THE CHARACTERIZATION OF BLACK INKJET COMPUTER PRINTER INKS USING PYROLYSIS GAS CHROMATOGRAPHY-MASS SPECTROMETRY (Py-GC-MS), HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC), THIN LAYER CHROMATOGRAPHY (TLC) AND ATTENUATED TOTAL REFLECTION FOURIER TRANSFORM INFRARED SPECTROSCOPY (ATR FT-IR)

by

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VOLUME ONE

A dissertation submitted to the Graduate Faculty in Criminal Justice in partial fulfillment of the requirements for the degree of Doctor of Philosophy,

The City University of New York.

2012

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This manuscript has been read and accepted for the
Graduate Faculty in Criminal Justice in satisfaction of the
dissertation requirement for the degree of Doctor of Philosophy

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Abstract

The Characterization of Black Inkjet Computer Printer Inks using Pyrolysis Gas Chromatography-Mass Spectrometry (Py-GC-MS), High Performance Liquid Chromatography (HPLC), Thin Layer Chromatography (TLC) and Attenuated Total Reflection Fourier Transform Infrared Spectroscopy (ATR FT-IR)

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Documents are prevalent in every aspect of daily life and hardly a day passes without using some sort of document. Problems arise, however, when the authenticity of these documents is raised. Forensic science has long been involved in the investigation and examination of suspect documents. One of the steps in the examination of questioned documents is for the examiner to analyze the type of material used to create the document. This could involve the analysis of the paper substrate and/or the medium used to create the written word, namely pen ink, typewriter ink or toner in photocopied documents.

This is the age of the computer, and as a result new challenges are facing the questioned document examiner. With more and more individuals using computers to produce their documents, and with the advancement of more sophisticated computer and printer systems, it has become harder for the analyst to distinguish and possibly

individualize a suspected document based on physical appearance alone. Once again, the forensic scientist must focus on the material used to produce the document, namely the computer printer ink. An examination of these ink samples may allow for the differentiation between the many manufacturers, as well as within the products of a specific manufacturer. In time, it may also be possible to date a computer printer generated document based on the drying and decomposition rates of the different computer printer ink components. Currently, this is unfortunately still just a theory. There have been few studies on the different types of computer printer inks and how, or if, they differ from each other. The identification of the various black inkjet computer printer ink manufacturers, and the creation of a classification procedure, is the first step in the analysis of a questioned inkjet produced document.

The goal of this study was to produce a detailed document on the forensic identification of black inkjet computer printer inks, and this research succeeded in its goal. The analysis of the black inkjet computer printer ink samples by Thin Layer Chromatography (TLC), High Performance Liquid Chromatography (HPLC), Pyrolysis Gas Chromatography-Mass Spectrometry (Py-GC-MS) and Attenuated Total Reflection Fourier Transform Infrared Spectroscopy (ATR FT-IR) analytical methods resulted in the production of data that led to the establishment of a classification procedure that could assist the forensic scientist in the examination, identification and discrimination of the different inkjet computer generated documents they receive.

Acknowledgements

I would like to thank my dissertation committee for all of their guidance, advice and support over the years. To Dr. Kubic, Dr. De Forest and Dr. Reffner who have guided me over the course of this research, I owe you my heartfelt gratitude. You knew when to guide me and when to challenge me, you were there from the beginning and were always available to offer advice and suggestions for improvement. This project is better because of your input and I am thankful that you were all a part of this.

I would be remiss if I did not also thank my family for all of their love and support over the years. To my parents, Mary and Dennis Boileau, my sister Annette, brother-in-law Peter, nephew Declan and niece Brianna, your love and support have been a driving force for me and I thank you for always being there with a laugh or a shoulder to lean on. Thank you for believing in me and supporting me when I stumbled or doubted the path I was on. I dedicate this dissertation to you.

A special thank you to all of my Professors over the years. I have been fortunate to interact and learn from some of the best in this field. I have taken something from each and every one of you and I thank you for all that you have done. A special thank you to Dr. Ira Sommers of California State University, Los Angeles for teaching me the basics of statistics, to Dr. Margaret Wallace of John Jay College of Criminal Justice for your support and encouragement over the years and to Dr. Lawrence Kobilinsky of John Jay College of Criminal Justice for your support and participation with my dissertation defense. I would also like to thank the late Ms. Ketteline Paul of John Jay College of Criminal Justice who was always supportive of my research and who encouraged me to follow my dreams.

Thank you to the members of the Doctorate program in Criminal Justice who were always there to answer a question or to provide guidance. I do not think you realize just how much you are appreciated. I would like to especially thank Mr. Paul Giovine and Mrs. Christina Czechowicz for your support and guidance during my progression through the program.

To my friends near and far, I thank you all for your support and want you to know how much I value your friendship. In particular I would like to thank Nikolay Azar, Alexia Tussay-Lindenberg, Argeliz Pomales, Quynh Nguyen, Azinia Brooks and Elisabeth (Contreras) Moran for keeping me sane over the long eighteen hour days spent collecting data and for reminding me that there was more to life than my dissertation research. I would also be remiss if I did not thank Nicole Wimberger, Heather Clines, Bridget and Paul Verdino, Julie (Leon) Moore and Veronica Toledo for all of their encouragement over the years. I would also like to give a special thank you to Alexia Tussay-Lindenberg for all of your help in preparing the unknown ink samples for the Blind Study. In addition, a special thank you must be given to Nikolay Aar for all of his help with the instruments and their issues, and for keeping me from going completely crazy when an instrument did not perform the way it was supposed to.

I would like to thank the various inkjet computer printer ink manufacturers. Thank you to Canon, Epson, Hewlett Packard, Kodak, Okidata and Xerox for your generous donation of the ink samples used in this study and for the guidance you provided during this research. I would also like to thank CDS Analytical Inc., and in particular Mr. Chip Trissel, for the suggestions and assistance you provided with regards to the CDS Analytical 5150 Pyroprobe and pyrolysis in general. Thank you to each and

every one of you as this research would not have been as successful without your contributions.

Finally, I would like to thank the late Professor Anthony Longhetti of California State University, Los Angeles for all of his support and guidance. You started my interest in the field of Forensic Science, especially Question Document examination, and my pursuit of my Doctorate degree was a result of your belief in me. I think you would have enjoyed this research project and I only wish you could be here to celebrate this achievement. You are missed.

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CHAPTER I. STATEMENT OF THE PROBLEM

Documents are prevalent in every aspect of our lives. Hardly a day passes without our using some sort of document. Whether it is signing a charge slip for a purchase, completing business correspondences, writing a letter or email, or simply taking notes in class, documents are involved. In addition to the multiple types of documents that are commonly encountered, there are multiple ways to produce these documents. They can be handwritten, typed, photocopied or printed from a computer printer. Problems arise, however, when the authenticity of these documents is raised. In such situations, it is often the job of the forensic questioned document examiner to attempt to resolve these issues.

Forensic science has long been involved in the investigation and examination of suspect documents. One of the earliest cases occurred in 1795 and involved the examination of a manuscript of *Kynge Leare* allegedly written by hand by William Shakespeare. (Lerner and Lerner, 2006) In this case, the authenticity of the manuscript was suspect, and through the examination of the paper upon which the manuscript was written, a conclusion as to the genuineness of the document was able to be accomplished. It was discovered that even though the paper upon which the manuscript was written was consistent with the time frame, the number of different paper stocks present in the manuscript suggested it was a forgery. Ten years later, the owner of the manuscript confessed to faking the document. (Lerner and Lerner, 2006)

Thus, as the case above illustrates, the initial step in any examination may be for the forensic document examiner to analyze the type of material used to create the document, including both the ink and the paper. One common type of analysis involves

the examination of the different types of pen inks that are commercially available. Through these examinations, and the creation of a database, it is possible to identify the different types or manufacturers of the pen ink samples submitted for analysis. The document examiner is able to distinguish not only between the different manufacturers, but is also able to distinguish within a specific manufacturer based on these pen ink compositions. In addition, techniques were developed to determine the date, or approximate date, of production of a specific document. The dating of an ink sample is based, in part, on databases of ink formulations. Consequently, it is possible to determine whether a signature on a document was made in an ink formulation that is consistent with the document's age. If the ink formulation was not available until after the purported date of the document, then a conclusion can be reached that the document is fraudulent. By using the date of manufacture of a specific ink formulation, the examiner can determine that a document was created "not before" a specific date. Therefore, the document examiner can analyze two samples submitted to the laboratory to determine if they were written with the same writing instrument and determine if the ink formulation dates are consistent with the purported date of the document.

With the development of more sophisticated writing instruments, namely the typewriter, the type of "ink" varied, but not the focus of the examiner. The forensic document examiner still first examined the material used to create the questioned document. In this case, the examiner has to examine the typed word, not the written word. Now the examiner has to identify the typeface, the type of ink left by the ribbon, the character spacing and the line alignments to determine whether or not two documents were produced by the same typewriter. Once again, it is possible to differentiate between

manufacturers, as well as within a single manufacturer, through the examination of the ink left behind by the ribbon, as well as by the markings left by the typeface. In addition, since the manufacturers modified or expanded their typewriter lines, it is even possible, at times, to provide an approximate date, or set limits on the date of manufacture, for the production of a specific questioned document. By using the date of manufacture of a specific type of typewriter or ribbon, the examiner can determine that a document was created "not before" a specific date. Thus, once again it is sometimes possible to determine if two samples submitted to the laboratory were written at the same time with the same writing instrument.

Currently we live in the age of the computer, and as a result new challenges are facing the questioned document examiner. With more and more individuals using computers to produce their documents, and with the advancement of more sophisticated computer and printer systems, it has become harder for the analyst to distinguish and individualize a suspected document based on physical properties alone. Once again, the forensic scientist must focus on the material used to produce the document, namely the computer printer ink. An examination of these ink samples may allow for the differentiation between the many manufacturers, as well as within the products of a specific manufacturer. In time, it may also be possible to date a computer printer generated document based on the drying and decomposition rates of the different computer printer ink components and by building and refining a sample database. Unfortunately, for the computer printer inks, this currently remains just a theory. There have been few studies on the different types of computer printer inks and how, or if, they differ from each other, and there have been no comprehensive studies done to date. The

identification of the various black inkjet computer printer ink manufacturers, and the creation of a classification procedure, is the first step in the analysis of a questioned inkjet printer produced document.

The creation of a classification procedure for the identification and differentiation of black inkjet computer printer inks is a necessary step for the advancement of questioned document examination, both scientifically and legally. Inkjet computer printer technology has increased not only in popularity for home use, but has increased in popularity for illegal activities. In remarks presented before the United States Senate Homeland Security and Government Affairs Committee in June 2005, Mr. Frank E. Moss reported that in 2004 there were 1722 cases of passport fraud with 183 arrests, while in the first half of 2005 there were 2401 cases of passport fraud with 375 arrests. (Moss, 2005) This is an increase in cases of more than 39% over 2004, with half of the year still to be included. Though obviously not all of these fraudulent passports were modified using inkjet computer technology, the popularity of these devices suggest that a significant percentage of these documents were modified and/or produced using black inkjet inks. By identifying the composition of the black inkjet inks, it may be possible to determine if a passport or document has been altered, and if so, how much of the passport or document has been altered. Through the classification procedure it may be possible to provide investigators with leads as to the type of printer system that has been used. This information can also be used for the elimination of an individual as a possible suspect or for the prosecution of those suspected of producing the fraudulent documents. Furthermore, black inkjet inks are not the only type of inkjet inks to be used for illegal activities. Colored inkjet inks, though beyond the scope of this project, have also been

used for illegal activities, namely to produce fraudulent currency. In 1995 $2,615,153 in counterfeit US currency was passed, of which 6.7% was produced by inkjet technology; whereas in 2001 $19,555,048 in counterfeit US currency was passed, of which 94.1% was produced by inkjet technology. (LaPorte and Ramotowski, 2003) This represents a 14-fold increase in the use of inkjet technology in only one type of illegal activity. These types of situations necessitate a comprehensive study and establishment of a classification procedure to aid in the investigation, analysis and prosecution of those using the technology for illegal activities.

When we are able to characterize and distinguish the ink from different black inkjet printer ink cartridges we will be able to identify possible investigative leads, identify potential suspects, assist in authenticating a document or determine if a document has been altered. This information has the potential of being invaluable in the investigation and prosecution of a variety of crimes, from kidnapping (ransom notes) to counterfeiting (illegal tender), from terrorism (falsified travel documents) to fraud (altered cheques, wills, forged signatures). As long as documents, and those created on ink based computer printers, remain prevalent in today's society, the need for the ability to distinguish computer printer inks will only increase.

CHAPTER II. REVIEW OF THE LITERATURE

The examination and differentiation of questioned documents has traditionally focused on the material used to produce the document. Researchers examine ink and toner compositions, typewriter impressions and ribbon composition and paper effects in an attempt to provide some means of identification, classification and/or individualization. Despite the prevalence of computers and computer-generated documents, very little research has been done in this area of questioned document examination.

A. Computer Ink Analysis

One of the first studies done on the examination of computer printed documents was conducted by J.M. Winchester in 1981. In this article, Winchester discusses the various types of printers available that can produce computer generated documents, and provided suggestions as to the area where the forensic examiner should focus his examinations. Unfortunately it was not until the following year that more comprehensive techniques for the examination of computer generated printed documents was proposed. In 1982, Leslie and Stimpson investigated the idea of pinpointing key aspects or features of the various printout devices, from the typewriter to the printer, in order to assist in the identification of the device used to generate a specific document. The authors' focus was on the various physical features or characteristics, like typeface and spacing misalignments, that vary with each type of device. In an article published in 1983, Boyd outlines the class and identifying features of laser printers, particularly the IBM 3800 printer. Once again, the focus of Boyd's research was on identifying the physical

features and characteristics that were useful in the analysis. No chemical tests for the identification or classification of laser printers was proposed. Even though Boyd was successful in identifying important class and individual characteristics of the IBM 3800 laser printer, he concluded that much work was still needed to fully understand how laser printing worked and to comprehensively identify all the necessary defects and features that would aid in their classification and identification.

Unfortunately, very little research in this area has occurred in the twenty years since Boyd's paper. In fact, it has only been in the last few years that any significant research has been performed. In 2003 a series of articles was published on the use of Reflection-Absorption Infrared Spectroscopy (R-A-IR) for the analysis of electrostatic photocopy and printer toners. (Merrill, Bartick and Taylor, 2003; Egan, Morgan, Bartick, Merrill and Taylor, 2003; Egan, Galipo, Kochanowski, Morgan, Bartick, Miller, Ward and Mothershead, 2003) In the first article of the series, the authors were able to establish an infrared spectral library of toners and using their database they were able to classify 807 toners into 98 groups. (Merrill, Bartick and Taylor, 2003) In the second article of the series, multivariate statistics was applied to the analysis of the reflection-absorption infrared spectral data. The authors concluded that the results of the multivariate statistical analysis provided simple and discriminating results that were as effective, if not more so, than the visual examination and classification of the reflection-absorption infrared spectral data. The authors argued that multivariate analysis should be the preferred method due to the fact that it was more sensitive, less time consuming, provided further information, was more objective and could be automated. (Egan, Morgan, Bartick, Merrill and Taylor, 2003) In the final article, the authors applied

multivariate analysis to scanning electron microscopy and pyrolysis gas chromatography-mass spectroscopy data, as well as to the reflection-absorption infrared spectral data, and found that by combining the results of the various techniques further information was obtained and better classification and discriminating features were achieved. (Egan, Galipo, Kochanowski, Morgan, Bartick, Miller, Ward and Mothershead, 2003)

In 2003, LaPorte and Ramotowski applied the technique of Thin Layer Chromatography (TLC) to the analysis of printed documents that have previously undergone latent print processing. The authors were investigating what effects, if any, latent print processing has on the identification and discrimination of inkjet inks and toners. The authors concluded that none of the latent print processing techniques explored had any effect on toner analysis, but that the physical developer (PD) method and the bleach enhancer technique had significant negative impact on the analysis of the inkjet inks. (LaPorte and Ramotowski, 2003) The other types of latent print processing had no significant effect on the analysis, identification and discrimination of inkjet inks.

The use of thin layer chromatography for the analysis of inkjet computer printer inks was explored further in a 2003 study by LaPorte, Wilson, Mancke, Payne, Ramotowski and Fortunato. The authors were analyzing thermal transfer printing ink samples using a modified thin layer chromatography solvent system. It was found that the modified TLC solvent system of hexane:methyl ethyl ketone:ethyl acetate (80:3:17) was effective for resolving the dye compounds in the sample. (LaPorte, Wilson, Mancke, Payne, Ramotowski and Fortunato, 2003) Of the two types of thermal transfer printing methods tested, the different dye diffusion thermal transfer ink samples could be discriminated using the modified solvent system, whereas the thermal mass transfer ink

samples did not have the same level of discrimination in the ink samples. Further research on the thermal mass transfer ink samples is necessary.

The use of the Surface-Enhanced Resonance Raman Scattering (SERRS) method for the analysis of black inkjet dyes was studied in 2003 by Littleford, Hughes, Dent, Tackley and Smith. The authors were investigating the black di-azo dyes that are used in black inkjet computer printer ink cartridges. It should be noted that the authors were not examining ink cartridges, just the black di-azo dyes that are found in these ink cartridges. The black di-azo dyes were examined in solution and *in situ* on the paper matrix. The authors were able to detect the changes that occurred as the black di-azo dyes were absorbed into the paper. (Littleford, Hughes, Dent, Tackley and Smith, 2003) The use of Surface-Enhanced Resonance Raman Scattering provided an alternate and effective method for the analysis of the black di-azo dyes that are found in inkjet computer printer ink cartridges.

In 2003 Analytical Spectral Devices Incorporated investigated the applicability of Near Infrared (NIR) Transmittance Spectroscopy to the analysis of inkjet inks. In a very limited study, the researchers analyzed four samples of ink; in which two were black liquid ink samples (dyes) and two were black pigment ink samples. The results of the study concluded that by NIR spectroscopy it was possible to distinguish between the pigment inks from the dye inks, and that the two dye inks could be distinguished from each other. (ASD, 2003) The results of this study must be further explored and verified before any meaningful conclusions can be reached. The extremely small sample set, and in particular comparing only two samples each of the pigment and dye inks, does not provide sufficient data to allow for any significant conclusions to be reached. NIR

spectroscopy may provide an excellent means for the analysis and discrimination of inks, but further studies must be performed before this can be established.

In a study performed in 2004, LaPorte used the Electrostatic Detection Device (EDD) to identify class and individual characteristics or features on printer produced documents and photocopied documents. The EDD, also known as the Electrostatic Detection Apparatus (ESDA), showed much promise in identifying consistent and reproducible physical marks and impressions on documents produced by both photocopiers and inkjet printers. LaPorte cautioned, however, that the forensic document examiner needed to be aware of the variety of manufacturing techniques used to produce not only the document, but also the paper itself, so as to not assign significance to features that were observed after using ESDA that were due to these manufacturing processes and hence were not unique to the printed document itself. (LaPorte, 2004)

The analysis of colored inkjet computer printer ink cartridges by Thin Layer Chromatography (TLC) and High Performance Liquid Chromatography (HPLC) was investigated in 2005 by Poon, Ho and Li. The authors tested twenty-three ink cartridges of both OEM and non-OEM manufacturers. The ink samples tested in the study were both the neat ink of the ink cartridges and extracted ink samples from the paper matrix. The ink samples were tested over the course of four months and the ink samples were found to be distinguishable from one another and exhibited no signs of aging over the course of the study. (Poon, Ho and Li, 2005) Though the results of this study showed that differences existed between the colored inkjet ink samples, further research is necessary to test the reproducibility of the results from a specific inkjet ink cartridge and to expand the analysis to other inkjet ink cartridge samples.

In 2006 Trzcińska analyzed black toners using Fourier Transform Infrared Spectrometry (FT-IR) and X-Ray Fluorescence Spectrometry (XRF). In the study, 82 types of toner cartridges were analyzed by both methods and the results were compared. Trzcińska found that with the use of FT-IR analysis alone, 82.5% of the toners could be differentiated from one another but this rate of differentiation increased to 90.8% when only the XRF method was used and to 95.8% when both methods were used to analyze the toners. (Trzcińska, 2006) The combination of the two analytical methods allowed for the differentiation of black toner samples that could not be differentiated using a single analytical method.

A final method proposed for the analysis of inkjet ink samples was Laser Desorption-Mass Spectrometry (LDMS). In a 2010 article, Donnelly, Marrero, Cornell, Fowler and Allison analyzed pigmented inkjet computer printer inks from two Epson printers. The authors found that LDMS was effective at detecting and identifying the pigments used in the pigmented ink samples. However, the authors also found that in one of their pigmented ink samples that a dye was also present, and recommended that TLC analysis precede any analysis with LDMS when dealing with pigmented ink samples. (Donnelly, Marrero, Cornell, Fowler and Allison, 2010) The analysis of a printed color document was also performed, and it was found that the LDMS method was capable of detecting the different pigments present on the document, even when a mixture of pigments was present. (Donnelly, Marrero, Cornell, Fowler and Allison, 2010) Though this was an interesting study, the research needed to be expanded to more than the ink samples from two Epson inkjet printers. It would be interesting to see how these results compare to the other manufactures of pigmented inkjet computer printer ink cartridges.

B. Pen Ink Analysis

i. Spectrophotometry and Microspectrophotometry

One of the main focuses of research in the field of forensic document examination has been on the examination of pen inks. One of the first methods used to analyze and distinguish ballpoint pen inks involved the use of different wavelengths of light to expose differences in the pen ink compositions. (Dick, 1970; Kelly, 1973; Totty, 1977) A main advantage of this method over chemical methods of analysis was the fact that no damage occurred to the sample during the examination. This is a statement that cannot be made for the chemical methods of analysis. In 1970, Ronald Dick proposed that it would be possible to differentiate between various ink samples through the use of dichroic filters. These filters were designed to allow the transmittance of two wavelengths of light simultaneously, normally the red region of the visible spectrum and the blue-green region. Dick found that some inks exhibited color changes when viewed through the filters, while other inks remained unchanged, and thus discriminating features/criteria could be established to differentiate the various ink samples tested. (Dick, 1970) However, the author cautioned that more research had to be done before this relationship could be fully understood and utilized, as other ink formulations not studied in this research may not show this effect. In 1976, Creer expanded upon the use of filters for the examination of erased and obliterated writings, and. Creer found that by using contrast filters with specialized light sources (ultraviolet and infrared) it was often possible to recover the erased or obliterated writings. (Creer, 1976) In addition, the author found that this method often worked when the other, more traditional, methods failed.

The use of fluorescence spectrophotometry is a common method in the analysis of various types of substances. The theory behind fluorescence spectrophotometry is that when compounds are excited by shorter wavelengths of light, they absorb this radiation and emit radiation of a longer wavelength, commonly in the visible or near-infrared portion of the electromagnetic spectrum, though it is possible to produce wavelengths in the infrared portion of the spectrum. (Kelly, 1973) In 1973 Kelly applied this technique of spectrofluorometric analysis to the study of inks on paper. Kelly found that of all the samples tested, all had either unique excitation and emission wavelength or unique emission spectrum, allowing for differentiations among the samples. Even though eighty-two samples of six different colored inks were used, the author cautioned that the results obtained only applied to those inks tested and that further testing needed to be done before applying the results to all pen inks. (Kelly, 1973)

As stated above, one type of fluorescence that can be obtained from a sample is infrared luminescence. One drawback with the use of infrared luminescence to differentiate ink samples is the documentation problems. In order for the image to be recorded photographically, long exposure times are needed. (Hardcastle and Hall, 1978; Rohilla, Das Gupta, Gupta and Bami, 1980) This is due to the fact that the infrared luminescence intensity at room temperature is generally low, and if it is too weak an image may never be recorded. As a result, Hardcastle and Hall (1978) proposed that if the sample were cooled prior to exposure and analysis, then the resulting infrared luminescence of the ink would be significantly increased. This was due to the fact that at low temperatures there are fewer molecular collisions and interferences, and thus more infrared luminescence is released by the sample. Thus, the authors suggested that the

document should be immersed in liquid nitrogen prior to analysis to enhance the results of the infrared luminescence. (Hardcastle and Hall, 1978) The beneficial effects of cooling the document prior to the analysis of inks were later confirmed by a study by Sinor, Wilde, Everse and Menzel in 1986. Other methods proposed to assist in the enhancement of the infrared luminescence of a sample included using an image converter and a fibre optic system (Rohilla, Das Gupta, Gupta and Bami, 1980) and 'Calflex' infrared reflecting mirrors (Totty and Roberts, 1981).

A second problem associated with the use of luminescence to differentiate ink samples is the fact that this luminescence or fluorescence can be quenched by other non-luminescent or non-fluorescent molecules present in the sample. Quenching is described as the internal absorption of the fluorescence by the non-fluorescent molecule, and is generally caused when the fluorescent molecule is bound to a non-fluorescent molecule. (Gupta, Mukhi and Bami, 1978) If the fluorescent component can be separated from the non-fluorescent component then it is possible to minimize or negate this effect. In 1978 Gupta, Mukhi and Bami suggested that a sample could be dequenched, that is separate the fluorescent component from the non-fluorescent component, by a simple extraction. The authors found that by taking an aqueous extract of the ink sample from the paper they could eliminate any quenching effects caused by the non-fluorescence components of the paper and hence could differentiate samples that previously could not be differentiated. (Gupta, Mukhi and Bami, 1978)

As a result of these problems, a study was conducted by Sensi and Cantu in 1982 to evaluate the effectiveness of the infrared luminescence method for the analysis and differentiation of ink samples. The authors stated that many of the inks contained at least

one component that luminesced under infrared irradiation, but in half of the cases the luminescence from the sample could not be observed due to masking or quenching effects. (Sensi and Cantu, 1982) The authors found that a variety of solutions, including body oil and perspiration, could minimize or eliminate this masking effect by separating the luminescent component from the non-luminescent component, which is consistent with the results from the Gupta, Mukhi and Bami study. However, Sensi and Cantu further found that the degree of unmasking in these cases was not always consistent, even when coupled with an aqueous extraction, thus causing potential identification problems. (Sensi and Cantu, 1982) Consequently, the authors questioned the reliability of using infrared luminescence as the sole means for the identification and differentiation of ink samples, and instead suggested that it should be used either in conjunction with other techniques or only after tests have shown the sample to contain no masking components.

In 1983 Dalrymple further tested the effects of quenching, and hence the reliability, of infrared luminescence in the analysis of ink samples. The author found that by using lasers to excite the molecules an improvement in the resulting infrared luminescence was observed. (Dalrymple, 1983) However, Dalrymple did caution that care must be taken in the interpretation of the results, as masking of the luminescence was still possible even with the use of lasers. Dalrymple's results were verified by a study performed in 1988 by Zimmerman and Mooney, and by a study performed in 1991 by Horton and Nelson. Both studies found that the use of lasers not only allowed for the differentiation of inks, but also provided additional information that was not previously obtainable. Again, however, interferences to the ink's spectrum from the paper and the color background were noted, which could cause identification problems.

Sometimes the sample size of the ink submitted to the laboratory for analysis requires the use of more sensitive instrumentation. The microspectrophotometer allows for the analysis of extremely small sample sizes, as small as $10\mu m^2$. (Pfeffferli, 1983) In 1983, Pfeffferli studied the applicability of differentiating similarly colored inks of different manufacturers using a microspectrophotometer. The main advantages of this method were the decreased sample size, lack of sample preparation required and its nondestructive nature. Pfeffferli found that it was possible to discriminate between inks that had similar visual appearance by examining their reflectance spectra. (Pfeffferli, 1983) Pfeffferli's results were verified by studies by Laing and Isaacs in 1983, Olson in 1986, Ordidge and Totty in 1984 and Zeichner, Levin, Klein and Novoselsky in 1988. In addition, a series of studies have been performed by the S.E.E. Incorporation (1997, 1999) on the applicability of Visible-Near Infrared Reflection Microspectrophotometers for the analysis of blue and black inks. In all of the studies performed by the S.E.E. Incorporation in 1997 and 1999, the researchers found that microspectrophotometry was a simple, rapid, effective and non-destructive method for the analysis of ink samples.

A new type of writing pen has added a new challenge to the questioned document examiner. In the mid-1990's the gel pen was introduced to the United States from Japan. The main differences in these aqueous based inks were the fact that they incorporated colored pigments rather than colored dyestuffs in their ink formulations and that the inks had an increased viscosity (thickness) that thins out when the pen was used. (Gernandt and Urlaub, 1996) A variety of methods have been used to analyze and differentiate gel pen inks, including Spectrophotometry (Mazzella and Khanmy-Vital, 2003; Wilson, LaPorte and Cantu, 2004), Thin Layer Chromatography (Gernandt and Urlaub, 1996;

Wilson, LaPorte and Cantu 2004), Gas Chromatography-Mass Spectrometry (Wilson, LaPorte and Cantu, 2004) and Raman Spectroscopy (Mazzella and Khanmy-Vital, 2003).

ii. Thin-Layer Chromatography (TLC)

Another method that was used to successfully analyze ink samples was Thin Layer Chromatography (TLC). In 1973 Kevern found that many different types of inks could be identified based on their color and their thin layer chromatograms. In addition, the author found that if he photographed the thin layer chromatogram's Infrared luminescence further discrimination between the ink samples was possible. (Kevern, 1973) This work was investigated further ten years later by Blackledge and Iwan. These authors found that by combining Thin Layer Chromatography with Infrared Luminescence it was possible to not only distinguish similar inks of different manufacturers, but that it was also possible to show variations in ink formulations of the same manufacturer. (Blackledge and Iwan, 1983) Specifically, the authors were able to differentiate between three Skilcraft ball pens, all containing Skilcraft black ink ball pen refills, which could have been produced at one of two manufacturing plants.

A modification of the traditional Thin Layer Chromatography method is the High Performance Thin Layer Chromatography (HPTLC) method. Differences between high performance thin layer chromatography and regular thin layer chromatography include the fact that the sample is prepared as bands in high performance thin layer chromatography rather than as discrete spots as in thin layer chromatography and that the system is developed horizontally in high performance thin layer chromatography rather than vertically as in thin layer chromatography. These modifications are advantageous in that they increase the resolution of the separated components and allow for greater

separation and differentiation. In a study by Tappolet in 1983, the applicability of using High Performance Thin Layer Chromatography (HPTLC) for the analysis of ink samples was first explored. The author found that not only was it possible to successfully analyze the samples based on high performance thin layer chromatography, but that the results were comparable to those found using the traditional thin layer chromatographic methods. (Tappolet, 1983) In 1985 Totty, Ordidge and Onion studied the applicability of High Performance Thin Layer Chromatography (HPTLC) to the analysis of aqueous ink samples, and found that the discrimination between similar inks was improved with the use of high performance thin layer chromatography. In addition, the authors found that when they paired high performance thin layer chromatography with visible microspectrophotometry, additional information was obtained by the high performance thin layer chromatography method, such as the identification of minor components, which made the identification and discrimination of the inks samples easier. (Totty, Ordidge and Onion, 1985) These results were verified by a study by Aginsky in 1993.

In a separate study in 1993 Aginsky was able to show that it was possible to analyze all components of an ink sample, especially the colored pigments, using a modified Thin Layer Chromatography (TLC) method. In this method it was possible to separate out the aqueous dyes, the acidic dyes, the basic dyes and the organic pigments using a three-step process, which not only helped to distinguish the inks samples but also provided information on the chemical properties of the inks' components. (Aginsky, 1993b)

The relatively large sample size necessary to perform the thin layer chromatography analysis and the inherent destructive nature of the test had been a

detriment to the wide scale usage of this method. In 1992 Harris advocated the use of the 'micro-hole punch', which allowed the analyst to sample the document without significantly damaging or obliterating the text. Previous studies used the syringe needle approach for sample collection (Witte, 1963; Crown, Brown and Cantu, 1976; Stewart, 1985; Kuranz, 1986; Brunelle and Lee, 1989), in which a 20-gauge syringe was used to obtain a sample of the document and then the sample plug was removed from the syringe into a vial. (Harris, 1992) The sampling of the document had to be done slowly and carefully in order to avoid damaging or tearing the document itself. Consequently, Harris and the Royal Canadian Mounted Police Laboratory developed the micro-punch system. The micro-punch samples a small amount of the document, approximately 1mm diameter sample size, by a quick downward tap on the punch head and drops the sample plugs directly into the vial allowing for a rapid sample collection with minimal loss or alternation. (Harris, 1992) As a result, the micro-punch system results in a faster analysis time and more accurate and consistent results.

Since the results of the thin layer chromatographic method can be affected by a variety of factors, including, but not limited to, concentration, temperature and solvent systems used, it became apparent that some sort of quality control measures had to be implemented if this method was to be completely effective in the analysis and identification of unknown ink samples, and in the creation of an uniform database. As a result, in 1996 Lewis established a set of minimal quality control standards for the thin layer chromatographic analysis of inks. In particular, the study outlined the most effective solvent systems and thin layer chromatography plates that should be used, defined the sample concentration ranges necessary to achieve optimum separation and

identification, the origin position and standard ink selections necessary for the results to be generalized to more than one laboratory and provided information on ways to eliminate equipment contamination, on the proper way to store and preserve the thin layer chromatographic plates and the proper photographic recording procedure to be used. (Lewis, 1996) All these requirements were necessary if useable and reproducible libraries were to be established and inconsistencies between laboratories and analysts were to be minimized or eliminated.

iii. High Performance Liquid Chromatography (HPLC)

A method more recently used for the analysis of ink samples is High Performance Liquid Chromatography (HPLC). In 1982, Lyter analyzed several samples of ballpoint pen inks using High Performance Liquid Chromatography (HPLC) to determine qualitatively, as well as quantitatively, the various components of the ink samples. Lyter (1982) was able to not only differentiate different formulas of the ballpoint ink from the various manufacturers, but was also able to differentiate multiple samples of the same production run of ink formulation of a specific manufacturer. In 1984, Keto was able to add to Lyter's method by developing a means to semi-quantitate the pigment components and manufacturing artifacts present in the various types of inks using the High Performance Liquid Chromatography (HPLC) method.

Several studies were performed to analyze and differentiate various non-ball point pen inks using High Performance Liquid Chromatography (HPLC) that had not been differentiated by traditional methods. (Throckmorton, 1985; Tebblett, Chen, Fitzgerald and Olson, 1992) In each study, the authors found increased sensitivity and resolution using high performance liquid chromatography than with the other traditional methods,

and that further information could be obtained, such as the identification of minor components and better separation, thereby leading to increased discriminating ability. (Throckmorton, 1985; Tebblett, Chen, Fitzgerald and Olson, 1992) In 1993 Löfgren and Andrasko examined printing inks and found that high performance liquid chromatography was effective not only in identifying and differentiating between similar colors of inks from different manufacturers, but that it could also be used to distinguish between different production runs of a single ink formulation of the same manufacturer.

In 2001 Kher, Green and Mulholland examined several ballpoint pen inks from different manufacturers using High Performance Liquid Chromatography (HPLC) with a Photodiode Array detector (PDA). By analyzing the ink samples at multiple wavelengths they were able to qualitatively distinguish the inks. (Kher, Green and Mulholland, 2001) The benefit of using multiple wavelengths was that it provided yet another means of classifying the inks. Similar colored inks did not always absorb light the same at various wavelengths, thus they could be distinguished and identified by comparing their spectra. In addition, the results were analyzed statistically to show the degree of discrimination between the different classes of inks based on their response at the various wavelengths. (Kher, Green and Mulholland, 2001)

iv. Capillary Zone Electrophoresis (CZE)

Capillary Zone Electrophoresis (CZE) is a relatively recent technique to be used for the analysis of inks. In 1991, Fanali and Schudel first applied this method for the analysis of fiber-tip pen inks. The authors found that not only was it possible to distinguish the various types of inks using this method, but that the method was quick, easy and the results were reproducible. (Fanali and Schudel, 1991) In 1997 Rohde,

McManus, Vogt and Heineman examined fountain pen inks using capillary zone electrophoresis, and found that it was possible to distinguish the various manufacturers by examining the electropherograms of the various inks.

In 1999 Vogt, Becker and Vogt examined ballpoint inks by Capillary Electrophoresis with ultraviolet/visible absorbance and Laser Induced Fluorescence detection and Particle Induced X-Ray Emission (PIXE). Particle induced x-ray emission allowed for the metal composition of the sample to be determined, which added additional information to help in the analysis and interpretation. The authors found that samples with near identical metal compositions had different electropherograms and that samples with near identical electropherograms had different metal compositions. (Vogt, Becker and Vogt, 1999) Thus, the authors were able to further distinguish samples with the combination of both of these methods than with either method alone.

v. Gas Chromatography (GC)

Very few researchers have explored the possibility of using gas chromatography to separate and analyze ink samples. In 1985 Stewart used gas chromatography, along with other methods, to determine the relative age of the document. The purpose of the study was to attempt to date the document based on the presence, or lack thereof, of the volatile components in the ink formulations. In 1993c Aginsky reinvestigated the applicability of gas chromatography to date a document. The theory behind using gas chromatography to date a document is that over time the volatile components in the sample evaporate, decreasing their concentration. Both studies theorized that this evaporation was somewhat consistent, though it could vary depending on the environmental conditions, ink formulations and ink thickness. Therefore, by examining

the concentration of the volatile components present on the paper, it was possible to estimate an age of production for the document. (Stewart, 1985; Aginsky, 1993c) Since gas chromatography is an effective method in the detection of volatile components, it was shown that this would be an effective method in the dating of unknown ink samples.

vi. Mass Spectrometry

Mass spectrometry has had little demonstrated application to the analysis of inks, despite the fact that it would seem to show great promise for their identification and differentiation. In fact, one of the first articles dealing with the analysis of questioned documents that used mass spectrometry did not analyze ink samples, but instead analyzed pencil marks made on paper. (Zoro and Totty, 1980) In 1980, Zorro and Totty found that they could separate pencil marks into groups based on their selected ion spectra. Though the authors were not able to differentiate all of the samples, and there were substrate concerns, this method showed great potential in the analysis of questioned documents. It was not until 1991, in a study conducted by Acampora, Ferranti, Malorni and Milone, that mass spectrometry was applied to the analysis of ink samples. In this study, the authors were able to show that two ink samples could not be differentiated from each other using electron ionization mass spectrometry. (Acampora, Ferranti, Malorni and Milone, 1991) In 1999 Sakayanagi, Komuro, Konda, Wantanabe and Harigaya examined a series of ballpoint pen inks using field desorption mass spectrometry to determine if it was possible to distinguish between them. The authors were successful in identifying the basic dyes in the inks using mass spectrometry, and based on these results they could distinguish the various manufacturers of the pen inks. (Sakayanagi, Komuro, Konda, Wantanabe and Harigaya, 1999)

In the last few years several studies have been done to further investigate the applicability of mass spectrometry to the differentiation of ink samples. In 2002, Ng, LaFontaine and Brazeau used positive and negative ion-electrospray ionization mass spectrometry to analyze several different ink samples from a series of manufacturers. Ng, LaFontaine and Brazeau (2002) found that not only was this a fast and sensitive method, but that differences in ink formulations could readily be identified between the ink samples. The applicability of Laser Desorption Mass Spectrometry to ink analysis was studied by Grim, Siegel and Allison (2002a), Grim, Siegel and Allison (2002b) and Dunn, Siegel and Allison (2003). In each study, the authors found that not only could similar color inks formulations of different manufacturers be differentiated from each other, but that it was possible to date the document by the degradation rates of the various components of the ink formulations (Grim, Siegel and Allison, 2002a; Grim, Siegel and Allison, 2002b). In 2003, Koenig used Laser Ablation Inductively Coupled Plasma Mass Spectrometry (LA-ICP-MS) to analyze inks directly on the paper document and was able to produce elemental composition of each ink sample which allowed for their identification and differentiation. Finally, in early 2004, LaPorte, Wilson, Cantu, Mancke and Fortunato used Gas Chromatography-Mass Spectrometry (GC-MS) to identify the compound 2-Phenoxyethanol, a volatile component in the ink formulations, to aid in the dating of a document.

vii. Fourier Transform Infrared Spectrophotometry (FT-IR)

Another method that has recently been used for the analysis of ink samples is Fourier Transform Infrared Spectrophotometry (FT-IR). The main benefit of this method is that it analyzes the inks as a whole, rather than as separate entities or components,

thereby showing possible interactions of components and identifying components of the sample that do not separate out from the document. In 1985 Humecki attempted to use infrared spectroscopy to determine if it was possible to date a document based on its absorption spectrum. He found it was possible to get an estimate of the age of a document, up to 10 years, based on the OH to CH bond ratio. (Humecki, 1985) Harris in 1991 and Merrill and Bartick in 1992 examined the applicability of FT-IR to the analysis of several ballpoint pen inks. Merrill and Bartick were also examining whether it would be possible to establish a useable and searchable library of ink spectra. Both studies found that not only was it possible to distinguish some of the inks based solely on their FT-IR spectra, but also that they could identify and compare a variety of unknown ink samples based on the library results. (Humecki, 1985; Merrill and Bartick, 1992) Thus, both studies concluded that FT-IR analysis provided additional and complementary information from other analytical methods, which greatly enhanced the identification process.

In 2001 Wang, Luo, Sun, Wang and Wang further analyzed blue ballpoint pen inks using FT-IR spectrophotometry, and found that it was possible to classify the inks into a variety of groups based on their spectral features. The main benefits of this method were the simple sample preparation, its reliability and its nondestructive approach for the characterization of pen inks. In 2002 two studies explored the use of synchrotron infrared radiation for the analysis of inks. (Wilkinson, Perry, Martin, McKinney and Cantu, 2002; Wilkinson, Perry, McKinney and Martin, 2002) Synchrotron infrared radiation is hundreds of times brighter than traditional infrared radiation, which correlates into an increased signal-to-noise ratio. Consequently, smaller samples could be analyzed

than with the traditional methods with greater sensitivity and increased discriminating ability. In both studies, the authors were able to analyze the ink samples in situ, and were able to obtain additional information about the ink samples that traditionally infrared spectroscopy was unable to obtain. (Wilkinson, Perry, Martin, McKinney and Cantu, 2002; Wilkinson, Perry, McKinney and Martin, 2002) However, the major drawback to this method was the fact that only a few facilities have the ability to provide synchrotron radiation, so this method is not available to most forensic laboratories.

In 2001 Purcell, Kubic and Reffner investigated the use of micro-Attenuated Total Reflection Fourier Transform Infrared Spectroscopy (ATR FT-IR) for the analysis of pen inks on paper. The advantage of ATR FT-IR over the traditional FT-IR system was its lack of sample preparation requirements, its ease of use and its nondestructive nature. The authors found that not only was it possible to differentiate between manufacturers, but depending on the paper type, it was possible to differentiate within a specific manufacturer. (Purcell, Kubic and Reffner, 2001)

C. Photocopier Toner Analysis

i. Physical Characteristics

The first attempt to differentiate both photocopies from original documents and between two photocopied documents was based on the examination of the physical characteristics. (Hilton, 1978; Totty and Baxendale, 1981; Holland, 1984) In each instance the main focus was on the class characteristics that the photocopy machine left on the document, as well as individual or identifying marks that were left behind due to the photocopying process. In 1987, James did a comprehensive study to establish the features that should be taken into account when classifying or identifying a photocopied

document, and in identifying the type of photocopy machine and/or process that was used to manufacture the document. The features that were identified as being important included the type of toner used, the reduction/enlargement of the document and the capabilities of the machine, the way the paper was fed into the machine and any identifying marks left behind on the paper. (James, 1987)

ii. X- Ray Microprobe Analysis

One of the first instrumental methods used to analyze photocopied documents was the x-ray microprobe. A study by Totty, Dubery, Evett and Renshaw in 1979 examined the inorganic content of the surface coating, print and backing paper of a photocopied document by x-ray microprobe analysis in an attempt to determine if it was possible to differentiate between the many different manufacturers. The authors found that there was significant differences in the composition of the coatings and print between the manufactures, which helped in their identification, as well as assisted in the identification of the type of photocopy method used to create the document. (Totty, Dubery, Evett and Renshaw, 1979)

iii. Fourier Transform Infrared Spectrophotometry (FT-IR)

The most common method for the analysis of photocopy toners is infrared spectrophotometry. One of the first studies that utilized this technique was performed by Kemp and Totty in 1983, and found that photocopy toners could be classified into groups based on their absorption spectra. This study was particularly relevant in that the toners used for the analysis were removed from photocopied documents themselves, and were not raw or bulk toner samples. (Kemp and Totty, 1983) As a result, the study had more

case relevant significance. Williams (1983) examined the results of Kemp and Totty's experiment and found that not only was it possible to classify the photocopy toners, but that the chemical structure information could be obtained through the examination of the infrared spectra. Neither study was able to completely differentiate the photocopy toners, but they were able to classify them into groups, thus limiting the number of sources that could have produced a photocopied document.

Several studies were performed using the Diffuse Reflection Infrared Fourier Transform Spectroscopy (DRIFTS) method. (Mazzella and Lennard, 1991; Mazzella, Lennard and Margot, 1991a; Mazzella, Lennard and Margot, 1991b) Mazzella and Lennard (1991) found that by using a silicon carbide abrasive disk the photocopied document could be easily sampled with minimal time, sample preparation and destruction to the document itself. The basis behind the silicon carbide disk sampling method was that the abrasive disk was rubbed on the sample document until such time as sufficient material was collected. (Mazzella and Lennard, 1991) The drawback to this method was the destructive nature of the technique. Though only slightly destructive it still made microscopic examination difficult and if not done properly, the silicon carbide disk could alter or obliterate the writings on the document. However, the authors found that this sampling technique worked well when employed in the DRIFTS method, and that classification of the samples could be achieved. (Mazzella and Lennard, 1991) Mazzella, Lennard and Margot (1991a) re-analyzed a variety of toners using the Diffuse Reflection Infrared Fourier Transform Spectroscopy (DRIFTS) method. The difference in this study was that not only were they analyzing toners removed from the documents themselves, but they were also examining raw toners in bulk. The preliminary results of

their study suggested that not only could the toners be classified based on their spectra, but also that it would be possible to establish a database that could be used to assist in the classification of unknown toner samples. (Mazzella, Lennard and Margot, 1991a) In the final report on their study, the authors determined that not only were classifications of the toners possible and that a searchable database could be established, but also that the DRIFTS technique was not inhibited by the age of the document, the toner batch used or by prior fingerprint development techniques. (Mazzella, Lennard and Margot, 1991b) Once again, however, it should be noted that none of the studies were successful in completely differentiating the various toners, but rather they could only classify them into smaller groups.

As stated earlier, traditional methods for the sampling of photocopy toners involved scraping the toner off of the paper document. Concerns were raised about the destructive nature of this technique, especially its potential to alter or obliterate parts of the text or the entire text depending on the amount of sample involved in the case. In 1994 Andrasko proposed a new method for the sampling of photocopy toners. In this method a metallic stub was placed over the area to be sampled and heat was applied to the backside of the stub. (Andrasko, 1994) The toner was thermally transferred from the paper to the stub, leaving minimal damage to the text below. The damage that was done to the document by this thermal transfer method could be viewed only with the use of a microscope. The benefits of this method were that it was fast, easy, minimally destructive and the results that were obtained are reproducible. (Andrasko, 1994)

As with pen ink analysis, the need to analyze microscopic toner sample sizes resulted in the study of the applicability of microspectrometry to photocopied documents.

In 1996, Merrill, Bartick and Mazzella investigated the use of microscopic infrared spectrometry to the analysis of toners, and found that high quality spectra could be obtained that required minimal to no sample preparation and was nondestructive to the document. In 1996, Andrasko found that FT-IR microspectrophotometry provided reproducible results and produced spectra that were as good as normal FT-IR. Finally in 1998 Bartick, Merrill, Egan, Kochanowski and Morgan were able to show that it was possible to discriminate between photocopy toners using FT-IR reflection microspectroscopy.

As photocopiers evolved, the methods used to analyze them also had to evolve. Traditional photocopiers produced black and white images, whereas today's photocopiers can produce colored documents in addition to black and white documents. In 1991, Shiver and Nelson investigated which methods would be effective in the analysis and differentiation of colored toners. The authors found that microscopy; infrared luminescence, infrared reflection and laser luminescence provided the necessary information that allowed for the differentiation of the various samples. (Shiver and Nelson, 1991)

iv. Pyrolysis Gas Chromatography (Py-GC) and Gas Chromatography-Mass Spectrometry (GC-MS)

As discussed earlier, infrared spectrophotometry allowed for the classification of photocopy toners, but did not provide complete differentiation of the samples. In 1986, Zimmerman, Mooney and Kimmett investigated whether Pyrolysis Gas Chromatography (Py-GC) would be able to completely distinguish or differentiate between the various photocopy toner samples. Zimmerman, Mooney and Kimmett (1986) first analyzed the

toners using infrared spectrophotometry and found that the samples could be classified into several groups, with some groups containing one sample and other groups containing multiple samples. The photocopy toners were then analyzed using pyrolysis gas chromatography and the authors found that they could differentiate all of the toners from each other. (Zimmerman, Mooney and Kimmett 1986) In 1993, Chang et al were able to show that not only was pyrolysis gas chromatography able to differentiate the various photocopy toner samples, but that a searchable library could be established with this method to help in their identification.

In 1998 Mizrachi, Aizenshtat, Levy and Elkayam investigated whether Gas Chromatography-Mass Spectrometry (GC-MS) could assist in the identification and differentiation of the various photocopy toner samples. The authors analyzed a series of unknown toners and standard toners in an attempt to link or identify them using both Fourier Transform Infrared Spectrophotometry (FT-IR) and Gas Chromatography-Mass Spectrometry (GC-MS). The authors concluded that both FT-IR and GC-MS could assist in the identification of unknown toner sample to a standard reference toner sample, but that GC-MS should be used when FT-IR could distinguish between two samples. (Mizrachi, Aizenshtat, Levy and Elkayam, 1998) As a result, the authors recommended that Gas Chromatography-Mass Spectrometry (GC-MS) be used as a complementary method to Fourier Transform Infrared Spectrophotometry (FT-IR).

D. Typewriter Analysis

Before the advent of computers, for almost a century typewriters were the method of choice to produce legal or professional looking documents. Initial methods for the analysis of typewritten documents focused on a physical examination of the document,

including examining the typestyle of the characters, the typeface for damaged type characters, the wear patterns; including examining the broken detent teeth and peeling of the electroplating from the surface of the type character; in addition to examining for manufacturer defects in the characters and print quality of the document. (Leslie, 1977; Levinson, 1979; Winchester, 1980; Leslie and Stimpson, 1982; Estabrooks, 1983)

However, the forensic analysis of a typed document soon focused on the examination of the typewriter ribbon ink, rather than the physical examination of the image. Brunelle, Negri, Cantu and Lyter (1977) analyzed a number of different typewriter ribbon inks by thin layer chromatography to determine if they could be differentiated from each other. The authors found that similar colored inks of different manufacturers could be differentiated from each other, as well as all inks within a manufacturer could be differentiated from each other, based on their thin layer chromatograms. (Brunelle, Negri, Cantu and Lyter, 1977) In 1978 English used thin layer chromatography to determine if it was possible to date a typewritten document based on the ink chromatogram. English (1978) found that it might be possible to date a questioned document using this technique only if standards from the same ribbon in the same time frame as the questioned document were available as comparisons.

In 1984 Mathyer and Pfister studied whether it was possible that the carbon film typewriter ribbon could leave identifying features on the surface of the paper. The authors found that with the use of the scanning electron microscope it was possible to differentiate the carbon film ribbon strokes on paper from the different manufacturers, providing yet another means for the identification and individualization of questioned documents. (Mathyer and Pfister, 1984)

E. Paper Analysis

The subject of questioned document examination would not be complete without mentioning the methods used to analyze the paper on which the document was written. One of the first studies done on paper was by Brunelle, Washington, Hoffman and Pro in 1970 using Neutron Activation Analysis (NAA) to examine a variety of papers. The authors found that not only could different manufactures be differentiated from each other, but if paper samples made by the same manufacturer were made a year or more apart, then they could also be differentiated from each other. (Brunelle, Washington, Hoffman and Pro, 1970) Another method used to analyze and differentiate paper samples was by examining the physical properties of the paper itself, including, but not limited to, its weight, pH and color under ultraviolet light. (Kelly and Haville, 1980) In 1993, Blackledge and Gernandt proposed the use of a pH pen as an additional discriminator for the analysis and identification of paper samples. The advantage of the pH pen over other traditional methods for establishing the pH of a sample was that it was quicker, easier and non-destructive to the sample as a whole. (Blackledge and Gernandt, 1993)

CHAPTER III. THEORY

A. Inkjet Printer Theory and Ink Composition

i. Inkjet Printer Theory

There are two main types of image production systems that have traditionally been used to produce inkjet images. The systems are classified as being either continuous inkjet (CIJ) image formulation or drop-on-demand (DOD) inkjet image formation, depending on how the ink is transferred from the cartridge to the medium. For the continuous inkjet (CIJ) technology there are three processes involved in the image formation, namely creation of pressurized drops, drop deflection and ink recirculation. The continuous inkjet (CIJ) process is illustrated schematically in Figure 1. The continuous inkjet system involves pressurizing the ink sufficiently to create a jet of ink out of the nozzle. The jet of ink is then broken into individual drops through the application of a periodic modulation of the fluid exiting the nozzle. (Pond, 2000) In this system, drops are created for every pixel location on the substrate, even if they are not needed to produce the printed document. The drops needed to produce the image are deflected towards the print plane, whereas the excess drops are deflected away from the print plane and into the collection chamber, called a gutter. The ink drops collected in the gutter are then recirculated back into the ink supply reservoir. (Pond, 2000)

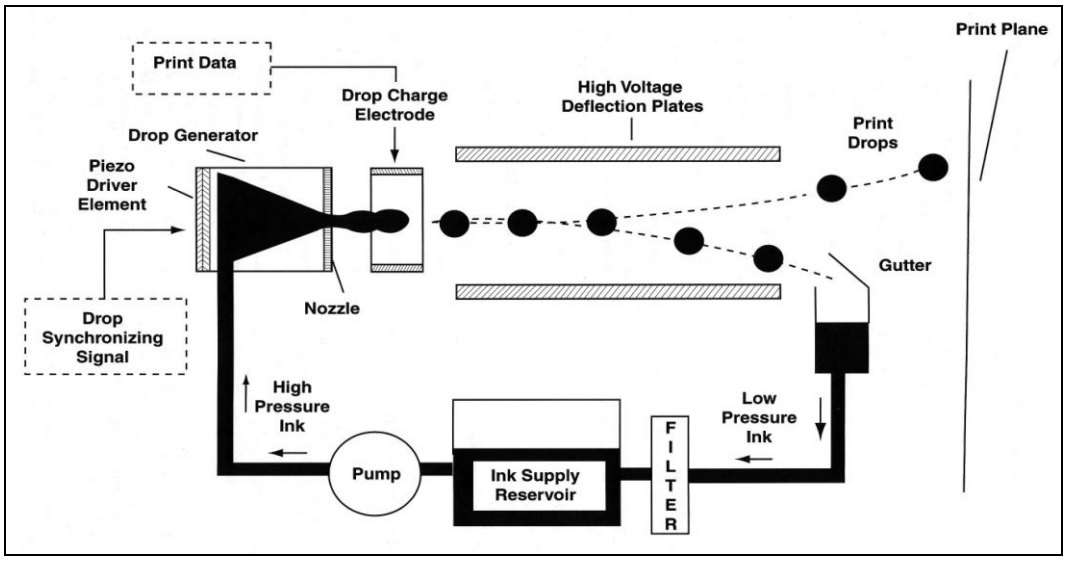

Figure 1: Schematic of the continuous inkjet (CIJ) process. (Adapted from Stephen F. Pond, Ph.D. Inkjet Technology and Product Development Strategies. CA: Torrey Pines Research, 2000, p. 95.)

The advantages of the continuous inkjet image formation process includes the fact that it produces the highest drop rates of any inkjet format and that it is effective with almost any liquid ink composition, the only exception being inductively charged liquid inks. (Pond, 2000) Unfortunately, this type of ink formation is expensive to produce, which is a disadvantage to this type of system. The fact that this system cannot be made to be completely automatic has also hindered its use and acceptance. However, the main disadvantage to the continuous inkjet technology is the decreased ink reliability and poor print quality of the printed documents. (Pond, 2000)

In the drop-on-demand (DOD) inkjet image formation method, the ink is not pressurized to cause an ink jet like in the continuous method, but rather the ink is held in the nozzle, forming a meniscus, which remains in place until some other force overcomes the surface tension forces of the liquid ink. (Pond, 2000) The

drop-on-demand image formation method can be further classified into four main types, namely piezoelectric, thermal, acoustic and electrostatic inkjet image production. Thermal inkjet (TIJ) and piezoelectric inkjet (PIJ) image formation methods are the common methods used in today's printer systems and are discussed in detail below.

Canon was the first company to file patents related to thermal inkjet image formation and was the first company to produce a thermal inkjet printer. As Canon held all the patents on thermal ink formation, manufacturers could not produce their own thermal inkjet printers unless Canon allowed them license. Canon licensed their thermal inkjet (TIJ) process to Hewlett Packard, IBM, Xerox, Olivetti and Kodak, while the other manufacturers, including Epson, Brother and DataProducts, were forced to developed alternative drop-on-demand inkjet printers, namely the piezoelectric inkjet (PIJ) printers. (Pond, 2000) The thermal inkjet (TIJ) process is illustrated schematically in Figure 2. In the thermal inkjet image process, tiny resistors located near the exit nozzle of the cartridge generate sufficient heat for the ink to boil, causing it to bubble. As the bubble expands, the pressure builds and some of the ink is pushed out of the nozzle onto the medium. When the bubble collapses a vacuum is created which pulls ink from the cartridge reservoir onto the printhead, replacing the ink that was dispensed. This latter process is the limiting factor in how fast a thermal inkjet device can print an image. (Pond, 2000)

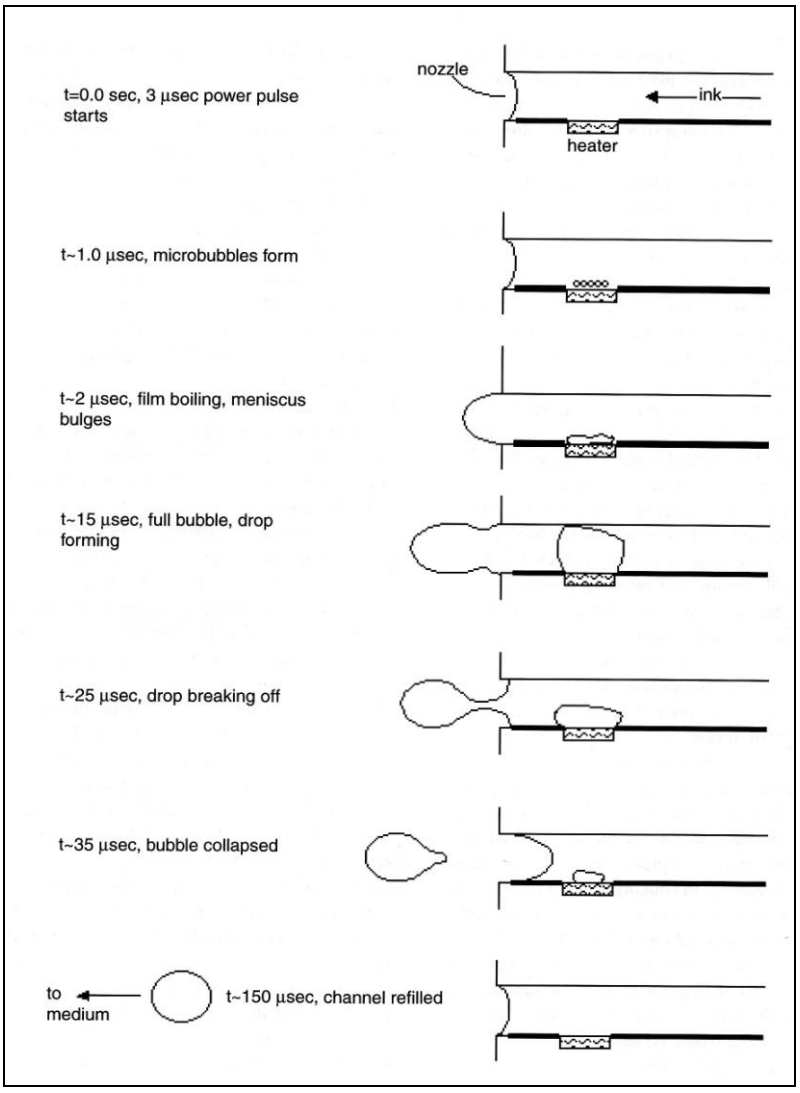

Figure 2: Schematic of the thermal inkjet (TIJ) process. (Adapted from Stephen F. Pond, Ph.D. Inkjet Technology and Product Development Strategies. CA: Torrey Pines Research, 2000, p. 118.)

There are two types of thermal inkjet cartridges that are commonly used, and they differ based on how the ink is ejected from the cartridge. The two types of thermal inkjet systems are the edgeshooter and the roofshooter. The edgeshooter and roofshooter inkjet systems are illustrated schematically in Figures 3 and 4. The edgeshooter and roofshooter classification is based on the orientation of the nozzle in relation to the heater resistor surface. In the edgeshooter design, the ink drops

are ejected in a direction along the plane of the heater surface, whereas in the roofshooter design, the ink drops are ejected perpendicular to the plane of the heater resistor surface. (Pond, 2000) The other main differences between the edgeshooter and the roofshooter devices include the location of the ink supply and the speed of drop generation/regeneration. In the edgeshooter device, the ink enters the chamber from the side of the device, whereas for the roofshooter device the ink enters from beneath the heater surface. This latter orientation for the ink supply allows for faster chamber refilling and hence faster printing than what is observed for the edgeshooter systems. The preference for an edgeshooter or a roofshooter system has less to do with any slight advantage one system may have over another, and more to do with the in-house experience and knowledge with a particular setup. The edgeshooter type of thermal inkjet (TIJ) system is preferred by Canon and Xerox, while the roofshooter type of thermal inkjet (TIJ) system is preferred by Hewlett Packard, Olivetti and Lexmark. (Pond, 2000)

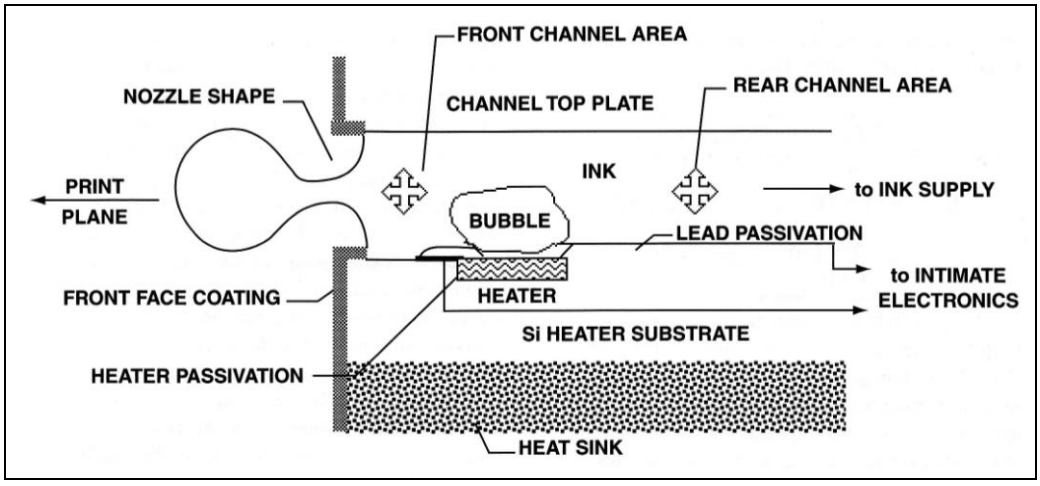

Figure 3: The schematics of the edgeshooter thermal inkjet (TIJ) device. (Adapted from Stephen F. Pond, Ph.D. Inkjet Technology and Product Development Strategies. CA: Torrey Pines Research, 2000, p. 120.)

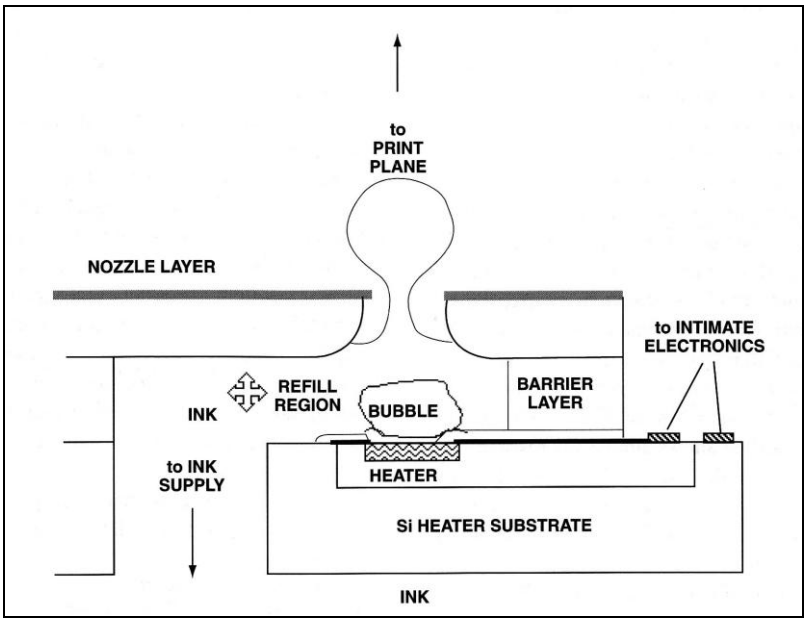

Figure 4: The schematics of the roofshooter thermal inkjet (TIJ) device. (Adapted from Stephen F. Pond, Ph.D. Inkjet Technology and Product Development Strategies. CA: Torrey Pines Research, 2000, p. 120.)

The main benefits of the thermal inkjet image technology are its low cost and its disposable printhead ability. The fact that the cartridge not only contains an ink supply, but also a printhead, means that every time the cartridge is replaced a new printhead is being used, which eliminates the problem of printhead failure and improves the image formation. The disadvantages, however, are the fact that the ink formulations are restricted to those with a vaporizable component and its inability to completely control the bubble collapse part of the drop ejection process. (Pond, 2000)

Piezoelectric drop-on-demand inkjet image formation, on the other hand, is the technology used by Epson, Brother, DataProducts Howtek, Tektronix and Okidata in their computer printers. (Pond, 2000; Okidata personal communication, 2011) Unlike the thermal inkjet technology, which uses heat to dispense the ink droplets, the piezoelectric inkjet technology uses piezoelectric elements or

piezoelectric crystals, located at the back of the ink reservoir of each nozzle, to dispense the ink droplets. These piezoelectric elements receive a tiny electric charge that causes the element to vibrate. When the element vibrates in towards the cartridge reservoir, it forces out a tiny amount of the ink from the nozzle onto the document, and when the element vibrates outwards, it pulls ink in from the reservoir to replace the dispelled ink. (Pond, 2000) The piezoelectric inkjet (PIJ) process is illustrated schematically in Figure 5.

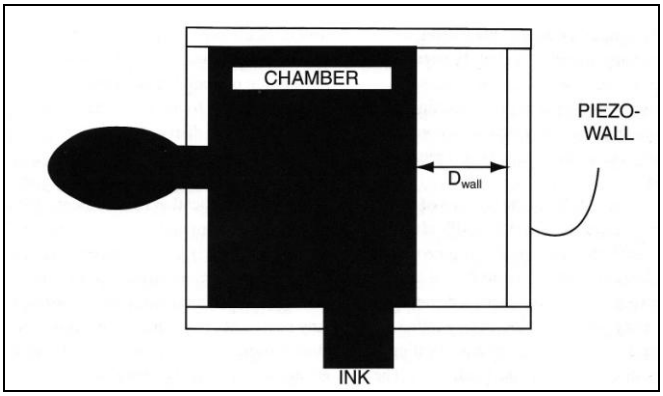

Figure 5: The schematics of the piezoelectric inkjet (PIJ) process. (Adapted from Stephen F. Pond, Ph.D. Inkjet Technology and Product Development Strategies. CA: Torrey Pines Research, 2000, p. 106.)

The main advantages with the piezoelectric inkjet technology are its precision in dispensing the ink droplet and the wide variety of ink formulations that can be used in this system. The only limiting factor in its ink formulation is that the viscosity of the ink must be low enough so that its surface tension forces allow an ink drop to form in the time frame allowed. (Pond, 2000) The main disadvantage with this method is that it is more expensive than the thermal inkjet systems. This increased expense is due in part to the fact that since each nozzle has its own ink chamber, the printhead has to be large enough to accommodate the row of nozzles and chambers, as well as the electronics necessarily to run the system. In addition,

the transducers needed for the system to operate are more expensive than the transducers used for the thermal inkjet systems. The large cost to produce the piezoelectric printheads makes these printheads non-disposable, and therefore they must be able to last for the lifetime of the printer device. The non-disposable nature of the printhead may also lead to greater instances of printhead failure as compared to the thermal inkjet printing process. (Pond, 2000)

ii. Ink Composition

The two types of drop-on-demand inkjet technologies, thermal inkjet (TIJ) and piezoelectric inkjet (PIJ), have different requirements for their ink formulations. In the thermal inkjet technology, some of the products of the degradation reactions can deposition on the surface of the heater resistor in a process called kogation. Kogation refers to this build-up of material on the outer surface of the printhead, which causes reduced heat transfer to the adjacent ink resulting in a decrease in the ink ejection from the printhead. Thus, the ink composition must be kogation resistant for it to be successful as a thermal inkjet (TIJ) ink. (Pond, 2000) For the piezoelectric inkjet technology, on the other hand, the ink composition has to be designed to allow the ink to be more resistant to air dissolution. Humectants and organic solvents used in a piezoelectric inkjet ink composition must be chosen to avoid the creation of air bubbles. (Pond, 2000) In general it was found that an ink composition that could be used successfully in a thermal inkjet (TIJ) printhead could also be used successfully in a piezoelectric inkjet (PIJ) printhead, however the converse is not necessarily true. (Pond, 2000)

Inkjet computer printer ink is a highly complex mixture of solvents and dissolved, and sometimes suspended, solids. The types of solvents and/or solids that are present in the various types of ink solutions are dependent on the characteristics or behavior that is required of the inks themselves. There are several common types of solvents and/or solids that are used in the formulation of the ink, and these include colorant, humectants, solvents, surfactants and penetrants.

Colorants are used to provide the color to the ink formation, and include either dyes or pigments that absorb light at specific wavelengths. The difference between dyes and pigments is that dyes are individual colored molecules in solution, whereas pigments are solid particles comprising of hundreds or thousands of colored molecules, depending on the size of the pigment. (Pond, 2000) Common dyes and pigments in the preparation of inkjet ink cartridges include Food Black 2, Carbon Black, Acid Blue 9, CI Direct Blue 199, CI Acid Red 52, CI Reactive Red 180, CI Acid Red 37, CI Reactive Red 23, CI Pigment Red 122, CI Pigment Red 184, CI Direct Yellow 86, Direct Yellow 132, Acid Yellow 23, Acid Yellow 17, CI Pigment Yellow 74, CI Pigment Yellow 154 and CI Pigment Yellow 13. (Pond, 2000) Refer to Appendix A for the structures of the common dyes and pigments.

Solvents, meanwhile, are the ink vehicles that dissolve or suspend the colorant. A specific ink formulation can consist of a single solvent or be composed of a multitude of solvents. When multiple solvents are used, they have different responsibilities in the ink formulation. One solvent can be used to keep the dye in solution, while the other can be used to delay the loss of water from the printhead. Examples of common solvents include water, alcohols, and methyl ethyl ketone.

Dye based inks tend to be based on water as the primary solvent, though this is not always the case. Hewlett Packard, for example, produced an ink formulation where the major "solvent" components were humectants that functioned like solvents in suspending the dye molecules. (Pond, 2000)

Surfactants are added to lower the surface tension of ink to promote the wetting of the paper, thus allowing the ink to penetrate into the paper. (Pond, 2000) In general, colored inks need to penetrate the paper quicker than the black inks in order to allow for the multiple layering of color needed to achieve the desired shade without ink bleeding or smearing. Consequently, it would be expected that more surfactant would be present in colored inks than in black inks. Humectants are used to lower the volatility of the liquid used to suspend/dissolve the colorant, which in turn inhibit evaporation of the ink prior to the application of ink to paper. (Pond, 2000) The humectant(s) used must be miscible with the primary solvent in order to be effective. Glycols are a common type of humectant used in the creation of inks. Penetrants are added to promote the penetration of the ink into the plain paper fibers for the purpose of accelerating ambient drying. (Pond, 2000) Once again, since colored inks need to penetrate the paper and dry faster than black inks, one would expect more penetrants in colored inks than in black inks.

Viscosity modifiers are used to raise the ink viscosity and prevent smearing. This is generally done by adding an additional amount of humectant rather than using a separate viscosity modifier. Dye solubilizers are added to promote dye solubility in the primary solvent and allow for even coloring within the document. An example of a common dye solubilizer is n-methyl-pyrrolidone. (Pond, 2000)

Dispersants are used to assist in the colloidal suspension of a pigment in the primary solvent. Since not all inks are pigment based, not all inks will contain a dispersant. Fixatives are added to promote image permanence and resistance to smearing, while biocides are used to kill bacteria and other organisms that can grow in the aqueous inks. (Pond, 2000) Chelation agents are added to complex metal ions to prevent scale buildup in locations where ink may evaporate, especially on the printhead surface of the cartridge. pH buffers are added to alter the pH of the ink solution into the desired range to maximize the solubility of the main components and UV blockers are added to promote lightfastness of the dyes in the final image. (Pond, 2000) Anticockle additives are used to reduce the interaction of the liquid ink with the paper fibers, which leads to paper cockle and curl. Free radical inhibitors and antioxidants are used to stabilize the dyes in the printed image in order to delay color fading or shifting. (Pond, 2000)

Not all ink formulations contain all of the components listed above. Which components are included in a specific ink formulation is dependent on the quality of the ink cartridge, the manufacturer and the applications for which it is used. In addition, it is not unusual for the different manufacturers to chemically modify a commercially available type of dye or surfactant, which can assist in their identification and differentiation to a particular cartridge and/or manufacturer.

B. Chromatography

Chromatography is a simple technique for the separation and identification of a variety of substances, including, but not limited to, inorganic ions, organic molecules and bioorganic compounds. The first real application of absorption chromatography to

scientific studies was performed by Mikhail Tsvett in 1901, who first used the term chromatography in 1906. (Braithwaite and Smith, 1996) Tsvett discovered that plant pigments, namely chlorophylls, could be separated into discrete bands by placing them through a column filled with calcium carbonate. Tsvett further experimented with different column materials and particle sizes to observe their effect on the separation of the sample components.

A renewed interest in Tsvett's work led to advances in absorption chromatography in the early 1930's, but it was not until the paper by Martin and Synge, in the early 1940's, that chromatography became common usage in the laboratory. (Jonsson, 1987) Martin and Synge developed the process of liquid-liquid chromatography, both in the column and in the planar form, for which they earned a Chemistry Nobel Prize in 1952. (Jonsson, 1987; Braithwaite and Smith, 1996) The development of gas-liquid chromatography was performed by James and Martin, whose work was first published in 1952. (Jonsson, 1987) Their work on gas-liquid chromatography led to a variety of studies and improvements in the field of chromatography for several decades after their article was published.

In the simplest of terms, chromatography is a separation technique that uses differences in the affinity of the components in a mixture for the stationary phase and the mobile phase to facilitate their separation out of the mixture. The components of the mixture can interact with the stationary phase and mobile phase in a variety of ways, including charge, relative solubility or absorption, though traditionally it is the adsorption-desorption equilibrium between the compounds on the stationary phase and in the mobile phase which give rise to their separation. The separation can be effected by a

number of factors, including, but not limited to, the polarity of the stationary and mobile phases, the polarity of the sample molecules, the flow rate of the mobile phase and temperature. The factors selected for enhancing the separation of the components of the sample is dependent in part on the chromatography method selected for use. The common types of chromatographic methods are discussed below.

i. Thin Layer Chromatography

In thin layer chromatography the stationary phase is a layer of adsorbent material fixed onto a flat glass, thin aluminum or polymer substrate. The type of adsorbent used can vary and the selection is dependent on the types of substances that are to be analyzed. Common types of adsorbents used include silica gel, alumina and cellulose, with silica gel being the most common. (Braithwaite and Smith, 1996) Thin layer chromatography plates are generally prepared by mixing the adsorbent with an inert binder and water, spreading the slurry over the plate and then the activation of the adsorbent by heating it in an oven. Two important properties of the adsorbent are its particles size, recommended to be between 10-15 μm, and it homogeneity. (Braithwaite and Smith, 1996) If the particles are too coarse, then it will not produce a satisfactory thin layer, whereas if the particles are too small, it will produce an unacceptably slow flow rate.

Development of the chromatogram is accomplished by capillary action of the mobile phase or solvent up the adsorbent or plate. As the solvent moves past the starting point, equilibrium is established for each component in the sample mixture between the stationary phase (adsorbent) and the mobile phase (solvent). Due to the differences in the equilibrium for the various sample components, and

differences in their solubility in the mobile phase, the various sample components will appear as discrete spots at different levels on the plate for the specific solvent system used. There are a variety of different mobile phases to choose from, ranging in their degree of polarity, which can be used to aid in the identification and differentiation of sample components. The type of mobile phase selected is dependent on the sample type and the adsorbent used as the stationary phase.

Once the plate has been developed, it is removed from the tank, dried and examined. If the sample components or spots are visible, then an immediate examination and comparison can be done. If the sample components or spots are invisible, then a visualization technique must be utilized first before a comparison can occur. These sample components or spots can be visualized either by physical methods such as the use of UV light or fluorescence monitoring, or by chemically reacting the sample with a developing reagent; the method selected is based on the composition of the starting material. (Braithwaite and Smith, 1996) Once the spots are visible, their Rf values can be calculated and compared with standards to aid in their identification. The Rf values for a particular sample component can be calculated using the formula

$$Rf = \frac{\text{distance sample component traveled}}{\text{distance mobile phase traveled}}$$

Refer to Figure 6 for the schematic of the Thin Layer Chromatography (TLC) process.

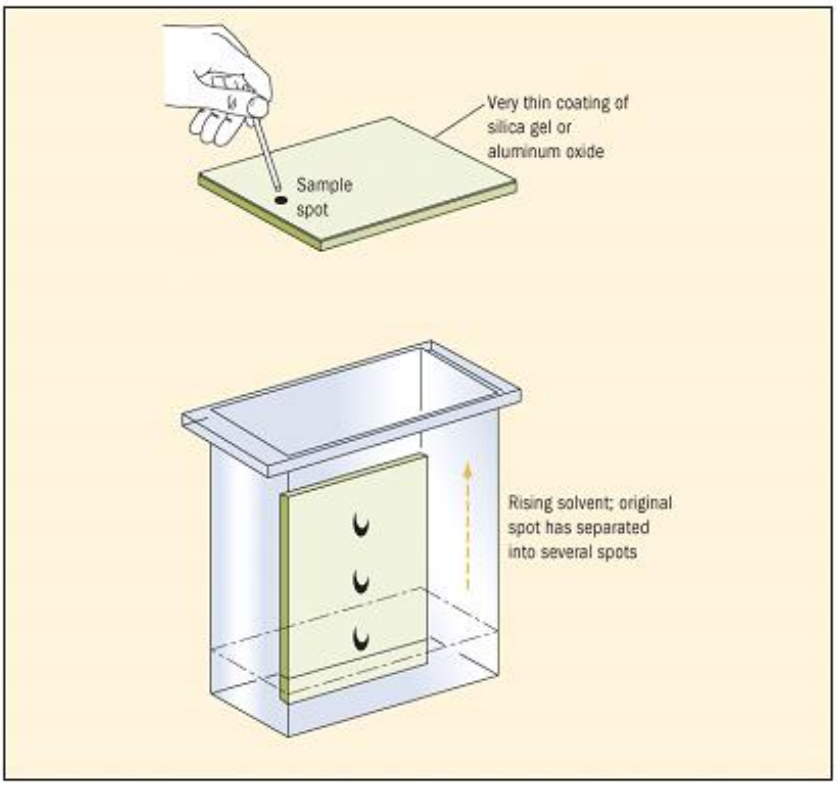

Figure 6: The schematics of the Thin Layer Chromatography (TLC) process. (Adapted from Richard Saferstein, Introduction to Forensic Science, 9th Edition. NJ: Prentice Hall, 2007.)

Thin layer chromatography is sensitive to differences in chemical structure, as structure affects the types of interactions between samples and adsorption and sample solubility in the mobile phase. The possible interactions that can occur between the adsorbent and the sample include London dispersion or van der Waals forces, dipole-dipole interactions, intermolecular hydrogen bonding and chemisorption. (Braithwaite and Smith, 1996) The efficiency in separating out the components in a mixture is dependent, in part, on the type or types of interactions present. Other methods have been developed to increase the resolution and identification of the sample components, including the use of a forced solvent flow, operating the plate in a vacuum, multiple development with a series of mobile

phases and two-dimensional thin layer chromatography in which the plate is rotated 90^{o} after development in one system before placing it in the second solvent or development system.

ii. Gas Chromatography and Pyrolysis Gas Chromatography

Gas chromatography is a technique used for the separation of volatile organic mixtures. In this method, a liquid sample is injected into the heated injector port, which causes the sample to vaporize. The gaseous mobile phase then transports the sample components, as a vapor, over the stationary phase (column), where separation is achieved, in part, by the individual sample component's vapor pressure and the extent of its interaction with the stationary phase. (Braithwaite and Smith, 1996; Jennings, 1987) As each sample component exits the stationary phase (column), they are detected by the detector and the results are displayed by the recorder. The benefit of this method is that it not only allows for the identification of the components of a mixture (qualitative results), but it also allows for the determination of the amount present of each component in the mixture (quantitative results). The gas chromatography (GC) process is illustrated schematically in Figure 7.

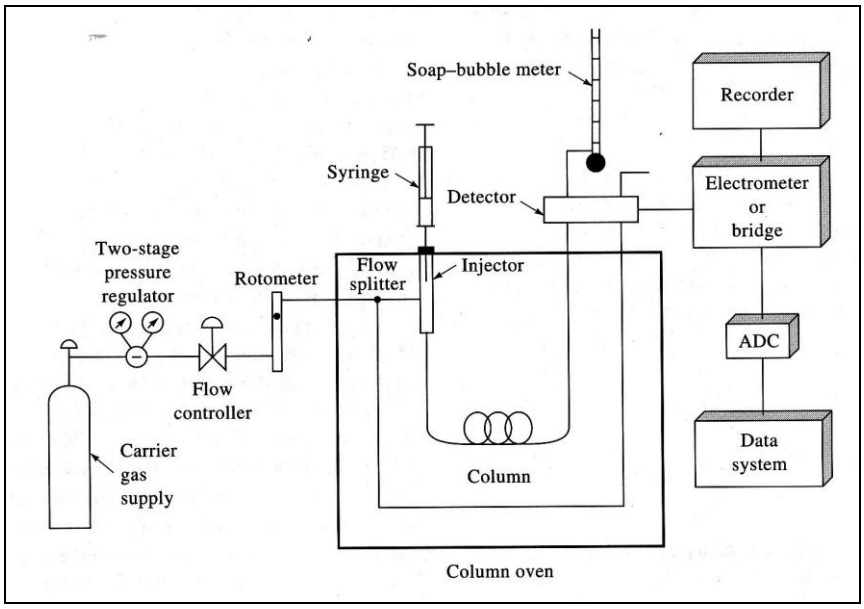

Figure 7: The schematics of the gas chromatography (GC) process. (Adapted from Douglas A. Skoog, James F. Holler and Timothy A. Nieman. Principles of Instrumental Analysis. Fifth Edition. Chicago: Saunders College Publishers, 1998, p. 703)

Traditional gas chromatographic systems used a packed column as the stationary phase. A packed column contains a finely divided, inert, solid support material, usually diatomaceous earth, that is coated with a liquid or solid stationary phase, the nature of which determines what types of materials that can be separated. Current gas chromatographic systems use a capillary column, generally made of fused silica with a polyimide outer coating, whose internal walls are coated with either a liquid or a solid active material as the stationary phase. (Braithwaite and Smith, 1996; Jennings, 1987) These types of columns have a significantly smaller diameter and are much longer in length, increasing the separation and identification ability of the system. The latter system is described in more detail below.

In capillary gas chromatography, the stationary phase is generally a cross-linked liquid bonded to the internal walls of a capillary column and the mobile phase is generally helium or another inert gas. The sample is injected into the

heated injection port and becomes vaporized. The gaseous sample mixes with the helium gas (mobile phase) and travels through the column. The separation is effected by the interaction of the individual components of the sample with the stationary phase, resulting in retardation down the length of the column in accordance to the individual component's distribution ratio (K). The distribution ratio (K) is defined as the concentration of the sample component in the stationary phase divided by the concentration of the sample component in the mobile phase, and is dependent on the component's vapor pressure, thermodynamic properties and affinity for the stationary phase. (Braithwaite and Smith, 1996) Therefore, the time it takes for a specific component to reach the detector is dependent on how many interactions it has with the column, which in turn is dependent on its boiling point, vapor pressure and solubility in the carrier gas. (Jennings, 1987) Consequently, since all components will have different boiling points, vapor pressures and different solubilities, each component will reach the detector at a different time. Using a constant mobile flow rate, the time it takes for one component to go through the system and reach the detector is called its retention time, which can be useful in identifying the various components of the sample.

Pyrolysis gas chromatography is an adaptation of the traditional gas chromatographic method that allows for the analysis of nonvolatile substances. Instead of a direct injection of the sample into the gas chromatographic system, the sample is generally placed into a quartz chamber that is heated resistively in an oxygen-free environment to a set temperature for a number of seconds. (Bull, 2005) This results in a heat-mediated cleavage of the chemical bonds within the initial

sample to yield a number of lower molecular weight substances, referred to as the pyrolysis products of the original samples. This mixture of compounds is then swept onto the column of the gas chromatograph and the method proceeds as normal. The chemical substances produced by the pyrolysis step are indicative of the original sample, and can be used to identify and differentiate the original sample.

It is the thermal energy that is added to the system during the pyrolysis process that breaks down the original substance into fragments of smaller compounds, also referred to as the pyrolysis products. If the parameters of temperature, heating rate and time are kept constant, then the resulting pyrolysis products, and hence pyrogram, will be characteristic of the original substance and the results of the analysis will also be reproducible. (Wampler, 2007) Thus, the pyrogram for a specific compound will consist of the pyrolysis products associated with that compound and not with the original compound itself. For example, when poly(vinyl chloride) is pyrolyzed, the resulting pyrogram consists of peaks for benzene, toluene and naphthalene, but there is no peak in the pyrogram for poly(vinyl chloride). When paper, which is essentially cellulose, is pyrolyzed, peaks for furfural and levoglucosan are found in the pyrogram but there is no peak for cellulose. (Wampler, 2007) Therefore, it is the pattern of the pyrolysis products that are produced during the pyrolysis process that is obtained and used for the comparison and identification of an original sample.

iii. Liquid Chromatography

Liquid chromatography is another technique used for the separation of organic mixtures. One of the first types of liquid chromatographic systems was adsorption chromatography, also known as solid-liquid or normal phase adsorption chromatography. In adsorption chromatography, a polar packed column stationary phase is used with a non-polar mobile phase. The stationary phase consists of a lattice of common porous adsorbents, which are terminated at the surface with polar hydroxyl groups that provide the means for the surface interactions with the solute molecules, while the mobile phase consists of non-polar solvents containing a small amount of polar modifiers. (Braithwaite and Smith, 1996) When the sample is applied to the column, the sample molecules that contain polar functional groups are attracted to the active sites on the stationary phase, which are then subsequently displaced by the polar modifier molecules within the mobile phase, resulting in the sample molecules passing down the column to be readsorbed onto fresh sites on the packed columns. The ease of displacement of the sample components by the polar modifiers is dependent on the relative polarities of the sample components. The more polar the sample components are, the stronger they are adsorbed onto the packed column and the slower they are eluted from the column. (Braithwaite and Smith, 1996)

Current liquid chromatographic systems use capillary columns that contain a bonded-phase component as the stationary phase. Consequently, this type of liquid chromatography is also known as bonded-phase chromatography and can be operated in either the normal or reverse phase. As stated above, in normal phase

chromatography the stationary phase is polar and the mobile phase is non-polar, whereas in reverse phase chromatography the stationary phase is non-polar and the mobile phase is polar. In reverse phase bonded-phase chromatography, "the stationary phase is chemically bonded or organo-bonded to an insoluble matrix. The most common type of stationary phase [used] is octadecylsilane (ODS), which is [then] bonded to a silica support via a silyl ether (siloxane) linkage". (Braithwaite and Smith, 1996, p. 263) Other stationary phases include C_8 hydrocarbon chains, C_{18} hydrocarbon chains, C_8 groupings containing aromatic moieties and phenyl groups. (Braithwaite and Smith, 1996) In normal phase bonded phase chromatography, "the polar characteristics of the stationary phase are modified by incorporating ether, nitrile, diol and/or amino substituents normally at the end of a hydrocarbon chain or, on an aromatic ring, both of which would then be bonded to an [insoluble] support material". (Braithwaite and Smith, 1996, p. 263) The advantage of the bonded-phase liquid chromatography over the liquid-solid system is its ability to use the gradient elution method, in addition to the isocratic elution method, for the analysis of a sample.

There are a variety of other types of liquid chromatography systems that can be used for the analysis. Ion-exchange liquid chromatography uses the differing affinities of the ions in the sample for oppositely charged ionic groupings located on the column or stationary phase to facilitate the separation of the components. Ion-pair liquid chromatography method incorporates a large organic counter ion in the mobile phase that has the opposite charge to that of the sample ion(s), and when it comes into contact with the sample ion(s) it will form a neutral ion-pair. The ion-

pair formed tends to be hydrophobic in nature and hence will be attracted to the non-polar stationary phase, facilitating its separation from the mixture. (Braithwaite and Smith, 1996) Gel permeation or gel-exclusion liquid chromatography uses the selective diffusion of the sample molecules within the mobile phase lattice as the means for separating out the components in a mixture. Consequently, the basis for separation in this method is the molecular weight and size of the sample components. (Braithwaite and Smith, 1996) Other methods of liquid chromatography are available, but have limited use in the forensic analysis of evidence, in particular forensic document evidence.

There are many benefits of the liquid chromatography method, including greater control and choice of stationary phase and mobile phase, the non-destructive nature of the analysis and the fact that it is not limited by sample component volatility or thermal stability. In addition, like that for the gas chromatography system, through the use of a constant mobile phase flow rate, the detection/identification of the components of a mixture, and the determination of the amount present of each component in the mixture, can be accomplished.

High Performance Liquid Chromatography (HPLC) is the current method that is commonly used and is the method that will be discussed. In high performance liquid chromatography the sample is dissolved in a solvent, is injected into the injection port and mixes with the liquid mobile phase. The composition of the mobile phase is determined by the proportion of each separate solvent drawn from the solvent reservoirs and delivered to the column via the high-pressure pump. The mobile phase carries the sample into and through the column. As the sample

mixture travels through the system, the individual sample components interact with both the mobile phase and the stationary phase. The time it takes for a specific component to reach the detector is dependent on how many interactions it has with each of the two phases, which in turn is dependent on its relative solubility within each phase. Thus, since components have different solubilities with each phase, each component will reach the detector at a different time. As stated previously in the gas chromatography section, the time it takes for one component to go through the system and reach the detector, at a constant flow, is called its retention time, and can be used as one criterion in the identification of the components of the sample. The High Performance Liquid Chromatography (HPLC) process is illustrated schematically in Figure 8.

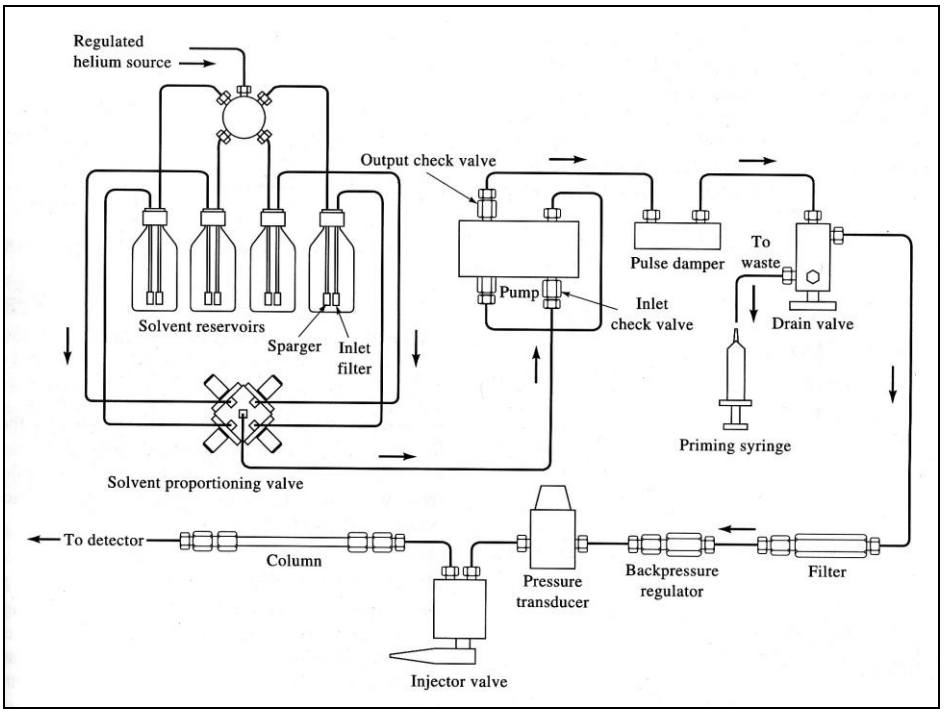

Figure 8: The schematics of the High Performance Liquid Chromatography (HPLC) process. (Adapted from Douglas A. Skoog, James F. Holler and Timothy A. Nieman. Principles of Instrumental Analysis. Fifth Edition. Chicago: Saunders College Publishers, 1998, p. 729)

C. Infrared Spectroscopy and Attenuated Total Reflection Fourier Transform Infrared Spectroscopy (ATR FT-IR)

Spectroscopy is a technique commonly used for the identification and analysis of organic substances. Differences in the absorption of specific wavelengths of light by the samples are detected and compared. There are several different regions of light used for the analysis – ultraviolet, visible and infrared. By selecting a specific region of light for analyzing the sample, qualitative results (generally by using infrared light) or quantitative results (generally by using ultraviolet-visible light) can be obtained. In this project, infrared spectroscopy was used to analyze the various black inkjet computer printer inks.

In Fourier transform infrared spectroscopy the source of the infrared radiation is typically a heated filament or a heated rare earth oxide electrode (Nerst Glower), and the infrared radiation is collected by a series of optics and passed onto a Michelson interferometer. The Michelson interferometer works in that a beam of radiation from the source is collimated and impinges onto a beam splitter, transmitting half of the radiation and reflecting the other half. The two beams of radiation are then reflected by mirrors, the transmitted beam from the beam splitter is reflected by a moveable mirror and the reflected beam from the beam splitter is reflected by a fixed mirror. The two beams are then reunited at the beam splitter, where half of each is directed towards the sample and the detector, while the other half of each is directed towards the source. (Skoog, Holler and Nieman, 1998) The intensity of the light reflected by the sample is measured by the detector as a function of the mirror position. (Wilkinson, Perry, McKinney and Martin, 2002) This generates an interferogram (a time domain signal) which is then converted by the Fourier transform (FT) to a spectrum (a frequency domain signal). Since all

molecules, except for homonuclear species, absorb infrared radiation, all molecules, except for homonuclear species, are capable of generating these molecular "fingerprints". (Skoog, Holler and Nieman, 1998) The Fourier Transform Infrared (FT-IR) Spectrometer is illustrated schematically in Figure 9.

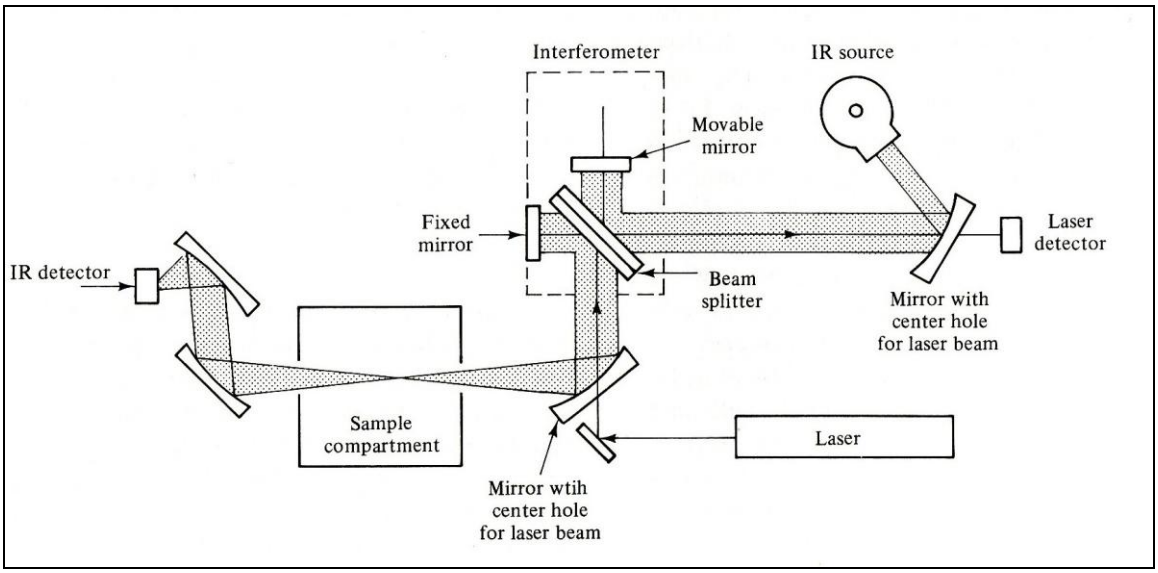

Figure 9: The schematics of the Fourier transform infrared (FT-IR) spectrometer. (Adapted from James D. Ingle, Jr. and Stanley R. Crouch. Spectrochemical Analysis. New Jersey: Prentice Hall, 1988, p. 412.)

In Attenuated Total Reflection Fourier Transform Infrared Spectroscopy (ATR FT-IR) the sample is placed directly onto an internal reflecting element (IRE) that has a high refractive index, commonly a diamond, germanium or zinc selenide internal reflecting element but other types are possible. Pressure is provided from above in order to ensure maximum amount of contact is made between the internal reflecting element and the sample in order that informative and reproducible spectra are obtained. (Merrill, Bartick and Mazzella, 1996) It is important to use the correct internal reflecting element for the type of sample that will be analyzed. The diamond internal reflecting element tends to mask the region of 1800-2400 cm^{-1}, whereas the germanium internal reflecting

element allows an unobstructed spectrum to be obtained. (Merrill, Bartick and Mazzella, 1996) Depending on the sample to be studied, and the region of interest to be looked at, one type of internal reflecting element may be chosen over the others.

As the beam of radiation passes from a higher refractive index medium to a lower refractive index medium, reflection and refraction occurs. The path of the light rays is determined by the angle of the incident beam in respect to the boundary between the two media. As shown in Figure 10, as the angle of incidence increases, the radiant power of the reflected beam increases and the radiant power of the refracted beam decreases. At a certain angle, called the critical angle, the light will not be refracted into the lower refractive index medium. Instead the light will be refracted parallel to the boundary between the higher refractive index medium and the lower refractive index medium. At an angle exceeding the critical angle, the light is reflected back into the higher refractive index medium. This reflection of the light back into the higher refractive index medium is called total internal reflection. (Ingle and Crouch, 1988)

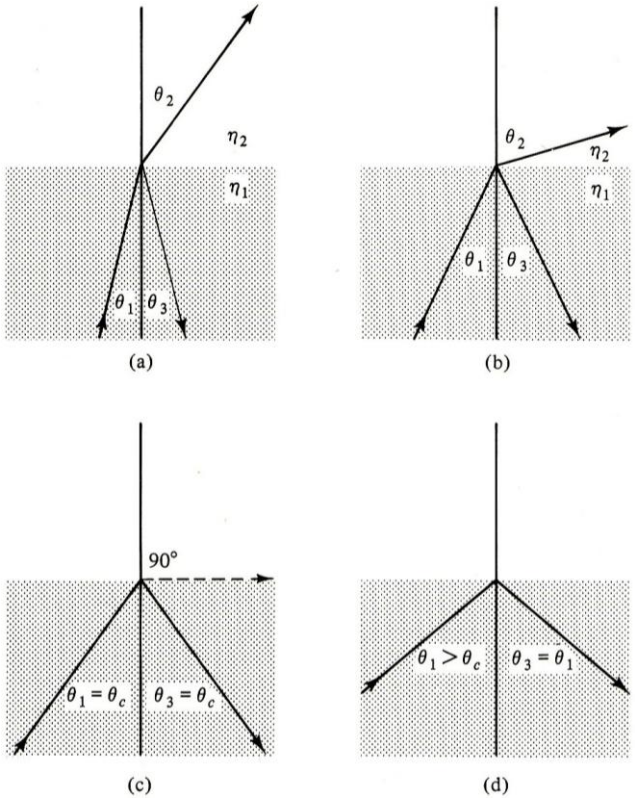

Figure 10: a) As the incident beam passes from a higher refractive index medium to a lower refractive index medium it bends away from the normal. b) As the angle of incidence θ_1 becomes larger, the reflected beam grows stronger and the refracted beam grows weaker. c) At the critical angle θ_C, the light will be refracted parallel to the boundary been the two media. d) At an angle greater than the critical angle, the light is reflected back into the higher refractive index medium in phenomenon called total internal reflection. (Adapted from James D. Ingle Jr. and Stanley R. Crouch Spectrochemical Analysis. New Jersey: Prentice Hall, 1988, p. 34.)

In order to obtain an ATR spectrum of a sample, the sample is placed directly onto an internal reflecting element (IRE) that has a higher refractive index than the refractive index of the sample. As illustrated in Figure 11, as the incident beam passes into the lower refractive index medium at an angle exceeding the critical angle, the light is reflected back into the higher refractive index medium. Even though there is total reflection at an angle greater than the critical angle, the radiation does penetrate a small distance into the lower refractive index medium. The penetrating radiation is called the evanescent wave, and how far this wave penetrates into the lower refractive index

medium is dependent on the refractive indices of the two media, wavelength of radiation and the angle of the incident beam. The depth of penetration of the evanescent wave into the lower refractive index medium will increase as the difference between the refractive indices of the two media decreases. If the lower refractive index medium absorbs the evanescent radiation, the formation of absorption bands corresponding to the lower refractive index medium occurs, which has the effect of lowering the intensity of the reflecting radiation. Hence this process is known as attenuated total reflection (ATR). (Skoog, Holler and Nieman, 1998; Ingle and Crouch, 1988)

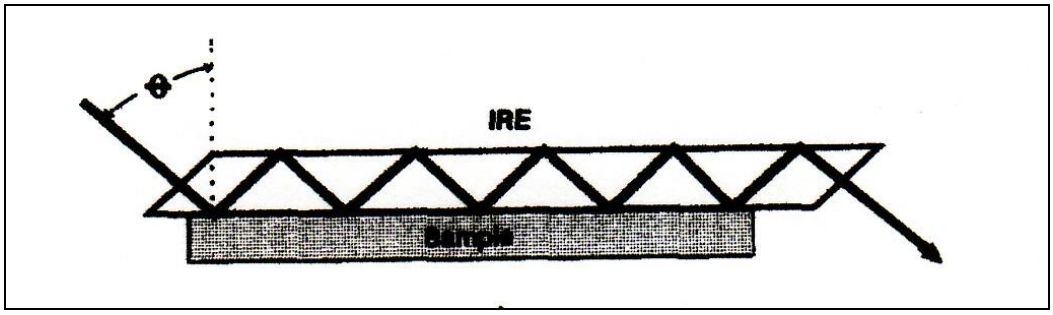

Figure 11: The multiple internal reflections in an internal reflection element (IRE). (Adapted from Edward G. Bartick, Mary W. Tungol and John A. Reffner. "A new approach to forensic analysis with infrared microscopy: internal reflection spectroscopy." Analytica Chimica Acta, 1994; 288: 35-42.)

Attenuated total reflectance spectra are similar to the IR spectra obtained with a regular FT-IR spectrophotometer. Peak shapes and relative intensities are the main differences observed when comparing ATR spectra to traditionally obtained IR spectra. As long as the sample thickness exceeds the depth of penetration, the absorbance bands will be independent of sample thickness, since the radiation penetrates only a few micrometers into the sample. (Skoog, Holler and Nieman, 1998; Ingle and Crouch, 1988)

The main benefit of the ATR FT-IR method is the fact that there is minimal to no sample preparation required before analyzing the sample. The desired area of the sample,

in this case the document, is placed in contact with the internal reflecting element and a spectrum is easily obtained. This method is applicable to a wide variety of sample types, including solids, pastes and solutions and the results of the analyses are reproducible, which allows for the establishment of a searchable database. In addition, this method is non-destructive, which is an essential criterion when examining questioned document evidence.

CHAPTER IV. SCOPE OF THE STUDY

This study was limited to the analysis of black inkjet or liquid inks dried on paper substrates that were manufactured by the major computer printer ink companies. In addition, control substrates of blank paper and glass microscope slides were analyzed in this study to assist in the interpretation of the analytical results of the ink samples. The companies whose products were examined in this research project included Canon, Hewlett Packard, Epson, Xerox, Kodak and Okidata. (Please see Appendix B for complete listing of the various black inkjet computer printer ink samples). The products of other manufacturers (Lexmark, Apple and Brother) and the refill ink companies were not examined in this research project. Laser toners, solid phase inks (i.e. non-liquid inks) and colored inkjet inks were also not examined at this time.

CHAPTER V. HYPOTHESES

The aim of this project was to determine the variations that exist among the different types of black inkjet computer printer inks produced from six different inkjet ink manufacturers. As stated previously, the companies included in this study were Canon, Hewlett Packard, Epson, Xerox, Kodak and Okidata. In addition, it was necessary to determine if variations exist within a specific black inkjet ink manufactured by these companies. This information was necessary for the identification and evaluation of computer generated questioned document physical evidence. The analysis was restricted to black inkjet inks dried on a paper substrate and/or control sample glass. Liquid or neat inkjet samples were not analyzed at this time.

The main hypotheses of this study are listed below.

Hypothesis One: There exist analytically demonstratable differences in the inkjet computer printer ink compositions from the *different* manufacturers that can be demonstrated in the laboratory and thus will allow them to be differentiated from each other.

Hypothesis Two: There exist laboratory demonstrable differences in the inkjet computer printer ink compositions of the various types of black ink cartridge types produced by a *single* manufacturer that will allow them to be differentiated from each other.

Hypothesis Three: The black ink composition of a *single model* of ink cartridge type from a specific manufacturer will be consistent across various manufacturer production runs.

Hypothesis Four: The composition of the black ink *within* a single ink cartridge type from a specific manufacturer will be consistent across multiple printings.

Hypothesis Five: Chromatographic and spectrophotometric methods will provide accurate and reproducible results that can be used, either individually or in conjunction with each other, to differentiate between the various black inkjet computer printer ink manufacturers.

CHAPTER VI. METHODOLOGY

A. Introduction

The purpose of this research was to develop a method for the analysis and characterization of black inkjet computer printer inks. This research was conducted in two separate stages. The first stage of this study involved the analysis of the black inkjet computer printer inks in order to establish a classification procedure for the analysis and identification of black inkjet inks using a variety of analytical techniques. The second stage of this study involved a blind study to test the classification procedure established in the first part.

Various analytical techniques were used to analyze the black inkjet computer printer inks. The main techniques employed included Thin Layer Chromatography (TLC), High Performance Liquid Chromatography (HPLC), Pyrolysis Gas Chromatography-Mass Spectrometry (Py-GC-MS) and Attenuated Total Reflection Fourier Transform Infrared Spectroscopy (ATR FT-IR).

The creation of a classification procedure for the identification and differentiation of black inkjet computer printer inks was a necessary step for the advancement of questioned document examination. As stated previously, inkjet computer printer technology has increased not only in popularity for home use, but has increased in popularity for illegal activities. For example, in 1995 $2,615,153 in counterfeit US currency was passed, of which 6.7% was produced by inkjet technology; whereas in 2001 $19,555,048 in counterfeit US currency was passed, of which 94.1% was produced by inkjet technology. (LaPorte and Ramotowski, 2003) This represented a 14-fold increase in the use of inkjet technology in only one type of

illegal activity. Additionally, in remarks presented before the United States Senate Homeland Security and Government Affairs Committee in June 2005, Mr. Frank E. Moss reported that in 2004 there were 1722 cases of passport fraud with 183 arrests and in the first half of 2005 there were 2401 cases of passport fraud with 375 arrests. (Moss, 2005) Though obviously not all of these fraudulent passports were modified using inkjet computer technology, the popularity of the inkjet devices suggest that a significant percentage of these documents were modified and/or produced using black inkjet inks. Without the creation of a classification procedure in the identification of black inkjet computer printer inks, it would be harder to prove associations between suspect(s) and questioned document(s). This classification procedure would be able to provide the investigator another tool in the investigation, examination and prosecution of computer generated questioned documents.

B. Sample Collection

This study focused on the composition of the different types of black inkjet or liquid printer inks only. The analysis of laser toners, solid phase inks (i.e. non-liquid) cartridges and colored inkjet ink cartridges will be left for a future study.

Samples were requested from the different major computer printer ink manufacturers. Manufacturers were asked to donate 3-5 samples each of the different inkjet (liquid ink) cartridges that they manufacture. It was important that multiple samples of each cartridge be analyzed in order to determine the consistency of the specific cartridge compositions. It was crucial to show that the composition within a specific cartridge type was uniform to ensure the validity of the results. Most of the manufacturers who responded had generously donated representative samples of their

different ink cartridges (in some cases they donated all of the types of cartridges that they manufacture) and most were sent as multiple samples. A listing of the inkjet ink cartridges donated from the different computer printer ink manufacturers is included in Appendix B.

The products of other manufacturers (Lexmark, Apple and Brother) and the refill ink companies will not be examined in this research project.

C. Sample Preparation

i. HPLC and TLC Sample Preparation

For both TLC and HPLC, the type of sample being analyzed was the extracted ink sample. In order to extract the ink from the paper a solvent must be used. Extraction solvents of either 100% methanol, 100% ethanol or a 50:50 mixture of ethanol and distilled water were tested as the extraction solvent in this study. The extraction solvents listed were recommended by Mr. Gerry LaPorte of the United States Secret Service, who had previously studied a limited set of inkjet inks using thin layer chromatography. (LaPorte and Ramotowski, 2003) The extraction solvent selected for the study allowed for the maximum extraction of the ink from the paper matrix. For the TLC and HPLC analyses, a small section of the stained portion of the ink deposited paper was placed in a labeled vial containing an aliquot of the extraction solvent. The paper was allowed to soak in the extraction solvent, agitating it periodically, to ensure that as much of the ink as possible was extracted from the paper. All samples were soaked in the extraction solvent for the same amount of time to eliminate introduction of extraction time bias in the results.

The extracted ink solutions were transferred into clean, labeled vials and capped. Multiple samples, when provided, of the black inkjet ink cartridge types were prepared and analyzed. This sampling of the ink from paper was done so as to mimic real case situations as closely as possible, since document examiners receive documents for analysis rather than ink cartridges.

ii. Py-GC-MS and ATR FT-IR Sample Preparation

For both Py-GC-MS and ATR FT-IR, the ink samples were analyzed directly on the paper; there was no extraction of the ink from the paper prior to the analysis. A stained portion of the ink deposited paper was placed onto the appropriate sample holder, either placed within a quartz chamber or placed in contact with the internal reflecting element for analysis by Py-GC-MS and ATR FT-IR respectively, and the results were obtained. The results from the paper analysis were subtracted from the results of the ink plus paper analysis to remove any peaks that were due to the paper matrix, so that only results due to the ink samples were compared.

In addition to the ink samples deposited on paper, ink samples dried on glass microscope slides were also examined to identify the peaks of the neat ink samples without the influence of the paper matrix. This analysis was helpful in the interpretation of the results of the ink on paper samples, and helped to minimize or eliminate paper artifacts or interferences in the analysis leading to a better classification scheme.

D. Sample Analysis

Sample analysis of black inkjet computer printer inks from the various manufacturers was performed to test the hypotheses listed previously. In order to develop a classification procedure or scheme that could be used to analyze and identify the source of a printed document, certain variations/conditions were taken into account.

i. Variations within a single inkjet computer printer ink cartridge

Determination of the variation of ink composition within a single inkjet computer printer ink cartridge was necessary to establish the consistency of the manufactured product. In order for the classification scheme to be effective it was necessary that the ink composition within a specific cartridge be consistent. The classification scheme would be useless if the ink composition from a specific cartridge was shown to be inconsistent across the various document printings produced by a single black inkjet ink cartridge. In accordance with hypothesis four, it was anticipated that the variation of ink composition *within* a specific ink cartridge will be insignificant, based on strict manufacturing procedures.

ii. Variations within single cartridge type

Determination of the variation of ink composition within a single inkjet computer printer ink cartridge type was necessary to establish the consistency of the manufactured product. In order to establish the differences between the various inkjet computer printer ink manufacturers, it was necessary to show that ink composition within a single inkjet computer printer ink cartridge type of a single inkjet computer printer ink manufacturer was consistent. This was

a necessary step if the classification procedure was to be effective. In addition, it was necessary to establish the expected variations within a single cartridge type in order to prevent assigning discriminating features to a component that exhibits this variability.

iii. Variations within single Manufacturer.

Determination of the variations of ink composition of different types of ink cartridges from a single inkjet computer printer ink manufacturer was necessary in order to establish the range of ink formulations that could exist for a particular manufacturer. Depending on the specific usage for a cartridge type, different ink formulations may be used by a specific manufacturer. It was necessary to establish all ink formulations that could be expected from a single manufacturer if the classification procedure was to be effective. Establishing the various types of black inkjet ink compositions produced by a single manufacturer assisted in the creation of a classification scheme and the identification of an unknown ink sample.

iv. Variations between Manufacturers.

Determination of the variations of ink composition between various manufacturers of inkjet computer printer inks was necessary in order to establish a classification procedure that could be used to identify the various manufacturers of inkjet computer printer ink cartridges. In accordance with hypothesis one, it was anticipated that this variation in inkjet ink formulations would be significant, and as a result it was possible to develop a classification procedure. Establishing this classification procedure would allow for the

identification of unknown ink samples and would assist in the investigation of a variety of crimes.

v. Variations due to analytical technique

Determination of the effect that the specific analytical technique used had on the analysis and results of the black inkjet ink sample was necessary in order to establish the most effective means of analysis. It was essential to examine the various analytical techniques used in the study in order to select the method and/or methods most applicable to the analysis of black inkjet computer printer inks, and consequently it allowed for the creation of an effective classification procedure.

E. Research Protocol

i. First Stage --- Establishment of a Classification Procedure

In order to establish the classification procedure for the analysis of black inkjet computer printer inks, the black inkjet inks were analyzed using a variety of analytical techniques. Before any analyses could be started, the ink samples were first collected, sampled and prepared. As stated previously, the main inkjet computer printer ink manufacturers were contacted in order to obtain samples of the various inkjet inks they produce. The manufacturers were extremely generous and donated the different types of inkjet inks they manufactured, in some instances they donated multiple copies of each cartridge. A listing of the black inkjet ink samples can be found in Appendix B.

Once the cartridges were donated, the ink was removed from the cartridge so that it could be sampled onto blank white paper. The ink samples were

transferred to labeled, airtight vials using disposable Pasteur pipettes. All relevant information from the cartridge and outer packaging was noted and the outer box was labeled with the sample number and stored for future reference. Within days of removing the ink from the cartridge, a sample of ink was placed onto a labeled (including date), clean white piece of paper. The ink samples were allowed to dry before packaging them into a 2" binder. The dried ink samples were further prepared for analysis depending on the analytical technique used. Detailed methods for sample preparation can be found in Section C: Sample Preparation.

The first method used for the analysis of the black inkjet computer printer inks was Thin Layer Chromatography (TLC). Once the samples were extracted from the paper using the extraction solvent, the extracted ink samples were analyzed on silica gel glass TLC plates using a mobile phase solvent system of n-butanol:ethanol:distilled water:acetic acid (470ml:235ml:235ml:59ml) or an approximate 8:4:4:1 ratio. Once the plates were fully developed, the plates were allowed to dry and then were examined under short wave and long wave UV light. After noting any additional information, the plates were scanned to record the image.

High Performance Liquid Chromatography (HPLC) was also used to analyze the extracted ink samples. After the ink samples had been extracted from the paper, they were placed into clean, labeled vials; capped and analyzed on the instrument. The final chromatographic technique used for the analysis of the black inkjet ink samples was Pyrolysis Gas Chromatography-Mass Spectrometry (Py-GC-MS). As stated previously, for this method the ink samples were not

extracted from the paper prior to analysis and instead were analyzed *in situ*. For both high performance liquid chromatography and pyrolysis gas chromatography-mass spectrometry, the choice of operating conditions, including the mobile phase, temperature and column type, were modified as necessary to optimize separation and identification of the component of interest.

The samples were also examined using Attenuated Total Reflection Fourier Transform Infrared Spectroscopy (ATR FT-IR). As stated in a previous section, for this method the ink samples were not extracted from the paper prior to analysis and instead were analyzed *in situ*. As with the chromatographic methods, the choice of operating conditions and sample collection parameters were modified as necessary in order to achieve optimal separation and identification of the components of interest.

At the end of the first part of this study, and with the results from all of the analytical methods used, a classification procedure was created to assist in the identification and differentiation of black inkjet computer printer inks. The classification procedure was based on the results of all four of the analytical techniques. The method(s) that allow for discrimination between the various samples and manufacturers were included in the classification procedure and a detailed guide for the analysis of black inkjet inks was created. Once a classification procedure was established it was tested in the second part of this project in a blind study to determine its effectiveness at identifying and differentiating black inkjet computer printer inks.

ii. Second Stage --- Blind Study

At the completion of the first part of the study, a blind study was conducted to test the classification procedure established based on the results of the standard set. A set of 15 ink on paper samples, not necessarily only those ink samples analyzed in this study, were selected by an independent person and labeled UNK 01 through UNK 15. These unknown ink samples were analyzed using the four analytical techniques that were used on the standard ink samples and which were included in the classification procedure. Based on the results of these analyses, each unknown ink sample was identified to a specific ink manufacturer, as well as to a specific ink cartridge or group of ink cartridges, if possible, or was assigned a label of "inconclusive". Upon completion of all the unknown ink samples analyses, the results were examined and the identity of each unknown ink sample was revealed. At such time, a determination of the success of the classification procedure was accomplished.

F. Analytical Conditions

The analytical conditions for the instrument and/or method were modified as necessary to ensure optimal results and discrimination between the samples was achieved.

G. Data Interpretation

For each analytical method the results were analyzed to determine whether differences existed between the various inkjet computer printer ink samples. At this time a classification procedure was established for the identification of black inkjet computer

printer inks. After review of the data, it was concluded that at this time the evaluation of the data by statistical methods would not be performed. As stated previously, upon completion of the classification procedure, a blind study was performed to test and validate its results.

CHAPTER VII. RESULTS

There were four analytical parts to this research, namely Thin Layer Chromatography (TLC), High Performance Liquid Chromatography (HPLC), Attenuated Total Reflection Fourier Transform Infrared Spectroscopy (ATR FT-IR) and Pyrolysis Gas Chromatography-Mass Spectrometry (Py-GC-MS). In the first two techniques, it was necessary to first extract an aliquot of the ink sample from the paper matrix prior to analysis, while in the latter two techniques the ink samples were analyzed *in situ*. As a result, an extraction study was done to determine the optimal extraction solvent necessary to remove as much of the ink from the paper as possible. The results of the extraction study helped establish the necessary concentration of extracted ink needed for use during the TLC and HPLC analyses. In addition to the analytical methods, the ink samples were also examined under the microscope, using both transmitted light and reflected light to see if any differences could be seen between the various ink samples.

Thirty-four different ink cartridge types from six different manufacturers were used in this study. For one of the ink cartridges used in this study, a slightly yellow liquid was present in the cartridge and was included in the study as a separate ink sample, bringing the total to thirty-five different ink samples. For simplicity sake, this slightly yellow liquid was considered as an ink cartridge type, making for thirty-five different ink cartridge types. The manufacturers used in this study included Okidata, Xerox, Canon, Hewlett Packard, Kodak and Epson. For the majority of the ink cartridges analyzed, multiple cartridges of each type were used to determine the consistency within a specific manufacturer with respect to a specific ink cartridge formulation. The total number of ink samples used in this study was 176. The breakdown of the number of samples per

manufacturer were as follows: Kodak donated a single copy of 2 different cartridge types, Okidata donated 3 cartridges of the same type, Hewlett Packard donated a single copy of 5 different cartridge types, Xerox donated 17 cartridges of 3 different types, Epson donated 33 cartridges of 11 different types, plus an additional 2 Epson ink cartridges were used for a total of 35 Epson ink cartridges and Canon donated 114 cartridges of 12 different types. It was the Canon BC-60 ink cartridge that contained the slightly yellow liquid, which raised the total number of different types of Canon ink samples analyzed in this study to thirteen. Refer to Table 1 for a complete listing of the black inkjet ink cartridges used for the study and for the sample numbering for these ink cartridges. The manufacturers also provided colored inkjet ink samples, but these ink samples were outside the scope of this research. The ink cartridge samples were numbered as received and as such the black ink samples were not numbered sequentially. A complete listing of all inkjet ink samples received can be found in Appendix B.

Table 1: Black Inkjet Ink Samples used for the Research Study.

Sample #	Manufacturer	Cartridge Type	Model #	Box Lot #	Cartridge Lot #	Ink Color
04	Okidata	Single	52110001	N/A	99286AD	Black
05	Okidata	Single	52110001	N/A	0325AD	Black
09	Okidata	Single	52110001	N/A	99286AD	Black
13	Xerox	Single	8R7994	N/A	99133CD	Black
14	Xerox	Single	8R7994	N/A	99133CD	Black
15	Xerox	Single	8R7994	N/A	99133CD	Black
16	Xerox	Single	8R7994	N/A	99133CD	Black
17	Kodak	Single	1369511	N/A	M36974J4	Black
22	Kodak	Multi (3-in-1)	1754852	N/A	M68892G2	Photo Black
24	Xerox	Single	8R7660	N/A	N/A	Black
25	Xerox	Single	8R7660	N/A	N/A	Black
26	Xerox	Single	8R7660	N/A	N/A	Black
27	Xerox	Single	8R7660	N/A	N/A	Black
28	Xerox	Single	8R7660	N/A	N/A	Black
29	Xerox	Single	8R7660	N/A	N/A	Black

Table 1: Black Inkjet Ink Samples used for the Research Study cont.

Sample #	Manufacturer	Cartridge Type	Model #	Box Lot #	Cartridge Lot #	Ink Color
30	Epson	Single	T013	N/A	2729CD	Black
31	Epson	Single	T013	N/A	2729CD	Black
32	Epson	Single	T013	N/A	2729CD	Black
33	Epson	Single	T003	2615AA	2615AA	Black
34	Epson	Single	T003	2615AA	2615AA	Black
35	Epson	Single	T003	2615AA	2615AB	Black
60	Epson	Single	T007	N/A	2620IC	Black
61	Epson	Single	T007	N/A	2620IC	Black
62	Epson	Single	T007	N/A	2620IC	Black
63	Epson	Single	S020189	2603HA	2603HA	Black
64	Epson	Single	S020189	2603HA	2603HB	Black
65	Epson	Single	S020189	2603HA	2603HB	Black
66	Epson	Single	T026	N/A	2510AE	Black
67	Epson	Single	T026	N/A	2510AF	Black
68	Epson	Single	T026	N/A	2510AE	Black
84	Epson	Single	T0321	N/A	2104CA	Black
85	Epson	Single	T0321	N/A	1C11CA	Black
86	Epson	Single	T0321	N/A	2104CA	Black
90	Epson	Single	T019	2225CC	2225CC	Black
91	Epson	Single	T019	2225CC	2225CC	Black
92	Epson	Single	T019	2225CC	2225CC	Black
93	Epson	Single	T028	N/A	2613CC	Black
94	Epson	Single	T028	N/A	2613CC	Black
95	Epson	Single	T028	N/A	2613CC	Black
120	Epson	Single	S020187	2530HA	2530HA	Black
121	Epson	Single	S020187	2530HA	2530HB	Black
122	Epson	Single	S020187	2530HA	2530HA	Black
123	Epson	Single	T017	N/A	2624CB	Black
124	Epson	Single	T017	N/A	2624CB	Black
125	Epson	Single	T017	N/A	2624CB	Black
156	Epson	Single	T015	0803AA	0803AA	Black
157	Epson	Single	T015	0803AA	0803AA	Black
158	Epson	Single	T015	0803AA	0803AA	Black
198	Hewlett Packard	Single	#29 (51629A)	194360	N/A	Black
199	Hewlett Packard	Single	#56 (C6656AN)	N/A	AL01030312020 3/ 14292994; L05 2 22:46:29	Black
200	Hewlett Packard	Single	#27 (C8727AN)	N/A	AL01021087195 5/ 02365797	Black
201	Hewlett Packard	Single	#45 (19434E)	19434E	T03S310A23E81 7B; 20040313S	Black
205	Hewlett Packard	Multi (3-in-1)	#58 (C6658AN)	N/A	L06 1 14:40:13; 2005/04/21 L	Black

Table 1: Black Inkjet Ink Samples used for the Research Study cont.

Sample #	Manufacturer	Cartridge Type	Model #	Box Lot #	Cartridge Lot #	Ink Color
217	Canon	Single	BCI-6BK	3B02G08	3B02G08	Black
218	Canon	Single	BCI-6BK	3B02G08	3B02G08	Black
219	Canon	Single	BCI-6BK	3B02G08	3B02G08	Black
220	Canon	Single	BCI-6BK	3B02G08	3B02G08	Black
221	Canon	Single	BCI-6BK	3B02G08	3B02G08	Black
222	Canon	Single	BCI-6BK	3B02G08	3B02G08	Black
223	Canon	Single	BCI-10	4302E30	432E3022	Black
224	Canon	Single	BCI-10	4302E30	432E3022	Black
225	Canon	Single	BCI-10	4302E30	432E3022	Black
226	Canon	Single	BCI-10	4302E30	432E3022	Black
227	Canon	Single	BCI-10	4302E30	432E3022	Black
228	Canon	Single	BCI-10	4302E30	432E3022	Black
244	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00158B06	Black
248	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00158B06	Black
252	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00158B06	Black
256	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00158B06	Black
260	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00158B06	Black
264	Xerox	Single	8R7994	N/A	99133CD	Black
265	Xerox	Single	8R7994	N/A	99133CD	Black
282	Canon	Single	BC-02	A902E26	A902E26	Black
283	Canon	Single	BC-02	A902E26	A902E26	Black
284	Canon	Single	BC-02	A902E26	A902E26	Black
285	Canon	Single	BC-02	A902E26	A902E26	Black
286	Canon	Single	BC-02	A902E26	A902E26	Black
287	Canon	Single	BC-02	A902E26	A902E26	Black
306	Canon	Single	BC-20	6D02D12	6A2D1234	Black
307	Canon	Single	BC-20	6D02D12	6A2D1234	Black
308	Canon	Single	BC-20	6D02D12	6A2D1234	Black
309	Canon	Single	BC-20	6D02D12	6A2D1234	Black
310	Canon	Single	BC-20	6D02D12	6A2D1234	Black
311	Canon	Single	BC-20	6D02D12	6A2D1234	Black
312	Canon	Single	BC-23	1700H23	1C0H2232	Black
313	Canon	Single	BC-23	1700H23	1C0H2232	Black
314	Canon	Single	BC-23	1700H23	1C0H2232	Black
315	Canon	Single	BC-23	1700H23	1C0H2232	Black
316	Canon	Single	BC-23	1700H23	1C0H2232	Black
317	Canon	Single	BC-23	1700H23	1C0H2232	Black
318	Canon	Single	BC-60	3202F140	3202F140	Black
319	Canon	Single	BC-60	3202F140	3202F140	Black

Table 1: Black Inkjet Ink Samples used for the Research Study cont.

Sample #	Manufacturer	Cartridge Type	Model #	Box Lot #	Cartridge Lot #	Ink Color
320	Canon	Single	BC-60	3202F140	3202F140	Black
321	Canon	Single	BC-60	3202F140	3202F140	Black
322	Canon	Single	BC-60	3202F140	3202F140	Black
323	Canon	Single	BC-60	3202F140	3202F140	Black
318a	Canon	Single	BC-60	3202F140	3202F140	Clear
319a	Canon	Single	BC-60	3202F140	3202F140	Clear
320a	Canon	Single	BC-60	3202F140	3202F140	Clear
321a	Canon	Single	BC-60	3202F140	3202F140	Clear
322a	Canon	Single	BC-60	3202F140	3202F140	Clear
323a	Canon	Single	BC-60	3202F140	3202F140	Clear
327	Canon	Multi (4-in-a-box)	BC-22e	7702D24	7H2D2331	Black
331	Canon	Multi (4-in-a-box)	BC-22e	7702D24	7H2D2331	Black
335	Canon	Multi (4-in-a-box)	BC-22e	7702D24	7H2D2331	Black
339	Canon	Multi (4-in-a-box)	BC-22e	7702D24	7H2D2411	Black
343	Canon	Multi (4-in-a-box)	BC-22e	7702D24	7H2D2411	Black
347	Canon	Multi (4-in-a-box)	BC-22e	7702D24	7H2D2411	Black
348	Canon	Single	BCI-21	3502F15	342F1311	Black
349	Canon	Single	BCI-21	3502F15	342F1311	Black
350	Canon	Single	BCI-21	3502F15	342F1311	Black
351	Canon	Single	BCI-21	3502F15	342F1311	Black
352	Canon	Single	BCI-21	3502F15	342F1311	Black
353	Canon	Single	BCI-21	3502F15	342F1311	Black
372	Canon	Single	BCI-10	4302E30	432E3022	Black
373	Canon	Single	BCI-10	4302E30	432E3022	Black
374	Canon	Single	BCI-10	4302E30	432E3022	Black
375	Canon	Single	BCI-10	4302E30	432E3022	Black
376	Canon	Single	BCI-10	4302E30	432E3022	Black
377	Canon	Single	BCI-10	4302E30	432E3022	Black
378	Canon	Single	BCI-10	4302E30	432E3022	Black
379	Canon	Single	BCI-10	4302E30	432E3022	Black
380	Canon	Single	BCI-10	4302E30	432E3022	Black
381	Canon	Single	BCI-10	4302E30	432E3022	Black
382	Canon	Single	BCI-10	4302E30	432E3022	Black
383	Canon	Single	BCI-10	4302E30	432E3022	Black
384	Canon	Single	BCI-11	N/A	412F1324	Black
385	Canon	Single	BCI-11	N/A	412F1324	Black
386	Canon	Single	BCI-11	N/A	412F1324	Black
387	Canon	Single	BCI-11	N/A	412F1324	Black
388	Canon	Single	BCI-11	N/A	412F1324	Black

Table 1: Black Inkjet Ink Samples used for the Research Study cont.

Sample #	Manufacturer	Cartridge Type	Model #	Box Lot #	Cartridge Lot #	Ink Color
389	Canon	Single	BCI-11	N/A	412F1324	Black
390	Canon	Single	BCI-11	N/A	412F1324	Black
391	Canon	Single	BCI-11	N/A	412F1324	Black
392	Canon	Single	BCI-11	N/A	412F1324	Black
393	Canon	Single	BCI-11	N/A	412F1324	Black
394	Canon	Single	BCI-11	N/A	412F1324	Black
395	Canon	Single	BCI-11	N/A	412F1324	Black
396	Canon	Single	BCI-11	N/A	412F1324	Black
397	Canon	Single	BCI-11	N/A	412F1324	Black
398	Canon	Single	BCI-11	N/A	412F1324	Black
399	Canon	Single	BCI-11	N/A	412F1324	Black
400	Canon	Single	BCI-11	N/A	412F1324	Black
401	Canon	Single	BCI-11	N/A	412F1324	Black
402	Canon	Single	BCI-12	N/A	222G0214	Black
403	Canon	Single	BCI-12	N/A	222G0214	Black
404	Canon	Single	BCI-12	N/A	222G0214	Black
405	Canon	Single	BCI-12	N/A	222G0214	Black
406	Canon	Single	BCI-12	N/A	222G0214	Black
407	Canon	Single	BCI-12	N/A	222G0214	Black
408	Canon	Single	BCI-12	N/A	222G0214	Black
409	Canon	Single	BCI-12	N/A	222G0214	Black
410	Canon	Single	BCI-12	N/A	222G0214	Black
411	Canon	Single	BCI-12	N/A	222G0214	Black
412	Canon	Single	BCI-12	N/A	222G0214	Black
413	Canon	Single	BCI-12	N/A	222G0214	Black
414	Canon	Single	BCI-12	N/A	222G0214	Black
415	Canon	Single	BCI-12	N/A	222G0214	Black
416	Canon	Single	BCI-12	N/A	222G0214	Black
417	Canon	Single	BCI-12	N/A	222G0214	Black
418	Canon	Single	BCI-12	N/A	222G0214	Black
419	Canon	Single	BCI-12	N/A	222G0214	Black
492	Canon	Single	BCI-3eBK	2002F19	242F1720	Black
493	Canon	Single	BCI-3eBK	2002F19	242F1720	Black
494	Canon	Single	BCI-3eBK	2002F19	242F1720	Black
495	Canon	Single	BCI-3eBK	2002F19	242F1720	Black
496	Canon	Single	BCI-3eBK	2002F19	242F1720	Black
497	Canon	Single	BCI-3eBK	2002F19	242F1720	Black
522	Canon	Single	BCI-3ePBk	2B02E19	2B2E1420	Photo Black
523	Canon	Single	BCI-3ePBk	2B02E19	2B2E1420	Photo Black
524	Canon	Single	BCI-3ePBk	2B02E19	2B2E1420	Photo Black
525	Canon	Single	BCI-3ePBk	2B02E19	2B2E1420	Photo Black
526	Canon	Single	BCI-3ePBk	2B02E19	2B2E1420	Photo Black
527	Canon	Single	BCI-3ePBk	2B02E19	2B2E1420	Photo Black
558	Epson	Single	T019	2813CC	2813CC	Black
559	Epson	Single	T019	2813CC	2813CC	Black

A. Extraction Study

An appropriate extraction solvent needed to be determined that would allow for the maximum amount of ink to be released/extracted from the paper. Three extraction solvent systems were selected to be tested, namely 100% ethanol, a 50:50 mixture of ethanol and distilled water and 100% methanol. The 50:50 mixture of ethanol and distilled water was selected based in part on the article by LaPorte and Ramotowski (2003) and the fact that the inkjet ink samples tended to be water-based. The 100% ethanol and 100% methanol solvents were chosen as a natural complement to the 50:50 mixture of ethanol and distilled water. Pyridine, the traditional extraction solvent of pen inks, was not selected due to its known health hazards, and which, in hindsight, was fortunate as pyridine was a component of some of the black inkjet ink samples. Thus, using pyridine as the extraction solvent would have had the potential of adding unintended solvent contamination to the ink samples, hindering their identification. Twenty-two different ink cartridges, representing all six manufacturers, were selected for the extraction study. A total volume of 1 ml of the appropriate extraction volume was added to an ink sample. In order to obtain a uniform sample size of the ink on the paper a standard hole punch was employed. In the case of the 100% methanol samples, only four ink samples, representing four of the manufacturers, were used.

The results from the 100% ethanol extraction solvent showed very little extraction of the ink from the paper. None of the Xerox, Kodak, Canon and Hewlett Packard ink samples extracted in this solvent. The ink samples that did show some extraction from the paper, namely the Okidata and Epson ink samples, showed minimal extraction into the ethanol solvent. The four ink samples used for the 100% methanol study showed

varied results. Two of the ink samples, namely the Canon and Epson ink samples, had some extraction of the ink from the paper, while the other two ink samples, namely the Xerox and Hewlett Packard ink samples, showed no extraction of the ink from the paper. The Canon and Epson ink samples that extracted using the methanol showed a light to medium color concentration, suggesting a slight to moderate extraction of the ink from the paper.

The 50:50 mixture of ethanol and distilled water showed a variety of results with respect to its extraction ability. For the Xerox ink samples there was no extraction of the ink from the paper into the solvent. This was also true for one of the Kodak ink samples tested, two of the Hewlett Packard ink samples tested, one of the Canon ink samples tested and one of the Epson ink sample tested. For the remainder of the ink samples that did extract from the paper using this solvent, the majority showed a medium to dark color, indicating a moderate to significant extraction of the ink from the paper. In addition, upon examining the paper of the sample, no noticeable ink remained on the paper. Both sides of the paper of the extractable ink samples were white in color, indicating a complete extraction of the ink sample from the paper matrix. Thus the results from the 50:50 mixture of ethanol and distilled water showed the best extraction results, and hence was the extraction solvent chosen for the remainder of this research. Refer to Table 2 for the results of the extraction solvent study using the extraction solvents of 100% ethanol, 100% methanol and a 50:50 mixture of ethanol and distilled water.

Table 2: Comparison of the Extraction Results Using Three Extraction Solvents Systems

Sample # / Manufacturer		EtOH only	EtOH:dH_2O (50:50)	MeOH only
13	Xerox	Colorless	Colorless	n/a
24	Xerox	Colorless	Colorless	Colorless
244	Xerox	Colorless	Colorless	n/a
04	Okidata	Pale/Light Pink	Dark Purple-Blue	n/a
17	Kodak	Colorless	Colorless	n/a
22	Kodak	Colorless	Dark Blue-Black	n/a
217	Canon	Colorless	Medium Teal Blue-Black	n/a
223	Canon	Colorless	Medium Blue-Black	Light Bluish-Black
282	Canon	Colorless	Medium-Dark Blue-Black	n/a
306	Canon	Colorless	Light-Medium Blue-Black	n/a
318	Canon	Colorless	Medium-Dark Teal Blue-Black	n/a
348	Canon	Colorless	Medium Blue-Black	n/a
492	Canon	Colorless	Colorless	n/a
522	Canon	Colorless	Dark Blue-Black	n/a
198	HP	Colorless	Colorless	Colorless
201	HP	Colorless	Colorless	n/a
205	HP	Colorless	Dark Blue, Hint of Black	n/a
30	Epson	Faint Yellow Tint	Dark Purple-Black	Blackish-Yellow
63	Epson	Faint Bluish-Black Tint	Dark Black, Hint of Blue	n/a
84	Epson	Colorless	Colorless	n/a
120	Epson	Faint Bluish-Black Tint	Dark Blue-Black	n/a
157	Epson	Colorless	Light Blue Tint	n/a

Once the extraction solvent was selected the next step was to determine the optimal relationship between the extraction volume and sample size. The concentration of the extracted ink had to be high enough to provide optimal results using TLC and HPLC. In this part of the extraction study, all of the different cartridge types of the various manufacturers were used. Consequently thirty-five ink samples were used, as opposed to the twenty-two ink samples used in the first part. This allowed for an ink concentration to be selected that worked for all thirty-five different ink cartridge types. Initially the ink sample was punched a single time, and the one punch was extracted using 1 ml of ethanol and 1 ml of distilled water. When the ethanol and distilled water mixture

was added to the ink samples, some of the ink samples immediately started to extract from the paper matrix. While in other instances, the ink did not extract from the paper, regardless of the time the ink on paper sample remained in the extraction solvent.

Of the thirty-five ink cartridge types used in the study, twelve ink cartridges were classified as non-extractable ink samples and twenty-three ink cartridges were classified as extractable ink samples. Some trends were observed between the various manufacturers as to whether or not the ink would extract from the paper matrix. The Okidata, Canon and Epson ink cartridges showed the highest percentage of extractable ink samples. The single Okidata ink cartridge, ten of the thirteen Canon ink cartridges and ten of the eleven Epson ink cartridges were found to be extractable ink samples. The Hewlett Packard and Xerox ink cartridges, on the other hand, showed the highest percentage of non-extractable ink samples. All three of the Xerox ink cartridges and four of the five Hewlett Packard ink cartridges were found to be non-extractable ink samples. The Kodak ink cartridges did not show a preference for being either an extractable or a non-extractable ink sample. Of the two Kodak ink cartridges, one was found to be an extractable ink, while the other was found to be a non-extractable ink sample. Refer to Table 3 for the extraction results of the thirty-five different ink cartridge types using the extraction solvent of a 50:50 mixture of ethanol and distilled water.

Table 3: Extraction Results for the Different Ink Cartridges from the Various Manufactures Using the EtOH;dH_2O Extraction Solvent

Sample #	Sample Name	EtOH:dH_2O (50:50)
04	Okidata #52110001	Dark Purple-Blue
13	Xerox 8R7994	Colorless
24	Xerox 8R7660	Colorless
244	Xerox M-Series	Colorless
17	Kodak #1369511	Colorless
22	Kodak #1754852	Dark Blue-Black
217	Canon BCI-6Bk	Medium Teal Blue-Black
223	Canon BCI-10	Medium Blue-Black
282	Canon BC-02	Medium-Dark Blue-Black
306	Canon BC-20	Light-Medium Blue-Black
312	Canon BC-23	Colorless
318	Canon BC-60	Medium-Dark Teal Blue-Black
318a	Canon BC-60	Colorless
327	Canon BC-22e	Light-Medium Blue-Black
348	Canon BCI-21	Medium Blue-Black
384	Canon BCI-11	Medium Blue-Black
402	Canon BCI-12	Light-Medium Blue-Black
492	Canon BCI-3eBk	Colorless
522	Canon BCI-3ePBk	Dark Blue-Black
198	HP #29 (51629A)	Colorless
199	HP #56 (C6656AN)	Colorless
200	HP #27 (C8727AN)	Colorless
201	HP #45 (1943AE)	Colorless
205	HP #58 (C6658AN)	Dark Blue, Hint of Black
30	Epson T013	Dark Purple-Black
33	Epson T003	Dark Purple-Black
60	Epson T007	Dark Purple-Black
63	Epson S020189	Dark Black, Hint of Blue
66	Epson T026	Dark Purple-Black
84	Epson T0321	Colorless
90	Epson T019	Dark Purple-Black
93	Epson T028	Dark Purple-Black
120	Epson S020187	Dark Blue-Black
123	Epson T017	Dark Purple-Black
156	Epson T015	Light Blue Tint

The concentration of the first set of extracted ink samples was too dilute when spotted on the TLC plates, so a second standard set was created using two punches of the hole punch and 0.5 ml of ethanol and 0.5 ml of distilled water. Though this greatly increased the concentration of the extracted ink sample, when it was spotted on the TLC plates the ink samples were still extremely light/dilute. A third attempt was made using

four punches of the hole punch and 0.5 ml of ethanol and 0.5 ml of distilled water. The concentration associated with this extraction volume worked extremely well on the TLC plates, and gave satisfactory results on the HPLC system. A final standard set was made using two punches of the hole punch and 0.15 ml of ethanol and 0.15 ml of distilled water. This extraction volume gave the best visual extraction of the ink and was the standard set used in the analysis.

B. Microscopical Examination

The ink samples from the thirty-five different ink cartridge types of the various manufacturers were examined using both transmitted light microscopy and reflected light microscopy. Approximately 5µl or one-half of a microcap of neat ink sample, that was non-extracted ink, was placed onto a clean, labeled microscope slide and then was covered with a rectangular coverslip. The neat ink samples were examined immediately after being placed onto the microscope slide and approximately an hour after preparation onto the microscope slide.

The neat ink samples were initially examined using transmitted light on a compound microscope using a 4X objective, a 10X objective and a 40X objective. For the majority of the neat ink samples, when examined under transmitted light, there was uniform color distribution throughout the sample and no solid particles were observed. One notable exception to this phenomenon was observed with the Xerox neat ink samples. For two of the three types of Xerox neat ink samples, namely the Xerox 24 and Xerox 244 neat ink samples, solid particles were observed towards the edge of the sample spot. These particles appeared as "tailing" or streams of particles, mainly along the

edges. Towards the middle of these two neat ink samples no solid particles were observed. In the third Xerox neat ink sample, the Xerox 13 ink sample, no solid particles were observed either in the middle of the ink sample or at the edge of the ink sample. The other exception noted occurred with Hewlett Packard 205 neat ink sample. The Hewlett Packard 205 ink sample was the only ink sample of Hewlett Packard that extracted from the paper during the extraction study. The remaining four Hewlett Packard ink samples did not extract from the paper. Within the Hewlett Packard 205 neat ink sample, small, dark blue, open circles were observed distributed throughout the ink sample. These circular particles were not uniformly distributed but rather tended to clump together. However, these "clumps" of circular particles were present throughout the entire neat ink sample. One concern was that these circular particles may actually have been tiny air bubbles. However, when compared to actual air bubbles there were differences in their appearance, namely in the fact that the blue color of the ink could be seen within the circle of the particles, whereas in the air bubbles the middle area was colorless. Thus, these circular particles could be excluded as being air bubbles.

The color of the neat ink sample under the compound microscope was noted for each of the thirty-five ink standards. Depending on the ink cartridge, different colors were observed for the neat ink samples. The Xerox 24, Xerox 244, Epson 84, Epson 156, Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200 and Hewlett Packard 201 neat ink samples all had a brown appearance under the compound microscope. The Xerox 13, Canon 312 and Canon 492 neat ink samples had an orange-brown appearance at low concentrations and a brown appearance at higher concentrations under the compound microscope. The Kodak 17 neat ink sample had a brown appearance at low

concentrations to a black appearance at higher concentrations under the compound microscope. Of the ink samples mentioned, all but one, the Epson 156 neat ink sample, were non-extractable ink samples. The Epson 156 extractable ink sample had a different appearance under the compound microscope than any other extractable ink sample.

The Okidata 04, Epson 30, Epson 60, Epson 90, Epson 93, Epson 120, Epson 123, Canon 217, Canon 306, Canon 384 and Canon 522 neat ink samples all had a red appearance under the compound microscope. The Epson 66, Canon 223, Canon 348 and Canon 402 neat ink samples had a pink appearance at low concentrations and a red appearance at higher concentrations under the compound microscope. The Epson 33 neat ink sample had a brownish-red appearance at low concentrations and a red appearance at higher concentrations under the compound microscope, whereas the Epson 63 neat ink sample had a grey appearance at low concentrations to a red appearance at higher concentrations under the compound microscope. The Hewlett Packard 205 and Canon 318 neat ink samples both had a blue appearance under the compound microscope, whereas the Canon 327 neat ink sample had a pink appearance at low concentrations and a red-purple appearance at higher concentrations under the compound microscope. The Canon 282 neat ink sample had a purplish-gray appearance under the compound microscope and the Kodak 22 neat ink sample had a purple appearance under the compound microscope. The Canon 318a neat ink sample, which was the slightly yellow liquid from the Canon BC-60 ink cartridge, appeared colorless under the compound microscope. Refer to Table 4 for the observations of the thirty-five ink standards under the compound microscope in terms of color and the presence, or lack thereof, of particles.

Table 4: Observations of the Thirty-Five Ink Cartridges Under the Compound Microscope.

Sample # / Manufacturer		Color Under Microscope	Solid Particles (Y/N) Description? (10X and 40X Objective)
04	Okidata	Red Color. Uniform Distribution	Contamination in first sample. No solid particles seen in second sample.
13	Xerox	Orange brown to brown (low to high concentration). Uniform distribution	No solid particles observed.
24	Xerox	Brown color. Somewhat uniform distribution	See some small distinct particles on the outer edge of the slide. Particles dissolving into color bands. Dark brown in color.
244	Xerox	Brown color. Somewhat uniform distribution -- saw some "tailing" within the ink/slide.	Color showed "tails" or streams of pigment. Not consistent throughout the slide -- mostly towards the bottom edge. Seem to originate from a point then tail outwards.
17	Kodak	Brown to black in color (low to high concentration). Uniform distribution	No solid particles observed.
22	Kodak	Purple color. Uniform distribution	No solid particles observed.
30	Epson	Red color. Uniform distribution	No solid particles observed.
33	Epson	Reddish brown to Red in color (low to high concentration). Uniform distribution	No solid particles observed.
60	Epson	Red color. Uniform distribution	No solid particles observed.
63	Epson	Grey to red in color (low to high concentration). Uniform distribution	No solid particles observed.
66	Epson	Pink to Red in color (low to high concentration). Uniform distribution	No solid particles observed.
84	Epson	Brown color. Uniform distribution	No solid particles observed.
90	Epson	Red color. Uniform distribution	No solid particles observed.
93	Epson	Red color. Uniform distribution	No solid particles observed.
120	Epson	Red color. Uniform distribution	No solid particles observed.
123	Epson	Red color. Uniform distribution	No solid particles observed.
156	Epson	Brown color. Uniform distribution	No solid particles observed.
198	Hewlett Packard	Brown color. Uniform distribution	No solid particles observed.
199	Hewlett Packard	Brown color. Uniform distribution	No solid particles observed.
200	Hewlett Packard	Brown color. Uniform distribution	No solid particles observed.
201	Hewlett Packard	Brown color. Uniform distribution	No solid particles observed.
205	Hewlett Packard	Blue color. Uniform distribution	Small dark particles observed. Under 40X objective these particles appear as a series of open circles clustered together.
217	Canon	Red color. Uniform distribution	No solid particles observed.

Table 4: Observations of the Thirty-Five Ink Cartridges Under the Compound Microscope cont.

Sample # / Manufacturer		Color Under Microscope	Solid Particles (Y/N) Description? (10X and 40X Objective)
223	Canon	Pale pink to Red in color (low to high concentration). Uniform distribution	No solid particles observed.
282	Canon	Purple-grey color. Uniform distribution.	No solid particles observed.
306	Canon	Red color. Uniform distribution	No solid particles observed.
312	Canon	Orange brown to dark brown in color (low to high concentration). Uniform distribution	No solid particles observed.
318	Canon	Blue color. Uniform distribution	No solid particles observed.
318a	Canon	Colorless	No solid particles observed.
327	Canon	Pink to Red-Purple in color (low to high concentration). Uniform distribution	No solid particles observed.
348	Canon	Pink to Red in color (low to high concentration). Uniform distribution	No solid particles observed.
384	Canon	Red color. Uniform distribution.	No solid particles observed.
402	Canon	Pink to Red in color (low to high concentration). Uniform distribution	No solid particles observed.
492	Canon	Orange brown to Brown in color (low to high concentration). Uniform distribution	No solid particles observed.
522	Canon	Red (lighter red) color. Uniform distribution	No solid particles observed.

The neat ink samples were then re-examined under plane polarized light using a polarized light microscope with an attached Nikon digital camera. For the majority of the neat ink samples, the color observed under the polarized light microscope were similar to the colors observed under the compound microscope. The Xerox 13, Xerox 24, Xerox 244, Kodak 17, Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200, Hewlett Packard 201 and Canon 492 neat ink samples all had a brown appearance under the polarized light microscope, which was similar to what was observed for these neat ink samples under the compound microscope. The Epson 84 and Canon 312 neat ink

samples had an orange-brown appearance under the polarized light microscope, which was observed at low concentrations under the compound microscope. The Okidata 04, Epson 93, Canon 223, Canon 348, Canon 384 and Canon 402 neat ink samples had a red appearance under the polarized light microscope, which was similar to the observations for these neat ink samples when examined under the compound microscope. The Epson 156 neat ink sample showed a slight tonal difference with a grey-brown appearance under the polarized light microscope and a brown appearance under the compound microscope. The Canon 282 neat ink sample also showed a slight tonal difference with a grey-purple appearance under the polarized light microscope and a purple appearance under the compound microscope.

For fifteen of the neat ink standards, differences were observed between the polarized light microscope and the compound microscope which could be attributed to differences in the color saturation of these samples. The differences in the observed colors could be due, in part, to the increased wattage of the light source and hence a stronger light going through the neat ink samples while using the polarized light microscope. The Kodak 22 neat ink sample had a pink appearance under the polarized light microscope and a purple appearance under the compound microscope. The Epson 30, Epson 33, Epson 63, Epson 66, Epson 90, Epson 120, Epson 123, Canon 217 and Canon 306 neat ink samples had an orange-red appearance under the polarized light microscope and a red appearance under the compound microscope. The Epson 60 and Canon 522 neat ink samples had a reddish-purple to purple appearance, from low to high concentrations respectively, under the polarized light microscope and a red appearance under the compound microscope, whereas the Canon 327 neat ink sample had a red

appearance under the polarized light microscope and a reddish-purple appearance under the compound microscope. The Hewlett Packard 205 and Canon 318 neat ink samples had a purple appearance under the polarized light microscope and a blue appearance under the compound microscope.

The neat ink samples were examined using a 40X objective and images of each neat ink sample were recorded digitally using a Nikon digital camera (A=1/30, F=3.1, ISO 100). Unlike the results from the compound microscope, all three of the Xerox neat ink samples showed the presence of solid dark particles, especially around the edges of the ink samples when examined under the polarized light microscope. These dark particles appeared more like waves of pigmentation, as opposed to the streaking or tailing of the particles observed using the compound microscope. Furthermore, two additional neat ink samples showed the presence of solid particles that were not previously observed using the compound microscope. These two ink samples were the Canon 492 neat ink sample and the Kodak 17 neat ink sample, both of which did not extract from the paper using the extraction solvent. The Xerox ink samples also did not extract from the paper using the extraction solvent. For the Canon 492 neat ink sample, the solid particles were observed throughout the ink sample, with a higher concentration present along the outer edges. As seen with the Xerox ink samples, the particles along the edges of the Canon 492 neat ink sample appeared as dark waves rather than as individual particles. For the Kodak 17 neat ink sample, dark particles could be observed throughout the sample, however this may be a drying artifact, as this ink sample was the only ink sample that had significant evaporation/drying within the sample container. Unlike the other ink samples in the study, the Kodak 17 ink sample exhibited thickening of the liquid ink within its

sealed container. The distribution of the pigments observed along the edges of the Xerox and Canon neat ink samples are illustrated in Figure 12.

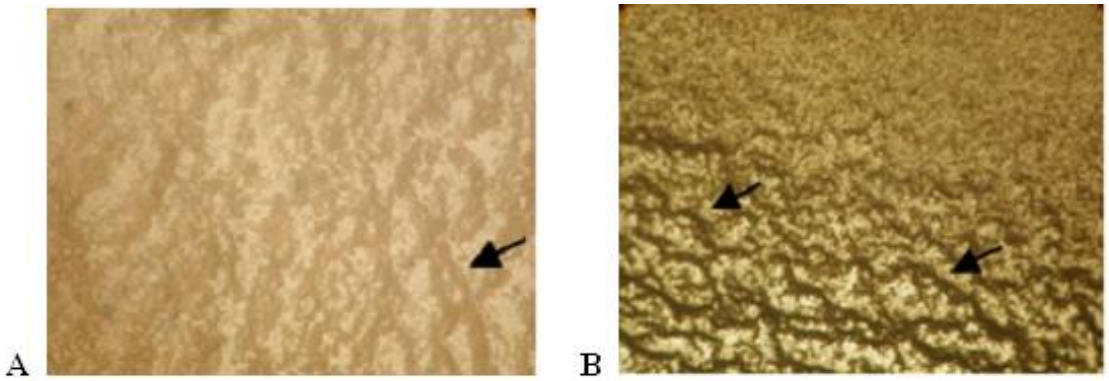

Figure 12: a) Xerox 24 neat ink sample photomicrograph at 40X objective and b) Canon 492 neat ink sample photomicrograph at 40X objective showing the "tailing" or waves of solid particles along the outer edge of the stain.

Similar to the observations under the compound microscope, under examination with the polarized light microscope the Hewlett Packard 205 neat ink sample showed small, dark purple, open circles present throughout the entire ink sample. These particles were extremely small, approximately 0.5µm in size (measured using a stage micrometer), and were only observed within this neat ink sample. No other Hewlett Packard ink samples, nor any other ink sample of any manufacturer tested in this research study, showed these types of particles. As stated previously, the Hewlett Packard 205 ink sample was the only Hewlett Packard ink sample that extracted from the paper matrix using the extraction solvent, which could explain its different appearance under the compound microscope and the polarized light microscope from the other Hewlett Packard ink samples used in this study. The circular particles present in the Hewlett Packard 205 ink sample are illustrated in Figure 13.

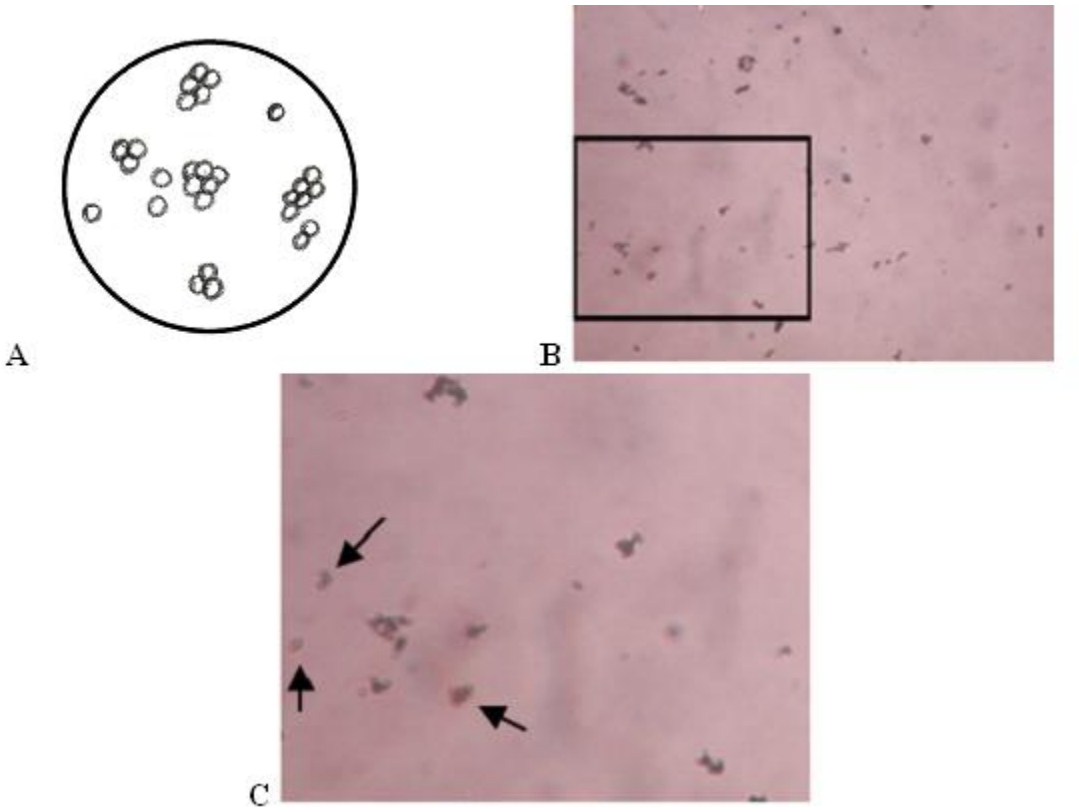

Figure 13: a) Sketch of the circular particles as observed at 40X magnification (Note: Not drawn to scale), b) Hewlett Packard 205 neat ink sample photomicrograph at 40X objective and c) a close-up view of the boxed area in the image on the left showing the circular particles.

The observations of the thirty-five ink standards as viewed using a 40X objective under the polarized light microscope, in terms of sample color and the presence, or lack thereof, of particles, are listed in Table 5.

Table 5: Observations of the Thirty-Five Ink Cartridges Under the Polarized Light Microscope.

Sample # / Manufacturer		Observations – 40X Objective
04	Okidata	Light red in color. Uniform distribution. No particles observed.
13	Xerox	Brown in color. Particles distributed throughout the sample -- heavier along the edges of the sample.
24	Xerox	Brown in color. Particles distributed throughout the sample -- heavier along the edges of the sample (looking like waves/streams of pigments/particles).
244	Xerox	Brown in color. Particles distributed throughout the sample -- heavier along the edges of the sample (looking like waves/streams of pigments/particles).
17	Kodak	Sample dried out -- "globby" in texture. Dark brown in color. Particles present throughout the sample -- due to the fact that the ink had partially dried, see some drying artifacts (i.e. ink looks like scales).

Table 5: Observations of the Thirty-Five Ink Cartridges Under the Polarized Light Microscope cont.

Sample # / Manufacturer		Observations
22	Kodak	Light pink in color. Uniform distribution. No particles observed.
30	Epson	Orange-red in color. Uniform distribution. No particles observed.
33	Epson	Orange-red in color. Uniform distribution. No particles observed.
60	Epson	Reddish-purple to dark purple in color. Uniform distribution. No particles observed.
63	Epson	Reddish-orange in color. Uniform distribution. No particles observed.
66	Epson	Light orange in color to reddish-orange in color. Uniform distribution. No particles.
84	Epson	Orange-brown in color. Uniform distribution. No particles observed.
90	Epson	Orange-red in color. Uniform distribution. No particles observed.
93	Epson	Light pink in color. Uniform distribution. No particles observed.
120	Epson	Orange-red in color. Uniform distribution. No particles observed.
123	Epson	Orange-red in color. Uniform distribution. No particles observed.
156	Epson	Light grey-brown tint. Uniform distribution. No particles observed.
198	Hewlett Packard	Light brown in color. Uniform distribution. No particles observed.
199	Hewlett Packard	Light brown in color. Uniform distribution. No particles observed.
200	Hewlett Packard	Light brown in color. Uniform distribution. No particles observed.
201	Hewlett Packard	Light brown in color. Uniform distribution. No particles observed.
205	Hewlett Packard	Purple in color. Small, dark purple open circle particles distributed throughout the sample.
217	Canon	Light orange-red color. Uniform distribution. No particles observed.
223	Canon	Light red in color. Uniform distribution. No particles observed.
282	Canon	Light purple in color. Uniform distribution. No particles observed.
306	Canon	Light orange-red color. Uniform distribution. No particles observed.
312	Canon	Orange-brown in color. Uniform distribution. No particles observed.
318	Canon	Very faint grey-purple tint in color. No particles observed.
318a	Canon	Colorless sample. No particles observed.
327	Canon	Light red in color. Uniform distribution. No particles observed.
348	Canon	Light red in color. Uniform distribution. No particles observed.
384	Canon	Light red in color. Uniform distribution. No particles observed.
402	Canon	Pink in color. Uniform distribution. No particles observed.
492	Canon	Brown in color. Particles distributed throughout the sample -- heavier along the edges of the sample (looking like waves/streams of pigments/particles).
522	Canon	Light purple in color. Uniform distribution. No particles observed.

The thirty-five neat ink samples were also examined using reflected light microscopy with an external light source. The light source for this microscopical examination was an external fiber optic light, which was adjusted to maximize the amount of light reflecting from the sample. Each neat ink sample was placed onto a

clean, labeled microscope slide, covered with a rectangular coverslip and examined using 4X, 10X and 40X objectives. The majority of the neat ink samples appeared dark throughout the sample, with no particles noticeable within the ink sample. This characteristic was observed for all of the extractable neat ink samples and for approximately half of the non-extractable neat ink samples. All three of the Xerox non-extractable neat ink samples, however, showed the presence of particles along the edges of the ink sample. These particles appeared as dark streaks under the lower magnification (4X), whereas at the higher magnification (40X) the particles were actually groupings of individual darker particles along the edges of the ink sample. The middle of the ink sample did not appear to contain pigments/particles and was a uniform dark color. This pattern of grouping of pigments/particles along the edge of the ink sample and a uniform dark color towards the middle of the ink sample was also observed for the Kodak 17, Hewlett Packard 201 and Canon 492 neat ink samples. The Hewlett Packard 201 neat ink sample was the only Hewlett Packard neat ink sample that appeared to have particles present using the reflected light microscope. The Hewlett Packard 201 neat ink sample did not show any particles present under transmitted light using either the compound or polarized light microscope, particles were only noticeable under the reflected light microscope. None of the other non-extractable Hewlett Packard neat ink samples showed particles present in their ink sample. The Hewlett Packard 205 neat ink sample, which showed dark, open circle particles under transmitted light, showed no particles present within the neat ink sample using reflected light microscopy. Refer to Table 6 for the observations of the thirty-five ink standards using reflected light microscopy.

Table 6: Observations of the Thirty-Five Ink Cartridges Under the Reflected Light Microscope.

Sample # / Manufacturer		Observations
04	Okidata	Initially saw white particles present in the sample at 4X, 10X and 40X, but these were also present where no ink sample was located. Possible contamination on the slide. Prepared new slide and no particles were observed.
13	Xerox	At 4X along the edge see tiny dark areas. At 40X see grouping of pigment/particles within the solvent. Only along the edge -- once in the middle see a uniform dark color.
24	Xerox	At 4X at the edge see tiny dark areas -- like streams. At 40X see grouping of pigment/particles within the solvent only along the edge. Once in middle, uniform dark color.
244	Xerox	At 4X see at edges tiny particles like streaks. At 40X they were groupings of pigment/particles within the solvent. Only along the edge. Once in the middle see uniform dark color.
17	Kodak	Ink dried up -- "globby". At 4X the middle of the sample was uniform in appearances; edges see what appear to be particles. At 10X, seen as "streams" of pigments. At 40X see groupings of pigment like particles.
22	Kodak	Uniform color throughout the sample at 4X, 10X and 40X. Initially saw some white particles in the sample, but also observed these were no ink sample was located. Thus contamination on the slide. Prepared new slide and no particles were observed.
30	Epson	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. See tiny air bubbles throughout the sample. No particles observed.
33	Epson	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
60	Epson	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
63	Epson	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
66	Epson	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
84	Epson	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
90	Epson	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
93	Epson	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
120	Epson	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
123	Epson	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
156	Epson	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
198	Hewlett Packard	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
199	Hewlett Packard	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
200	Hewlett Packard	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
201	Hewlett Packard	At 4X at the edge see tiny particles, while at 40X they appear as groups of pigments/particles. Low concentration of ink.

Table 6: Observations of the Thirty-Five Ink Cartridges Under the Reflected Light Microscope cont.

Sample # / Manufacturer		Observations
205	Hewlett Packard	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
217	Canon	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
223	Canon	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
282	Canon	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
306	Canon	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
312	Canon	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
318	Canon	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
318a	Canon	Uniform appearance/distribution using 4X, 10X and 40X objectives. No particles observed.
327	Canon	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
348	Canon	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
384	Canon	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
402	Canon	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.
492	Canon	At 4X along the edges see tiny particles, like streaks. At 40X they were a group of pigments/particles within the solvent. Only along the edge. Once in the middle see uniform dark color.
522	Canon	Uniform distribution of color (dark color) using 4X, 10X and 40X objectives. No particles observed.

The above microscopical observations were made using the neat ink standards. One problem with these observations was the fact that rarely does the forensic laboratory examine neat ink samples. In general, the ink samples being analyzed were printed on paper, and the forensic examiner is analyzing extracted ink samples. As a result, the extracted ink samples of the thirty-five ink standards were examined using a compound microscope with a 4X objective, a 10X objective and a 40X objective.

Approximately 5 µl or one half of a microcap of the extracted ink sample was placed onto a clean, labeled microscope slide. The sample was then covered with a

coverslip and immediately examined under the microscope. The microscope used to examine the extracted ink samples was a compound microscope using transmitted light. The light was set to the medium setting to maximize the contrast and to optimize the color of each extracted ink sample. It was essential to examine the extracted ink samples as soon as they were placed onto the microscope slide because the extraction solvent evaporated quickly, causing changes to the color and appearance of the ink sample. In addition, a whole microscope coverslip could not be used since the extracted ink sample spread out more than the neat ink standards, which diluted the extracted ink sample and changed the color and appearance of the ink sample. Each rectangular coverslip was quartered and a quarter of the coverslip was used to cover the extracted ink sample.

The extracted ink samples, as discussed previously, could be classified into two groups based on their behavior with the extraction solvent. These two groups were the extractable ink samples and the non-extractable ink samples. All of the non-extractable ink samples were colorless under the compound microscope. This was not surprising as these ink samples did not extract from the paper and the extraction solvent for the ink on paper samples was clear. The extractable ink samples, on the other hand, exhibited some color under the compound microscope, but the colors of these extracted ink samples were lighter than the colors noted for the neat ink standards. This was not unexpected as the extracted ink samples had been diluted by the extraction solvent so it would be expected that their color would be lighter than the neat ink standards.

Not only did the color become lighter for the extracted ink samples, but for some of these ink samples there was a change in the observed color saturation of the ink sample. The Epson 30, Epson 60, Epson 63 and Epson 120 ink samples went from a red

appearance as neat ink standards to a reddish-brown appearance as extracted ink samples. The Epson 156 ink sample went from a brown appearance as a neat ink standard to a grey-purple appearance as an extracted ink sample. The Epson 90 ink sample went from a red appearance as a neat ink standard to a brown appearance as an extracted ink sample. The Epson 33, Epson 66, Epson 93, Epson 123, Canon 217, Canon 223, Canon 306, Canon 327, Canon 348, Canon 384, Canon 402 and Canon 522 ink samples went from a red appearance as neat ink standards to a purple appearance as extracted ink samples. The Hewlett Packard 205 ink sample went from a blue appearance as a neat ink sample to a purple appearance as an extracted ink sample. Though it should be noted that for the extracted Hewlett Packard 205 ink sample, its color was consistent with its appearance as a neat ink sample under the polarized light microscope. The appearance of the Okidata 04, Kodak 22, Canon 282 and Canon 318 ink samples had the same appearance as extracted ink samples as their appearance as neat ink standards. In all thirty-five extracted ink samples, no particles were observed under the compound microscope. Refer to Table 7 for the observations of the extracted ink samples of the thirty-five different ink cartridges under the compound microscope noting the color and the presence, or lack thereof, of any particles.

Table 7: Observations of the Thirty-Five Extracted Ink Samples Under the Compound Microscope.

Sample #	Manufacturer	Color Under Microscope (4X objective)	Solid Particles (Y/N) Description? (10X and 40X objective)
04	Okidata	Light to medium pink in color	No particles
13	Xerox	Colorless	No particles
24	Xerox	Colorless	No particles
244	Xerox	Colorless	No particles
17	Kodak	Colorless	No particles
22	Kodak	Light greyish-purple in color	No particles
30	Epson	Reddish brown in color	No particles

Table 7: Observations of the Thirty-Five Extracted Ink Samples Under the Compound Microscope cont.

Sample #	Manufacturer	Color Under Microscope (4X objective)	Solid Particles (Y/N) Description? (10X and 40X objective)
33	Epson	Greyish-purple in color	No particles
60	Epson	Brownish-red in color	Some debris, not really particles as such at 40X and 10X
63	Epson	Brownish-red in color	Some debris, not really particles as such at 40X and 10X
66	Epson	Greyish-purple in color	No particles
84	Epson	Colorless	No particles
90	Epson	Light brown in color	No particles
93	Epson	Light greyish-purple in color	No particles
120	Epson	Brownish-red in color	No particles
123	Epson	Purple in color. Brownish-purple along edge of stain	No particles
156	Epson	Very faint greyish-purple in color	No particles
198	Hewlett Packard	Colorless	No particles
199	Hewlett Packard	Colorless	No particles
200	Hewlett Packard	Colorless	No particles
201	Hewlett Packard	Colorless	No particles
205	Hewlett Packard	Purple in color.	No particles
217	Canon	Light to medium purple in color	No particles
223	Canon	Light purple in color	No particles
282	Canon	Light to medium purple in color	No particles
306	Canon	Light purple in color	No particles
312	Canon	Colorless	No particles
318	Canon	Light blue in color	No particles
318a	Canon	Colorless	No particles
327	Canon	Pale to light purple in color	No particles
348	Canon	Light to medium purple in color	No particles
384	Canon	Light purple in color	No particles
402	Canon	Light to medium purple in color	No particles
492	Canon	Colorless	No particles
522	Canon	Light to medium purple in color	No particles

C. Thin Layer Chromatography

A series of thirteen TLC plates were labeled with all 176 different ink samples and the three blank paper samples. Aliquots of the extracted ink samples were spotted in their appropriate labeled location and each sample was spotted using approximately 10µl

of sample, or two half-filled microcaps of the sample. Though not all of the samples required that much sample to be spotted, to keep things consistent across the board it was decided to treat all the ink samples in the same manner. The thirteen TLC plates were then developed in a solvent system of n-butanol:ethanol:distilled water:acetic acid (470ml:235ml:235ml:59ml) or an approximate 8:4:4:1 ratio. The thirteen plates took approximately seven hours to fully develop within the solvent system. Unless otherwise stated, the ink samples analyzed using TLC were the extracted ink samples.

After removal from the TLC tanks the plates were allowed to dry and then were examined under short wave and long wave UV light. Under the short wave UV light, all the visible colored bands that were noticed on the plates using normal white light appeared dark. In addition, there was also a dark spot located approximately 2 cm from the starting line for all of the extracted ink samples and the blank paper samples. No other noticeable results were observed under the short wave UV light. Under the long wave UV light, for all of the samples it was noted that there was a pale blue fluorescent spot approximately 2 cm from the starting line, corresponding to the dark spot observed under the short wave UV light. This spot was also observed in the blank paper samples, not just in the extracted ink sample. It was thus concluded that this spot was due to some feature of the paper, and most likely due to the optical brighteners present in the paper, and not specific to the ink formulations themselves. The only ink samples that showed any fluorescence under the long wave UV light was the Okidata black ink samples. For all three ink samples, there was a bright orange fluorescent spot present under the long wave UV light that was associated with the pink spot visible on the TLC plate under normal white light.

For each ink sample on each TLC plate for each replicate, the Rf value for all spots observed were calculated and entered into an Excel spreadsheet. In addition, the various colored spots visible for the various ink samples were noted on an Excel spreadsheet. Part of this spreadsheet can be found at the end of this section, while the complete spreadsheet for all of the TLC replicates can be found in Appendix C. In addition, the TLC plates were scanned using a Canon Multi-Pass 160 printer with a built in scanner. The contrast was adjusted to maximize the visualization of the ink spots on the TLC plates. Depending on the ink sample and/or the concentration of the ink sample, not all of the spots that were visible on the TLC plates were captured by scanner. All visual spots, and their colors, were recorded in the excel spreadsheet. Any differences in the apparent color of the spots in the TLC images and the written description were due to the scanning process, and the written description should be referred to whenever a discrepancy occurs.

Within a specific manufacturer, there seemed to be color trends that could be used to help identify the ink samples. In the case of the Okidata ink samples, the highest concentration of the ink samples reliably separated out into three spots, each having a color arrangement of purple, pink and yellow (bottom to top of the TLC plate respectively). At the lower concentration of the extracted ink samples, only the two higher colored spots, pink and yellow respectively, were noted. The lack of the purple spot could be attributed to the lower concentration of the ink extracted from the paper and hence the lower concentration of the ink spotted onto the TLC plate. In addition, at the lower concentration of the ink samples, not only was less sample used for the extraction but a higher volume of the extraction solvent was used. Thus, the ink samples were more

dilute at these conditions, resulting in less ink and lighter spots developing on the TLC plates. At the middle concentration, two spots were also noted, namely a purple spot and an orange spot (bottom to top of the TLC plate respectively). This orange spot could be the result of not allowing the ink sample to fully separate out (develop) into the pink and yellow spots that were observed at the higher concentration. The TLC results were the same for all cartridges of the Okidata #52110001 ink samples. The three ink cartridges of the Okidata #52110001 black ink samples produced the same results as compared to each other at the various concentrations. Refer to Figure 14 for the TLC results of the Okidata #52110001 ink cartridge at the various concentrations.

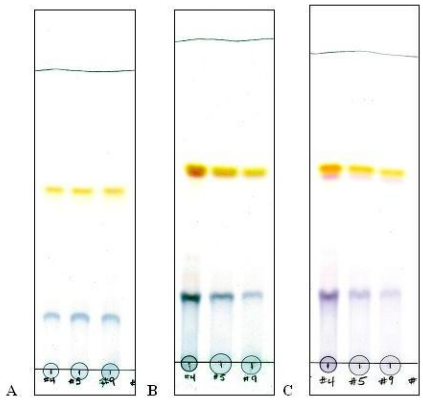

Figure 14: TLC results of the Okidata #52110001 ink cartridge (ink samples 04, 05 and 09) ink samples analyzed at (A) medium concentration and (B, C) high concentrations. Note the absence of the pink spot in the medium concentration results of (A).

In the case of the Xerox 8R7994 (ink samples 13 through 16 and 264 through 265), Xerox 8R7660 (ink samples 24 through 29) and Xerox M-Series (ink samples 244, 248, 252, 256 and 260) ink cartridges, none of the ink samples extracted out from the paper. When the extraction solvent from the appropriate vial was spotted onto the TLC plate, no spots or colors were observed for these ink samples. In addition, the Kodak #1369511 ink cartridge (ink sample 17) also did not extract from the paper, and as a

consequence there was no spot or color observed on the TLC plates for this ink sample. The Kodak #1754852 ink cartridge (ink sample 22), on the other hand, did extracted out from the paper and visible spots were found on the TLC plate for this ink sample. The Kodak 22 ink sample tended to produce a TLC arrangement of two spots that ranged in color from a grey color to a brown color as the concentration increased from a medium concentration to a high concentration. The Rf values for the two spots on the TLC plates for these two concentrations were consistent between the sample replicates. At the lower concentration, the Kodak 22 ink sample was diluted and only a single spot was noticed on the TLC plate. For one replicate of the Kodak 22 ink sample at the lowest concentration, this spot was actually split into two, which could have been due to an imperfection on the silica gel TLC plate. When two distinct spots were noted on the TLC plate, as which was found with the higher concentrations of extracted ink sample, the top spot was always significantly lighter than the bottom spot, which may explain why it was not observed on the TLC plate for the lower concentration of the Kodak 22 ink sample. Refer to Figure 15 for the TLC results of the Xerox 8R7994 and Xerox 8R7660 ink cartridges and the Kodak #1369511 and Kodak #1754852 ink cartridges at the different concentrations.

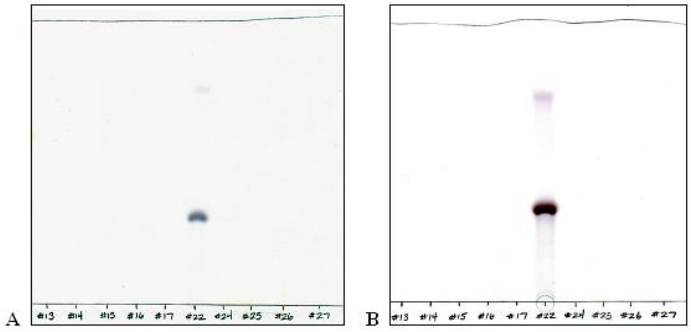

Figure 15: TLC results of the Xerox 8R7994 (ink samples 13 through 16), Xerox 8R7660 (ink samples 24 through 27), Kodak #1369511 (ink sample 17) and Kodak #1754852 (ink sample 22) ink cartridges analyzed at A) medium and B) high concentrations. Note the stronger presence of a second spot for Kodak 22 ink sample at the higher concentration of the extracted ink, whereas at the medium concentration of the extracted ink the second spot was extremely faint.

The Epson ink samples showed a wider variability in their TLC results, though some consistencies and/or characteristics were observed. The majority of the ink samples exhibited a color pattern of either a purple, purple, yellow, purple, purple arrangement or a purple, yellow, purple, purple arrangement (bottom to top of the TLC plate respectively). The Epson T003 ink cartridge (ink samples 33 through 35), Epson T007 ink cartridge (ink samples 60 through 62) and Epson S020189 ink cartridge (ink samples 63 through 65) tended to have the purple, purple, yellow, purple, purple arrangement (bottom to top of the TLC plate respectively), while the Epson T026 ink cartridge (ink samples 66 through 68), Epson T019 ink cartridge (ink samples 90 through 92), Epson T028 ink cartridge (ink samples 93 through 95), Epson S020187 ink cartridge (ink samples 120 through 122) and Epson T017 ink cartridge (ink samples 123 through 125) tended to have the purple, yellow, purple, purple arrangement (bottom to top of the TLC plate respectively). These TLC color patterns changed slightly as the concentration of the ink samples changed. At the lowest concentration, the ink samples were more diluted and the spots on the TLC plates were lighter. At this concentration, all eight Epson ink cartridges produced a TLC color arrangement of purple, yellow, purple, purple (bottom to top of the TLC plate respectively), with the bottom purple spot for the Epson T003, Epson T007 and Epson S020189 ink cartridges observed previously not visible at the lower concentration. The lowest concentration was reanalyzed and the second set of TLC plates produced the same TLC patterns. The only difference between the two sets of low concentration sample replicates was the fact that for the Epson 62 ink sample (T007 ink cartridge), its yellow spot had a green tint to it and the rest of the yellow spots for the eight Epson ink cartridges were yellow.

As the concentration increased, the Epson 33 (T003), Epson 60 (T007) and Epson 63 (S020189) ink samples the bottom purple spot became visible and formed the TLC pattern of purple, purple, yellow, purple, purple (bottom to top of the TLC plate respectively). For some of these Epson ink samples, the bottom purple spot was extremely faint and was not included on the excel spreadsheet. The faintness of the bottom purple spot made it difficult to determine if the spot was present or if the faint color observed was due to the sample moving up the TLC plate. In order to err on the side of caution, it was decided to leave these questioned spots off of the excel spreadsheet. For two replicates of the Epson 90 and Epson 92 ink samples and one replicate of the Epson 91 ink sample, a faint bottom purple spot was observed, giving a TLC color arrangement of purple, purple, yellow, purple, purple (bottom to top of the TLC plate respectively). These ink samples were not grouped with the Epson ink samples that produced the purple, purple, yellow, purple, purple arrangement due to the fact that this arrangement was not observed for all sample replicates of these ink samples. In addition, the bottom purple spot was faint and could have been due to the samples moving up the TLC plate. These spots were included on the excel spreadsheet because they were slightly more pronounced than the spots observed for the previously discussed faint purple spots of the Epson 33, Epson 60 and Epson 63 ink samples. The calculated Rf values for the respective spots observed on the TLC plates for the Epson ink samples were consistent across sample replicates and between multiple copies of each Epson ink cartridge. Refer to Figure 16 and Figure 17 for the TLC results of the Epson T003, Epson T007, Epson S020189, Epson T026, Epson T019, Epson T028, Epson S020187 and Epson T017 ink cartridges at the different concentrations.

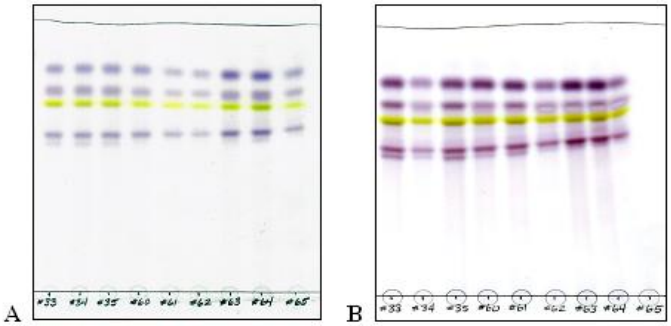

Figure 16: TLC results of the Epson T003 (ink samples 33 through 35), Epson T007 (ink samples 60 through 62) and Epson S020189 (ink samples 63 through 65) ink cartridges analyzed at A) medium and B) high concentrations.

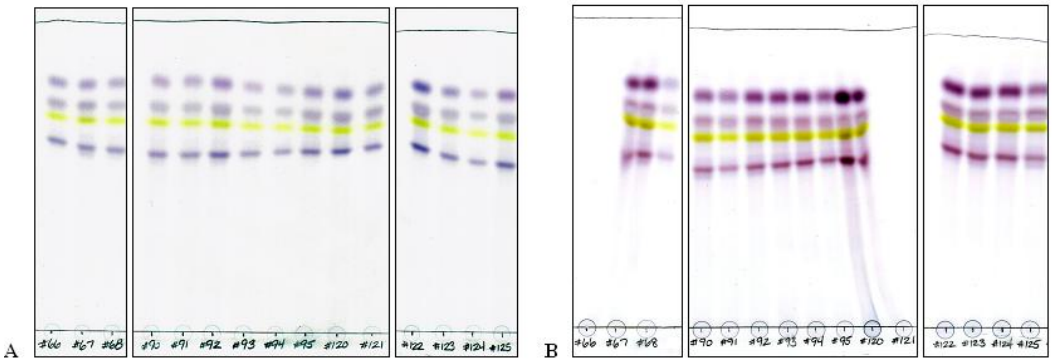

Figure 17: TLC results of the Epson T026 (ink samples 66 through 68), Epson T019 (ink samples 90 through 92), Epson T028 (ink samples 93 through 95), Epson S020187 (ink samples 120 through 122) and Epson T017 (ink samples 123 through 125) ink cartridges analyzed at A) medium and B) high concentrations.

The Epson T013 ink sample showed a different TLC color pattern than the one exhibited by the previously discussed Epson ink samples. For the Epson T013 ink cartridge (ink samples 30 through 32), at the higher concentration of the ink sample the TLC plate showed a color pattern of purple, pink, yellow, yellow, purple (bottom to top of the TLC plate respectively), while at the lower concentrations the color arrangement was yellow, yellow purple (bottom to top of the TLC plate respectively), with the top purple spot being significantly lighter than the two yellow spots. At the lower concentration of the Epson T013 ink samples, the bottom purple and pink spot were not visible on the TLC plate. The lack of the two bottom spots on the TLC plate for the

lower concentration was not surprising as the ink sample was dilute and the spots that were visible were extremely faint and difficult to see. Thus, it was important to increase the concentration of the extracted ink sample, by increasing the ink sample size amount and/or by reducing the amount of the added extraction solvent, in order for the complete TLC color pattern of the Epson T013 ink sample to be observed. The Epson T013 ink cartridge produced consistent TLC results across sample replicates and between multiple copies of the ink cartridge. Refer to Figure 18 for the TLC results of the Epson T013 ink cartridge at the different concentrations.

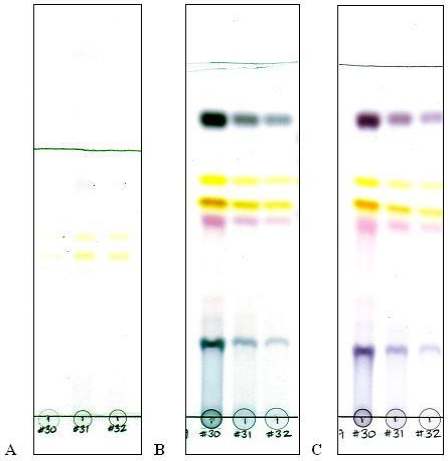

Figure 18: TLC results of the Epson T013 ink cartridge (ink samples 30 through 32) analyzed at (A) low and (B, C) high concentrations. Note the absence of the bottom purple and pink spots and the faint upper purple spot in the lower concentrations on the TLC plate in (A).

Another characteristic that was observed within the Epson ink samples occurred with the Epson T015 ink cartridge, (ink samples 156 to 158), in which only one spot was observed on the TLC plate using the medium and high concentrations. The color of the spot varied from a grayish color to a light pink-brown color to a purple color with increasing concentration of the extracted ink sample. At the lowest concentration of the ink sample, two sets of TLC plates were analyzed. One set produced no spots for the Epson T015 ink samples, while the second set had a single grey spot on the TLC plate.

The Epson T015 extracted ink samples were light in appearance in the extraction solvent and at the lowest concentration very little ink was visible at the origin on the TLC plate. Consequently, it was not surprising that the lowest concentration did not always produce a visible TLC pattern. For all concentrations of the Epson T015 ink samples, the spots observed on the TLC plates were faint, even with the highest concentration of the ink sample. The results of the Epson T015 ink samples were consistent with each other and the calculated RF value for the spots produced by these ink samples were also consistent across sample replicates. Refer to Figure 19 for the TLC results of the Epson T015 ink cartridge at the different concentrations.

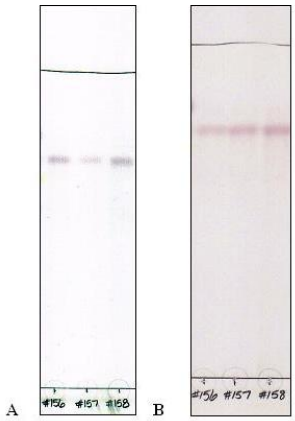

Figure 19: TLC results of the Epson T015 ink cartridge (ink samples 156 through 158) analyzed at A) medium and B) high concentrations. Note the color change from a grayish-blue to a purple as the concentration of the ink increases.

A final characteristic observed within the Epson ink samples involved cartridge type T0321, (ink samples 84 to 86), in which the ink did not extract from the paper, and as a result no spots or colors were noted on the TLC plates for these samples. All three copies of the T0321 ink cartridge were consistent in their results, in that no ink was extracted from the paper and no visible spots were observed on the TLC plates. Refer to Figure 20 for the TLC results of the Epson T0321 ink cartridge.

Figure 20: TLC results of the Epson T0321 ink cartridge (ink samples 84 through 86).

The Hewlett Packard ink samples also showed some useful characteristics that could aid in their identification. Four of the five Hewlett Packard ink samples did not extract from the paper, and as a result no spots or colors were noted on the TLC plates for these samples. All replicates of the Hewlett Packard #29 (ink sample 198), Hewlett Packard #56 (ink sample 199), Hewlett Packard #27 (ink sample 200) and Hewlett Packard #45 (ink sample 201) ink cartridges were consistent in that no ink was extracted from the paper and no visible spots were observed on the TLC plates. The fifth sample, the Hewlett Packard #58 ink cartridge, (ink sample 205), did extract from the paper using the extraction solvent and produced one spot on the TLC plate at the medium and high concentrations. This spot varied in color from a grayish color to a dark brown color, with the spot becoming darker brown at the higher concentrations. The spot observed with the Hewlett Packard 205 ink sample was similar to the result seen with some of the results of the Kodak 22 ink sample, which produced only a single spot on the TLC plate at the low concentration of extracted ink sample. In the cases where the Kodak 22 ink sample separated out into two spots, the Hewlett Packard 205 ink sample could then be differentiated from the Kodak 22 ink sample. Thus it was necessary to ensure that the

proper concentration of extracted ink sample was used so that the difference between the Kodak 22 ink sample and the Hewlett Packard 205 ink sample could be observed. The Rf values calculated for the Hewlett Packard 205 ink sample were consistent across the various sample replicates. Refer to Figure 21 for the TLC results of the Hewlett Packard ink cartridges at the different concentrations.

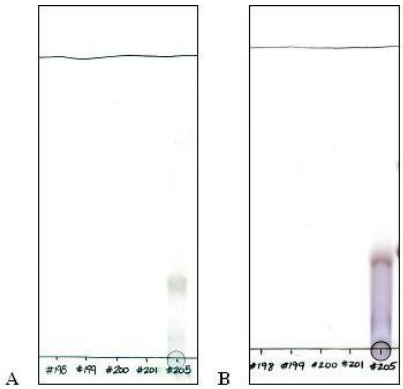

Figure 21: TLC results of the Hewlett Packard #29 (ink sample 198), Hewlett Packard #56 (ink sample 199), Hewlett Packard #27 (ink sample 200), Hewlett Packard #45 (ink sample 201) and Hewlett Packard #58 (ink sample 205) ink cartridges analyzed at A) medium and B) high concentrations. Note the color change in the Hewlett Packard 205 ink sample from a grayish color to a brown color with increasing concentration.

The final product line tested was the Canon brand of inkjet ink samples. Like the Epson brand of ink samples, the Canon ink samples showed a variety of results on the TLC plates. The majority of the ink samples, namely the Canon BCI-6Bk, Canon BC-02, Canon BCI-3ePBk, Canon BCI-10, Canon BCI-21 and Canon BCI-11 ink cartridges produced one of two main TLC color arrangements. The Canon BCI-6Bk (ink sample 217 through 222), Canon BC-02 (ink sample 282 through 287) and Canon BCI-3ePBk (ink samples 522 through 527) ink cartridges produced a TLC color pattern of brown, brown (bottom to top of the TLC plate respectively), while the Canon BCI-10 (ink samples 223 through 228 and 372 through 383), Canon BCI-21 (ink samples 348 through 353) and Canon BCI-11 (ink samples 384 through 401) ink cartridges produced a TLC

color arrangement of brown, brown, purple (bottom to top of the TLC plate respectively). The color of the brown spots varied with the ink concentrations, with the color being a lighter brown at the medium concentration and a darker brown at the higher concentration. At the lowest concentration for the Canon BCI-6Bk (ink sample 217 through 222), Canon BC-02 (ink sample 282 through 287) and Canon BCI-3ePBk (ink samples 522 through 527) ink cartridges, a purple spot appeared between the two brown spots on the TLC plate. The TLC color pattern was now brown, purple, brown (bottom to top of the TLC plate respectively) for these Canon ink samples. Only the lowest concentration for these Canon ink samples produced the purple spot on the TLC plate. At the medium and high concentrations of these Canon ink samples there was no purple spot present and the TLC color arrangement was brown, brown (bottom to top of the TLC plate respectively). The Rf values for the brown, brown spots and the brown, brown, purple spots were consistent across their respective samples replicates. In addition, the multiple copies of each ink cartridge produced consistent TLC color patterns with consistent Rf values for all samples replicates. Refer to Figure 22 and Figure 23 for the TLC results of the Canon BCI-6Bk, Canon BC-02, Canon BCI-3ePBk, Canon BCI-10, Canon BCI-21 and Canon BCI-11 ink cartridges at the different concentrations.

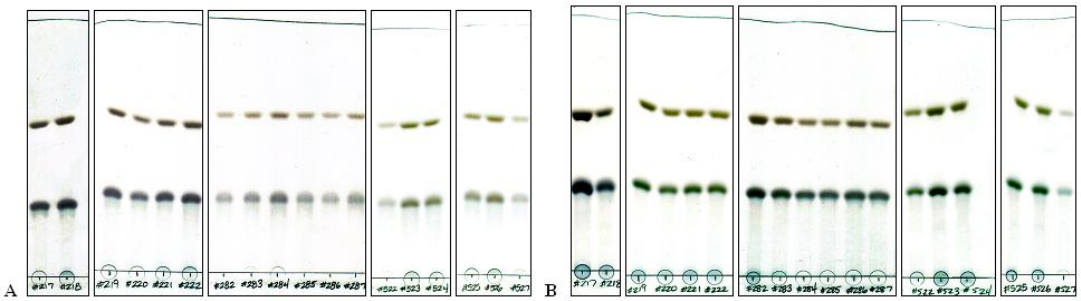

Figure 22: TLC results of the Canon BCI-6Bk (ink sample 217 through 222), Canon BC-02 (ink samples 282 through 297) and Canon BCI-3ePBk (ink samples 522 through 527) ink cartridges analyzed at A) medium and B) high concentrations. Note the darkening of the colors with increasing ink concentration.

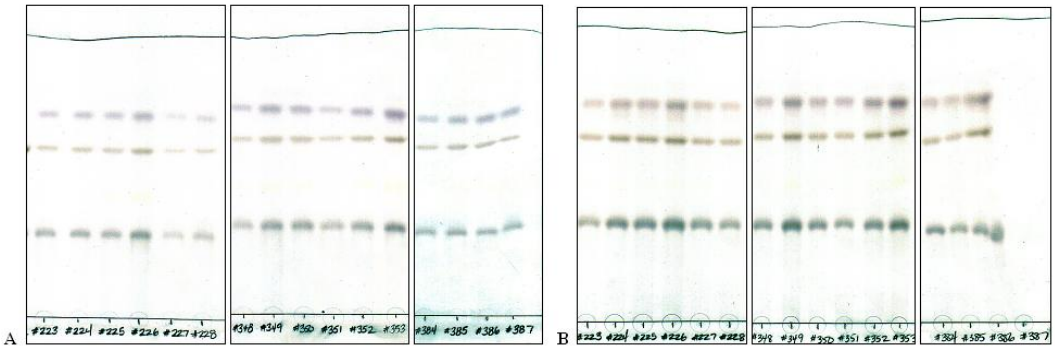

Figure 23: TLC results of the Canon BCI-10 (ink samples 223 through 228), Canon BCI-21 (ink samples 348 through 353) and Canon BCI-11 (ink samples 384 through 387) ink cartridges analyzed at A) medium and B) high concentrations. Note the darkening of the colors with increasing ink concentration.

The Canon BC-20 ink cartridge (ink samples 306 to 311) exhibited either a yellow, purple color arrangement or a yellow, purple, purple color arrangement (bottom to top of the TLC plate respectively) at the medium and high concentrations of the ink sample. The top purple spot was extremely faint, which may explain why it was not always visible on the TLC plate. The yellow spot was also very faint and depending on the amount of ink sample spotted on the TLC plate, it may not always be readily visible. At the lowest concentration of the Canon BC-20 ink samples, only a single spot was observed on the TLC plates, which was extremely faint and ranged in color from grey to purple. The Rf calculation for this spot corresponded to the middle purple spot found on the TLC plate at the higher concentrations. The multiple copies of Canon BC-20 ink cartridge produced consistent TLC color patterns and consistent Rf values across sample replicates. The TLC pattern for the Canon BC-20 ink sample was similar to some of the Epson ink samples, however it lacked the initial purple or purple, purple combination noticed with the Epson ink samples and hence these ink samples could be distinguished. In addition, the Rf value for the yellow spot of the Canon BC-20 ink cartridge was significantly lower than the Rf value for the yellow spot of the Epson ink samples,

allowing for another feature to distinguish between these ink samples. Refer to Figure 24 for the TLC results of the Canon BC-20 ink cartridge at the different concentrations.

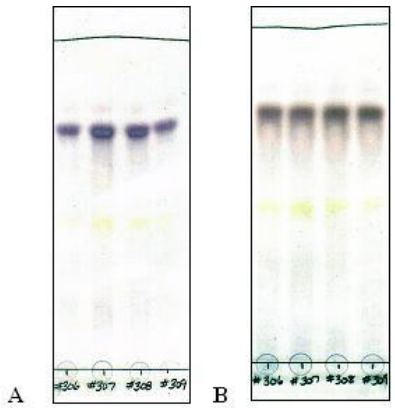

Figure 24: TLC results of the Canon BC-20 ink cartridge (ink samples 306 through 311) at the A) medium and B) high concentrations. Note in the presence of extremely faint purple spots above the main/middle spot on the plate in A) that were not readily visible on the plate in B), and the faint yellow spots on the plate in B) that were not readily visible on the plate in A).

The Canon BC-22e ink cartridge (ink samples 327, 331, 335, 339, 343 and 347) also exhibited only one spot on the TLC plate, which was purple in color at the medium and high concentrations of the ink samples. The result of the TLC analysis for these ink samples were similar to those observed with the Epson T015 ink cartridge (ink samples 156 to 158). However, the concentration of the extracted ink, and hence the intensity of the color on the TLC plate, was greater for the Canon ink samples than for the Epson ink samples. At the lower concentration of the ink sample spotted on the TLC plate, the color of the visible spot was grey rather than purple, which could allow the Canon BC-22e ink sample to be confused with the Epson T015 ink sample. Therefore, it was crucial that sufficient ink sample be spotted on the TLC plate in order to differentiate between the ink standards. However, the Rf values for all copies of BC-22e analyzed on multiple days were consistent across the sample replicates and across ink sample concentrations. Refer to Figure 25 for the TLC results of the Canon BC-22e ink cartridge.

Figure 25: TLC results of the Canon BC-22e ink cartridge (ink samples 327, 331, 335, 339, 343 and 347).

The Canon BC-60 ink cartridge (ink samples 318 to 323) also showed a unique result on the TLC plate. In this instance, the Canon BC-60 ink samples produced either a grey, purple color arrangement or a grey, yellow, purple color arrangement with increasing concentration. The yellow spot was extremely faint and was extremely difficult to see at times. At the lower concentration of the Canon BC-60 ink cartridge, only two spots were observed that were both grey in color. The two grey spots observed on the TLC plate at the lower concentration corresponded to the grey and purple spots found at the medium and high concentrations for these ink samples. The Rf values were consistent for the spots on the TLC plates for all the sample replicates from the multiple copies of the BC-60 ink cartridges analyzed on the same day and between sample replicates developed on different days. The Canon BC-60 ink cartridge also had a slightly yellow liquid fraction (ink samples 318a through 323a), which was extracted from paper and spotted on the TLC plate. The Canon 318a through 323a extracted ink samples were clear in color and did not produce any visible spots on the TLC plates. Refer to Figure 26 for the TLC results of the Canon BC-60 ink cartridge at the different concentrations.

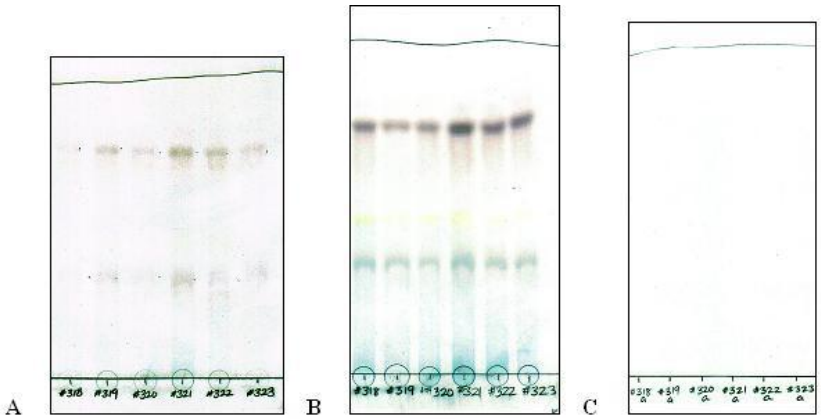

Figure 26: TLC results of the Canon BC-60 ink cartridge (ink samples 318 through 323) analyzed at A) low and B) high concentrations. Note in B) the faint yellow spots in the middle that were not visible on the plate in A). The results of the slightly yellow liquid found in cartridge BC-60 (ink samples 318a through 323a) can be found in C).

A final characteristic observed within the Canon ink samples involved the Canon BC-23 (ink samples 312 to 317) and BCI-3eBk (ink samples 492 to 497) ink cartridges, in which the ink did not extract from the paper, and as a result no spots or colors were noted on the TLC plates for these Canon ink samples. The ink sample replicates from the multiple copies of the Canon BC-23 and Canon BCI-3eBk ink cartridges were consistent in that no ink was extracted from the paper and no visible spots were observed on the TLC plates. Refer to Figure 27 for the TLC results of the Canon BC-23 and BCI-3eBk ink cartridges.

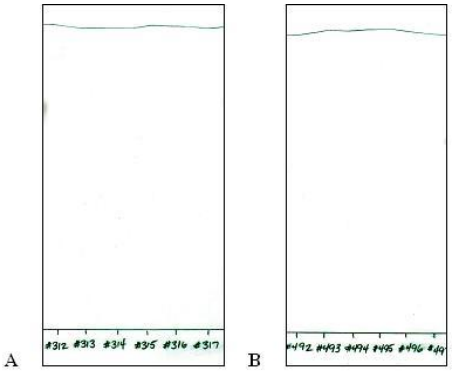

Figure 27: TLC results of the A) Canon BC-23 ink cartridge (ink samples 312 through 317) and B) Canon BCI-3eBk ink cartridge (ink samples 492 through 497).

Table 8 shows the results of the TLC analysis with the highest concentration of ink samples extracted from the paper. The distance traveled by the mobile phase and any spot(s) noted for a specific ink sample were noted in the following table. The Rf value was calculated for each spot, if applicable, and was also included in the table. The colors within the following table represented the colors observed for the visible spots on the TLC plate for the specific ink sample. For complete results of all of the TLC analyses, refer to the spreadsheets located in Appendix C.

Table 8: TLC Observations and Rf calculations for TLC plates analyzed on October 20th, 2008.

Sample #	Manufacturer	Solvent Front	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	MISC
Blank 1	Staples	**13**						
	Rf Values		**0**	**0**	**0**	**0**	**0**	
Blank 2	Staples	**12.8**						
	Rf Values		**0**	**0**	**0**	**0**	**0**	
Blank 3	Staples	**13.4**						
	Rf Values		**0**	**0**	**0**	**0**	**0**	
04	Okidata	**13**	**2.8**	**7.8**	**8.2**			
	Rf Values		**0.2154**	**0.6**	**0.6308**	**0**	**0**	
05	Okidata	**13**	**2.8**	**7.8**	**8.1**			
	Rf Values		**0.2154**	**0.6**	**0.6231**	**0**	**0**	
09	Okidata	**12.9**	**2.8**	**7.7**	**8**			
	Rf Values		**0.2171**	**0.5969**	**0.6202**	**0**	**0**	
13	Xerox	**12.8**						
	Rf Values		**0**	**0**	**0**	**0**	**0**	
14	Xerox	**12.9**						
	Rf Values		**0**	**0**	**0**	**0**	**0**	
15	Xerox	**12.8**						
	Rf Values		**0**	**0**	**0**	**0**	**0**	
16	Xerox	**12.8**						
	Rf Values		**0**	**0**	**0**	**0**	**0**	
17	Kodak	**13**						
	Rf Values		**0**	**0**	**0**	**0**	**0**	
22	Kodak	**13**	**4.2**	**9.7**				
	Rf Values		**0.3231**	**0.7462**	**0**	**0**	**0**	
24	Xerox	**13**						
	Rf Values		**0**	**0**	**0**	**0**	**0**	
25	Xerox	**13**						
	Rf Values		**0**	**0**	**0**	**0**	**0**	

Table 8: TLC Observations and Rf calculations for TLC plates analyzed on October 20th, 2008 cont.

Sample #	Manufacturer	Solvent Front	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	MISC
26	Xerox	13						
	Rf Values		0	0	0	0		
27	Xerox	12.9						
	Rf Values		0	0	0	0		
28	Xerox	14						
	Rf Values		0	0	0	0		
29	Xerox	13.9						
	Rf Values		0	0	0	0		
30	Epson	13.8	2.5	7.6	8.4	9.2	11.6	
	Rf Values		0.1812	0.5507	0.6087	0.6667	0.8406	
31	Epson	13.8	2.5	7.5	8.2	9.1	11.65	
	Rf Values		0.1812	0.5435	0.5942	0.6594	0.8442	
32	Epson	13.8	2.6	7.4	8.1	9.1	11.7	
	Rf Values		0.1884	0.5362	0.587	0.6594	0.8478	
33	Epson	13.8	7.1	7.5	9	9.8	10.9	
	Rf Values		0.5145	0.5435	0.6522	0.7101	0.7899	
34	Epson	13.6	7.1	7.4	8.9	9.7	10.9	
	Rf Values		0.5221	0.5441	0.6544	0.7132	0.8015	
35	Epson	13.7	7.1	7.4	8.9	9.7	10.9	
	Rf Values		0.5182	0.5401	0.6496	0.708	0.7956	
60	Epson	13.8	7.2	7.5	9	9.75	10.9	
	Rf Values		0.5217	0.5435	0.6522	0.7065	0.7899	
61	Epson	13.9	7.2	7.6	9	9.7	10.8	Solvent front/ samples curved
	Rf Values		0.518	0.5468	0.6475	0.6978	0.777	
62	Epson	13.9	7.8	9.05	9.8	10.8		Solvent front/ samples curved
	Rf Values		0.5612	0.6511	0.705	0.777	0	
63	Epson	14	7.7	7.9	9.1	9.85	10.8	Solvent front/ samples curved
	Rf Values		0.55	0.5643	0.65	0.7036	0.7714	
64	Epson	14	7.7	8	9.1	9.8	10.8	Solvent front/ samples curved
	Rf Values		0.55	0.5714	0.65	0.7	0.7714	
65	Epson	14	8.15	9.4	9.9	11		Solvent front/ samples curved
	Rf Values		0.5821	0.6714	0.7071	0.7857	0	
66	Epson	13.6	7.5	9.1	9.8	10.8		Solvent front/ samples curved
	Rf Values		0.5515	0.6691	0.7206	0.7941	0	
67	Epson	13.6	7.5	8.9	9.6	10.7		Solvent front/ samples curved
	Rf Values		0.5515	0.6544	0.7059	0.7868	0	
68	Epson	13.6	7.4	8.8	9.5	10.7		
	Rf Values		0.5441	0.6471	0.6985	0.7868	0	
84	Epson	13.6						
	Rf Values		0	0	0	0	0	

Table 8: TLC Observations and Rf calculations for TLC plates analyzed on October 20th, 2008 cont.

Sample #	Manufacturer	Solvent Front	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	MISC
85	Epson	13.6						
	Rf Values		0	0	0	0	0	
86	Epson	13.6						
	Rf Values		0	0	0	0	0	
90	Epson	13.5	6.7	7	8.5	9.3	10.4	
	Rf Values		0.4963	0.5185	0.6296	0.6889	0.7704	
91	Epson	13.4	7.1	8.5	9.2	10.35		
	Rf Values		0.5299	0.6343	0.6866	0.7724	0	
92	Epson	13.5	7.2	8.5	9.35	10.4		
	Rf Values		0.5333	0.6296	0.6926	0.7704	0	
93	Epson	13.5	7.3	8.5	9.35	10.45		
	Rf Values		0.5407	0.6296	0.6926	0.7741	0	
94	Epson	13.5	7.5	8.6	9.3	10.45		
	Rf Values		0.5556	0.637	0.6889	0.7741	0	
95	Epson	13.45	7.5	8.6	9.25	10.4		Solvent front/ samples curved
	Rf Values		0.5576	0.6394	0.6877	0.7732	0	
120	Epson	13.4	7.5	8.6	9.4	10.4		Solvent front/ samples curved
	Rf Values		0.5597	0.6418	0.7015	0.7761	0	
121	Epson	13.4	7.5	8.7	9.55	10.5		Solvent front/ samples curved
	Rf Values		0.5597	0.6493	0.7127	0.7836	0	
122	Epson	13.2	7.8	9.2	9.8	10.6		Solvent front/ samples curved
	Rf Values		0.5909	0.697	0.7424	0.803	0	
123	Epson	13.2	7.7	9	9.6	10.5		
	Rf Values		0.5833	0.6818	0.7273	0.7955	0	
124	Epson	13.1	7.7	9	9.5	10.6		
	Rf Values		0.5878	0.687	0.7252	0.8092	0	
125	Epson	13	7.6	8.9	9.5	10.6		
	Rf Values		0.5846	0.6846	0.7308	0.8154	0	
156	Epson	12.8	9.6					
	Rf Values		0.75	0	0	0	0	
157	Epson	12.8	9.5					
	Rf Values		0.7422	0	0	0	0	
158	Epson	12.7	9.5					
	Rf Values		0.748	0	0	0	0	
198	Hewlett Packard	12.7						
	Rf Values		0	0	0	0	0	
199	Hewlett Packard	12.7						
	Rf Values		0	0	0	0	0	
200	Hewlett Packard	12.7						
	Rf Values		0	0	0	0	0	

Table 8: TLC Observations and Rf calculations for TLC plates analyzed on October 20th, 2008 cont.

Sample #	Manufacturer	Solvent Front	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	MISC
201	Hewlett Packard	12.7						
	Rf Values		0	0	0	0	0	
205	Hewlett Packard	12.7	3.5					
	Rf Values		0.2756	0	0	0	0	
217	Canon	12.8	4.1	7.55				
	Rf Values		0.3203	0.5898	0	0	0	
218	Canon	12.8	4.1	7.6				
	Rf Values		0.3203	0.5938	0	0	0	
219	Canon	13.3	4.5	8.4				Solvent front/ samples curved
	Rf Values		0.3383	0.6316	0	0	0	
220	Canon	13.4	4.4	8.1				
	Rf Values		0.3284	0.6045	0	0	0	
221	Canon	13.5	4.4	8				
	Rf Values		0.3259	0.5926	0	0	0	
222	Canon	13.4	4.4	8				
	Rf Values		0.3284	0.597	0	0	0	
223	Canon	13.2	4.4	8	9.4			
	Rf Values		0.3333	0.6061	0.7121	0	0	
224	Canon	13.15	4.3	7.85	9.2			
	Rf Values		0.327	0.597	0.6996	0	0	
225	Canon	13	4.3	7.8	9.2			
	Rf Values		0.3308	0.6	0.7077	0	0	
226	Canon	13	4.2	7.7	9.3			
	Rf Values		0.3231	0.5923	0.7154	0	0	
227	Canon	13	4.2	7.65	9.4			
	Rf Values		0.3231	0.5885	0.7231	0	0	
228	Canon	12.7	4.1	7.6	9.4			
	Rf Values		0.3228	0.5984	0.7402	0	0	
244	Xerox	12.7						
	Rf Values		0	0	0	0	0	
248	Xerox	12.8						
	Rf Values		0	0	0	0	0	
252	Xerox	12.9						
	Rf Values		0	0	0	0	0	
256	Xerox	13						
	Rf Values		0	0	0	0	0	
260	Xerox	13.3						
	Rf Values		0	0	0	0	0	
264	Xerox	13.4						
	Rf Values		0	0	0	0	0	

Table 8: TLC Observations and Rf calculations for TLC plates analyzed on October 20th, 2008 cont.

Sample #	Manufacturer	Solvent Front	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	MISC
265	Xerox	13.4						
	Rf Values		0	0	0	0	0	
282	Canon	13.4	4	7.7				
	Rf Values		0.2985	0.5746	0	0	0	
283	Canon	13.4	4	7.65				
	Rf Values		0.2985	0.5709	0	0	0	
284	Canon	13.1	3.95	7.6				
	Rf Values		0.3015	0.5802	0	0	0	
285	Canon	13.1	3.95	7.6				
	Rf Values		0.3015	0.5802	0	0	0	
286	Canon	13.1	3.9	7.5				
	Rf Values		0.2977	0.5725	0	0	0	
287	Canon	13	3.9	7.5				
	Rf Values		0.3	0.5769	0	0	0	
306	Canon	12.8	5.7	9				
	Rf Values		0.4453	0.7031	0	0	0	
307	Canon	12.8	5.7	9				
	Rf Values		0.4453	0.7031	0	0	0	
308	Canon	12.7	5.7	9				
	Rf Values		0.4488	0.7087	0	0	0	
309	Canon	12.8	5.7	9				
	Rf Values		0.4453	0.7031	0	0	0	
310	Canon	13.1	9.6					Solvent front/ samples curved
	Rf Values		0.7328	0	0	0	0	
311	Canon	13	9.3					
	Rf Values		0.7154	0	0	0	0	
312	Canon	13						
	Rf Values		0	0	0	0	0	
313	Canon	12.8						
	Rf Values		0	0	0	0	0	
314	Canon	12.8						
	Rf Values		0	0	0	0	0	
315	Canon	12.9						
	Rf Values		0	0	0	0	0	
316	Canon	12.9						
	Rf Values		0	0	0	0	0	
317	Canon	12.9						
	Rf Values		0	0	0	0	0	
318	Canon	13	4	5.8	9.4			
	Rf Values		0.3077	0.4462	0.7231	0	0	
319	Canon	13	4	5.8	9.4			
	Rf Values		0.3077	0.4462	0.7231	0	0	

Table 8: TLC Observations and Rf calculations for TLC plates analyzed on October 20th, 2008 cont.

Sample #	Manufacturer	Solvent Front	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	MISC
320	Canon	13	4	5.9	9.4			
	Rf Values		0.3077	0.4538	0.7231	0	0	
321	Canon	13	4	5.9	9.3			
	Rf Values		0.3077	0.4538	0.7154	0	0	
322	Canon	12.9	4.1	6	9.3			
	Rf Values		0.3178	0.4651	0.7209	0	0	
323	Canon	13	4.1	6	9.25			Solvent front/ samples curved
	Rf Values		0.3154	0.4615	0.7115	0	0	
327	Canon	13.1	9.6					Solvent front/ samples curved
	Rf Values		0.7328	0	0	0	0	
331	Canon	13.1	9.2					Solvent front/ samples curved
	Rf Values		0.7023	0	0	0	0	
335	Canon	13.1	9.3					
	Rf Values		0.7099	0	0	0	0	
339	Canon	13.2	9.3					
	Rf Values		0.7045	0	0	0	0	
343	Canon	13.1	9.3					
	Rf Values		0.7099	0	0	0	0	
347	Canon	13.2	9.2					
	Rf Values		0.697	0	0	0	0	
348	Canon	13.4	4.1	7.8	9.3			
	Rf Values		0.306	0.5821	0.694	0	0	
349	Canon	13.5	4.1	7.8	9.4			
	Rf Values		0.3037	0.5778	0.6963	0	0	
350	Canon	13.5	4.1	7.8	9.35			
	Rf Values		0.3037	0.5778	0.6926	0	0	
351	Canon	13.6	4.1	7.85	9.4			
	Rf Values		0.3015	0.5772	0.6912	0	0	
352	Canon	13.5	4.1	7.8	9.4			
	Rf Values		0.3037	0.5778	0.6963	0	0	
353	Canon	13.5	4.1	8	9.4			Solvent front/ samples curved
	Rf Values		0.3037	0.5926	0.6963	0	0	
372	Canon	13.5	4.2	8.2	9.5			Solvent front/ samples curved
	Rf Values		0.3111	0.6074	0.7037	0	0	
373	Canon	13.5	4.2	8.3	9.5			Solvent front/ samples curved
	Rf Values		0.3111	0.6148	0.7037	0	0	
374	Canon	13.2	4.4	8.1	9.6			Solvent front/ samples curved
	Rf Values		0.3333	0.6136	0.7273	0	0	
375	Canon	13.2	3.8	7.8	9.5			Solvent front/ samples curved
	Rf Values		0.2879	0.5909	0.7197	0	0	

Table 8: TLC Observations and Rf calculations for TLC plates analyzed on October 20th, 2008 cont.

Sample #	Manufacturer	Solvent Front	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	MISC
376	Canon	13.1	3.7	7.7	9.4			Solvent front/ samples curved
	Rf Values		0.2824	0.5878	0.7176	0	0	
377	Canon	13.1	3.6	7.4	9.2			
	Rf Values		0.2748	0.5649	0.7023	0	0	
378	Canon	13.1	3.5	7.4	9.2			
	Rf Values		0.2672	0.5649	0.7023	0	0	
379	Canon	13.2	3.5	7.4	9.2			
	Rf Values		0.2652	0.5606	0.697	0	0	
380	Canon	13.4	3.5	7.4	9.2			
	Rf Values		0.2612	0.5522	0.6866	0	0	
381	Canon	13.3	3.5	7.4	9.3			
	Rf Values		0.2632	0.5564	0.6992	0	0	
382	Canon	13.3	3.5	7.4	9.2			
	Rf Values		0.2632	0.5564	0.6917	0	0	
383	Canon	13.4	3.5	7.4	9.3			
	Rf Values		0.2612	0.5522	0.694	0	0	
384	Canon	13.5	3.6	7.5	9.4			
	Rf Values		0.2667	0.5556	0.6963	0	0	
385	Canon	13.3	3.5	7.5	9.2			Solvent front/ samples curved
	Rf Values		0.2632	0.5639	0.6917	0	0	
386	Canon	13.4	3.6	7.85	9.5			Solvent front/ samples curved
	Rf Values		0.2687	0.5858	0.709	0	0	
387	Canon	13.5	3.8	8.2	9.9			Solvent front/ samples curved
	Rf Values		0.2815	0.6074	0.7333	0	0	
388	Canon	13.4	4.5	8.2	9.4			
	Rf Values		0.3358	0.6119	0.7015	0	0	
389	Canon	13.5	4.5	8.2	9.3			
	Rf Values		0.3333	0.6074	0.6889	0	0	
390	Canon	13.5	4.5	8.2	9.4			
	Rf Values		0.3333	0.6074	0.6963	0	0	
391	Canon	13.5	4.5	8.2	9.5			
	Rf Values		0.3333	0.6074	0.7037	0	0	
392	Canon	13.5	4.5	8.2	9.5			
	Rf Values		0.3333	0.6074	0.7037	0	0	
393	Canon	13.5	4.5	8.2	9.5			
	Rf Values		0.3333	0.6074	0.7037	0	0	
394	Canon	13.3	4.5	8.2	9.4			
	Rf Values		0.3383	0.6165	0.7068	0	0	
395	Canon	13.2	4.5	8.2	9.5			
	Rf Values		0.3409	0.6212	0.7197	0	0	
396	Canon	13	4.4	8	9.5			
	Rf Values		0.3385	0.6154	0.7308	0	0	

Table 8: TLC Observations and Rf calculations for TLC plates analyzed on October 20th, 2008 cont.

Sample #	Manufacturer	Solvent Front	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	MISC
397	Canon	13.2	4.5	8.2	9.6			
	Rf Values		0.3409	0.6212	0.7273	0	0	
398	Canon	13.2	4.5	8.2	9.3			
	Rf Values		0.3409	0.6212	0.7045	0	0	
399	Canon	13.2	4.4	8.1	9.4			
	Rf Values		0.3333	0.6136	0.7121	0	0	
400	Canon	13.2	4.5	8.2	9.5			
	Rf Values		0.3409	0.6212	0.7197	0	0	
401	Canon	14.7	9					Solvent front/ samples curved
	Rf Values		0.6122	0	0	0	0	
402	Canon	14.7	9.1					Solvent front/ samples curved
	Rf Values		0.619	0	0	0	0	
403	Canon	14.8	9.3					Solvent front/ samples curved
	Rf Values		0.6284	0	0	0	0	
404	Canon	14.7	9.5					Solvent front/ samples curved
	Rf Values		0.6463	0	0	0	0	
405	Canon	14.6	9.5					Solvent front/ samples curved
	Rf Values		0.6507	0	0	0	0	
406	Canon	14.5	9.5					Solvent front/ samples curved
	Rf Values		0.6552	0	0	0	0	
407	Canon	14.4	9.5					
	Rf Values		0.6597	0	0	0	0	
408	Canon	14.4	9.4					
	Rf Values		0.6528	0	0	0	0	
409	Canon	14.4	9.4					
	Rf Values		0.6528	0	0	0	0	
410	Canon	14.3	9.4					
	Rf Values		0.6573	0	0	0	0	
411	Canon	14.2	9.5					
	Rf Values		0.669	0	0	0	0	
412	Canon	14.2	9.6					
	Rf Values		0.6761	0	0	0	0	
413	Canon	14.2	9.6					
	Rf Values		0.6761	0	0	0	0	
414	Canon	14.2	9.8					
	Rf Values		0.6901	0	0	0	0	
415	Canon	13.4	9.8					
	Rf Values		0.7313	0	0	0	0	
416	Canon	13.4	9.6					
	Rf Values		0.7164	0	0	0	0	
417	Canon	13.3	9.5					
	Rf Values		0.7143	0	0	0	0	

Table 8: TLC Observations and Rf calculations for TLC plates analyzed on October 20th, 2008 cont.

Sample #	Manufacturer	Solvent Front	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	MISC
418	Canon	13.3	9.5					
	Rf Values		0.7143	0	0	0	0	
419	Canon	13.3	9.4					
	Rf Values		0.7068	0	0	0	0	
492	Canon	13.3						
	Rf Values		0	0	0	0	0	
493	Canon	13.4						
	Rf Values		0	0	0	0	0	
494	Canon	13.5						
	Rf Values		0	0	0	0	0	
495	Canon	13.5						
	Rf Values		0	0	0	0	0	
496	Canon	13.5						
	Rf Values		0	0	0	0	0	
497	Canon	13.65						
	Rf Values		0	0	0	0	0	
522	Canon	13.6	4	7.8				
	Rf Values		0.2941	0.5735	0	0	0	
523	Canon	13.5	3.95	7.9				
	Rf Values		0.2926	0.5852	0	0	0	
524	Canon	13.5	3.95	8.1				
	Rf Values		0.2926	0.6	0	0	0	
525	Canon	12.8	4.3	8.1				Solvent front/ samples curved
	Rf Values		0.3359	0.6328	0	0	0	
526	Canon	12.75	4	7.7				
	Rf Values		0.3137	0.6039	0	0	0	
527	Canon	12.8	4.1	7.9				
	Rf Values		0.3203	0.6172	0	0	0	
558	Epson	12.8	7.5	8.45	9.1	10.1		
	Rf Values		0.5859	0.6602	0.7109	0.7891	0	
559	Epson	12.8	7.5	8.5	9.1	10.2		
	Rf Values		0.5859	0.6641	0.7109	0.7969	0	
318a	Canon	12.8						
	Rf Values		0	0	0	0	0	
319a	Canon	12.9						
	Rf Values		0	0	0	0	0	
320a	Canon	13						
	Rf Values		0	0	0	0	0	
321a	Canon	13.1						
	Rf Values		0	0	0	0	0	
322a	Canon	13.1						
	Rf Values		0	0	0	0	0	
323a	Canon	13.1						
	Rf Values		0	0	0	0	0	

D. High Performance Liquid Chromatography

Prior to High Performance Liquid Chromatography (HPLC) analysis on an Agilent 1100 HPLC, representative samples from the six manufacturers were analyzed on a Shimatsu UV-1700 UV-vis spectrophotometer, scanning from 700nm to 200nm. Twenty-two ink samples were selected to be analyzed on the Shimatsu UV-1700 UV-vis spectrophotometer, of which eight were Canon ink samples, five were Epson ink samples, one was an Okidata ink sample, two were Kodak ink samples, three were Hewlett Packard ink samples and three were Xerox ink samples. The ink samples were analyzed to establish the maximum absorbance wavelengths, also known as λ-max, so that the detector in the HPLC could be set to monitor those wavelengths. Since the Agilent 1100 HPLC instrument used in the study could be set to monitor five wavelengths at one time, upon reviewing the results of the analyses on the UV-vis spectrophotometer, five wavelengths were selected for the use within the HPLC analysis. The wavelengths were chosen so that each ink sample contained at least one potential monitoring wavelength, thereby ensuring that each ink sample in the study would be detected by the HPLC diode array detector. Based on the results, shown in Table 9, the five wavelengths chosen for the HPLC diode array detector were 236nm, 256nm, 417nm, 564nm and 588nm. The results of the UV-vis analysis that are shown in Table 9 have been highlighted in red with respect to the five wavelengths selected for monitoring in the HPLC detector system, with a range of +/- 5nm for each λ-max selected, to illustrate the fact that at least one wavelength used in the HPLC detector was found in each ink sample.

Table 9: UV-vis Results for the Various Ink Manufacturers

Sample	UV Peaks					
Okidata 04	203.30	**233.40**	341.80	**415.80**	**564.20**	
Epson 30	207.50	**234.30**	330.30	**414.10**	**590.70**	
Kodak 17	200.90	**236.00**	**241.90**			
Canon 217	207.50	265.90	469.30	**588.10**		
Hewlett Packard 198	200.50	**241.90**				
Xerox 13	200.70	**256.30**				
Kodak 22	204.50	264.20	295.40	462.70	**588.30**	
Xerox 24	200.70	**236.30**	**241.90**			
Xerox 244	**236.40**	**241.90**				
Epson 63	205.40	**257.50**	405.00	408.30	**411.00**	579.70
Epson 84	200.40	**236.80**	**241.90**			
Epson 120	205.50	**257.70**	408.30	584.60	**588.30**	
Epson 157	201.20	**236.70**	**256.30**	408.50	486.30	576.10
Hewlett Packard 201	200.60	**238.50**	**241.90**			
Hewlett Packard 205	201.90	227.70	**257.90**	342.70	408.30	**590.50**
Canon 223	**261.70**	293.70	462.70	**583.90**		
Canon 282	204.10	266.00	302.70	468.70	**587.70**	
Canon 306	204.20	**259.30**	434.90	576.80		
Canon 318	204.30	**261.30**	599.80			
Canon 348	205.30	**262.70**	295.40	486.30	**582.70**	
Canon 492	222.60	**255.00**				
Canon 522	206.70	265.50	300.20	469.50	535.90	**587.90**

The ink samples were analyzed on an Agilent 1100 HPLC instrument using the medium and high concentrations of the extracted ink samples. The results for the medium extracted ink concentrations were not strong enough to see consistent results, and as such only the highest concentration of the extracted ink samples were used. The HPLC was operated in the gradient method, with a two solvent mobile phase system of 0.02M Acetic Acid:Methanol (8:2) mixture and 100% Methanol. All of the solvents used in the experiment were HPLC grade solvents. The initial solvent mixture was 100% 0.02M Acetic Acid:Methanol and 0% Methanol, which was gradually changed over the course of 3.5 minutes to a 90% 0.02M Acetic Acid:Methanol and 10% Methanol mixture. The mobile phase mixture was then gradually changed to a 70% 0.02M Acetic Acid:Methanol and 30% Methanol mixture over the course of the next 11.5 minutes,

where it was then held constant for an additional 2 minutes. The total analysis time for the HPLC analysis was 17 minutes. The diode array detector of the HPLC was set up to monitor the five wavelengths previously discussed. In addition, the full spectrum was recorded for each ink sample as it was analyzed by the HPLC. After examining the HPLC chromatograms, it was decided to focus on the results of the 236 nm monitoring wavelength. This was decided based on the fact that the 236 nm wavelength provided the most information for the different ink samples. The other four wavelengths did not register as much information as the 236 nm wavelength, in particular there were some peaks not detected at these wavelengths that were detected by the 236 nm wavelength. Thus, the results of the 236 nm monitoring wavelength were used to discuss the similarities and/or differences between the thirty-five ink standards.

The results of the HPLC analysis were not highly discriminating as the TLC method, though some trends between the various ink samples could be observed. When examining the HPLC chromatograms, some peaks were present in the ink samples, blank paper samples and blank ethanol:distilled water (50:50) samples that needed to be addressed. First of all, there was a peak located at approximately 3.7 minutes in some of the HPLC chromatograms. After examining these HPLC chromatograms in detail, it was determined that the peak at approximately 3.7 minutes was a deviation from the baseline and not an actual peak. Thus, the peaks at approximately 3.7 minutes will not be discussed and were treated as an instrumental artifact. The second peak that was noticed in some of the HPLC chromatograms was a peak that had a peak maximum that ranged from approximately 0.1 minutes to a maximum of 0.28 minutes, with an average retention time of 0.11 minutes. After examining these HPLC chromatograms in detail, it

appeared that this peak was due to the sample injection process of the autosampler and was not as a component of the ink sample itself. This was confirmed by the fact that this peak appeared in the ink samples, blank paper samples and the blank ethanol:distilled water (50:50) samples, and consequently this peak will not be discussed further. As stated previously, when looking at the HPLC chromatograms of the different ink samples, only the results of the 236 nm monitoring wavelength were discussed. This wavelength provided the most information about each ink sample and provided the most discriminating information for the different ink samples. The data for the other four monitoring wavelengths were not discussed, but the data for these four wavelengths, plus the 236 nm wavelength, can be found in Appendix D.

Ten of the non-extractable ink samples and three of the extractable ink samples had the same HPLC chromatograms. The Xerox 13, Xerox 24, Xerox 244, Kodak 17, Epson 84, Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200, Canon 312 and Canon 318a non-extractable ink samples and the Canon 306, Canon 327 and Canon 402 extractable ink samples all contained a single peak in their HPLC chromatograms. With the exception of one sample replicate, for the remaining sample replicates for each copy of each ink cartridge, only a single peak at approximately 1.5 minutes was detected. For the Canon BCI-12 ink cartridge (ink sample 402 through 419), one replicate of the Canon 419 ink sample contained two peaks, one at approximately 1.5 minutes and the other at approximately 6.7 minutes. The peak at approximately 6.7 minutes was extremely small, with an area less than 24 mAU's or an area percentage of less than 1% relative to the entire HPLC chromatogram. Looking at this HPLC chromatogram and comparing it to the other HPLC chromatograms in the study, it was theorized that this

peak was not due to a component of the ink sample. As a result, the HPLC chromatogram for this specific Canon 419 ink sample replicate could be determined to be consistent with the other sample replicates of the other seventeen copies of the Canon BCI-12 ink cartridge. In addition, it should be noted that for the blank paper sample replicates and the blank ethanol:distilled water (50:50) mixture sample replicates, their HPLC chromatograms also contained only a single peak at approximately 1.5 minutes. Thus, these ten non-extractable ink samples and three extractable ink samples could not be distinguished from either each other or from the blank paper and/or blank ethanol:distilled water (50:50) sample replicates. Refer to Figure 28 for representative HPLC chromatograms for the ink samples that contained only a single peak, as well as the HPLC chromatograms for the blank paper sample and the blank ethanol:distilled water (50:50) mixture.

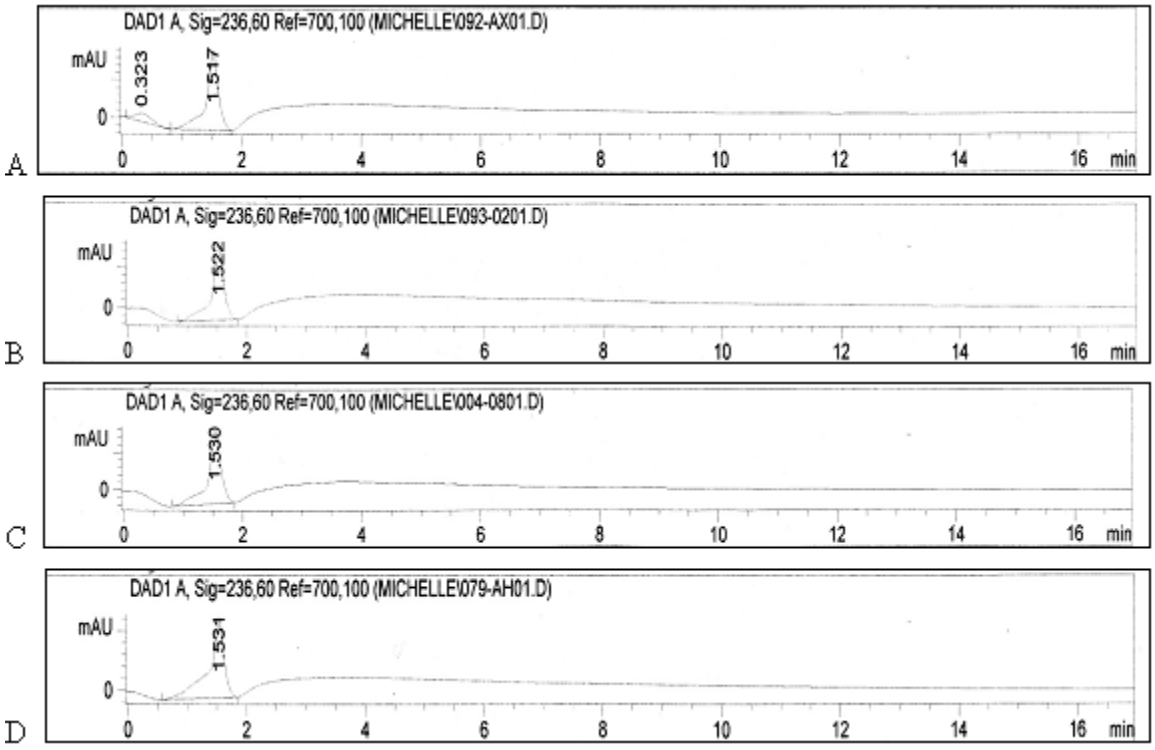

Figure 28: HPLC chromatograms for A) blank ethanol:distilled water (50:50) mixture, B) blank paper sample, C) Xerox 13 non-extractable ink sample and D) Canon 306 extractable ink sample.

Six of the extractable ink samples and one of the non-extractable ink samples had the same HPLC chromatogram. The Kodak 22, Epson 156, Canon 223, Canon 348, Canon 384 and Canon 318 extractable ink samples, and the Hewlett Packard 201 non-extractable ink sample all had an HPLC chromatogram that consisted of a peak at approximately 1.1 minutes and a peak at approximately 1.5 minutes. With the exception of the Epson T015 ink cartridge (ink samples 156 through 158), all sample replicates for each copy of each ink cartridge had reproducible and consistent HPLC chromatogram which showed these two peaks. For the Epson T015 ink cartridge, three copies of the cartridge were analyzed and for one ink cartridge, the Epson 158 ink sample, the peak at approximately 1.1 minute was not detected in all replicates for this ink sample. The Epson T015 ink cartridge, though an extractable ink sample, had the lightest extraction of all of the Epson ink samples, and among the lightest of all of the extractable ink samples. Thus, it was not entirely surprising that at this lower concentration that a peak would not be detected. In addition, for some of the Canon BCI-11 ink cartridges (ink samples 384 through 401), the peak at approximately 1.1 minutes was shifted to approximately 1.25 minutes. There were several reasons a change in peak position could occur, one of which was a change in the ambient temperature. The peak pattern and shape of the peaks were consistent between the sample replicates and a difference of approximately nine seconds between the peak locations for these ink sample replicates was not significant enough to exclude these ink samples from this HPLC classification group.

For the Hewlett Packard 205 ink sample, one of the sample replicates had an HPLC chromatogram that consisted of a peak at approximately 1.1 minutes and a peak at

approximately 1.5 minutes. In a second sample replicate, however, a peak was also noted at approximately 1.8 minutes. Thus, in the second HPLC chromatogram there were three peaks present at approximately 1.1 minutes, 1.5 minutes and 1.8 minutes. The peak at approximately 1.8 minutes found in one replicate of the Hewlett Packard 205 ink sample appeared to be on the tailing end of the peak at approximately 1.5 minutes, which may explain why it was not detected in the second sample replicate of the Hewlett Packard 205 ink sample. In the Hewlett Packard 205 ink sample, the peaks located at approximately 1.1 minutes, 1.5 minutes and 1.8 minutes appeared to co-elute with each other, forming a wide peak with nondistinctive peaks and valleys. Rather, the peaks in the Hewlett Packard 205 ink sample had a staircase like shape with the 1.5 minute and 1.8 minute peaks appearing like steps down from the main peak at 1.1 minutes. This peak pattern was completely different from the peak patterns of the Kodak 22, Epson 156, Canon 223, Canon 348, Canon 384 and Canon 318 extractable ink samples, and the Hewlett Packard 201 non-extractable ink sample, whose peaks at approximately 1.1 minutes and 1.5 minutes were distinct and separate peaks. Thus, even when the peak at 1.8 minutes was not identified in the Hewlett Packard 205 ink sample, this ink sample could be distinguished from the Kodak 22, Epson 156, Canon 223, Canon 348, Canon 384 and Canon 318 extractable ink samples, and the Hewlett Packard 201 non-extractable ink sample by comparing their HPLC chromatograms. Refer to Figure 29 for the representative HPLC chromatograms for ink samples that contained two peaks at approximately 1.1 minutes and 1.5 minutes.

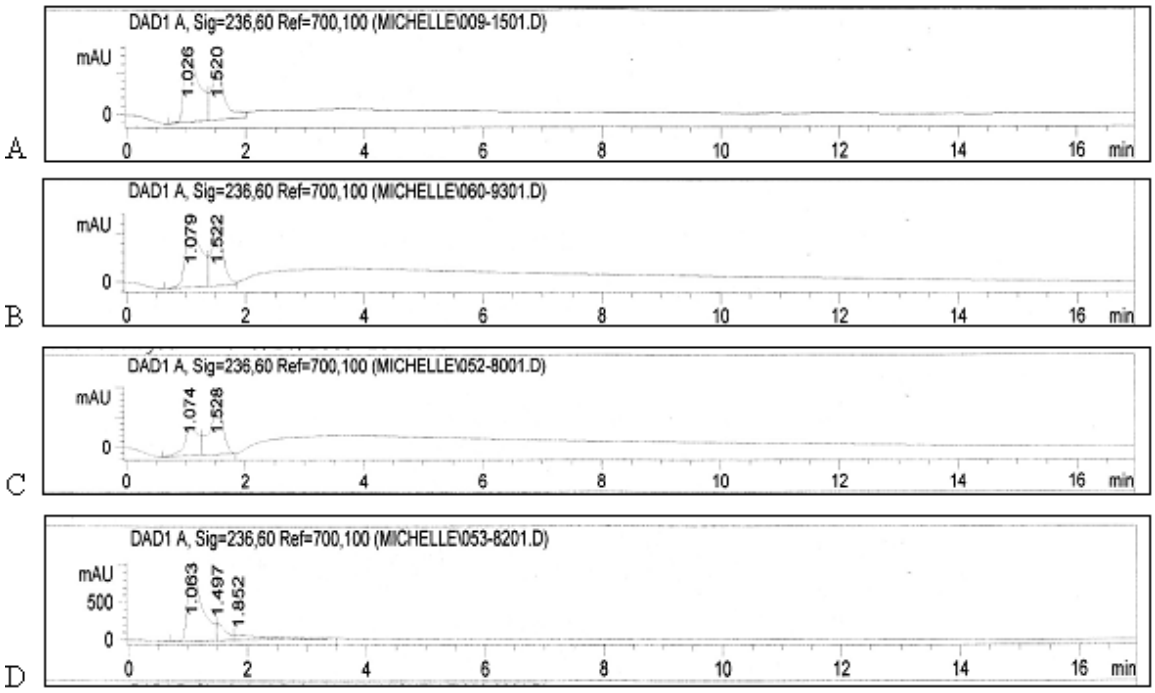

Figure 29: HPLC chromatograms for A) Kodak 22 extractable ink sample, B) Canon 223 extractable ink sample, C) Hewlett Packard 201 non-extractable ink sample and D) Hewlett Packard 205 extractable ink sample.

The Canon 217, Canon 282 and Canon 522 extractable ink samples had the same HPLC chromatograms of three peaks at approximately 1.1 minute, 1.5 minutes and 8.2 minutes. For all sample replicates of all copies of the Canon BC-6Bk ink cartridge (ink samples 217 through 222) and half of the Canon BC-02 ink cartridge (ink samples 282 through 287) and Canon BCI-3ePBk ink cartridge (ink samples 522 through 527) sample replicates, all three peaks were detected by the HPLC diode array detector. For the Canon BC-02 (ink samples 282 through 287) and Canon BCI-3ePBk (ink samples 522 through 527) ink cartridges, in about half of the sample replicates the peak at approximately 8.2 minutes was not detected by the 236 nm monitoring wavelength. In addition, for one replicate of the Canon BCI-3ePBK ink cartridge, the Canon 522 ink sample, there was a peak at approximately 6.7 minutes that was not found in any of the

other sample replicates. For this sample replicate, the peak at approximately 8.2 minutes was not detected and instead this earlier peak was identified by the detector. The peak at approximately 6.7 minutes was also extremely small, having an area percentage of about 0.2%. For the ink samples that had the peak at approximately 8.2 minutes, the peak was also small in comparison to the peaks at approximately 1.1 minute and 1.5 minutes, and had an area percentage of around 2%, depending on the ink sample. Thus, it was not unexpected that a peak with such a small area percentage may not be detected in some of the sample replicates. Refer to Figure 30 for the representative HPLC chromatograms for the Canon 217, Canon 282 and Canon 522 ink samples.

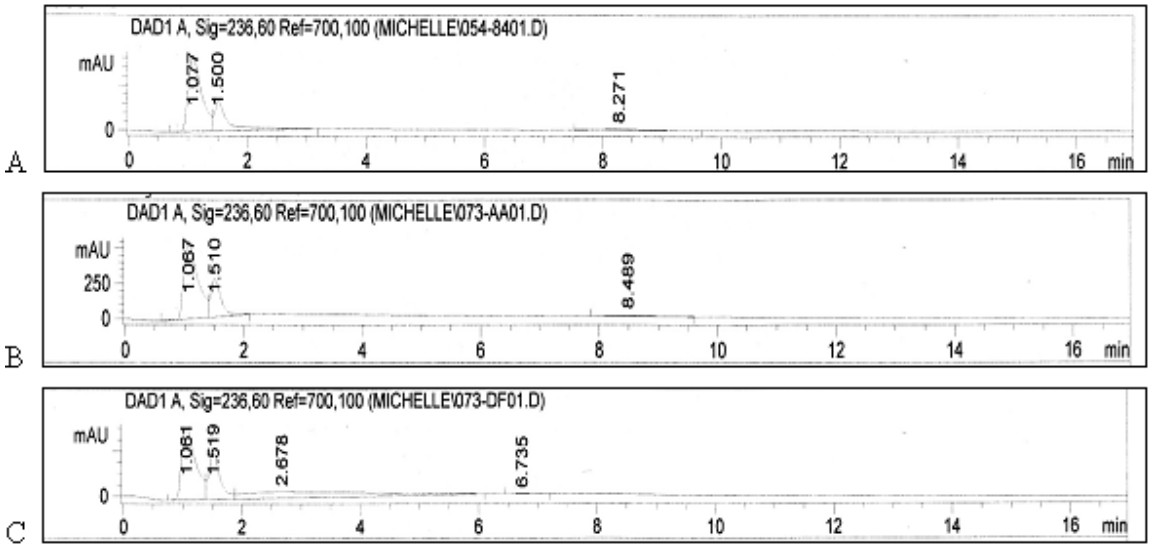

Figure 30: HPLC chromatograms for A) Canon 217 extractable ink sample, B) Canon 282 extractable ink sample and C) Canon 522 extractable ink sample.

For the Epson ink cartridge T013 (ink samples 30 through 32), an HPLC chromatogram pattern of four peaks located at approximately 1.1 minute, 1.5 minutes, 10.9 minutes and 12.0 minutes was observed. These four peaks were found in all sample replicates of all copies of the Epson T013 ink cartridge. In addition, for the Epson 30 ink sample only, a peak at approximately 7.0 minutes was observed. This peak was not

detected in the other T013 ink samples. The peak at approximately 7.0 minutes for the Epson 30 ink sample was extremely small and had an area percentage of less than 2.0%. Thus, it was not unexpected that a peak with such a small height and low area percentage would not be detected in some of the sample replicates. Refer to Figure 31 for the HPLC chromatogram of the Epson 30 ink sample.

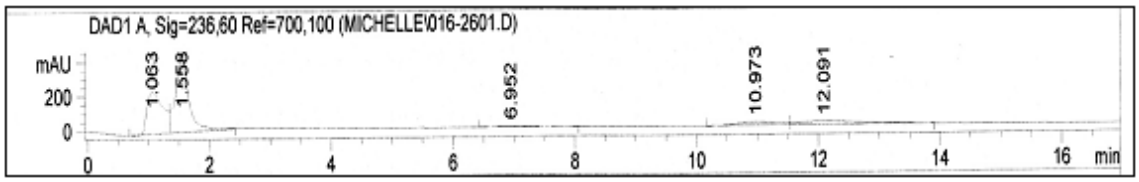

Figure 31: HPLC chromatograms for Epson 30 ink sample.

The HPLC chromatograms of the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples had some peaks in common with the HPLC chromatogram of the Epson 30 ink sample. The HPLC chromatograms of these eight Epson ink samples contained peaks at approximately 1.1 minutes, 1.5 minutes and 10.7 minutes. In some of the sample replicates, the peak at approximately 1.1 minutes was not identified by the detector, though a quick look at the HPLC chromatogram showed the presence of this peak. Thus, it could be stated that these three peaks were present in all sample replicates for all copies of these eight Epson ink cartridges. In addition, in about 30% of the sample replicates for these Epson ink samples there was also a peak at approximately 8.0 minutes. Thus, these Epson ink samples could be distinguished from the Epson 30 ink sample in some cases by the presence of this peak at 8.0 minutes, which was not found in the Epson 30 ink sample. However, as the peak at 8.0 minutes was not observed consistently for the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink

samples, the peak at approximately 12.0 minutes had to be used to distinguish these Epson ink samples from the Epson 30 ink sample, as this peak was not found in the Epson 30 ink sample. The Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples that contained a peak at approximately 8.0 minutes could be distinguished from the Canon 217, Canon 282 and Canon 522 ink samples by the presence of the peak at approximately 10.7 minute in the Epson ink samples that was not present in the Canon 217, Canon 282 and Canon 522 ink samples. Refer to Figure 32 for the representative HPLC chromatograms of Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples.

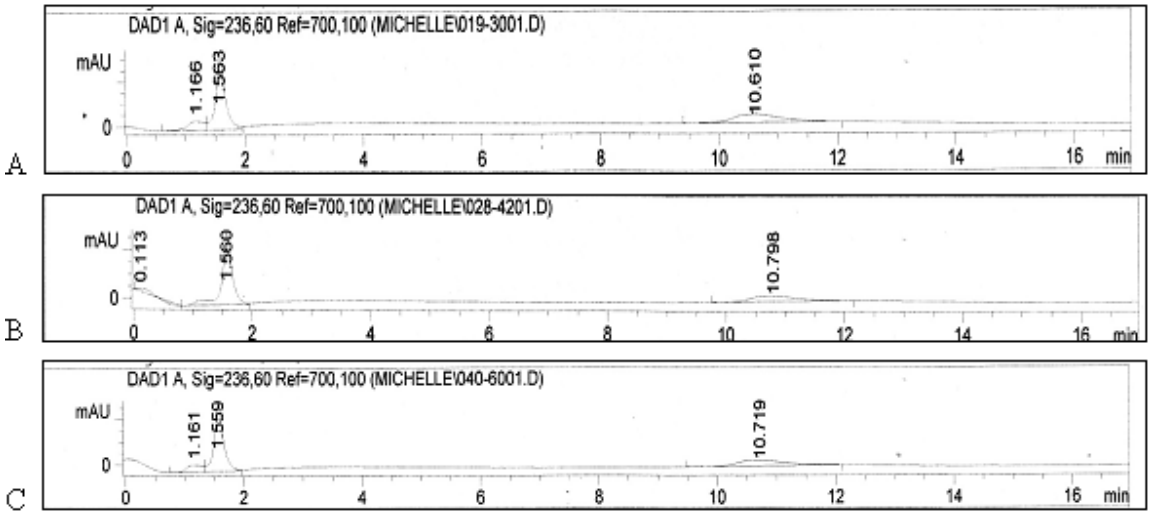

Figure 32: HPLC chromatograms for A) Epson 33 extractable ink sample, B) Epson 66 extractable ink sample and C) Epson 120 extractable ink sample.

For the Okidata #52110001 ink cartridge (ink samples 04, 05 and 09), an HPLC chromatogram of three peaks at approximately 1.1 minutes, 1.5 minutes and 12.0 minutes was observed. These three peaks were found in all sample replicates of all copies of the Okidata #52110001 ink cartridge. In one replicate of the Okidata 09 ink sample, a peak was recorded at approximately 10.7 minutes that, upon examination of the HPLC

chromatogram, was determined not to be a peak at this retention time. The peak recorded had an area percentage of approximately 0.2%, and was not visible as a peak on the HPLC chromatogram. Thus the peak at approximately 10.7 minutes was not considered to be a component of the Okidata 09 ink sample. The Okidata 04 ink samples could be distinguished from the Epson 30 ink samples by the fact that the latter contained a peak at approximately 10.9 minutes that was not found in the Okidata 04 ink samples. Additionally, the peak at approximately 10.9 minutes in the Epson 30 ink samples had an area percent value of between 4.3% and 7.0%, depending on the ink sample, which could not be confused with the peak found at 10.7 minutes in the Okidata 09 ink sample that had an area percent value of approximately 0.2%. Refer to Figure 33 for the HPLC chromatogram of an Okidata 04 ink sample.

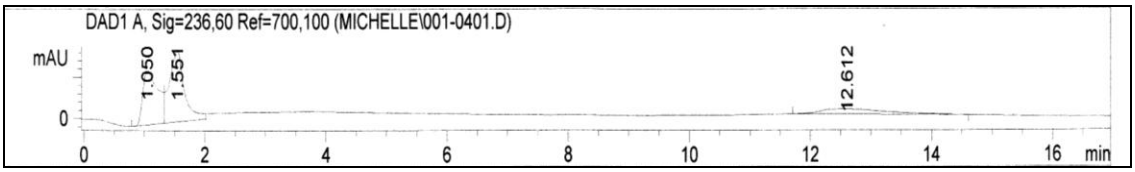

Figure 33: HPLC chromatograms for the Okidata 04 extractable ink sample.

For the Canon BCI-3eBk ink cartridge (ink samples 492 through 497), an HPLC chromatogram of three peaks was observed. The HPLC chromatograms of the Canon BCI-3eBk had three peaks present, with retention times of approximately 1.5 minutes, 6.8 minutes and 7.3 minutes. Though all sample replicates of the multiple copies of this ink cartridge contained these peaks, the two peaks located at approximately 6.8 minutes and 7.3 minutes were not always identified as two separate peaks. In half of the sample replicates, the peak at approximately 6.8 minutes was not detected and in 17% of the samples replicates, the peak at approximately 7.3 minutes was not detected. However, at least one of these peaks of the two peaks was detected in each sample replicate, and if the

HPLC chromatogram was examined the two peaks were readily observed. Refer to Figure 34 for the HPLC chromatogram of Canon 492 ink sample.

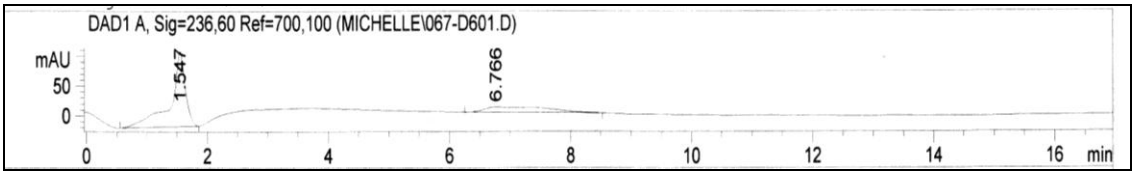

Figure 34: HPLC chromatograms for the Canon 492 non-extractable ink sample.

E. Attenuated Total Reflection Fourier Transform Infrared Spectroscopy

The ink samples were analyzed using Attenuated Total Reflection Fourier Transform Infrared Spectroscopy (ATR FT-IR). The ink samples were analyzed on a Nicolet 380 FT-IR spectrophotometer with an ATR Miracle attachment. The internal reflecting element (IRE) for the ATR attachment was zinc selenide (ZnSe). The ATR spectrum for each sample was scanned in the range from 600 cm^{-1} to 4000 cm^{-1}, with a resolution of 8 cm^{-1} and 32 scans per spectrum. The ink samples were analyzed as both ink on paper samples and neat ink samples. The neat ink samples were done to assist in the interpretation and analysis of the results of the ink on paper sample replicates.

For this analysis the ink on paper samples were analyzed directly on the paper (*in situ*), which was done as this is the form of the evidence that is routinely encountered in a crime laboratory. The blank paper was also analyzed in anticipation of using subtraction analysis to differentiate and classify the different inkjet ink manufacturers. For each ink on paper sample and blank paper sample, the ATR FT-IR spectrum was baseline corrected and automatically smoothed using the Savitzky-Golay algorithm, and then the spectra for a specific ink sample and/or blank paper sample were averaged. This step was done prior to the subtraction of the blank paper spectra from the ink on paper spectra.

When the ink on paper samples ATR spectra were smoothed, a change in a peak maximum position, generally with a difference of between 2 cm^{-1} and 4 cm^{-1} from the unsmoothed ATR spectra, was noticed for a single peak in less than 8% of the ink on paper samples. The majority of the ink on paper samples that had a difference in the peak maximum position for a single peak in their ATR spectra were found in the ink on paper samples collected prior to July 2008, when the ATR FT-IR system was not purged with nitrogen. In addition, the neat ink samples were analyzed to establish the ATR FT-IR spectra for each ink cartridge. For each neat ink sample, the ATR FT-IR spectrum was baseline corrected, automatically smoothed using the Savitzky-Golay algorithm and then the spectra for a specific ink cartridge were averaged. This step was used to assist in the interpretation of the ATR FT-IR data for the ink on paper samples.

The neat ink samples were prepared by pipetting 10µl of neat ink onto a clean, labeled glass microscope slide and letting the neat ink samples air dry. The neat ink samples were air dried for approximately ten weeks, and then were placed into an oven set at 60^{o}C for a minimum of two hours on three separate days. At this point, the surface of the ink samples on the glass slides appeared to be dry. As stated previously, the ink samples were scanned using a Nicolet 380 FT-IR spectrophotometer and an ATR Miracle (ZnSe) attachment, with a resolution of 8 cm^{-1} and 32 scans per spectrum. Upon completion of the data collection, and prior to the interpretation, the neat ink samples underwent sample processing. The neat ink samples ATR spectra were baseline corrected; automatically smoothed using the Savitzky-Golay algorithm and the y-axis was changed from % Transmittance to Absorbance. The majority of the neat ink samples remained as a single spot on the microscope slide, which was black in color. However,

for the Okidata 04, Epson 33 and Epson 63 neat ink samples, as the stain dried on the glass microscope slide, the black neat ink sample separated out into two different colored spots. For these three neat ink samples, there was a darker spot in the middle surrounded by a lighter color spot. The ATR FT-IR spectrum for each colored spot was collected for these three neat ink standards, and then the results were combined to produce the final representative ATR spectrum for the Okidata 04, Epson 33 and Epson 63 neat ink sample. The ATR spectrum for each neat ink standard was collected a minimum of three times in three different locations on the neat ink sample and the results averaged in order to obtain a complete representation of the ATR FT-IR spectrum for that neat ink standard. As stated previously, if the ink sample contained more than one component, then each component ATR spectrum was collected a minimum of three times and the results were averaged into a single, representative ATR spectrum for that sample. In addition, since the neat ink standards were analyzed directly on a glass microscope slide, the ATR FT-IR spectrum of the glass microscope slide was collected; baseline corrected and automatically smoothed using the Savitzky-Golay algorithm.

As stated previously, each neat ink standard was analyzed directly on a glass microscope slide, and as such the ATR spectrum for the glass microscope slide was also obtained. In order to obtain a representative ATR spectrum, the glass microscope slide's ATR spectrum was collected five times. Each ATR spectrum of the glass microscope slide was baseline corrected; automatically smoothed using the Savitzky-Golay algorithm and then the ATR spectra for the glass microscope slide were averaged. In order to eliminate any interference from the glass microscope slide on each of the neat ink standard ATR spectrum, the glass microscope slide ATR spectrum was subtracted from

each neat ink standard ATR spectrum. This subtraction step was also done for the black and brown components of the Okidata 04 neat ink standard, the black and brown components of the Epson 33 neat ink standard and the green and purple components of the Epson 63 neat ink standard.

For over half of the neat ink standards, the results of the subtraction of the glass microscope slide ATR spectrum from a specific neat ink standard ATR spectrum had no effect on that neat ink standard ATR spectrum. The peak maxima and overall peak pattern were the same for both the glass microscope slide subtracted ATR spectra and the non-subtracted ATR spectra for these neat ink standards. This was the result obtained for the Okidata 04, Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123, Kodak 22, Canon 306, Canon 318a, Canon 327, Canon 348,, Canon 402, Canon 492 and Canon 522 neat ink samples ATR spectra, as well as for the Okidata 04 black and brown components ATR spectra, Epson 33 black and brown components ATR spectra and Epson 63 green and purple components ATR spectra.

For seven of the neat ink standards, the subtraction of the glass microscope slide ATR spectrum from a specific neat ink standard ATR spectrum had minor effects on that neat ink standard ATR spectrum. In the Epson 84 neat ink sample ATR spectrum, there was a change in the peak maximum for a single peak from approximately 913 cm^{-1} in the non-subtracted ATR spectrum to approximately 926 cm^{-1} in the glass microscope slide subtracted ATR spectrum. For the remaining six neat ink standards; namely the Hewlett Packard 205, Canon 217, Canon 223, Canon 282, Canon 318 and Canon 384 neat ink samples; there again was a single peak difference between the glass microscope slide subtracted ATR spectra and the non-subtracted ATR spectra. In each instance, the peak

in question was a wide peak and the difference occurred in the identification of the peak maximum. For these six neat ink standards, there was a change in the peak maxima of between 10 cm^{-1} and 20 cm^{-1}. The peak maxima in the glass microscope slide subtracted ATR spectra were at a higher wavenumber than the peak maxima in the non-subtracted ATR spectra. The peak pattern and shape of the peaks in the ATR spectra for these six neat ink standards was the same for the glass microscope slide subtracted ATR spectra and the non-subtracted ATR spectra.

For eleven of the neat ink standards, the subtraction of the glass microscope slide ATR spectrum from the neat ink standards ATR spectra resulted in differences being noted between the glass microscope slide subtracted and the non-subtracted ATR spectra. For the Kodak 17 neat ink standard, after subtraction of the glass microscope slide ATR spectrum from the Kodak 17 neat ink spectrum, additional peaks were noted in the region between approximately 600 cm^{-1} and 900 cm^{-1} in the glass microscope slide subtracted ATR spectrum as compared to the non-subtracted ATR spectrum. Additionally, in the Kodak 17 neat ink non-subtracted ATR spectrum there was a peak located at approximately 1025 cm^{-1}, whereas in the Kodak 17 neat ink glass microscope slide subtracted ATR spectrum there was no distinct peak in this location. For the Epson 30 neat ink standard, in the non-subtracted ATR spectrum there was a peak located at approximately 976 cm^{-1}, whereas in the glass microscope slide subtracted ATR spectrum there was no distinct peak in this location. Additionally, there was a change in the peak maximum for a single peak from approximately 1177 cm^{-1} in the Epson 30 neat ink non-subtracted ATR spectrum to approximately 1204 cm^{-1} in the Epson 30 neat ink glass microscope slide subtracted ATR spectrum. For the Canon 312 neat ink standard, after

subtraction of the glass microscope slide ATR spectrum from the Canon 312 neat ink sample ATR spectrum, additional peaks were noted in the region between approximately 850 cm^{-1} and 1000 cm^{-1} in the glass microscope slide subtracted ATR spectrum as compared to the non-subtracted ATR spectrum. Additionally, there was a change in the peak maximum for a single peak from approximately 1153 cm^{-1} in the Canon 312 neat ink non-subtracted ATR spectrum to approximately 1178 cm^{-1} in the Canon 312 neat ink glass microscope slide subtracted ATR spectrum.

For the remaining eight neat ink standards; namely the Xerox 13, Xerox 24, Xerox 244, Epson 156, Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200 and Hewlett Packard 201 neat ink samples; changes in the peak maxima were noted between the non-subtracted ATR spectra and the glass microscope slide subtracted ATR spectra. The changes in peak maxima for the eight neat ink standards were limited to the region between approximately 600 cm^{-1} and 1200 cm^{-1}. After approximately 1200 cm^{-1}, the ATR spectra were the same for the glass microscope slide subtracted ATR spectra and the non-subtracted ATR spectra. For these eight neat ink standards, and in particular for the Epson 156, Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200 and Hewlett Packard 201 neat ink standards, the interference of the glass microscope slide on the neat ink standard spectrum was most significant and readily apparent. The glass microscope slide ATR spectrum contained two peaks located at approximately 763 cm^{-1} and 907 cm^{-1}. The two peaks identified in the glass microscope slide ATR spectrum spanned the region from approximately 1200 cm^{-1} to 600 cm^{-1}, and it was these two peaks that had the greatest influence on the neat ink standard ATR spectra for these eight neat ink standards. Refer to Figure 35 for a comparison between the glass microscope slide

ATR spectrum and the non-subtracted ATR spectra of the Hewlett Packard 198, Hewlett Packard 201 and Epson 156 neat ink standards.

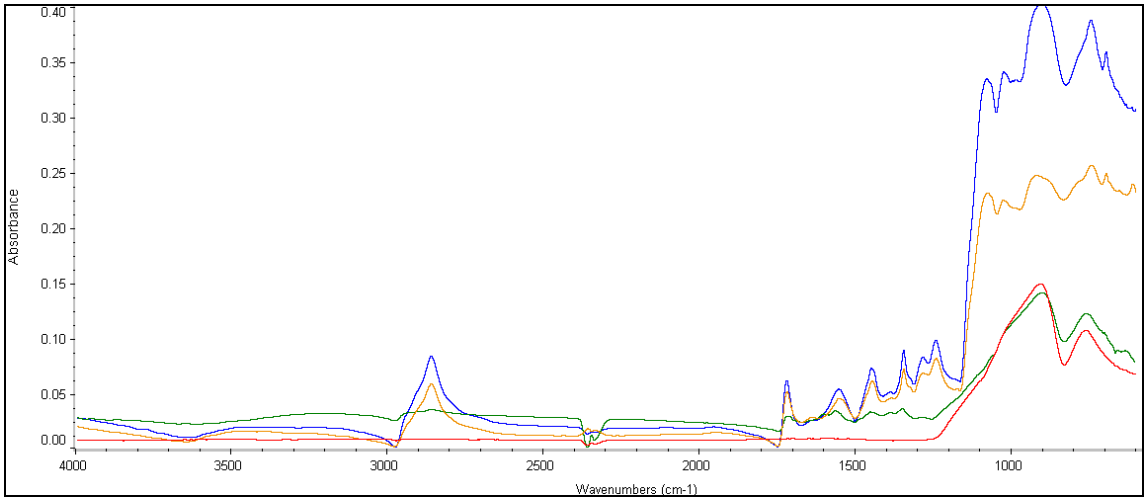

Figure 35: ATR spectra of Hewlett Packard 198 neat ink average (blue), Hewlett Packard 201 neat ink average (orange), Epson 156 neat ink average (green) and Blank Microscope Slide average (red).

What was interesting to note was that the neat ink standards that exhibited the most difference between their glass microscope slide subtracted ATR spectra and their non-subtracted ATR spectra tended to be the non-extractable ink samples. Eight of the eleven neat ink standards that had differences between their glass microscope slide subtracted ATR spectra and their non-subtracted ATR spectra were non-extractable ink samples. Additionally, it was the non-extractable ink samples that tended to have the most interference from the glass microscope slide during the collection of the neat ink standard ATR spectra. For the most part, the extractable ink samples were not effected, at least not to a significant degree, by either the glass microscope slide in the collection of the neat ink standard ATR spectra or by the subtraction of the glass microscope slide from their neat ink samples ATR spectra. The glass microscope slide subtracted ATR spectra were the most representative of the neat ink standards and were used for the

subsequent discussion of the similarities and/or differences between the neat ink samples ATR spectra of the thirty-five ink cartridges.

As stated previously, out of the thirty-five ink cartridge types that were tested in this study, three of the neat ink samples showed the splitting of the black ink into two distinct components. The Okidata 04 neat ink sample, when placed to dry on the microscope slide, separated out into a black component and a light-to-medium brown component. Each component had its own distinct ATR spectrum that was then combined into a single spectrum for the Okidata 04 neat ink sample. Though there were similarities between the ATR spectra of the black and brown components of the Okidata 04 ink standard, there were also several differences. The black component ATR spectrum contained two peaks located at approximately 975 cm^{-1} and 1033 cm^{-1} that were not found in the brown component ATR spectrum, whereas the brown component ATR spectrum contained six peaks located at approximately 773 cm^{-1}, 1132 cm^{-1}, 1277 cm^{-1}, 1307 cm^{-1}, 1428 cm^{-1} and 1458 cm^{-1} that were not found in the black component ATR spectrum. Additionally, changes in peak maxima were found for four peaks between the black component ATR spectrum and the brown component ATR spectrum. The black component ATR spectrum had the peak maxima for four peaks listed at approximately 621 cm^{-1}, 708 cm^{-1}, 918 cm^{-1} and 1094 cm^{-1}, whereas in the brown component ATR spectrum the peak maxima for these four peaks were located at approximately 631 cm^{-1}, 727 cm^{-1}, 903 cm^{-1} and 1109 cm^{-1}, respectively. The black component of the Okidata 04 ink sample was the dominant component, producing an ATR spectrum that was approximately 4-5 times stronger than the ATR spectrum of the brown component. Additionally, though each component had a distinct ATR spectrum, similarities were also

observed between the two components ATR spectra. Refer to Figure 36 for the ATR spectra of the Okidata 04 neat ink sample and its components.

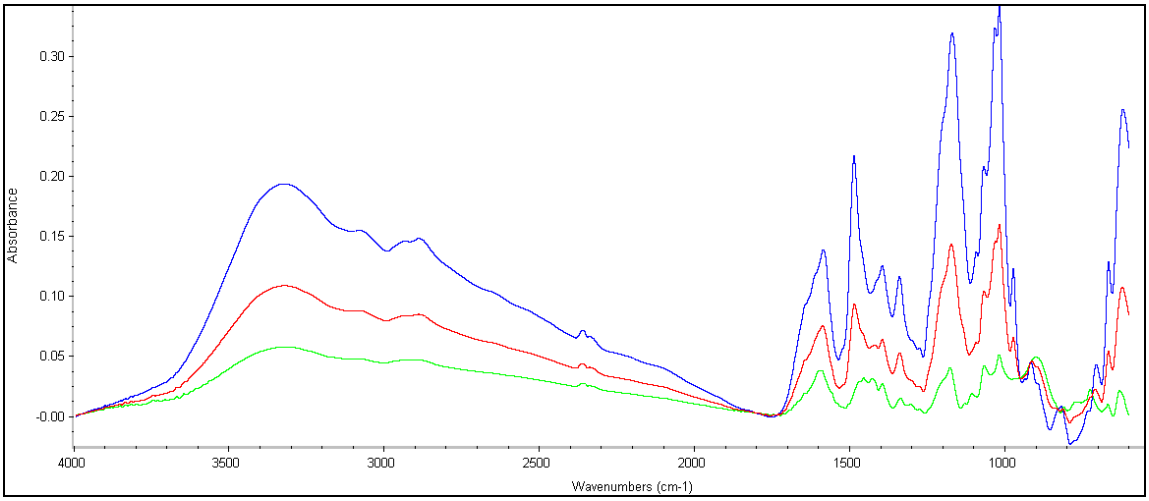

Figure 36: Glass microscope slide subtracted ATR spectra of the Okidata 04 neat ink black component (blue), the Okidata 04 neat ink brown component (green) and the Okidata 04 neat ink average (red).

The two other neat ink samples that separated out into two components upon drying were both Epson ink samples. The Epson 33 neat ink sample separated out into a medium-to-dark brown colored component and a black colored component. The ATR spectra for the black and brown components of the Epson 33 neat ink sample were similar in appearance to each other, showing only a few differences between the two spectra. The black component ATR spectrum contained a peak located at approximately 685 cm^{-1} that was not found in the brown component ATR spectrum, while the brown component ATR spectrum contained a peak located at approximately 905 cm^{-1} that was not found in the black component ATR spectrum. Additionally, changes in peak maxima were found for two peaks between the black component ATR spectrum and the brown component ATR spectrum. The black component ATR spectrum had the peak maxima for two peaks listed at approximately 860 cm^{-1} and 918 cm^{-1}, whereas in the brown

component ATR spectrum the peak maxima for these two peaks were located at approximately 875 cm^{-1} and 933 cm^{-1}, respectively. The black component of the Epson 33 ink sample was the dominant component, producing an ATR spectrum that was approximately 2.5 times stronger than the ATR spectrum of the brown component. Refer to Figure 37 for the ATR spectra of the Epson 33 neat ink sample and its components.

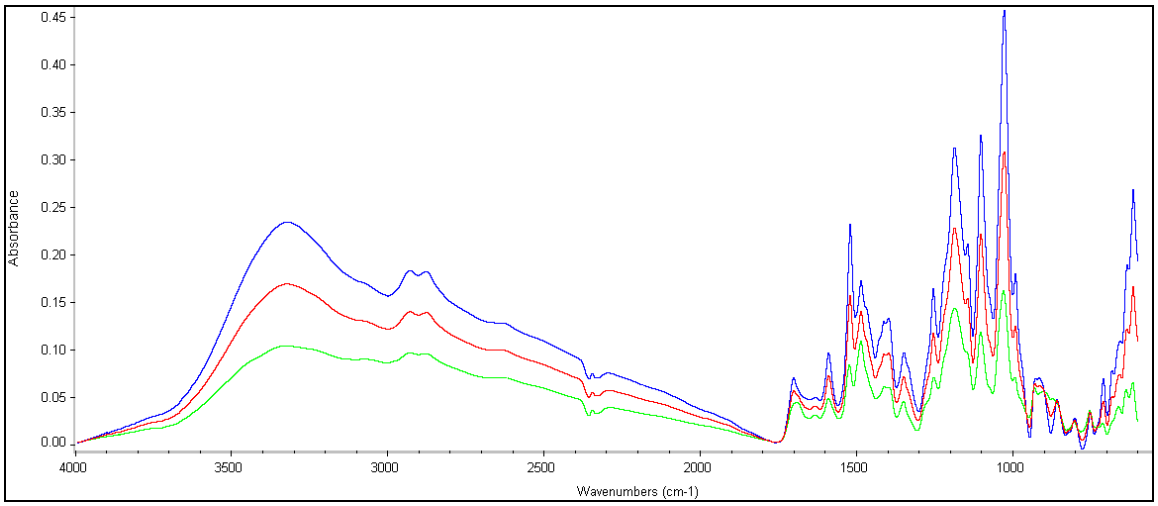

Figure 37: Glass microscope slide subtracted ATR spectra of the Epson 33 neat ink black component (blue), the Epson 33 neat ink brown component (green) and the Epson 33 neat ink average (red).

The other Epson neat ink sample, Epson 63, separated out into a green component and a purple component. The ATR spectra for the green and purple components of the Epson 63 neat ink sample were similar in appearance to each other, showing only a few differences between the two spectra. The purple component ATR spectrum contained two peaks located at approximately 665 cm^{-1} and 686 cm^{-1} that were not found in the green component ATR spectrum. Additionally, changes in peak maxima were found for a single peak between the green component ATR spectrum and the purple component ATR spectrum. The green component ATR spectrum had the peak maximum listed at approximately 861 cm^{-1}, whereas in the purple component ATR spectrum the peak

maximum was listed at approximately 873 cm^{-1}. Once again, one of the components was more dominant than the other in producing the final ATR spectrum for the Epson 63 neat ink sample ATR spectrum. The green component of the Epson 63 ink sample produced an ATR spectrum that was twice as strong as the ATR spectrum of the purple component. Refer to Figure 38 for the ATR spectra of the Epson 63 neat ink sample and its components.

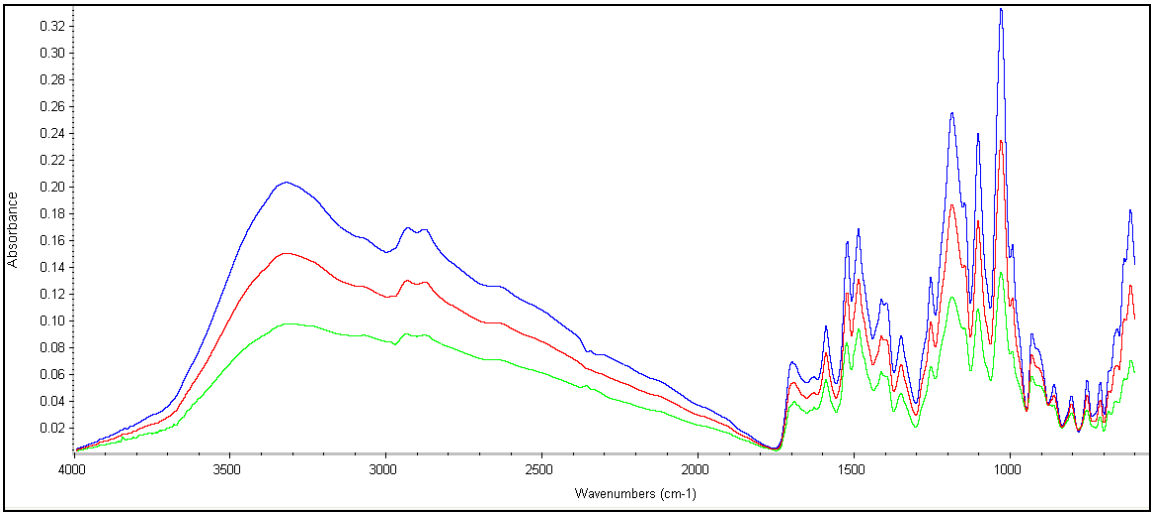

Figure 38: Glass microscope slide subtracted ATR spectra of the Epson 63 neat ink green component (blue), the Epson 63 neat ink purple component (green) and the Epson 63 neat ink average (red).

Refer to Table 10 for the peaks identified in the glass microscope slide subtracted ATR spectra for the thirty-five neat ink standards, as well the separate components of the Okidata 04, Epson 33 and Epson 63 neat ink standards. The peaks listed in Table 10 were the peaks observed in the entire glass microscope slide subtracted neat ink sample ATR spectrum, from approximately 4000 cm^{-1} to 600 cm^{-1}, for the thirty-five neat ink standards and the separate components of the Okidata 04, Epson 33 and Epson 63 neat ink standards.

Table 10: Slide Subtracted ATR FT-IR Data for the Different Ink Cartridges

	Okidata 04 Average	Okidata 04 Black Spot Average	Okidata 04 Brown Spot Average	Xerox 13 Average	Xerox 24 Average	Xerox 244 Average	Kodak 17 Average	Kodak 22 Average
1								
2	623.6	621.8		621.4		625.6	624.4	618.6
3			632.1					
4						653.2	647.5	644.8
5	668.0	667.6	669.3	668.2	670.1			
6						679.6		677.1
7				691.2		695.7		
8	711.6	707.8						708.4
9			727.7					
10						739.7		741.4
11								
12			773.1		784.8			
13				798.6		801.2		807.9
14	815.6	819.4	811.3					
15					831.7		827.7	826.9
16						840.0		848.8
17								
18								881.3
19			903.3					
20	915.6	918.3						911.8
21								
22							944.0	
23	975.3	975.4						970.7
24								
25				1012.5	1015.4	1012.3		1008.1
26	1019.7	1019.5	1020.6					
27	1032.9	1033.9						1033.0
28	1069.6	1070.6	1068.4			1078.7		
29		1094.3		1091.7	1085.6		1089.4	
30						1103.9		1098.7
31			1108.8					
32								1122.9
33			1132.4					
34						1140.5	1141.2	
35								
36	1175.2	1172.5	1179.4					
37								1191.5
38								
39								
40								
41							1238.8	
42				1255.1	1253.0	1258.1		
43	1277.5		1276.9				1278.3	1281.9
44				1294.7	1293.1			
45			1307.4					
46								
47	1341.0	1341.9	1339.0			1350.4	1340.1	1350.9
48				1371.0	1368.5			

Table 10: Slide Subtracted ATR FT-IR Data for the Different Ink Cartridges cont.

	Okidata 04 Average	Okidata 04 Black Spot Average	Okidata 04 Brown Spot Average	Xerox 13 Average	Xerox 24 Average	Xerox 244 Average	Kodak 17 Average	Kodak 22 Average
49								
50	1397.5	1397.4	1397.7					1396.8
51								
52	1420.6		1428.3					1426.2
53			1457.7	1449.4	1447.1	1452.5	1449.8	1453.7
54			1472.7					
55	1487.6	1488.6						
56								
57								
58								
59				1548.9	1551.5	1555.3	1552.5	
60								1572.3
61	1589.8	1587.9	1593.0					
62						1606.8		1604.1
63						1621.3		
64								
65				1648.0				
66								
67						1679.5		
68								
69				1714.0	1712.5		1714.2	
70						1722.8		
71								
72							1949.9	
73				2334.8	2334.3	2339.2	2337.4	
74			2341.0					2348.4
75	2362.9	2362.4	2363.6	2362.6	2362.4	2361.3	2358.4	
76								
77				2864.5	2853.3	2861.5	2864.0	
78								2876.9
79	2892.8	2892.2	2901.8					
80								
81								2930.7
82								
83				2958.5				
84								
85								
86								
87								
88								
89								
90	3326.8	3328.2	3318.4					
91								
92							3351.8	3353.1
93								
94								

Table 10: Slide Subtracted ATR FT-IR Data for the Different Ink Cartridges cont.

	Epson 30 Average	Epson 33 Average	Epson 33 Black Spot Average	Epson 33 Brown Spot Average	Epson 60 Average	Epson 63 Average	Epson 63 Green Spot Average	Epson 63 Purple Spot Average
1								
2	625.4	617.2	616.7	618.7	615.2	615.7	616.0	614.7
3		636.9	635.8	640.1	636.2	635.6	635.7	635.3
4								
5	667.7	660.7	658.8	663.2	662.9	659.6		665.6
6		683.7	684.6		685.2	684.8		685.8
7								
8		713.1	712.7	715.5	713.5	713.5	713.4	713.8
9								
10								
11		755.0	754.4	755.9	755.7	755.3	755.1	756.0
12	784.1							
13		804.8	803.8	806.4	805.2	805.7	805.6	805.9
14	817.1							
15								
16								
17		861.1	860.2			861.6	861.0	
18				875.4				872.9
19				904.7				
20	920.9		918.4					
21		931.9		933.1	932.8	932.3	932.2	932.4
22								
23								
24		994.7	994.3	995.9	995.8	995.4	995.2	996.0
25								
26								
27	1033.7	1030.6	1030.1	1032.6	1030.6	1031.2	1031.1	1031.5
28								
29								
30	1105.1	1104.7	1104.4	1105.7	1105.1	1105.2	1105.1	1105.6
31								
32								
33								
34		1147.3	1146.9	1151.0	1150.1	1149.0	1148.6	1150.1
35								
36								
37		1189.2	1189.3	1188.1	1188.3	1188.9	1188.9	1189.1
38	1204.7							
39								
40								
41								
42		1256.8	1257.1	1255.5	1256.4	1256.6	1256.8	1256.3
43								
44								
45								
46								
47	1343.4	1351.5	1350.9	1352.8	1352.3	1351.9	1351.7	1352.4
48								

Table 10: Slide Subtracted ATR FT-IR Data for the Different Ink Cartridges cont.

	Epson 30 Average	Epson 33 Average	Epson 33 Black Spot Average	Epson 33 Brown Spot Average	Epson 60 Average	Epson 63 Average	Epson 63 Green Spot Average	Epson 63 Purple Spot Average
49								
50	1396.7	1400.6	1400.7	1399.9	1400.1	1400.8	1400.2	
51		1414.5	1414.7	1413.9	1415.5	1414.9	1414.8	1415.1
52								
53								
54								
55	1481.6	1488.7	1488.6	1488.9	1488.6	1488.6	1488.8	1488.2
56								
57	1530.3	1523.6	1523.1	1526.0	1526.3	1525.3	1524.8	1526.8
58								
59								
60								
61		1592.3	1592.2	1592.7	1592.6	1592.7	1592.6	1593.0
62	1603.9							
63	1622.3							
64		1635.8	1634.7	1636.5	1633.0	1631.6	1632.3	1631.2
65								
66	1660.1							
67								
68		1703.5	1704.2	1692.5	1701.0	1695.0	1701.9	1694.0
69								
70								
71								
72								
73								
74		2348.6	2348.7	2348.5	2348.9		2348.9	
75	2364.6							2361.6
76								
77								
78	2884.9	2880.8	2880.5	2882.1	2884.0	2879.7	2879.1	2880.9
79								
80								
81		2932.1	2932.3	2931.5	2937.6	2935.0	2933.9	2939.2
82	2944.5							
83								
84								
85								
86								
87								
88								
89								
90		3327.7	3327.1	3330.6	3331.3	3322.0	3323.9	3305.7
91								
92	3350.8							
93								
94								

Table 10: Slide Subtracted ATR FT-IR Data for the Different Ink Cartridges cont.

	Epson 66 Average	Epson 84 Average	Epson 90 Average	Epson 93 Average	Epson 120 Average	Epson 123 Average	Epson 156 Average
1							
2	616.8	618.5	617.6	615.8	617.7	614.5	
3	638.9		639.4	639.2	640.5	638.7	629.8
4							652.6
5	666.5		662.5	665.9	663.7	662.6	
6	685.9		687.1	686.5	686.6	686.9	
7							701.3
8	715.4		713.9	714.0	714.2	713.3	
9							
10							747.7
11	756.2		755.7	756.1	757.3	755.9	
12							
13	805.9		806.1	806.2	806.1	806.7	
14							818.8
15		827.4					832.8
16							
17							
18							
19	896.2		897.5	903.0	898.4	903.8	
20							
21	932.4	926.9	932.3	932.7	932.5	932.4	
22							
23		976.3					
24	996.7		996.5	996.3	996.9	996.8	
25							
26							1022.9
27	1033.2		1031.9	1031.0	1032.7	1031.4	
28		1072.2					
29							1092.9
30	1106.5		1105.7	1105.0	1105.8	1104.9	
31							1112.7
32							
33							1131.6
34	1150.9		1150.4	1150.1	1151.2	1151.1	
35							
36		1177.8					
37	1189.9		1186.6	1187.4	1187.1	1187.6	
38							
39							
40							1227.8
41							
42	1257.2	1263.5	1256.6	1256.5	1256.3	1256.1	
43							
44							1291.4
45							
46		1325.9					
47	1354.0		1353.7	1353.3	1353.9	1354.6	1350.6
48							

Table 10: Slide Subtracted ATR FT-IR Data for the Different Ink Cartridges cont.

	Epson 66 Average	Epson 84 Average	Epson 90 Average	Epson 93 Average	Epson 120 Average	Epson 123 Average	Epson 156 Average
49							1388.3
50		1392.8		1401.6		1400.5	
51	1416.0		1415.8	1415.5	1415.6	1415.0	
52							
53		1442.0					1452.5
54							
55	1489.3		1488.2	1488.2	1488.0	1488.1	
56		1503.1					
57	1526.7		1527.0	1526.9	1526.7	1526.7	
58		1538.3					
59							
60							1566.2
61	1593.6		1593.0	1592.7	1593.5	1593.1	
62							1603.4
63							
64	1638.0		1630.4	1630.5	1633.0		
65		1643.5					
66							1661.7
67							
68	1701.0		1697.7	1693.5	1696.4	1696.3	
69							
70							1721.2
71		1735.3					
72							
73							
74	2340.2		2348.4				2348.5
75	2361.6						
76							
77							2868.4
78	2885.2		2887.2	2884.8	2886.4	2885.2	
79							
80		2910.9					
81	2935.4		2935.2	2937.7	2935.9	2938.9	
82		2949.4					
83							
84		3058.0					
85	3076.6						
86							
87							3203.3
88							
89							
90	3323.8		3316.8	3325.8	3322.4	3320.8	
91							
92							
93							
94							

Table 10: Slide Subtracted ATR FT-IR Data for the Different Ink Cartridges cont.

	Hewlett Packard 198 Average	Hewlett Packard 199 Average	Hewlett Packard 200 Average	Hewlett Packard 201 Average	Hewlett Packard 205 Average	Canon 217 Average	Canon 223 Average	Canon 282 Average	Canon 306 Average
1	613.4			612.4					
2		622.2	616.0		611.6			619.6	611.5
3			634.4		637.1				
4	651.8	652.8	650.7	650.6					
5	667.8	668.1	667.4		667.4	666.1		662.8	659.9
6								675.0	
7	696.3	697.3	696.7	695.9				705.4	
8									
9	734.3		729.6	729.6	722.5				
10		739.5							
11									751.8
12					776.5	783.9	783.2	783.0	780.6
13							809.6		
14									
15	833.9	833.2	832.4	833.0	822.1				
16								854.0	848.1
17					861.6				
18									
19									
20						922.5		922.0	
21	930.9						924.8		927.1
22		947.0	948.4	947.8	948.1				
23									
24							996.2		995.1
25					1011.1				
26								1027.3	
27		1028.0			1035.1	1030.3	1034.0		1038.9
28									
29	1093.9			1094.3					
30		1103.7	1098.0		1100.8				
31						1115.9	1113.2	1115.7	1109.2
32									
33					1130.3				
34									1149.4
35									
36									
37						1189.3		1194.0	
38							1199.9		1201.8
39					1216.8				
40									
41	1245.5	1247.9	1246.0	1245.3					
42									
43	1284.5			1285.5		1279.9	1283.0	1280.6	1283.3
44		1287.7	1287.4						
45					1308.2				
46									
47	1346.9	1348.0	1347.7	1346.9	1347.7	1348.5	1349.6	1342.4	1351.1
48									

Table 10: Slide Subtracted ATR FT-IR Data for the Different Ink Cartridges cont.

	Hewlett Packard 198 Average	Hewlett Packard 199 Average	Hewlett Packard 200 Average	Hewlett Packard 201 Average	Hewlett Packard 205 Average	Canon 217 Average	Canon 223 Average	Canon 282 Average	Canon 306 Average
49	1386.7	1385.4	1384.7	1384.7	1380.7				
50									
51					1418.3				
52									
53	1449.6	1451.3	1450.3	1449.1		1453.6	1454.2	1457.5	1454.6
54					1461.3				
55									
56									
57									
58									
59	1553.1		1552.8	1553.4					
60		1560.4							
61					1589.7				
62									
63						1620.2	1621.1	1622.3	1622.4
64	1640.5	1638.8	1636.0	1636.0					
65									
66	1659.1	1660.8			1660.3	1659.9	1660.0	1660.5	1662.0
67									
68									
69									
70	1723.0	1724.4	1722.7	1721.8					
71									
72	1951.9	1952.7	1951.4	1951.5					
73	2337.8		2337.6	2339.5		2336.6	2337.9		
74		2340.1			2348.3			2348.0	
75	2361.4	2360.5	2361.0	2360.5		2360.6	2360.9		2366.0
76									
77	2863.2	2862.8	2863.4	2862.5					
78					2882.3	2882.6	2882.6	2883.1	2884.2
79									
80									
81					2930.7				
82						2944.2	2941.8	2942.5	2941.4
83					2960.8				
84									
85									
86		3186.0	3189.3						
87									
88						3220.6	3220.3	3221.7	3221.1
89									
90									
91									
92					3358.3	3351.5	3349.3	3350.8	3348.4
93	3366.5			3398.9					
94						3439.2		3441.2	

Table 10: Slide Subtracted ATR FT-IR Data for the Different Ink Cartridges cont.

	Canon 312 Average	Canon 318 Average	Canon 318a Average	Canon 327 Average	Canon 348 Average	Canon 384 Average	Canon 402 Average	Canon 492 Average	Canon 522 Average
1	612.0				608.4			609.9	
2			616.6			617.4			
3									
4			649.0						
5						660.6			667.1
6								684.0	
7	704.3								
8									
9								733.2	
10									
11									
12	779.0	782.8		782.5	782.6	783.5	781.1	778.0	784.6
13									
14			817.4			810.8	819.0		
15									832.9
16									
17	859.9							864.2	
18									
19									
20			922.8		922.7		923.2		922.6
21		924.3		924.0		925.4		929.1	
22									
23									
24	999.4	994.2	996.2	994.2	994.6	995.3	993.5		
25									
26	1025.3							1024.9	
27		1037.0	1038.1	1039.6	1033.5	1035.2	1039.7		1029.7
28									
29									
30									
31	1116.0	1110.8	1111.3	1109.3	1111.2	1112.5	1109.7	1111.7	1116.1
32									
33									
34							1154.4		
35		1163.4		1162.9				1149.9	1157.3
36	1178.2								
37							1190.7		1186.2
38	1205.4	1200.4		1210.0	1203.5	1202.1			
39									
40									
41			1241.4						
42								1259.1	
43		1284.6			1283.7	1283.6			1279.7
44				1288.8			1291.6		
45	1311.6								
46			1326.1						
47	1350.0	1349.3		1354.4	1350.2	1350.8			1344.7
48							1363.6	1358.3	

Table 10: Slide Subtracted ATR FT-IR Data for the Different Ink Cartridges cont.

	Canon 312 Average	Canon 318 Average	Canon 318a Average	Canon 327 Average	Canon 348 Average	Canon 384 Average	Canon 402 Average	Canon 492 Average	Canon 522 Average
49									
50			1404.5						
51									
52									
53		1454.7		1454.5	1454.3	1455.0			
54	1461.8						1463.3	1460.3	1465.5
55									
56			1500.2						
57									
58									
59									
60			1561.7						
61	1595.8						1596.9		1595.4
62								1600.0	
63	1624.0	1622.0		1621.0	1621.4	1622.3	1622.6		1621.0
64			1640.3						
65									
66		1660.9		1658.4	1659.5	1660.8			1671.4
67									
68									
69									
70									
71									
72									
73		2339.7		2338.9		2338.5			2337.1
74	2344.5				2347.9			2345.2	
75		2361.6		2361.0		2361.4			
76	2841.7								
77									
78		2881.5	2874.4	2878.8	2884.4	2881.9	2882.1	2878.1	2878.1
79									
80									
81	2928.6		2924.6						
82		2942.2		2943.7	2943.2	2943.2	2943.7	2945.5	2945.5
83									
84									
85									
86									
87									
88		3221.1		3216.6	3220.5	3221.9		3213.3	
89	3232.4		3255.4					3247.3	3258.7
90									
91	3336.8						3339.5		3336.4
92		3350.5		3346.4	3349.3	3349.4			
93									
94							3439.8		3431.1

The fingerprint region in the ATR spectrum was selected as the primary area for the comparison of the ink samples. For the main part, peaks were selected between approximately 900 cm^{-1} to 1900 cm^{-1} for each ink cartridge. These peaks were used for the first part of the comparison. If differences were not noted in this region, then the entire ATR spectrum was compared. Some of the neat ink standards, Canon in particular, had some characteristic peaks, and more importantly peak patterns, present throughout their ATR spectra that could aid in their identification. When this information was collected, some useful trends were observed within various ink manufacturers and between the ink manufacturers. As stated previously, the glass microscope slide subtracted neat ink samples ATR spectral data was used for the comparison between the thirty-five ink cartridges. The differences noted between the glass microscope slide subtracted neat ink samples ATR spectra and the neat ink samples ATR spectra for the majority of the neat ink samples were minimal. Therefore, in the following discussion the terms glass microscope slide subtracted neat ink sample ATR spectrum/spectra and neat ink sample ATR spectrum/spectra were used interchangeably. This was done to simplify the discussion on the comparisons between the thirty-five ink standards.

Dividing the ink samples into extractable ink samples and non-extractable ink samples, some useful information was obtained that could aid in their identification. For the twenty-three extractable neat ink samples ATR spectra some consistencies were observed across and within the manufacturers. Twenty-one of the twenty-three extractable neat ink samples ATR spectra contained a peak at approximately 1032 cm^{-1} ± 5 cm^{-1}. Of the remaining two extractable neat ink standards, the Canon 282 neat ink sample ATR spectrum contained a peak at approximately 1027 cm^{-1}, and the Epson 156

neat ink sample ATR spectrum did not have a peak in this area. All ten of the Canon neat ink samples ATR spectra and the Epson 156 neat ink sample ATR spectrum contained a peak at approximately 1113 cm^{-1} ± 5 cm^{-1}, while nine of the ten Epson neat ink samples ATR spectra, Epson 156 neat ink sample ATR spectrum being the exception, and the Hewlett Packard 205 and Kodak 22 neat ink samples ATR spectra contained a peak at approximately 1102 cm^{-1} ± 5 cm^{-1}.

Six of the ten Canon neat ink samples ATR spectra and the Epson 30 neat ink sample ATR spectrum contained a peak at approximately 1205 cm^{-1} ± 5 cm^{-1}. The remaining four Canon neat ink samples ATR spectra, eight of the ten Epson neat ink samples ATR spectra and the Kodak 22 neat ink sample ATR spectrum contained a peak at approximately 1190 cm^{-1} ± 5 cm^{-1}. Eight of the ten Canon neat ink samples ATR spectra, the Okidata 04 neat ink sample ATR spectrum and the Kodak 22 neat ink sample ATR spectrum contained a peak at approximately 1281 cm^{-1} ± 5 cm^{-1}. Twenty-two of the twenty-three extractable neat ink samples ATR spectra contained a peak at approximately 1347 cm^{-1} ± 8 cm^{-1}, the exception was the Canon 402 neat ink sample ATR spectrum which contained a peak at approximately 1363 cm^{-1}. Eight of the ten Canon neat ink samples ATR spectra, the Kodak 22 neat ink sample ATR spectrum and the Epson 156 neat ink sample ATR spectrum contained a peak at approximately 1450 cm^{-1} ± 5 cm^{-1}, while nine of the ten Epson neat ink samples ATR spectra and the Okidata 04 neat ink sample ATR spectrum contained a peak at approximately 1485 cm^{-1} ± 5 cm^{-1}.

Thirteen of the twenty-three extractable neat ink samples ATR spectra had a single peak in the region between 3150 cm^{-1} and 3500 cm^{-1}. The exceptions were the Canon neat ink standards, which had three peaks in this region. The Canon 217, Canon

223, Canon 282, Canon 306, Canon 318, Canon 327, Canon 348 and Canon 384 neat ink samples ATR spectra had three peaks at approximately 3218 cm^{-1} ± 5 cm^{-1}, 3352 cm^{-1} ± 5 cm^{-1} and 3439 cm^{-1} ± 5 cm^{-1}, though the latter peak was not always present above the threshold. The Canon 402 and Canon 522 neat ink samples ATR spectra also contained three peaks in the region between 3150 cm^{-1} and 3500 cm^{-1}. However, the peak pattern and peak maxima for these two Canon ink standards were different from the peak pattern observed with the other Canon ink standards. The Canon 402 and Canon 522 neat ink samples ATR spectra had three peaks at approximately 3253 cm^{-1} ± 5 cm^{-1}, 3338 cm^{-1} ± 5 cm^{-1} and 3439 cm^{-1} ± 5 cm^{-1}, though the first peak was not always present above the threshold. The three peaks in the Canon 402 and Canon 522 neat ink samples ATR spectra were more pronounced than the three peaks in the other Canon extractable neat ink samples ATR spectra. Refer to Figures 39 through 43 for the ATR spectra of the extractable neat ink samples.

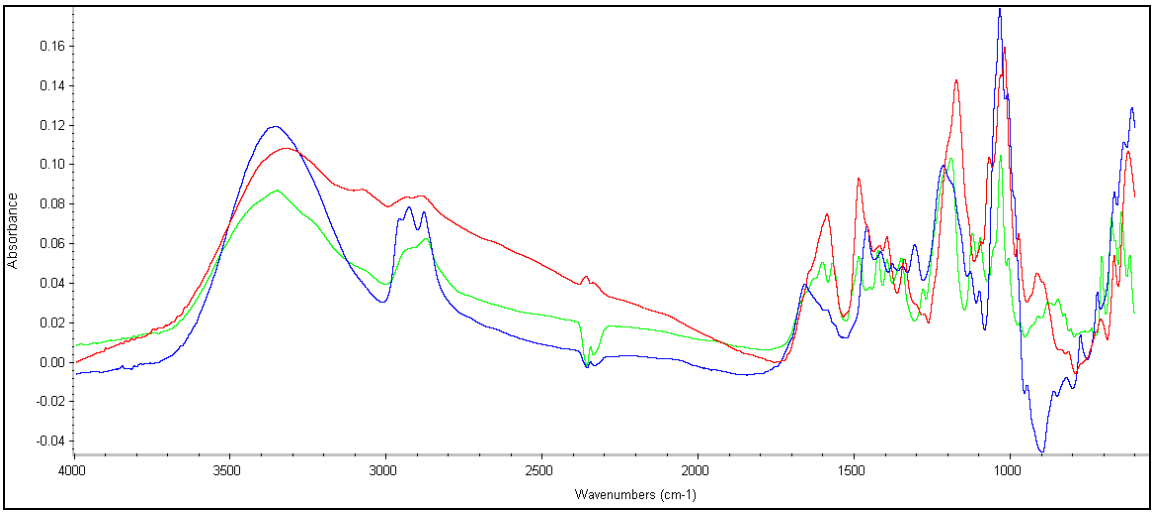

Figure 39: Glass microscope slide subtracted ATR spectra of Hewlett Packard 205 neat ink sample (blue), Okidata 04 neat ink sample (red) and Kodak 22 neat ink sample (green).

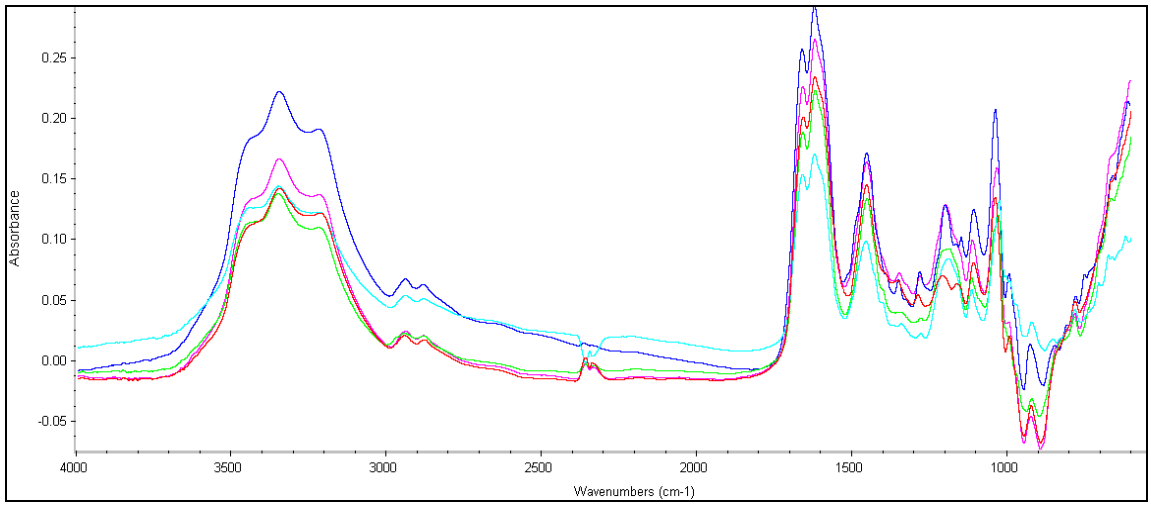

Figure 40: Glass microscope slide subtracted ATR spectra of Canon 306 neat ink sample (blue), Canon 223 neat ink sample (purple), Canon 282 neat ink sample (light blue), Canon 327 neat ink sample (red) and Canon 217 neat ink sample (green).

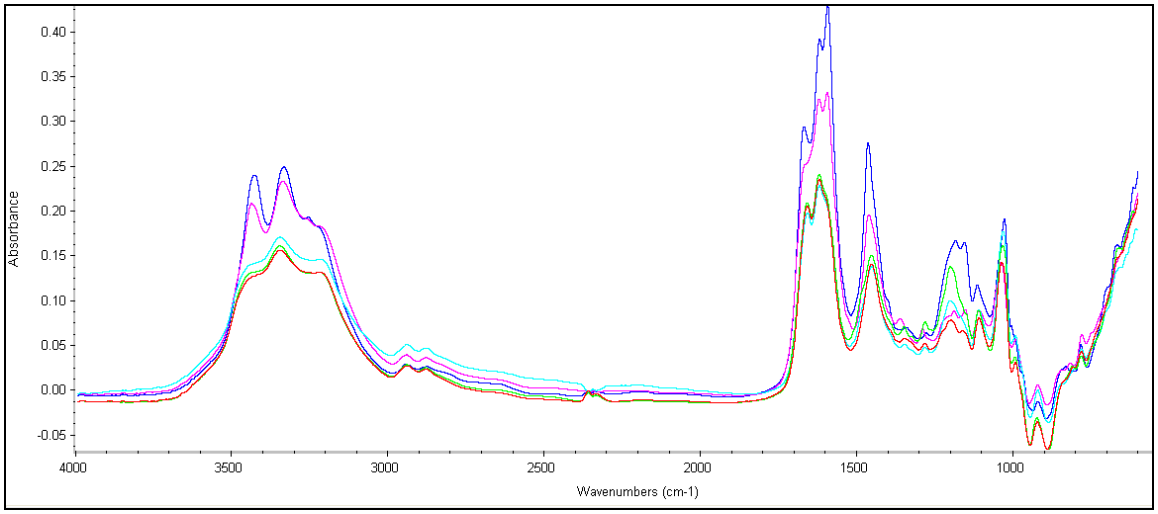

Figure 41: Glass microscope slide subtracted ATR spectra of Canon 522 neat ink sample (blue), Canon 402 neat ink sample (purple), Canon 348 neat ink sample (light blue), Canon 384 neat ink sample (green) and Canon 318 neat ink sample (red).

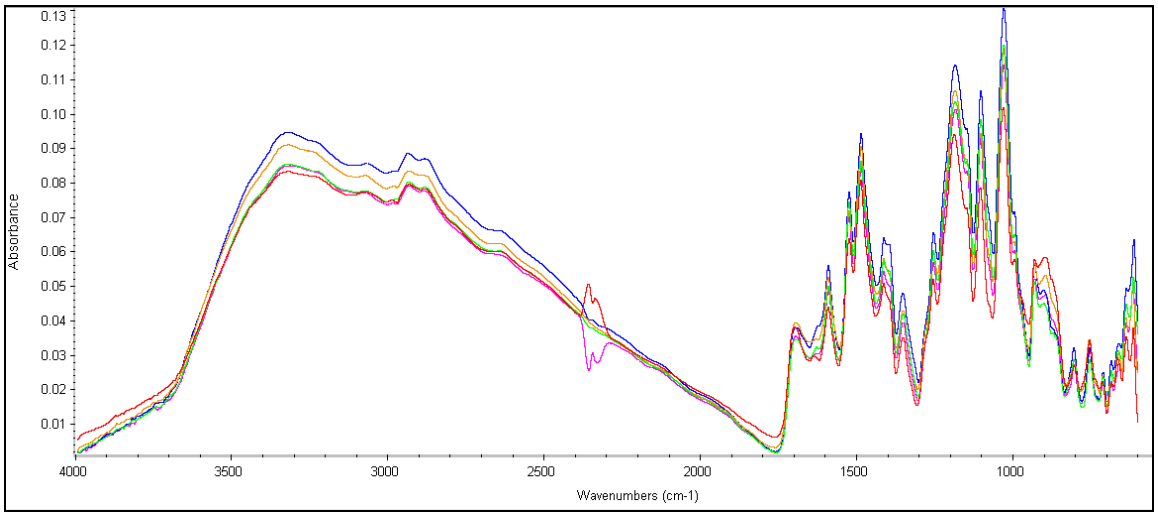

Figure 42: Glass microscope slide subtracted ATR spectra of the Epson 123 neat ink sample (blue), the Epson 120 neat ink sample (orange), the Epson 93 neat ink sample (green), the Epson 90 neat ink sample (purple) and the Epson 66 neat ink sample (red).

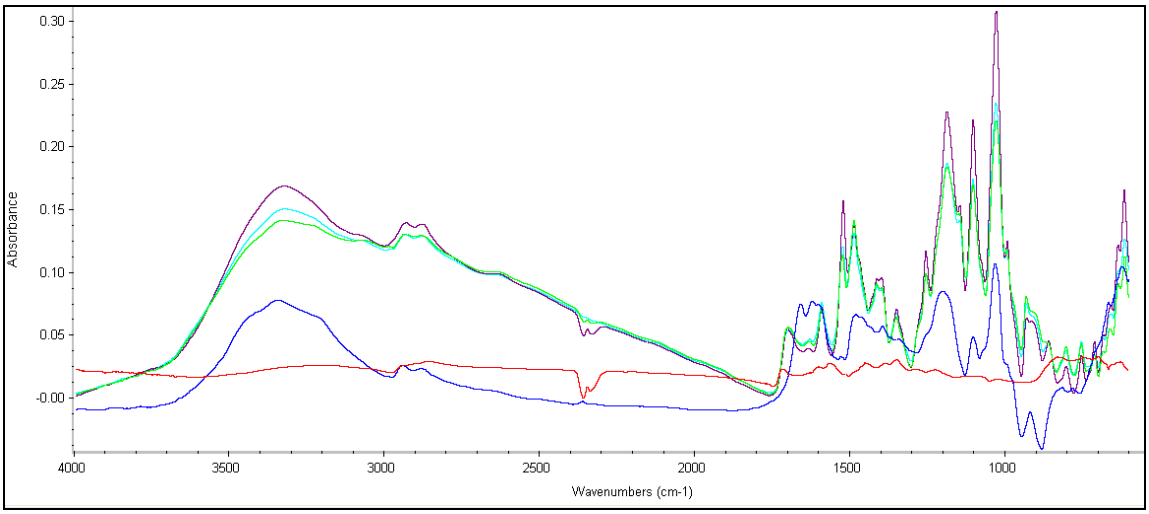

Figure 43: Glass microscope slide subtracted ATR spectra of the Epson 33 neat ink sample (purple), the Epson 63 neat ink sample (light blue), the Epson 60 neat ink sample (green), the Epson 30 neat ink sample (blue) and the Epson 156 neat ink sample (red).

Though there were these consistencies between and within the various ink manufactures, when the entire range of 900 cm^{-1} to 1900 cm^{-1} was examined, each manufacturer had its own distinctive ATR spectrum. In addition, some of the extractable ink samples within a specific manufacturer exhibited differences in their neat ink samples

ATR spectra, which allowed them to be distinguished from the other ink samples of the same manufacturer. For example, the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 neat ink samples ATR spectra were similar in overall peak pattern and peak maxima. Fourteen peak similarities and only two peak differences were noted between the neat ink samples ATR spectra of the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink standards. The first difference that was observed between these ink standards was that a peak at approximately 899 cm^{-1} was observed in the Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 neat ink samples ATR spectra that was not found in the Epson 33, Epson 60 and Epson 63 neat ink samples ATR spectra. Secondly, a peak at approximately 1400 cm^{-1} was found in the Epson 33, Epson 60, Epson 63, Epson 93 and Epson 123 neat ink samples ATR spectra that was not found in the Epson 66, Epson 90 and Epson 120 neat ink samples ATR spectra. The Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 neat ink samples ATR spectra were also different from the other extractable Epson neat ink samples ATR spectra. The Epson 30 neat ink sample ATR spectrum had only six peaks in common and the Epson 156 neat ink sample ATR spectrum had only a single peak in common with the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 neat ink samples ATR spectra. Additionally, though the Epson 30 neat ink sample ATR spectrum and the Epson 156 neat ink sample ATR spectrum had three peaks in common with one another, the overall neat ink samples ATR spectra were distinct for the Epson 30 and Epson 156 neat ink samples.

There were eight peaks present in the Canon ink samples that were common to the majority of the Canon neat ink samples ATR spectra. Nine of the ten Canon neat ink samples ATR spectra contained these eight peaks located at approximately 929 cm^{-1}, 1035 cm^{-1}, 1113 cm^{-1}, 1281 cm^{-1}, 1347 cm^{-1}, 1450 cm^{-1}, 1622 cm^{-1} and 1665 cm^{-1}. The exception was the Canon 402 neat ink spectrum that had a change in peak maximum for the 1347 cm^{-1} peak to approximately 1364 cm^{-1}, and lacked the peak at approximately 1665 cm^{-1}. In addition, the Canon 223, Canon 306, Canon 318, Canon 327, Canon 348, Canon 384 and Canon 402 neat ink samples ATR spectra contained a peak at approximately 995 cm^{-1} that was not found in the Canon 217, Canon 282 and Canon 522 neat ink samples ATR spectra. The Canon 223, Canon 306, Canon 318, Canon 327, Canon 348 and Canon 384 neat ink samples ATR spectra contained a peak at approximately 1202 cm^{-1}, whereas the Canon 217, Canon 282, Canon 402 and Canon 522 neat ink samples ATR spectra contained a peak at approximately 1190 cm^{-1}. Finally, the Canon 306, Canon 402 and Canon 522 neat ink samples ATR spectra contained a peak at approximately 1151 cm^{-1} that was not found in the other Canon neat ink samples ATR spectra, the Canon 318 and Canon 327 neat ink samples ATR spectra contained a peak at approximately 1160 cm^{-1} that was not found in the other Canon neat ink samples ATR spectra and the Canon 402 and Canon 522 neat ink samples ATR spectra contained a peak at approximately 1592 cm^{-1} that was not found in the other Canon neat ink samples ATR spectra.

Refer to Table 11 for the identified peaks present within the ATR FT-IR spectral data of the extractable neat ink samples within the range of 900 cm^{-1} to 1900 cm^{-1}.

Table 11: The ATR FT-IR Data for the Neat Extractable Ink Samples for the Region between 900 cm^{-1} and 1900 cm^{-1}.

	Okidata 04 ALL Average	Kodak 22 Average	Epson 30 Average	Epson 33 ALL Average	Epson 60 Average	Epson 63 ALL Average	Epson 66 Average	Epson 90 Average
1							896.2	897.5
2	915.6	911.8	920.9					
3				931.9	932.8	932.3	932.4	932.3
4								
5	975.3	970.7						
6				994.7	995.8	995.4	996.7	996.5
7		1008.1						
8	1019.7							
9	1032.9	1033.0	1033.7	1030.6	1030.6	1031.2	1033.2	1031.9
10	1069.6							
11								
12		1098.7	1105.1	1104.7	1105.1	1105.2	1106.5	1105.7
13								
14		1122.9						
15								
16				1147.3	1150.1	1149.0	1150.9	1150.4
17								
18	1175.2							
19		1191.5		1189.2	1188.3	1188.9	1189.9	1186.6
20			1204.7					
21								
22								
23				1256.8	1256.4	1256.6	1257.2	1256.6
24	1277.5	1281.9						
25								
26								
27	1341.0	1350.9	1343.4	1351.5	1352.3	1351.9	1354.0	1353.7
28								
29								
30	1397.5	1396.8	1396.7	1400.6	1400.1	1400.8		
31				1414.5	1415.5	1414.9	1416.0	1415.8
32	1420.6	1426.2						
33		1453.7						
34								
35	1487.6		1481.6	1488.7	1488.6	1488.6	1489.3	1488.2
36			1530.3	1523.6	1526.3	1525.3	1526.7	1527.0
37		1572.3						
38	1589.8			1592.3	1592.6	1592.7	1593.6	1593.0
39		1604.1	1603.9					
40			1622.3					
41				1635.8	1633.0	1631.6	1638.0	1630.4
42			1660.1					
43				1703.5	1701.0	1695.0	1701.0	1697.7
44								

Table 11: The ATR FT-IR Data for the Neat Extractable Ink Samples for the Region between 900 cm^{-1} and 1900 cm^{-1} cont.

	Epson 93 Average	Epson 120 Average	Epson 123 Average	Epson 156 Average	Hewlett Packard 205 Average	Canon 217 Average	Canon 223 Average	Canon 282 Average
1	903.0	898.4	903.8					
2						922.5		922.0
3	932.7	932.5	932.4				924.8	
4					948.1			
5								
6	996.3	996.9	996.8				996.2	
7					1011.1			
8				1022.9				1027.3
9	1031.0	1032.7	1031.4		1035.1	1030.3	1034.0	
10								
11				1092.9				
12	1105.0	1105.8	1104.9		1100.8			
13				1112.7		1115.9	1113.2	1115.7
14								
15				1131.6	1130.3			
16	1150.1	1151.2	1151.1					
17								
18								
19	1187.4	1187.1	1187.6			1189.3		1194.0
20							1199.9	
21					1216.8			
22				1227.8				
23	1256.5	1256.3	1256.1					
24						1279.9	1283.0	1280.6
25				1291.4				
26					1308.2			
27	1353.3	1353.9	1354.6	1350.6	1347.7	1348.5	1349.6	1342.4
28								
29				1388.3	1380.7			
30	1401.6		1400.5					
31	1415.5	1415.6	1415.0		1418.3			
32								
33				1452.5		1453.6	1454.2	1457.5
34					1461.3			
35	1488.2	1488.0	1488.1					
36	1526.9	1526.7	1526.7					
37				1566.2				
38	1592.7	1593.5	1593.1		1589.7			
39				1603.4				
40						1620.2	1621.1	1622.3
41	1630.5	1633.0						
42				1661.7	1660.3	1659.9	1660.0	1660.5
43	1693.5	1696.4	1696.3					
44				1721.2				

Table 11: The ATR FT-IR Data for the Neat Extractable Ink Samples for the Region between 900 cm^{-1} and 1900 cm^{-1} cont.

	Canon 306 Average	Canon 318 Average	Canon 327 Average	Canon 348 Average	Canon 384 Average	Canon 402 Average	Canon 522 Average
1							
2				922.7		923.2	922.6
3	927.1	924.3	924.0		925.4		
4							
5							
6	995.1	994.2	994.2	994.6	995.3	993.5	
7							
8							
9	1038.9	1037.0	1039.6	1033.5	1035.2	1039.7	1029.7
10							
11							
12							
13	1109.2	1110.8	1109.3	1111.2	1112.5	1109.7	1116.1
14							
15							
16	1149.4					1154.4	
17		1163.4	1162.9				1157.3
18							
19						1190.7	1186.2
20	1201.8	1200.4	1210.0	1203.5	1202.1		
21							
22							
23							
24	1283.3	1284.6		1283.7	1283.6		1279.7
25			1288.8			1291.6	
26							
27	1351.1	1349.3	1354.4	1350.2	1350.8		1344.7
28						1363.6	
29							
30							
31							
32							
33	1454.6	1454.7	1454.5	1454.3	1455.0		
34						1463.3	1465.5
35							
36							
37							
38						1596.9	1595.4
39							
40	1622.4	1622.0	1621.0	1621.4	1622.3	1622.6	1621.0
41							
42	1662.0	1660.9	1658.4	1659.5	1660.8		1671.4
43							
44							

The non-extractable neat ink samples ATR spectra, including the Canon 318a neat ink sample ATR spectrum, were also examined to determine if useful information could be obtained that could aid in their identification. For the twelve non-extractable neat ink samples ATR spectra some consistencies were observed across and within the manufacturers. All three of the Xerox neat ink samples ATR spectra contained a peak at approximately 1012 $cm^{-1} \pm 5\ cm^{-1}$, while two of the Xerox neat ink samples ATR spectra, two of the Hewlett Packard neat ink samples ATR spectra and the Kodak 17 neat ink sample ATR spectrum contained a peak at approximately 1089 $cm^{-1} \pm 5\ cm^{-1}$. All three of the Canon neat ink samples ATR spectra contained a peak at approximately 1113 $cm^{-1} \pm 5\ cm^{-1}$. All four of the Hewlett Packard neat ink samples ATR spectra, the Kodak 17 neat ink sample ATR spectrum and the Canon 318a neat ink sample ATR spectrum contained a peak at approximately 1243 $cm^{-1} \pm 5\ cm^{-1}$, whereas all three of the Xerox neat ink samples ATR spectra, the Epson 84 neat ink sample ATR spectrum and the Canon 492 neat ink sample ATR spectrum contained a peak at approximately 1258 $cm^{-1} \pm 5\ cm^{-1}$.

Two of the Hewlett Packard neat ink samples ATR spectra and the Kodak 17 neat ink sample ATR spectrum contained a peak at approximately 1281 $cm^{-1} \pm 5\ cm^{-1}$, while the other two Hewlett Packard neat ink samples ATR spectra and two of the Xerox neat ink samples ATR spectra contained a peak at approximately 1291 $cm^{-1} \pm 5\ cm^{-1}$. All four of the Hewlett Packard neat ink samples ATR spectra, the Xerox 244 neat ink sample ATR spectrum, the Kodak 17 neat ink sample ATR spectrum and the Canon 312 neat ink sample ATR spectrum contained a peak at approximately 1347 $cm^{-1} \pm 5\ cm^{-1}$. All four of the Hewlett Packard neat ink samples ATR spectra contained a peak at approximately

1385 cm^{-1} ± 5 cm^{-1}. Nine of the twelve neat ink samples ATR spectra, with the Canon 312, Canon 492 and Canon 318a neat ink samples ATR spectra being the exceptions, contained a peak at approximately 1450 cm^{-1} ± 5 cm^{-1}, while all three of the Xerox neat ink samples ATR spectra and all four of the Hewlett Packard neat ink samples ATR spectra contained a peak at approximately 1551 cm^{-1} ± 5 cm^{-1}. All four of the Hewlett Packard neat ink samples ATR spectra and the Canon 318a neat ink sample ATR spectrum contained a peak at approximately 1635 cm^{-1} ± 5 cm^{-1}, while all four Hewlett Packard neat ink samples ATR spectra and the Xerox 244 neat ink sample ATR spectrum contained a peak at approximately 1723 cm^{-1} ± 5 cm^{-1}. Finally, all four of the Hewlett Packard neat ink samples ATR spectra and the Kodak 17 neat ink sample ATR spectrum contained a peak at approximately 1951 cm^{-1} ± 5 cm^{-1}. Unlike the extractable ink standards, the majority of the non-extractable neat ink standard ATR spectra did not contain either a definitive single peak or three peaks in the region between approximately 3000 cm^{-1} and 3500 cm^{-1}. The exceptions were the Canon 312, Canon 492 and Canon 318a non-extractable neat ink samples ATR spectra and the Kodak 17 neat ink sample ATR spectrum. For these four ink standards, a single peak was found in the region between approximately 3000 cm^{-1} and 3500 cm^{-1}. None of the non-extractable ink samples had three peaks in this region. Refer to Figures 44 through 46 for the ATR spectral of the non-extractable neat ink samples.

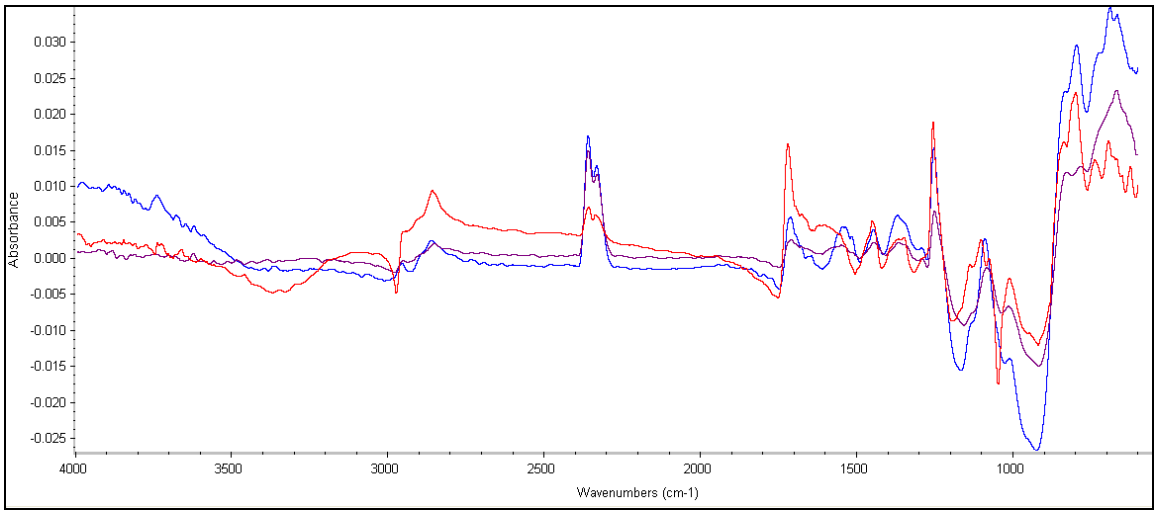

Figure 44: Glass microscope slide subtracted ATR spectra of the Xerox 13 neat ink sample (blue), the Xerox 244 neat ink sample (red) and the Xerox 24 neat ink sample (purple).

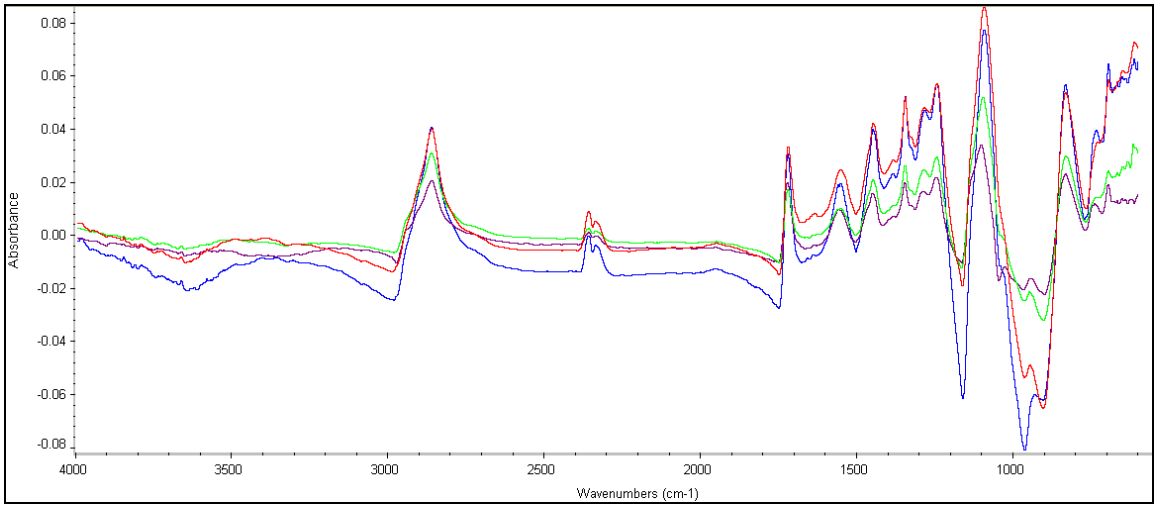

Figure 45: Glass microscope slide subtracted ATR spectra of the Hewlett Packard 198 neat ink sample (blue), the Hewlett Packard 201 neat ink sample (red), the Hewlett Packard 199 neat ink sample (purple) and the Hewlett Packard 200 neat ink sample (green).

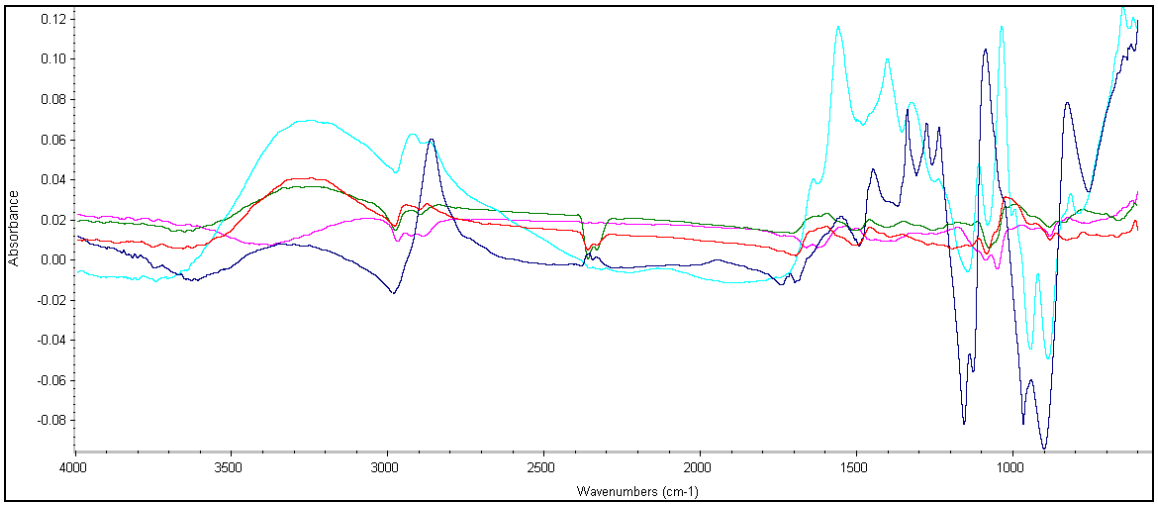

Figure 46: Glass microscope slide subtracted ATR spectra of the Canon 318a neat ink sample (light blue), the Kodak 17 neat ink sample (blue), the Canon 492 neat ink sample (red), the Canon 312 neat ink sample (green) and the Epson 84 neat ink sample (purple).

Though there were these consistencies between and within the various ink manufactures, when the entire range of 900 cm^{-1} to 1900 cm^{-1} was examined, each manufacturer had its own distinctive spectrum. In addition, some of the non-extractable ink samples within a manufacturer exhibited differences in their neat ink samples ATR spectra, which allowed them to be distinguished from other ink samples of the same manufacturer. For example, the Xerox 13 neat ink sample ATR spectrum and the Xerox 24 neat ink sample ATR spectrum were similar in peak pattern and peak maxima. A single peak difference was noted between these two neat ink samples ATR spectra. The Xerox 13 neat ink sample ATR spectrum contained a peak at approximately 1648 cm^{-1} that was not found in the Xerox 24 neat ink sample ATR spectrum. Meanwhile, significant differences were noted between the Xerox 244 neat ink sample ATR spectrum and the Xerox 13 and Xerox 24 neat ink samples ATR spectra. The Xerox 244 neat ink sample ATR spectrum contained four peaks at approximately 1104 cm^{-1}, 1140 cm^{-1}, 1607 cm^{-1} and 1679 cm^{-1} that were not found in either the Xerox 13 or the Xerox 24 neat ink

samples ATR spectra. In addition, there was a change in the peak maxima for the peaks located at approximately 1091 cm^{-1}, 1371 cm^{-1} and 1714 cm^{-1} in the Xerox 13 and Xerox 24 neat ink samples ATR spectra and 1648 cm^{-1} in the Xerox 13 neat ink sample ATR spectrum. These peaks were located in the Xerox 244 neat ink sample ATR spectrum at approximately 1079 cm^{-1}, 1350 cm^{-1}, 1723 cm^{-1} and 1621 cm^{-1} respectively.

The four Hewlett Packard neat ink samples ATR spectra were similar to one another; however there were some differences present within these ATR spectra that should be noted. There were a few differences in peak maxima positions between the four Hewlett Packard neat ink samples ATR spectra. In particular, the peak at approximately 1094 cm^{-1} in the Hewlett Packard 198 and Hewlett Packard 201 neat ink samples ATR spectra was located at approximately 1102 cm^{-1} in the Hewlett Packard 199 and Hewlett Packard 200 neat ink samples ATR spectra. Additionally, the peak at approximately 947 cm^{-1} in the Hewlett Packard 199, Hewlett Packard 200 and Hewlett Packard 201 neat ink samples ATR spectra was located at approximately 931 cm^{-1} in the Hewlett Packard 198 neat ink sample ATR spectrum. There was also a peak located at approximately 1660 cm^{-1} in the Hewlett Packard 198 and Hewlett Packard 199 neat ink samples ATR spectra that was not found in the Hewlett Packard 200 and Hewlett Packard 201 neat ink samples ATR spectra, and a peak at approximately 1028 cm^{-1} in the Hewlett Packard 199 neat ink sample ATR spectrum that was not found in the other three non-extractable Hewlett Packard neat ink samples ATR spectra.

The Canon 318a neat ink sample ATR spectrum differed from the Canon 312 and Canon 492 neat ink samples ATR spectra. This was not surprising, as the Canon 318a ink sample was not a black ink sample but rather was the slightly yellow liquid from the

BC-60 ink cartridge. Thus, it was not expected that the slightly yellow liquid would have a similar ATR spectrum as a black ink sample. The Canon 312 and Canon 492 neat ink samples ATR spectra had a few peaks in common, however there were a number of peaks that were present in one of the neat ink sample ATR spectrum that was not found in the other neat ink sample ATR spectrum. The Canon 312 neat ink sample ATR spectrum contained five peaks at approximately 999 cm^{-1}, 1178 cm^{-1}, 1205 cm^{-1}, 1311 cm^{-1} and 1624 cm^{-1} that were not found in the Canon 492 neat ink sample ATR spectrum, whereas the Canon 492 neat ink sample ATR spectrum contained three peaks at approximately 929 cm^{-1}, 1150 cm^{-1} and 1259 cm^{-1} that were not found in the Canon 312 neat ink sample ATR spectrum.

Refer to Table 12 for the identified peaks present within the ATR FT-IR data of the non-extractable neat ink samples within the range of 900 cm^{-1} to 1960 cm^{-1}.

Table 12: ATR FT-IR Data for the Non-Extractable Neat Ink Samples for the Region between 900 cm^{-1} and 1960 cm^{-1}.

	Kodak 17 Average	Epson 84 Average	Hewlett Packard 198 Average	Hewlett Packard 199 Average	Hewlett Packard 200 Average	Hewlett Packard 201 Average
1						
2		926.9	930.9			
3	944.0			947.0	948.4	947.8
4		976.3				
5						
6						
7						
8				1028.0		
9		1072.2				
10	1089.4		1093.9			1094.3
11				1103.7	1098.0	
12						
13	1141.2					
14						
15		1177.8				
16						
17	1238.8		1245.5	1247.9	1246.0	1245.3
18		1263.5				
19	1278.3		1284.5			1285.5
20				1287.7	1287.4	
21						
22		1325.9				
23	1340.1		1346.9	1348.0	1347.7	1346.9
24						
25			1386.7	1385.4	1384.7	1384.7
26		1392.8				
27	1449.8	1442.0	1449.6	1451.3	1450.3	1449.1
28						
29		1503.1				
30		1538.3				
31	1552.5		1553.1		1552.8	1553.4
32				1560.4		
33						
34						
35						
36			1640.5	1638.8	1636.0	1636.0
37		1643.5				
38			1659.1	1660.8		
39						
40	1714.2					
41			1723.0	1724.4	1722.7	1721.8
42		1735.3				
43	1949.9		1951.9	1952.7	1951.4	1951.5

Table 12: ATR FT-IR Data for the Non-Extractable Neat Ink Samples for the Region between 900 cm^{-1} and 1960 cm^{-1}.

	Xerox 13 Average	Xerox 24 Average	Xerox 244 Average	Canon 312 Average	Canon 492 Average	Canon 318a Average
1						922.8
2					929.1	
3						
4						
5				999.4		996.2
6	1012.5	1015.4	1012.3			
7				1025.3	1024.9	
8						1038.1
9			1078.7			
10	1091.7	1085.6				
11			1103.9			
12				1116.0	1111.7	1111.3
13			1140.5			
14					1149.9	
15				1178.2		
16				1205.4		
17						1241.4
18	1255.1	1253.0	1258.1		1259.1	
19						
20	1294.7	1293.1				
21				1311.6		
22						1326.1
23			1350.4	1350.0		
24	1371.0	1368.5			1358.3	
25						
26						1404.5
27	1449.4	1447.1	1452.5			
28				1461.8	1460.3	
29						1500.2
30						
31	1548.9	1551.5	1555.3			
32						1561.7
33				1595.8		
34			1606.8		1600.0	
35			1621.3	1624.0		
36						1640.3
37	1648.0					
38						
39			1679.5			
40	1714.0	1712.5				
41			1722.8			
42						
43						

The paper used in this study consisted of plain white recycled Staples brand printing paper. The paper was placed into three groups based on the date of ink preparation and paper packaging. The initial paper used was identified as "Blank Paper 1" and was the first sheet of paper from the first pack of 500 sheets. "Blank Paper 2" was the 305th sheet of paper from the same package as "Blank Paper 1". "Blank Paper 3" was the first sheet of the second pack of paper needed to complete the ink on paper preparations.

Twenty-one spectra of the Blank Paper 1 sample, ten spectra of the Blank Paper 2 sample and eight spectra of the Blank Paper 3 sample were collected on the ATR FT-IR and the average was obtained for the three blank paper sources, which was used for the ink on paper analysis. The three blank paper samples ATR spectra and their averaged ATR spectra were similar in peak shape and pattern. With the exception of the peaks located at approximately 1418 cm^{-1} and 2910 cm^{-1}, all the peaks within the three blank paper ATR spectra appeared at peak locations with a peak maxima difference of less than 1 cm^{-1}, and generally in the 0.5 cm^{-1} range. As mentioned above, the peak located at approximately 1418 cm^{-1} was one exception to this phenomenon. The Blank Paper 1 sample had a peak at approximately 1421 cm^{-1}, the Blank Paper 2 sample had a peak at approximately 1417 cm^{-1} and the Blank Paper 3 sample had a peak at approximately 1418 cm^{-1}. This was a range of upwards of 4 cm^{-1} depending on the sample. The other peak that showed a greater range of variability was the peak at approximately 2910 cm^{-1}, where the range was as high as 12 cm^{-1}. The Blank Paper 1 sample had a peak at approximately 2911 cm^{-1}, the Blank Paper 2 sample had a peak at approximately 2914 cm^{-1} and the Blank Paper 3 sample had a peak at approximately 2902 cm^{-1}. In addition,

the Blank Paper 1 sample had an extra peak located at approximately 2362 cm^{-1} that was not observed in the other two paper samples. Refer to Figure 47 for the ATR spectra of the Blank Paper samples.

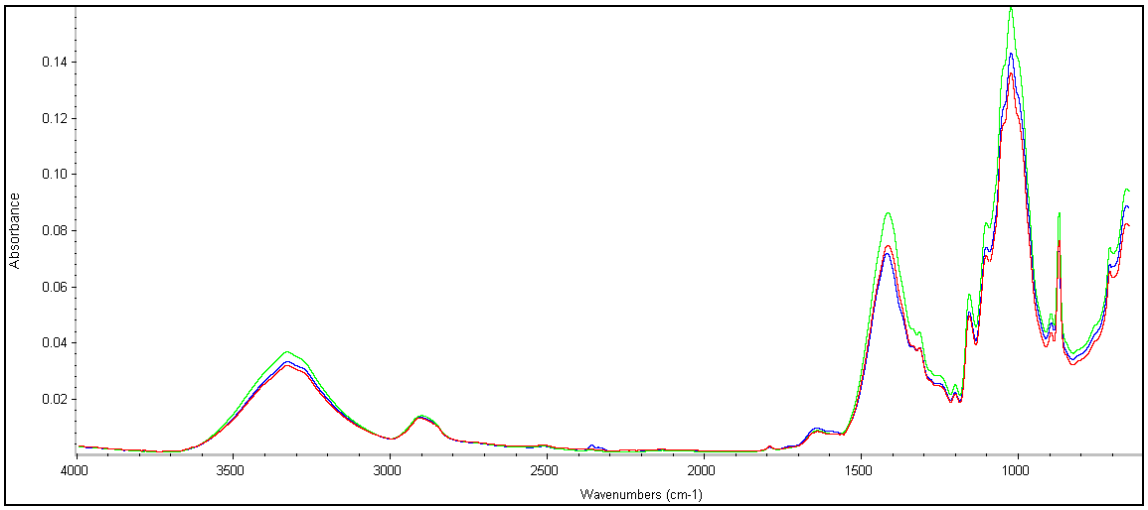

Figure 47: ATR spectra of the Blank Paper 3 sample (green), the Blank Paper 1 sample (blue) and the Blank Paper 2 sample (red).

Refer to Table 13 for the identified peaks present within the ATR FT-IR data of the blank paper samples within the range of 4000 cm^{-1} to 600 cm^{-1}.

Table 13: ATR FT-IR Data for the Blank Paper Samples

Peak	Sample		
	Paper 1 Average	Paper 2 Average	Paper 3 Average
1	656.23	656.84	656.46
2	709.83	709.97	710.03
3	872.30	871.96	872.06
4	896.52	896.88	897.34
5	1025.00	1025.37	1025.57
6	1103.88	1104.50	1104.09
7	1158.18	1158.23	1158.34
8	1203.22	1202.93	1202.88
9	1316.63	1317.25	1317.19
10	1420.70	1416.77	1418.29
11	1641.70	1641.11	1641.70
12	1794.81	1795.48	1794.52
13	2361.56		
14	2910.72	2914.31	2902.20
15	3332.00	3331.17	3333.26

A comparison of the different ink on paper sample replicates of the thirty-five different ink cartridges, and any multiple copies of those ink cartridges, was performed to determine the reproducibility of the results and the consistency of the ink formulations between ink cartridges. This step was done before comparing the ink cartridges to determine if manufacturer specific differences existed. If the sample replicates were not reproducible then a determination of any differences between the manufacturers could not be accomplished. It should be noted that the ink on paper samples were analyzed on multiple days over the course of a year. In order to reduce peaks in the ATR spectrum that were due to the environmental conditions, the ATR system was purged with nitrogen. The purging system was not installed until the beginning of July 2008, thus all of the ink on paper sample replicates before this time were performed in a non-purged system. Even with the purged system, the July ink on paper sample replicates showed more environmental contamination, especially peaks due to water vapor, than the ink on paper sample replicates performed in November and December. However compared to the ink on paper samples replicates collected in June under the same environmental conditions but without the purging system, the noise observed in the July ink on paper sample replicates was significantly reduced. The comparison of the reproducibility of the results and the consistency between multiple copies of ink cartridges focused on the ink on paper sample replicates performed in a purged system. Refer to Appendix F for the ATR data of all ink on paper sample replicates done for this research study.

As discussed above, the July ink on paper sample replicates contained more noise than the sample replicates obtained in November and December. One result of this

increased noise was that the resulting ink on paper ATR spectra were not as smooth as the ink on paper ATR spectra obtained in November and December, however the overall peak pattern remained constant between the different days. The other result of the increased noise in the July ink on paper sample replicates was the fact that some of the peaks in the ATR spectrum had slight peak shape changes and slight changes in peak maxima positions. Since the ATR spectra were not as smooth as the other ink on paper sample replicates, the maxima of the peaks were not as readily visible to the software, resulting in slightly different values.

Twelve different types of Canon ink cartridges were used in this study. For three ink cartridges, Canon BCI-10, Canon BCI-11 and Canon BCI-12 respectively, eighteen copies of the ink cartridge were provided for inclusion into the study. For the remaining nine ink cartridge types six copies of each ink cartridge was provided for inclusion into the study. For the Canon BCI-6Bk ink cartridge (ink samples 217 through 222), Canon BCI-10 ink cartridge (ink samples 223 through 228 and 272 through 283), Canon BC-02 ink cartridge (ink samples 282 through 287), Canon BC-20 ink cartridge (ink samples 306 through 311), Canon BC-23 ink cartridge (ink samples 312 through 317), Canon BC-60 ink cartridge (ink samples 318 through 323 and 318a through 323a), Canon BC-22e ink cartridge (ink samples 327, 331, 335, 339, 343 and 347), Canon BCI-21 ink cartridge (ink samples 348 through 353), Canon BCI-11 ink cartridge (ink samples 384 through 401), Canon BCI-12 ink cartridge (ink samples 402 through 419), Canon BCI-3eBk ink cartridge (ink samples 492 through 497) and Canon BCI-3ePBk ink cartridge (ink samples 522 through 527) the ink on paper sample replicates from a specific ink cartridge, as well as the ink on paper sample replicates from the multiple copies of the ink

cartridge, were consistent with one another. The only variation in the ink on paper ATR spectra tended to occur with the July ink on paper sample replicates ATR spectra, and the differences observed were able to be attributed to the increased noise present in these samples. Overall, the peak patterns for the different ink cartridge types were similar between sample replicates and sample days. The ink on paper ATR spectra of the respective ink cartridge were reproducible and the ink formulations of the different copies of the same ink cartridge type were similar.

One Okidata ink cartridge type, and three copies of this ink cartridge, was analyzed in this study. For the Okidata #52110001 ink cartridge (ink samples 04, 05 and 09), the ink on paper sample replicates from a specific ink cartridge, as well as the ink on paper sample replicates from the multiple copies of this ink cartridge were consistent with one another. As stated for the Canon ink samples, the only variation in the ink on paper ATR spectra tended to occur with the July ink on paper sample replicates ATR spectra, and the differences observed were all attributable to the increased noise present in these samples. The results of the ink on paper samples analyzed by ATR FT-IR were similar between sample replicates and between samples analyzed on different days.

Two Kodak ink cartridges were provided for inclusion in this study. One copy of each of these ink cartridges were provided, and multiple ink on paper sample replicates were performed for each ink cartridge in order to determine the reproducibility of the Kodak ink on paper sample ATR spectrum. The Kodak #1754852 ink cartridge (ink sample 22) and Kodak #1369511 ink cartridge (ink sample 17) were consistent across ink on paper sample replicates and between samples analyzed on different days. The only difference observed in the Kodak #1754852 ink cartridge and the Kodak #1369511 ink

cartridge was the increased noise present in the ink on paper sample replicates ATR spectra performed in July. The peak patterns and the peak shapes were consistent across the different dates and sample replicates, even with the increased noise found in the July ink on paper sample replicates ATR spectra. The results from the ATR FT-IR analysis for these two Kodak ink cartridges were consistent and reproducible.

Three different Xerox ink cartridges were used in this study. For the Xerox 8R7994 ink cartridge (ink samples 13 through 16 and 264 through 265) and the Xerox 8R7660 ink cartridge (ink samples 24 through 29), six copies of each ink cartridge type were included for analysis in this study. For the Xerox M-Series ink cartridge (ink samples 244, 248, 252, 256 and 260), five copies of this ink cartridge type were included for analysis in the study. For the July sample replicates, there was increased noise found in these ink on paper ATR spectra and this increased noise caused some changes in the peak maxima positions and slight peak shape changes as compared to the ink on paper sample replicates ATR spectra collected in November and December. The changes in the peak maxima positions were not significant and did not change the overall peak pattern found in the ink on paper ATR spectrum. The changes in peak shape tended to occur with the peak located at approximately 1410 cm^{-1}, and it was really a change in the absorbance of this peak, as compared to the ink on paper sample replicates ATR spectra collected in November and December, that affected its overall shape. This peak was part of a series of peaks, and the lower absorbance for this peak caused a slight alteration in the peak shape and pattern in this region. However, the peak at approximately 1410 cm^{-1} was present in the July ink on paper sample replicates ATR spectra, and the results were consistent with the ink on paper sample replicates ATR spectra collected in November

and December. Overall, the peak patterns for the different ink cartridge types were similar between ink sample replicates and sample days. The ATR spectra of the respective ink cartridge were reproducible and the ink formulations of the different copies of the same ink cartridge type were similar.

Five Hewlett Packard ink cartridges were included in this study. For the Hewlett Packard #29 ink cartridge (ink sample 198), the Hewlett Packard #56 ink cartridge (ink sample 199), the Hewlett Packard #27 ink cartridge (ink sample 200), the Hewlett Packard #45 ink cartridge (ink sample 201) and the Hewlett Packard #58 ink cartridge (ink sample 205), only a single copy of each of the ink cartridges was analyzed. Once again the only variation in the ink on paper ATR spectra tended to occur with the July ink on paper sample replicates ATR spectra, and the differences observed were all attributable to the increased noise present in these samples. The differences observed between the sample replicates of a specific ink cartridge type tended to be the smoothness of the ink on paper ATR spectrum, with the July ink on paper sample replicates having a less smooth ATR spectrum than the November and December ink on paper sample replicates. The peak pattern and peak shape of the ink on paper ATR spectra were similar for all sample replicates and the results were reproducible for each Hewlett Packard ink cartridge type.

Eleven different types of Epson ink cartridges were used in this study. With the exception of one ink cartridge, T019 which had five copies included in the study, there were three copies of each Epson ink cartridge analyzed in this study. For the Epson T013 ink cartridge (ink samples 30 through 32), Epson T003 ink cartridge (ink samples 33 through 35), Epson T007 ink cartridge (ink samples 60 through 62), Epson S020189 ink

cartridge (ink samples 63 through 65), Epson T026 ink cartridge (ink samples 66 through 68), Epson T0321 ink cartridge (ink samples 84 through 86), Epson T019 ink cartridge (ink samples 90 through 92 and 558 through 559), Epson T028 ink cartridge (ink samples 93 through 95), Epson S020187 ink cartridge (ink samples 120 through 122), Epson T017 ink cartridge (ink samples 123 through 125) and Epson T015 ink cartridge (ink samples 156 through 158), the ink on paper sample replicates ATR spectra from a specific ink cartridge, as well as the ink on paper sample replicates ATR spectra from the multiple copies of the ink cartridge, were consistent with one another. The only variation in the ink on paper ATR spectra tended to occur with the July ink on paper sample replicates ATR spectra, and the differences observed were able to be attributed to the increased noise present in these samples. Overall, the peak patterns for the different ink cartridge types were similar between ink on paper sample replicates and sample days, with the only difference observed was the decreased smoothness in the July ink on paper ATR spectra. This increased noise and subsequent less smooth ink on paper ATR spectra did not alter the peak pattern of the ink on paper sample, and the results were similar to the ink on paper ATR spectra obtained in November and December. The ink on paper ATR spectra of the respective ink cartridge were reproducible and the ink formulations of the different copies of the same ink cartridge type were similar.

After establishing the reproducibility of the ATR results, the first method attempted for the analysis of the ATR data of the different black inkjet computer printer ink samples was the subtraction method. An average of each inkjet ink cartridge type was obtained from the multiple ink on paper ATR spectra collected, as well as an average of each blank paper sample type. Using the EZ OMNIC software, the respective blank

paper average ATR spectrum was subtracted from the averaged ink standard ATR spectrum. This method was done for each of the thirty-five different ink standards. The Blank Paper 1 averaged ATR spectrum was used for the black ink samples from sample 04 up to and including sample 287, the Blank Paper 2 averaged ATR spectrum was used for the black ink samples from sample 306 up to and including sample 379 and the Blank Paper 3 averaged ATR spectrum was used for the black ink samples from sample 380 up to and including sample 559, plus the slightly yellow liquid samples 318a through 323a.

When the extractable ink samples were applied to the paper, these ink samples tended to absorb into the paper matrix, whereas when the non-extractable ink samples were applied to the paper they tended to remain more on the surface of the paper matrix. As a result, when the ink on paper ATR spectrum of an extractable ink sample was obtained, the influence of the paper matrix was more pronounced, as compared to when the ink on paper ATR spectrum of a non-extractable ink sample was obtained. This influence of the paper matrix was of concern since the averaged blank paper sample ATR spectrum was subtracted from the ink on paper samples ATR spectra of the thirty-five ink standards using the subtraction method. Consequently, when the subtraction method was used for the extractable ink samples, the resulting paper subtracted ATR spectra showed little differentiation between the maximum peak height and the baseline. In particular, the most pronounced peak found using this method for an extractable ink was 0.012 absorbance units, while the majority of the peaks on all of the paper subtracted extractable ink samples ATR spectra had a maximum of approximately 0.006 absorbance units. On the other hand, when the subtraction method was used for the non-extractable ink samples, the resulting paper subtracted ATR spectra showed significant differences

between the maximum peak height and the baseline. The peaks in these paper subtracted non-extractable ink samples ATR spectra had a maximum peak height of approximately 0.04 absorbance units, which was anywhere from 3 to 5 times the maximum peak height found in the paper subtracted ATR spectra of the extractable ink samples. Refer to Figure 48 for the difference ATR spectra from the paper subtraction of both the extractable and the non-extractable neat ink samples.

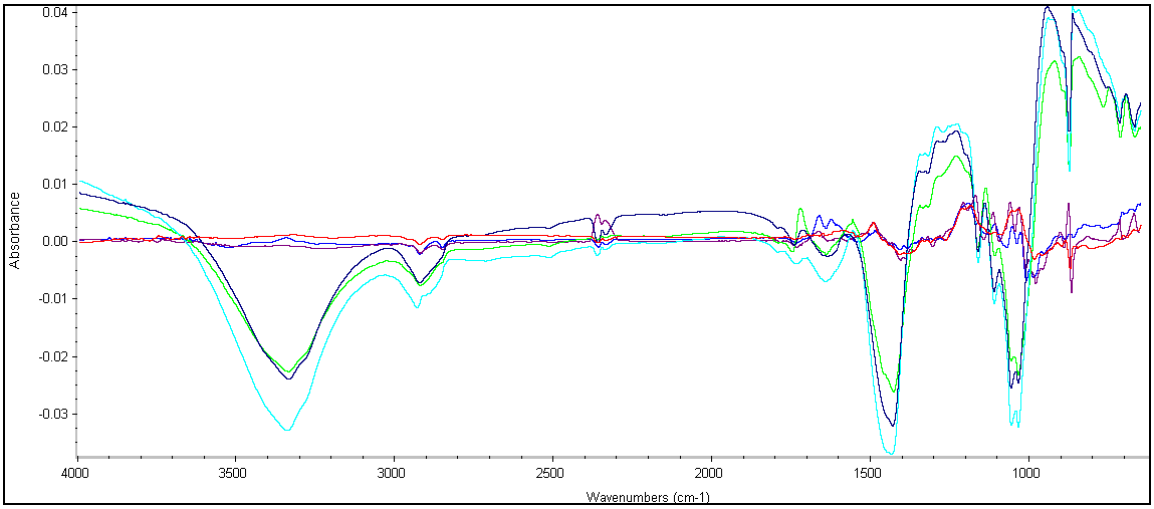

Figure 48: ATR Paper Subtraction spectra for the Okidata 04 ink sample (red), the Canon 217 ink sample (medium blue), the Epson 30 ink sample (purple), the Xerox 13 ink sample (dark blue), the Hewlett Packard 198 ink sample (green) and the Kodak 17 ink sample (light blue).

In addition, when the averaged blank paper ATR spectra were subtracted from each other, the resulting paper subtracted ATR spectra did not show consistent results. In some of the paper subtracted ATR spectra there were sharp peaks, in other paper subtracted ATR spectra there were sharp valleys and in some of the paper subtracted ATR spectra there was almost perfect subtraction results. However, the peaks that were identifiable using the EZ OMNIC software tended to coincide with the peaks listed for the neat ink samples ATR spectra obtained previously. This fact, along with the fact that the subtraction method was not consistently effective for all of the different inkjet ink

samples type, suggested that a separate method needed to be used for the comparison and analysis of the black inkjet computer printer inks. Refer to Figure 49 for the difference ATR spectra from the paper subtraction of the three blank paper samples.

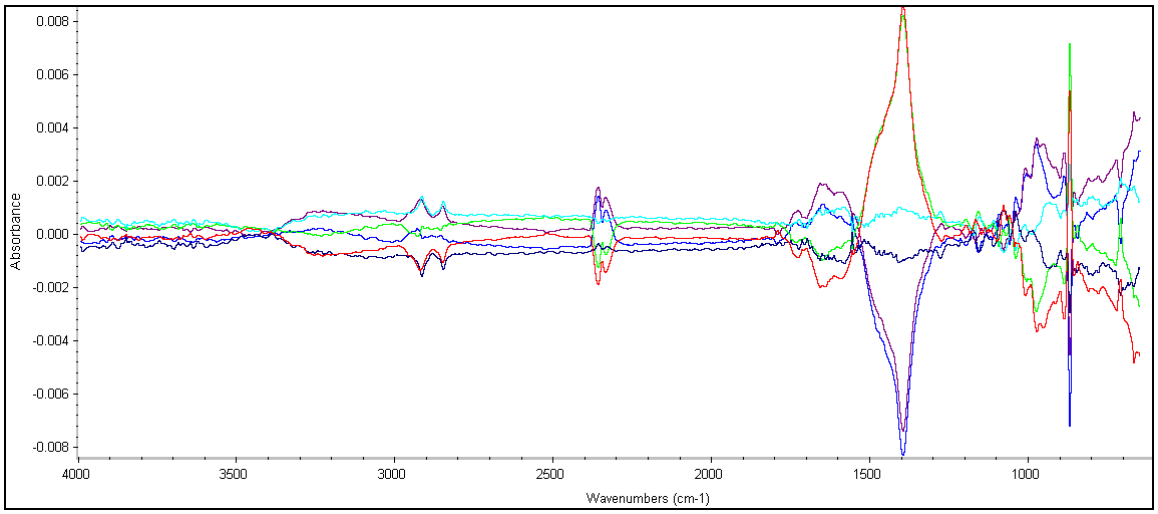

Figure 49: ATR Paper Subtraction spectra for the Blank Paper 3 from Blank Paper 1 (red), the Blank Paper 2 from Blank Paper 1 (green), the Blank Paper 2 from Blank Paper 3 (light blue), the Blank Paper 3 from Blank Paper 2 (dark blue), the Blank Paper 1 from the Blank Paper 2 (blue) and the Blank Paper 1 from the Blank Paper 3 (purple).

The subtraction method for the analysis of the ink samples, and for their comparison and differentiation, was not as effective a method as first thought, especially with respect to the extractable ink samples. As such, an examination of the ATR spectra of the ink samples directly on the paper, without any subtraction of the paper matrix, was conducted. As stated previously, all of the ink samples were scanned using a Nicolet 380 FT-IR instrument, with a resolution of 8 cm^{-1} and 32 scans per spectrum. Prior to comparing the ATR spectra of the ink samples from each manufacturer, and the ATR spectrum of each ink sample within a manufacturer, the ink on paper ATR spectra were baseline corrected, automatically smoothed using the Savitzky-Golay algorithm and the y-axis was changed from % Transmittance to Absorbance. As mentioned earlier, when

the ATR spectra were smoothed, a change in a peak maximum position, generally with a difference of between 2 cm^{-1} and 4 cm^{-1} from the unsmoothed ATR spectra, was noticed for a single peak in less than 8% of the ink on paper samples ATR spectra. Due to the nature of the ink sample, the ATR spectrum of the paper sample dominated the results, but it was hypothesized that the presence of the different ink formulations would alter the blank paper ATR spectra and aid in the identification of an unknown sample. The different ink cartridge types were compared, and then a comparison between the various ink manufactures was done. The discussion included below was based on the results of the ATR FT-IR analysis of the ink on paper samples.

The first manufacturer analyzed was the Canon brand of ink samples. Twelve different Canon ink cartridge types were compared, ten of which were classified as extractable ink samples and two were classified as non-extractable ink samples. The extractable ink samples included the Canon 217 (BCI-6Bk), Canon 223 (BCI-10), Canon 282 (BC-02), Canon 306 (BC-20), Canon 318 (BC-60), Canon 327 (BC-22e), Canon 348 (BCI-21), Canon 384 (BCI-11), Canon 402 (BCI-12) and Canon 522 (BCI-3ePBk) ink samples, while the non-extractable ink samples included the Canon 312 (BC-23) and Canon 492 (BCI-3eBk) ink samples. In addition, Canon 318a ink sample, the slightly yellow liquid of the Canon BC-60 ink cartridge, was also examined. The Canon 318a ink sample was initially classified as a non-extractable ink sample based on its TLC results, but was discussed separately later. The similarities and/or differences in the ink on paper ATR spectra of the extractable ink samples were discussed first. In the region between 3600 cm^{-1} and 2800 cm^{-1}, the overall peak shape and peak pattern were similar for all of the Canon extractable ink samples. The Canon extractable ink samples had similar peak

maxima positions, with little to no changes in peak maxima positions occurring between the Canon extractable ink samples ATR spectra. Refer to Figure 50 for the ATR spectra from 3600 cm^{-1} to 2600 cm^{-1} of the Canon extractable ink samples.

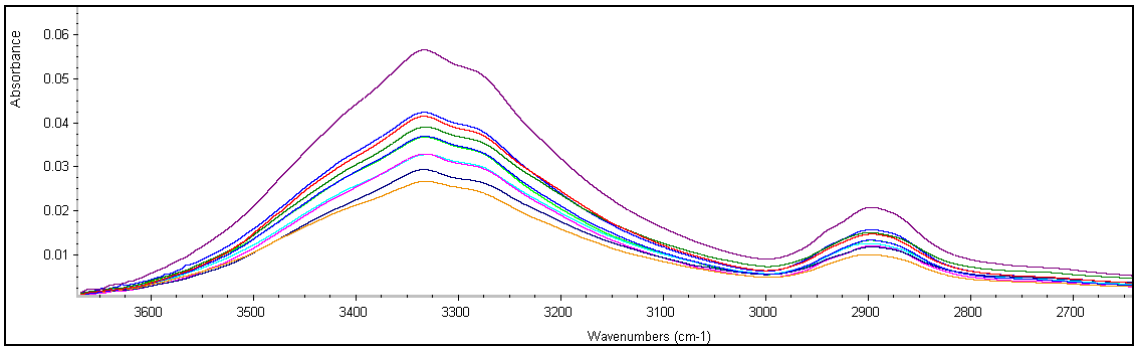

Figure 50: ATR spectra for the region between 3600 cm^{-1} and 2650 cm^{-1} of the Canon 223 ink sample (dark purple), the Canon 217 ink sample (top medium blue), the Canon 522 ink sample (red), the Canon 348 ink sample (dark green), the Canon 402 ink sample (second medium blue), the Canon 282 ink sample (light green), the Canon 318 ink sample (light purple), the Canon 306 ink sample (light blue), the Canon 327 ink sample (dark blue) and the Canon 384 ink sample (orange).

In the region between 1700 cm^{-1} and 1550 cm^{-1}, the Canon extractable ink samples could be placed into two groups. In the first group were the ink samples that contained two peaks between the region of 1675 cm^{-1} and 1625 cm^{-1}, and in the second group were the ink samples that contained three peaks in this region. In the first group, the Canon extractable ink samples showed a peak at approximately 1659 cm^{-1} and the second peak at approximately 1628 cm^{-1}. The ink samples that fit into this first group included the Canon 306, Canon 318, Canon 327, Canon 384, Canon 402 and Canon 522 ink samples. In the second group, the Canon extractable ink samples showed three peaks at approximately 1661 cm^{-1}, 1641 cm^{-1} and 1629 cm^{-1} in their ink on paper ATR spectra. The ink samples that fit into this second group included the Canon 217, Canon 223, Canon 282 and Canon 348 ink samples. The Canon ink sample 217 was slightly different from the other ink samples in the second group as its ink on paper ATR spectrum was not

as smooth as the Canon 223, Canon 282 and Canon 348 ink on paper samples ATR spectra. Additionally, there was a change in the peak maximum for the second peak to a higher wavenumber in the Canon 217 ink on paper ATR spectrum as compared to the Canon 223, Canon 282 and Canon 348 ink on paper ATR spectra. Refer to Figure 51 for the ATR spectra from 1700 cm^{-1} to 1560 cm^{-1} of the Canon extractable ink samples.

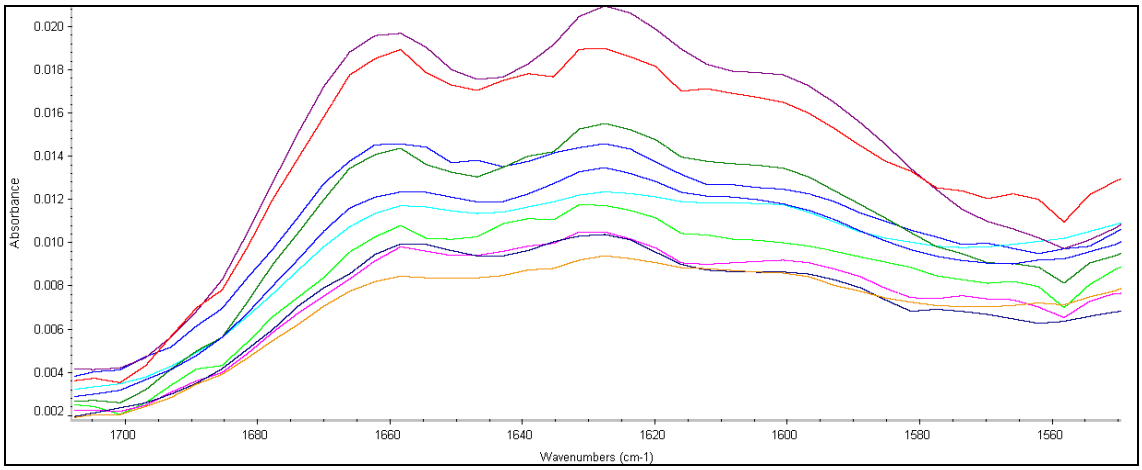

Figure 51: ATR spectra for the region between 1700 cm^{-1} and 1550 cm^{-1} of the Canon 223 ink sample (red), the Canon 522 ink sample (dark purple), the Canon 217 ink sample (top blue), the Canon 402 ink sample (second blue), the Canon 348 ink sample (dark green), the Canon 282 ink sample (light green), the Canon 306 ink sample (light blue), the Canon 384 ink sample (orange), the Canon 327 ink sample (dark blue) and the Canon 318 ink sample (light purple).

In the region between 1500 cm^{-1} and 1300 cm^{-1}, there were some slight changes in peak maxima positions that were observed in the various extractable Canon ink samples, especially between 1450 cm^{-1} and 1370 cm^{-1}. In particular, there was a change in peak maximum position of approximately 4 cm^{-1} between the Canon extractable ink samples. The Canon 217, Canon 223, Canon 282, Canon 318, Canon 327 and Canon 348 ink on paper samples ATR spectra had a peak located at approximately 1421 cm^{-1}, whereas the Canon 306, Canon 384, Canon 402 and Canon 522 ink on paper samples ATR spectra had a peak located at approximately 1417 cm^{-1}. In the region between 1080 cm^{-1} and

960 cm^{-1}, the Canon extractable ink on paper samples ATR spectra all exhibited the same peak pattern and peak shape. In particular, there was a group of three peaks present for all of these samples that were symmetrical in shape. Refer to Figure 52 for the ATR spectra from 1530 cm^{-1} to 720 cm^{-1} of the Canon extractable ink samples.

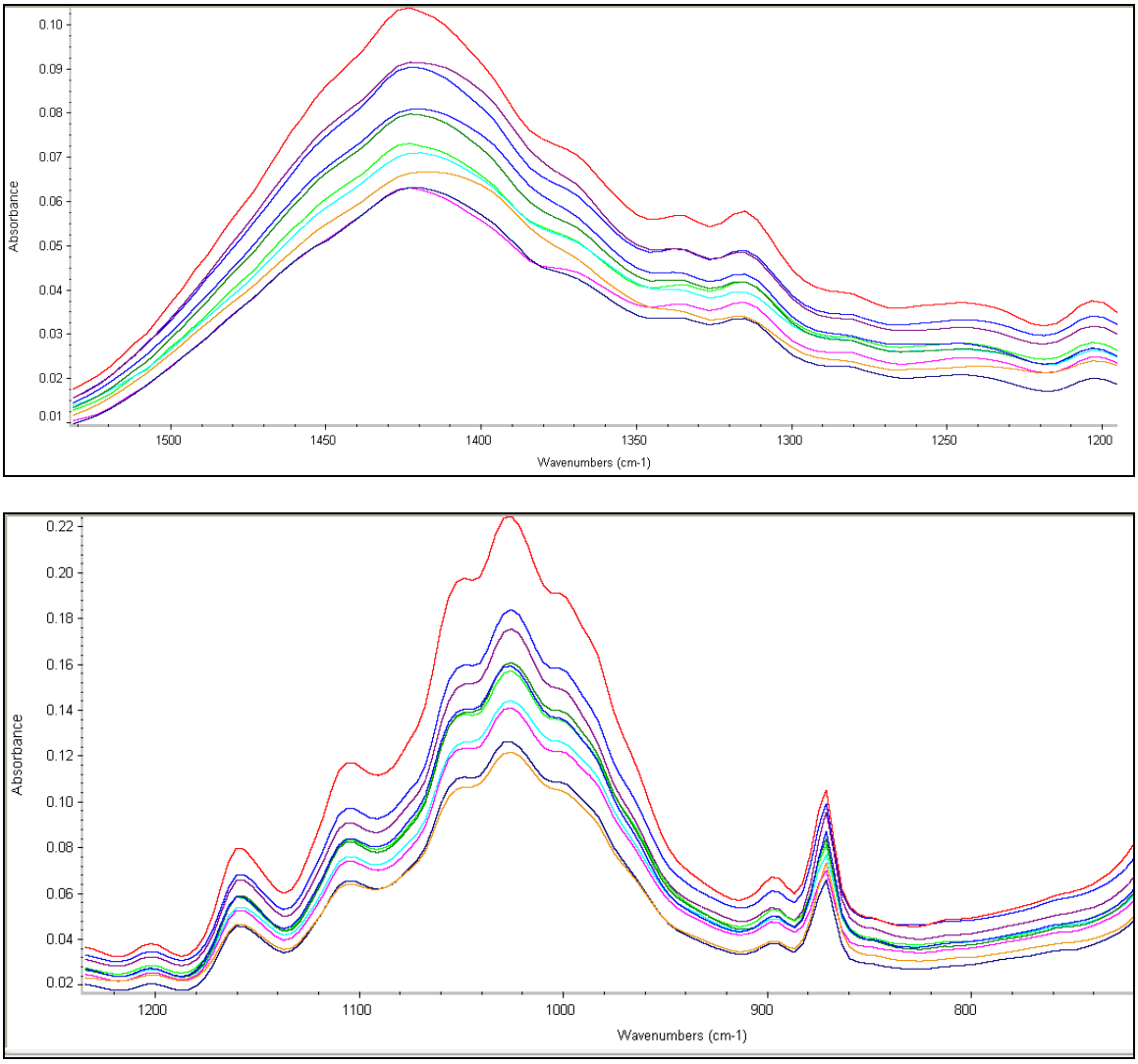

Figure 52: ATR spectra for the region between (top) 1530 cm^{-1} and 1200 cm^{-1} and (bottom) 1240 cm^{-1} and 720 cm^{-1} for the Canon 223 ink sample (red), the Canon 522 ink sample (dark purple), the Canon 217 ink sample (top blue), the Canon 402 ink sample (second blue), the Canon 348 ink sample (dark green), the Canon 282 ink sample (light green), the Canon 306 ink sample (light blue), the Canon 384 ink sample (orange), the Canon 327 ink sample (dark blue) and the Canon 318 ink sample (light purple).

When the non-extractable Canon black ink samples, namely the Canon 312 and Canon 492 ink samples, were compared to the extractable ink samples, some useful information was obtained. For the region between 3600 cm^{-1} and 3000 cm^{-1}, there was a change in the peak shape between the extractable and non-extractable ink on paper samples ATR spectra. Instead of a larger first peak followed by a smaller second peak, the non-extractable ink samples showed an almost flattened or even peak shape. In addition, for the region between 3000 cm^{-1} and 2800 cm^{-1}, there was a widening of the peak for the Canon 312 non-extractable ink sample and a formation of two flattened peaks for the Canon 492 non-extractable ink sample that was not observed for the Canon extractable ink samples. Refer to Figure 53 for the ATR spectra from 3700 cm^{-1} to 2700 cm^{-1} of the Canon extractable and non-extractable ink samples.

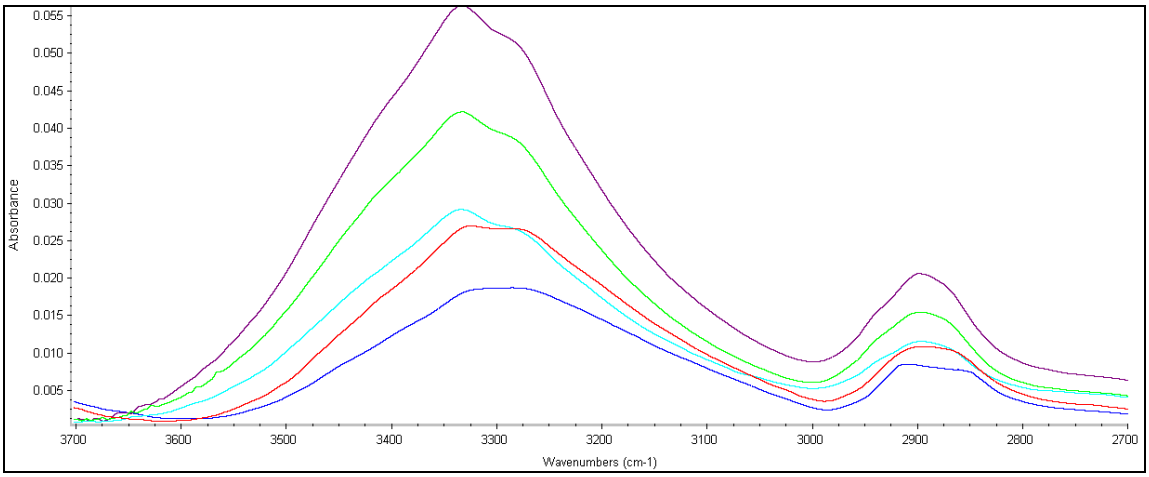

Figure 53: ATR spectra for the region between 3700 cm^{-1} and 2700 cm^{-1} of the Canon 223 ink sample (purple), the Canon 217 ink sample (green), the Canon 327 ink sample (light blue), the Canon 312 ink sample (red) and the Canon 492 ink sample (blue).

In the region between 1675 cm^{-1} and 1620 cm^{-1}, the Canon non-extractable ink on paper samples ATR spectra had a slight change in the peak maximum position and peak shape change from the Canon extractable ink samples. The Canon non-extractable ink

on paper samples ATR spectra also contained an extra peak at approximately 1590-1580 cm^{-1}, depending on the non-extractable ink sample, that was not present in the Canon extractable ink on paper ATR spectra. Additionally, at this point the ATR spectrum of the Canon 312 ink sample crossed the ATR spectrum of the Canon 492 ink sample, which indicated a difference in their sample composition. There was also a change in the peak maximum position from approximately 1423 cm^{-1} observed for the Canon extractable ink on paper samples ATR spectra to approximately 1404 cm^{-1} for the Canon 312 ink on paper sample ATR spectrum and 1394 cm^{-1} for the Canon 492 ink on paper sample ATR spectrum. This was a difference in peak maximum position for this peak of approximately 19 cm^{-1} for the Canon 312 ink sample and approximately 29 cm^{-1} for the Canon 492 ink sample, as compared to the Canon extractable ink samples. There was a small change in the peak maximum position of approximately 4 cm^{-1} for the peak located at approximately 1161 cm^{-1} in the Canon extractable ink on paper samples ATR spectra to a peak location of approximately 1157 cm^{-1} for the two Canon non-extractable ink on paper samples ATR spectra. This peak also had a different peak shape for the Canon non-extractable ink samples as compared to the Canon extractable ink samples. Refer to Figure 54 for the ATR spectra from 1700 cm^{-1} to 1200 cm^{-1} of the Canon extractable and non-extractable ink samples.

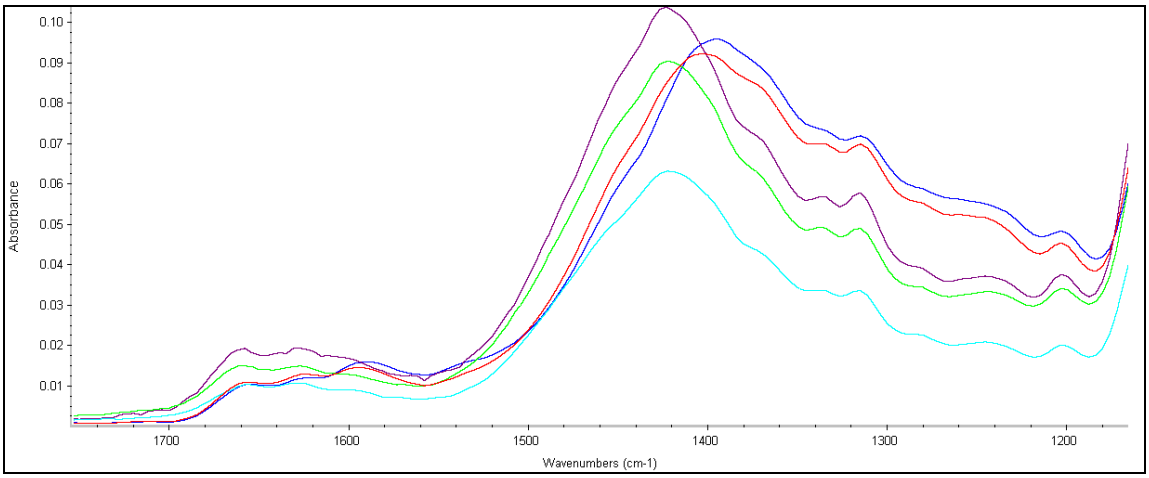

Figure 54: ATR spectra for the region between 1700 cm^{-1} and 1200 cm^{-1} of the Canon 223 ink sample (purple), the Canon 217 ink sample (green), the Canon 327 ink sample (light blue), the Canon 312 ink sample (red) and the Canon 492 ink sample (blue).

The two non-extractable Canon ink samples exhibited a change in the peak maxima positions of approximately 3 cm^{-1} to 5 cm^{-1} for the group of three peaks located between 1080 cm^{-1} and 960 cm^{-1}, as compared to the Canon extractable ink samples. The group of three peaks in the Canon non-extractable ink on paper samples ATR spectra were located a lower wavenumber and were not as symmetrical as they were for the Canon extractable ink on paper samples ATR spectra. In addition, the two Canon non-extractable ink on paper samples ATR spectra contained a peak located at approximately 868 cm^{-1} that was not present in the Canon extractable ink on paper samples ATR spectra. This peak was not as pronounced as some of the other peaks in the Canon non-extractable ink on paper samples ATR spectra, but it was still a useful point of distinction between these two Canon sample types. Refer to Figure 55 for the ATR spectra from 1200 cm^{-1} to 600 cm^{-1} of the Canon extractable and non-extractable ink samples.

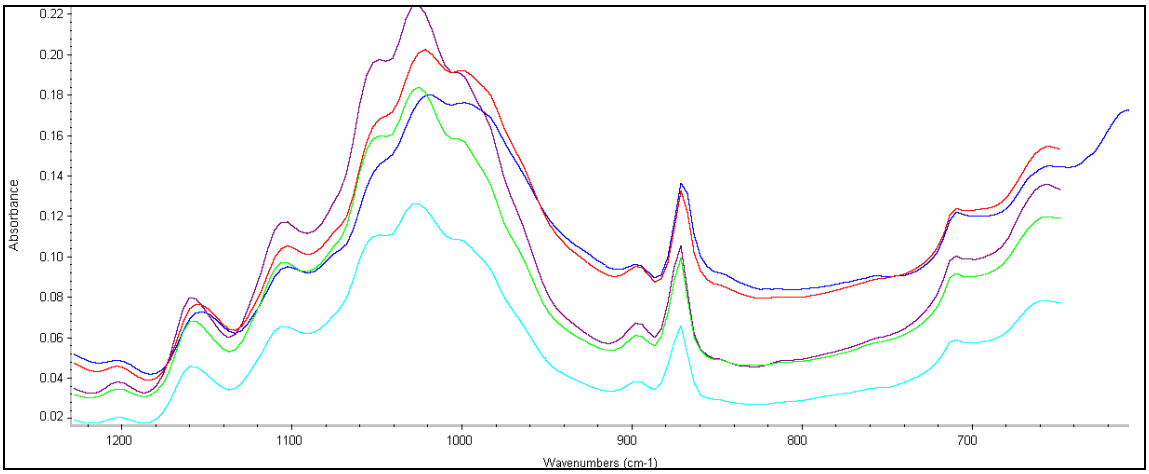

Figure 55: ATR spectra for the region between 1200 cm^{-1} and 600 cm^{-1} of the Canon 223 ink sample (purple), the Canon 217 ink sample (green), the Canon 327 ink sample (light blue), the Canon 312 ink sample (red) and the Canon 492 ink sample (blue).

The Canon 318a ink sample was the slightly yellow liquid from Canon BC-60 ink cartridge. Based on the results of the TLC analysis, this sample was generally classified with the non-extractable ink samples. When the ink on paper sample ATR spectrum for the Canon 318a ink sample was compared to the ink on paper samples ATR spectra of the extractable Canon ink samples and the non-extractable Canon ink samples, it was found to have a different ink on paper sample ATR spectrum from the Canon non-extractable ink samples. The Canon 318a ink on paper sample ATR spectrum was in better agreement with the ATR results for the Canon extractable ink samples as compared to the Canon non-extractable ink samples, though it had some of its own unique features. In the region between 1680 cm^{-1} and 1600 cm^{-1}, there were neither the two peaks nor the three peaks present as observed in the ink on paper samples ATR spectra for the Canon extractable ink samples. Rather there tended to be a single wide peak present without a noticeable or significant valley to indicate the presence of a secondary peak. In addition, the Canon 318a ink on paper sample ATR spectrum showed slight changes in the peak

maxima positions in this region as compared to the Canon extractable ink on paper samples ATR spectra. The Canon 318a ink on paper sample ATR spectrum contained two peaks at approximately 1417 cm^{-1} and 1157 cm^{-1}, whereas in the Canon extractable ink on paper samples ATR spectra these peaks were located at approximately 1420 cm^{-1} and 1159.5 cm^{-1} respectively. Once at the group of three peaks located between approximately 1080 cm^{-1} and 960 cm^{-1}, the Canon 318a ink on paper sample ATR spectrum was back in agreement with the other Canon extractable ink on paper samples ATR spectra. Refer to Figure 56 for the ATR spectra from 1700 cm^{-1} to 650 cm^{-1} of the Canon 318a ink sample and the Canon extractable ink samples.

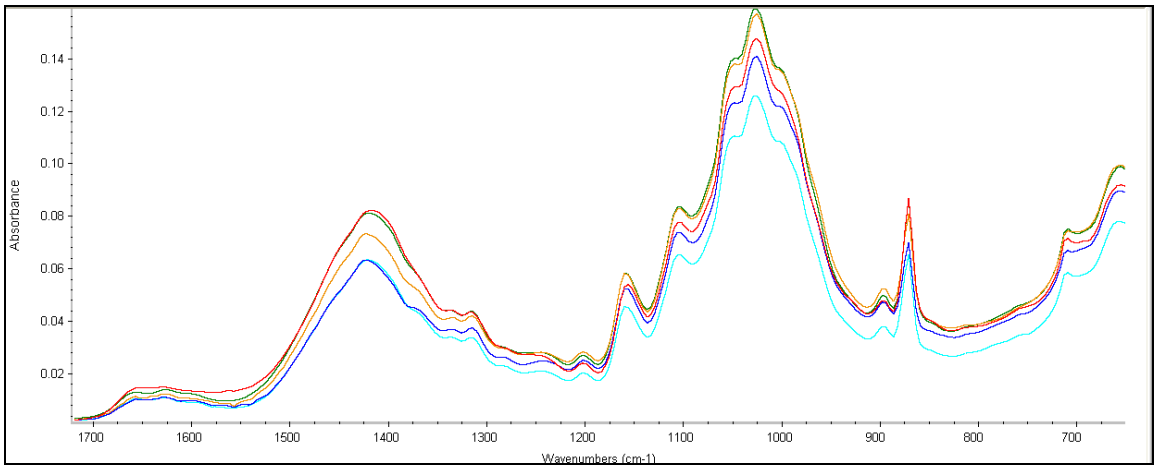

Figure 56: ATR spectra for the region between 1700 cm^{-1} and 650 cm^{-1} of the Canon 318a ink sample (red), the Canon 402 ink sample (green), the Canon 282 ink sample (orange), the Canon 318 ink sample (blue) and the Canon 327 ink sample (light blue).

Ten of the eleven Epson ink cartridges were extractable from the paper using the extraction solvent of 50:50 ethanol: distilled water. The Epson extractable ink samples included the Epson 30 (T013), Epson 33 (T003), Epson 60 (T007), Epson 63 (S020189), Epson 66 (T026), Epson 90 (T019), Epson 93 (T028), Epson 120 (S020187), Epson 123 (T017) and Epson 156 (T015). The Epson extractable ink on paper samples ATR spectra

all had similar peak patterns, except for certain areas of the ink on paper samples ATR spectra. In the region between 1810 cm^{-1} and 1770 cm^{-1}, the peak at approximately 1795 cm^{-1} underwent slight changes in the peak shape for the various Epson extractable ink on paper samples ATR spectra, but the peak maximum wavenumbers remained consistent. For the Epson 30, Epson 33 and Epson 93 ink samples, the peak was almost completely flat, whereas for the Epson 60, Epson 63, Epson 66, Epson 90, Epson 120 and Epson 123 ink samples, the peak was tilted to the right, with the right side of the peak higher than the left side. For the Epson 66 ink sample, this tilt towards the right side was more pronounced than in the other five Epson extractable ink samples. For the Epson 156 ink sample, the peak was tilted towards the left. The peak shape was very sharp or pronounced on the left side for the Epson 156 ink sample than what was observed with the other Epson extractable ink samples. Refer to Figure 57 for the ATR spectra from 1810 cm^{-1} to 1760 cm^{-1} of the Epson extractable ink samples.

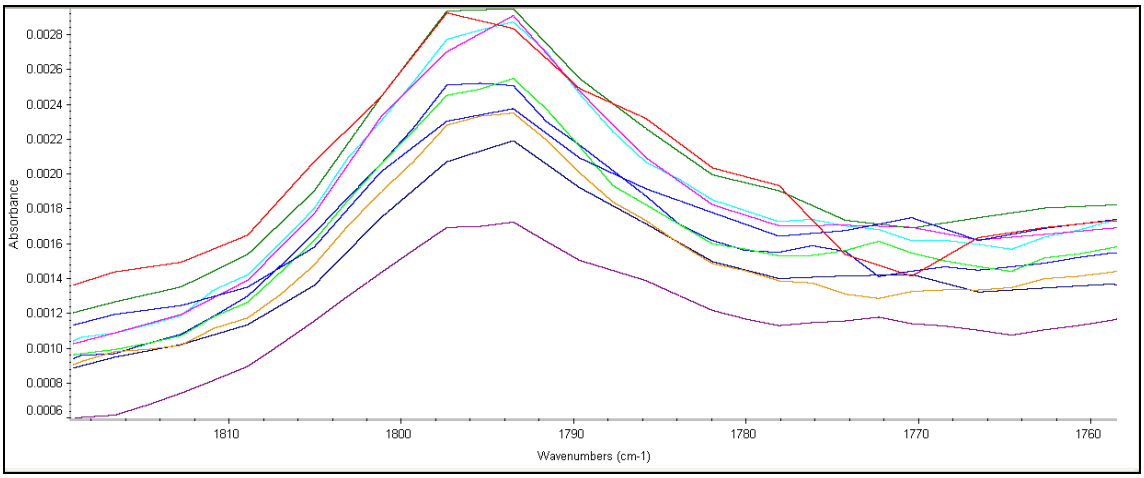

Figure 57: ATR spectra for the region between 1810 cm^{-1} and 1760 cm^{-1} of the Epson 93 ink sample (green), the Epson 156 ink sample (red), the Epson 63 ink sample (light blue), the Epson 66 ink sample (light purple), the Epson 30 ink sample (top blue), the Epson 60 ink sample (light green), the Epson 123 ink sample (second blue), the Epson 120 ink sample (orange), the Epson 90 ink sample (dark blue) and the Epson 33 ink sample (dark purple).

In the region between 1780 cm^{-1} and 1540 cm^{-1}, there were significant peak shape and peak pattern differences between the Epson extractable ink on paper samples ATR spectra. Seven of the ten Epson extractable ink samples, namely the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93 and Epson 123 ink samples, had similar peak patterns and changes in the peak maxima positions tended to be minor with differences between the peak maxima positions being approximately 1.5 cm^{-1}. The differences between these Epson extractable ink samples were more pronounced in the 1644 cm^{-1} to 1622 cm^{-1} region. For the Epson 120 ink on paper sample ATR spectrum, there were some peak pattern similarities to the other Epson extractable ink samples previously discussed, however the Epson 120 ink sample showed more changes in the peak maxima positions than in the other Epson extractable ink samples. The Epson 30 ink on paper sample ATR spectrum had a few peak similarities to the other Epson extractable ink samples, but overall it contained a different peak pattern from all of the other Epson extractable ink samples discussed previously. The Epson 30 ink on paper sample ATR spectrum was more distinct than all of the other Epson extractable ink on paper samples ATR spectra, with the exception of the Epson 156 ink on paper sample ATR spectrum. The Epson 156 ink on paper sample ATR spectrum showed multiple peaks within the region of 1780 cm^{-1} and 1540 cm^{-1}. This peak pattern was completely different from the other Epson extractable ink samples in this region of the ATR spectra. A concern was that these peaks could be due to noise or an unsmooth spectrum; however the rest of the Epson 156 ink on paper sample ATR spectrum was smooth so this peak pattern could not be due solely to the noise in this region. Refer to Figure 58 for the ATR spectra from 1740 cm^{-1} to 1540 cm^{-1} of the Epson extractable ink samples.

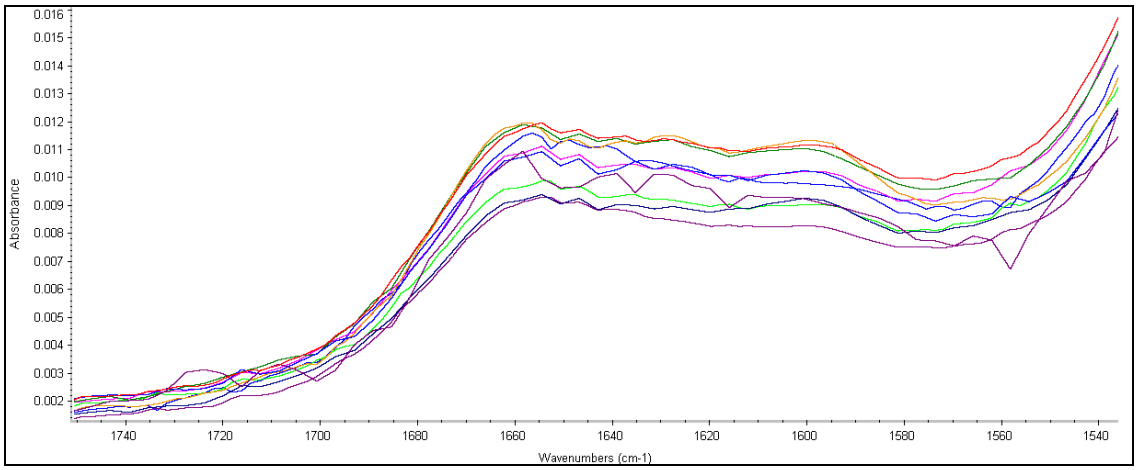

Figure 58: ATR spectra for the region between 1740 cm^{-1} and 1540 cm^{-1} of the Epson 63 ink sample (red), the Epson 120 ink sample (orange), the Epson 93 ink sample (dark green), the Epson 30 ink sample (top blue), the Epson 66 ink sample (light purple), the Epson 123 ink sample (second blue), the Epson 156 ink sample (top dark purple), the Epson 60 ink sample (light green), the Epson 90 ink sample (dark blue) and the Epson 33 ink sample (second dark purple).

One of the Epson ink samples, namely the Epson 84 ink sample, was classified as being a non-extractable ink sample. The Epson 84 ink on paper sample ATR spectrum was compared to the Epson extractable ink on paper samples ATR spectra so that the differences and/or similarities between the Epson ink samples could be observed. In the region between 3600 cm^{-1} and 2600 cm^{-1}, the non-extractable Epson 84 ink on paper sample ATR spectrum was similar to the Epson extractable ink on paper samples ATR spectra. The main difference in the ATR spectra of these Epson ink samples was the fact that the Epson 84 non-extractable ink on paper sample ATR spectrum showed some changes in the peak maxima position as compared to the peak maxima positions observed in the Epson extractable ink on paper samples ATR spectra. The changes in the peak maxima positions tended to have the peaks positioned at lower wavenumbers in the Epson 84 ink on paper sample ATR spectrum as compared to the Epson extractable ink

on paper samples ATR spectra. Refer to Figure 59 for the ATR spectra from 3600 cm^{-1} to 2400 cm^{-1} of the Epson non-extractable and extractable ink samples.

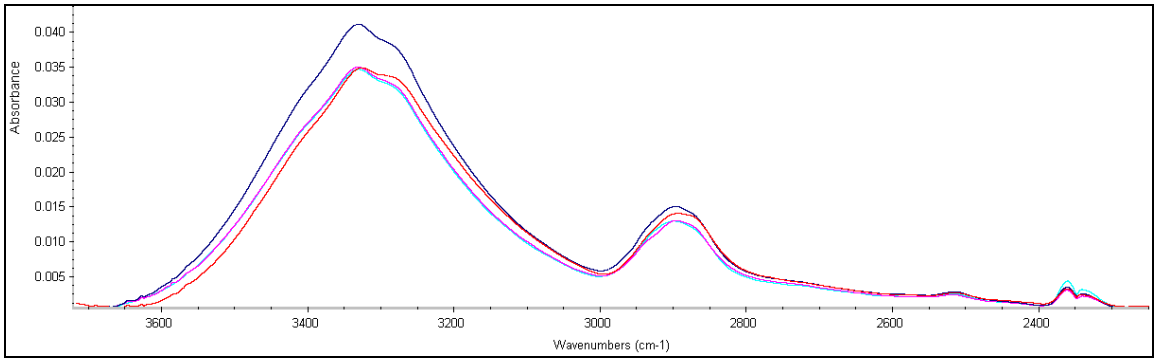

Figure 59: ATR spectra for the region between 3600 cm^{-1} and 2400 cm^{-1} of the Epson 84 ink sample (red), the Epson 66 ink sample (dark blue), the Epson 60 ink sample (light blue) and the Epson 90 ink sample (purple).

In the region between 1780 cm^{-1} and 1700 cm^{-1}, the Epson 84 non-extractable ink on paper sample ATR spectrum showed some changes in the peak maxima positions within the peak pattern, as compared to the Epson extractable ink on paper samples ATR spectra. However, the changes in the peak maxima positions within the peak pattern for the Epson non-extractable and extractable ink samples in this region were minor. In the region between 1680 cm^{-1} and 1520 cm^{-1}, there was a major peak difference in the Epson 84 non-extractable ink on paper ATR spectrum as compared to the Epson extractable ink on paper samples ATR spectra, especially around the area of approximately 1645 cm^{-1} to 1550 cm^{-1}. The Epson extractable ink on paper ATR spectra showed a decrease in absorbance in this region, whereas the Epson 84 non-extractable ink on paper ATR spectrum showed an increase in absorbance and an overall different peak pattern. Refer to Figure 60 for the ATR spectra from 1800 cm^{-1} to 1550 cm^{-1} of the Epson non-extractable and extractable ink samples.

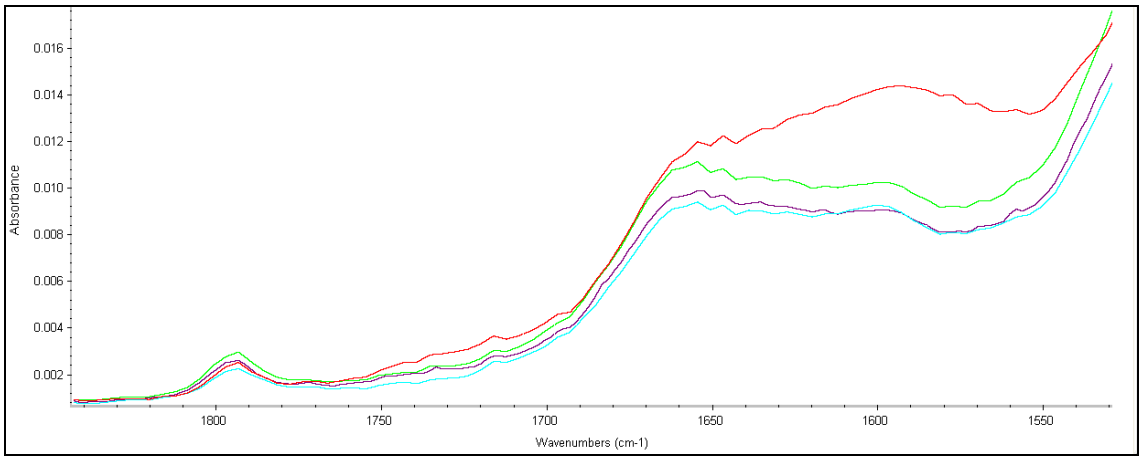

Figure 60: ATR spectra for the region between 1800 cm^{-1} and 1550 cm^{-1} of the Epson 84 ink sample (red), the Epson 66 ink sample (green), the Epson 60 ink sample (purple) and the Epson 90 ink sample (light blue).

Except for the differences noted above, the Epson 84 non-extractable ink on paper sample ATR spectrum and the Epson extractable ink on paper samples ATR spectra had similar peak patterns. The Epson 84 non-extractable ink on paper sample ATR spectrum did cross the ATR spectra of the Epson extractable ink samples in some locations, but this was usually associated with changes in the peak maxima positions. Generally the Epson 84 non-extractable ink on paper sample ATR spectrum showed changes in the peak maxima positions with lower wavenumbers as compared to the peaks maxima positions found in the Epson extractable ink on paper samples ATR spectra.

Four of the five Hewlett Packard ink cartridges were not extractable from the paper using the extraction solvent of 50:50 ethanol: distilled water, while one of the five Hewlett Packard ink cartridges was extractable from the paper using the extraction solvent. The four non-extractable Hewlett Packard ink samples were the Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200 and Hewlett Packard 201 ink samples, while the Hewlett Packard extractable ink sample was the Hewlett Packard 205

ink sample. The Hewlett Packard non-extractable ink samples were examined first to establish the ink on paper samples ATR spectra for these types of Hewlett Packard ink samples. In the region between 3600 cm^{-1} and 2700 cm^{-1}, there was a slight change in the peak pattern for the Hewlett Packard 199 and the Hewlett Packard 200 ink samples, as compared to the peak patterns for the Hewlett Packard 198 and the Hewlett Packard 201 ink samples. Based on the ink on paper ATR spectra in this region, the Hewlett Packard non-extractable ink samples could be placed into two groups, with the Hewlett Packard 199 and the Hewlett Packard 200 ink samples in one group and the Hewlett Packard 198 and the Hewlett Packard 201 ink samples in the other group. The change in peak pattern in the Hewlett Packard non-extractable ink on paper samples ATR spectra was a subtle change, but it did allow for a distinction between the various Hewlett Packard non-extractable ink samples. Refer to Figure 61 for the ATR spectra from 3600 cm^{-1} to 2400 cm^{-1} of the Hewlett Packard non-extractable ink samples.

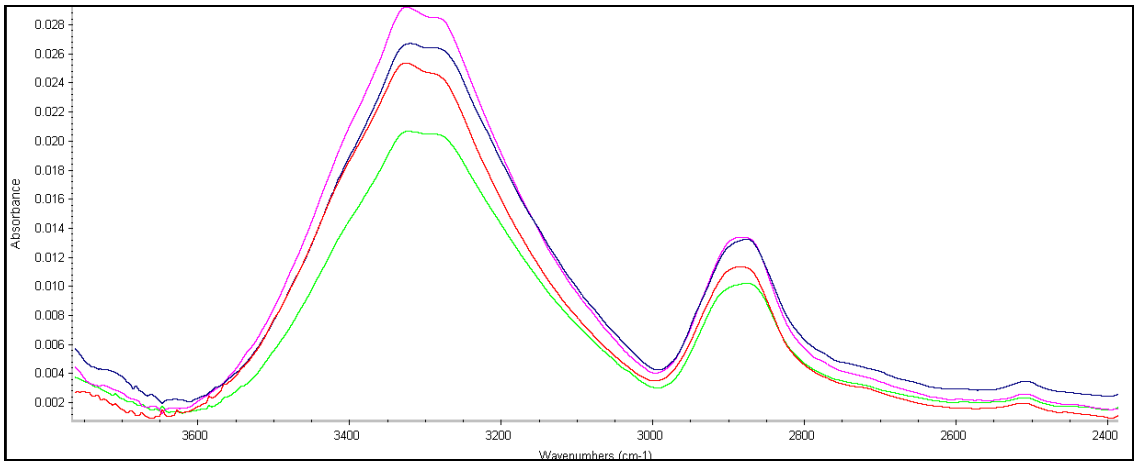

Figure 61: ATR spectra for the region between 3600 cm^{-1} and 2400 cm^{-1} of the Hewlett Packard 199 ink sample (red), the Hewlett Packard 200 ink sample (purple), the Hewlett Packard 201 ink sample (blue) and the Hewlett Packard 198 ink sample (green).

In the region between 1500 cm^{-1} and 1200 cm^{-1}, the overall peak pattern was similar for all four of the Hewlett Packard non-extractable ink on paper samples ATR spectra. There were, however, some differences noted between the ink on paper ATR spectra of the Hewlett Packard non-extractable ink samples. For example, there was a change in the peak maximum position for one peak of approximately 6 cm^{-1} between the two groups of Hewlett Packard non-extractable ink samples. The Hewlett Packard 198 and Hewlett Packard 201 ink on paper samples ATR spectra showed a peak at approximately 1408 cm^{-1}, whereas the Hewlett Packard 199 and Hewlett Packard 200 ink on paper samples ATR spectra showed a peak at approximately 1414 cm^{-1}. Refer to Figure 62 for the ATR spectra from 1700 cm^{-1} to 1200 cm^{-1} of the Hewlett Packard non-extractable ink samples.

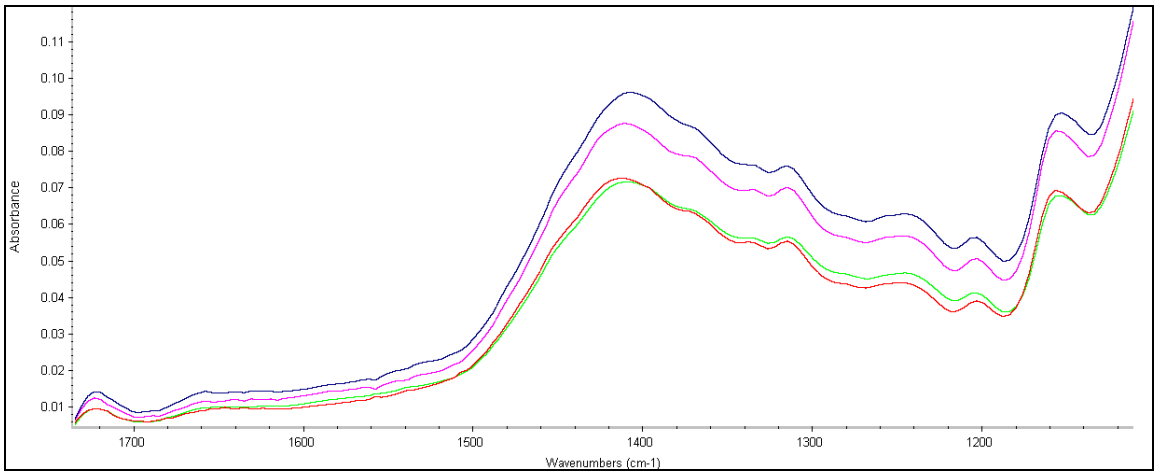

Figure 62: ATR spectra for the region between 1700 cm^{-1} and 1200 cm^{-1} of the Hewlett Packard 199 ink sample (red), the Hewlett Packard 200 ink sample (purple), the Hewlett Packard 201 ink sample (blue) and the Hewlett Packard 198 ink sample (green).

The group of three peaks located in the region of 1080 cm^{-1} and 960 cm^{-1} was similar in peak shape and peak pattern for all four non-extractable Hewlett Packard ink on paper samples ATR spectra. There were slight differences in the ink on paper

samples ATR spectra for these Hewlett Packard non-extractable ink samples, but generally the differences observed dealt with changes in the peak maxima positions for the three peaks of approximately 1.5 cm^{-1}. For example, the top peak in the group of three peaks was located at approximately 1022.5 cm^{-1} for the Hewlett Packard 198 and Hewlett Packard 201 ink samples, whereas for the Hewlett Packard 199 and Hewlett Packard 200 ink samples this peak was located at approximately 1024.1 cm^{-1}. Refer to Figure 63 for the ATR spectra from 1150 cm^{-1} to 650 cm^{-1} of the Hewlett Packard non-extractable ink samples.

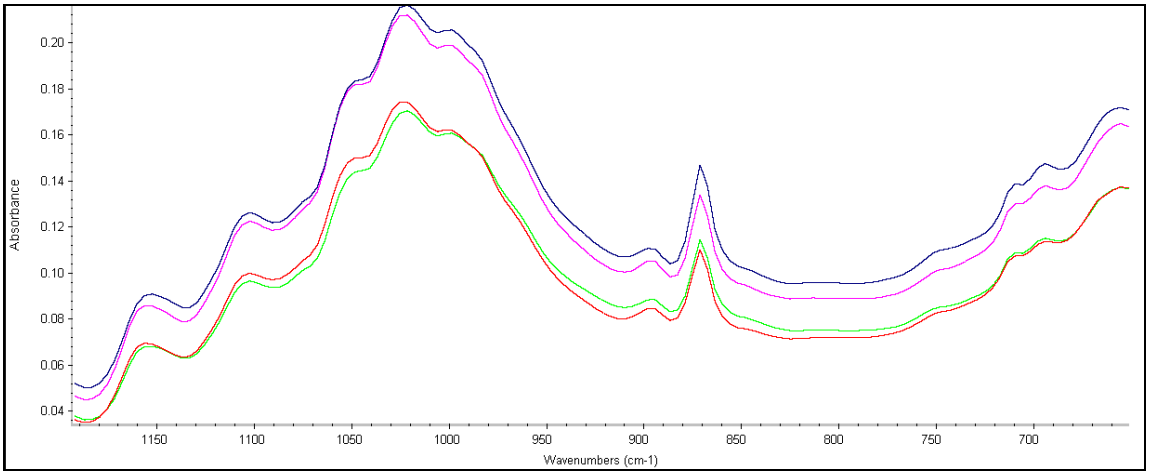

Figure 63: ATR spectra for the region between 1150 cm^{-1} and 650 cm^{-1} of the Hewlett Packard 199 ink sample (red), the Hewlett Packard 200 ink sample (purple), the Hewlett Packard 201 ink sample (blue) and the Hewlett Packard 198 ink sample (green).

When the Hewlett Packard 205 extractable ink on paper sample ATR spectrum was compared to the Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200 and Hewlett Packard 201 non-extractable ink on paper samples ATR spectra, several differences were noted. In the region between 3600 cm^{-1} and 2700 cm^{-1}, the Hewlett Packard 205 extractable ink on paper sample ATR spectrum showed a different peak pattern and significant changes in the peak maxima positions from the ink on paper

samples ATR spectra of the four non-extractable Hewlett Packard ink samples. In particular, there was an approximate 9 cm^{-1} difference in the peak maximum position between the peak located at approximately 2897 cm^{-1} in the Hewlett Packard 205 ink on paper sample ATR spectrum and its corresponding position, located at approximately 2888 cm^{-1}, in the four Hewlett Packard non-extractable ink on paper samples ATR spectra. In addition, there was a change in the peak maximum position from approximately 3333 cm^{-1} in the Hewlett Packard 205 ink on paper sample ATR spectrum to approximately 3326 cm^{-1} in the Hewlett Packard non-extractable ink on paper samples ATR spectra, a difference of approximately 7 cm^{-1}. Refer to Figure 64 for the ATR spectra from 3600 cm^{-1} to 2600 cm^{-1} of the Hewlett Packard extractable and non-extractable ink samples.

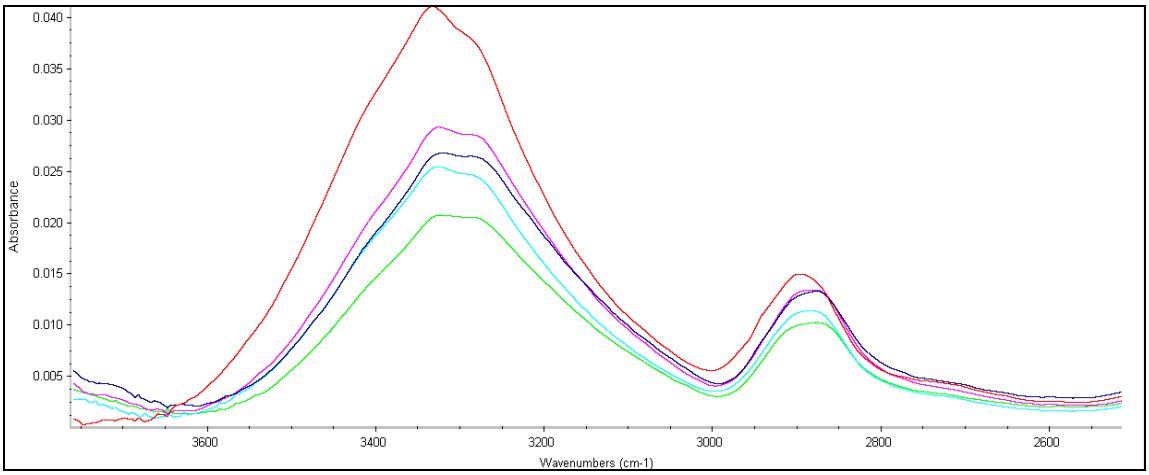

Figure 64: ATR spectra for the region between 3600 cm^{-1} and 2400 cm^{-1} of the Hewlett Packard 205 ink sample (red), the Hewlett Packard 200 ink sample (purple), the Hewlett Packard 201 ink sample (dark blue), the Hewlett Packard 199 ink sample (light blue) and the Hewlett Packard 198 ink sample (green).

In the region between 1750 cm^{-1} and 1680 cm^{-1}, there were differences noted in the ink on paper samples ATR spectra of the Hewlett Packard 205 extractable ink sample and the four Hewlett Packard non-extractable ink samples. The Hewlett Packard 205

extractable ink on paper sample ATR spectrum lacked the large peak at approximately 1725 cm^{-1} that was observed in the four Hewlett Packard non-extractable ink on paper samples ATR spectra. The ATR spectrum for the Hewlett Packard 205 ink on paper sample was unsmooth at this location, but it appeared that instead of the large single peak observed in the Hewlett Packard non-extractable ink on paper samples ATR spectra, that there were two very small peaks present at approximately 1724 cm^{-1} and 1709 cm^{-1}. Refer to Figure 65 for the ATR spectra from 1780 cm^{-1} to 1600 cm^{-1} of the Hewlett Packard extractable and non-extractable ink samples.

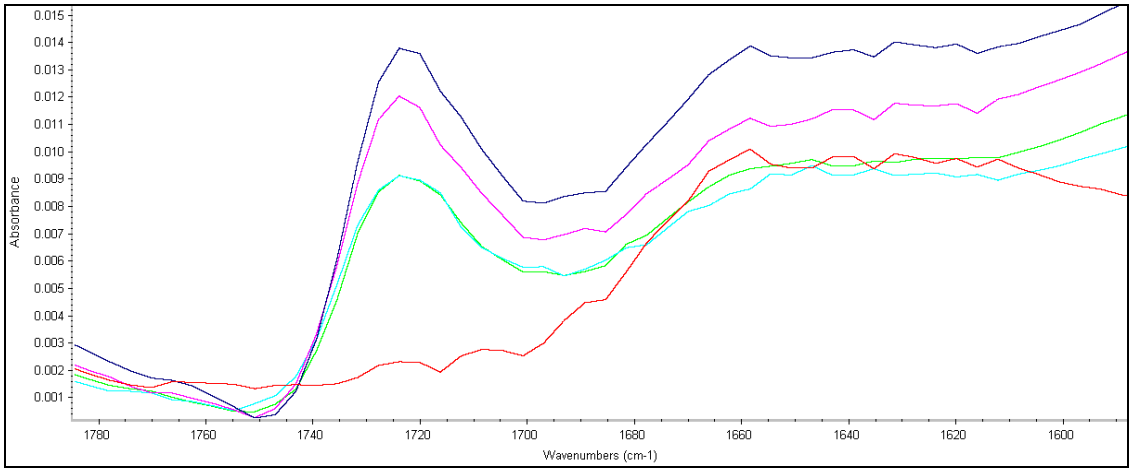

Figure 65: ATR spectra for the region between 1780 cm^{-1} and 1600 cm^{-1} of the Hewlett Packard 205 ink sample (red), the Hewlett Packard 200 ink sample (purple), the Hewlett Packard 201 ink sample (dark blue), the Hewlett Packard 199 ink sample (light blue) and the Hewlett Packard 198 ink sample (green).

In the region between 1550 cm^{-1} and 1200 cm^{-1}, the Hewlett Packard 205 extractable ink on paper sample ATR spectrum had different peak maxima positions, peak shapes and peak pattern than what was observed for the Hewlett Packard non-extractable ink on paper samples ATR spectra. In particular, there was a change in the peak maximum position of approximately 9 cm^{-1} to 15 cm^{-1}, depending on the specific Hewlett Packard non-extractable ink sample being compared, for the peak located at

approximately 1423 cm^{-1} in the Hewlett Packard 205 ink on paper sample ATR spectrum. For the Hewlett Packard 198 and Hewlett Packard 201 non-extractable ink on paper samples ATR spectra the peak was located at approximately 1408 cm^{-1}, a change in peak maximum position of approximately 15 cm^{-1} as compared to the Hewlett Packard 205 ink sample. For the Hewlett Packard 199 and Hewlett Packard 200 non-extractable ink on paper samples ATR spectra the peak was located at approximately 1414 cm^{-1}, a change in peak maximum position of approximately 9 cm^{-1} as compared to the Hewlett Packard 205 ink sample. Refer to Figure 66 for the ATR spectra from 1600 cm^{-1} to 1200 cm^{-1} of the Hewlett Packard extractable and non-extractable ink samples.

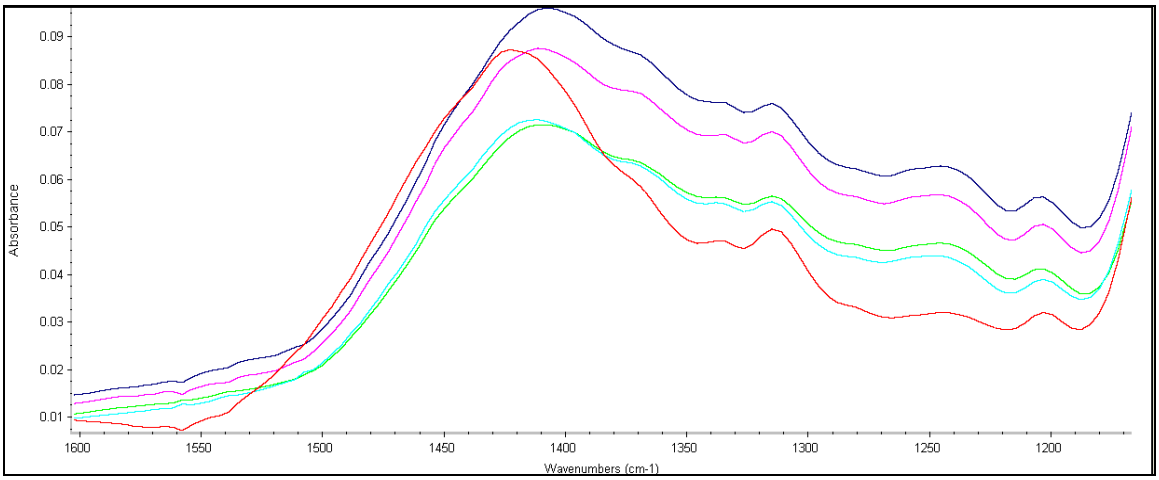

Figure 66: ATR spectra for the region between 1600 cm^{-1} and 1200 cm^{-1} of the Hewlett Packard 205 ink sample (red), the Hewlett Packard 200 ink sample (purple), the Hewlett Packard 201 ink sample (dark blue), the Hewlett Packard 199 ink sample (light blue) and the Hewlett Packard 198 ink sample (green).

In the region between 1150 cm^{-1} and 900 cm^{-1}, and in particular the area between 1080 cm^{-1} and 960 cm^{-1} where the group of three peaks were located, there was a change in the peak maxima positions, located at higher wavenumbers, for the Hewlett Packard 205 extractable ink on paper sample ATR spectrum as compared to the Hewlett Packard non-extractable ink on paper samples ATR spectra. Specifically, there was a peak

maximum position difference of approximately 4 cm^{-1} to 6 cm^{-1} for the second peak of the group of three peaks for the Hewlett Packard 205 extractable ink on paper sample ATR spectrum as compared to the four Hewlett Packard non-extractable ink on paper samples ATR spectra. The Hewlett Packard 205 extractable ink on paper sample ATR spectrum showed the top peak located at approximately 1028 cm^{-1}, as compared to the peak location of 1024 cm^{-1} for the Hewlett Packard 199 and Hewlett Packard 200 non-extractable ink samples and 1022 cm^{-1} for the Hewlett Packard 198 and Hewlett Packard 201 non-extractable ink samples. Furthermore, the group of three peaks for the Hewlett Packard 205 extractable ink sample was more symmetrical in appearance, while the group of three peaks for the four Hewlett Packard non-extractable ink samples had a more asymmetrical appearance. The four non-extractable Hewlett Packard ink on paper samples ATR spectra contained two peaks in the region between approximately 725 cm^{-1} and 685 cm^{-1}, whereas the Hewlett Packard 205 extractable ink on paper sample ATR spectrum had only a single peak in this region. The single peak of the Hewlett Packard 205 extractable ink sample, located at approximately 711 cm^{-1}, corresponded to the first peak of the two peaks of the four Hewlett Packard non-extractable ink samples. Refer to Figure 67 for the ATR spectra from 1200 cm^{-1} to 650 cm^{-1} of the Hewlett Packard extractable and non-extractable ink samples.

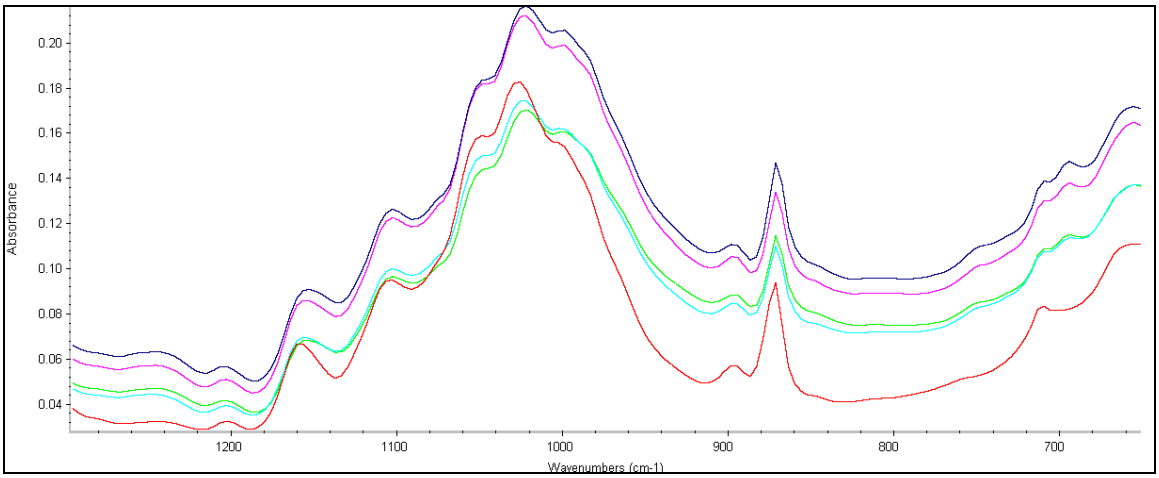

Figure 67: ATR spectra for the region between 1200 cm^{-1} and 650 cm^{-1} of the Hewlett Packard 205 ink sample (red), the Hewlett Packard 200 ink sample (purple), the Hewlett Packard 201 ink sample (dark blue), the Hewlett Packard 199 ink sample (light blue) and the Hewlett Packard 198 ink sample (green).

Three different Xerox ink samples, namely the Xerox 13, Xerox 24 and Xerox 244 ink samples, were used in this study. All three of the Xerox ink samples were classified as being non-extractable ink samples. When examining the ink on paper ATR spectra of the three Xerox non-extractable ink samples, slight differences were noted in the peak shape and the peak maximum position in the region between 3600 cm^{-1} and 2700 cm^{-1}, especially in the region of 3000 cm^{-1} and 2800 cm^{-1}. The peak shape for the peak located at approximately 2883 cm^{-1} in the Xerox 24 and Xerox 244 ink on paper samples ATR spectra was rounded and symmetrical, whereas for the Xerox 13 ink on paper sample ATR spectrum the peak was tilted to the left and was located at approximately 2895 cm^{-1}, a difference in the peak maximum position of about 12 cm^{-1}. Refer to Figure 68 for the ATR spectra from 3600 cm^{-1} to 2600 cm^{-1} of the Xerox non-extractable ink samples.

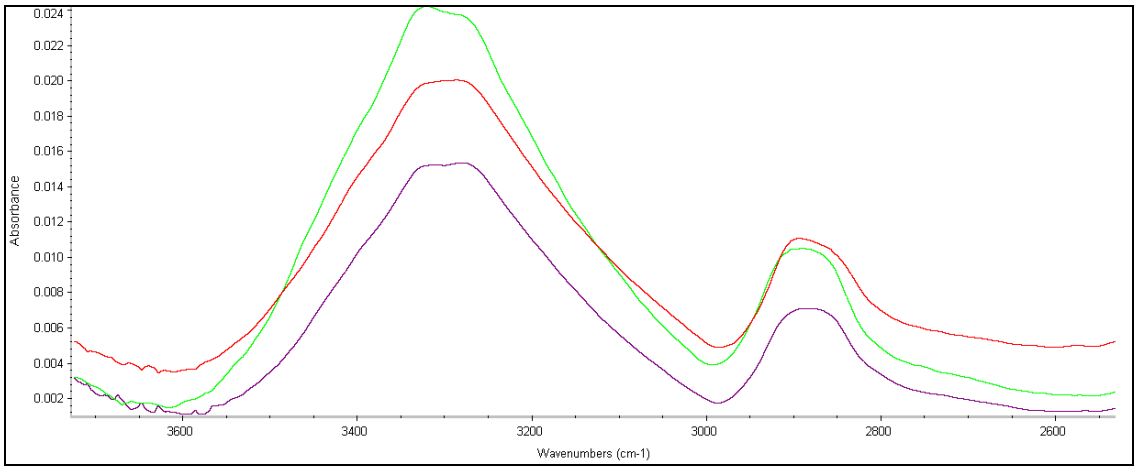

Figure 68: ATR spectra for the region between 3600 cm^{-1} and 2600 cm^{-1} of the Xerox 13 ink sample (red), the Xerox 244 ink sample (green) and the Xerox 24 ink sample (purple).

In the region between 1740 cm^{-1} and 1540 cm^{-1} there was a slight difference in the peak pattern for the Xerox 244 ink on paper sample ATR spectrum as compared to the peak patterns of the Xerox 13 and Xerox 24 ink on paper samples ATR spectra. In particular, there were changes in the peak maxima positions and an extra peak present in this region for the Xerox 244 ink on paper sample when compared to the ink on paper samples ATR spectra of the Xerox 13 and Xerox 24 ink samples. The Xerox 244 ink on paper sample ATR spectrum had three peaks at approximately 1658 cm^{-1}, 1626 cm^{-1} and 1592 cm^{-1}, whereas the Xerox 13 and Xerox 24 ink on paper samples ATR spectra had two peaks located in this region at approximately 1648 cm^{-1} and 1585 cm^{-1}. This was a difference in the peak maxima positions in the Xerox 244 ink on paper sample ATR spectrum of between 7 cm^{-1} and 10 cm^{-1}, depending on the peak. There was some noise or unsmoothness of the ink on paper ATR spectra in this region, but it did not effect the peak identifications for these three Xerox ink samples. Refer to Figure 69 for the ATR spectra from 1740 cm^{-1} to 1520 cm^{-1} of the Xerox non-extractable ink samples.

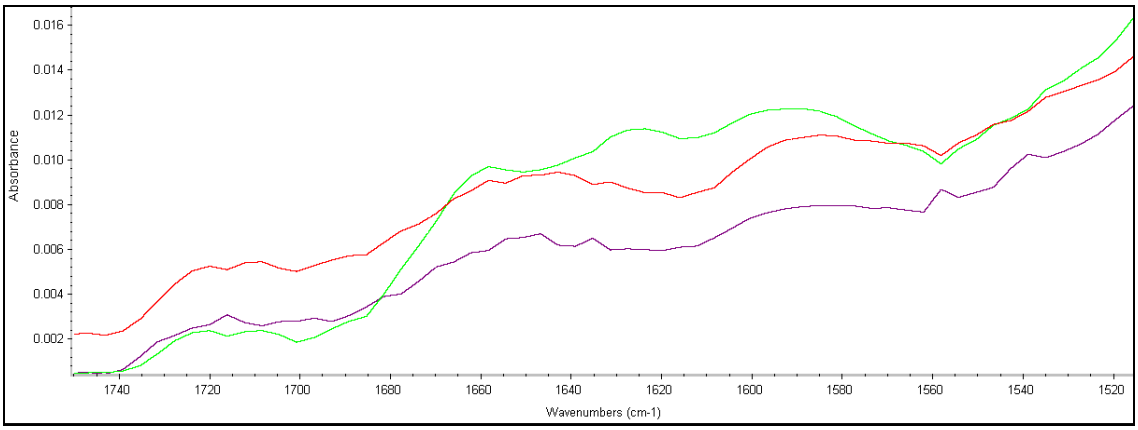

Figure 69: ATR spectra for the region between 1740 cm^{-1} and 1520 cm^{-1} of the Xerox 13 ink sample (red), the Xerox 244 ink sample (green) and the Xerox 24 ink sample (purple).

In the region between 1550 cm^{-1} and 1200 cm^{-1}, the Xerox 244 ink on paper sample ATR spectrum was back in agreement with the Xerox 24 ink on paper sample ATR spectrum; however the Xerox 13 ink on paper sample ATR spectrum now showed a change in the peak maximum position, especially in the region between 1425 cm^{-1} and 1350 cm^{-1}. The Xerox 13 ink on paper sample ATR spectrum showed a change in the peak maximum position to a lower wavenumber, as compared to the ink on paper samples ATR spectra of the Xerox 24 and Xerox 244 ink samples. The peak was located at approximately 1398 cm^{-1} in the Xerox 13 ink on paper sample ATR spectrum, as compared to 1403 cm^{-1} and 1405 cm^{-1} in the Xerox 24 and Xerox 244 ink on paper samples ATR spectra respectively. This was a difference of 5 cm^{-1} to 7 cm^{-1}, depending on the sample. All three of the Xerox ink on paper samples ATR spectra showed a peak at approximately 1370 cm^{-1}, however the shape and pattern immediately before the peak was slightly different for the Xerox 13 ink sample as compared to the other two Xerox ink samples. By approximately 1315 cm^{-1} the three ink on paper samples ATR spectra

were back in alignment with each other. Refer to Figure 70 for the ATR spectra from 1600 cm^{-1} to 1150 cm^{-1} of the Xerox non-extractable ink samples.

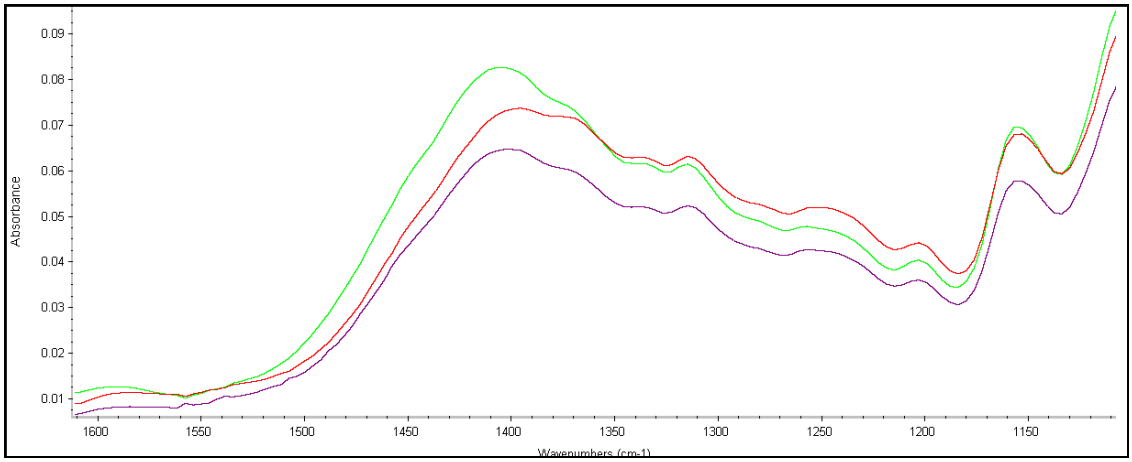

Figure 70: ATR spectra for the region between 1600 cm^{-1} and 1150 cm^{-1} of the Xerox 13 ink sample (red), the Xerox 244 ink sample (green) and the Xerox 24 ink sample (purple).

In the region between 1100 cm^{-1} and 900 cm^{-1}, and especially in the region between 1080 cm^{-1} and 960 cm^{-1} where the group of three peaks were located, the Xerox 244 ink on paper sample ATR spectrum had a slightly different peak shape on the tailing end of the third peak of the group of three peaks when compared to the ink on paper samples ATR spectra of the Xerox 13 and the Xerox 24 ink samples. The third peak in the group of three peaks for the Xerox 244 ink sample decreased in absorbance faster than the same peak in the Xerox 13 and Xerox 24 ink samples, producing a peak that was not as wide as the peak found in the latter two Xerox ink on paper samples. The second peak in the group of three peaks in the Xerox 244 ink on paper sample ATR spectrum had a peak maximum position difference of approximately 2 cm^{-1}, as compared the corresponding peak in the Xerox 13 and Xerox 24 ink on paper samples ATR spectra. The second peak in the group of three peaks for the Xerox 244 ink sample was located at approximately 1022 cm^{-1}, and for the Xerox 13 and Xerox 24 ink samples this peak was

located at approximately 1020 cm^{-1}. Refer to Figure 71 for the ATR spectra from 1150 cm^{-1} to 650 cm^{-1} of the Xerox non-extractable ink samples.

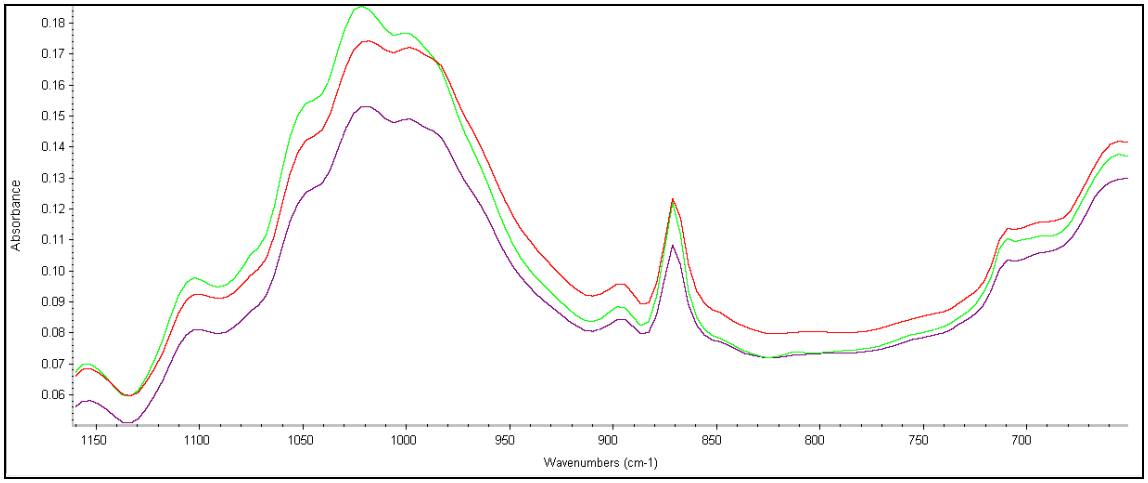

Figure 71: ATR spectra for the region between 1150 cm^{-1} and 650 cm^{-1} of the Xerox 13 ink sample (red), the Xerox 244 ink sample (green) and the Xerox 24 ink sample (purple).

Two Kodak ink samples were used in the study. One of the ink samples, the Kodak 17 ink sample, was a non-extractable ink sample and the other, the Kodak 22 ink sample, was an extractable ink sample. These two ink samples produced different ink on paper samples ATR spectra, which allowed them to be distinguished from each other. In particular, in the region between 3600 cm^{-1} and 2700 cm^{-1}, the ink on paper samples ATR spectra had different peak shapes, peak patterns and peak maxima positions. The main peak in this area showed a difference in the peak maximum position of approximately 13 cm^{-1} between the two Kodak ink on paper samples ATR spectra. In the Kodak 22 extractable ink on paper sample ATR spectrum, the peak was located at approximately 3332 cm^{-1}, whereas in the Kodak 17 non-extractable ink on paper sample ATR spectrum the peak was located at approximately 3319 cm^{-1}. In addition, the peak shape of this particular peak was also different for these two samples. In the region between 3600 cm^{-1} and 3000 cm^{-1} were actually two peaks present, with the first peak located at

approximately 3332 cm^{-1} for the Kodak 22 ink sample and 3319 cm^{-1} for the Kodak 17 ink sample and the second peak located at approximately 3289 cm^{-1} for both Kodak ink samples. The Kodak 17 non-extractable ink on paper sample ATR spectrum showed a flattened transition between the two peaks, with only a small valley present between the peaks. The Kodak 22 extractable ink on paper sample ATR spectrum, on the other hand, had a sharper transition between the two peaks. In the Kodak 22 extractable ink on paper sample ATR spectrum, the first peak was higher and more pronounced than the second peak, which was present on the tailing end of the first peak. In addition, in the region between 3000 cm^{-1} and 2800 cm^{-1}, the Kodak 22 extractable ink on paper ATR spectrum showed a single peak at approximately 2895 cm^{-1}, whereas for the Kodak 17 non-extractable ink sample, the ATR spectrum showed two peaks present in this region. The two peaks in the Kodak 17 ink on paper sample ATR spectrum were located at approximately 2909 cm^{-1} and 2851 cm^{-1}, with the first peak more pronounced than the second peak. Refer to Figure 72 for the ATR spectra from 3600 cm^{-1} to 2600 cm^{-1} of the Kodak ink samples.

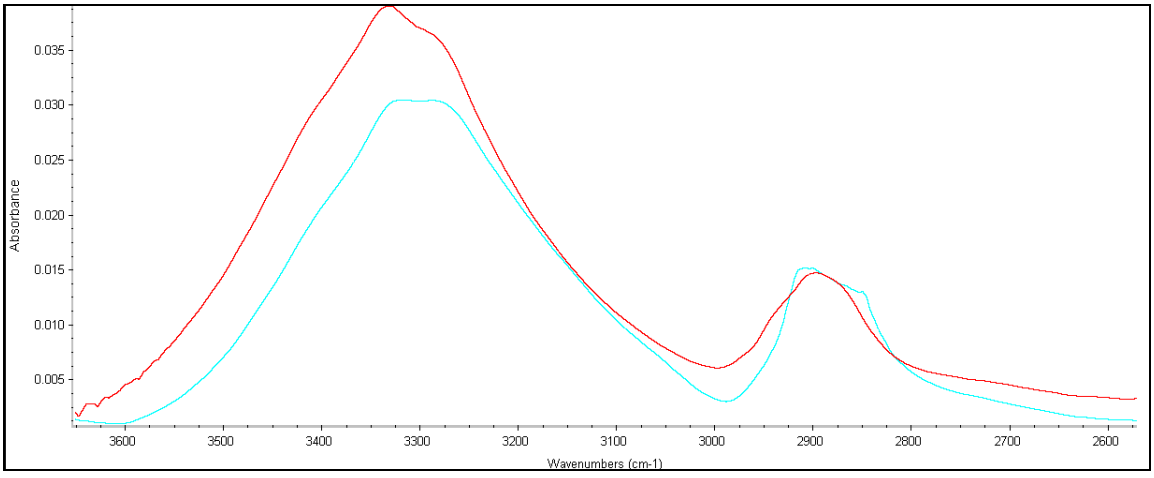

Figure 72: ATR spectra for the region between 3600 cm^{-1} and 2600 cm^{-1} of the Kodak 22 ink sample (red) and the Kodak 17 ink sample (blue).

In the region between 1850 cm^{-1} and 1500 cm^{-1} some changes in the peak maxima positions were noted between the two Kodak ink samples. The Kodak 22 extractable ink on paper sample ATR spectrum had some noise in this region, more than the Kodak 17 non-extractable ink on paper sample ATR spectrum; however the peaks in the Kodak 22 ATR spectrum could still be identified. In the Kodak 22 extractable ink on paper sample ATR spectrum the peaks were located at approximately 1797 cm^{-1} and 1656 cm^{-1}, whereas in the Kodak 17 non-extractable ink on paper sample ATR spectrum the peaks were located at approximately 1795 cm^{-1} and 1644 cm^{-1} respectively. This was a difference in the peak maxima positions for the two Kodak ink on paper samples of approximately 2 cm^{-1} and 12 cm^{-1}, respectively. In addition, the Kodak 17 ink on paper sample ATR spectrum had a minor peak at approximately 1539 cm^{-1} that was not present in the Kodak 22 ink on paper sample ATR spectrum. Refer to Figure 73 for the ATR spectra from 1850 cm^{-1} to 1500 cm^{-1} of the Kodak ink samples.

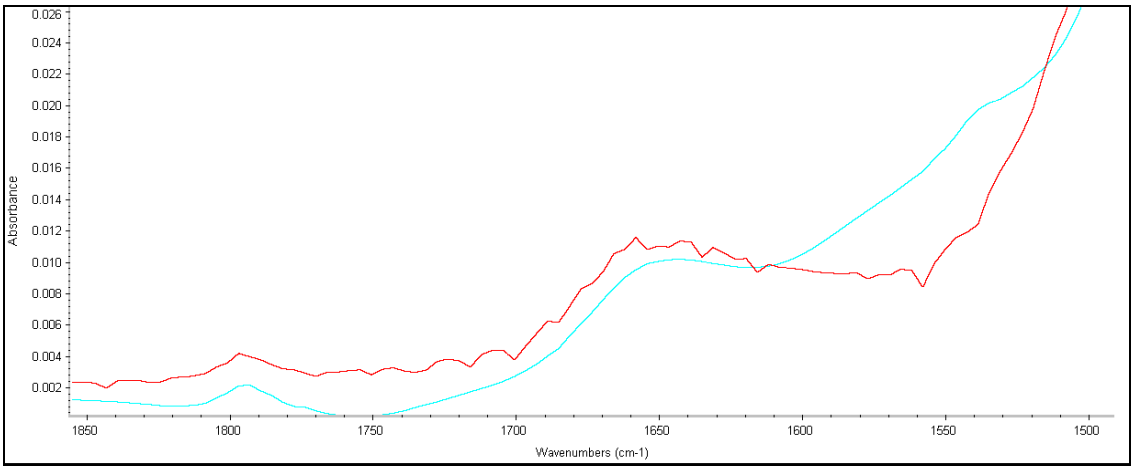

Figure 73: ATR spectra for the region between 1850 cm^{-1} and 1500 cm^{-1} of the Kodak 22 ink sample (red) and the Kodak 17 ink sample (blue).

In the region between 1500 cm^{-1} and 1200 cm^{-1}, the Kodak 22 extractable ink on paper sample ATR spectrum showed a peak at approximately 1424 cm^{-1}, whereas in the

Kodak 17 non-extractable ink on paper sample ATR spectrum this peak was located at approximately 1405 cm^{-1}. This was a difference in the peak maximum position of approximately 19 cm^{-1} between the Kodak 22 extractable ink sample and the Kodak 17 non-extractable ink sample. The other peaks in this region were similar between the two Kodak ink on paper samples ATR spectra, with changes in the peak maxima positions ranging from 1 cm^{-1} to 2 cm^{-1} between the Kodak 22 extractable ink sample and the Kodak 17 non-extractable ink sample. The overall peak pattern was similar in the region between 1500 cm^{-1} and 1200 cm^{-1} for the Kodak 17 non-extractable ink on paper sample ATR spectrum and the Kodak 22 extractable ink on paper sample ATR spectrum, with the only difference being the changes in the peak maxima positions noted previously. Refer to Figure 74 for the ATR spectra from 1500 cm^{-1} to 1200 cm^{-1} of the Kodak ink samples.

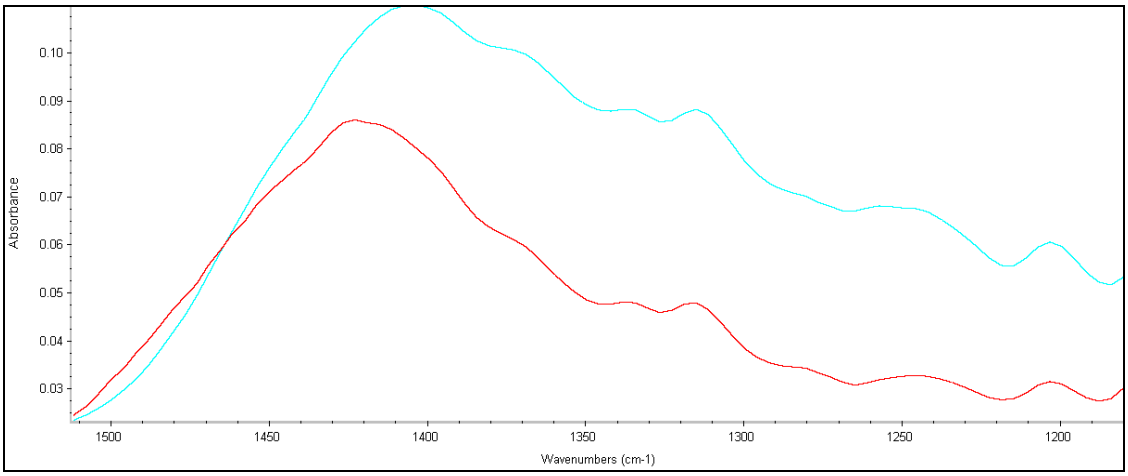

Figure 74: ATR spectra for the region between 1500 cm^{-1} and 1200 cm^{-1} of the Kodak 22 ink sample (red) and the Kodak 17 ink sample (blue).

In the region between 1200 cm^{-1} and 700 cm^{-1}, the two ATR spectra had similar peak shape and peak patterns, with changes in the peak maxima positions the main difference between the two Kodak ink on paper samples ATR spectra. The peaks in the

Kodak 22 extractable ink on paper sample ATR spectrum were located at slightly higher wavenumbers as compared to the same peaks in the Kodak 17 non-extractable ink on paper sample ATR spectrum. This was a change in the peak maxima positions of between 2 cm^{-1} and 4 cm^{-1}, depending on the specific peak being compared. The peaks in the Kodak 22 extractable ink on paper sample ATR spectrum were located at approximately 1203 cm^{-1}, 1159 cm^{-1}, 1106 cm^{-1}, 1053.5 cm^{-1}, 1026 cm^{-1}, 1001 cm^{-1}, 897 cm^{-1}, 872 cm^{-1}, 711 cm^{-1} and 661 cm^{-1}. This corresponded to the peak maxima positions in the Kodak 17 non-extractable ink on paper sample ATR spectrum of approximately 1203 cm^{-1}, 1156 cm^{-1}, 1104 cm^{-1}, 1050 cm^{-1}, 1022 cm^{-1}, 999 cm^{-1}, 897 cm^{-1}, 872 cm^{-1}, 710 cm^{-1} and 658 cm^{-1}, respectively. The group of three peaks in the region between 1080 cm^{-1} and 960 cm^{-1} showed the greatest difference in the peak maxima positions between the two Kodak ink samples. Refer to Figure 75 for the ATR spectra from 1200 cm^{-1} to 600 cm^{-1} of the Kodak ink samples.

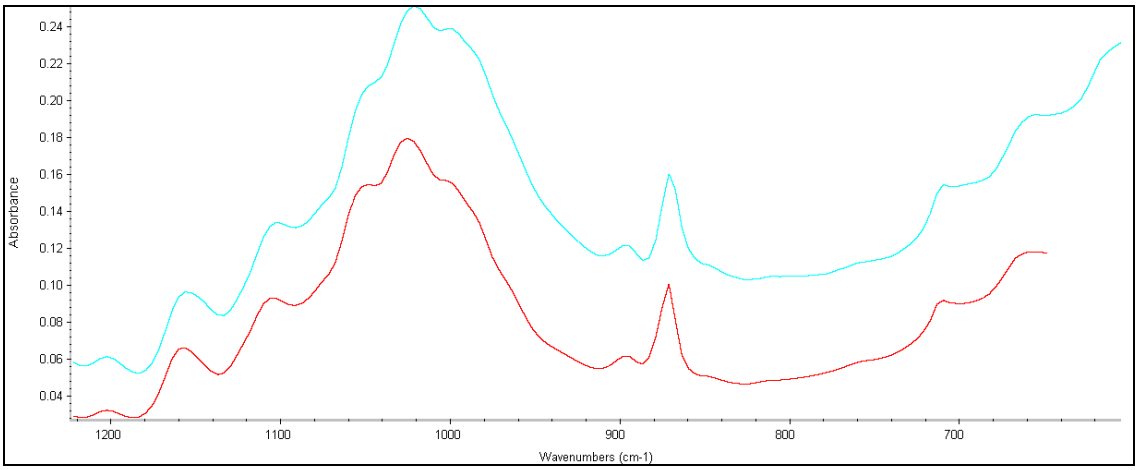

Figure 75: ATR spectra for the region between 1200 cm^{-1} and 600 cm^{-1} of the Kodak 22 ink sample (red) and the Kodak 17 ink sample (blue).

There was only one type of Okidata ink sample used in this study, namely the Okidata 04 ink sample, which was classified as an extractable ink sample. The Okidata

04 ink sample was compared to the other extractable ink samples to establish its peak patterns and peak shapes, and its agreement with the ink on paper ATR spectra produced by the other extractable ink samples. As such, the ink on paper ATR spectra of the twenty-three extractable ink samples of the manufacturers Epson, Canon, Kodak and Hewlett Packard were compared to the single Okidata 04 ink on paper sample ATR spectrum, for a total of twenty-four extractable ink samples. In the region between 3600 cm^{-1} and 2800 cm^{-1}, all of the extractable ink on paper samples ATR spectra had similar peak shapes and peak pattern. Additionally, the region between 1500 cm^{-1} and 1200 cm^{-1} showed a high degree of similarity between the extractable ink samples, with the exception of the Canon ink samples discussed previously with regards to the differences in peak maxima positions exhibited within the different Canon extractable ink samples. In the region between 1150 cm^{-1} and 700 cm^{-1}, the ATR spectra were similar in peak pattern and peak shape, except where previously discussed. The only region that showed differences between the twenty-three extractable ink on paper samples ATR spectra was the region between 1700 cm^{-1} and 1560 cm^{-1}. As noted before, some of the extractable ink samples, especially the Canon ink samples, showed varied peak shapes and peak patterns in this region. In addition, some of the Epson extractable ink samples showed some changes in the peak maxima positions for the peaks located in this region. Refer to Figure 76 for the ATR spectra of all twenty-four extractable ink samples.

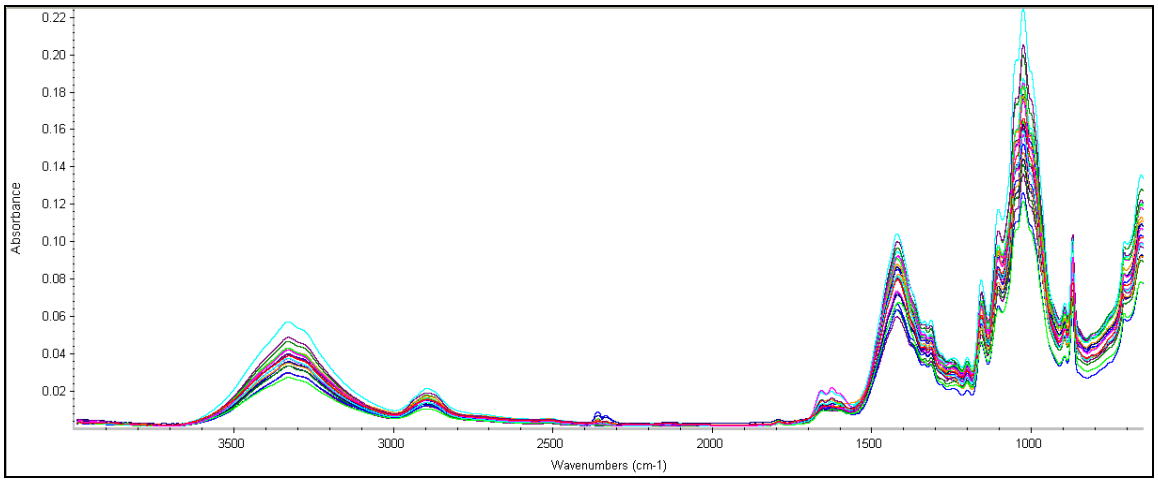

Figure 76: ATR spectra for the region between 3600 cm^{-1} and 600 cm^{-1} for all twenty-four extractable ink samples

The problem with the above analysis was the large number of ink samples being compared at one time. The ink on paper ATR spectra of twenty-four ink samples did not allow for the subtle differences within the twenty-four extractable ink samples to be noted. As such, the number of extractable ink samples being compared was reduced. The ATR spectral data for the ink on paper samples were examined to determine if it was possible to group specific ink samples together based on their similar results. For the extractable ink samples, it was possible to place the ink samples into eight groups based on their ink on paper ATR data. The first group contained the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples, the second group consisted of the Epson 30 ink sample, the third group consisted of the Epson 156 ink sample, the fourth group consisted of the Canon 217, Canon 223, Canon 282, Canon 306, Canon 318, Canon 327, Canon 348 and Canon 384 ink samples, the fifth group consisted of the Canon 402 and Canon 522 ink samples, the sixth group consisted of the Kodak 22 ink sample, the seventh group consisted of the Okidata 04 ink sample and the eighth group consisted of the Hewlett Packard 205 ink sample. The fourth group,

which consisted of the eight Canon ink samples, showed the greatest variability in their ATR spectra, however, the overall ink on paper ATR spectra did not differ significantly and the ATR spectra were similar enough to be considered as a single group.

For a true comparison, fourteen extractable ink samples were selected that represented the eight groups listed above. The ten Epson ink samples were reduced to five, representing the variations in their ink on paper ATR spectra, and the eleven Canon ink samples were reduced to six, representing the variations in their ink on paper ATR spectra. In addition to the above, the Okidata 04 ink sample, the Kodak 22 ink sample and the Hewlett Packard 205 ink sample were also included for this comparison. The Epson and Canon ink samples used for the comparison included the Epson 30, Epson 156, Epson 93, Epson 120, Epson 66, Canon 223, Canon 282, Canon 318, Canon 522, Canon 402 and Canon 384 ink samples. Overall the extractable ink on paper samples ATR spectra had similar peak pattern and peak shape, but there were some differences present between these ink samples. In the region between 3500 cm^{-1} and 3100 cm^{-1}, the fourteen extractable ink on paper samples ATR spectra were similar in peak shape and peak pattern. The location of the peak maxima positions for the peaks in this region were consistent between the various ink samples, with peak maxima variations of approximately ± 1 cm^{-1}. Refer to Figure 77 for the ATR spectra from 3550 cm^{-1} to 3050 cm^{-1} of the fourteen extractable ink samples.

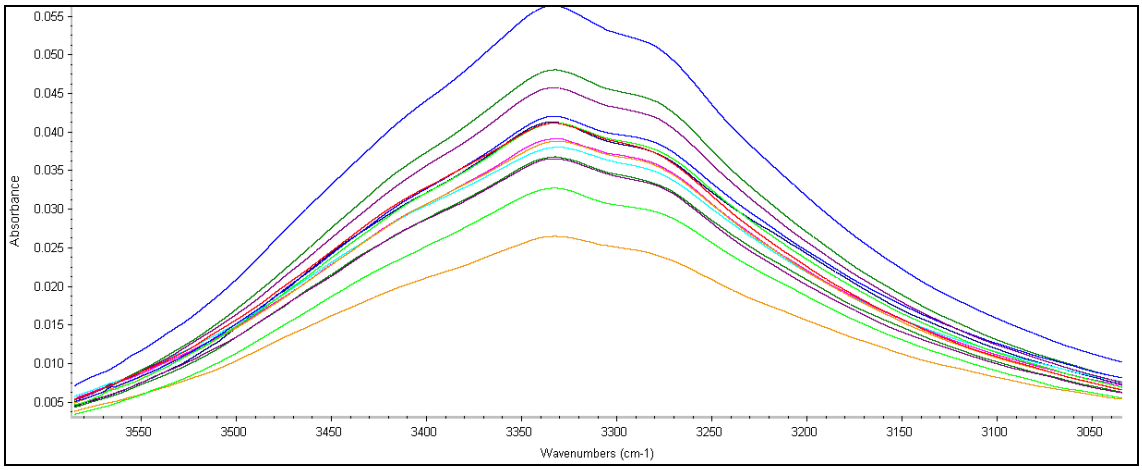

Figure 77: ATR spectra for the region between 3550 cm^{-1} and 3050 cm^{-1} of the Canon 223 ink sample (top blue), the Epson 156 ink sample (top dark green), the Epson 93 ink sample (top dark purple), the Epson 120 ink sample (second blue), the Canon 522 ink sample (dark blue), the Epson 66 ink sample (top light green), the Hewlett Packard 205 ink sample (red), the Kodak 22 ink sample (light purple), the Epson 30 ink sample (top orange), the Okidata 04 ink sample (light blue), the Canon 402 ink sample (second dark green), the Canon 282 ink sample (second dark purple), the Canon 318 ink sample (second light green) and the Canon 384 ink sample (second orange).

In the region between 3000 cm^{-1} and 2800 cm^{-1} there were some slight pattern changes present in the fourteen extractable ink on paper samples ATR spectra. The fourteen extractable ink samples could be placed into one of two groups based on their ink on paper ATR spectra. The first group contained a single peak in this region that was symmetrical in shape, while the second group consisted of a main peak in this region with a minor secondary peak attached to the leading edge of the main peak. For some of the ink samples in the second group, the secondary peak was more pronounced than those found in the other ink samples of the same group. The samples that contained only one symmetrical peak in this region included the Okidata 04, Canon 522, Canon 402, Canon 384 and Epson 30 ink samples. The samples that contained the one main peak and a minor secondary peak included the Kodak 22, Hewlett Packard 205, Epson 156, Epson 66, Epson 93, Epson 120, Canon 223, Canon 282 and Canon 318 ink sample. Refer to

Figure 78 for the ATR spectra from 3050 cm^{-1} to 2650 cm^{-1} of the fourteen extractable ink samples.

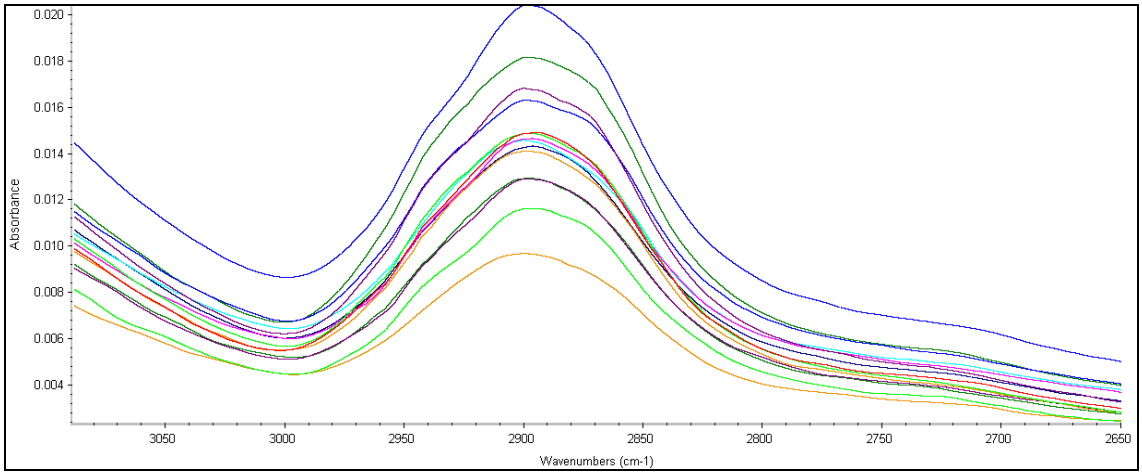

Figure 78: ATR spectra for the region between 3050 cm^{-1} and 2650 cm^{-1} of the Canon 223 ink sample (top blue), the Epson 156 ink sample (top dark green), the Epson 93 ink sample (top dark purple), the Epson 120 ink sample (second blue), the Canon 522 ink sample (dark blue), the Epson 66 ink sample (top light green), the Hewlett Packard 205 ink sample (red), the Kodak 22 ink sample (light purple), the Epson 30 ink sample (top orange), the Okidata 04 ink sample (light blue), the Canon 402 ink sample (second dark green), the Canon 282 ink sample (second dark purple), the Canon 318 ink sample (second light green) and the Canon 384 ink sample (second orange).

For the group of extractable ink samples that contained a single peak in the region between 3000 cm^{-1} and 2800 cm^{-1}, the five extractable ink on paper samples ATR spectra showed some differences in the peak maximum position. For the Okidata 04 ink sample the peak was located at approximately 2900 cm^{-1}, for the Canon 522 ink sample the peak was located at approximately 2896 cm^{-1}, for the Canon 402 ink sample the peak was located at approximately 2898 cm^{-1}, and for the Canon 384 and Epson 30 ink samples the peak was located at approximately 2899 cm^{-1}. This was a difference in the peak maximum position of upwards of 4 cm^{-1} depending on the extractable ink sample. Refer to Figure 79 for the ATR spectra from 3050 cm^{-1} to 2750 cm^{-1} of the first group of extractable ink samples.

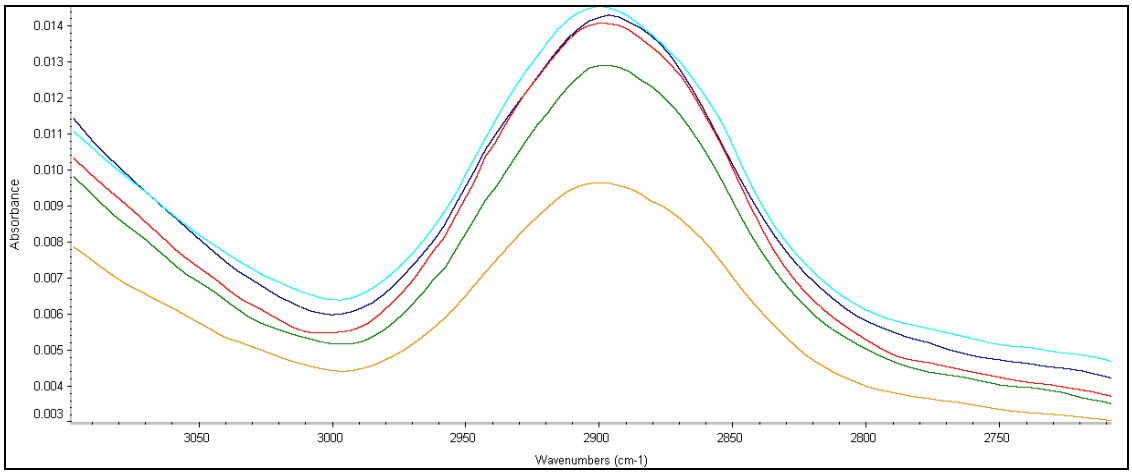

Figure 79: ATR spectra for the region between 3050 cm^{-1} and 2750 cm^{-1} of the Okidata 04 ink sample (light blue), the Epson 30 ink sample (red), the Canon 522 ink sample (dark blue), the Canon 402 ink sample (green) and the Canon 384 ink sample (orange).

For the second group of extractable ink samples that contained the major peak and the minor secondary peak in the region between 3000 cm^{-1} and 2800 cm^{-1}, there were some differences in the peak maxima position noted between the different extractable ink samples. The differences in the peak maxima positions were more significant with the main peak in this region. In particular, the main peak was located at approximately 2898 cm^{-1} for the Canon 223, Canon 282 and Epson 120 ink samples, at approximately 2897 cm^{-1} for the Epson 156, Kodak 22 and Canon 318 ink samples, at approximately 2899 cm^{-1} for the Epson 93 and Epson 66 ink samples and at approximately 2896 cm^{-1} for the Hewlett Packard 205 ink sample. This was a difference of upwards of 3 cm^{-1} depending on the extractable ink sample. Refer to Figure 80 for the ATR spectra from 3050 cm^{-1} to 2750 cm^{-1} of the second group of extractable ink samples.

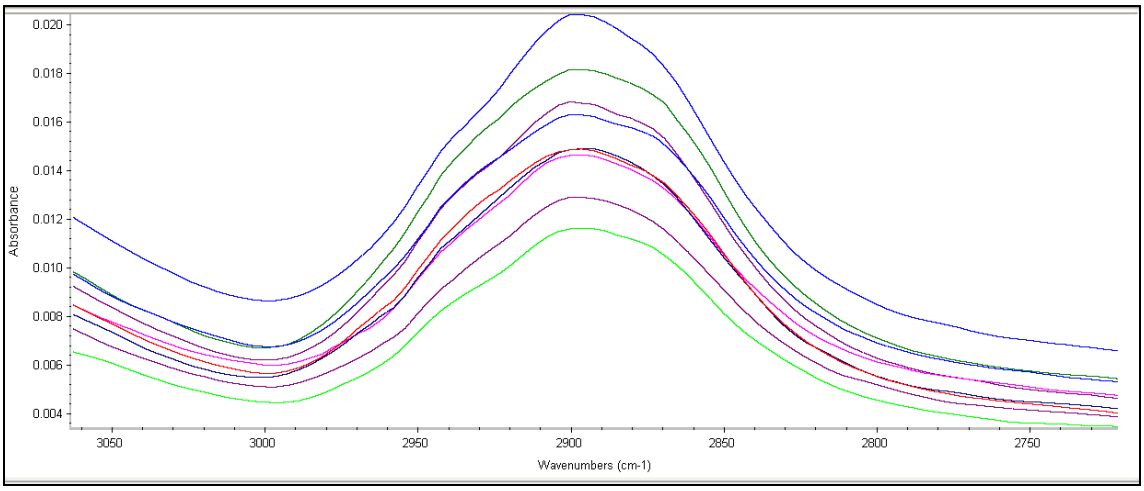

Figure 80: ATR spectra for the region between 3050 cm^{-1} and 2750 cm^{-1} of the Canon 223 ink sample (top blue), the Epson 156 ink sample (top dark green), the Epson 93 ink sample (top dark purple), the Epson 120 ink sample (second blue), the Epson 66 ink sample (red), the Hewlett Packard 205 ink sample (dark blue), the Kodak 22 ink sample (light purple), the Canon 282 ink sample (second dark purple) and the Canon 318 ink sample (second light green).

In the region between 1750 cm^{-1} and 1550 cm^{-1}, and especially in the region between 1670 cm^{-1} and 1625 cm^{-1}, the ink on paper ATR spectra for the various extractable ink samples were not as smooth as in the other regions of the ATR spectra, however useful information could still be obtained. For the fourteen extractable ink samples in this region, there were either two peaks, three peaks or four peaks present in the ATR spectra. The Canon 522, Canon 402, Canon 384 and Canon 318 extractable ink on paper samples ATR spectra all showed two peaks in this region, with the two peaks located at approximately 1659 cm^{-1} and 1628 cm^{-1}. The Canon 223, Canon 282, Hewlett Packard 205 and Epson 156 extractable ink on paper samples ATR spectra all showed three peaks in this region, with the three peaks located at approximately 1661 cm^{-1}, 1641 cm^{-1} and 1629 cm^{-1}. The Kodak 22 extractable ink on paper sample ATR spectrum also showed three peaks in this region, but these peaks were located at slightly different wavenumbers from the peaks listed previously. For the Kodak 22 ink sample, the three

peaks were located at approximately 1658 cm^{-1}, 1642 cm^{-1} and 1631 cm^{-1}, respectively. The Epson 66 extractable ink on paper sample ATR spectrum also contained three peaks in this region, but again these three peaks were located at different wavenumbers from the previously discussed three peak samples. In the Epson 66 extractable ink on paper sample ATR spectrum, the three peaks were located at approximately 1654 cm^{-1}, 1646 cm^{-1} and 1636 cm^{-1}, respectively. The Epson 93 and Epson 120 extractable ink on paper samples ATR spectra showed four peaks in this region, with the four peaks located at approximately 1658 cm^{-1}, 1648 cm^{-1}, 1638 cm^{-1} and 1628 cm^{-1}. The Epson 30 extractable ink on paper sample ATR spectrum also contained four peaks in this region, but these four peaks were located at slightly different wavenumbers from the peaks listed previously for the Epson 93 and Epson 120 ink samples. In the Epson 30 extractable ink on paper sample ATR spectrum the four peaks were located at approximately 1656 cm^{-1}, 1650 cm^{-1}, 1640 cm^{-1} and 1633 cm^{-1}, respectively, with the last peak being significantly smaller than the previous three. The other ink sample that exhibited four peaks in this region was the Okidata 04 ink sample. However for the Okidata 04 extractable ink on paper sample ATR spectrum the peaks were located at slightly different wavenumbers from the peaks listed previously for the Epson 30, Epson 93 and Epson 120 ink samples. The four peaks in the Okidata 04 extractable ink on paper sample ATR spectrum were located at approximately 1651 cm^{-1}, 1642 cm^{-1}, 1632 cm^{-1} and 1620 cm^{-1}, respectively. In addition, these four peaks in the Okidata 04 ink sample were very small and subtle, not the pronounced peaks like those illustrated for some of the other extractable ink samples. A concern was that these peaks could be due to noise or an unsmooth spectrum; however the rest of the Okidata 04 ink on paper sample ATR spectrum was smooth so this peak

pattern could not be due solely to the noise in this region. Refer to Figure 81 for the ATR spectra from 1740 cm^{-1} to 1540 cm^{-1} of the fourteen extractable ink samples.

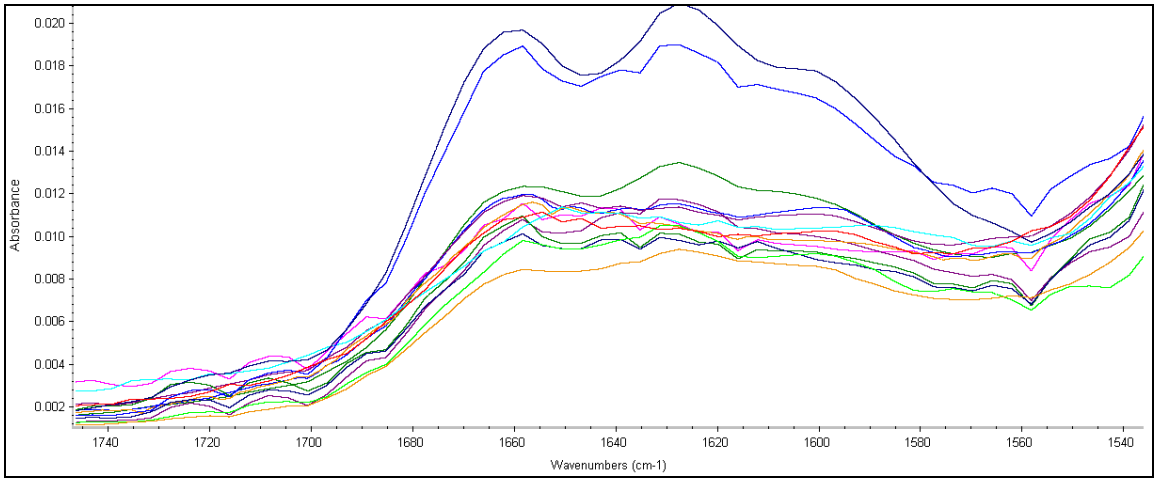

Figure 81: ATR spectra for the region between 1740 cm^{-1} and 1540 cm^{-1} of the Canon 522 ink sample (top dark blue), the Canon 223 ink sample (top blue), the Canon 402 ink sample (top dark green), the Epson 93 ink sample (top dark purple), the Epson 120 ink sample (second blue), the Canon 282 ink sample (second dark purple), the Okidata 04 ink sample (light blue), the Epson 66 ink sample (red), the Hewlett Packard 205 ink sample (second dark blue), the Kodak 22 ink sample (light purple), the Epson 30 ink sample (top orange), the Epson 156 ink sample (second dark green), the Canon 318 ink sample (light green) and the Canon 384 ink sample (second orange).

In the region between 1550 cm^{-1} and 1275 cm^{-1}, the fourteen extractable ink on paper samples ATR spectra had similar overall peak patterns, but there were some differences in the peak maxima positions and the peak shapes for the ink samples in this region. In particular, the Canon 384 ink sample had a peak at approximately 1416 cm^{-1}, the Hewlett Packard 205 ink sample had a peak at approximately 1419 cm^{-1}, the Epson 156 and Epson 66 ink samples had a peak at approximately 1421 cm^{-1}, the Epson 93, Epson 30, Canon 522, Canon 402 and Okidata 04 ink samples had a peak at approximately 1422 cm^{-1}, the Epson 120 ink sample had a peak at approximately 1423 cm^{-1}, and the Canon 223, Canon 318, Canon 282 and Kodak 22 ink samples had a peak at approximately 1424 cm^{-1}. This was a difference in the peak maximum position of

upwards of 8 cm^{-1}, depending on the sample. In addition to the differences in the peak maxima positions, some of the extractable ink samples also showed some peak shape changes in this region. The Canon 522, Canon 402, Canon 282 and Canon 318 ink samples had a wider overall peak shape with an elongated tailing edge as compared to the other extractable ink samples. The Hewlett Packard 205 ink sample had a wider and flatter peak than the other extractable ink samples, whereas the peaks present in the Okidata 04, Epson 30, Epson 66 and Epson 93 ink samples were more uniform and symmetrical in appearance. The Canon 384 ink sample was also symmetrical in appearance; however this peak showed the greatest difference in peak position, as much as 8 cm^{-1}, depending on the extractable ink sample. Refer to Figure 82 for the ATR spectra from 1600 cm^{-1} to 1200 cm^{-1} of the fourteen extractable ink samples.

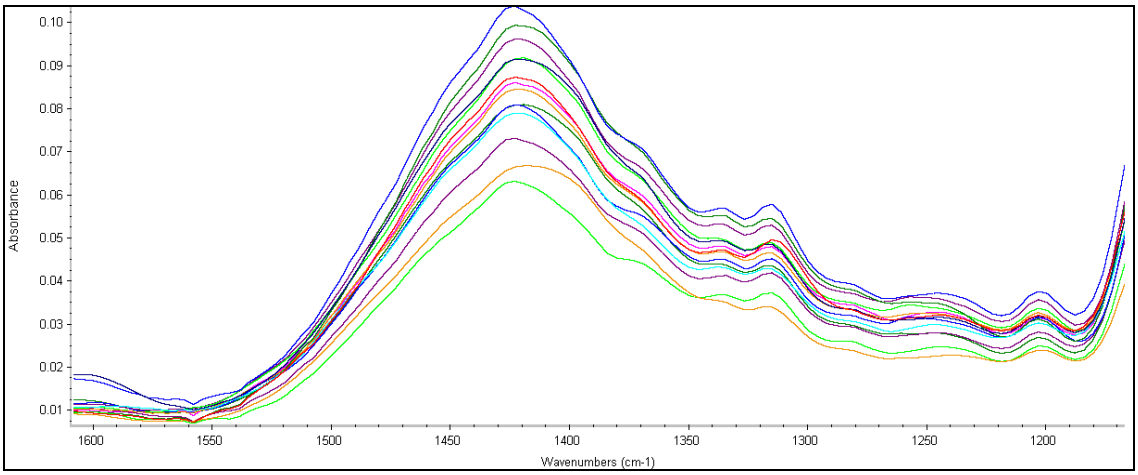

Figure 82: ATR spectra for the region between 1600 cm^{-1} and 1200 cm^{-1} of the Canon 223 ink sample (top blue), the Epson 156 ink sample (top dark green), the Epson 93 ink sample (top dark purple), the Canon 522 ink sample (dark blue), the Epson 66 ink sample (top light green), the Hewlett Packard 205 ink sample (red), the Kodak 22 ink sample (light purple), the Epson 30 ink sample (top orange), the Canon 402 ink sample (second dark green), the Epson 120 ink sample (second blue), the Okidata 04 ink sample (light blue), the Canon 282 ink sample (second dark purple), the Canon 384 ink sample (second orange) and the Canon 318 ink sample (second light green).

In the region between 1175 cm^{-1} and 1135 cm^{-1} the majority of the extractable ink on paper samples ATR spectra contained a peak at approximately 1159 cm^{-1}. The Epson 120 ink sample was the only ink sample to show a difference in the peak maximum position, and this difference was minor. The Epson 120 ink sample contained a peak in this region which was only 1 cm^{-1} lower in wavenumber as compared to the other thirteen extractable ink samples. For the group of three peaks in the region between 1080 cm^{-1} and 960 cm^{-1}, the ink on paper samples ATR spectra were similar in peak shape and peak pattern for all of the fourteen extractable ink samples, with minor differences in the peak maxima positions of approximately ± 1 cm^{-1}. Refer to Figure 83 for the ATR spectra from 1200 cm^{-1} to 700 cm^{-1} of the fourteen extractable ink samples.

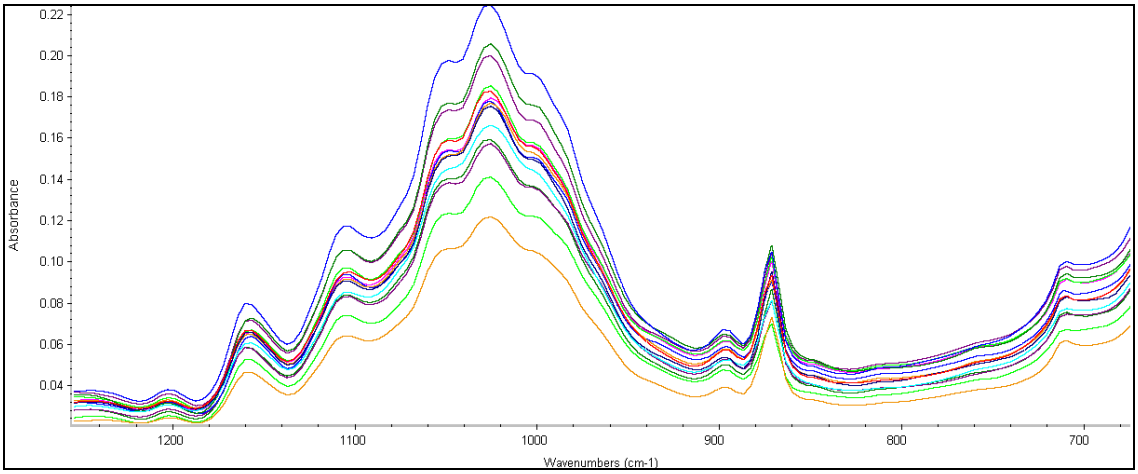

Figure 83: ATR spectra for the region between 1200 cm^{-1} and 700 cm^{-1} of the Canon 223 ink sample (top blue), the Epson 156 ink sample (top dark green), the Epson 93 ink sample (top dark purple), the Epson 66 ink sample (top light green), the Hewlett Packard 205 ink sample (red), the Kodak 22 ink sample (light purple), the Epson 120 ink sample (second blue), the Epson 30 ink sample (top orange), the Canon 522 ink sample (dark blue), the Okidata 04 ink sample (light blue), the Canon 402 ink sample (second dark green), the Canon 282 ink sample (second dark purple), the Canon 318 ink sample (second light green) and the Canon 384 ink sample (second orange).

Eleven non-extractable black ink samples were used in this study. The black non-extractable ink samples included the Xerox 13, Xerox 24, Xerox 244, Hewlett Packard

198, Hewlett Packard 199, Hewlett Packard 200, Hewlett Packard 201, Kodak 17, Epson 84, Canon 312 and Canon 492 ink samples. In addition, the Canon 318a ink sample, the slightly yellow liquid from the Canon BC-60 ink cartridge, was classified as a non-extractable ink sample based on its TLC results. Overall the non-extractable ink samples ATR spectra had similar peak pattern and peak shapes, but there were some differences between the non-extractable ink on paper samples ATR spectra. As a result, the non-extractable ink samples could be placed into seven groups based on their ink on paper ATR spectral data. The first group consisted of the Epson 84 ink sample, the second group consisted of the Canon 318a ink sample, the third group consisted of the Canon 312 ink sample, the fourth group consisted of the Canon 492 ink sample, the fifth group consisted of the Xerox 13, Xerox 24 and Xerox 244 ink samples, the sixth group consisted of the Kodak 17 ink sample and the seventh group consisted of the Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200 and Hewlett Packard 201 ink samples. As stated previously, the Canon 318a ink sample ink on paper sample ATR spectrum was more consistent with the results of the Canon extractable ink samples than with the Canon non-extractable ink samples. Consequently, the Canon 318a ink sample was grouped with the extractable ink samples and the differences and similarities in its ink on paper ATR spectrum had been described previously with the extractable ink samples. As a result, the Canon 318a ink sample was not be included in the following discussion on the similarities and/or differences between the non-extractable ink samples.

In the region between 3500 cm^{-1} and 3100 cm^{-1}, based on their ink on paper ATR spectra, the non-extractable ink samples could be separated into three groups. The main difference between each group of non-extractable ink samples was the peak shape of the

main peak in this region. The peak shape observed in these ink on paper samples ATR spectra varied from a single peak, to two almost flattened peaks to two peaks where the first peak dominated the second peak. These peaks also exhibited some differences in the peak maxima positions between the non-extractable ink samples. The Kodak 17, Canon 492, Xerox 13 and Xerox 24 ink on paper samples ATR spectra all contained a single wide, flat peak, with a peak location of approximately 3299 cm^{-1}. The Epson 84, Hewlett Packard 199, and Hewlett Packard 200 ink on paper samples ATR spectra contained two peaks, where the first peak was more pronounced than the secondary peak. The two peaks identified in the second group of non-extractable ink samples were located at approximately 3328 cm^{-1} and 3284 cm^{-1}, where the peak at approximately 3328 cm^{-1} was the dominant main peak. The last group of non-extractable ink samples, where the two peaks identified in the ink on paper ATR spectra were flatten with only a small valley between the peaks, included the Hewlett Packard 198, Hewlett Packard 201, Canon 312, and Xerox 244 ink samples. The two peaks for this third group were located at approximately 3328 cm^{-1} and 3281 cm^{-1} respectively, which was a difference in the peak maximum position of approximately 3 cm^{-1} for the second peak from the same peak in the second group. Refer to Figure 84 for the ATR spectra from 3600 cm^{-1} to 3000 cm^{-1} of the non-extractable ink samples.

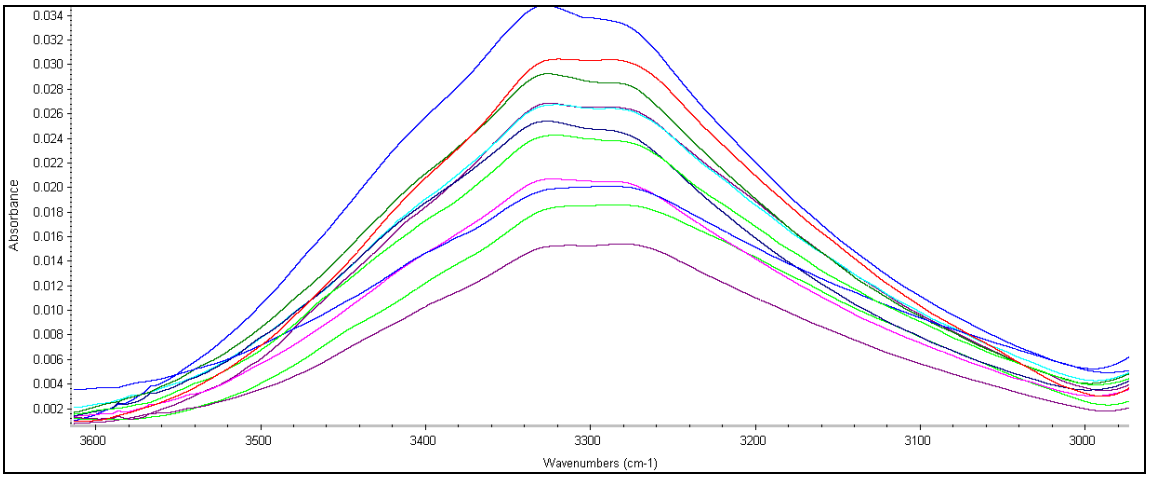

Figure 84: ATR spectra for the region between 3600 cm^{-1} and 3000 cm^{-1} of the Epson 84 ink sample (top medium blue), the Kodak 17 ink sample (red), the Hewlett Packard 200 ink sample (dark green), the Canon 312 ink sample (top dark purple), the Hewlett Packard 201 ink sample (light blue), the Hewlett Packard 199 ink sample (dark blue), the Xerox 244 ink sample (top light green), the Hewlett Packard 198 ink sample (light purple), the Xerox 13 ink sample (second medium blue), the Canon 492 ink sample (second light green) and the Xerox 24 ink sample (second dark purple).

In the region between 3000 cm^{-1} and 2800 cm^{-1} there was some variation in the peak shape and peak pattern for the different non-extractable ink samples. The majority of the non-extractable ink samples had a single peak in this region, though there were some differences in the peak maximum position for these non-extractable ink samples. Nine of the eleven non-extractable ink samples showed this peak pattern, and seven of the nine non-extractable ink samples had a symmetrical peak pattern for this peak. The seven non-extractable ink samples that had the symmetrical single peak included the Epson 84 ink sample, with a peak at approximately 2894 cm^{-1}, the Hewlett Packard 201 ink sample, with a peak at approximately 2888 cm^{-1}, the Hewlett Packard 200, Hewlett Packard 199 and Xerox 24 ink samples, with a peak at approximately 2884 cm^{-1}, the Xerox 244 ink sample, with a peak at approximately 2890 cm^{-1} and the Canon 312 ink sample, with a peak at approximately 2891 cm^{-1}. The remaining two non-extractable ink

samples that contained a single peak in the region between 3000 cm^{-1} and 2800 cm^{-1} had single peaks that did not have a symmetrical peak shape. The Hewlett Packard 198 ink sample had a single peak located at approximately 2888 cm^{-1}, but it was slightly off-centered to the right in shape, whereas the Xerox 13 ink sample had a peak at approximately 2893 cm^{-1} but its shape was slightly off-centered to the left. The difference in the peak maximum position for the peak in these nine non-extractable ink samples was upwards of 10 cm^{-1}, depending on the ink sample. For the Kodak 17 non-extractable ink sample, and to a lesser extent the Canon 492 non-extractable ink sample, there were two peaks present in this region. The first peak was more pronounced than the second peak, and the two peaks were located at approximately 2911 cm^{-1} and 2850 cm^{-1}, respectively. Refer to Figure 85 for the ATR spectra from 3000 cm^{-1} to 2750 cm^{-1} of the non-extractable ink samples.

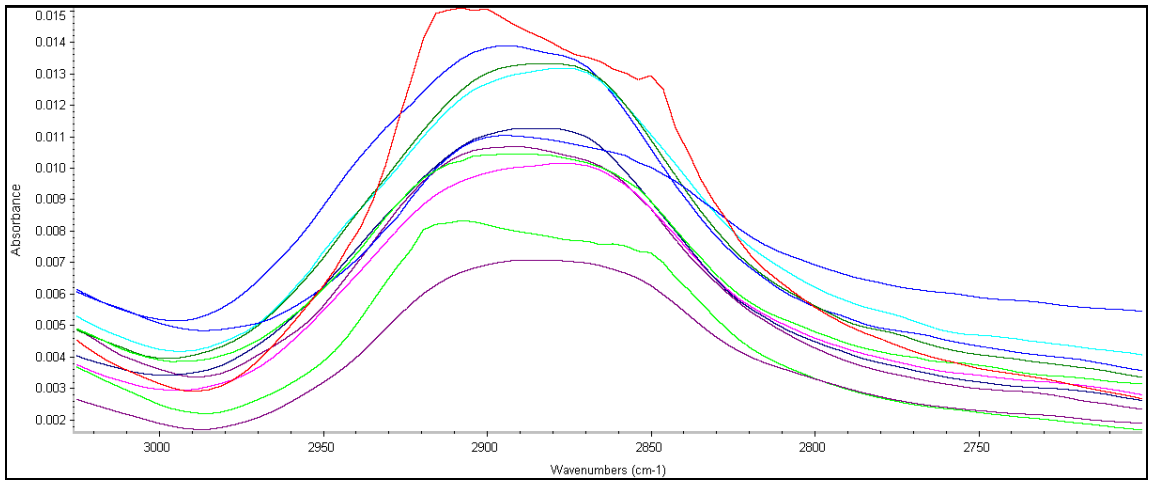

Figure 85: ATR spectra for the region between 3000 cm^{-1} and 2750 cm^{-1} of the Kodak 17 ink sample (red), the Epson 84 ink sample (top medium blue), the Hewlett Packard 200 ink sample (dark green), the Hewlett Packard 201 ink sample (light blue), the Hewlett Packard 199 ink sample (dark blue), the Xerox 13 ink sample (second medium blue), the Canon 312 ink sample (top dark purple),the Xerox 244 ink sample (top light green), the Hewlett Packard 198 ink sample (light purple), the Canon 492 ink sample (second light green) and the Xerox 24 ink sample (second dark purple).

In the region between 1760 cm^{-1} and 1680 cm^{-1}, the various non-extractable ink samples showed differences in their ink on paper ATR spectra. All four of the Hewlett Packard non-extractable ink on paper samples ATR spectra showed a single peak at approximately 1724 cm^{-1}, whereas the Xerox 244 and Xerox 13 non-extractable ink on paper samples ATR spectra had two small peaks present at approximately 1723 cm^{-1} and 1710 cm^{-1}, respectively. The Kodak 17, Canon 312 and Canon 492 non-extractable ink on paper samples ATR spectra had no peaks in this region. For the Epson 84 and Xerox 24 ink on paper samples ATR spectra there was a slight bump, not a pronounced peak, at approximately 1716 cm^{-1}. Refer to Figure 86 for the ATR spectra from 1780 cm^{-1} to 1680 cm^{-1} of the non-extractable ink samples.

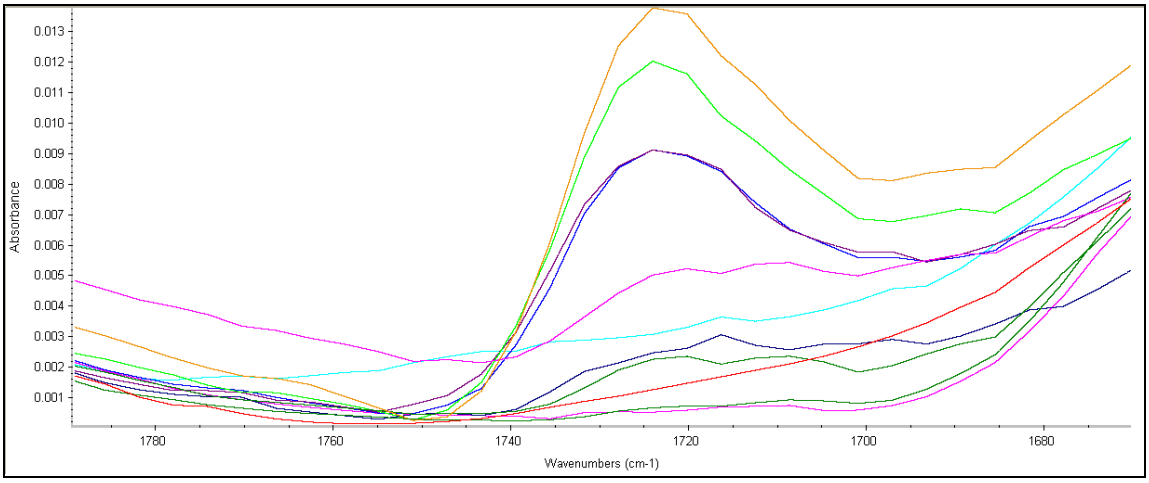

Figure 86: ATR spectra for the region between 1780 cm^{-1} and 1680 cm^{-1} of the Hewlett Packard 201 ink sample (orange), the Hewlett Packard 200 ink sample (light green), the Hewlett Packard 199 ink sample (dark purple), the Hewlett Packard 198 ink sample (medium blue), the Xerox 13 ink sample (top light purple), the Epson 84 ink sample (light blue), the Xerox 24 ink sample (dark blue), the Xerox 244 ink sample (top dark green), the Kodak 17 ink sample (red), the Canon 312 ink sample (second dark green) and the Canon 492 ink sample (second light purple).

In the region between 1680 cm^{-1} and 1520 cm^{-1} the peaks identified on the ink on paper ATR spectra for the non-extractable ink samples ranged from zero peaks to three peaks depending on the non-extractable ink sample. The Canon 312, Canon 492 and

Xerox 244 non-extractable ink on paper samples ATR spectra, all exhibited three peaks in this region, with the three peaks located at approximately 1658 cm^{-1}, 1625 cm^{-1} and 1595 cm^{-1}; 1656 cm^{-1}, 1625 cm^{-1} and 1592 cm^{-1} and 1658 cm^{-1}, 1626 cm^{-1} and 1592 cm^{-1} respectively. Depending on the sample, these peaks had differences in their peak maxima positions of upwards of 3 cm^{-1}. The Xerox 13 and Xerox 24 non-extractable ink on paper samples ATR spectra showed two peaks in this region, with the two peaks located at approximately 1648 cm^{-1} and 1586 cm^{-1}. The Kodak 17 non-extractable ink on paper sample ATR spectrum had a single peak located at approximately 1644 cm^{-1} in this region. However, there was a minor peak located at approximately 1539 cm^{-1} in the Kodak 17 non-extractable ink on paper sample ATR spectrum that was not labeled by the OMNIC software program. The Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200 and Hewlett Packard 201 non-extractable ink on paper samples ATR spectra were not as smooth in this region as they were in the other parts of their ink on paper ATR spectra. Even though there was increased noise and unsmoothness in the Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200 and Hewlett Packard 201 ink on paper samples ATR spectra, a peak was identified at approximately 1640 cm^{-1}. As stated previously, there was more noise in this region, so the peak exhibited by the Hewlett Packard non-extractable ink samples did not have a defined peak maximum position, but this peak maximum position could be ascertained by examining the Hewlett Packard non-extractable ink on paper samples ATR spectra in detail. The Epson 84 non-extractable ink on paper sample ATR spectrum, also exhibited more of an unsmoothed ATR spectrum in this region, contained two very small peaks at approximately 1647 cm^{-1} and 1594 cm^{-1}. These two peaks in the Epson 84 non-extractable ink sample may not always

be recognizable in an Epson 84 non-extractable ink on paper sample ATR spectrum due to their size of these peaks, so care must be taken when examining the Epson 84 non-extractable ink on paper sample ATR spectrum. Refer to Figure 87 for the ATR spectra from 1680 cm^{-1} to 1520 cm^{-1} of the non-extractable ink samples.

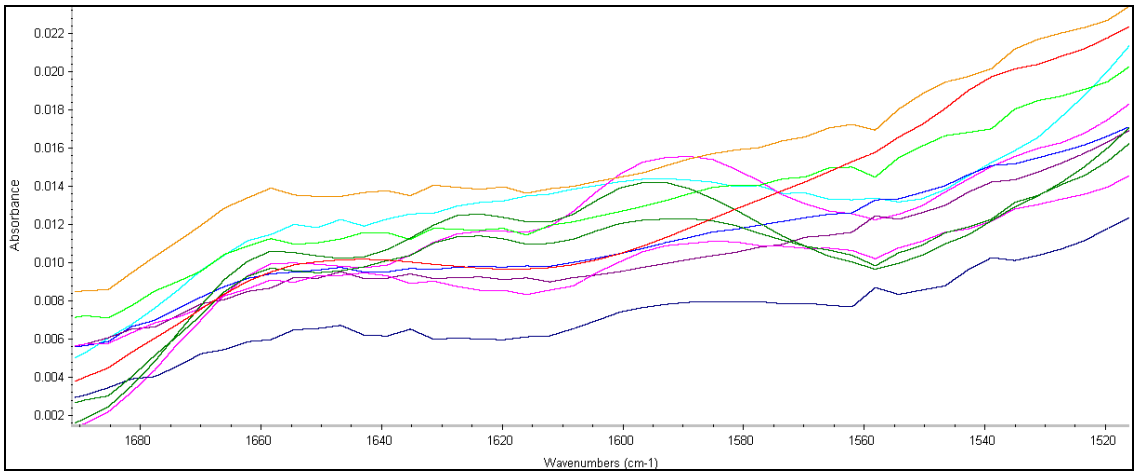

Figure 87: ATR spectra for the region between 1680 cm^{-1} and 1520 cm^{-1} of the Hewlett Packard 201 ink sample (orange), the Epson 84 ink sample (light blue), the Hewlett Packard 200 ink sample (light green), the Canon 312 ink sample (top dark green), the Canon 492 ink sample (top light purple), the Xerox 244 ink sample (second dark green), the Kodak 17 ink sample (red), the Hewlett Packard 198 ink sample (medium blue), the Hewlett Packard 199 ink sample (dark purple), the Xerox 13 ink sample (second light purple) and the Xerox 24 ink sample (dark blue).

In the region between 1500 cm^{-1} and 1200 cm^{-1} the main peak showed differences in the peak maximum position for the different non-extractable ink samples. The Canon 492 ink sample had a peak at approximately 1395 cm^{-1}, the Xerox 13 ink sample had a peak at approximately 1398 cm^{-1}, the Xerox 24 ink sample had a peak at approximately 1402 cm^{-1}, the Canon 312 ink sample had a peak at approximately 1404 cm^{-1}, the Kodak 17 and Xerox 244 ink samples had a peak at approximately 1405 cm^{-1}, the Hewlett Packard 201 ink sample had a peak at approximately 1408 cm^{-1}, the Hewlett Packard 198 ink sample had a peak at approximately 1409 cm^{-1}, the Hewlett Packard 200 ink sample had a peak at approximately 1413 cm^{-1}, the Hewlett Packard 199 ink sample had a peak

at approximately 1414 cm^{-1} and the Epson 84 ink sample had a peak at approximately 1417 cm^{-1}. This was a difference in the peak maximum position of upwards of 22 cm^{-1} depending on the non-extractable ink sample. In addition, the Canon 492 ink sample did not have the defined peak at approximately 1369 cm^{-1} that was found in the other non-extractable ink samples. The "peak" in the Canon 492 ink sample was more of a bump and not the defined peak that was found in the other non-extractable ink samples. The Canon 492 ink sample also lacked the peak located at approximately 1242 cm^{-1} that was found in the other non-extractable ink samples. Refer to Figure 88 for the ATR spectra from 1500 cm^{-1} to 1200 cm^{-1} of the non-extractable ink samples.

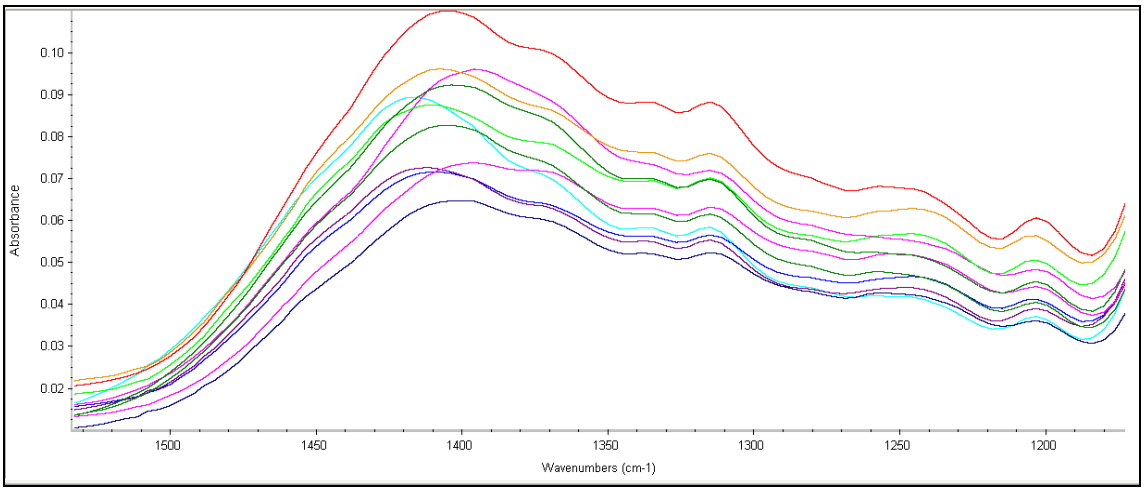

Figure 88: ATR spectra for the region between 1500 cm^{-1} and 1200 cm^{-1} of the Kodak 17 ink sample (red), the Hewlett Packard 201 ink sample (orange), the Canon 492 ink sample (top light purple), the Canon 312 ink sample (top dark green), the Epson 84 ink sample (light blue), the Hewlett Packard 200 ink sample (light green), the Xerox 244 ink sample (second dark green), the Hewlett Packard 199 ink sample (dark purple), the Xerox 13 ink sample (second light purple), the Hewlett Packard 198 ink sample (medium blue) and the Xerox 24 ink sample (dark blue).

In the region between 1180 cm^{-1} and 1130 cm^{-1} the non-extractable ink samples showed some differences in the peak maximum position of the main peak in this region. The Hewlett Packard 201, Hewlett Packard 198, Canon 492 and Xerox 13 ink samples had a peak located at approximately 1154 cm^{-1}, the Xerox 24 and Xerox 244 ink samples

had a peak located at approximately 1155 cm^{-1}, the Hewlett Packard 200 and Hewlett Packard 199 ink samples had a peak located at approximately 1156 cm^{-1} and Kodak 17, Canon 312 and Epson 84 ink samples had a peak located at approximately 1157 cm^{-1}. This was a difference in the peak maximum position of upwards of 3 cm^{-1}, depending on the non-extractable ink sample.

For the group of three peaks in the region between 1080 cm^{-1} and 960 cm^{-1}, there were some differences in the peak maxima positions and peak pattern changes for the different non-extractable ink samples. The second peak, which was the main peak in the group of three peaks, and the third peak of the group of three peaks exhibited the most peak maxima position differences. The Kodak 17 ink sample had the second and third peak at approximately 1021 cm^{-1} and 999 cm^{-1} respectively, the Hewlett Packard 201, Canon 312, Xerox 244 and Hewlett Packard 198 ink samples had the second and third peak at approximately 1022 cm^{-1} and 999 cm^{-1} respectively, the Hewlett Packard 200 and Hewlett Packard 199 ink samples had the second and third peak at approximately 1024 cm^{-1} and 999 cm^{-1} respectively, the Epson 84 ink sample had the second and third peak at approximately 1025 cm^{-1} and 1000 cm^{-1} respectively and the Canon 492, Xerox 13 and Xerox 24 ink samples had the second and third peak at approximately 1020 cm^{-1} and 996 cm^{-1} respectively. This was a difference in the peak maxima positions of as much as 5 cm^{-1} depending on the peak and the non-extractable ink sample. In addition, in the majority of the non-extractable ink samples, specifically in seven of the eleven non-extractable ink samples, the peak pattern for the group of three peaks was slightly asymmetrical, with the third peak being slightly higher than the first peak in the group. This pattern was found for the Canon 312, Hewlett Packard 198, Hewlett Packard 199,

Hewlett Packard 200, Hewlett Packard 201, Xerox 244 and Kodak 17 ink samples. For the Epson 84 ink sample, the group of three peaks in the region between 1080 cm^{-1} and 960 cm^{-1} was more symmetrical in shape, with the first and third peak being almost the same peak height. The peak pattern exhibited by the Epson 84 non-extractable ink sample was similar to the peak pattern exhibited by the extractable ink samples for the group of three peaks in this region. For the Canon 492, Xerox 13 and Xerox 24 ink samples, the group of three peaks in the region between 1080 cm^{-1} and 960 cm^{-1} was asymmetrical with the second and third peaks almost level.

In the region between 720 cm^{-1} and 670 cm^{-1}, two different peak patterns emerged for the non-extractable ink samples. In one pattern there were two peaks present at approximately 711 cm^{-1} and 695 cm^{-1}, whereas for the other pattern there was a single peak present at approximately 712 cm^{-1}. The four Hewlett Packard non-extractable ink samples fell into the first group that contained the two peaks, while the Kodak 17, Canon 492, Canon 312, Xerox 13, Xerox 24, Xerox 244 and Epson 84 non-extractable ink samples fell into the second group that contained a single peak. Refer to Figure 89 for the ATR spectra from 1200 cm^{-1} to 600 cm^{-1} of the non-extractable ink samples.

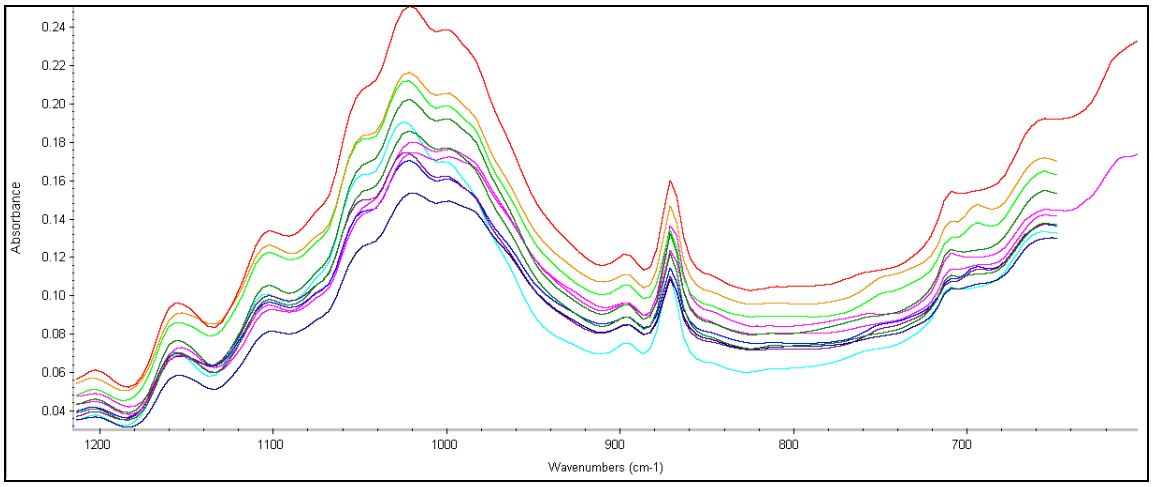

Figure 89: ATR spectra for the region between 1200 cm^{-1} and 600 cm^{-1} of the Kodak 17 ink sample (red), the Hewlett Packard 201 ink sample (orange), the Hewlett Packard 200 ink sample (light green), the Canon 312 ink sample (top dark green), the Epson 84 ink sample (light blue), the Xerox 244 ink sample (second dark green), the Canon 492 ink sample (top light purple), the Xerox 13 ink sample (second light purple), the Hewlett Packard 199 ink sample (dark purple), the Hewlett Packard 198 ink sample (medium blue) and the Xerox 24 ink sample (dark blue).

The paper ATR spectrum was compared to the extractable ink samples and the non-extractable ink samples in order to identify the peaks that differ between these ATR spectra, and hence could be used for the identification purposes. The paper ATR spectrum was first compared with the fourteen extractable ink samples previously described. In the region between 3500 cm^{-1} and 3100 cm^{-1}, the paper ATR spectrum was similar in pattern to the extractable ink on paper samples ATR spectra. The paper ATR spectrum contained two peaks, one main peak at approximately 3332 cm^{-1} and a second minor peak at approximately 3282 cm^{-1}. This was similar to the results obtained with the extractable ink on paper samples ATR spectra. Refer to Figure 90 for the ATR spectra from 3600 cm^{-1} to 2700 cm^{-1} of the paper and the fourteen extractable ink samples.

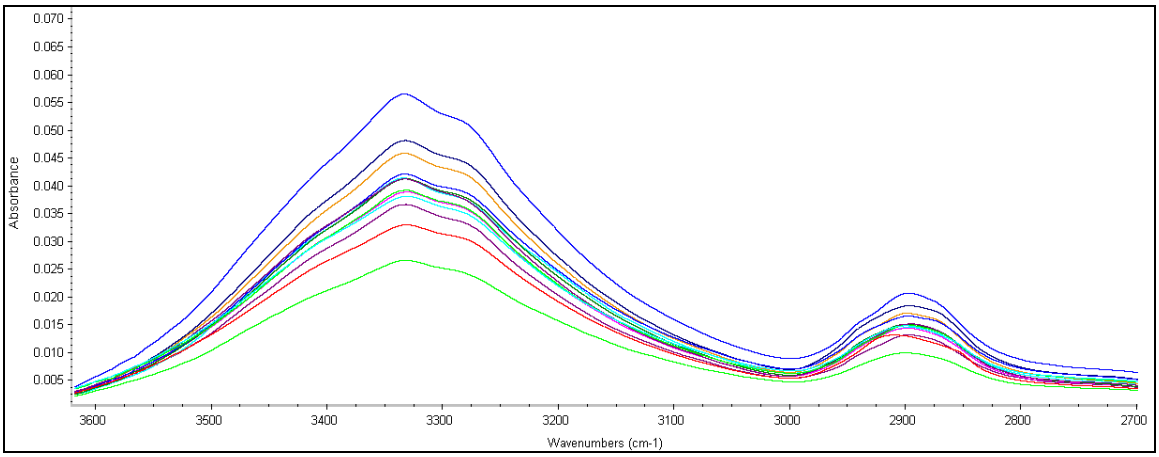

Figure 90: ATR spectra for the region between 3600 cm^{-1} and 2700 cm^{-1} of the Canon 223 ink sample (top medium blue), the Epson 156 ink sample (top dark blue), the Epson 93 ink sample (orange), the Epson 120 ink sample (second medium blue), the Canon 522 ink sample (top light blue), the Epson 66 ink sample (dark green), the Hewlett Packard 205 ink sample (top dark purple), the Kodak 22 ink sample (top light green), the Epson 30 ink sample (light purple), the Okidata 04 ink sample (second light blue), the Canon 282 ink sample (second dark purple), the Blank Paper 1 sample (red) and the Canon 384 ink sample (second light green).

In the region between 3000 cm^{-1} and 2800 cm^{-1}, differences were noted between the paper ATR spectrum and the extractable ink on paper samples ATR spectra. The paper ATR spectrum did not have the main peak at approximately 2896 cm^{-1} that was observed in the extractable ink samples; however the paper ATR spectrum did have a peak located at approximately 2916 cm^{-1} that corresponded to the bump or secondary peak observed in some of the extractable ink on paper samples ATR spectra. The paper ATR spectrum also contained a small peak at approximately 2854 cm^{-1} that was not observed with the extractable ink on paper samples ATR spectra. Refer to Figure 91 for the ATR spectra from 3000 cm^{-1} to 2700 cm^{-1} of the paper and the fourteen extractable ink samples.

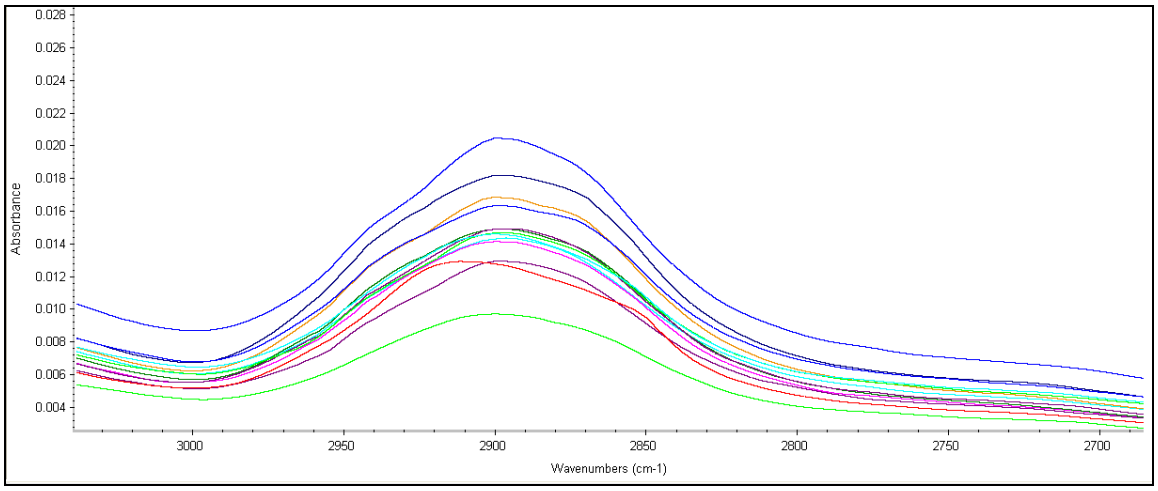

Figure 91: ATR spectra for the region between 3000 cm^{-1} and 2700 cm^{-1} of the Canon 223 ink sample (top medium blue), the Epson 156 ink sample (dark blue), the Epson 93 ink sample (orange), the Epson 120 ink sample (second medium blue), the Okidata 04 ink sample (top light blue), the Epson 66 ink sample (dark green), the Hewlett Packard 205 ink sample (top dark purple), the Kodak 22 ink sample (top light green), the Epson 30 ink sample (light purple), the Canon 522 ink sample (second light blue), the Canon 282 ink sample (second dark purple), the Blank Paper 1 sample (red) and the Canon 384 ink sample (second light green).

In the region between 1700 cm^{-1} and 1560 cm^{-1}, the paper ATR spectrum had a single peak located at approximately 1643 cm^{-1} and its peak shape was different from the peak shape and peak pattern observed in the extractable ink on paper samples ATR spectra. As previously discussed, the extractable ink on paper samples ATR spectra contained either two, three or four peaks within this region, whereas the paper ATR spectrum contained a single peak in this region. Refer to Figure 92 for the ATR spectra from 1720 cm^{-1} to 1560 cm^{-1} of the paper and the fourteen extractable ink samples.

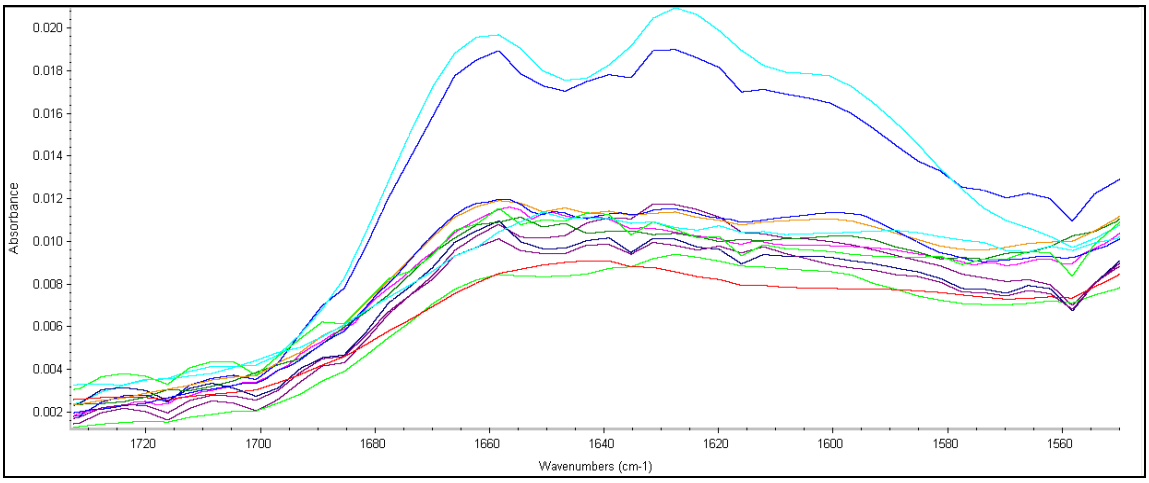

Figure 92: ATR spectra for the region between 1720 cm^{-1} and 1560 cm^{-1} of the Canon 522 ink sample (top light blue), the Canon 223 ink sample (top medium blue), the Epson 120 ink sample (second medium blue), the Epson 93 ink sample (orange), the Epson 30 ink sample (light purple), the Kodak 22 ink sample (top light green), the Epson 66 ink sample (dark green), the Epson 156 ink sample (dark blue), the Canon 282 ink sample (top dark purple), the Okidata 04 ink sample (second light blue), the Hewlett Packard 205 ink sample (second dark purple), the Blank Paper 1 sample (red) and the Canon 384 ink sample (second light green).

In the region between 1500 cm^{-1} and 1300 cm^{-1}, the paper ATR spectrum had a similar peak shape as compared to the extractable ink on paper samples ATR spectra. The paper ATR spectrum had a peak located at approximately 1421 cm^{-1}, which was symmetrical in shape. In the region between 1200 cm^{-1} and 900 cm^{-1}, the peaks identified in the paper ATR spectrum had a similar peak pattern and peak shape as the peaks identified in the extractable ink on paper samples ATR spectra. The group of three peaks in the region between 1080 cm^{-1} and 960 cm^{-1} in the paper ATR spectrum was also consistent with the extractable ink on paper samples ATR spectra, with peaks present at approximately 1052 cm^{-1}, 1025 cm^{-1} and 1000 cm^{-1}. Refer to Figure 93 for the ATR spectra from 1500 cm^{-1} to 900 cm^{-1} of the paper and the fourteen extractable ink samples.

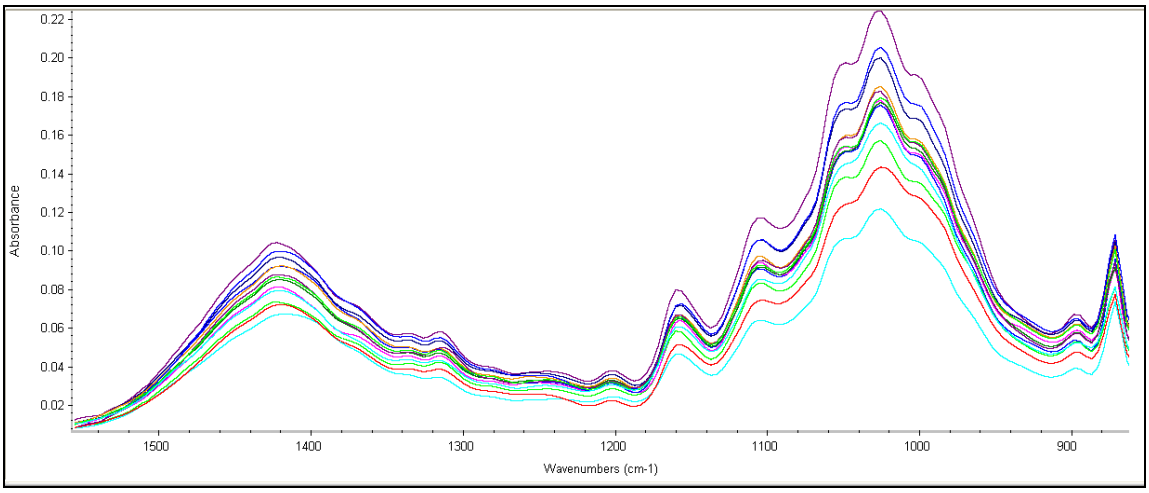

Figure 93: ATR spectra for the region between 1500 cm^{-1} and 900 cm^{-1} of the Canon 223 ink sample (top dark purple), the Epson 156 ink sample (top medium blue), the Epson 93 ink sample (dark blue), the Canon 522 ink sample (second medium blue), the Epson 66 ink sample (orange), the Hewlett Packard 205 ink sample (second dark purple), the Kodak 22 ink sample (top light green), the Epson 30 ink sample (dark green), the Epson 120 ink sample (light purple), the Okidata 04 ink sample (top light blue), the Canon 282 ink sample (second light green), the Blank Paper 1 sample (red) and the Canon 384 ink sample (second light blue).

The paper ATR spectrum was also compared to the eleven non-extractable black ink on paper samples ATR spectra. In the region between 3500 cm^{-1} and 3000 cm^{-1}, the paper ATR spectrum had the two peaks as discussed previously with the extractable ink samples, with the second peak being significantly smaller than the first peak. The peaks in this region for the paper sample ATR spectrum were located at approximately 3332 cm^{-1} and 3282 cm^{-1}. This peak pattern was similar to the peak pattern observed for the Epson 84, Hewlett Packard 200 and Hewlett Packard 199 non-extractable ink on paper samples ATR spectra, but the peaks were located at different wavenumbers than found with the paper sample ATR spectrum. The peaks for the Epson 84, Hewlett Packard 200 and Hewlett Packard 199 non-extractable ink samples were located at approximately 3328 cm^{-1} and 3284 cm^{-1}, which was a difference of upwards of 4 cm^{-1} depending on the

peak. Refer to Figure 94 for the ATR spectra from 3500 cm^{-1} to 2800 cm^{-1} of the paper and the non-extractable ink samples.

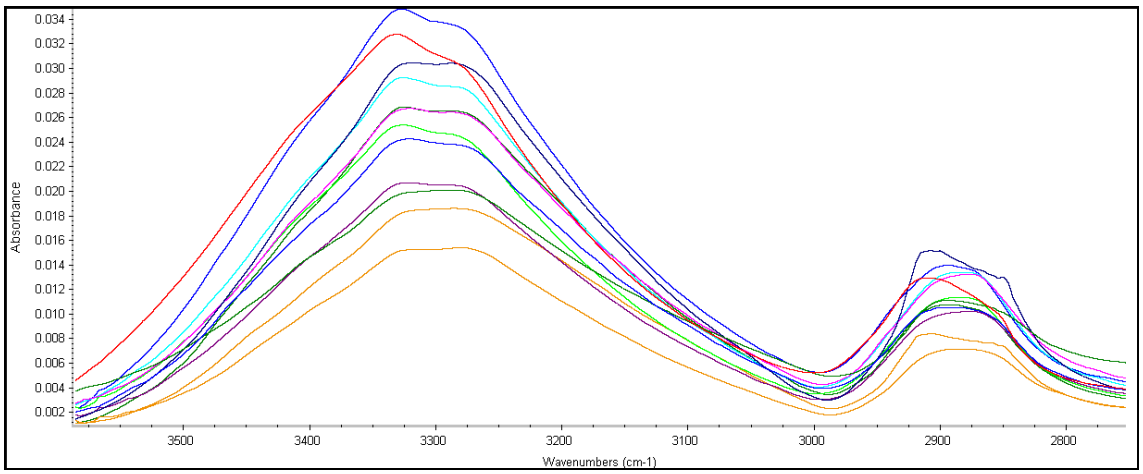

Figure 94: ATR spectra for the region between 3500 cm^{-1} and 2800 cm^{-1} of the Epson 84 ink sample (top medium blue), the Blank Paper 1 sample (red), the Kodak 17 ink sample (dark blue), the Hewlett Packard 200 ink sample (light blue), the Canon 312 ink sample (top dark green), the Hewlett Packard 201 ink sample (light purple), the Hewlett Packard 199 ink sample (light green), the Xerox 244 ink sample (second medium blue), the Hewlett Packard 198 ink sample (dark purple), the Xerox 13 ink sample (second dark green), the Canon 492 ink sample (top orange) and the Xerox 24 ink sample (second orange).

In the region between 3000 cm^{-1} and 2800 cm^{-1}, the paper ATR spectrum showed a completely different peak pattern as compared to the non-extractable ink on paper samples ATR spectra. There were some similarities to the ink on paper ATR spectra of the Kodak 17 and Canon 492 ink samples, but the paper ATR spectrum did not have the same overall peak pattern or peak shape as these two non-extractable ink samples. In addition, there were differences in the peak maxima positions between the peaks found in the paper ATR spectrum, at approximately 2916 cm^{-1} and 2854 cm^{-1}, as compared to the peaks found in Kodak 17 and Canon 492 ink samples ATR spectra, at approximately 2911 cm^{-1} and 2850 cm^{-1} respectively. Refer to Figure 95 for the ATR spectra from 3000 cm^{-1} to 2800 cm^{-1} of the paper and the non-extractable ink samples.

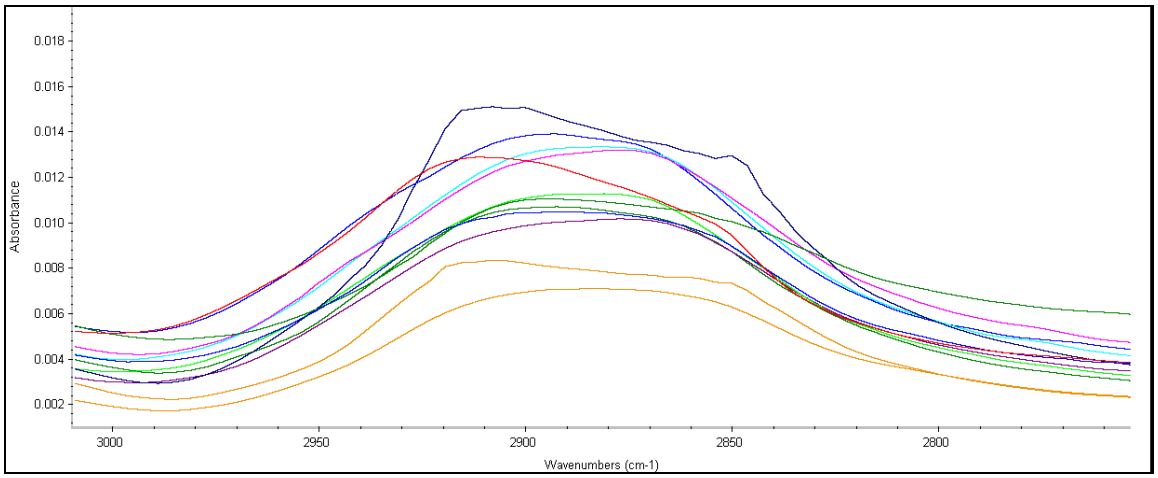

Figure 95: ATR spectra for the region between 3000 cm^{-1} and 2800 cm^{-1} of the Kodak 17 ink sample (dark blue), the Epson 84 ink sample (top medium blue), the Blank Paper 1 sample (red), the Hewlett Packard 200 ink sample (light blue), the Hewlett Packard 201 ink sample (light purple), the Hewlett Packard 199 ink sample (light green), the Xerox 13 ink sample (top dark green), the Canon 312 ink sample (second dark green), the Xerox 244 ink sample (second medium blue), the Hewlett Packard 198 ink sample (dark purple), the Canon 492 ink sample (top orange) and the Xerox 24 ink sample (second orange).

In the region between 1740 cm^{-1} and 1520 cm^{-1}, the paper sample ATR spectrum had only a single peak, which was located at approximately 1643 cm^{-1}. The peak shape and peak pattern of the paper ATR spectrum was different from the majority of the non-extractable ink on paper samples ATR spectra discussed previously. The Hewlett Packard non-extractable ink on paper samples ATR spectra, however, were similar to the paper sample ATR spectrum. The Hewlett Packard non-extractable ink on paper samples ATR spectra had a peak that was located at approximately 1640 cm^{-1}, which was a difference in the peak maximum position of 3 cm^{-1} as compared to the peak found in the paper sample ATR spectrum. In addition, the Hewlett Packard non-extractable ink samples had more noise in this region, but if the effect of the increased noise was taken into account when examining the Hewlett Packard non-extractable ink on paper samples ATR spectra, the overall peak pattern in the region between 1700 cm^{-1} and 1600 cm^{-1},

was similar to the peak pattern exhibited by the paper sample ATR spectrum. However, the paper sample ATR spectrum could be distinguished from the four Hewlett Packard non-extractable ink on paper samples ATR spectra due to the fact that the paper sample ATR spectrum lacked the peak at approximately 1724 cm^{-1} that was found in Packard non-extractable ink on paper samples ATR spectra. Refer to Figure 96 for the ATR spectra from 1760 cm^{-1} to 1520 cm^{-1} of the paper and the non-extractable ink samples.

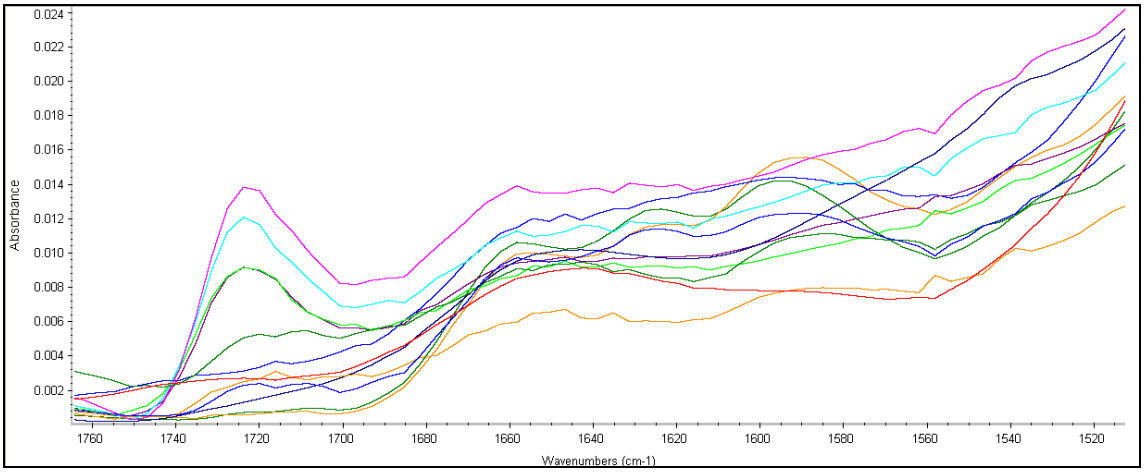

Figure 96: ATR spectra for the region between 1760 cm^{-1} and 1520 cm^{-1} of the Hewlett Packard 201 ink sample (light purple), the Hewlett Packard 200 ink sample (light blue), the Hewlett Packard 199 ink sample (light green), the Hewlett Packard 198 ink sample (dark purple), the Xerox 13 ink sample (top dark green), the Epson 84 ink sample (top medium blue), the Xerox 24 ink sample (top orange), the Blank Paper 1 sample (red), the Xerox 244 ink sample (second medium blue), the Kodak 17 ink sample (dark blue), the Canon 492 ink sample (second orange) and the Canon 312 ink sample (second dark green). Note: the dark green samples switch order at approximately 1670 cm^{-1}, and the orange samples switch order at approximately 1680 cm^{-1}.

In the region between 1550 cm^{-1} and 1200 cm^{-1}, the paper ATR spectrum had a similar peak pattern to the non-extractable ink on paper samples ATR spectra; however there were some differences in the peak position that should be noted. The main peak in the paper ATR spectrum was located at approximately 1421 cm^{-1}, which was a difference in the peak maximum position of between 4 cm^{-1} and 26 cm^{-1} as compared to the non-

extractable ink samples, depending on the specific non-extractable ink sample being compared.

In the region from 1200 cm^{-1} to 700 cm^{-1}, the paper ATR spectrum had a similar peak pattern to the non-extractable ink samples, however once again there were some differences in the peak maxima positions for the peaks in this region. The paper ATR spectrum had peaks located at approximately 1159 cm^{-1}, 1105 cm^{-1}, 1052 cm^{-1}, 1025 cm^{-1} and 1000 cm^{-1}, with the latter three being the group of three peaks. This was a difference in the peak maxima position of as much as 5 cm^{-1}, depending on the peak and the non-extractable ink sample being compared. More significantly, the group of three peaks in the region between 1080 cm^{-1} and 960 cm^{-1} in the paper ATR spectrum was symmetrical, whereas for the majority of the non-extractable ink samples, the exception being the Epson 84 ink sample, the group of three peaks was asymmetrical. Finally, the paper ATR spectrum had a single peak at approximately 711 cm^{-1}, which was consistent with all of the non-extractable ink on paper samples ATR spectra except for the four Hewlett Packard ink samples. Refer to Figure 97 for the ATR spectra from 1200 cm^{-1} to 700 cm^{-1} of the paper and the non-extractable ink samples.

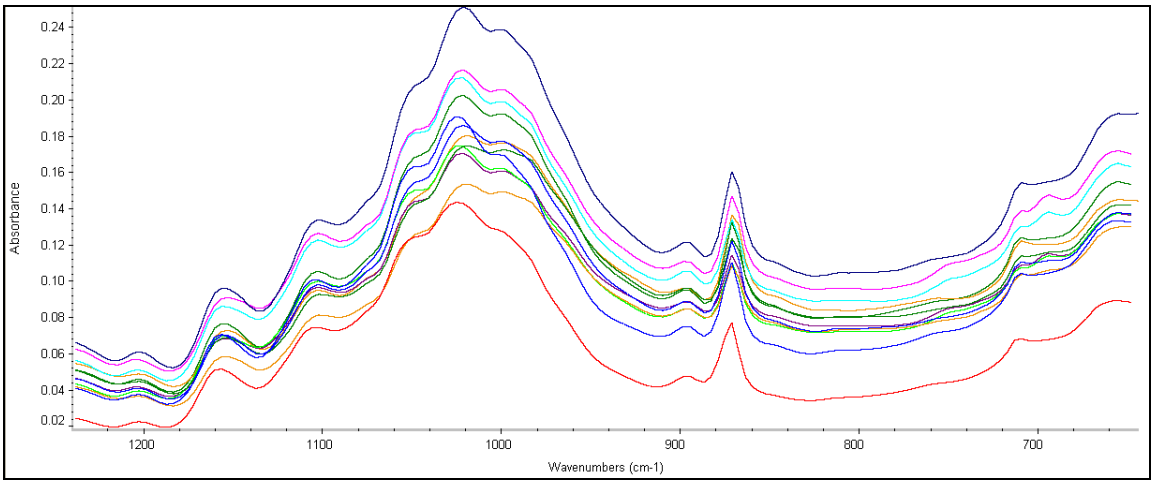

Figure 97: ATR spectra for the region between 1200 cm^{-1} and 700 cm^{-1} of the Kodak 17 ink sample (dark blue), the Hewlett Packard 201 ink sample (light purple), the Hewlett Packard 200 ink sample (light blue), the Canon 312 ink sample (top dark green), the Epson 84 ink sample (top medium blue), the Xerox 244 ink sample (second medium blue), the Canon 492 ink sample (top orange), the Xerox 13 ink sample (second dark green), the Hewlett Packard 199 ink sample (light green), the Hewlett Packard 198 ink sample (dark purple), the Xerox 24 ink sample (second orange),and the Blank Paper 1 sample (red).

F. Pyrolysis Gas Chromatography-Mass Spectrometry

The ink samples were also analyzed using Pyrolysis Gas Chromatography-Mass Spectrometry (Py-GC-MS). The instrument used was an Agilent 6850 Gas Chromatography, an Agilent 5975 Mass Spectrometer and a CDS Analytical 5150 Pyroprobe. The ink samples were analyzed as both ink on paper samples and neat ink samples. The neat ink samples were done to determine the pyrogram expected for each ink cartridge type, and hence the compounds present in the ink sample, in order to assist in the interpretation and analysis of the results of the ink on paper sample replicates.

The neat ink samples were prepared by pipetting 5µl of neat ink into a clean quartz tube. The tubes were then placed into appropriately labeled beakers and covered with parafilm to prevent any airborne contamination. The tubes were allowed to air dry

for 7 to 10 days and then were placed into an oven set at 60^{o}C for five hours on three separate days. The prepared samples were then pyrolyzed in the CDS pyroprobe in order to obtain the pyrogram for that specific type of ink cartridge.

Each ink sample, whether it was the ink on paper or neat ink sample, was placed into the probe and was allowed to equilibrate for one minute prior to analysis. This wait time was done in order for the sample name and information to be entered into the computer and to ensure that each sample was treated in the exact same manner. After one minute, the pyroprobe and the GC-MS methods were started on the respective instruments. The ink samples were pyrolyzed at 750^{o}C for 15 seconds and then the pyroprobe transfer line remained open and flushed with the carrier gas for an additional 45 seconds. The entire pyroprobe program was set for a total of one minute. The GC-MS program was set up for a total analysis time of 22.00 minutes. The column helium flow rate was set for 1.2 ml/min, while the inlet helium flow rate was initially set for 20 ml/min for the first two minutes, which was then lowered to a flow rate of 1 ml/min. The oven had an initial temperature of 50^{o}C, which was held for one minute and then raised to a final temperature of 210^{o}C at a rate of 8^{o}C/min and held at the final temperature for 1 minute.

Replicates of some of the neat ink standards were analyzed on the Py-GC-MS and there was consistency in their pyrograms. The peaks present in a pyrogram were classified as primary, secondary and minor peaks. Primary peaks were defined as those peaks that were present in abundances greater than or equal to 50% of the maximum peak in the pyrogram, secondary peaks were defined as those peaks that were present in abundance greater than 10% but less than 50% of the maximum peak in the pyrogram

and minor peaks were defined as those peaks with abundances less than 10%. The primary peaks present in the pyrogram were the same in each replicate; however, the secondary peaks showed a greater variation between the replicates. The majority of the secondary peaks were present in each replicate, though their intensities varied, and there were some additional secondary peaks present in some of the replicates. The greatest variation in the pyrograms for a particular ink standard occurred when there was significant difference in the maximum abundance of the main peak in the pyrogram. The closer the maximum abundances were to one another, the similar the peak pattern for the primary and secondary peaks were in their respective pyrograms.

As stated previously in the theory section, the primary and secondary peaks that were present in the pyrogram were due to the pyrolysis products of the original compounds present in the ink sample. Provided the conditions were kept constant, these pyrolysis products would be reproducible and characteristic of the original ink sample. The only differences between the replicates of the neat ink standards and the ink on paper samples were due to the relative abundances of the peaks present in their respective pyrograms. These variations in the abundances were due to the fact that there were slight differences in the sample size of the neat ink, differences in the size of the ink on paper sample, and/or differences in the amount of ink on the paper. However, even though the abundances were different in the sample replicates, the overall pyrograms were consistent between the sample replicates.

Upon examination of the neat ink pyrograms, it was found that there tended to be manufacturer specific pyrograms produced that could aid in an identification. However, there were some differences noted between all of the neat ink samples as not every single

neat ink sample had exactly the same peaks and/or compounds present. The differences observed between similar neat ink pyrograms tended to be with the secondary components of the neat ink sample and not with the primary components of the neat ink sample. It may not mean that a particular sample did not contain a specific or unique compound but rather that the compound was not detected above the set threshold. The focus was on the primary peaks in the pyrogram, as these peaks, and hence these compounds, were the ones most likely present in the ink on paper pyrograms. It was necessary to focus on the primary pyrolysis peaks of the neat ink sample due to the fact that the ink component of the ink on paper sample was a tiny fraction of the resulting pyrogram and the secondary peaks may not be distinguishable from the paper background in the ink on paper sample pyrogram.

An attempt was made to identify the compounds associated with the primary and secondary peaks found in a neat ink sample pyrogram. The NIST library was used to identify the compounds present in a neat ink sample pyrogram, and the NIST library used in this study was the NIST05a.L library. The possible match quality for a compound identification of a particular peak ranged from 0% to 100%, with the higher the match quality value was to 100% the better the match result that was obtained. The NIST library compared the mass spectral data of a peak in the neat ink sample to the mass spectral data of the standards contained in the library. The compounds that had the best mass spectral data match to a compound in the neat ink samples were listed, along with their match quality value. It is rarely possible to get a 100% match quality value between an unknown sample and a standard listed in a search library. However, a match quality value equal to or greater than 95% would result in a very confident match result, whereas

a match quality value of between 90% and 95% would result in a fairly confident match quality result. A match quality value below 90% would not allow for the positive identification of the compound but it would provide the analyst with information on the compound in question.

For the neat ink sample pyrograms, if the compound present in the neat ink sample was listed in the NIST library, then a strong match quality value would be obtained between the peak in the neat ink sample and the compound listed in the NIST library search results. If, however, the compound present in the neat ink sample was not listed in the NIST library then the library would provide the best match and the match quality value would be lower. Depending on the complexity of the sample being analyzed and the completeness of the search library database, the match quality values that could be obtained could be significantly lower than 90%. This lower match quality value was not necessarily invalid. The lower match quality value would not allow for a positive identification of the compound, but it could provide an indication of the compound present in the neat ink sample. Additionally, even if a compound was found with a high match quality, this did not necessarily mean the identification of the compound was correct. In both situations, the results of the library search meant that the listed compounds were the best match that the library found in its database based on the mass spectral data for that particular peak in the sample pyrogram. Consequently, the same best match result may be provided for more than one peak in a neat ink sample pyrogram.

As stated previously, the pyrogram for a specific ink sample consisted of the pyrolysis products associated with the specific ink sample and not with the original

compounds present in the non-pyrolyzed ink sample. Therefore, it was the pattern of the pyrolysis products that were produced during the pyrolysis process that was obtained and used for the comparison and identification of a neat ink sample. In the discussion that follows, the best match from the NIST library was listed for the identified primary peaks in the neat ink standard pyrograms. In addition, the match quality for the compound identified by the NIST library was included in parentheses after the compound name.

The Epson neat ink samples produced four main types of pyrograms, each of which were different from the other manufacturers. The first type of pyrogram found for the Epson ink samples was the pyrogram that was produced by the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 neat ink samples. All eight of these Epson neat ink samples had similar peak pattern and compound identification in their sample pyrograms. There were some differences noted in the pyrograms, but this tended to be due to the presence of a secondary component or the difference in assigning the primary or secondary peak status. The Epson 60, Epson 63 and Epson 120 neat ink samples produced the same major peak profiles, with the peaks occurring at approximately 1.71 minutes, 6.14 minutes, 10.10 minutes, 10.88 minutes, 11.83 minutes, 12.14 minutes and 14.02 minutes. Starting with the peak at approximately 6.14 minutes, these peaks were identified by the NIST library as Aniline (91%), Quinoline (95%), Indole (94%), 2-amino-Benzonitrile (95%), 6-methyl-1H-Indole (95%) and 1-Naphthalenamine (97%), respectively. The peak at approximately 1.71 minutes was identified as Sulfur Dioxide, and the quality match for this identification was less than 10%. This was an extremely low match quality value and hence this peak was not labeled in Table 14, located at the end of the discussion on the differences and/or

similarities of the thirty-five neat ink standard pyrograms. Refer to Figures 98 through 100 for the pyrograms of the Epson 60, Epson 63 and Epson 120 neat ink samples.

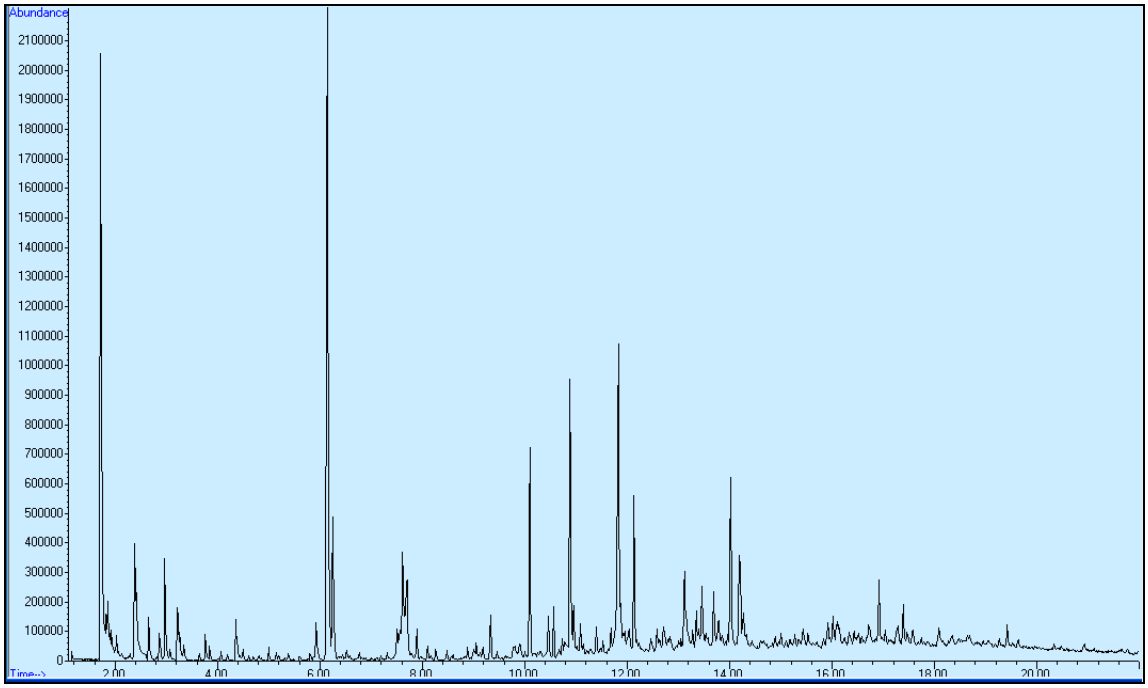

Figure 98: Epson 60 neat ink sample pyrogram.

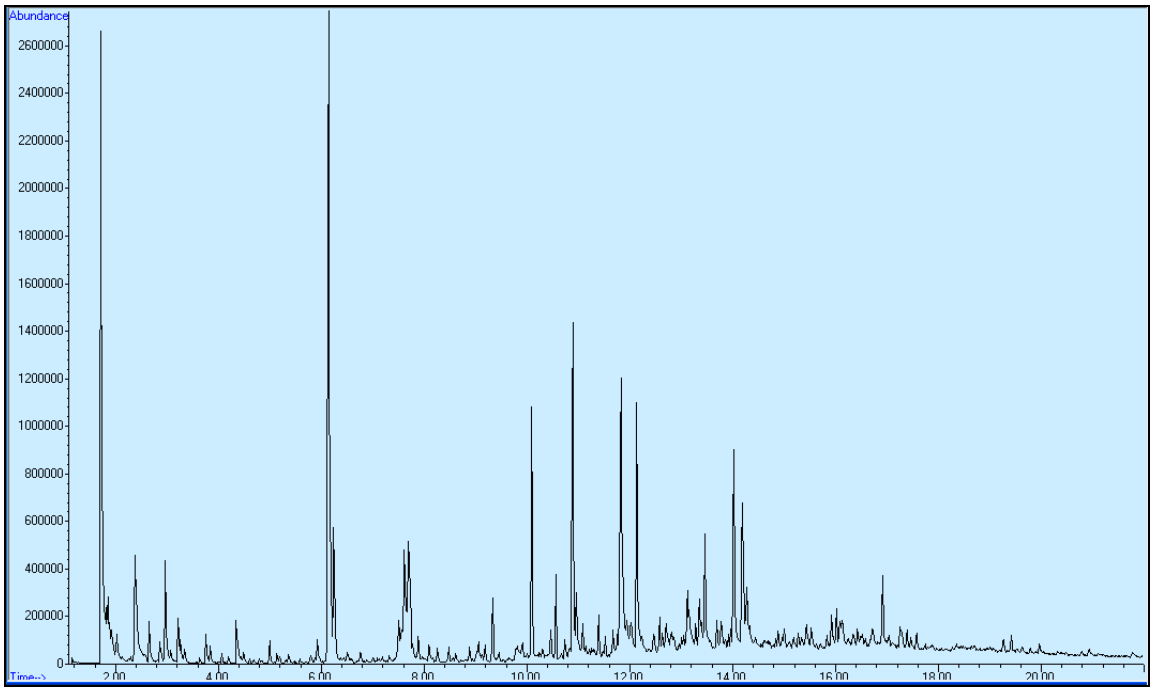

Figure 99: Epson 63 neat ink sample pyrogram.

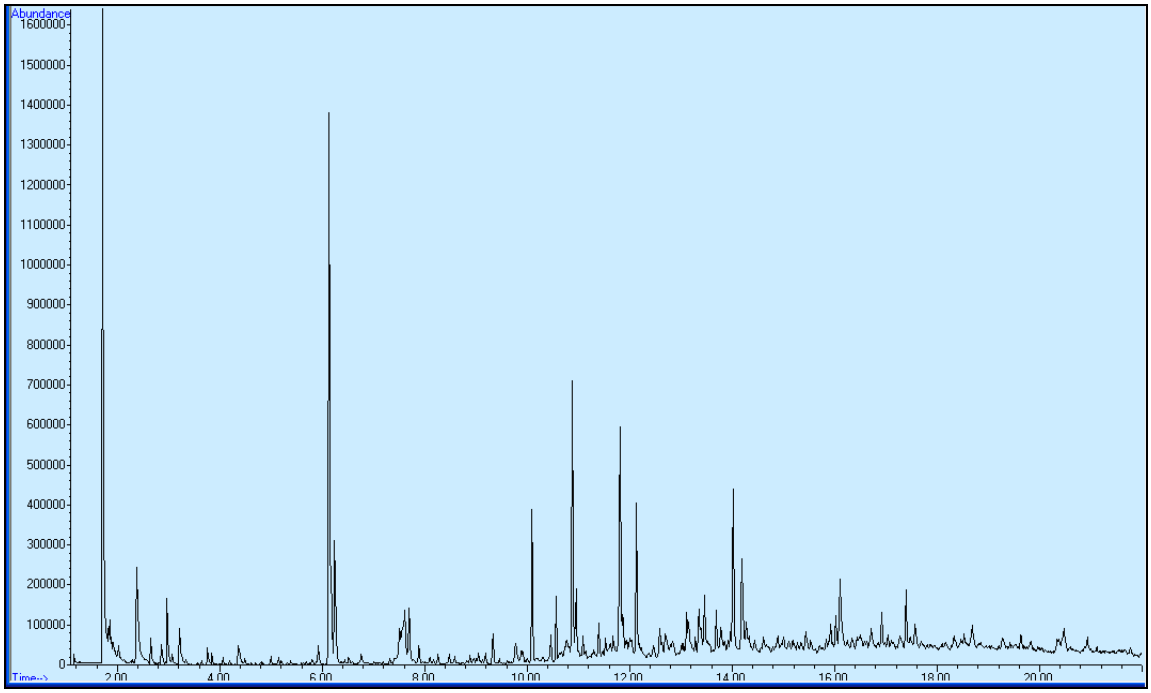

Figure 100: Epson 120 neat ink sample pyrogram.

The Epson 33 neat ink sample produced a pyrogram that was similar in appearance to the pyrograms produced by Epson 60, Epson 63 and Epson 120 neat ink samples. The Epson 33 neat ink sample had the same seven primary peaks at approximately the same retention times as the peaks listed for the Epson 60, Epson 63 and Epson 120 neat ink samples, and the NIST library identified the same compounds for these peaks. However, the Epson 33 neat ink sample had a primary peak present in its pyrogram that was not identified as a primary peak for Epson 60, Epson 63 and Epson 120 neat ink samples. This peak occurred at approximately 14.20 minutes, and was identified as being 2,5-Diethoxyaniline (96%). This peak, and corresponding compound, was present in the Epson 60, Epson 63 and Epson 120 neat ink samples but it was listed as a secondary peak rather than a primary peak in these Epson neat ink samples. Refer to Figure 101 for the pyrogram of the Epson 33 neat ink sample.

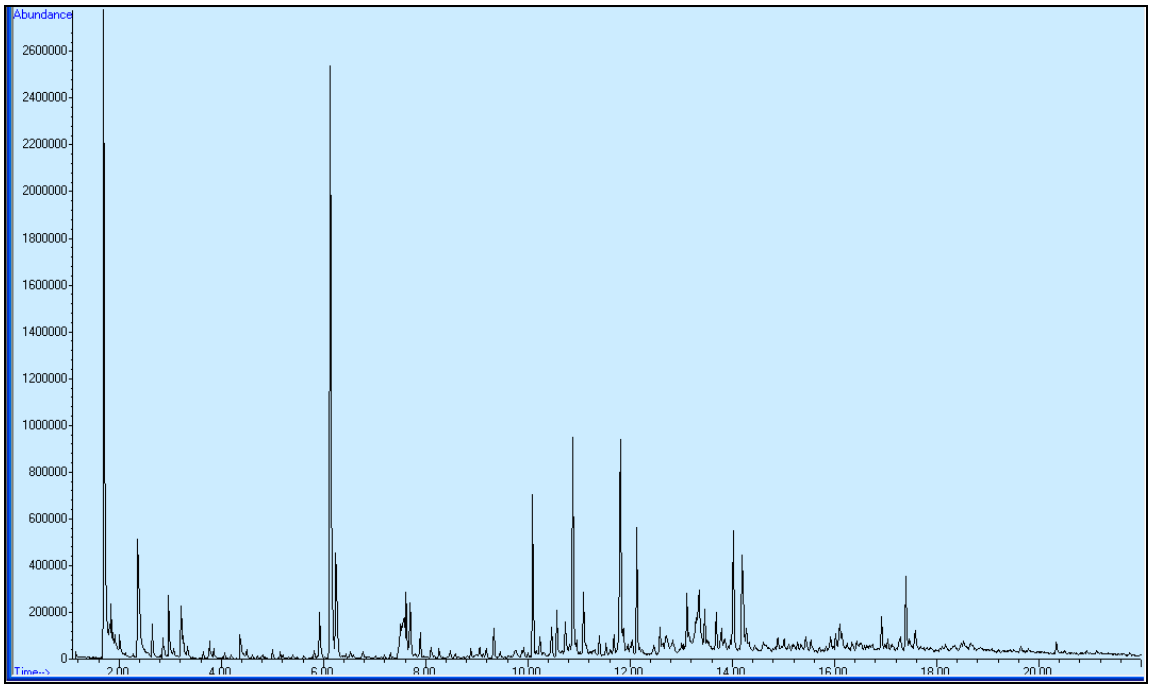

Figure 101: Epson 33 neat ink sample pyrogram.

The Epson 66 neat ink sample pyrogram was similar in peak pattern to the other Epson neat ink samples discussed previously, especially the Epson 60, Epson 63 and Epson 120 neat ink samples. The Epson 66 neat ink sample pyrogram contained six of the seven primary peaks identified in the Epson 60, Epson 63 and Epson 120 neat ink pyrograms; however it was missing the primary peak located at approximately 14.02 minutes. This peak, and compound of 1-Naphthalenamine (97%), was present in the Epson 66 neat ink sample pyrogram but as a secondary peak, not as a primary peak. In addition, the Epson 66 neat ink sample contained the peak at 14.18 minutes that was identified as being 2,5-Diethoxyaniline (92%). This peak was listed as a secondary peak, which was what was found for the Epson 60, Epson 63 and Epson 120 neat ink sample pyrograms. Refer to Figure 102 for the pyrogram of the Epson 66 neat ink sample.

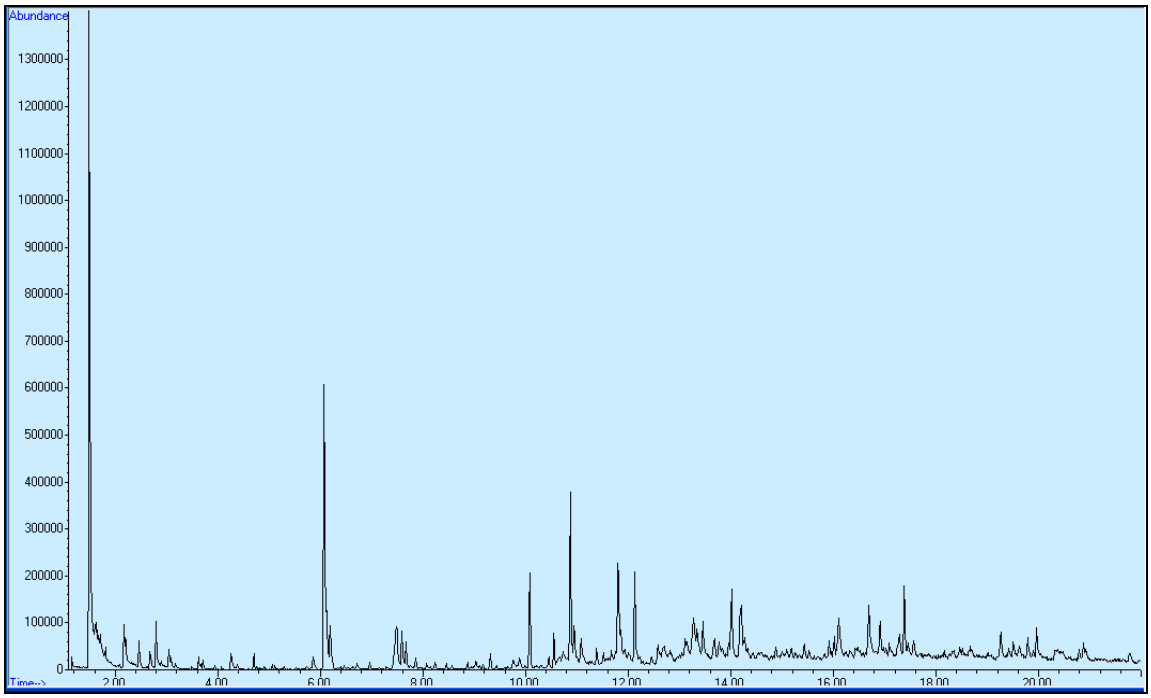

Figure 102: Epson 66 neat ink sample pyrogram

The Epson 90 and Epson 123 neat ink sample pyrograms were similar to the pyrograms discussed for the Epson 33, Epson 60, Epson 63, Epson 66 and Epson 120 neat ink samples. The Epson 90 and Epson 123 neat ink sample pyrograms contained the peaks at approximately 1.71 minutes, 6.14 minutes, 10.10 minutes, 10.88 minutes, 11.83 minutes, 12.14 minutes, 14.02 minutes and 14.20 minutes, and which were identified as the same compounds as listed for the previous Epson neat ink sample pyrograms. One distinction, however, was that the peak at 14.20 minutes was a primary peak found in the Epson 123 neat ink sample pyrogram but was a secondary peak in the Epson 90 neat ink sample pyrogram. Further, both the Epson 90 neat ink sample pyrogram and the Epson 123 neat ink sample pyrogram contained a primary peak at approximately 6.24 minutes that was not listed as a primary peak for the Epson 33, Epson 60, Epson 63, Epson 66 and Epson 120 neat ink samples. The peak at 6.24 minutes was identified as being

Benzonitrile (91%), and it was present in the Epson 33, Epson 60, Epson 63, Epson 66 and Epson 120 neat ink sample pyrograms but as a secondary peak rather than as a primary peak. Benzonitrile was listed as a primary peak in only the Epson 90 and Epson 123 neat ink sample pyrograms. Refer to Figure 103 and Figure 104 for the pyrograms of the Epson 90 and Epson 123 neat ink samples.

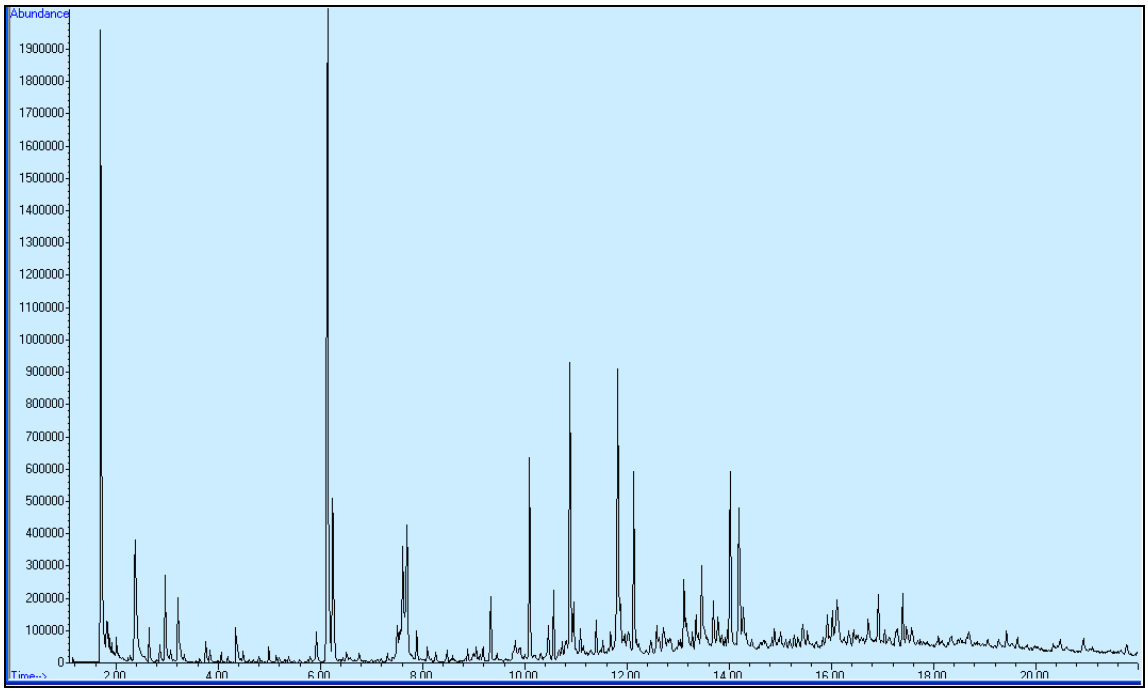

Figure 103: Epson 90 neat ink sample pyrogram

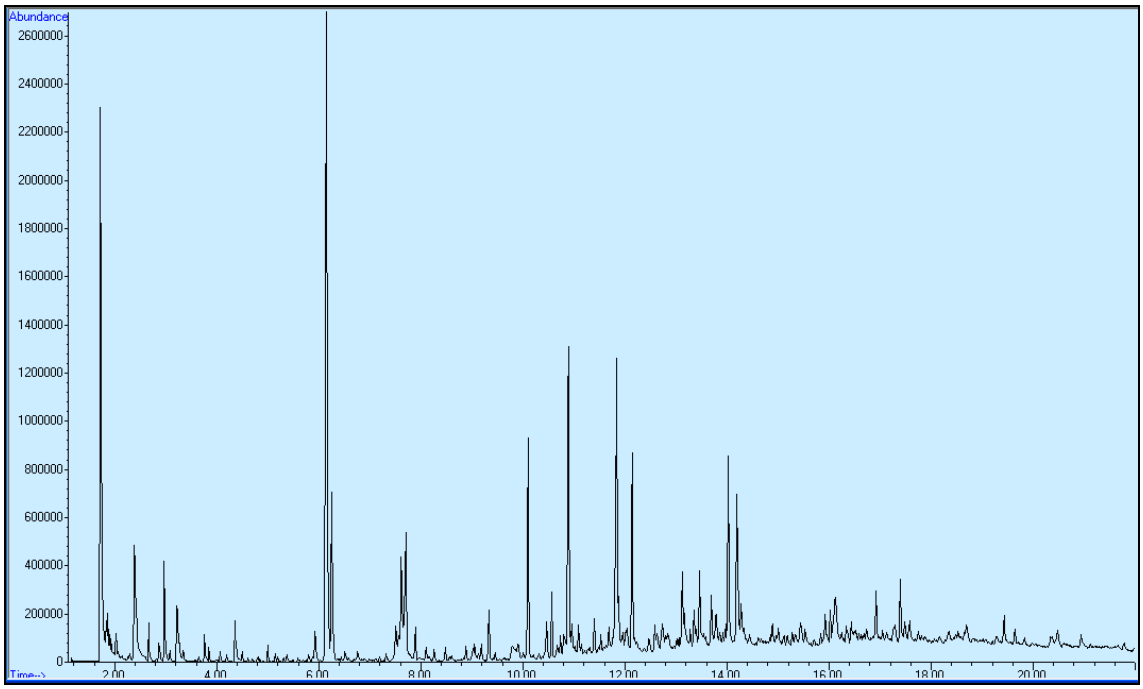

Figure 104: Epson 123 neat ink sample pyrogram

Epson 93 neat ink sample had a similar pyrogram to the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 120 and Epson 123 neat ink sample pyrograms, but it also exhibited a slight difference. The Epson 93 neat ink sample pyrogram contained the seven primary peaks, and identified compounds, as found in the Epson 60, Epson 63 and Epson 120 neat ink sample pyrograms. The Epson 93 neat ink sample pyrogram, however, also contained Benzonitrile (91%) at approximately 6.24 minutes and 2,5-Diethoxyaniline (96%) at approximately 14.20 minutes, as found in the previously discussed Epson neat ink sample pyrograms. However, the Epson 93 neat ink sample pyrogram contained a primary peak at approximately 10.96 minutes that was not identified as a primary peak, or as a secondary peak, in any of the other Epson neat ink samples previously discussed. This peak was identified as p-Isopropenylphenol (94%), and at first glance it appeared to be unique to the Epson 93 neat ink sample. However,

this compound was found in the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 120 and Epson 123 neat ink sample pyrograms, but at levels below the threshold, so it was not listed in these samples as either a primary or a secondary peak. This does not suggest that this peak was not helpful, but rather the fact that it was present at detectable limits only in one Epson neat ink sample made it a distinguishing feature of the Epson 93 neat ink sample. The presence of this compound, along with the other primary and secondary compounds listed for the Epson 93 neat ink sample, would allow this neat ink sample to be differentiated from the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 120 and Epson 123 neat ink samples. Refer to Figure 105 for the pyrogram of the Epson 93 ink sample.

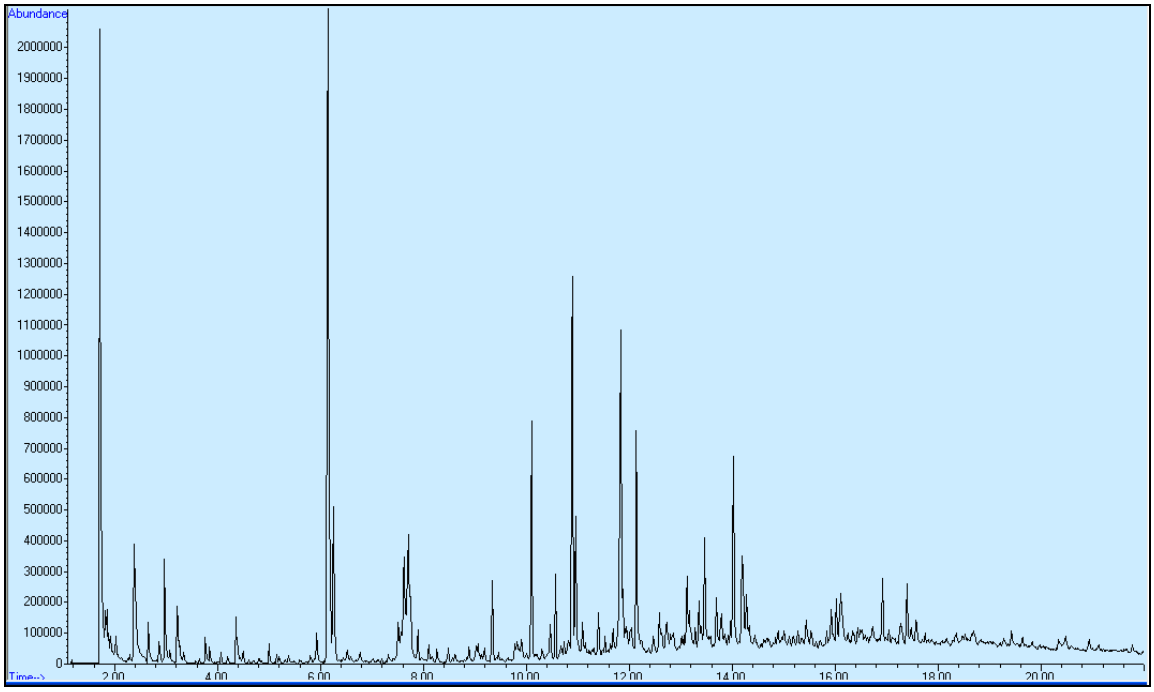

Figure 105: Epson 93 neat ink sample pyrogram

The second type of pyrogram produced by the Epson brand of neat ink samples was the one found for the Epson 30 neat ink sample. The Epson 30 neat ink sample had a

few peaks in its pyrogram that were found in the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 neat ink samples pyrograms discussed previously. Specifically, the primary peaks located at approximately 1.71 minutes, 6.13 minutes, 12.13 minutes and 14.20 minutes were found in the Epson 30 neat ink sample pyrogram. Starting with the peak at approximately 6.13 minutes, the three peaks were identified by the NIST library as Aniline (94%), 6-methyl-1H-Indole (93%) and 2-Naphthalenamine (95%). As stated previously, the peak at approximately 1.71 minutes was identified as Sulfur Dioxide, and the quality match for this identification was less than 10%. This was an extremely low match quality value and hence this peak was not labeled in the summary table, Table 14, located at the end of the discussion on the differences and/or similarities of the thirty-five neat ink standard pyrograms.

However, the other seven primary peaks identified in the Epson 30 neat ink sample pyrogram were not found in any other Epson neat ink sample pyrogram discussed previously. The majority of the primary peaks identified in the Epson 30 neat ink sample were concentrated in the region between approximately 10 minutes to 14 minutes. The primary peaks in this region were located at approximately 9.97 minutes, 10.44 minutes, 10.68 minutes, 10.86 minutes, 11.08 minutes, 13.61 minutes and 14.21 minutes. These primary peaks were identified by the NIST library as 2,5,5-trimethyl-1,3,6-Heptatriene (83%), 2-amino-Benzonitrile (93%), .gamma,.gamma,2,3-tetramethyl-2-Cyclopentene-1-butanal (59%), .gamma,.gamma,2,3-tetramethyl-2-Cyclopentene-1-butanal (53%) 1,2,4-trimethyl-3-nitro-(2-endo, 3-exo, 4-exo)-(+-)-Bicyclo[3.3.1]nonan-9-one (59%), Pentaethylene glycol (78%) and 2-Naphthalenamine (95%). The two peaks located at approximately 10.68 minutes and 10.86 minutes that were both identified as

.gamma,.gamma,2,3-tetramethyl-2-Cyclopentene-1-butanal contained similar main ions in their mass spectral data, which when the NIST library provided the best match to the standards listed in its library, the best match listed happened to be the same compound for both peaks. The Epson 30 neat ink sample pyrogram could be readily distinguished from the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 neat ink samples discussed previously, and the other neat ink samples used in this study, by studying its neat ink sample pyrogram. Refer to Figure 106 for the pyrogram of the Epson 30 neat ink sample.

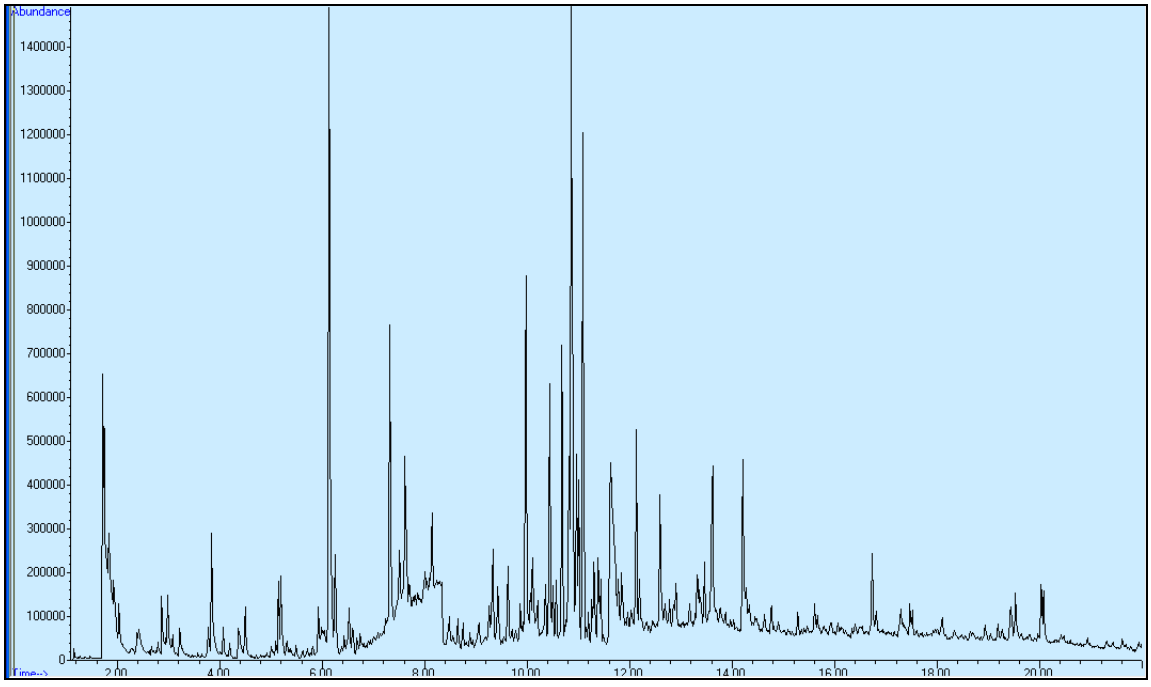

Figure 106: Epson 30 neat ink sample pyrogram

The third type of pyrogram that was found in the Epson brand of neat ink samples was produced by the Epson 156 neat ink sample. The Epson 156 neat ink sample pyrogram had some primary peaks in common with the Epson 30 neat ink sample pyrogram, especially within the region of approximately 10 minutes to just past 11

minutes. The Epson 156 and Epson 30 neat ink sample pyrograms contained the compound 2,5,5-trimethyl-1,3,6-Heptatriene (86%) at approximately 9.97 minutes and the two peaks at approximately 10.68 minutes and 10.86 minutes, both of which were identified as being either 5-[5-methylfurfuryl]hydantion (59%), .gamma,.gamma,2,3-tetramethyl-2-Cyclopentene-1-butanal (53%) or 6-Methyl-6-hepten-4-yn-3-ol (50%). The two peaks located at approximately 10.68 minutes and 10.86 minutes contained similar main ions in their mass spectral data, which resulted in NIST library providing the same list of compounds for both peaks as the best match to the standards listed in its library database.

However, there were also differences noted between the Epson 156 and the Epson 30 neat ink sample pyrograms. The Epson 156 neat ink sample pyrogram lacked the peak at approximately 10.44 minutes that was found in the Epson 30 neat ink sample pyrogram, and the peak located at approximately 11.08 minutes in the Epson 156 neat ink sample pyrogram was identified as being a different substance than what was listed for the Epson 30 neat ink sample pyrogram. In the Epson 156 neat ink sample pyrogram this last peak was identified as being 6-methyl-6-hepten-4-yn-3-ol (50%) rather than the compound 1,2,4-trimethyl-3-nitro-(2-endo,3-exo,4-exo)-(+-)-Bicyclo[3.3.1]nonan-9-one (59%) as found in the Epson 30 neat ink sample pyrogram. In addition, the Epson 156 neat ink sample pyrogram showed the presence of Styrene (95%) at 4.80 minutes and 4.89 minutes, and the presence of 4-amino-1,2-Benzenedicarbonitrile (91%) at 16.10 minutes. Styrene was identified for the two peaks at approximately 4.80 minutes and 4.89 minutes, and both of these two peaks had a high match quality value of 95%. Thus, unlike the situation with the two peaks at approximately 10.68 and 10.85 minutes, the

compound identification of these two peaks as Styrene was extremely strong and there was high confidence in the search results. The Styrene peak in the Epson 156 neat ink sample pyrogram had split into two peaks, the first peak at approximately 4.80 was the main peak and the peak at approximately 4.89 minutes was a secondary peak. The compounds Styrene and 4-amino-1,2-Benzenedicarbonitrile were not found in the other Epson neat ink sample, thus the Epson 156 ink sample could be distinguished from the other Epson ink samples used in this study. Refer to Figure 107 for the pyrogram of the Epson 156 neat ink sample.

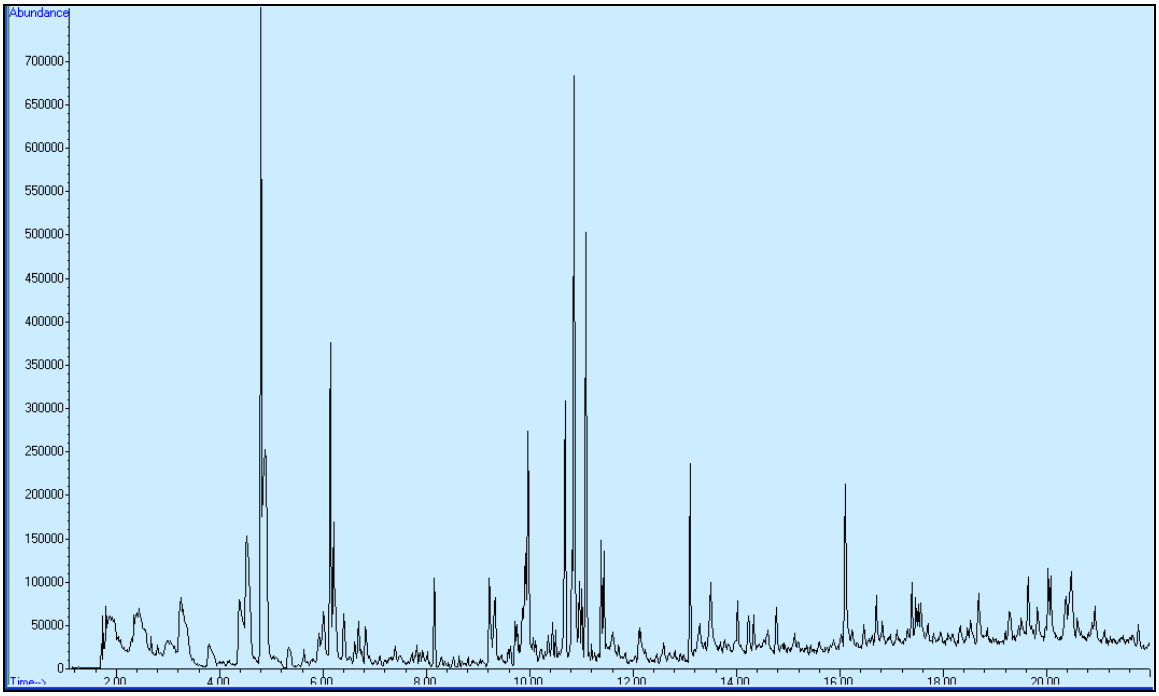

Figure 107: Epson 156 neat ink sample pyrogram

The final pyrogram pattern that was present in the Epson neat ink samples was the one produced by the Epson 84 neat ink sample. The Epson 84 ink sample was the only Epson ink sample that was a non-extractable ink so it was not surprising that its pyrogram would be different from the Epson extractable ink pyrograms. For the Epson 84 neat ink

sample pyrogram only five primary peaks were identified, with three of the five peaks, and related compounds, being the same as those found in the Epson 30 neat ink sample pyrogram and the Epson 156 neat ink sample pyrogram. In particular, the Epson 84 neat ink sample pyrogram contained the compound 2,5,5-trimethyl-1,3,6-Heptatriene (86%) at approximately 9.97 minutes and the two peaks at approximately 10.68 minutes and 10.85 minutes, which were identified as either 5-[5-methylfurfuryl]hydantion (59%), 6-Methyl-6-hepten-4-yn-3-ol (50%) or .gamma,.gamma,2,3-tetramethyl-2-Cyclopentene-1-butanal (50%). As stated previously, the two peaks located at approximately 10.68 minutes and 10.86 minutes contained similar main ions in their mass spectral data, which resulted in NIST library providing the same list of compounds for both peaks as the best match to the standards listed in its library database. In addition, the Epson 84 neat ink sample pyrogram contained a peak at approximately 11.08 minutes, which was identified as the compound 5-[5-methylfurfuryl]hydantion (59%) and a peak at 13.29 minutes, which was identified as D-Allose (90%). The peak at approximately 11.08 minutes and the two peaks at approximately 10.68 minutes and 10.86 minutes had similar mass spectral data, thus when The NIST library provided the best match to the standards listed in its library for these three peaks, the match lists contained the same compounds. Refer to Figure 108 for the pyrogram of the Epson 84 neat ink sample.

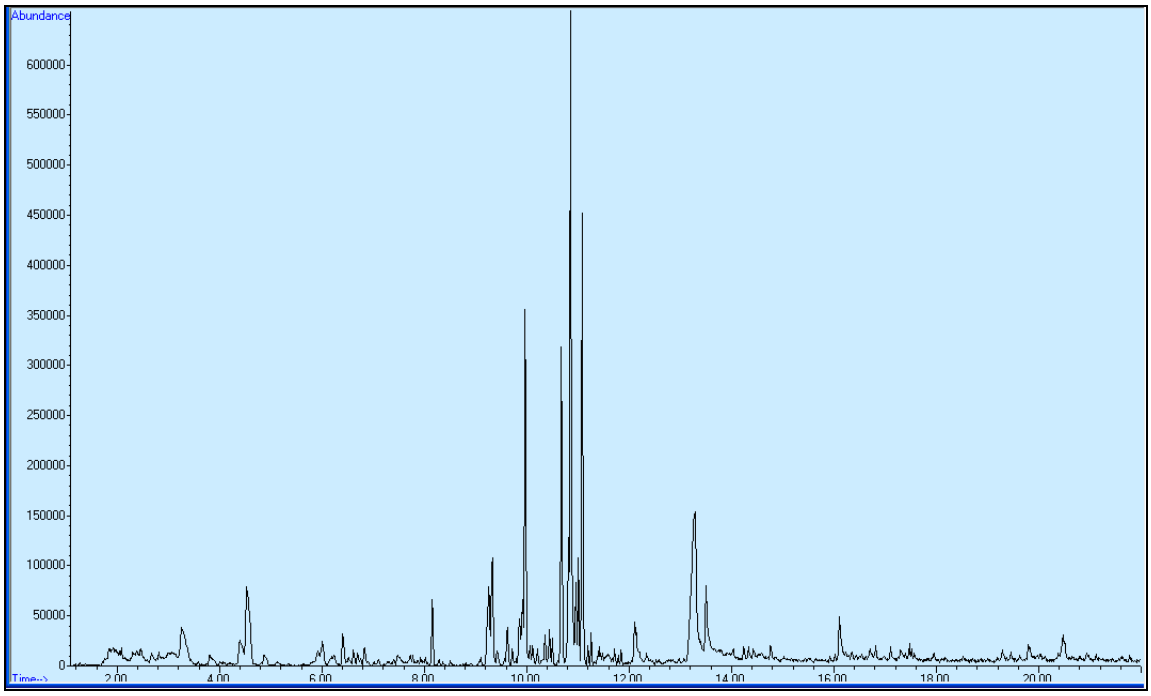

Figure 108: Epson 84 neat ink sample pyrogram

The thirteen Canon neat ink samples could be grouped into eight types of pyrograms. There was a greater degree of variation present in these samples but there was also some common neat ink sample pyrograms present, which could assist in the identification of an unknown sample. The Canon 223, Canon 348 and Canon 384 neat ink samples all had similar pyrograms. There were ten peaks that were primary in the neat ink sample pyrogram of the Canon 348 neat ink sample, and which were present in the Canon 223 and Canon 384 neat ink sample pyrograms, though some of these peaks were not primary peaks in the latter two neat ink samples but rather appeared as secondary peaks. The primary peaks present in the Canon 348 neat ink sample pyrogram included peaks at approximately 1.71 minutes, 2.96 minutes, 4.34 minutes, 6.13 minutes, 10.09 minutes, 11.75 minutes, 11.80 minutes, 14.02 minutes, 14.20 minutes and 16.92 minutes, all of which could be identified using the NIST library except for the peak at

1.71 minutes. As stated previously, the peak at approximately 1.71 minutes was identified as Sulfur Dioxide, and the quality match for this identification was less than 10%. This was an extremely low match quality value and hence this peak was not labeled in Table 14, located at the end of the discussion on the differences and/or similarities of the thirty-five neat ink standard pyrograms. Starting with the peak at approximately 2.96 minutes, the primary peaks were identified as Pyridine (91%), 3-methyl-Pyridine (94%), Aniline (91%), Quinoline (95%), 3-methyl-Quinoline (96%), 2-amino-Benzonitrile (95%), 1-Naphthalenamine (97%), 2-Naphthalenamine (97%) and Benzo[g]quinoline (96%), respectively. The Canon 223 neat ink sample pyrogram was similar to the Canon 348 neat ink sample pyrogram, with the exception of the two peaks at approximately 4.34 minutes and 11.75 minutes. The two peaks at approximately 4.34 minutes and 11.75 minutes were secondary peaks in the Canon 223 neat ink sample pyrogram, while these two peaks were primary peaks in the Canon 348 neat ink sample pyrogram. In addition, the Canon 384 neat ink sample pyrogram was similar to the Canon 348 neat ink sample pyrogram, with the exception that the peak at approximately 11.75 minutes was listed as a secondary peak in the Canon 384 neat ink sample pyrogram and not as a primary peak as in the Canon 348 neat ink sample pyrogram. In the region between approximately 17.2 minutes and 17.6 minutes, there were differences in the peak shapes for the Canon 223, Canon 348 and Canon 384 neat ink sample pyrograms, but the compounds present in this region were the same for all three neat ink samples. In all other respects, the Canon 223, Canon 348 and Canon 384 neat ink sample pyrograms were consistent with each other. Refer to Figures 109 through 111 for the pyrograms of the Canon 348, Canon 223 and Canon 384 neat ink samples.

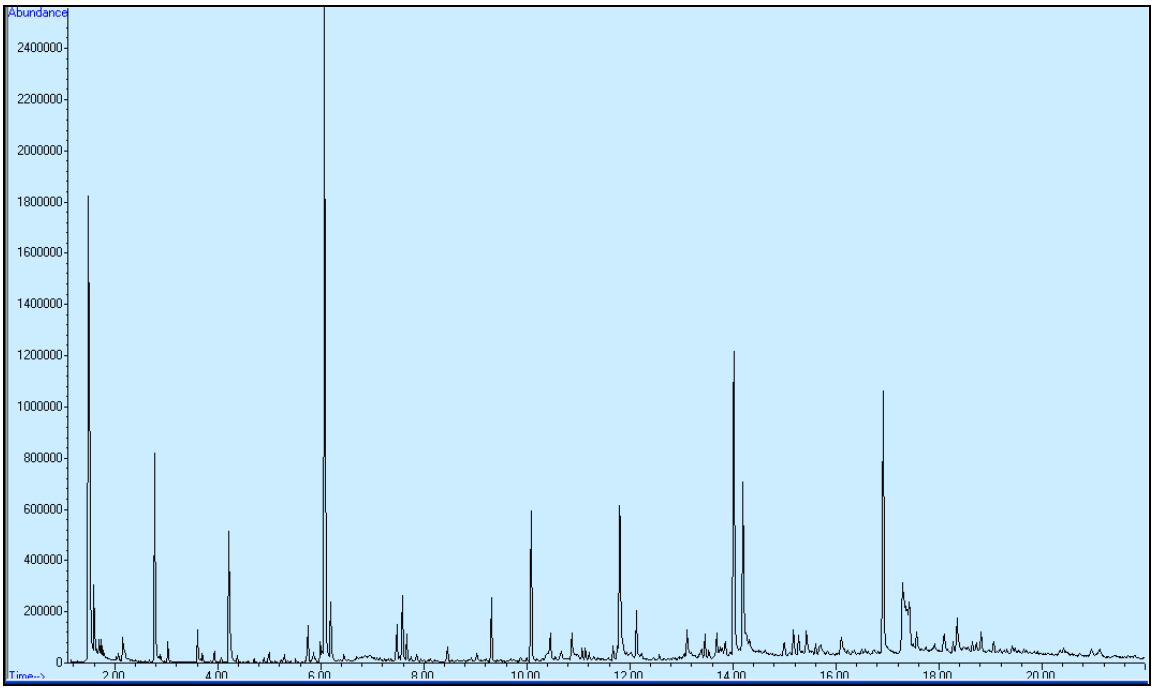

Figure 109: Canon 348 neat ink sample pyrogram

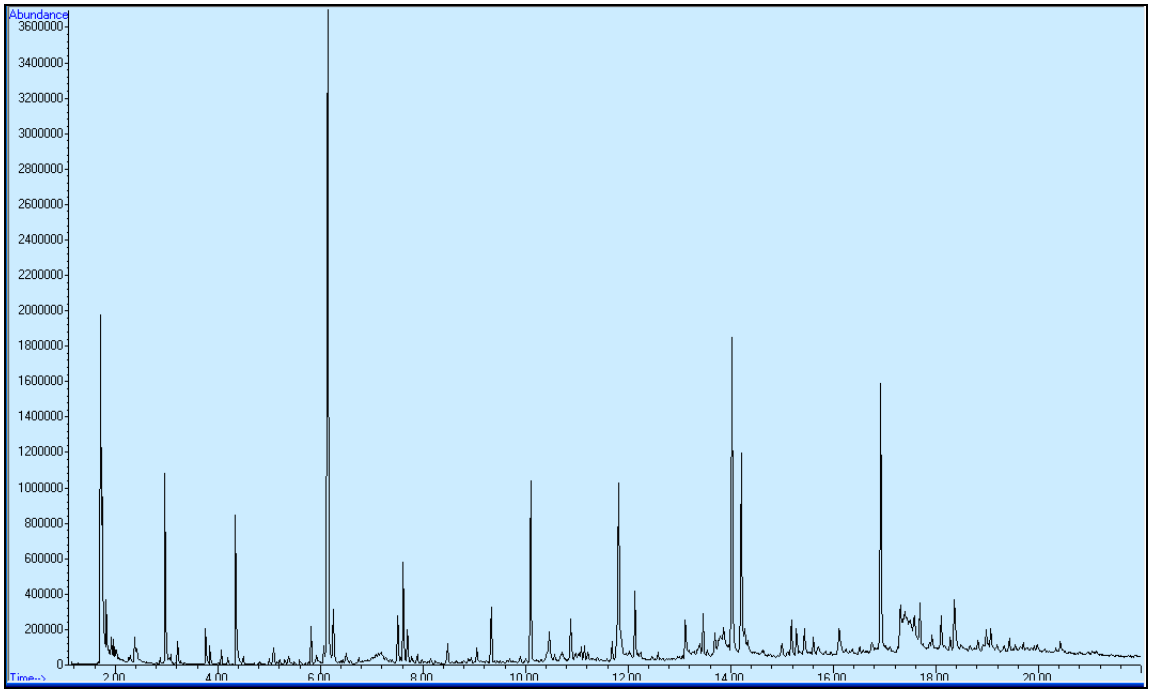

Figure 110: Canon 223 neat ink sample pyrogram

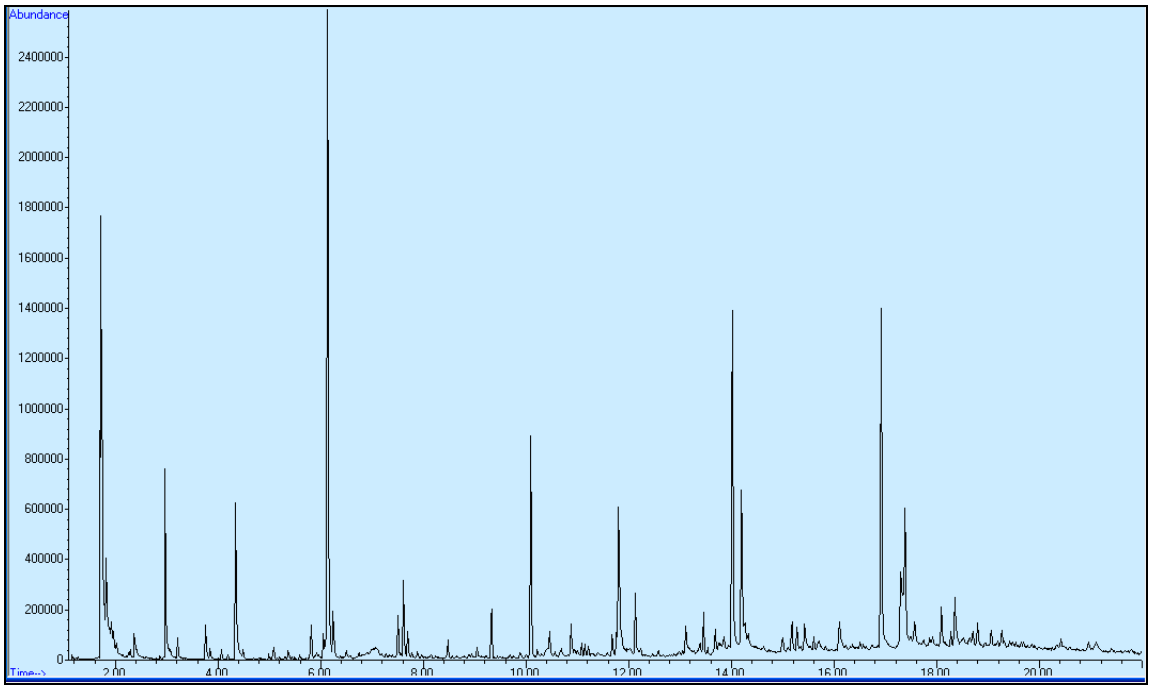

Figure 111: Canon 384 neat ink sample pyrogram

Canon 217 and Canon 522 neat ink sample pyrograms were similar in pattern to each other, though there were some differences in the labeling of the primary and secondary peaks between the two neat ink sample pyrograms. The Canon 217 neat ink sample pyrogram had seven primary peaks at approximately 1.71 minutes, 2.65 minutes, 2.97 minutes, 5.82 minutes, 6.14 minutes, 10.09 minutes and 17.29 minutes. Starting with the peak at approximately 2.65 minutes, these six primary peaks were identified by the NIST library as 1,4-Dioxane (86%), Pyridine (90%), Isocyanato-Benzene (91%), Aniline (91%), Quinoline (95%) and Benzo[f]quinoline (96%), respectively. As stated previously, the peak at approximately 1.71 minutes was identified as Sulfur Dioxide, and the quality match for this identification was less than 10%. This was an extremely low match quality value and hence this peak was not labeled in the summary table, Table 14, located at the end of the discussion on the differences and/or similarities of the thirty-five

neat ink standard pyrograms. The Canon 522 neat ink sample pyrogram lacked the three primary peaks located at approximately 2.65 minutes, 5.82 minutes and 17.29 minutes found in the Canon 217 neat ink sample pyrogram and had an additional primary peak at approximately 4.34 minutes, which was identified as 3-methyl-Pyridine (94%), that was not found as a primary peak for the Canon 217 neat ink sample pyrogram. However, taking into account the presence of secondary peaks, the Canon 522 neat ink sample pyrogram did contain these three peaks, though secondary, at approximately 2.65 minutes, 5.82 minutes and 17.29 minutes, with the same compound identification as in the Canon 217 neat ink sample pyrogram, and Canon 217 neat ink sample pyrogram did contain a secondary peak at 4.34 minutes, with the same compound identification as in the Canon 522 neat ink sample pyrogram. The differences present between the Canon 217 and Canon 522 neat ink sample pyrograms rested in the designation of a peak as being either a primary peak or a secondary peak. In addition, the Canon 522 neat ink sample pyrogram contained two peaks at approximately 16.1 minutes and 18.1 minutes that were not readily apparent in the Canon 217 neat ink sample pyrogram. The two peaks located at approximately 16.1 minutes and 18.1 minutes were identified by the NIST library as 4-amino-1,2-Benzenedicarbonitrile (91%) and 5H-Indeno[1,2-b]pyridine (90%) respectively. These two peaks, and their compound identifications, were found in the Canon 217 neat ink sample pyrogram but at a level well below the primary and secondary peak threshold. Refer to Figures 112 and 113 for the pyrograms of the Canon 217 and Canon 522 neat ink samples.

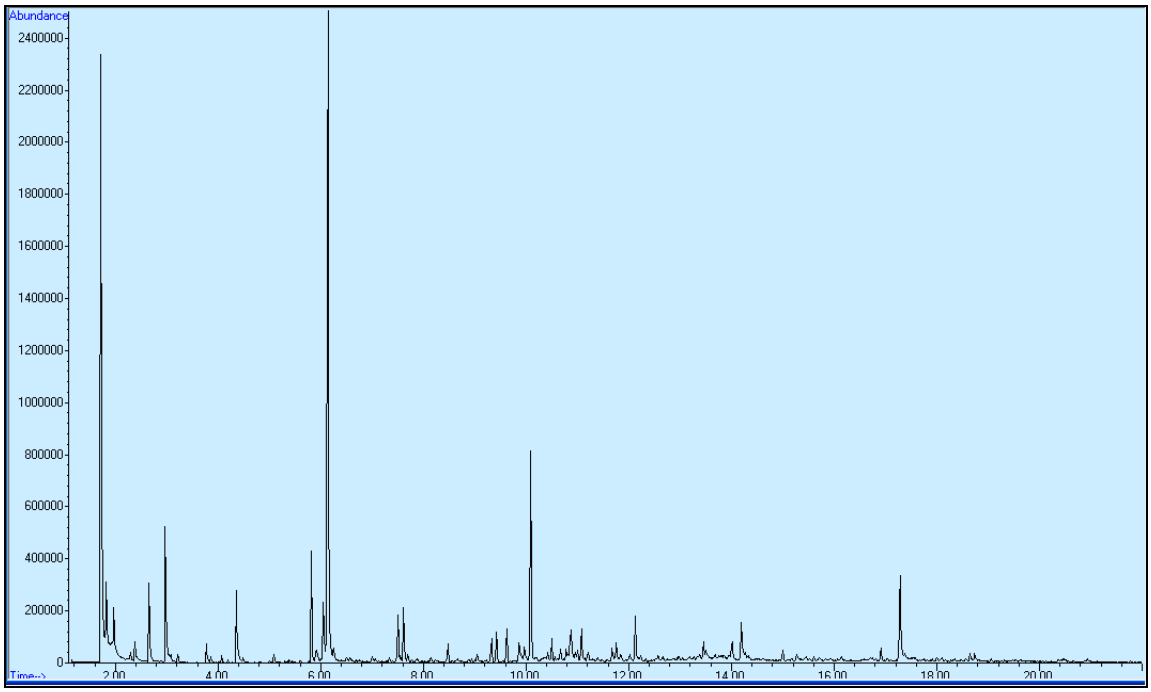

Figure 112: Canon 217 neat ink sample pyrogram

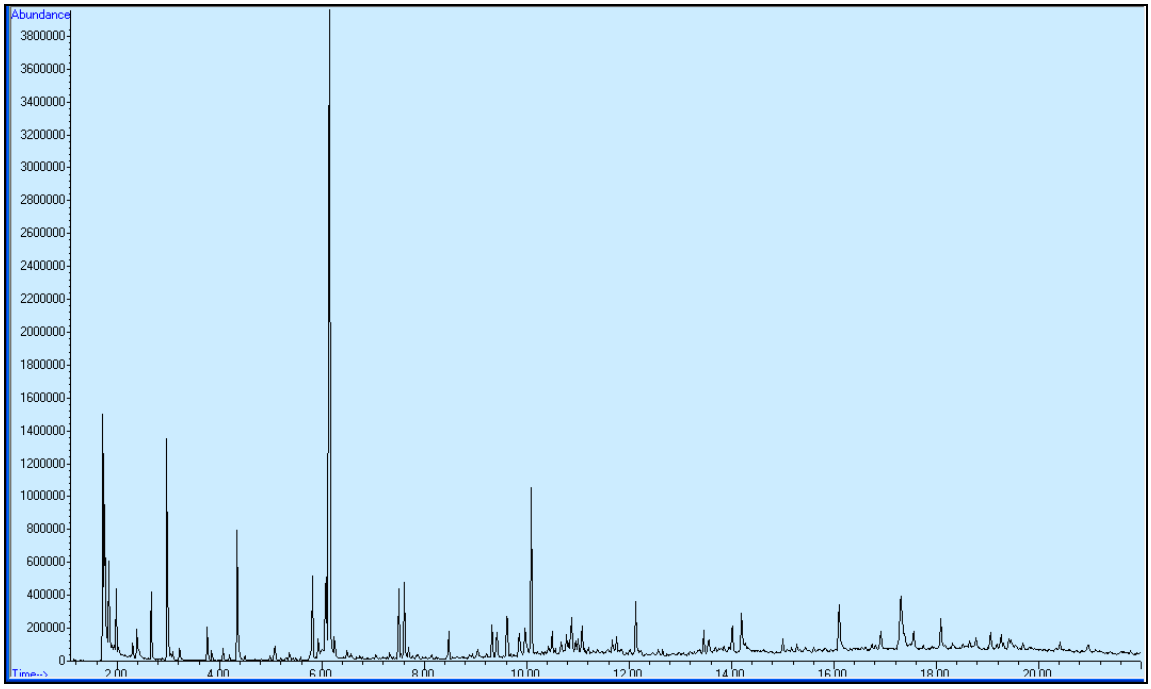

Figure 113: Canon 522 neat ink sample pyrogram

The Canon 327 and Canon 402 neat ink sample pyrograms were similar with respect to their overall peak patterns. The main difference between the Canon 327 and Canon 402 neat ink samples dealt with the designation of the primary peaks and the secondary peaks in their neat ink sample pyrograms. The Canon 327 neat ink sample pyrogram contained six primary peaks at approximately 1.71 minutes, 6.42 minutes, 11.71 minutes, 11.80 minutes, 14.01 minutes and 14.20 minutes. Staring with the peak at approximately 6.42 minutes, these five primary peaks were identified by the NIST library as Benzonitrile (91%), 2-methyl-1,4-Benzenediamine (95%), 2-amino-Benzonitrile (93%), 1-Naphthalenamine (97%) and 2-Naphthalenamine (97%) respectively. As stated previously, the peak at approximately 1.71 minutes was identified as Sulfur Dioxide, and the quality match for this identification was less than 10%. This was an extremely low match quality value and hence this peak was not labeled in the summary table, Table 14, located at the end of the discussion on the differences and/or similarities of the thirty-five neat ink standard pyrograms. The Canon 402 neat ink sample pyrogram lacked the primary peak at 1.71 minutes, it was a secondary peak in this neat ink sample pyrogram, but contained an extra primary peak at approximately 5.07 minutes, which was identified by the NIST library as 2,6-dimethyl-Pyrazine (72%). The peak at approximately 5.07 minutes, and its compound identification, was present as a secondary peak in the Canon 327 neat ink sample pyrogram. Overall however, the Canon 327 and Canon 402 neat ink sample pyrograms were consistent with each other. There were also other peaks present in the Canon 327 and Canon 402 neat ink sample pyrograms that varied in abundance. Though the compounds for these peaks were found in these two neat ink sample pyrograms, some of the peaks were well below the threshold for identification and were

not included in Table 14. Refer to Figure 114 and Figure 115 for the pyrograms of the Canon 327 and Canon 402 neat ink samples.

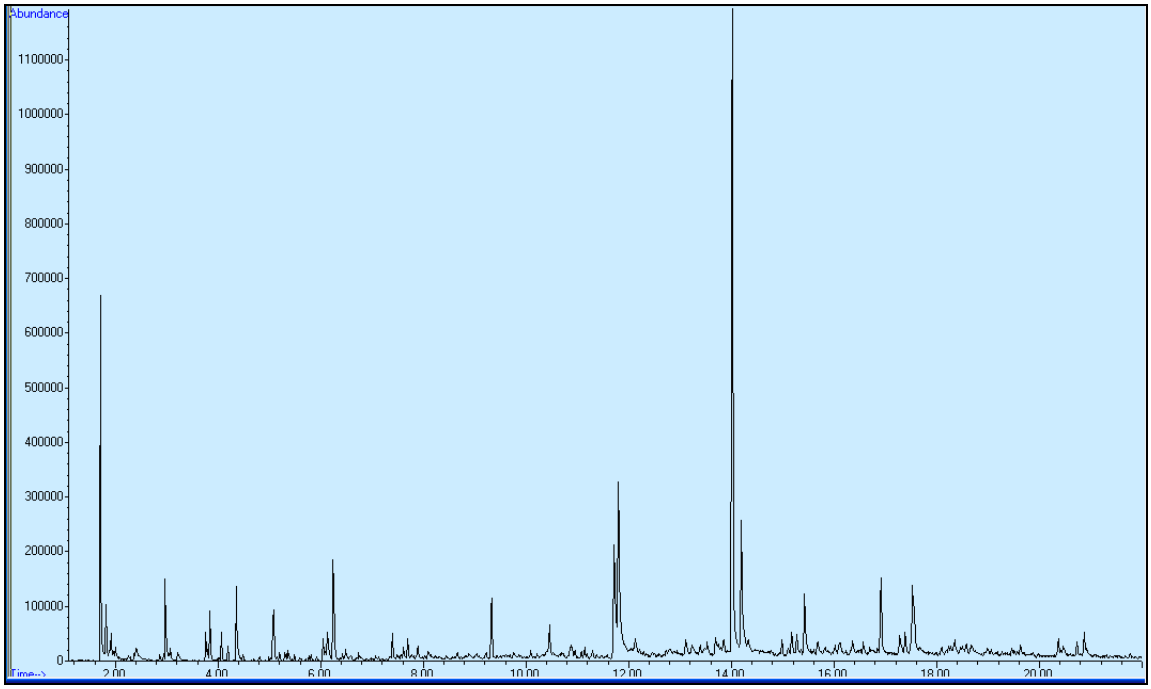

Figure 114: Canon 327 neat ink sample pyrogram

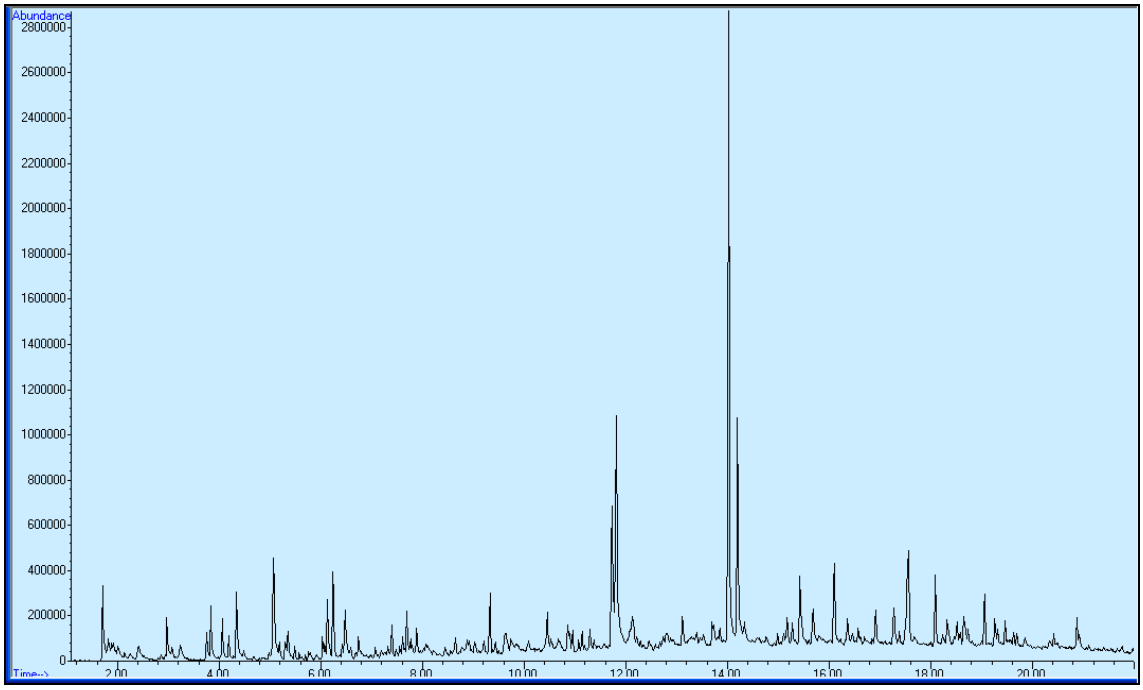

Figure 115: Canon 402 neat ink sample pyrogram

The Canon 312 and Canon 492 ink samples were the non-extractable ink samples found in the Canon brand of ink samples, and as such it was not surprising that their pyrograms were different from the Canon extractable ink samples. For the Canon 312 neat ink sample pyrogram, five peaks were listed as being primary for this neat ink sample. The five primary peaks had retention times of approximately 2.37 minutes, 6.13 minutes, 9.22 minutes, 12.04 minutes and 20.37 minutes, and were identified by the NIST library as Benzene (91%), Aniline (91%), Benzenecarboxylic acid (81%), Biphenyl (91%) and m-Terphenyl (98%) respectively. For the Canon 492 neat ink sample pyrogram, five peaks were also identified as being primary for this neat ink sample, and these peaks included the first four primary peaks listed for the Canon 312 neat ink sample pyrogram. The fifth primary peak found in the Canon 492 neat ink sample pyrogram was located at a retention time of approximately 16.36 minutes and was identified by the NIST library as 9H-Fluoren-9-one (97%). The peak located in the Canon 312 neat ink sample pyrogram at approximately 20.37 minutes was present in the Canon 492 neat ink sample pyrogram as a secondary peak. Conversely, the peak located in the Canon 492 neat ink sample pyrogram at approximately 16.36 minutes was present in the Canon 312 pyrogram as a secondary peak. Furthermore, a secondary peak located at approximately 19.27 minutes, and identified by the NIST library as 1-phenyl-4-(2,2-dicyanoethenyl)-Benzene (87%), in the Canon 492 neat ink sample pyrogram was not present in the Canon 312 neat ink sample pyrogram, which may allow for these two neat ink samples to be distinguished from each other, depending on the concentration of the ink sample.

Refer to Figures 116 and 117 for the pyrograms of the Canon 312 and Canon 492 neat ink samples.

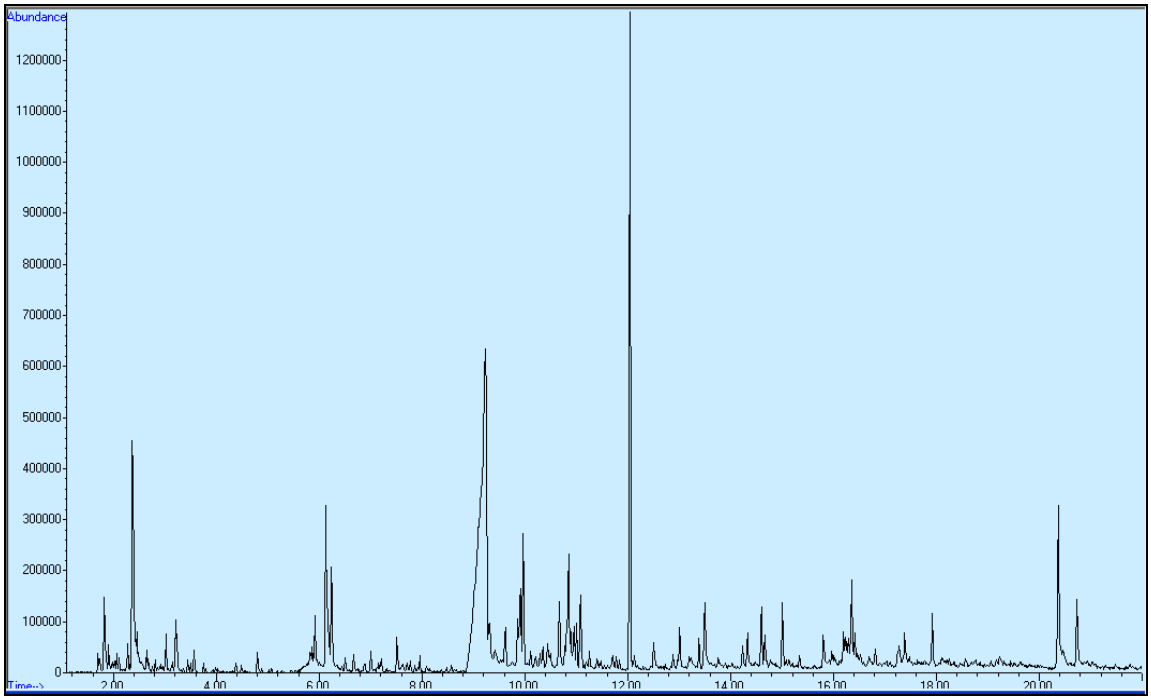

Figure 116: Canon 312 neat ink sample pyrogram

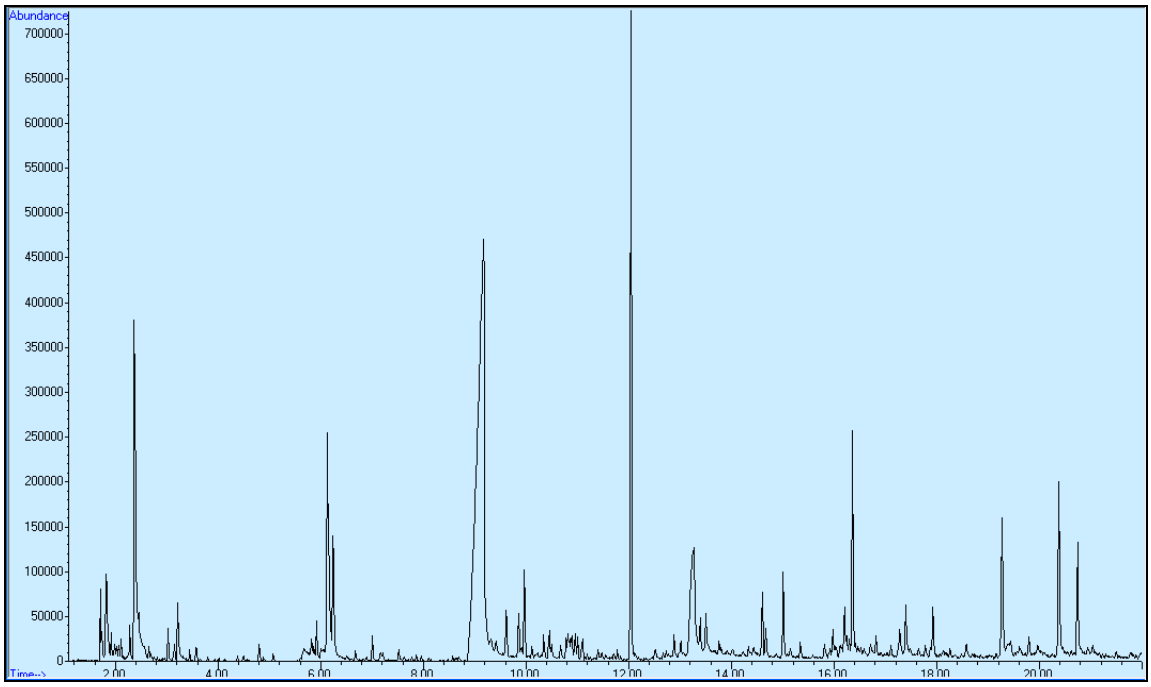

Figure 117: Canon 492 neat ink sample pyrogram

The Canon 282 neat ink sample pyrogram contained very few peaks, which was different from the other Canon neat ink sample pyrograms discussed previously. In the Canon 282 neat ink sample pyrogram, four peaks were listed as being primary peaks for this neat ink sample. These peaks occurred at retention times of approximately 1.72 minutes, 2.04 minutes, 6.13 minutes and 11.72 minutes, with the latter three identified as being Thiirane (80%), Aniline (94%) and 2-methyl-1,4-Benzenediamine (95%) respectively. As stated previously, the peak at approximately 1.71 minutes was identified as Sulfur Dioxide, and the quality match for this identification was less than 10%. This was an extremely low match quality value and hence this peak was not labeled in the summary table, Table 14, located at the end of the discussion on the differences and/or similarities of the thirty-five neat ink standard pyrograms. It should be noted that the Canon 282 neat ink sample pyrogram also contained a minor peak at approximately 17.29 minutes, which was identified by the NIST library as Benzo[f]quinoline (95%). This compound was found only in the Canon neat ink sample, and thus could be used for the identification of an unknown ink sample. Refer to Figure 118 for the pyrogram of the Canon 282 neat ink sample.

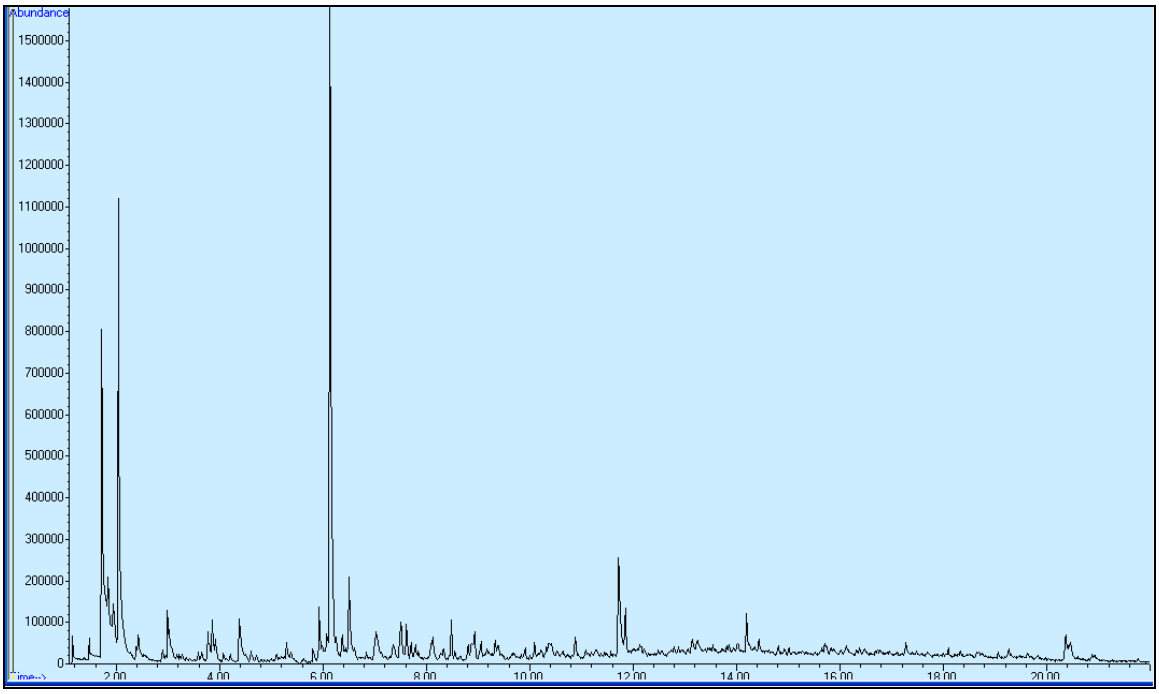

Figure 118: Canon 282 neat ink sample pyrogram

The Canon 318 neat ink sample pyrogram also contained the peaks at approximately 1.71 minutes and 2.03 minutes, identified by the NIST library as Sulfur Dioxide (9%) and Thiirane (80%) respectively, which were found in the Canon 282 neat ink sample pyrogram. However, this was where the similarities between these two Canon neat ink sample pyrograms ended. The Canon 318 neat ink sample pyrogram contained three primary peaks at approximately 2.97 minutes, 14.02 minutes and 14.20 minutes, which were identified by the NIST library as the compounds Pyridine (91%), 1-Naphthalenamine (97%) and 2-Naphthalenamine (97%) respectively. None of the other Canon neat ink samples, or any of the other neat ink samples used in this study, had the same neat ink sample pyrogram as the Canon 318 neat ink sample. Refer to Figure 119 for the pyrogram of the Canon 318 neat ink sample.

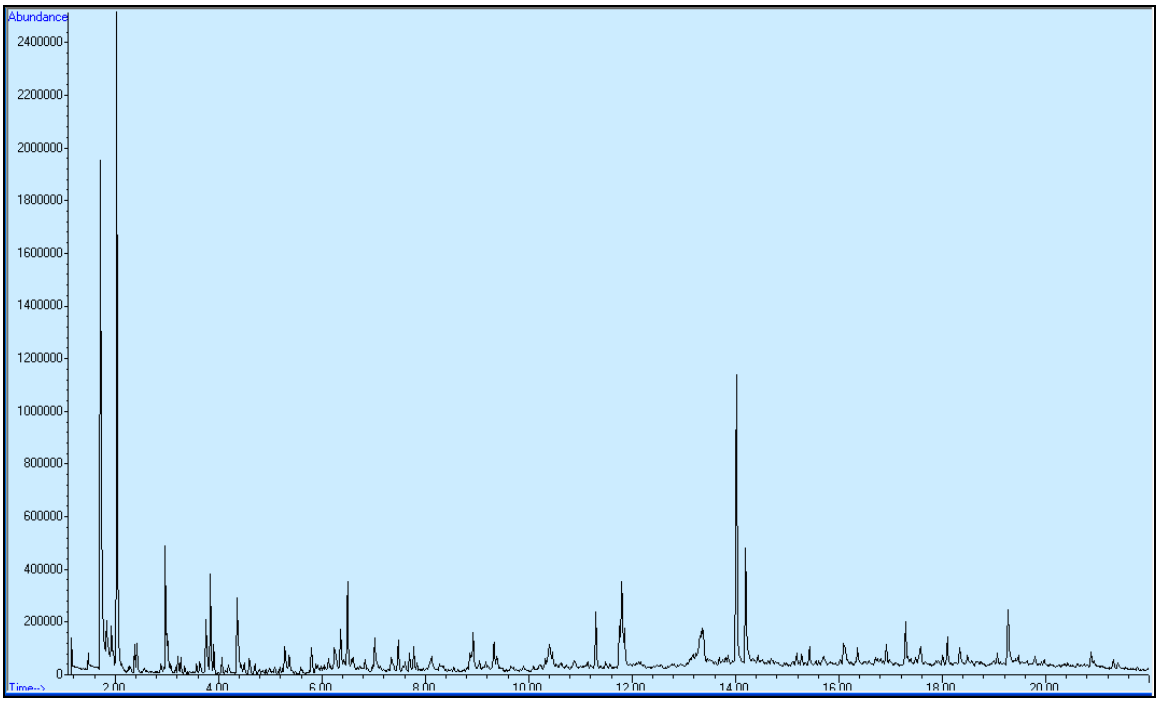

Figure 119: Canon 318 neat ink sample pyrogram

The Canon 318a neat ink sample, the slightly yellow liquid from the BC-60 ink cartridge, was also analyzed using pyrolysis gas chromatography-mass spectrometry. The neat ink sample pyrogram produced by the Canon 318a neat ink sample was different from the other samples. The overall peak pattern for this sample was different from the other neat ink sample pyrograms in the study, however the abundance results for this sample was also distinct from the rest of the neat ink samples tested. The maximum abundance value for the Canon 318a neat ink sample was approximately 180,000, which was about 10% of the value of the maximum abundance value for the majority of the other neat ink samples. Furthermore, the initial peaks, up to approximately 5 minutes, tended to be wider and less sharp than the peaks in any other neat ink sample pyrograms. In the Canon 318a neat ink sample pyrogram, four peaks were selected as primary peaks for the Canon 318a neat ink sample. The four primary peaks had retention times of

approximately 3.32 minutes, 13.27 minutes, 18.10 minutes and 19.27 minutes, with the latter three primary peaks identified by the NIST library as D-Allose (91%), 5H-Indeno[1,2-b]pyridine (72%) and 1-phenyl-4-[2,2-dicyanoethenyl]-Benzene (90%) respectively. The primary peak located at approximately 3.32 minutes was identified by the NIST library as 1,2-dimethyl-Azetidine, with a match quality value of 10%. This was an extremely low match quality value and hence this peak was not labeled in the summary table, Table 14, located at the end of the discussion on the differences and/or similarities of the thirty-five neat ink standard pyrograms. Refer to Figure 120 for the pyrogram of the Canon 318a neat ink sample.

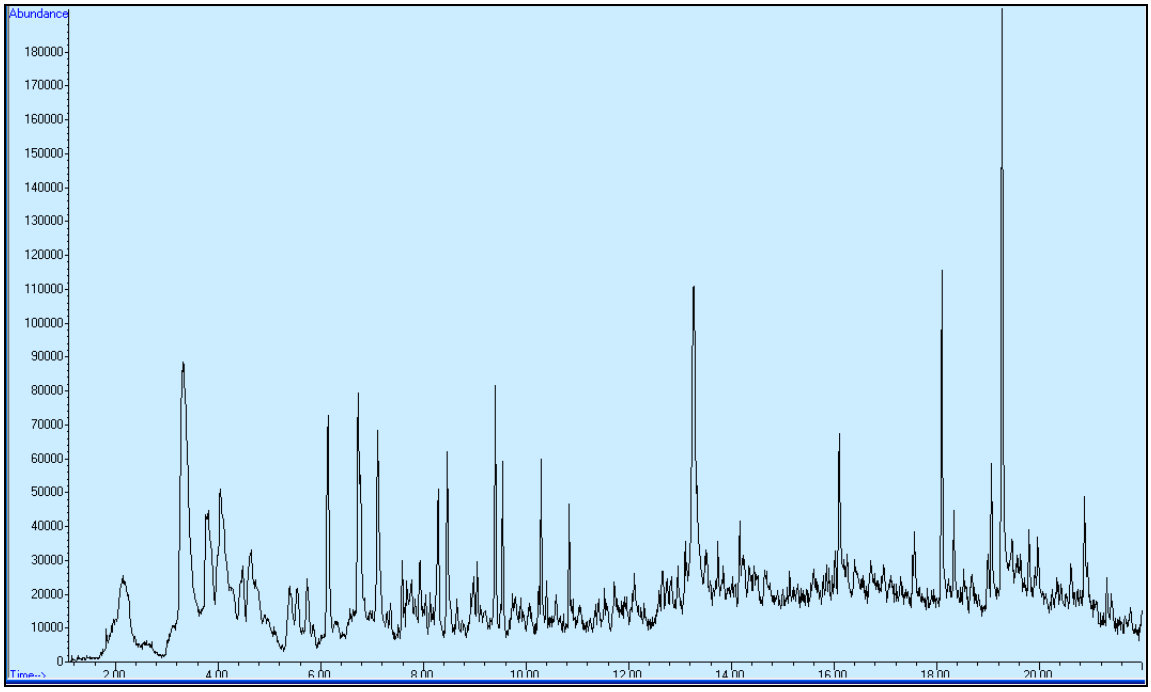

Figure 120: Canon 318a neat ink sample pyrogram

The final Canon neat ink sample tested in this study, namely the Canon 306 neat ink sample, had a pyrogram that was different from the neat ink sample pyrograms produced by the other Canon neat ink samples. In the Canon 306 neat ink sample

pyrogram, seven peaks were identified as being the primary peaks for the Canon 306 neat ink sample and these seven primary peaks had retention times of approximately 1.72 minutes, 11.82 minutes, 14.02 minutes, 14.20 minutes, 16.93 minutes and 17.29 minutes. The six primary peaks, starting with the peak at approximately 11.82 minutes, were identified by the NIST library as 2-amino-Benzonitrile (91%), 1-Naphthalenamine (95%), 2-Naphthalenamine (97%), Benzo[h]isoquinoline (93%) and Benzo[f]quinoline (96%) respectively. As stated previously, the primary peak located at approximately 1.71 minutes was identified as Sulfur Dioxide, and the quality match for this identification was less than 10%. This was an extremely low match quality value and hence this peak was not labeled in the summary table, Table 14, located at the end of the discussion on the differences and/or similarities of the thirty-five neat ink standard pyrograms. The Canon 306 neat ink sample pyrogram was different from the other Canon neat ink sample pyrograms, and the pyrograms of the other neat ink samples used in this study. Refer to Figure 121 for the pyrogram of the Canon 306 neat ink sample.

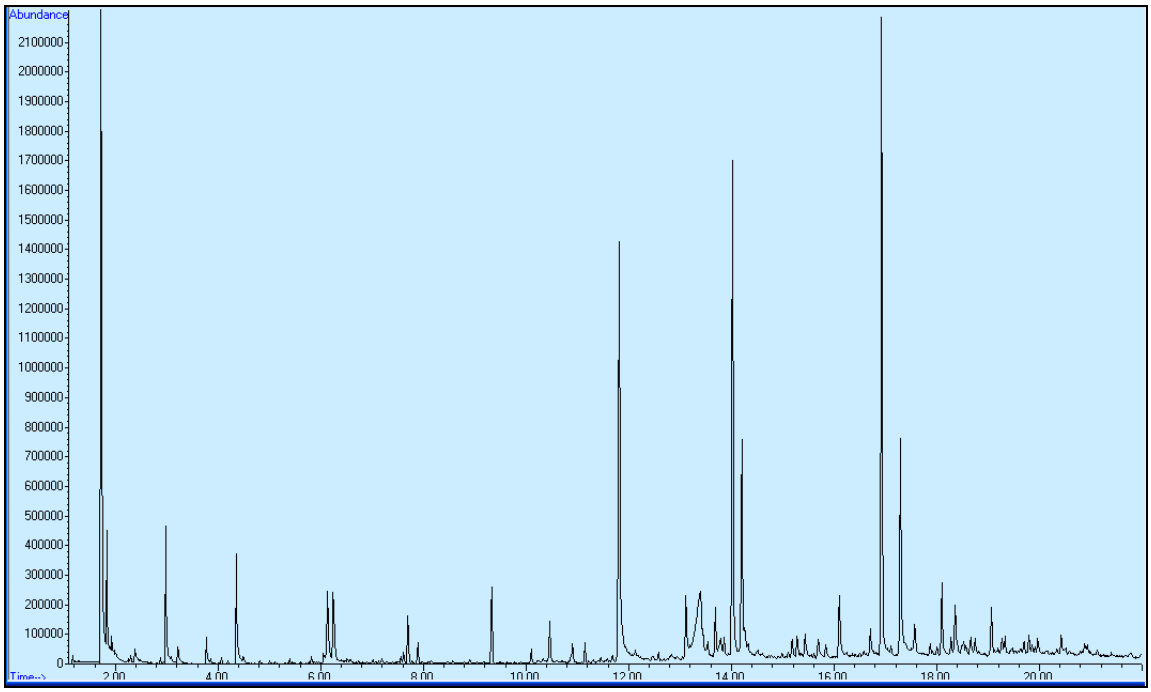

Figure 121: Canon 306 neat ink sample pyrogram

Based on the primary and secondary peak patterns present in their pyrograms, the Hewlett Packard neat ink samples pyrograms could be separated into two groups, namely the pyrograms produced by the non-extractable neat ink samples and the pyrogram produced by the extractable neat ink sample. The pyrograms produced by the Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200 and Hewlett Packard 201 non-extractable neat ink samples exhibited a large number of primary peaks that were common between the four Hewlett Packard non-extractable neat ink samples. The Hewlett Packard 198, Hewlett Packard 199 and Hewlett Packard 200 neat ink sample pyrograms all contained twelve primary peaks with retention times of approximately 3.21 minutes, 6.96 minutes, 7.08 minutes, 10.75 minutes, 11.42 minutes, 14.29 minutes, 14.40 minutes, 14.89 minutes, 15.15 minutes, 17.33 minutes, 17.41 minutes and 20.01 minutes. In the Hewlett Packard 198 neat ink sample pyrogram these twelve primary peaks were

identified by NIST library as the compounds Toluene (91%), Benzyl Alcohol (96%), Benzyl Alcohol (96%), 2-[2-(2-ethoxyethoxy)ethoxy]-Ethanol (83%), Benzyl Methacrylate (96%), Octaethylene glycol monododecyl ether (59%), 1,4,7,10,13,16-Hexaoxacyclooctadecane (83%), 4-Fluoro-6-aminopyrimidine (46%), unidentified, Heptaethylene glycol (64%), 1,4,7,10,13,16-Hexaoxacyclooctadecane (83%) and 1,4,7,10,13,16-Hexaoxacyclooctadecane (83%), respectively. The peak at 15.15 minutes was searched against the NIST library, however there was no definitive compound identified by the NIST library and hence this peak was labeled as unidentified. The Benzyl Alcohol peak was split in the Hewlett Packard neat ink sample pyrograms, which resulted in two peaks with the same compound identification. In addition, the peak at approximately 14.29 minutes, identified as Octaethylene glycol monododecyl ether for the Hewlett Packard 198 neat ink sample pyrogram, was identified as the compound 1,4,7,10,13,16-Hexaoxacyclooctadecane (59%) in the Hewlett Packard 199 and Hewlett Packard 200 neat ink sample pyrograms. For the Hewlett Packard 201 neat ink sample, the three peaks at approximately 14.29 minutes, 14.40 minutes and 20.06 minutes were not present as primary peaks in its pyrogram, but rather were present as secondary peaks. The other nine primary peaks discussed previously with the Hewlett Packard 198, Hewlett Packard 199 and Hewlett Packard 200 neat ink sample pyrograms were also present in the Hewlett Packard 201 neat ink sample pyrogram.

Four of the primary peaks in the Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200 and Hewlett Packard 201 neat ink sample pyrograms were identified by the NIST library as being 1,4,7,10,13,16-Hexaoxacyclooctadecane. These peaks were located at approximately 14.29 minutes, 14.40 minutes, 17.41 minutes and

20.04 minutes, and were present in the Hewlett Packard neat ink sample pyrograms as distinct and separate peaks. The match quality values for these four primary peaks ranged from 53% to 83%, depending on the peak and the neat ink sample being compared. Though this was a large difference in the match quality values, it should be noted that this was the best match that the NIST library could make for these four peaks based on their mass spectral data and the standards listed in the NIST database. The peaks located at approximately 14.29 minutes, 14.40 minutes, 17.41 minutes and 20.04 minutes, and the compound 1,4,7,10,13,16-Hexaoxacyclooctadecane had ions in common within their mass spectral data, which was the basis for the identification by the NIST library. When the Hewlett Packard neat ink sample pyrograms were examined in more detail a pattern emerged that included the four peaks discussed above. Located within the second half of the Hewlett Packard neat ink sample pyrograms, a pattern of a group of two peaks was repeated in a predictable pattern. The group of two peaks at approximately 14.29 minutes and 14.40 minutes, at 17.36 minutes and 17.41 minutes, and at 19.99 minutes and 20.04 minutes were examples of this pattern. Though the NIST library had listed the compound 1,4,7,10,13,16-Hexaoxacyclooctadecane as the best match for four of these peaks, other compounds were also listed within the match list. The other compounds included in the match lists were different types of glycol, namely Pentaethylene glycol, Heptaethylene glycol and Hexagol, the latter also known as Hexaethylene glycol. Thus, this pattern could in fact be due to the pyrolysis of a type of Glycol, which is a common component of inkjet ink formulations. Refer to Figures 122 through 125 for the pyrograms of the Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200 and Hewlett Packard 201 neat ink samples.

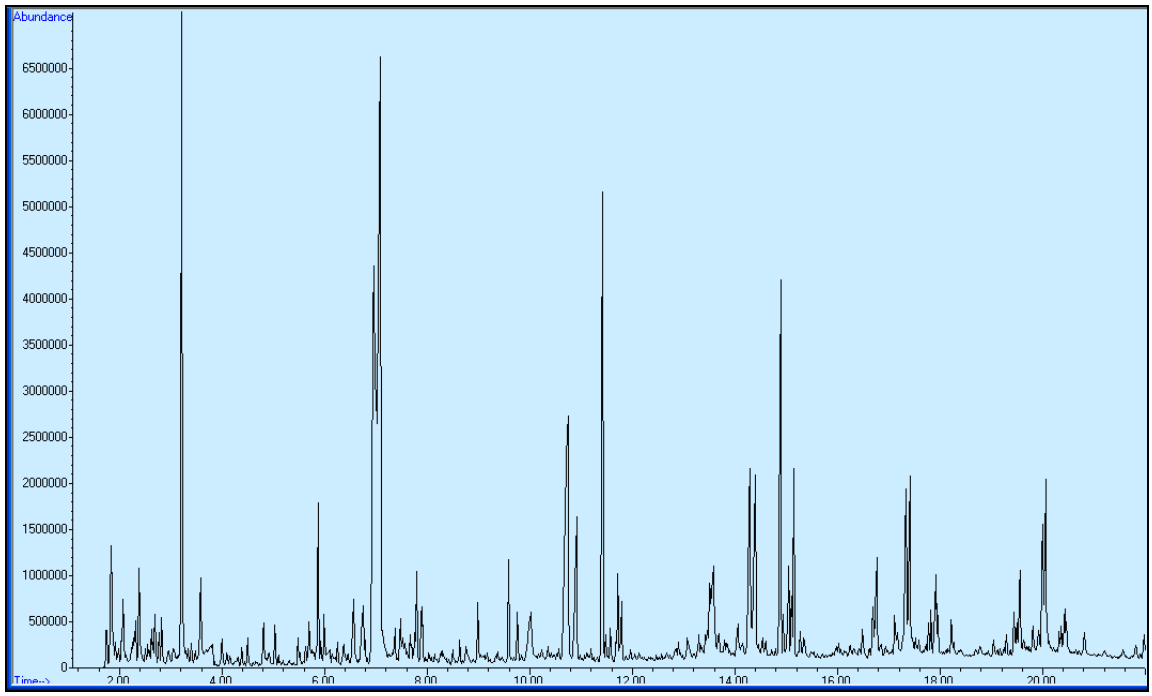

Figure 122: Hewlett Packard 198 neat ink sample pyrogram

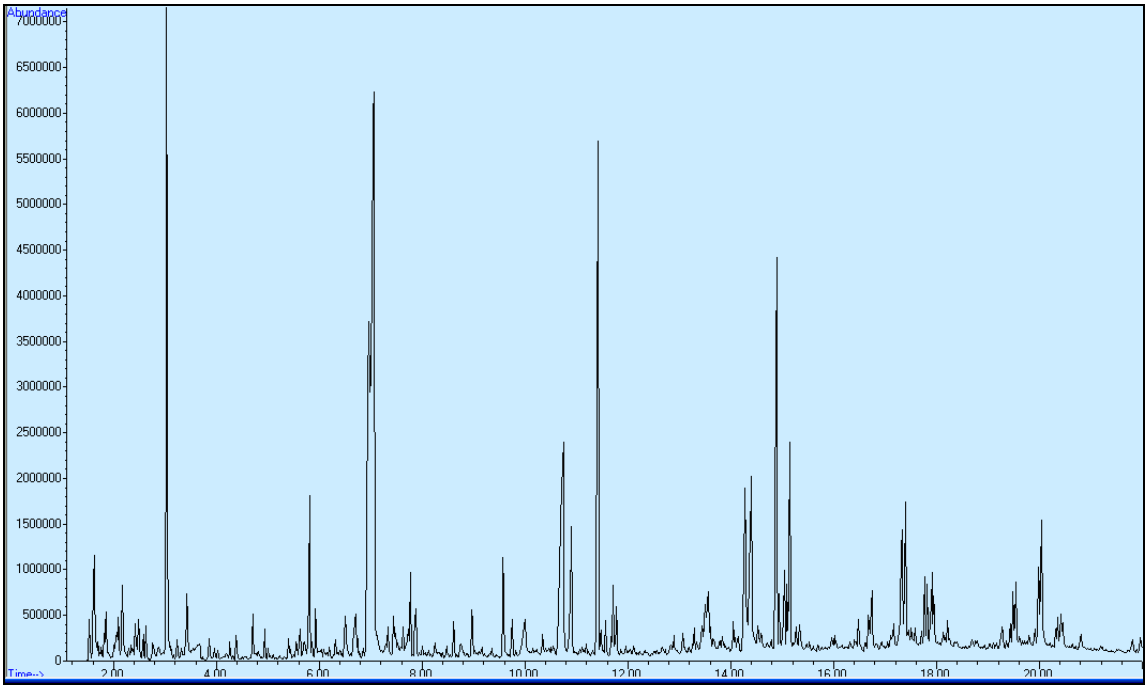

Figure 123: Hewlett Packard 199 neat ink sample pyrogram

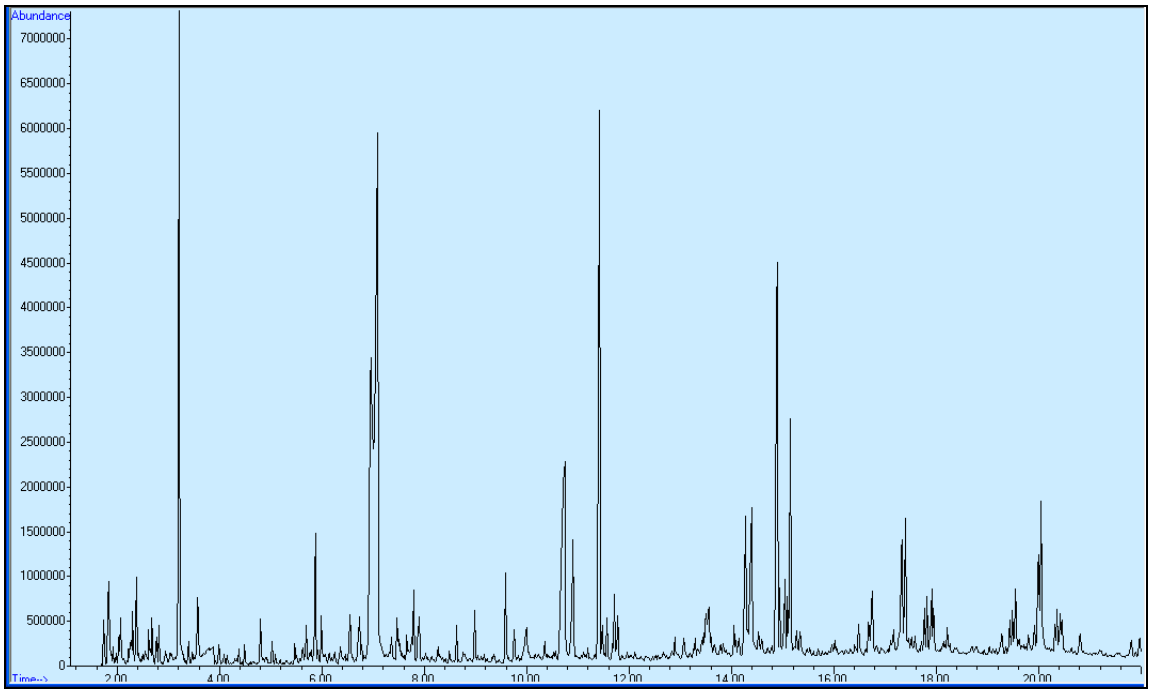

Figure 124: Hewlett Packard 200 neat ink sample pyrogram

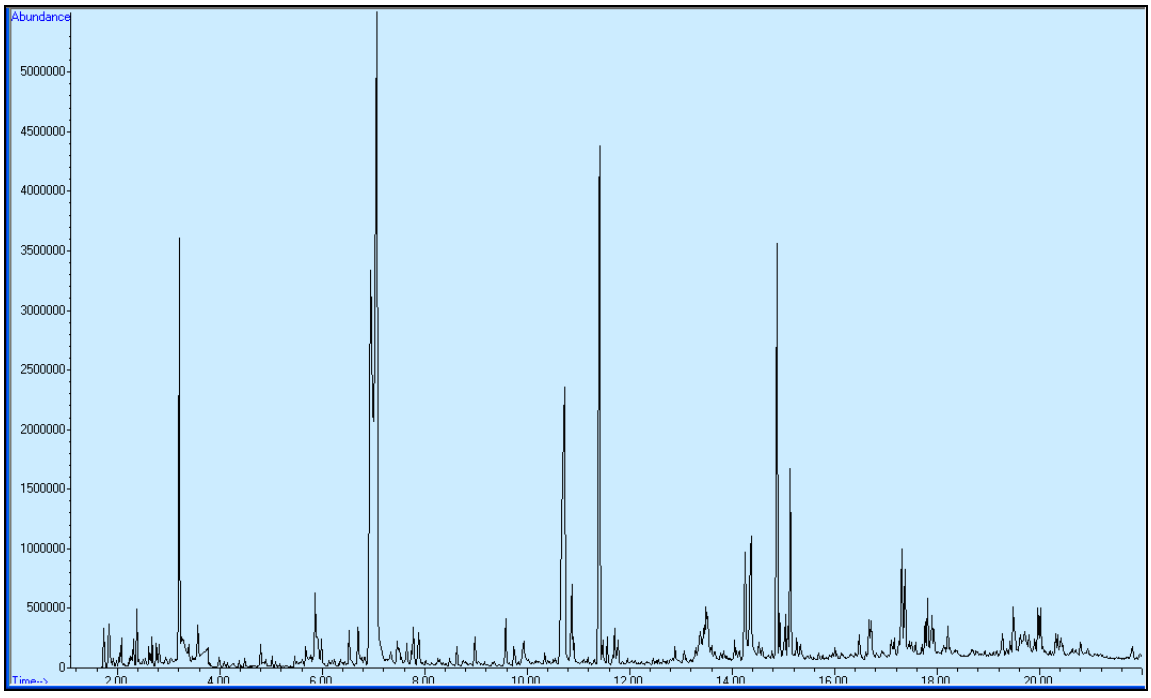

Figure 125: Hewlett Packard 201 neat ink sample pyrogram

The Hewlett Packard 205 ink sample was the only Hewlett Packard ink sample that was extractable from the paper, and as such it was not unexpected that its neat ink sample pyrogram would be different from the non-extractable Hewlett Packard neat ink sample pyrograms. The Hewlett Packard 205 neat ink sample pyrogram did not contain a lot of primary peaks, but the peaks it did contain were found at retention times of approximately 1.72 minutes, 12.00 minutes, 13.15 minutes, 13.32 minutes and 14.21 minutes. As stated previously, the peak at approximately 1.71 minutes was identified as Sulfur Dioxide, and the quality match for this identification was less than 10%. This was an extremely low match quality value and hence this peak was not labeled in the summary table, Table 14, located at the end of the discussion on the differences and/or similarities of the thirty-five neat ink standard pyrograms. The remaining primary peaks, starting with the peak at approximately 12.00 minutes, were identified by the NIST library as 1,3-dihydro-2H-Benzimidazol-2-one (80%), 2-methyl-5-aminobenzoxazole (87%), D-Allose (78%) and 2-Naphthalenamine (97%), respectively. The Hewlett Packard 205 neat ink sample pyrogram was unique not only with regards to the Hewlett Packard non-extractable neat ink samples previously discussed, but the Hewlett Packard 205 neat ink sample pyrogram was unique with respect to all of the neat ink samples tested in this study. Refer to Figure 126 for the pyrogram of the Hewlett Packard 205 neat ink sample.

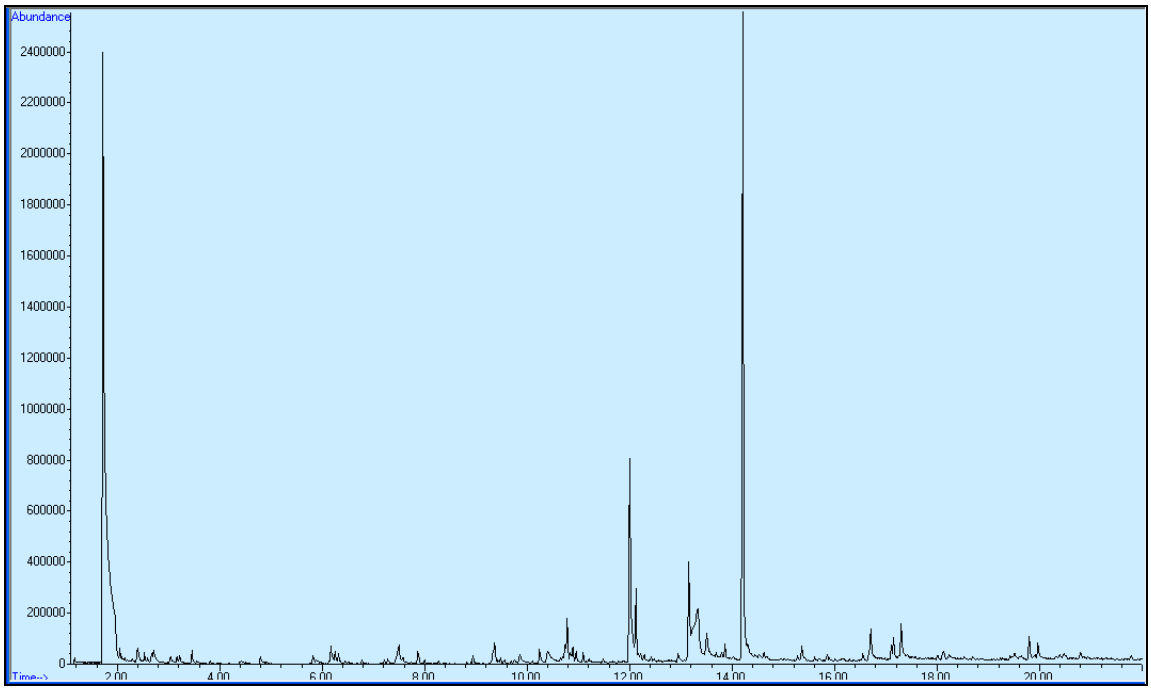

Figure 126: Hewlett Packard 205 neat ink sample pyrogram

The three Xerox neat ink samples had similar pyrograms, with the main difference between the Xerox neat ink samples being the designation of the primary and secondary peaks. All three Xerox neat ink sample pyrograms contained twelve peaks at retention times of approximately 3.21 minutes, 3.81 minutes, 6.41 minutes, 7.03 minutes, 8.81 minutes, 10.65 minutes, 11.25 minutes, 11.39 minutes, 13.46 minutes, 13.82 minutes, 14.86 minutes and 16.61 minutes. These peaks were identified by the NIST library as the compounds Toluene (91%), Hexamethyl-Cyclotrisiloxane (91%), Octamethyl-Cyclotetrasiloxane (86%), Benzyl Alcohol (96%), Decamethyl-Cyclopentasiloxane (94%), 2-[2-(2-ethoxyethoxy)ethoxy]-Ethanol (90%), Dodecamethyl-Cyclohexasiloxane (91%), Benzyl Methacrylate (96%), Tetradecamethyl-Cycloheptasiloxane (90%), 1,1'-(1,2-ethanediyl)bis-Benzene (94%) and Benzyl Benzoate (97%) respectively. For the Xerox 13 neat ink sample pyrogram the five peaks at

approximately 7.03 minutes, 10.65 minutes, 13.82 minutes, 14.86 minutes and 16.61 minutes were secondary peaks in its pyrogram, while the remainder of the peaks were primary. For the Xerox 24 neat ink sample pyrogram, the three peaks at approximately 7.03 minutes, 8.81 minutes and 10.67 minutes were secondary peaks in its pyrogram while the remainder of the peaks were primary. For the Xerox 244 neat ink sample pyrogram the only secondary peak was the one located at 14.86 minutes, the other eleven peaks were primary peaks in its pyrogram. In addition, the Xerox 244 neat ink sample pyrogram contained two extra peaks that were not found in the other two Xerox samples, which could be used to distinguish between the Xerox ink samples. Both of these peaks were primary peaks in the Xerox 244 neat ink sample pyrogram and were located at approximately 16.00 minutes and 16.10 minutes, and identified as [E]-Stilbene (97%) and 4-amino-1,2-Benzenedicarbonitrile (91%), respectively. Refer to Figures 127 through 129 for the pyrograms of the Xerox 13, Xerox 24 and Xerox 244 neat ink samples.

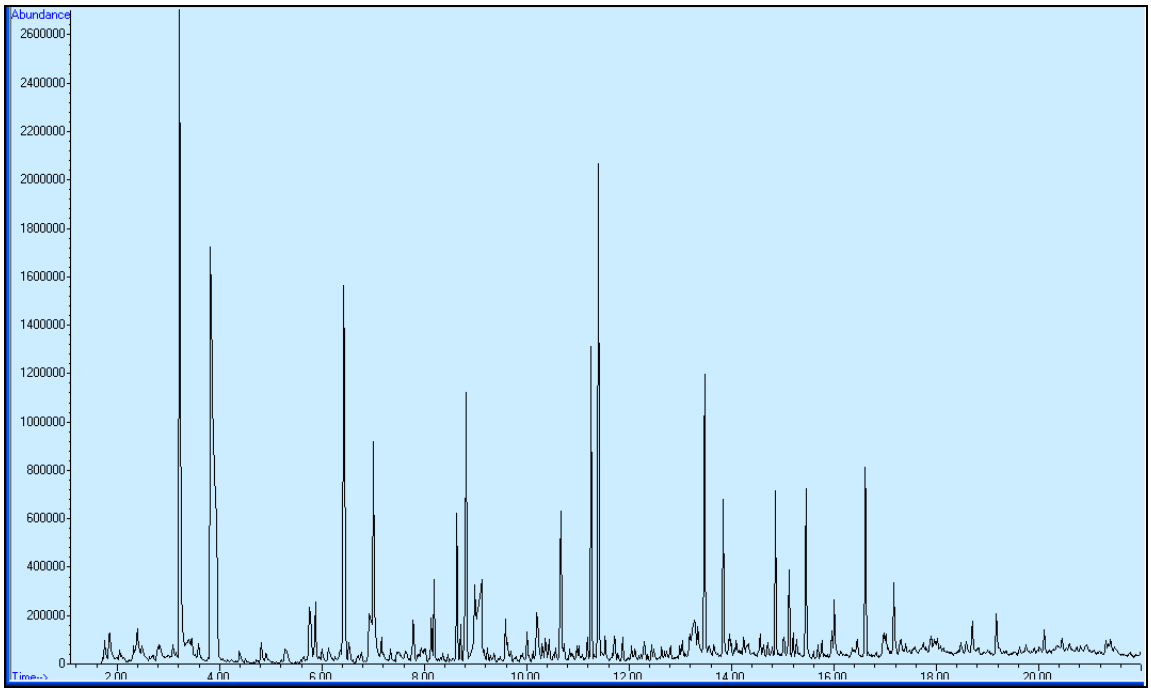

Figure 127: Xerox 13 neat ink sample pyrogram

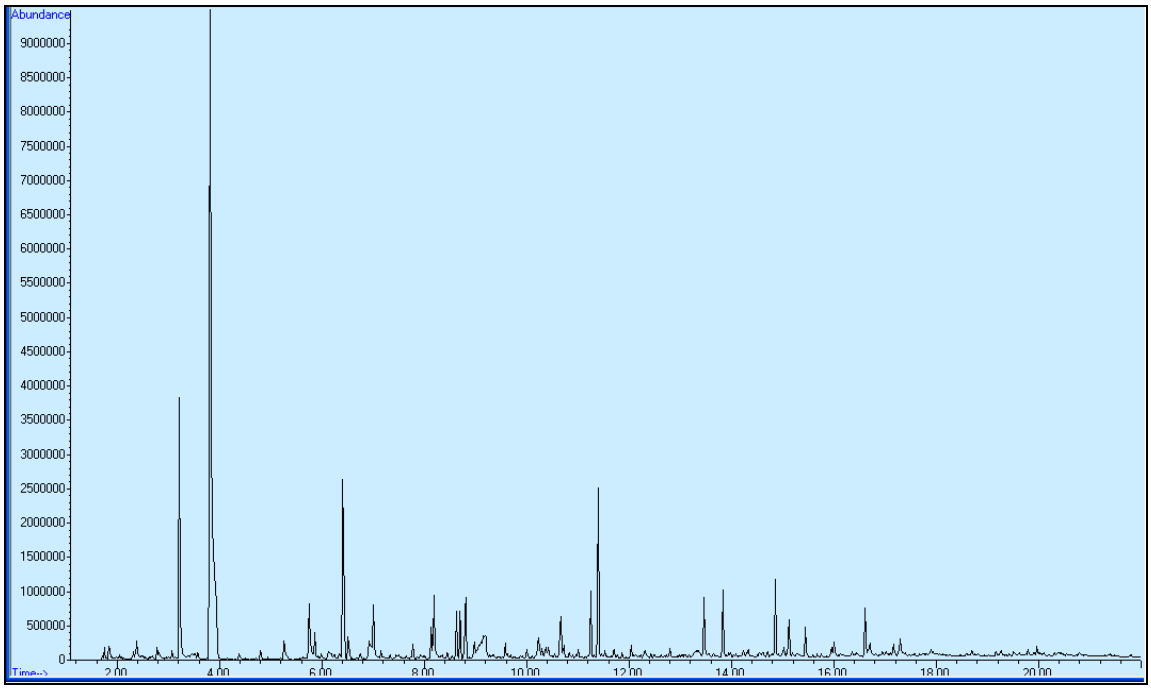

Figure 128: Xerox 24 neat ink sample pyrogram

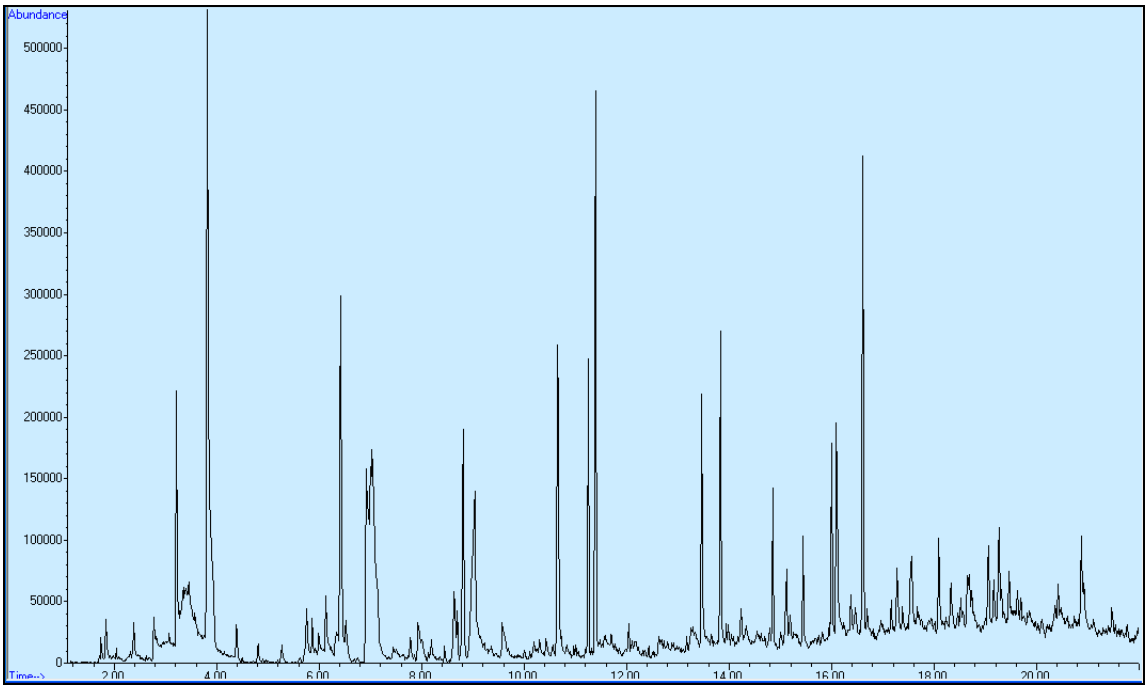

Figure 129: Xerox 244 neat ink sample pyrogram

The two Kodak neat ink samples had different neat ink sample pyrograms, which was not surprising as the Kodak 17 ink sample was a non-extractable ink and the Kodak 22 ink sample was an extractable ink. The Kodak 17 neat ink sample pyrogram consisted of four primary peaks located towards the latter half of the pyrogram. The four primary peaks were found at approximately 13.99 minutes, 15.12 minutes, 17.69 minutes and 19.66 minutes, and were identified by the NIST library as the compounds Cyclododecane (97%), 1-methylamino-Bicyclo(2,2,2)oct-2-ene (35%), [E]-2-Tetradecene (97%) and Cyclohexadecane (96%) respectively. This was the only ink sample in the study that contained these four compounds in their neat ink sample pyrogram.

The Kodak 22 neat ink sample pyrogram, on the other hand, consisted of seven primary peaks located within the region of 6 minutes and 14 minutes. The primary peaks were located at approximately 6.14 minutes, 6.17 minutes, 13.26 minutes, 13.33 minutes, 13.55 minutes, 13.96 minutes, and 14.02 minutes. These primary peaks were identified by the NIST library as Aniline (91%), Aniline (91%), D-Allose (83%), D-Allose (90%), 2,2'-(oxybis[2,1-ethanediyloxy])bis-Ethanol (83%), Ethyl 3,3-diethoxypropionate (32%) and 2-Naphthalenamine (91%). The Aniline and D-Allose peaks were split in the Kodak 22 neat ink sample pyrogram, which resulted in two separate peaks, with similar retention times, for each compound. The two peaks associated with the Aniline peak and the two peaks associated with the D-Allose peak had the same compound identification and similar match quality values by the NIST library. The peak at 13.96 minutes was identified by the NIST library as Ethyl 3,3-diethoxypropionate, with a match quality value of 32%. This was an extremely low match quality value, so there was little confidence that this was the correct identification of this peak. Rather, the peak at

approximately 13.96 minutes and the compound Ethyl 3,3-diethoxypropionate had ions in common in their mass spectral data. Due to its low match quality value, this peak was not labeled in the summary table, Table 14, located at the end of the discussion on the differences and/or similarities of the thirty-five neat ink standard pyrograms. The problem with the Kodak 22 neat ink sample pyrogram was the presence of the D-Allose as a primary peak, as D-Allose was also a component of paper sample, so its presence would not aid in the identification of the Kodak 22 neat ink sample. The peak at 13.55 minutes, however, was a unique peak and its presence may assist in the identification of a Kodak 22 neat ink sample. Refer to Figures 130 and 131 for the pyrograms of the Kodak 17 and Kodak 22 neat ink samples.

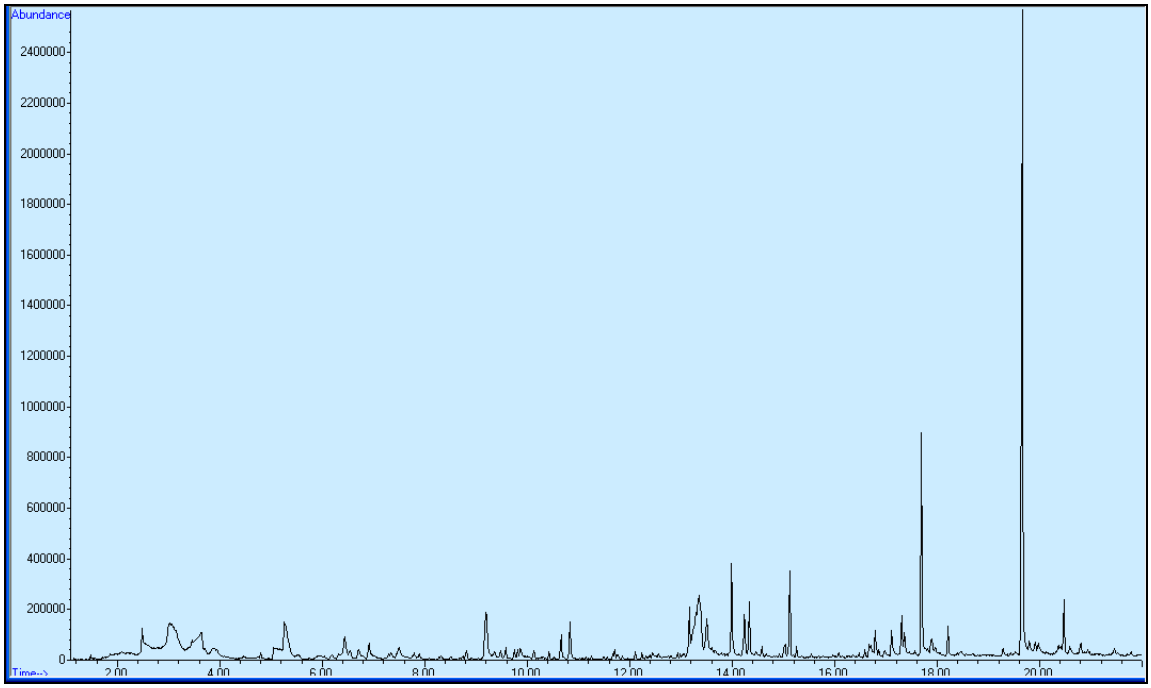

Figure 130: Kodak 17 neat ink sample pyrogram

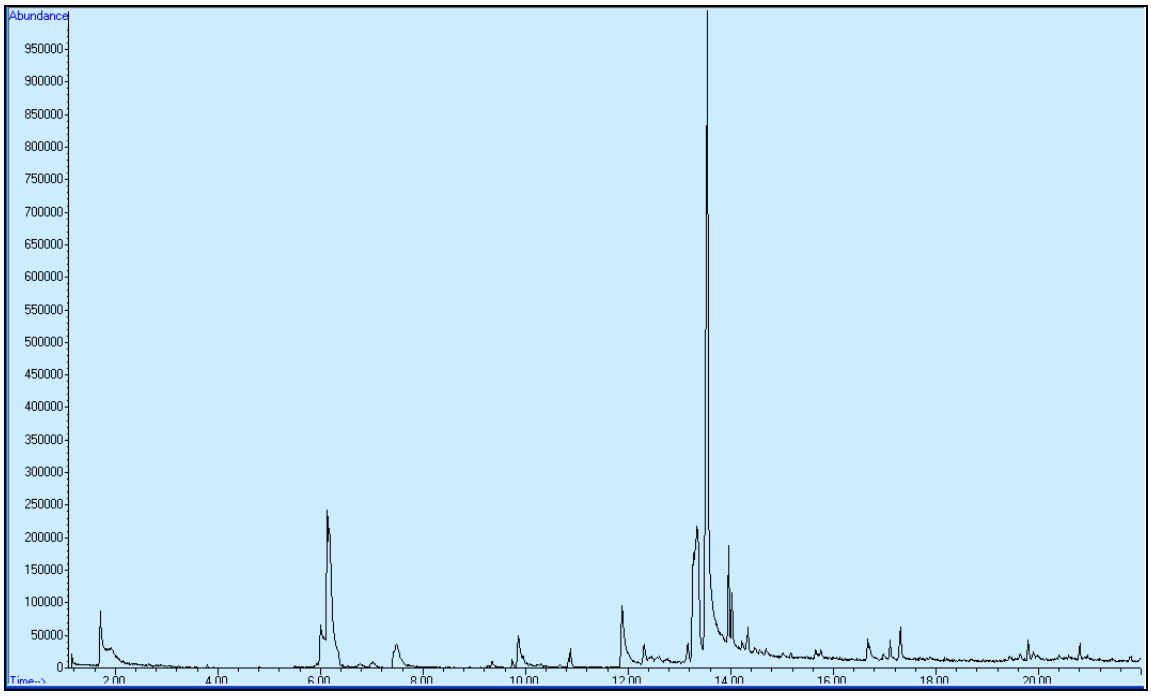

Figure 131: Kodak 22 neat ink sample pyrogram

The Okidata 04 neat ink sample pyrogram was different from the other neat ink sample pyrograms studied. This was not unexpected based on the previous analytical results, especially the Thin Layer Chromatography (TLC) results. For the Okidata 04 neat ink sample pyrogram, ten primary peaks were identified. The first primary peak was the peak at approximately 1.48 minutes, which was identified as Sulfur Dioxide but with a match quality below 10%. This was an extremely low match quality value and hence this peak was not labeled in the summary table, Table 14, located at the end of the discussion on the differences and/or similarities of the thirty-five neat ink standard pyrograms. The Okidata 04 neat ink sample pyrogram also contained two peaks at approximately 7.28 minutes and 7.59 minutes, and identified by the NIST library as 2-methyl-Phenol (96%) and p-Aminotoluene (95%), respectively. The Okidata 04 neat ink sample pyrogram also included a cluster of four peaks at approximately 10.79 minutes,

10.83 minutes, 10.86 minutes and 10.90 minutes, all of which were identified by the NIST library as the compound 1-[2-(2-methoxy-1-methylethoxy)-1-methylethoxy]-2-Propanol (83-90%) and a group of two peaks at approximately 11.06 minutes and 11.12 minutes, both of which were identified as being 1,1'-[(1-methyl-1,2-ethanediyl)bis(oxy)]bis-2-Propanol (45%). The Okidata 04 neat ink sample pyrogram contained a final primary peak at approximately 19.44 minutes, which was identified by the NIST library as Cyclic Octaatomic Sulfur (78%).

The peak maxima positions for the cluster of four peaks in the region between approximately 10.70 minutes and 11.00 minutes occurred over a time frame of approximately seven seconds, with the latter three peaks occurring within an approximate four second time frame. The latter three peaks, in particular, did not appear as separate and distinct peaks in Okidata 04 neat ink sample pyrogram. The mass spectral data for all four peaks in this region were almost identical, hence the identification of the same compound by the NIST library. The group of two peaks in the region between approximately 11.00 minutes and 11.12 minutes occurred over a time frame of approximately four seconds. The two peaks in this region were present as distinct peaks, however the mass spectral data for these two peaks were almost identical, hence the identification of the same compound by the NIST library. The close similarity of the mass spectral data for the two groups of peaks almost precludes the possibility of these six peaks being six distinct compounds, rather there was splitting of the peaks in this region, and the splitting of the peaks could be due to an instrument effect or incomplete pyrolysis of the parent compound. Refer to Figure 132 for the pyrogram of the Okidata 04 neat ink sample.

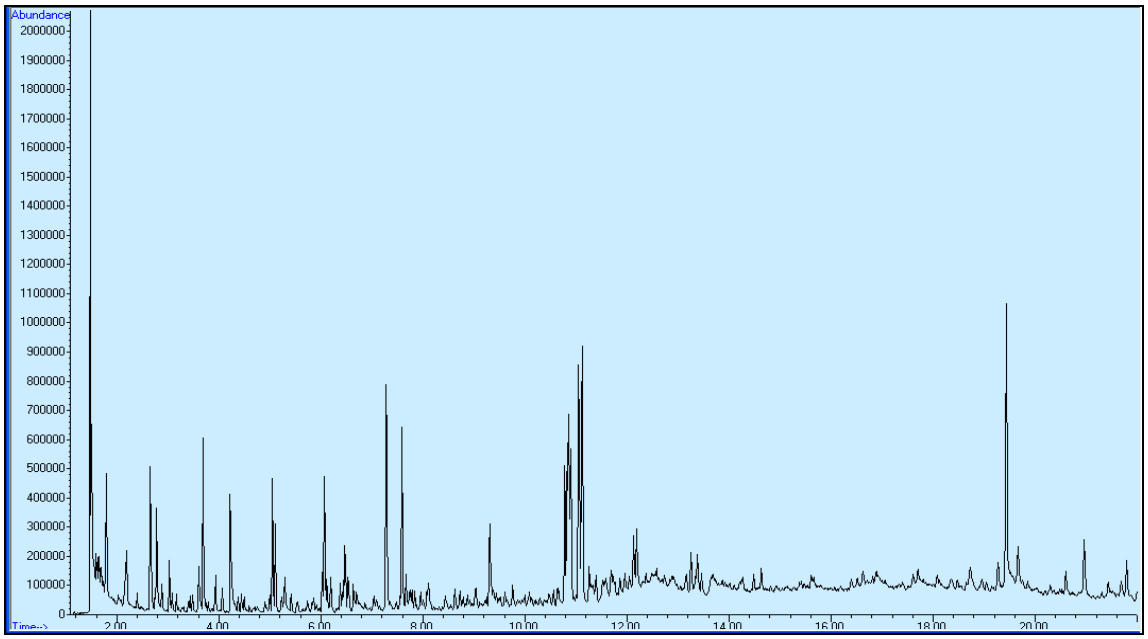

Figure 132: Okidata 04 neat ink sample pyrogram

Refer to Table 14 for the listing of the primary peaks in the pyrograms and their identification using the NIST05a.L Library. Note that the compounds listed in the table were color coded to show their presence, or lack thereof, in multiple ink cartridge types. The specific color used to highlight a particular compound was random; however no two compounds had the same color. If a compound was not highlighted in a color, it meant that it was found solely in that neat ink sample. The match quality value obtained for the compound identification of the peak by the NIST library was listed in parentheses after the compound name. The closer the match quality was to 100%, the stronger the match and the stronger the compound identification, whereas the closer the match quality was to 0%, the weaker the match and hence the weaker the compound identification. Compounds that had a match quality below 35% were not listed in the following table. In some instances more than one peak in a neat ink sample had the same compound identification by the NIST library. The NIST library compared the mass spectral data of

the peak in the neat ink sample to the mass spectral data of the standards contained in the NIST library database. The listed compounds were the best match that the NIST library found based on the comparison of the mass spectral data of the library standards and the mass spectral data of the compounds in the neat ink samples. Consequently, the same best match result may be provided for more than one peak in a neat ink sample pyrogram, especially when the peaks in the neat ink sample had similar mass spectral data and/or the compounds present in the neat ink samples were not contained in the library database. The results listed in Table 14 represent a single run of a specific neat ink standard. The results of multiple runs of a neat ink standard were not combined for inclusion into the peak and compound listings of Table 14. Any multiples in the compound identification for listed peaks in a specific neat ink standard was a result of NIST library search and was not the result of a multiple run of the neat ink sample.

Table 14: Primary Peaks Present in the Various Ink Manufacturers' Pyrograms and their Identification using the NIST library.

Sample	Retention Time	Possible Substance (if Quality Match below 35%, then not listed)
Okidata 04	1.476	
	7.278	2-methyl-Phenol (96%)
	7.587	p-Aminotoluene (95%)
	10.786	1-[2-(2-methoxy-1-methylethoxy)-1-methylethoxy)-2-Propanol (90%)
	10.831	1-[2-(2-methoxy-1-methylethoxy)-1-methylethoxy)-2-Propanol (90%)
	10.86	1-[2-(2-methoxy-1-methylethoxy)-1-methylethoxy)-2-Propanol (83%)
	10.9	1-[2-(2-methoxy-1-methylethoxy)-1-methylethoxy)-2-Propanol (83%)
	11.055	1,1'-[(1-methyl-1,2-ethanediyl)bis(oxy)]bis-2-Propanol (45%)
	11.123	1,1'-[(1-methyl-1,2-ethanediyl)bis(oxy)]bis-2-Propanol (45%)
	19.437	Cyclic Octaatomic sulfur (78%)
Kodak 17	13.99	Cyclododecane (97%)
	15.123	1-methylamino-Bicyclo(2,2,2)oct-2-ene (35%)
	17.692	[E]-2-Tetradecene (97%) OR 1-Hexadecanol (95%) OR Cyclotetradecane (95%)
	19.66	Cyclohexadecane (96%) OR 1-Nonadecene (95%)

Table 14: Primary Peaks Present in the Various Ink Manufacturers' Pyrograms and their Identification using the NIST library cont.

Sample	Retention Time	Possible Substance (if Quality Match below 35%, then not listed)
Kodak 22	6.139	Aniline (91%)
	6.173	Aniline (91%)
	13.263	D-Allose (83%)
	13.326	D-Allose (90%)
	13.549	2,2'-(oxybis(2,1-ethanediyloxy))bis-Ethanol (83%) OR Pentaethylene glycol (83%)
	13.955	
	14.024	2-Naphthalenamine (91%)
Epson 30	1.722	
	6.134	Aniline (94%)
	7.318	2-methyl-Phenol (96%)
	9.973	2,5,5-trimethyl-1,3,6-Heptatriene (83%)
	10.437	2-amino-Benzonitrile (93%)
	10.677	2-Cyclopentene-1-butanal, .gamma,.gamma,2,3-tetramethyl (59%)
	10.86	2-Cyclopentene-1-butanal, .gamma,.gamma,2,3-tetramethyl (53%)
	11.083	Bicyclo[3.3.1]nonan-9-one, 1,2,4-trimethyl-3-nitro-(2-endo, 3-exo, 4-exo)-(+-)- (59%)
	12.13	3-methyl-1H-Indole (93%) OR 6-methyl-1H-Indole (93%) OR 4-methyl-1H-Indole (93%) OR 5-methyl-1H-Indole (93%)
	13.612	Pentaethylene glycol (78%)
	14.207	2-Naphthalenamine (95%)
Epson 33	1.699	
	6.134	Aniline (91%)
	10.093	Quinoline (95%)
	10.877	Indole (94%)
	11.81	2-amino-Benzonitrile (95%)
	12.136	4-methyl-1H-Indole (95%) OR 6-methyl-1H-Indole (95%)
	14.018	1-Naphthalenamine (97%)
	14.19	2,5-Diethoxyaniline (96%)
Epson 60	1.71	
	6.145	Aniline (91%)
	10.099	Quinoline (95%)
	10.883	Indole (94%)
	11.827	2-amino-Benzonitrile (95%)
	12.136	6-methyl-1H-Indole (95%)
	14.018	1-Naphthalenamine (97%)
Epson 63	1.705	
	6.139	Aniline (91%)
	10.093	Quinoline (94%)
	10.883	Indole (94%)
	11.827	m-amino-Benzonitrile (91%) OR 4-amino-Benzonitrile (91%) OR 2-amino-Benzonitrile (91%)
	12.136	4-methyl-1H-Indole (94%) OR 6-methyl-1H-Indole (94%)
	14.018	1-Naphthalenamine (97%)

Table 14: Primary Peaks Present in the Various Ink Manufacturers' Pyrograms and their Identification using the NIST library cont.

Sample	Retention Time	Possible Substance (if Quality Match below 35%, then not listed)
Epson 66	1.493	
	6.071	Aniline (91%)
	10.082	Quinoline (95%)
	10.871	Indole (94%)
	11.804	2-amino-Benzonitrile (95%)
	12.13	2-methyl-1H-Indole (91%)
Epson 84	9.967	2,5,5-trimethyl-1,3,6-Heptatriene (86%)
	10.677	2-Cyclopentene-1-butanal, .gamma,.gamma,2,3-tetramethyl (59%)
	10.854	5-[5-methylfurfuryl]hydantoin (50%) OR 2-Cyclopentene-1-butanal, .gamma,.gamma,2,3-tetramethyl (50%) OR 6-methyl-6-hepten-4-yn-3-ol (50%)
	11.077	5-[5-methylfurfuryl]hydantoin (59%)
	13.286	D-Allose (90%)
Epson 90	1.699	
	6.134	Aniline (91%)
	6.242	Benzonitrile (91%)
	10.093	Quinoline (94%)
	10.883	Indole (94%)
	11.821	2-amino-Benzonitrile (95%)
	12.136	6-methyl-1H-Indole (95%) OR 4-methyl-1H-Indole (95%)
	14.018	1-Naphthalenamine (97%)
Epson 93	1.705	
	6.145	Aniline (91%)
	10.099	Quinoline (94%)
	10.889	Indole (94%)
	10.957	p-Isopropenylphenol (94%)
	11.833	2-amino-Benzonitrile (95%)
	12.136	2-methyl-1H-Indole (95%)
	14.018	1-Naphthalenamine (97%)
Epson 120	1.71	
	6.134	Aniline (91%)
	10.099	Quinoline (94%)
	10.883	Indole (94%)
	11.81	2-amino-Benzonitrile (95%)
	12.13	6-methyl-1H-Indole (95%) OR 4-methyl-1H-Indole (95%)
	14.018	1-Naphthalenamine (97%)
Epson 123	1.716	
	6.151	Aniline (91%)
	6.248	Benzonitrile (91%)
	10.099	Quinoline (94%)
	10.888	Indole (94%)
	11.838	4-amino-Benzonitrile (91%) OR m-amino-Benzonitrile (91%) OR 2-amino-Benzonitrile (91%)
	12.142	4-methyl-1H-Indole (95%) OR 6-methyl-1H-Indole (95%)
	14.024	1-Naphthalenamine (97%)
	14.19	2,5-Diethoxyaniline (96%)

Table 14: Primary Peaks Present in the Various Ink Manufacturers' Pyrograms and their Identification using the NIST library cont.

Sample	Retention Time	Possible Substance (if Quality Match below 35%, then not listed)
Epson 156	4.8	Styrene (95%)
	4.886	Styrene (95%)
	6.139	hexyl ester 2-Butenoic acid (72%)
	9.967	2,5,5-trimethyl-1,3,6-Heptatriene (86%)
	10.682	5-[5-methylfurfuryl]hydantoin (59%)
	10.86	2-Cyclopentene-1-butanal, .gamma,.gamma,2,3-tetramethyl- (53%)
	11.083	6-methyl-6-hepten-4-yn-3-ol (50%)
	13.097	2-[2-(2-butoxyethoxy)ethoxy]-Ethanol (91%)
	16.101	4-amino-1,2-Benzenedicarbonitrile (91%)
Canon 217	1.71	
	2.654	1,4-Dioxane (86%)
	2.969	Pyridine (90%)
	5.819	Isocyanato-Benzene (91%) OR 3-hydroxy-Benzonitrile (91%)
	6.139	Aniline (91%)
	10.087	Quinoline (95%)
	17.286	Benzo[f]quinoline (96%) OR Benzo[f]isoquinoline (96%)
Canon 223	1.711	
	2.969	Pyridine (91%)
	6.145	Aniline (94%)
	10.099	Quinoline (95%)
	11.816	2-Amino-Benzonitrile (95%)
	14.024	1-Naphthalenamine (97%)
	14.202	2-Naphthalenamine (97%)
	16.925	Benzo[g]quinoline (95%) OR Benzo[h]isoquinoline (95%)
Canon 282	1.722	
	2.037	Thiirane (80%)
	6.133	Aniline (94%)
	11.718	2-methyl-1,4-Benzenediamine (95%)
	17.286	Benzo[f]quinoline (95%) OR Benzo[f]isoquinoline (94%)
Canon 306	1.716	
	11.816	2-amino-Benzonitrile (91%) OR 4-amino-Benzonitrile (91%) OR m-amino-Benzonitrile (91%) OR 1H-Indazole (91%) OR 1H-Benzimidazole (91%)
	14.024	1-Naphthalenamine (95%)
	14.202	2-Naphthalenamine (97%)
	16.925	Benzo(h)isoquinoline (93%)
	17.292	Benzo(f)quinoline (96%) OR Benzo(f)isoquinoline (96%)
Canon 312	2.369	Benzene (91%)
	6.128	Aniline (91%)
	9.223	Benzenecarboxylic acid (81%)
	12.039	Biphenyl (91%)
	20.37	m-Terphenyl (98%)

Table 14: Primary Peaks Present in the Various Ink Manufacturers' Pyrograms and their Identification using the NIST library cont.

Sample	Retention Time	Possible Substance (if Quality Match below 35%, then not listed)
Canon 318	1.711	
	2.031	Thiirane (80%)
	2.969	Pyridine (91%)
	14.019	1-Naphthalenamine (97%) OR 2-Naphthalenamine (97%)
	14.196	2-Naphthalenamine (97%)
Canon 318a	3.318	
	13.269	1,6-Anhydro-beta-D-glucopyranose (levoglucosan) (91%) OR D-Allose (91%)
	18.104	5H-Indeno[1,2-b]pyridine (72%) OR 2-Azafluorene (72%)
	19.271	1-phenyl-4-[2,2-dicyanoethenyl]-Benzene (90%) OR Benzo(a)phenazine (90%)
Canon 327	1.705	
	6.242	Benzonitrile (91%) OR Tricyclo[3.1.0.0(2,4)]hex-3-ene-3-carbonitrile (91%)
	11.712	2-methyl-1,4-Benzenediamine (95%)
	11.798	2-amino-Benzonitrile (93%)
	14.013	1-Naphthalenamine (97%)
	14.19	2-Naphthalenamine (97%)
Canon 348	1.487	
	2.769	Pyridine (90%)
	4.211	3-methyl-Pyridine (94%)
	6.076	Aniline (91%)
	10.082	Quinoline (95%)
	11.752	3-methyl-Quinoline (96%)
	11.804	2-amino-Benzonitrile (95%)
	14.018	1-Naphthalenamine (97%)
	14.19	2-Naphthalenamine (97%)
	16.914	Benzo(h)isoquinoline (95%) OR Benzo(g)quinoline (95%)
Canon 384	1.705	
	2.964	Pyridine (91%)
	4.337	3-methyl-Pyridine (94%)
	6.134	Aniline (94%)
	10.093	Quinoline (95%)
	11.804	2-amino-Benzonitrile (95%)
	14.019	1-Naphthalenamine (97%)
	14.196	1-Naphthalenamine (97%) OR 2-Naphthalenamine (97%)
	16.92	Benzo(g)quinoline (95%)
Canon 402	5.069	2,6-dimethyl-Pyrazine (72%) OR 2,5-dimethyl-Pyrazine (72%)
	6.236	Benzonitrile (91%)
	11.724	2-methyl-1,4-Benzenediamine (97%)
	11.815	2-amino-Benzonitrile (94%)
	14.03	1-Naphthalenamine (97%)
	14.196	2-Naphthalenamine (97%)

Table 14: Primary Peaks Present in the Various Ink Manufacturers' Pyrograms and their Identification using the NIST library cont.

Sample	Retention Time	Possible Substance (if Quality Match below 35%, then not listed)
Canon 492	2.368	Benzene (91%)
	6.128	Aniline (94%)
	9.172	Benzenecarboxylic acid (91%)
	12.044	Biphenyl (91%)
	16.359	9H-Fluoren-9-one (97%)
Canon 522	1.722	
	2.969	Pyridine (91%)
	4.337	3-methyl-Pyridine (94%)
	6.145	Aniline (94%)
	10.088	Quinoline (95%)
HP 198	3.21	Toluene (91%)
	6.957	Benzyl Alcohol (96%)
	7.083	Benzyl Alcohol (96%)
	10.745	2-[2-(2-ethoxyethoxy)ethoxy]-Ethanol (83%)
	11.421	Benzyl Methacrylate (96%)
	14.287	Octaethylene glycol monododecyl ether (59%)
	14.402	1,4,7,10,13,16-Hexaoxacyclooctadecane (83%) OR Hexagol (83%)
	14.888	4-Fluoro-6-aminopyrimidine (46%)
	15.151	
	17.331	Heptaethylene glycol (64%) OR Octaethylene glycol (64%)
	17.406	1,4,7,10,13,16-Hexaoxacyclooctadecane (83%)
	20.055	1,4,7,10,13,16-Hexaoxacyclooctadecane (83%) OR 15-Crown-5 (83%) (83%) OR 18-Propyl-1,4,7,10,13,16-Hexaoxanonadecane
HP 199	3.038	Toluene (91%)
	6.963	Benzyl Alcohol (97%)
	7.055	Benzyl Alcohol (96%)
	10.746	2-[2-(2-ethoxyethoxy)ethoxy]-Ethanol (83%)
	11.421	Benzyl Methacrylate (96%)
	14.282	1,4,7,10,13,16-Hexaoxacyclooctadecane (59%)
	14.402	1,4,7,10,13,16-Hexaoxacyclooctadecane (83%)
	14.888	4-fluoro-6-aminopyrimidine (46%)
	15.146	
	17.32	Heptaethylene glycol (59%) OR Octaethylene glycol (59%)
	17.395	1,4,7,10,13,16-Hexaoxacyclooctadecane (83%)
	20.044	1,4,7,10,13,16-Hexaoxacyclooctadecane (78%)

Table 14: Primary Peaks Present in the Various Ink Manufacturers' Pyrograms and their Identification using the NIST library cont.

Sample	Retention Time	Possible Substance (if Quality Match below 35%, then not listed)
HP 200	3.204	Toluene (91%)
	6.957	Benzyl Alcohol (96%)
	7.083	Benzyl Alcohol (96%)
	10.745	2-[2-(2-ethoxyethoxy)ethoxy]-Ethanol (90%)
	11.421	Benzyl Methacrylate (96%)
	14.276	1,4,7,10,13,16-Hexaoxacyclooctadecane (53%)
	14.396	1,4,7,10,13,16-Hexaoxacyclooctadecane (83%)
	14.888	4-fluoro-6-aminopyrimidine (46%)
	15.151	
	17.326	Heptaethylene glycol (64%)
	17.394	1,4,7,10,13,16-Hexaoxacyclooctadecane (78%)
	20.049	1,4,7,10,13,16-Hexaoxacyclooctadecane (83%)
HP 201	3.204	Toluene (91%)
	6.946	Benzyl Alcohol (96%)
	7.066	Benzyl Alcohol (95%)
	10.723	2-[2-(2-ethoxyethoxy)ethoxy]-Ethanol (83%)
	11.409	Benzyl Methacrylate (96%)
	14.877	4-fluoro-6-aminopyrimidine (37%) -- Not listed as #1 for this sample
	15.134	
	17.314	Heptaethylene glycol (64%)
	17.372	1,4,7,10,13,16-Hexaoxacyclooctadecane (83%)
HP 205	1.716	
	11.999	1,3-dihydro-2H-Benzimidazol-2-one (80%)
	13.154	2-methyl-5-aminobenzoxazole (87%)
	13.315	D-Allose (78%)
	14.207	2-Naphthalenamine (97%)
Xerox 13	3.215	Toluene (91%)
	3.822	Hexamethyl-Cyclotrisiloxane (91%)
	6.425	Octamethyl-Cyclotetrasiloxane (86%)
	8.817	Decamethyl-Cyclopentasiloxane (94%)
	11.261	Dodecamethyl-Cyclohexasiloxane (91%)
	11.404	Benzyl Methacrylate (96%)
	13.475	Tetradecamethyl-Cycloheptasiloxane (93%)

Table 14: Primary Peaks Present in the Various Ink Manufacturers' Pyrograms and their Identification using the NIST library cont.

Sample	Retention Time	Possible Substance (if Quality Match below 35%, then not listed)
Xerox 24	3.21	Toluene (91%)
	3.811	Hexamethyl-Cyclotrisiloxane (90%)
	6.414	Octamethyl-Cyclotetrasiloxane (87%)
	11.255	Dodecamethyl-Cyclohexasiloxane (91%)
	11.398	Benzyl Methacrylate (96%)
	13.463	Tetradecamethyl-Cycloheptasiloxane (87%)
	13.835	1,1'-(1,2-ethanediyl)bis-Benzene (94%)
	14.86	
	16.611	Benzyl Benzoate (97%)
Xerox 244	3.21	Toluene (91%)
	3.81	Hexamethyl-Cyclotrisiloxane (91%)
	6.414	Octamethyl-Cyclotetrasiloxane (86%)
	7.032	Benzyl Alcohol (96%)
	8.811	Decamethyl-Cyclopentasiloxane (93%)
	10.654	2-[2-(2-ethoxyethoxy)ethoxy]-Ethanol (90%)
	11.249	Dodecamethyl-Cyclohexasiloxane (90%)
	11.392	Benzyl Methacrylate (96%)
	13.463	Tetradecamethyl-Cycloheptasiloxane (90%)
	13.824	1,1'-(1,2-ethanediyl)bis-Benzene (91%)
	15.998	[E]-Stilbene (97%)
	16.096	4-amino-1,2-Benzenedicarbonitrile (91%) OR 5-Benzimidazolecarbonitrile (91%)
	16.605	Benzyl Benzoate (98%)

Using the above information as a guideline, the selection of a method for the analysis of the ink on paper samples was attempted. The first method relied on the "Extract Ion Chromatograms" method provided in the Agilent software. In this method, up to six ions are entered into the program, and the ink pyrogram was scanned for the presence of the listed ions and displayed the "extract ion chromatogram(s)" which showed the location of peaks that contained the specified ion(s). Each ion selected had its own "extract ion chromatogram", and up to six "extract ion chromatograms" could be displayed on the computer screen in a stacked format, increasing the potential of this

method. Since each ion is operating independently from the other ions, it is possible to use a characteristic ion from a specific compound to search within a sample in order to identify the specific compound. Additionally, it is possible to use a combination of ions to look at the whole profile of the sample, which can aid in the identification of an unknown sample.

In order to apply this method to this study, it was first necessary to determine the ions that would be used in the search program. It would be better if a set of six ions could be determined that would be manufacturer specific, rather than a separate set of ions for each cartridge type, as this would allow a narrowing down of the possible sources of an unknown ink sample. In addition, this would allow for a faster screening time and may be flexible to slight changes in manufacturing composition over time. Once a manufacturer was determined, it would then be possible to search within that manufacturer for a particular ink cartridge type. As such, the first step was to determine what ions would be manufacturer specific and hence could be used in the "extract ion chromatograms" program. This was done by first examining the primary peaks that were identified in the specific ink pyrogram. From that list, the main ions for the various primary peaks were grouped into a spreadsheet, and both the primary peaks and the ions were listed in order of significance to the ink sample. After this ranking was done, all ink cartridges of a specific manufacturer were compared to each other and a final set of 6 ions were selected that represented that specific manufacturer. The manufacturers that contained both an extractable ink sample and a non-extractable ink sample were initially examined separately but a final listing for the manufacturer of only six ions was determined.

From the above analysis representative six ions were identified for each of the six manufacturers used in this study and were listed in the following table. The ions highlighted in orange were those ions used to search for a specific manufacturer using the "extract ion chromatograms" method. The ions highlighted in green represented secondary ions that could be considered to help in the manufacturer identification of an ink sample if the need arose, especially in the situations where it was known that the ink sample in question was extractable or non-extractable in nature. As observed in Table 15, though some manufacturers had some ions in common, none of the manufacturers contained all of the same ions. Thus, each group of six ions was unique to each manufacturer, which increased the ability of the "extract ion chromatogram" method to identify an ink sample.

Since the ink samples were analyzed on a paper matrix, it was necessary to determine if the there were common ions between the manufacturer specific ions and the ions that were present in the primary peaks of the paper pyrogram. Of the ions identified in the primary peaks of the paper sample, only four ions were found to be common to the sets of manufacturer specific ions. The four ions that were found to be common between the paper sample and the ink manufacturers had m/z values of 55, 60, 64 and 83. The majority of the ink manufacturers had only one ion in common with the paper sample, while the Xerox and Hewlett Packard non-extractable manufacturer specific ions had zero ions in common with the paper ions. The Kodak manufacturer specific ions had three ions in common with the paper ions; however the remaining three manufacturer ions were unique to the Kodak ink samples.

Table 15: Primary Ions Used for the "Extract Ion Chromatograms" Method

Ion (m/z)	Ink Cartridge Manufacturer / Samples							
	Okidata ALL	Kodak ALL	Epson ALL	Canon ALL	Hewlett Packard 198-201	Hewlett Packard 205	Hewlett Packard ALL	Xerox ALL
55		X						
59	X							
60		X		X				
64	X		X			X	X	
79					X			
83		X						
89		X						
91					X		X	X
93		X		X				
94			X					
104			X					
105								X
107	X		X					
108					X		X	
113					X		X	
118			X	X				
128	X							
131					X		X	X
134						X		
143			X	X		X	X	
148						X		
154				X				
160	X							
179				X				
207								X
234		X			X		X	
256	X							
267								X
281								X
341								X

When the above manufacturer specific ions were used on their respective neat ink samples, the results were as expected and manufacturer specific ions identified the primary peaks listed for the specific neat ink sample. Using the "extract ion chromatogram" method, the resulting neat ink sample extracted ion chromatograms had a significant reduction in the background noise found in the pyrograms of the same neat ink

sample. The peaks in the resulting neat ink sample extracted ion chromatograms were limited to those peaks which contained the ion under study. As such, the resulting neat ink sample extracted ion chromatograms were easier to interpret and compare between the different manufacturers. Refer to Figures 133 through 138 for the results of the "extract ion chromatogram" analysis of the neat ink sample with its manufacturer specific ions.

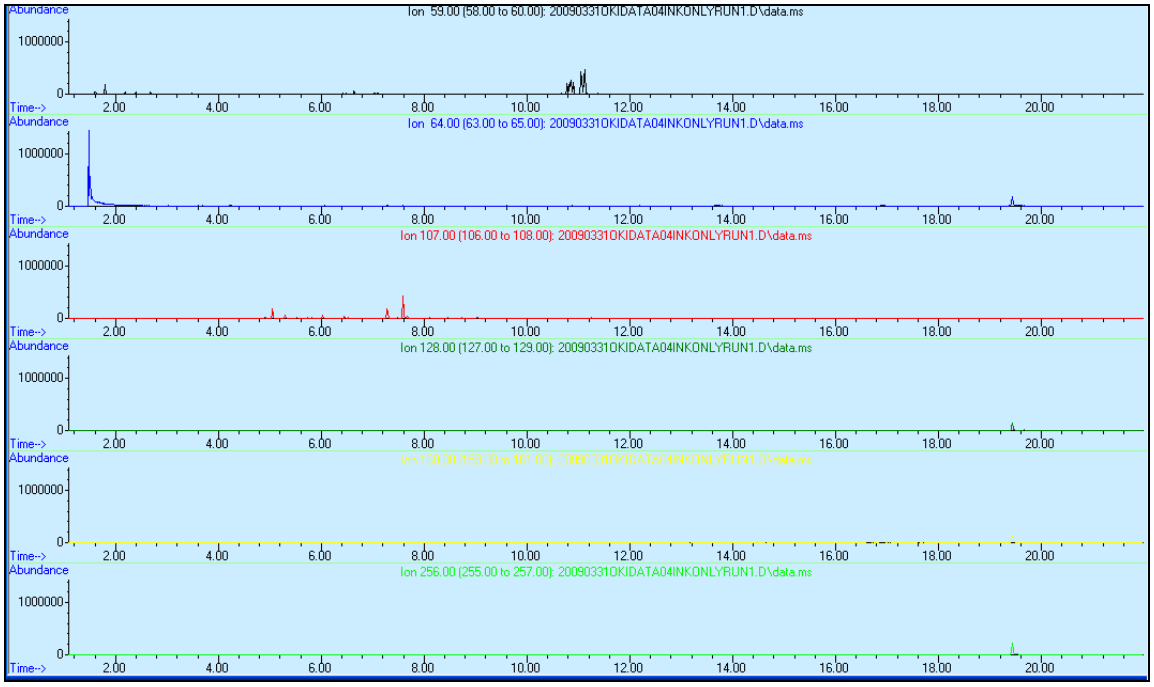

Figure 133: Results of the Extract Ion Chromatogram method for the Okidata 04 ink sample using the Okidata 04 ions.

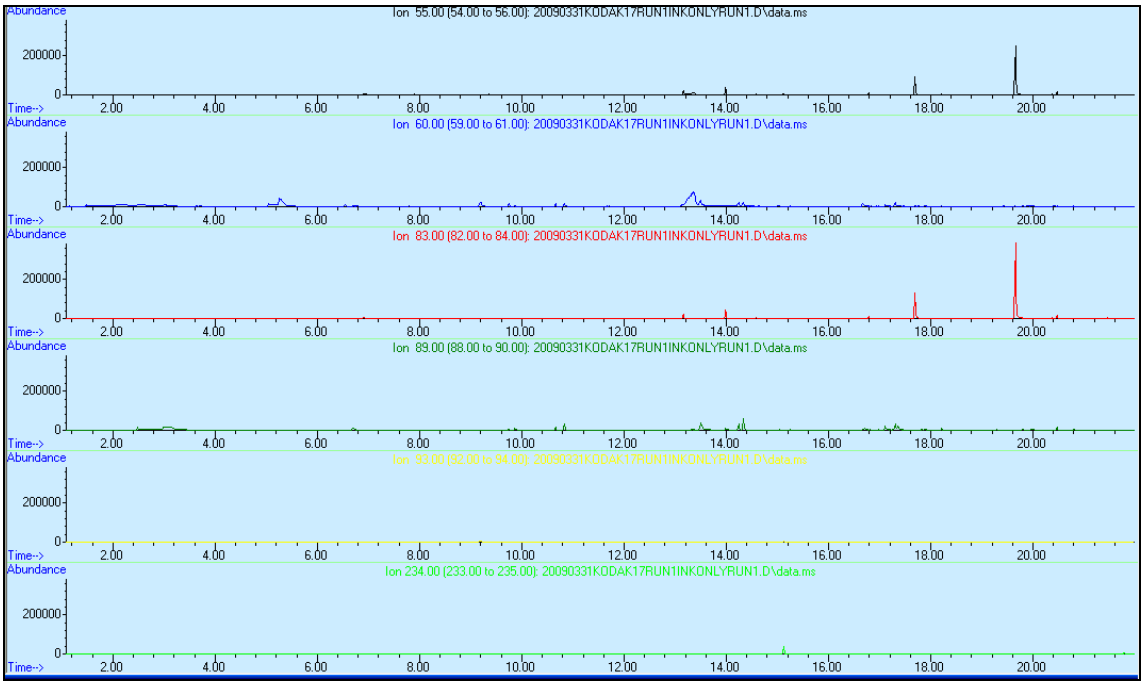

Figure 134: Results of the Extract Ion Chromatogram method for the Kodak 17 ink sample using the Kodak 17 ions.

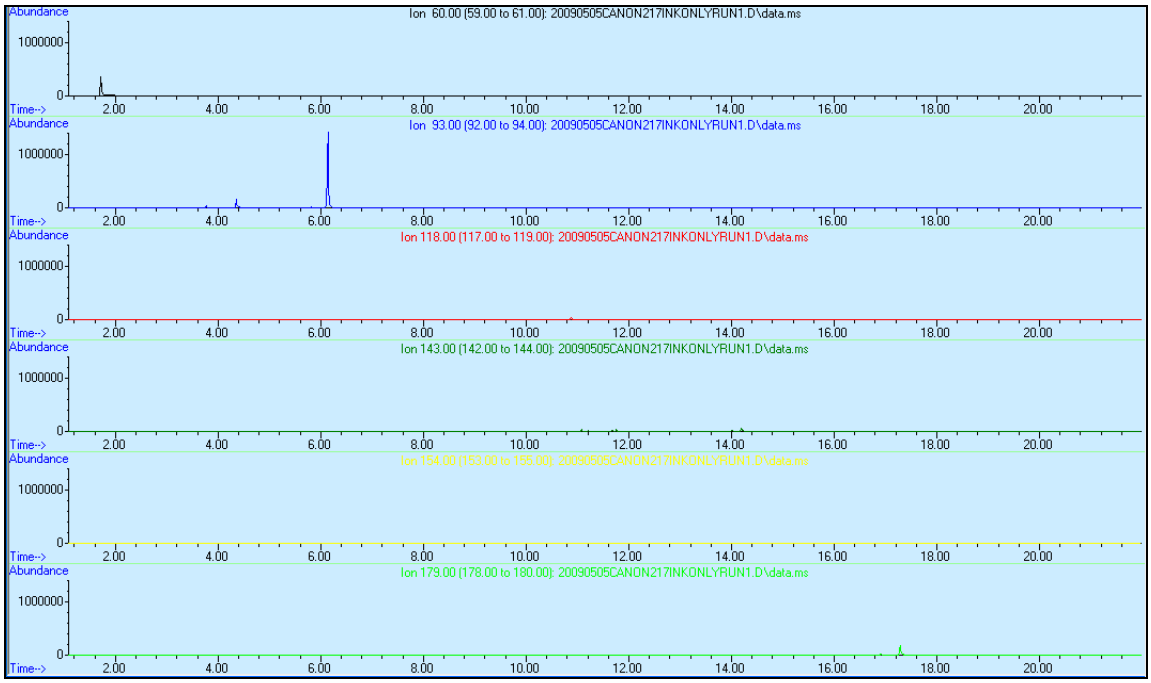

Figure 135: Results of the Extract Ion Chromatogram method for the Canon 217 ink sample using the Canon 217 ions.

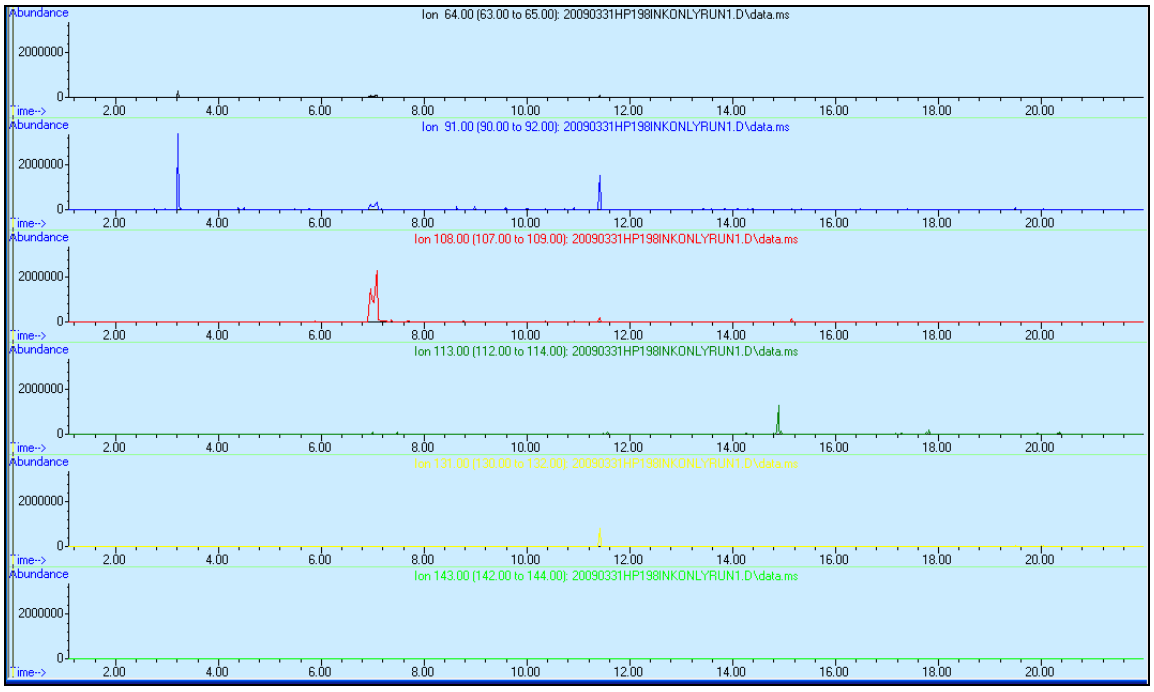

Figure 136: Results of the Extract Ion Chromatogram method for the Hewlett Packard 198 ink sample using the Hewlett Packard 198 ions.

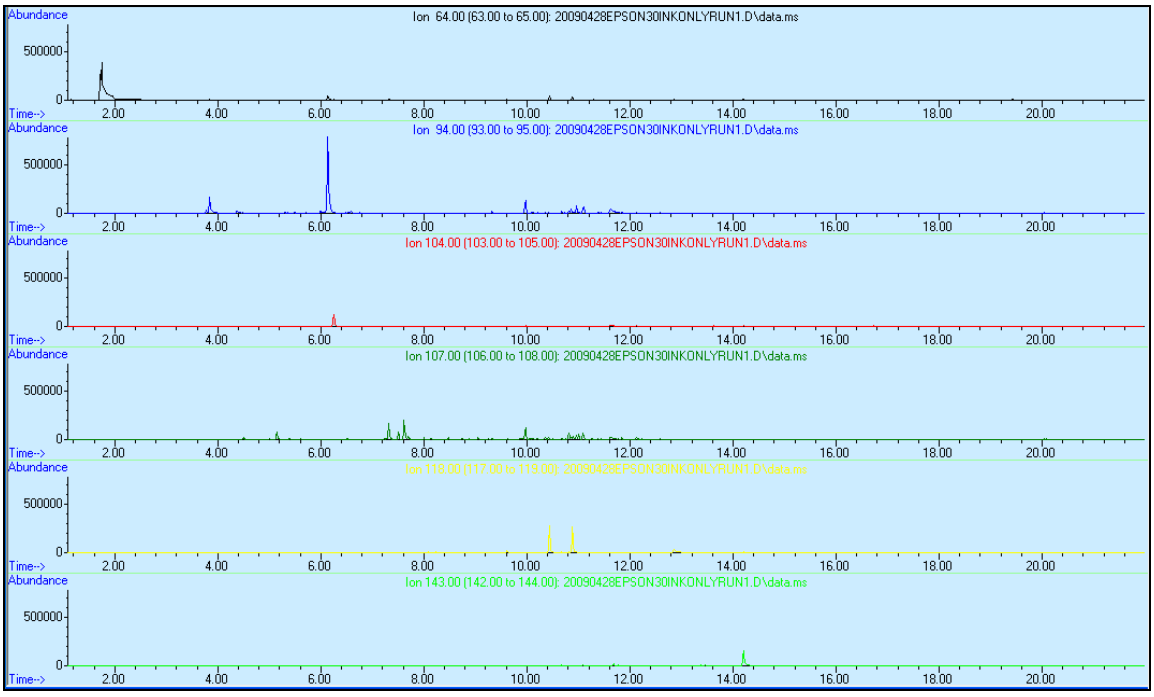

Figure 137: Results of the Extract Ion Chromatogram method for the Epson 30 ink sample using the Epson 30 ions.

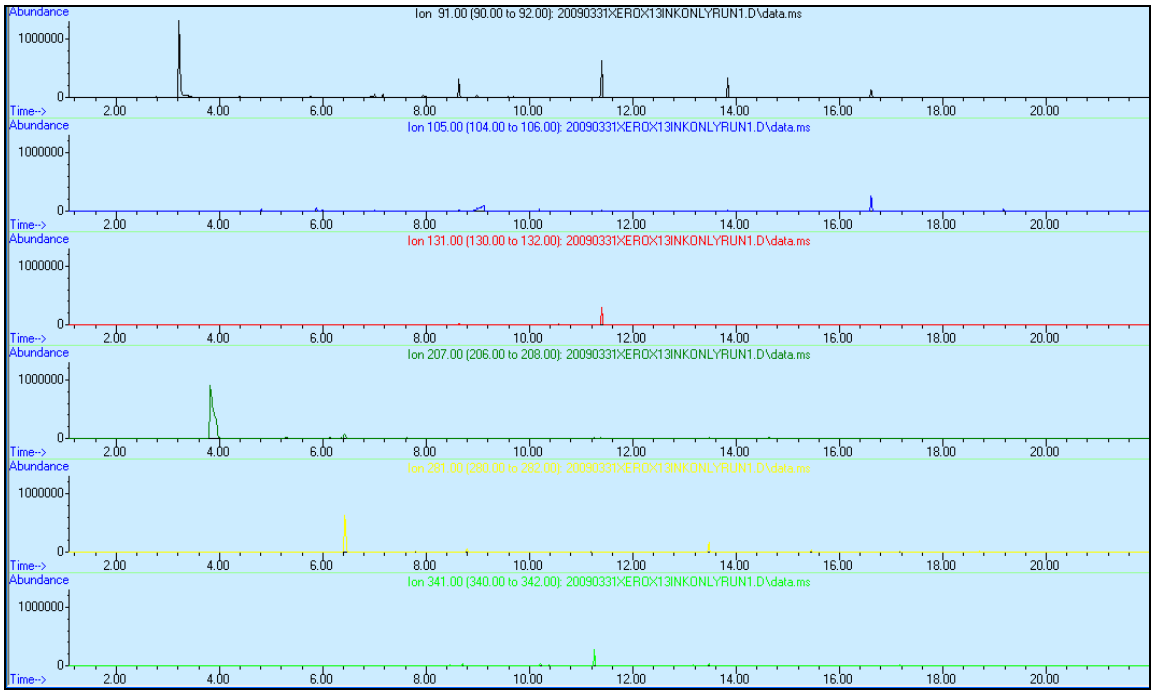

Figure 138: Results of the Extract Ion Chromatogram method for the Xerox 13 ink sample using the Xerox 13 ions.

A problem with this method appeared when it was applied to the ink on paper samples that were analyzed in this study. The advantage of this method was its potential to identify a specific manufacturer of an unknown ink sample, which could then be analyzed further to determine if a specific type of ink cartridge was used to make the questioned sample. However, when the manufacturer specific ions were applied to different ink on paper samples, the differences between the manufacturers were not readily apparent. For example, the six Epson specific ions were used to compare six ink on paper samples comprising of the Epson 30 ink sample, the Okidata 04 ink sample, the Canon 217 ink sample, the Kodak 17 ink sample, the Hewlett Packard 198 ink sample and the Xerox 13 ink sample. Though there were some differences observed between the different "extract ion chromatograms", the results were not as clear cut as what was observed previously with the neat ink sample of the correct manufacturer. In addition,

the main difference between the samples seemed to be related to the peak height of a specific peak in the pyrogram, and not with the presence or absence of a specific peak. The six "extract ion chromatograms" were similar in peak pattern to each other, with the possible exception of the peak at approximately 1.7 minutes, which appeared only in the Epson 30, Okidata 04 and Canon 217 extractable ink samples. Due to this issue, an alternate method for the analysis of the ink on paper samples had to be developed. Refer to Figures 139 through 144 for the "extract ion chromatogram" results on the six different manufacturers using the Epson manufacturer ions set.

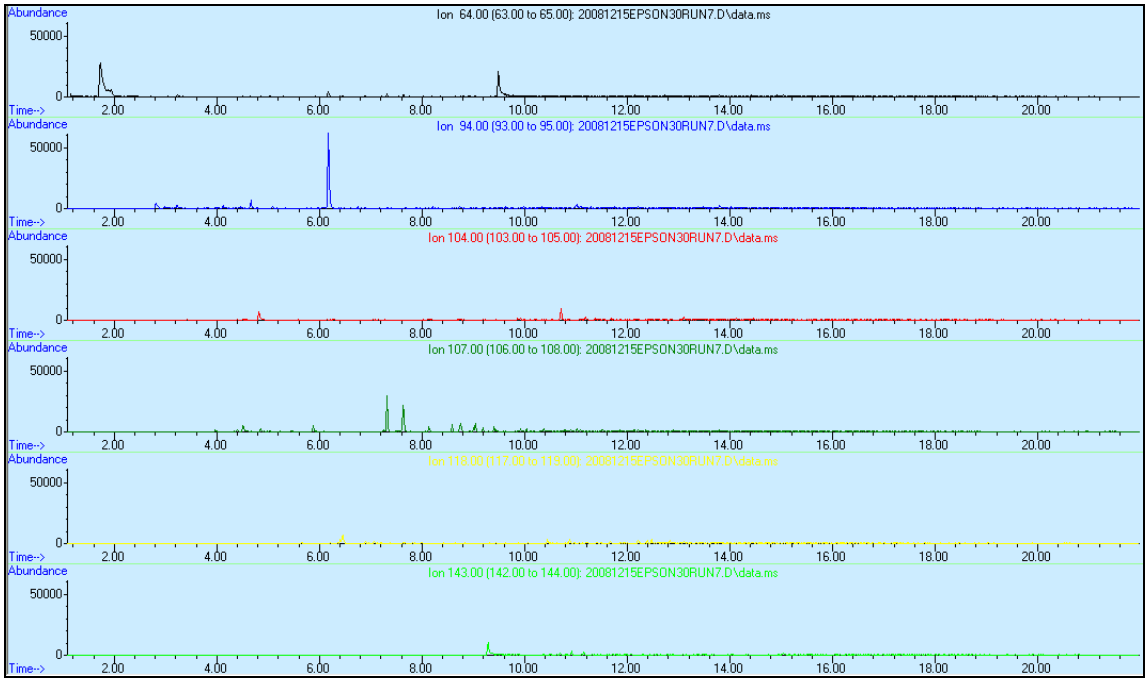

Figure 139: Results of the Extract Ion Chromatogram method for the Epson 30 ink on paper sample analyzed with the Epson ions.

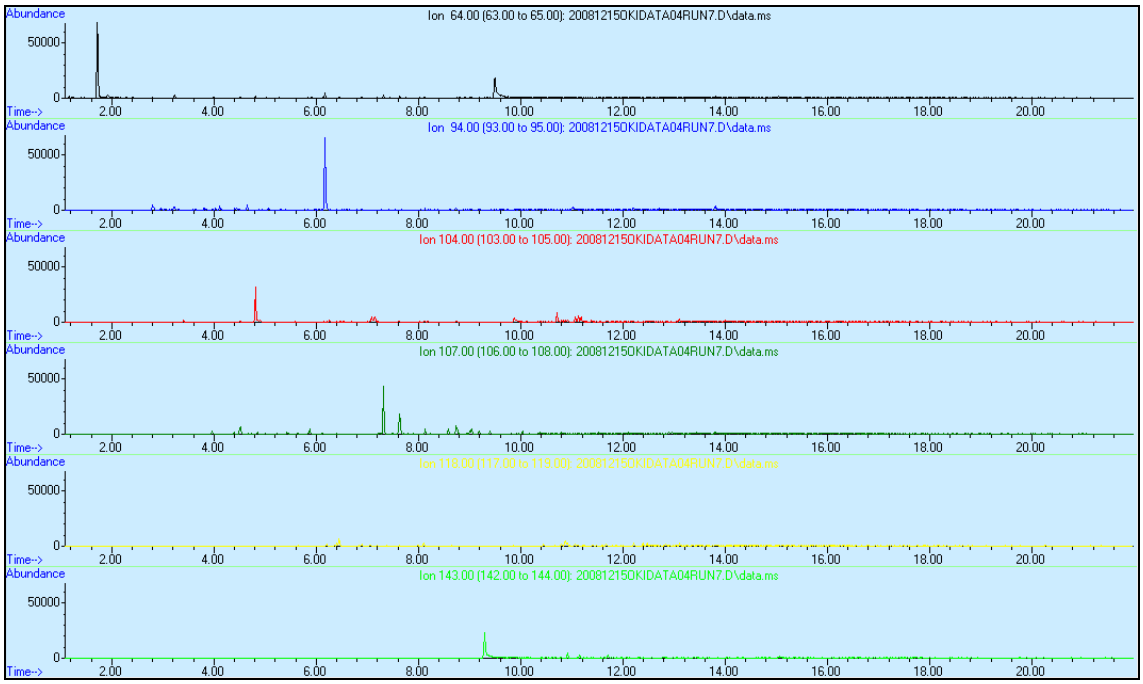

Figure 140: Results of the Extract Ion Chromatogram method for the Okidata 04 ink on paper sample analyzed with the Epson ions.

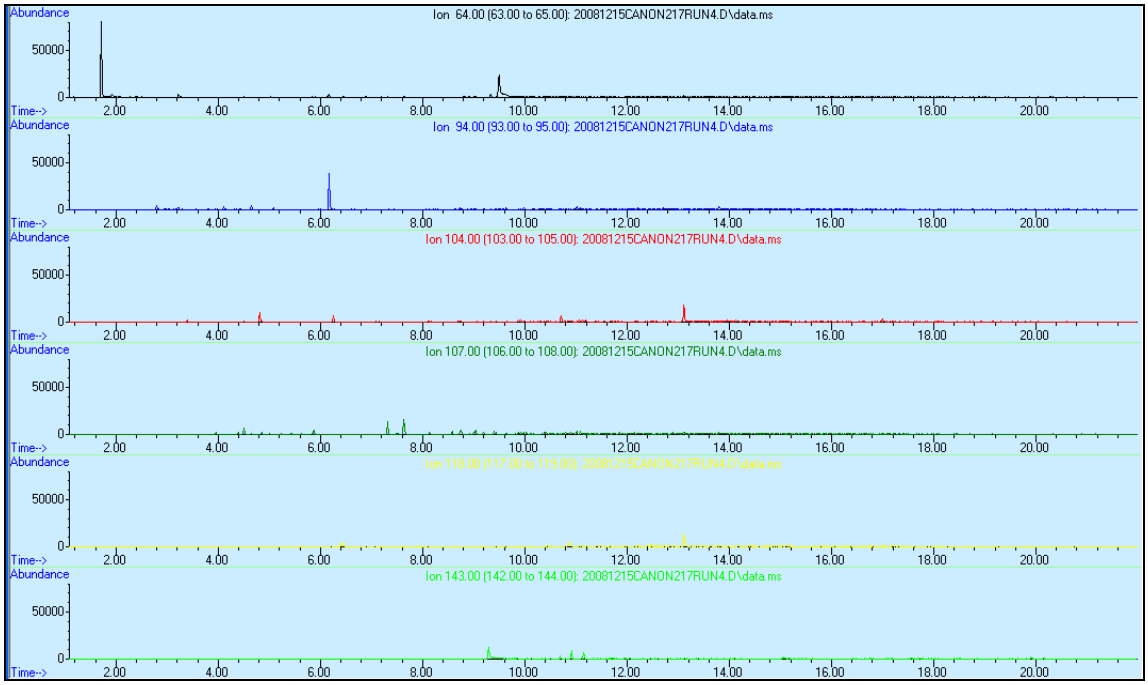

Figure 141: Results of the Extract Ion Chromatogram method for the Canon 217 ink on paper sample analyzed with the Epson ions.

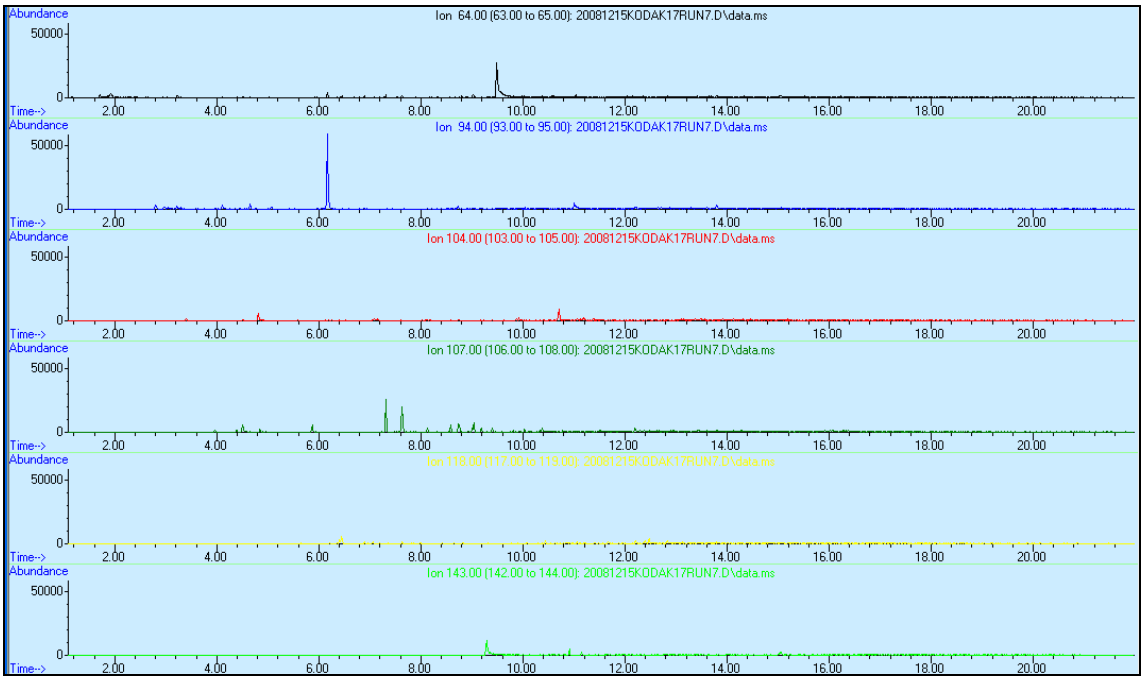

Figure 142: Results of the Extract Ion Chromatogram method for the Kodak 17 ink on paper sample analyzed with the Epson ions.

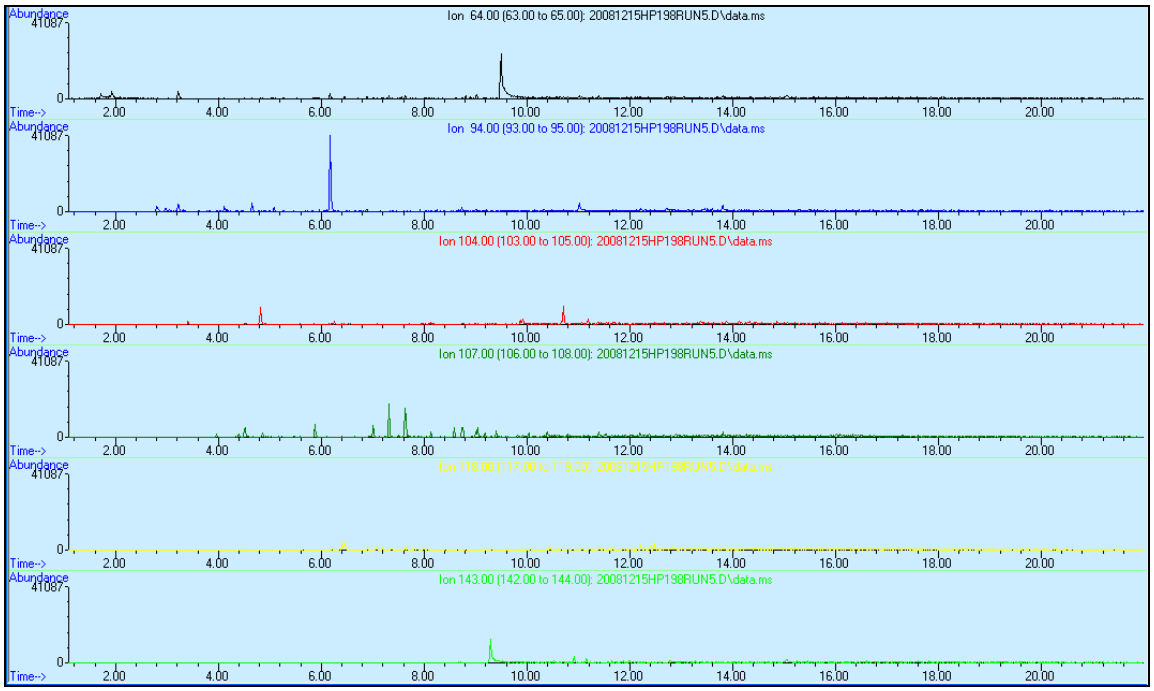

Figure 143: Results of the Extract Ion Chromatogram method for the Hewlett Packard 198 ink on paper sample analyzed with the Epson ions.

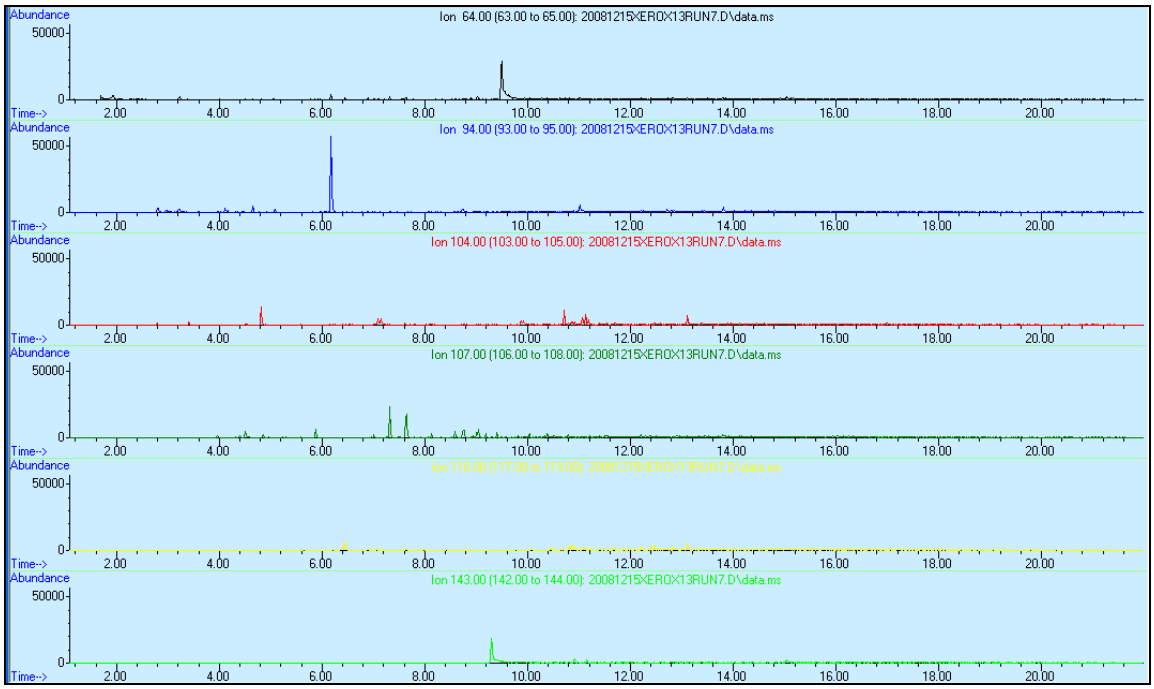

Figure 144: Results of the Extract Ion Chromatogram method for the Xerox 13 ink on paper sample analyzed with the Epson ions.

After looking at all of the above data other useful information was obtained from the neat ink sample pyrograms. Certain compounds seemed to be found in some manufacturers and not in other manufacturers, which could aid in the identification of an unknown ink sample. For example, Indole was found only in the Epson neat ink sample pyrograms, and Quinoline was found in eight of the Epson neat ink sample pyrograms and five of the Canon neat ink sample pyrograms. Toluene was found only in the non-extractable neat ink sample pyrograms of Hewlett Packard and Xerox. Pyridine was found in four Canon neat ink sample pyrograms and Thiirane was found in two Canon neat ink sample pyrograms, though the Canon neat ink sample pyrograms that contained pyridine did not also contain Thiirane. Benzyl Alcohol was found only in the four non-extractable Hewlett Packard neat ink sample pyrograms and the three Xerox neat ink sample pyrograms. Aniline was found in eight of the Epson neat ink sample pyrograms,

eight of the Canon neat ink sample pyrograms and one of the Kodak neat ink sample pyrograms. Naphthalenamine was found in seven Canon neat ink sample pyrograms, seven Epson neat ink sample pyrograms, one Kodak neat ink sample pyrogram and one Hewlett Packard neat ink sample pyrogram. D-Allose was found in three neat ink sample pyrograms, one Kodak, one Epson and one Hewlett Packard, as was a type of Glycol, though the Hewlett Packard neat ink sample pyrogram and the Epson neat ink sample pyrogram that contained the Glycol did not also contain the D-Allose. Finally Styrene was found in only one sample pyrogram, which was the pyrogram for the Epson 156 neat ink sample. Refer to Table 16 for a listing of potentially identifying compounds that were present in specific manufacturer neat ink sample pyrograms.

Table 16: Potentially Identifier Compounds Present in the Various Ink Manufacturers' Pyrograms.

Indole	Quinoline	Toluene	Aniline	Naphthalenamine	D-Allose
Epson 33	Epson 33	HP 198	Kodak 22	Kodak 22	Kodak 22
Epson 60	Epson 60	HP 199	Epson 30	Epson 30	Epson 84
Epson 63	Epson 63	HP 200	Epson 33	Epson 60	HP 205
Epson 66	Epson 66	HP 201	Epson 60	Epson 63	
Epson 90	Epson 90	Xerox 13	Epson 63	Epson 90	
Epson 93	Epson 93	Xerox 24	Epson 66	Epson 93	
Epson 120	Epson 120	Xerox 244	Epson 90	Epson 120	
Epson 123	Epson 123		Epson 93	Epson 123	
	Canon 217		Epson 123	Canon 223	
	Canon 223		Canon 217	Canon 306	
	Canon 348		Canon 223	Canon 318	
	Canon 384		Canon 282	Canon 327	
	Canon 522		Canon 312	Canon 348	
			Canon 348	Canon 384	
			Canon 384	Canon 402	
			Canon 492	HP 205	
			Canon 522		

Benzyl Alcohol	Glycol (any type)	Pyridine	Thiirane	Styrene
HP 198	Epson 30	Canon 217	Canon 282	Epson 156
HP 199	HP 198	Canon 223	Canon 318	
HP 200	Kodak 22	Canon 348		
HP 201		Canon 384		
Xerox 244				

Using the information that certain compounds were found in certain neat ink manufacturer pyrograms only, it was then necessary to determine if some of these substances were also a part of the paper pyrogram. The compounds identified in the paper pyrograms were identified using the NIST library and the match quality value for each identified compound was listed in parentheses after the compound name. When examining the various blank paper sample replicates, it was determined that Thiirane (4%) at approximately 2.03 minutes, Toluene (81%) at approximately 3.21 minutes and Phenol (90%) at approximately 6.15 minutes were present at significant levels in the paper pyrogram to interfere with the results of an ink on paper sample pyrogram. The problem with the Phenol peak at approximately 6.15 minutes was that it tended to co-elute with the compound Aniline, which was found within the ink samples. In addition, the paper sample pyrograms contained a peak at approximately 2.97 minutes, though not identified as Pyridine, the substance co-eluted with Pyridine. Though the use of a mass spectrometer can usually help detect co-elution and hence identify the co-eluted compounds, the problem in this situation was the fact that there was a large concentration difference between the paper sample and the ink on the paper sample. The paper sample ranged from a low of 4.5 times to an extreme 263 times more concentrated than the ink sample on the paper matrix, with the paper sample being an average 11 times more concentrated than the ink sample on the paper matrix. As a result, even if the ink ions were identified as being present in the co-eluted peak, they were generally too low for them to be identified by the NIST library. For example, the Phenol compound, which had a main ion of 94, co-eluted with the Aniline compound, which had a main ion of 93. When looking at the co-eluted peak, the 94 ion had an abundance of approximately

59,000; while the 93 ion of Aniline had an abundance of 1,200. This significant difference in the abundance made the identification of the Aniline peak by the NIST library practically impossible. The issue of co-elution was not a problem when the paper peak that co-eluted with an ink peak was not a main peak in the paper pyrogram. In addition, though Benzene (86%) at approximately 2.37 minutes, Styrene (92%) at approximately 4.82 minutes and Benzyl Alcohol (14%) at approximately 7.03 minutes were also present in the paper pyrogram, they were present at low levels. Thus, a strong peak of one of these compounds in an ink on paper sample would indicate its origination from the ink sample rather than from the paper sample.

Using predominately the primary peaks for each ink sample as discussed previously, and in particular the specific compounds associated with the ink sample pyrograms solely, a list of peaks and compounds of interest was developed for each ink on paper sample pyrogram. Each primary peak identified in the neat sample pyrograms were compared to their respective ink on paper sample pyrograms to determine if the compound could be identified in these pyrograms. When determining the peaks, and the corresponding compounds, to be searched for in an ink on paper sample, the neat ink standards that had similar pyrograms were grouped together. If a peak was found as a primary peak in one of the members of the group it was included in the search process. As a result some secondary peaks were used in the search to determine the identity of an ink sample. Furthermore, for the samples that did not have any primary peaks identified in the ink on paper samples, the secondary peaks were then examined to determine if they could be identified in the ink on paper sample pyrograms.

The main problem with analyzing the ink on paper pyrograms, as stated previously, was the fact that the paper matrix tended to dominant the peaks produced in the pyrogram. The peaks from the ink component of the sample tended to be significantly smaller than the paper peaks, and as such were not always identifiable or distinguishable from the ink on paper sample background. The peaks listed in Table 17 were those compounds that could readily be distinguished from the background of the ink on paper sample pyrogram and which could be identified correctly by the NIST05a.L library. By identifying the compounds listed in Table 17 it was possible to identify the manufacturer, and depending on the sample, the actual ink cartridge type of an unknown ink sample. The compounds listed in bold were the primary peaks for the ink sample pyrogram and the peaks not listed in bold were the secondary peaks for the ink sample pyrogram. Furthermore, the compounds that were highlighted in blue were those compounds that were found in each ink on paper sample tested, the compounds highlighted in light blue were those compounds that were found in some but not in every ink on paper sample tested and those compounds highlighted in yellow contained the correct ions at detectable levels but whose identification was not made correctly by the NIST library. The compounds not highlighted were not detected in the ink on paper sample pyrograms. Finally, the compounds labeled with an asterisk were also found in the blank paper pyrograms. Refer to Appendix E for the pyrolysis data of all sample replicates done for this research study.

As stated previously with respect to the neat ink sample pyrograms, the compounds were identified using the NIST05a.L library. The NIST library compared the mass spectral data of a peak in the neat ink sample to the mass spectral data of the

standards contained in the library. The compounds that had the best mass spectral data match to a compound in the ink on paper samples were listed, along with their match quality value. A match quality greater than or equal to 95% resulted in high confidence in the compound identification, while a match quality value of between 90-95% resulted in a fairly high confidence in the compound identification. If the compound present in the ink on paper sample was listed in the NIST library, then a strong match quality value would be obtained between the peak in the ink on paper sample and the compound listed in the NIST library search results. If, however, the compound present in the ink on paper sample was not listed in the NIST library then the library would provide the best match possible and the match quality value would be lower. Depending on the complexity of the sample being analyzed and the completeness of the search library database, the match quality values that could be obtained could be significantly lower than 90%. This lower match quality value was not necessarily invalid. The lower match quality value would not allow for a positive identification of the compound, but it could provide an indication of the compound present in the neat ink sample. Additionally, even if a compound was found with a high match quality, this did not necessarily mean the identification of the compound was correct. In both situations, the results of the library search meant that the listed compounds were the best match that the library found in its database based on the mass spectral data for that particular peak in the sample pyrogram. Consequently, the same best match result may be provided for more than one peak in a neat ink sample pyrogram.

It should be noted again that the primary and secondary peaks noted in the ink on paper sample pyrogram were the pyrolysis products of the ink on paper sample and were

not the actual compounds present in the original ink on paper sample. In the discussion that follows, the best match from the NIST library was listed for the identifying peaks in the ink on paper sample pyrograms. In addition, the match quality for the compound identified by the NIST library was included in parentheses after the compound name. It should also be noted that the match quality values were at times lower for these ink on paper sample pyrograms, depending on the compound, than the match quality values obtained for the same peaks and compounds in the neat ink sample pyrograms. It was the interferences of the paper matrix that lowered the match quality values of the identified compounds. Unless otherwise noted, the discussion that follows was based on the analysis of the ink on paper sample pyrograms for the thirty-five ink standards.

The above method had some problems with a few of the Canon extractable ink samples, namely the Canon 318, Canon 327 and Canon 402 ink samples. In these samples there were not a large number of identifiable peaks present in the ink on paper sample pyrogram that would assist in their identification from an unknown ink sample, and the peaks that were present were not always reliably or consistently identified. For the Canon BC-60 ink cartridge (ink samples 318 through 323), three peaks were documented at approximately 1.7 minutes, 2.0 minutes and 2.9 minutes that were present consistently in the ink on paper sample pyrograms and, which in theory, should assist in the identification of the ink sample. The peaks were identified as being Sulfur Dioxide, Thiirane and Pyridine respectively in the neat ink sample pyrograms, and they were all identified in the Canon BC-60 ink on paper samples. The peak at approximately 2.0 minutes in the neat ink samples had a match quality value to Thiirane of 80%, however when this peak was identified in the ink on paper samples it had a match quality to

Thiirane of only 4%. One of the problems was that there was a peak found in the blank paper pyrograms at this same retention time that had the same low match quality to Thiirane. Thus, the paper peak was masking the Thiirane peak from being identified in the Canon BC-60 ink on paper samples, practically eliminating its usefulness in identifying these ink samples. In addition, the Pyridine peak that was identified in all ten of the Canon extractable neat ink samples and located at approximately 2.9 minutes, was identified as Pyridine-D5 (36%), an isotopic isomer of Pyridine, in the Canon BC-60 ink on paper sample pyrograms. Unfortunately this peak, and compound identification, was also found in the blank paper pyrograms, reducing the usefulness of this peak to identify an ink sample. Thus for the Canon BC-60 ink cartridges the only reliable peak for the identification of these ink on paper samples occurred at approximately 1.7 minutes, and which was identified by the NIST library as Sulfur Dioxide (5%). The Hewlett Packard #56 ink cartridge (ink sample 205) also had only one peak in its ink on paper sample pyrogram, located at approximately 1.7 minutes, which could be used to identify the Hewlett Packard 205 ink sample. This peak was identified by the NIST library as Sulfur Dioxide and had a match quality value of 4%. Obviously a single peak that was found in multiple ink cartridges could not identify the Hewlett Packard 205 or Canon BC-60 ink on paper sample pyrograms. However, as this peak was not found in the blank paper pyrograms, the identification of this peak in the sample pyrogram indicated the presence of an ink sample and by process of elimination could narrow down the possible sources of this ink sample. For the slightly yellow liquid of the Canon BC-60 ink cartridge (ink samples 318a through 323a), two peaks were found in its ink on paper sample pyrogram at approximately 6.1 minutes and 13.3 minutes, which were identified by the NIST

library as 3,4-dimethyl-pyridine (45%) and D-Allose (83%) respectively. As D-Allose was a main component of the paper, its presence in the Canon 318a ink on paper sample pyrogram was not useful for identifying this ink sample. The 3,4-dimethyl-pyridine compound was unique to the Canon 318a ink on paper sample pyrogram, and as such the identification of this compound in an ink on paper sample pyrogram would allow for the ink to be identified as being the slightly yellow liquid from a Canon BC-60 ink cartridge. All results of the Canon BC-60 and Hewlett Packard #56 ink on paper sample pyrograms were consistent between sample replicates of the same ink cartridge and any multiple copies of the ink cartridge.

For the Canon BC-22e ink cartridge (ink samples 327, 331, 335, 339, 343 and 347) and the Canon BCI-12 ink cartridge (ink sample 402 through 419), three peaks were found at approximately 1.7 minutes, 2.9 minutes and 9.3 minutes that were present consistently in the ink on paper samples and that should assist in the identification of the ink sample. These peaks were identified in the Canon BC-22e and Canon BCI-12 ink on paper sample pyrograms as Sulfur Dioxide (5%), Pyridine-D5 (50%) and Naphthalene (46%) respectively. As stated above, the Pyridine-D5 peak was not discriminating as it was found in the blank paper pyrograms and hence in all of the ink on paper sample pyrograms. The Naphthalene peak, on the other hand, could be used to assist in the identification of the ink sample. Naphthalene was found in all ink on paper sample replicates of these two Canon ink cartridges, but this compound was not always identified by the NIST library, even though the ions for Naphthalene were always present at this location.

The Naphthalene compound was also found in the ink on paper sample pyrograms of the Canon BCI-10 ink cartridge (ink samples 223 through 228 and 372 through 383), Canon BCI-21 ink cartridge (ink samples 348 through 353), Canon BCI-11 ink cartridge (ink samples 384 through 401) and Canon BC-20 ink cartridge (ink samples 306 through 311). Naphthalene was a secondary peak, not a primary peak, for these ink samples, however it was consistently identified in these ink on paper sample pyrograms. The Canon BCI-10, Canon BCI-21 and Canon BCI-11 ink on paper sample pyrograms could be distinguished from the Canon BC-22e, Canon BCI-12 and Canon BC-20 ink on paper sample pyrograms by the fact that the Canon BCI-10, Canon BCI-21 and Canon BCI-11 ink on paper sample pyrograms contained a peak at approximately 6.25 minutes that was identified by the NIST library as Benzonitrile (22%), and which was not found in the Canon BC-22e, Canon BCI-12 and Canon BC-20 ink on paper sample pyrograms. The BC-20 ink cartridge could be distinguished from the other Canon ink cartridges discussed previously by the fact that its ink on paper sample pyrogram contained a peak at approximately 16.93 minutes that was identified by the NIST library as either Benzo[h]quinoline (11%) or Benzo[h]isoquinoline (25%), and which was not identified in the other Canon ink on paper sample pyrograms discussed. In the neat ink sample pyrogram of the Canon BCI-10, BCI-21 and BCI-11 ink cartridges, the compounds Benzo[f]quinoline and/or Benzo[h]isoquinoline were present at a retention time of approximately 16.92 minutes, however neither of these two compounds were identified in the ink on paper samples for these ink cartridges. However, even if the compounds Benzo[f]quinoline and/or Benzo[h]isoquinoline were identified in the Canon BCI-10, Canon BCI-21 and Canon BCI-11 ink on paper sample pyrograms, they could still be

differentiated from the Canon BC-20 ink on paper sample pyrogram, as the latter ink on paper sample pyrogram did not contain the compound Benzonitrile, which was found in the Canon BCI-10, Canon BCI-21 and Canon BCI-11 ink on paper sample pyrograms. Additionally, the Canon BCI-10, Canon BCI-21 and Canon BCI-11 ink on paper sample pyrograms also contained o-Toluidine (35%), however this compound was found not only in other Canon and Epson extractable ink on paper sample pyrograms, but it was also found in the blank paper pyrogram. Thus, this compound by itself was not useful for the identification of the Canon BCI-10, Canon BCI-21 and Canon BCI-11 ink samples.

For the BCI-12 ink cartridge (ink samples 402 through 419), the ink on paper sample was analyzed thirty-nine times using the Py-GC-MS method. For one ink on paper sample pyrogram for the Canon 419 ink sample, a peak for Caprolactam (91%) was detected at approximately 10.448 minutes. This compound was found in only one replicate of this ink on paper sample pyrogram, and it was most likely due to an impurity in the paper matrix rather than due to a component of the ink itself. Since this compound was not identified in the other sample replicates of this ink cartridge type, the impurity or contaminant was attributed to the paper and not with the ink sample itself. It would be expected that if this impurity was part of the ink sample it would be detected in another ink on paper sample pyrogram from the same ink cartridge. This was not the case, and hence it could be concluded that the Caprolactam was due to an impurity with the paper stock. With the exception of the one replicate for the BCI-12 ink cartridge noted above, all results of the Canon BC-22e, Canon BCI-12, Canon BCI-10, Canon BCI-21, Canon

BCI-11 and Canon BC-20 ink on paper sample pyrograms were consistent between sample replicates of the same ink cartridge and the multiple copies of the ink cartridge.

The Canon BCI-6Bk (ink samples 217 through 222), Canon BC-02 (ink samples 282 through 287) and Canon BCI-3ePBk (ink samples 522 through 527) ink on paper sample pyrograms contained four peaks that could assist in the identification of these ink samples. The peaks at approximately 1.7 minutes, 2.9 minutes, 7.6 minutes and 17.3 minutes, which were identified by the NIST library as Sulfur Dioxide (9%), Pyridine-D5 (33%), o-Toluidine (27%) and Benzo[f]quinoline (45%) or Benzo[f]isoquinoline (49%) respectively, were found in the sample replicates of these ink on paper sample pyrograms. As stated above, the Canon BC-02 ink on paper sample pyrograms contained the same peaks and compounds as the Canon BCI-6Bk and Canon BCI-3ePBk ink on paper sample pyrograms. However, the neat ink sample pyrogram of the Canon BC-02 ink cartridge was different in terms of peak pattern and compound identification from the neat ink sample pyrograms of the Canon BCI-6Bk and Canon BCI-3ePBk in cartridges. The influence of the paper matrix on these three Canon ink cartridges had resulted in removing the distinguishing features of these samples, and consequently they were grouped together based on their ink on paper sample pyrograms. Additionally, the Canon BC-20 neat ink sample pyrogram contained a peak at approximately 17.3 minutes, which was identified by the NIST library as either Benzo[f]quinoline (96%) or Benzo[f]isoquinoline (96%). However, in the Canon BC-20 ink on paper sample pyrograms, this peak was not detected. Thus, the Canon BC-20 ink sample could not be distinguished from the Canon BCI-6Bk, Canon BC-02 and Canon BCI-3ePBk ink samples through an examination of their ink on paper sample pyrograms. All results of

the Canon BCI-6Bk, Canon BC-02 and Canon BCI-3ePBk ink on paper sample pyrograms were consistent between sample replicates of the same ink cartridge and the multiple copies of the ink cartridge.

The Canon BC-23 (ink samples 312 through 317) and Canon BCI-3Bk (ink samples 492 through 497) ink cartridges were both the non-extractable ink samples found in the Canon ink samples. As such, their ink on paper sample pyrograms were different from the Canon extractable ink on paper sample pyrograms. For the Canon BC-23 and Canon BCI-3Bk ink on paper sample pyrograms, four peaks were identified that would assist in the identification of the Canon non-extractable ink sample. The four peaks were located at approximately 2.4 minutes, 9.2 minutes, 12.0 minutes and 20.3 minutes, and were identified by the NIST library as Benzene (68%), Benzenecarboxylic acid, Biphenyl (90%) and m-Terphenyl (86%) respectively. The compound Benzenecarboxylic acid had a match quality value of 50% in the Canon BC-23 ink on paper sample pyrograms and a match quality value of 91% in the Canon BCI-3Bk ink on paper sample pyrograms. The compounds Benzene and Benzenecarboxylic acid were found in the blank paper pyrograms, however the latter compound was found at a lower level and with a lower match quality than what was found in the Canon BC-23 and Canon BC-3eBk ink on paper sample pyrograms. These four compounds were found only in the Canon non-extractable ink samples, and thus the identification of these four compounds in an ink on paper sample pyrogram identifies the source of the ink as being from either the Canon BC-23 ink cartridge or Canon BC-3eBk ink cartridge. All results of the Canon BC-23 and Canon BCI-3eBk ink on paper sample pyrograms were consistent between sample replicates of the same ink cartridge and the multiple copies of the ink cartridge.

For the non-extractable Hewlett Packard ink samples, specifically the Hewlett Packard #29 ink cartridge (ink sample 198), the Hewlett Packard #56 ink cartridge (ink sample 199), the Hewlett Packard #27 ink cartridge (ink sample 200) and the Hewlett Packard #45 ink cartridge (ink sample 201), six peaks were found in their ink on paper sample pyrograms at approximately 3.2 minutes, 7.1 minutes, 10.7 minutes, 11.4 minutes, 14.2 minutes and 15.2 minutes that would assist in the identification of these ink samples. The peaks, starting with the 3.2 minute peak, were identified as being Toluene (55%), Benzyl Alcohol (96%), 2-[2-(2-ethoxyethoxy)ethoxy]-Ethanol (47%), Benzyl Methacrylate (90%), 4-Fluoro-6-aminopyrimidine (38%) and unidentified respectively. For the peak at approximately 15.2 minutes, in the Hewlett Packard non-extractable neat ink sample pyrograms the NIST library could not definitively identify a compound for this peak and hence this peak was labeled as unidentified. Consequently, in the Hewlett Packard non-extractable ink on paper sample pyrograms this peak was still listed as unidentified, however the main ions found for this peak in the neat ink sample pyrograms were present in all of the ink on paper sample pyrograms of the Hewlett Packard non-extractable ink samples. The peak at approximately 14.8 minutes in the Hewlett Packard non-extractable ink on paper sample pyrograms was not always identified by the NIST library as 4-Fluoro-6-aminopyrimidine, however the ions for this compound were present in all of the Hewlett Packard non-extractable ink on paper sample pyrograms. The arrangement of peaks and their corresponding compound identifications found in the Hewlett Packard non-extractable ink on paper sample pyrograms were unique to the Hewlett Packard ink samples and allowed for their identification from an ink on paper sample pyrogram. All results of the Hewlett Packard #29, Hewlett Packard #56, Hewlett

Packard #27 and Hewlett Packard #45 ink on paper sample pyrograms were consistent between sample replicates of the same ink cartridge.

For the Xerox non-extractable ink samples, specifically the Xerox 8R7994 ink cartridge (ink samples 13 through 16 and 264 through 265), the Xerox 8R7660 ink cartridge (ink samples 24 through 29) and the Xerox M-Series ink cartridge (ink samples 244, 248, 252, 256 and 260), six peaks were found in their ink on paper sample pyrograms at approximately 3.2 minutes, 3.8 minutes, 7.0 minutes and 11.4 minutes that would assist in the identification of these ink samples. The peaks, starting with the 3.2 minute peak, were identified by the NIST library as the compounds Toluene (70%), Hexamethyl-Cyclotrisiloxane (35%), Benzyl Alcohol (96%) and Benzyl Methacrylate (41%) respectively. In the Xerox neat ink sample pyrogram, the peaks at approximately 8.8 minutes and 11.3 minutes were identified as Decamethyl-Cyclopentasiloxane and Dodecamethyl-Cyclohexasiloxane respectively, however in the Xerox ink on paper samples these compounds were not identified by the NIST library in any of the ink on paper sample pyrograms, even though the ions for these two compounds were present in all ink on paper sample pyrograms. These two compounds had unique ions that allowed for the identification of these compounds even if their abundances were too low for the NIST library to identify the compounds. The compounds Benzyl Alcohol and Benzyl Methacrylate were not identified as being present in some of the Xerox ink on paper sample pyrograms, and in the ink on paper sample pyrograms where they were identified the peaks were extremely small and the match quality for these two compounds were not as high as the match quality found for these two compounds in the Hewlett Packard non-extractable ink on paper sample pyrograms. Though the Xerox non-extractable ink on

paper sample pyrograms and the Hewlett Packard non-extractable ink on paper sample pyrograms had some peaks and compounds in common, they also contained unique peaks and compounds that allowed them to be differentiated from one another. All results of the Xerox 8R7994, Xerox 8R7660 and Xerox M-Series ink on paper sample pyrograms were consistent between sample replicates of the same ink cartridge and the multiple copies of the ink cartridge.

For the Okidata #52110001 ink cartridge (ink samples 04, 05 and 09), the ink on paper sample pyrogram contained seven peaks at approximately 1.7 minutes, 7.3 minutes, 7.6 minutes, 10.83 minutes, 10.86 minutes, 10.9 minutes and 11.1 minutes that would assist in the identification of the Okidata #52110001 ink sample. Starting with the 1.7 minute peak, the peaks were identified by the NIST library as the compounds Sulfur Dioxide (9%), 2-Methyl-Phenol (97%), o-Toluidine (30%), 1-[2-(2-methoxy-1-methylethoxy)-1-methylethoxy]-2-Propanol (50%), 1-[2-(2-methoxy-1-methylethoxy)-1-methylethoxy]-2-Propanol (43%), 1-[2-(2-methoxy-1-methylethoxy)-1-methylethoxy]-2-Propanol (40%) and 1,1'-[(1-methyl-1,2ethanediyl)bis(oxy)]bis-2-Propanol (40%) respectively. The three peaks located at approximately 10.83 minutes, 10.86 minutes and 10.9 minutes that were identified as 1-[2-(2-methoxy-1-methylethoxy)-1-methylethoxy]-2-Propanol in the neat ink sample pyrogram contained similar main ions in their mass spectral data, consequently when the NIST library provided the best match to the standards listed in its library, the best match listed happened to be the same compound for all three peaks. The peak at 11.1 minutes was identified as being 1,1'-[(1-methyl-1,2ethanediyl)bis(oxy)]bis-2-Propanol, however the compounds of 1-[2-ethoxypropoxy]-2-Propanol (50%), 1-[2-(2-methoxy-1-methylethoxy)-1-methylethoxy]-2-Propanol (53%)

and 1-[1-methyl-2-(2-propenyloxy)ethoxy]-2-Propanol (50%) were close in the match quality, and contained similar ions, to the listed compound 1,1'-[(1-methyl-1,2ethanediyl)bis(oxy)]bis-2-Propanol. The compounds listed for the peaks located at approximately 7.3 minutes and 7.6 minutes, namely 2-Methyl-Phenol and o-Toluidine respectively, were also found in the blank paper pyrogram at similar retention times, so their presence alone was not sufficient to identify the source of an Okidata ink sample. However, the compounds listed at the peaks located at approximately 10.83 minutes, 10.86 minutes, 10.9 minutes and 11.1 minutes were unique to the Okidata ink sample, so their identification in an ink on paper sample pyrogram was an indication that the source of the ink sample was an Okidata #52110001 ink cartridge. All results of the Okidata #52110001 ink on paper sample pyrograms were consistent between sample replicates of the same ink cartridge and the multiple copies of the ink cartridge.

For the Kodak #1369511 ink cartridge (ink sample 17), two peaks were found in the neat ink sample pyrogram at approximately 15.1 minutes and 19.7 minutes that would assist in the identification of the Kodak #1369511 ink samples. These peaks were identified in the neat ink pyrogram as 1-methylamino-Bicyclo(2,2,2)oct-2-ene and Cyclohexadecane or 1-Nonadecene respectively. The peak located at approximately 15.1 minutes was not identified by the NIST library in the ink on paper sample pyrograms, however the main ions for this compound were present in the ink on paper sample pyrograms at this location, which allowed for its identification within the sample pyrogram. In the ink on paper sample pyrograms, the peak at approximately 19.7 minutes was identified as Cyclohexadecane, with a match quality value of 15%. This compound was unique to the Kodak #1369511 ink sample, therefore its detection in an

ink on paper sample pyrogram would allow for the identification of a Kodak #1369511 ink sample. For the Kodak #1754852 ink cartridge (ink sample 22), three peaks were found in the ink on paper sample pyrogram at approximately 1.7 minutes, 13.3 minutes and 13.5 minutes that would assist in the identification of the Kodak #1754852 ink samples. These peaks were identified by the NIST library as Sulfur Dioxide (4%), D-Allose (90%) and 2,2'-(oxybis(2,1-ethanediyloxy))bis-Ethanol (59%) or Pentaethylene glycol (59%) respectively. As D-Allose was a main component of the paper sample, its presence in the Kodak #1754852 ink on paper sample pyrogram was not useful for the identification of this ink sample. However, the peak at 13.5 minutes was a unique feature of the Kodak #1754852 ink sample, and was detectable by the NIST library, even though it co-eluted with the D-Allose peak in the ink on paper sample pyrograms. Thus, based on the presence of the peaks at approximately 1.7 minutes and 13.5 minutes, the identity of the Kodak #1754852 ink sample could be determined. All results of the Kodak #1369511 and the Kodak #1754852 ink on paper sample pyrograms were consistent between sample replicates of the same ink cartridge.

For the Epson T013 ink cartridge (ink samples 30 through 32), six peaks were found in the ink on paper sample pyrogram at approximately 1.7 minutes, 7.3 minutes, 10.86 minutes, 10.88 minutes, 11.1 minutes and 12.1 minutes that would assist in the identification of the Epson T013 ink samples. These peaks were identified by the NIST library as Sulfur Dioxide (7%), 2-Methyl-Phenol (96%), .gamma,.gamma,2,3-tetramethyl-2-cyclopentene-1-butanal (46%), Indole (46%), 6-methyl-6-hepten-4-yn-3-ol (35%) and 6-methyl-1H-Indole (35%) respectively. For the peak located at approximately 10.86 minutes, the compounds of 6-methyl-6-hepten-4-yn-3-ol (27%) and

5-[5-methylfurfuryl]hydantoin (30%) were close in match quality value, and had similar mass spectral data, to .gamma,.gamma,2,3-tetramethyl-2-cyclopentene-1-butanal. For the peak at approximately 11.1 minutes the compound 5-[5-methylfurfuryl]hydantoin (18%) was close in match quality value, and had similar mass spectral data, to the compound 6-methyl-6-hepten-4-yn-3-ol. The peak at approximately 11.1 minutes in the Epson T013 ink on paper sample pyrogram was not always identified by the NIST library, however the main ions for this peak were present in the ink on paper sample pyrograms at the same retention time, which allowed for its identification in the ink on paper sample pyrograms. For the peak at approximately 12.1 minutes, the compounds of 4-methyl-1H-Indole (25%) and 5-methyl-1H-Indole (35%) were close in match quality value, and had similar mass spectral data, to 6-methyl-1H-Indole (35%). This combination of peak locations and compound identifications was unique to the Epson T013 ink samples and the identification of these compounds in an ink on paper sample pyrogram allowed for the identity of the Epson T013 ink sample to be determined. All results of the Epson T013 ink on paper sample pyrograms were consistent between sample replicates of the same ink cartridge and the multiple copies of the ink cartridge.

For the Epson T003 ink cartridge (ink samples 33 through 35), Epson T007 ink cartridge (ink samples 60 through 62), Epson S020189 ink cartridge (ink samples 63 through 65), Epson T026 ink cartridge (ink samples 66 through 68), Epson T019 ink cartridge (ink samples 90 through 92), Epson T028 ink cartridge (ink samples 93 through 95), Epson S020187 ink cartridge (ink samples 120 through 122) and Epson T017 ink cartridge (ink samples 123 through 125) six peaks were found in their ink on paper sample pyrograms at approximately 1.7 minutes, 6.2 minutes, 7.6 minutes, 10.1 minutes,

10.9 minutes and 12.1 minutes that would assist in the identification of these Epson ink samples. The peaks were identified by the NIST library as the compounds Sulfur Dioxide (5%), Benzonitrile (46%), o-Toluidine (30%), Quinoline (25%), Indole (87%) and 4-methyl-1H-Indole (55%) respectively. For the peak located at approximately 12.1 minutes, the compounds of 6-methyl-1H-Indole (50%) and 2-methyl-1H-Indole (50%) were close in match quality value, and had similar mass spectral data, to the compound 4-methyl-1H-Indole (55%). The peak at approximately 10.8 minutes was not always identified in the Epson T003, Epson T007, Epson S020189, Epson T026, Epson T019, Epson T028, Epson S020187 and Epson T017 ink on paper sample pyrograms as Quinoline, but the main ions of Quinoline were present in these Epson ink on paper sample pyrograms at this location, which allowed for its identification. Though some of the compounds listed for the Epson T003, Epson T007, Epson S020189, Epson T026, Epson T019, Epson T028, Epson S020187 and Epson T017 ink on paper sample pyrograms could be found in other ink samples, the combination of compounds was unique to these Epson ink cartridges. As such, the identification of these compounds in an ink on paper sample pyrogram would indicate the source of the ink sample as being an Epson T003, an Epson T007, an Epson S02018, an Epson T026, an Epson T019, an Epson T028, an Epson S020187 or an Epson T017 ink sample. All results of the Epson T003, Epson T007, Epson S02018, Epson T026, Epson T019, Epson T028, Epson S020187 and Epson T017 ink on paper sample pyrograms were consistent between sample replicates of the same ink cartridge and the multiple copies of the ink cartridge.

For the non-extractable Epson ink sample, namely the Epson T0321 ink cartridge (ink samples 84 through 86), two peaks were found in the ink on paper sample pyrogram

at approximately 10.85 minutes and 11.1 minutes that would assist in the identification of the Epson T0321 ink samples. These two peaks were identified by the NIST library as being the compounds 5-[5-methylfurfuryl]hydantoin (35%) and .gamma,.gamma,2,3-tetramethyl-2-cyclopentene-1-butanal (53%) respectively. The mass spectral data for the compounds of 5-[5-methylfurfuryl]hydantoin, .gamma,.gamma,2,3-tetramethyl-2-cyclopentene-1-butanal and 6-methyl-6-hepten-4-yn-3-ol were similar, and as a result, for the peaks located at approximately 10.85 minutes and 11.1 minutes the match lists for the two peaks may contain one or all of these compounds. These three compounds, at similar peak locations, could also be found in the Epson T013 ink on paper sample pyrogram. However the Epson T013 ink on paper sample pyrogram could be distinguished from the Epson T0321 ink on paper sample pyrogram by the fact that the former had peaks at approximately 1.7 minutes, 7.3 minutes, 10.88 minutes and 12.1 minutes, identified as Sulfur Dioxide, 2-Methyl-Phenol, Indole and 6-methyl-1H-Indole respectively, that were not found in the Epson T0321 ink on paper sample pyrogram. As a result, the identification of the compounds for the peaks at approximately 10.85 minutes and 11.1 minutes, and the exclusion of the peaks at approximately 1.7 minutes, 7.3 minutes, 10.88 minutes and 12.1 minutes would allow for the identification of the T0321 ink sample from an ink on paper sample pyrogram. All results of the Epson T0321 ink on paper sample pyrogram were consistent between sample replicates of the same ink cartridge and the multiple copies of the ink cartridge.

For the final ink cartridge in this study, Epson T015 ink cartridge (ink samples 156 through 158) five peaks were found in the ink on paper sample pyrogram at approximately 4.8 minutes, 6.1 minutes, 10.86 minutes, 11.1 minutes and 13.1 minutes

that would assist in the identification of the Epson T015 ink samples. These five peaks were identified by the NIST library as the compounds Styrene (95%), hexyl ester 2-Butenoic acid (56%), .gamma,.gamma,2,3-tetramethyl-2-cyclopenten-1-butanal (38%), 5-[5-methylfurfuryl]hydantoin (38%) and 2-[2-(2-butoxyethoxy)ethoxy]-Ethanol (86%) respectively. For the peak located at approximately 10.86 minutes, the compounds of 6-methyl-6-hepten-4-yn-3-ol (43%) and 5-[5-methylfurfuryl]hydantoin (47%) were close in match quality value, and had similar mass spectral data, to .gamma,.gamma,2,3-tetramethyl-2-cyclopenten-1-butanal. For the peak located at approximately 11.1 minutes the compound 6-methyl-6-hepten-4-yn-3-ol (14%) was close in match quality value, and had similar mass spectral data, to 5-[5-methylfurfuryl]hydantoin. The peak located at approximately 13.1 minutes and identified as 2-[2-(2-butoxyethoxy)ethoxy]-Ethanol was also found in the blank paper pyrograms, so its presence in the Epson T015 ink on paper sample pyrograms did not allow for the conclusive identification of the Epson T015 ink sample for this ink on paper sample pyrogram. The compound Styrene was also found in the blank paper pyrograms, however Styrene was found at a higher abundance in the Epson T015 ink on paper sample pyrograms than in the blank paper pyrograms. The abundance of Styrene was compared to the abundance of Furfural, which was a component of the paper and was found at approximately 4.0 minutes. For the blank paper samples, the Styrene ranged from 8% to 28% the abundance of Furfural, whereas in the Epson T015 ink on paper sample pyrograms the Styrene ranged from 71% to 140% the abundance of Furfural, with the majority of the Epson T015 ink on paper sample pyrograms having a percentage over 100%. Thus, even though Styrene was found in both the blank paper sample pyrograms and the Epson T015 ink on paper sample

pyrograms, the higher concentration of the Styrene in the Epson T015 ink on paper sample pyrograms allowed for it to be an identifying and distinguishing feature of this ink sample. All results of the Epson T015 ink on paper sample pyrograms were consistent between sample replicates of the same ink cartridge and the multiple copies of the ink cartridge.

This identification method, and the method of pyrolysis gas chromatography-mass spectrometry in general, tended to work more consistently with the non-extractable ink samples than with the extractable ink samples. This was an advantage as some of the previous methods tended to work consistently only with the extractable ink samples rather than the non-extractable ink samples. Refer to Table 17 for the list of the peaks and identified compounds in the ink on paper sample pyrograms used for the identification of the various inkjet ink manufacturers. The compounds listed in bold were the primary peaks identified in the specific neat ink sample pyrogram and the peaks not listed in bold were the secondary peaks identified in the specific neat ink sample pyrogram. Furthermore, the compounds that were highlighted in blue were those compounds that were found in each ink on paper sample pyrogram tested, the compounds highlighted in light blue were those compounds that were found in some but not in every ink on paper sample pyrogram tested and those compounds highlighted in yellow contained the correct ions at detectable levels in the ink on paper sample pyrograms but whose identification was not made correctly by the NIST library. The compounds not highlighted were not detected in the ink on paper sample pyrograms. Finally, the compounds labeled with an asterisk were also found in the blank paper pyrograms. The results listed for each ink standard in Table 17 represent a single run of a specific ink on

paper sample pyrogram. The results of multiple runs of an ink on paper sample pyrogram were not combined for inclusion into the peak and compound listings of Table 17. Any multiples in the compound identification for the listed peaks in a specific ink standard was a result of NIST library search and was not the result of a multiple run of the ink on paper sample.

Table 17: Peaks and Compounds of Interest for the Identification of the Ink Samples

Sample	Retention Time (Neat Inks)	Possible Substance
Okidata 04	1.476	Sulfur Dioxide
	7.278	2-methyl-Phenol *
	7.587	p-Aminotoluene OR o-Toluidine *
	10.786	1-[2-(2-methoxy-1-methylethoxy)-1-methylethoxy)-2-Propanol
	10.831	1-[2-(2-methoxy-1-methylethoxy)-1-methylethoxy)-2-Propanol
	10.86	1-[2-(2-methoxy-1-methylethoxy)-1-methylethoxy)-2-Propanol
	10.90	1-[2-(2-methoxy-1-methylethoxy)-1-methylethoxy)-2-Propanol
	11.055	1,1'-[(1-methyl-1,2-ethanediyl)bis(oxy)]bis-2-Propanol OR 1-[2-ethoxypropoxy]-2-Propanol
	11.123	1,1'-[(1-methyl-1,2-ethanediyl)bis(oxy)]bis-2-Propanol OR 1-[2-ethoxypropoxy]-2-Propanol OR 1-[2-(2-methoxy-1-methylethoxy)-1-methylethoxy]-2-Propanol OR 1-[1-methyl-2-(2-propenyloxy)ethoxy]-2-Propanol
	19.437	Cyclic Octaatomic sulfur
Kodak 17	13.99	Cyclododecane
	15.123	1-methylamino-Bicyclo(2,2,2)oct-2-ene
	17.692	[E]-2-Tetradecene OR 1-Hexadecanol OR Cyclotetradecane
	19.66	Cyclohexadecane OR 1-Nonadecene
Kodak 22	1.705	Sulfur Dioxide
	6.139	Aniline
	13.326	D-Allose *
	13.549	2,2'-(oxybis(2,1-ethanediyloxy))bis-Ethanol OR Pentaethylene glycol
	13.955	N-methyl-N-nitro-2-Propanamine OR Ethoxy(dimethyl)isopropylsilane OR 2-Dimethylsiyloxytetradecane
	14.024	2-Naphthalenamine

Table 17: Peaks and Compounds of Interest for the Identification of the Ink Samples cont.

Sample	Retention Time (Neat Inks)	Possible Substance
Epson 30	1.722	Ethyl Chloride OR Sulfur Dioxide
	6.134	Aniline
	7.318	2-methyl-Phenol *
	9.973	2,5,5-trimethyl-1,3,6-Heptatriene
	10.437	2-amino-Benzonitrile
	10.677	2-Cyclopentene-1-butanal, .gamma,.gamma,2,3-tetramethyl OR 6-Methyl-6-hepten-4-yn-3-ol
	10.86	.gamma,.gamma,2,3-tetramethyl-2-Cyclopentene-1-butanal OR 6-Methyl-6-hepten-4-yn-3-ol OR 5-[5-methylfurfuryl]hydantoin
	10.883	Indole
	11.083	.gamma,.gamma,2,3-tetramethyl-2-Cyclopentene-1-butanal OR 6-Methyl-6-hepten-4-yn-3-ol OR 5-[5-methylfurfuryl]hydantoin
	12.13	6-methyl-1H-Indole OR 4-methyl-1H-Indole OR 5-methyl-1H-Indole OR 3-methyl-1H-Indole
	13.612	Pentaethylene glycol
	14.207	2-Naphthalenamine
Epson 33	1.699	Sulfur Dioxide
	6.134	Aniline
	6.242	Benzonitrile
	7.621	o-Toluidine *
	10.093	Quinoline
	10.877	Indole
	11.81	2-amino-Benzonitrile
	12.136	4-methyl-1H-Indole OR 6-methyl-1H-Indole
	14.018	1-Naphthalenamine
	14.19	2,5-Diethoxyaniline
Epson 60	1.71	Sulfur Dioxide
	6.145	Aniline
	6.248	Benzonitrile OR Tricyclo[3.1.0.0(2,4)]hex-3-ene-3-carbonitrile
	7.616	o-Toluidine OR p-Aminotoluene OR 3-methyl-Benzeneamine *
	10.099	Quinoline
	10.883	Indole
	11.827	2-amino-Benzonitrile
	12.136	6-methyl-1H-Indole
	14.018	1-Naphthalenamine
	14.19	2-Naphthalenamine OR 2,5-Diethoxyaniline
Epson 63	1.705	Sulfur Dioxide
	6.139	Aniline
	6.242	Benzonitrile
	7.616	o-Toluidine *
	10.093	Quinoline
	10.883	Indole
	11.827	m-amino-Benzonitrile OR 4-amino-Benzonitrile OR 2-amino-Benzonitrile
	12.136	4-methyl-1H-Indole OR 6-methyl-1H-Indole
	14.018	1-Naphthalenamine
	14.19	2,5-Diethoxyaniline

Table 17: Peaks and Compounds of Interest for the Identification of the Ink Samples cont.

Sample	Retention Time (Neat Inks)	Possible Substance
Epson 66	1.493	Sulfur Dioxide
	6.071	Aniline
	6.191	Benzonitrile
	7.587	3-methyl-Benzenamine OR p-Aminotoluene OR o-Toluidine
	10.082	Quinoline
	10.871	Indole
	11.804	2-amino-Benzonitrile
	12.13	2-methyl-1H-Indole OR 6-methyl-1H-Indole
Epson 84	9.967	2,5,5-trimethyl-1,3,6-Heptatriene
	10.677	2-Cyclopentene-1-butanal, .gamma,.gamma,2,3-tetramethyl OR 6-Methyl-6-hepten-4-yn-3-ol OR 5-[5-methylfurfuryl]hydantoin
	10.854	5-[5-methylfurfuryl]hydantoin OR .gamma,.gamma,2,3-tetramethyl-2-Cyclopentene-1-butanal OR 6-methyl-6-hepten-4-yn-3-ol
	11.077	5-[5-methylfurfuryl]hydantoin OR 6-Methyl-6-hepten-4-yn-3-ol OR .gamma,.gamma,2,3-tetramethyl-2-Cyclopentene-1-butanal OR 6-Methyl-2-heptyne
	13.286	D-Allose *
Epson 90	1.699	Sulfur Dioxide
	6.134	Aniline
	6.242	Benzonitrile
	7.61	o-Toluidine *
	10.093	Quinoline
	10.883	Indole
	11.821	2-amino-Benzonitrile
	12.136	6-methyl-1H-IndoleOR 4-methyl-1H-Indole
	14.018	1-Naphthalenamine
Epson 93	1.705	Sulfur Dioxide
	6.145	Aniline
	6.248	Benzonitrile
	7.621	p-Aminotoluene OR o-Toluidine *
	10.099	Quinoline
	10.889	Indole
	10.957	p-Isopropenylphenol
	11.833	2-amino-Benzonitrile
	12.136	2-methyl-1H-Indole OR 6-methyl-1H-Indole
	14.018	1-Naphthalenamine
Epson 120	1.71	Sulfur Dioxide
	6.134	Aniline
	6.242	Benzonitrile
	7.616	o-Toluidine *
	10.099	Quinoline
	10.883	Indole
	11.81	2-amino-Benzonitrile
	12.13	6-methyl-1H-Indole OR 4-methyl-1H-Indole
	14.018	1-Naphthalenamine

Table 17: Peaks and Compounds of Interest for the Identification of the Ink Samples cont.

Sample	Retention Time (Neat Inks)	Possible Substance
Epson 123	1.716	Sulfur Dioxide
	6.151	Aniline
	6.248	Benzonitrile
	7.615	o-Toluidine *
	10.099	Quinoline
	10.888	Indole
	11.838	4-amino-Benzonitrile OR m-amino-Benzonitrile OR 2-amino-Benzonitrile
	12.142	4-methyl-1H-Indole OR 6-methyl-1H-Indole
	14.024	1-Naphthalenamine
	14.190	2,5-Diethoxyaniline
Epson 156	4.800	Styrene *
	6.139	hexyl ester 2-Butenoic acid
	9.967	2,5,5-trimethyl-1,3,6-Heptatriene
	10.682	5-[5-methylfurfuryl]hydantoin
	10.86	2-Cyclopenten-1-butanal, .gamma,.gamma,2,3-tetramethyl- OR 6-Methyl-6-hepten-4-yn-3-ol OR 5-[5-methylfurfuryl]hydantoin
	11.083	6-methyl-6-hepten-4-yn-3-ol OR 5-[5-methylfurfuryl]hydantoin
	13.097	2-[2-(2-butoxyethoxy)ethoxy]-Ethanol *
	16.101	4-amino-1,2-Benzenedicarbonitrile
Canon 217	1.71	Sulfur Dioxide
	2.654	1,4-Dioxane
	2.969	Pyridine **
	5.819	Isocyanato-Benzene OR 3-hydroxy-Benzonitrile
	6.139	Aniline
	7.610	p-Aminotoluene OR o-Toluidine *
	10.087	Quinoline
	17.286	Benzo[f]quinoline OR Benzo[f]isoquinoline
Canon 223	1.711	Sulfur Dioxide
	2.969	Pyridine **
	6.145	Aniline
	6.248	Benzonitrile
	7.616	p-Aminotoluene OR o-Toluidine *
	9.332	Naphthalene
	10.099	Quinoline
	11.816	2-amino-Benzonitrile
	14.024	1-Naphthalenamine
	14.202	2-Naphthalenamine
	16.925	Benzo[g]quinoline OR Benzo[h]isoquinoline
Canon 282	1.722	Sulfur Dioxide
	2.037	Thiirane *
	2.986	Pyridine **
	6.133	Aniline
	11.718	2-methyl-1,4-Benzenediamine

Table 17: Peaks and Compounds of Interest for the Identification of the Ink Samples cont.

Sample	Retention Time (Neat Inks)	Possible Substance
Canon 306	1.716	Sulfur Dioxide
	2.975	Pyridine **
	9.327	Naphthalene
	11.816	2-amino-Benzonitrile OR 4-amino-Benzonitrile OR m-amino-Benzonitrile OR 1H-Indazole OR 1H-Benzimidazole
	14.024	1-Naphthalenamine
	14.202	2-Naphthalenamine
	16.925	Benzo[h]isoquinoline OR Benzo[h]quinoline OR Benzo[f]quinoline OR Benzo[f]isoquinoline
	17.292	Benzo[f]quinoline OR Benzo[f]isoquinoline
Canon 312	2.369	Benzene *
	6.128	Aniline
	9.223	Benzenecarboxylic acid *
	12.039	Biphenyl
	20.37	m-Terphenyl OR p-Terphenyl OR o-Terphenyl
Canon 318	1.711	Carbonyl sulfide OR Sulfur Dioxide
	2.031	Thiirane *
	2.969	Pyridine **
	14.019	1-Naphthalenamine OR 2-Naphthalenamine
	14.196	2-Naphthalenamine
Canon 318a	3.318	1-methyl-Pyrrolidine
	6.139	3,4-dimethyl-Pyridine
	13.269	1,6-Anhydro-beta-D-glucopyranose (levoglucosan) OR D-Allose *
	18.104	5H-Indeno[1,2-b]pyridine OR 2-Azafluorene
	19.271	1-phenyl-4-[2,2-dicyanoethenyl]-Benzene OR Benzo(a)phenazine
Canon 327	1.705	Sulfur Dioxide
	2.969	Pyridine **
	6.242	Benzonitrile OR Tricyclo[3.1.0.0(2,4)]hex-3-ene-3-carbonitrile
	9.326	Naphthalene
	11.712	2-methyl-1,4-Benzenediamine
	11.798	2-amino-Benzonitrile
	14.013	1-Naphthalenamine
	14.19	2-Naphthalenamine
Canon 348	1.487	Sulfur Dioxide
	2.769	Pyridine **
	4.211	3-methyl-Pyridine
	6.076	Aniline
	6.185	Benzonitrile
	7.581	p-Aminotoluene OR o-Toluidine *
	9.315	Naphthalene
	10.082	Quinoline
	11.752	3-methyl-Quinoline
	11.804	2-amino-Benzonitrile
	14.018	1-Naphthalenamine
	14.19	2-Naphthalenamine
	16.914	Benzo[h]isoquinoline OR Benzo[g]quinoline

Table 17: Peaks and Compounds of Interest for the Identification of the Ink Samples cont.

Sample	Retention Time (Neat Inks)	Possible Substance
Canon 384	**1.705**	**Sulfur Dioxide**
	2.964	**Pyridine ****
	4.337	**3-methyl-Pyridine**
	6.134	**Aniline**
	6.248	Benzonitrile
	7.616	p-Aminotoluene OR o-Toluidine *
	9.326	Naphthalene
	10.093	**Quinoline**
	11.804	**2-amino-Benzonitrile**
	14.019	**1-Naphthalenamine**
	14.196	**1-Naphthalenamine OR 2-Naphthalenamine**
	16.92	**Benzo[g]quinoline**
Canon 402	1.705	Sulfur Dioxide
	2.963	Pyridine **
	5.069	**2,6-dimethyl-Pyrazine OR 2,5-dimethyl-Pyrazine**
	6.236	**Benzonitrile**
	9.326	Naphthalene
	11.724	**2-methyl-1,4-Benzenediamine**
	11.815	**2-amino-Benzonitrile**
	14.03	**1-Naphthalenamine**
	14.196	**2-Naphthalenamine**
Canon 492	**2.368**	**Benzene ***
	6.128	**Aniline**
	9.172	**Benzenecarboxylic acid ***
	12.044	**Biphenyl**
	16.359	**9H-Fluoren-9-one**
	20.375	**m-Terphenyl OR p-Terphenyl OR o-Terphenyl**
Canon 522	**1.722**	**Sulfur Dioxide**
	2.969	**Pyridine ****
	4.337	**3-methyl-Pyridine**
	6.145	**Aniline**
	7.601	p-Aminotoluene OR o-Toluidine *
	10.088	**Quinoline**
	17.309	Benzo(f)quinoline
HP 198	**3.21**	**Toluene**
	7.083	**Benzyl Alcohol**
	10.745	**2-[2-(2-ethoxyethoxy)ethoxy]-Ethanol**
	11.421	**Benzyl Methacrylate**
	14.287	**Octaethylene glycol monododecyl ether**
	14.402	**1,4,7,10,13,16-Hexaoxacyclooctadecane OR Hexagol**
	14.888	**4-Fluoro-6-aminopyrimidine**
	15.151	

Table 17: Peaks and Compounds of Interest for the Identification of the Ink Samples cont.

Sample	Retention Time (Neat Inks)	Possible Substance
HP 199	3.038	Toluene
	7.055	Benzyl Alcohol
	10.746	2-[2-(2-ethoxyethoxy)ethoxy]-Ethanol
	11.421	Benzyl Methacrylate
	14.282	1,4,7,10,13,16-Hexaoxacyclooctadecane
	14.402	1,4,7,10,13,16-Hexaoxacyclooctadecane
	14.888	4-Fluoro-6-aminopyrimidine
	15.146	
	17.326	Heptaethylene glycol OR Octaethylene glycol
	17.4	1,4,7,10,13,16-Hexaoxanonadecane
	20.044	1,4,7,10,13,16-Hexaoxacyclooctadecane
HP 200	3.204	Toluene
	7.083	Benzyl Alcohol
	10.745	2-[2-(2-ethoxyethoxy)ethoxy]-Ethanol
	11.421	Benzyl Methacrylate
	14.276	1,4,7,10,13,16-Hexaoxacyclooctadecane
	14.396	1,4,7,10,13,16-Hexaoxacyclooctadecane
	14.888	4-Fluoro-6-aminopyrimidine
	15.151	
	17.32	Heptaethylene glycol
	17.4	1,4,7,10,13,16-Hexaoxacyclooctadecane
	20.049	1,4,7,10,13,16-Hexaoxacyclooctadecane
HP 201	3.204	Toluene
	7.066	Benzyl Alcohol
	10.723	2-[2-(2-ethoxyethoxy)ethoxy]-Ethanol
	11.409	Benzyl Methacrylate
	14.877	4-Fluoro-6-aminopyrimidine
	15.134	
	17.314	Heptaethylene glycol
	17.372	1,4,7,10,13,16-Hexaoxacyclooctadexane
HP 205	1.716	Sulfur Dioxide
	11.999	1,3-dihydro-2H-Benzimidazol-2-one OR 4-Azaindol-2[3H]-one OR 2-Benzoxazolamine
	13.154	2-methyl-5-aminobenzoxazole
	13.315	D-Allose *
	14.207	2-Naphthalenamine
Xerox 13	3.215	Toluene
	3.822	Hexamethyl-Cyclotrisiloxane
	6.425	Octamethyl-Cyclotetrasiloxane
	7.003	Benzyl Alcohol
	8.817	Decamethyl-Cyclopentasiloxane
	11.261	Dodecamethyl-Cyclohexasiloxane
	11.404	Benzyl Methacrylate
	13.475	Tetradecamethyl-Cycloheptasiloxane

Table 17: Peaks and Compounds of Interest for the Identification of the Ink Samples cont.

Sample	Retention Time (Neat Inks)	Possible Substance
Xerox 24	3.21	Toluene
	3.811	Hexamethyl-Cyclotrisiloxane
	6.414	Octamethyl-Cyclotetrasiloxane
	7.009	Benzyl Alcohol
	8.806	Decamethyl-Cyclopentasiloxane
	11.255	Dodecamethyl-Cyclohexasiloxane
	11.398	Benzyl Methacrylate
	13.463	Tetradecamethyl-Cycloheptasiloxane
	13.835	1,1'-(1,2-ethanediyl)bis-Benzene
	14.86	2-Propenoic acid, 2-methyl-, oxybis[2,1-ethanediyloxy-2,1-ethanediyl] ester OR 4-Fluoro-6-aminopyrimidine
	16.611	Benzyl Benzoate
Xerox 244	3.21	Toluene
	3.81	Hexamethyl-Cyclotrisiloxane
	6.414	Octamethyl-Cyclotetrasiloxane
	7.032	Benzyl Alcohol
	8.811	Decamethyl-Cyclopentasiloxane
	10.654	2-[2-(2-ethoxyethoxy)ethoxy]-Ethanol
	11.249	Dodecamethyl-Cyclohexasiloxane
	11.392	Benzyl Methacrylate
	13.463	Tetradecamethyl-Cycloheptasiloxane
	13.824	1,1'-(1,2-ethanediyl)bis-Benzene
	15.998	[E]-Stilbene
	16.096	4-amino-1,2-Benzenedicarbonitrile OR 5-Benzimidazolecarbonitrile
	16.605	Benzyl Benzoate

G. OMNIC and Spectral ID Search Libraries

In order to develop a faster and more objective method for the identification of the pyrolysis and the ATR data, computerized search libraries were created. Commercial library software programs were available that allowed the user to create and maintain standard libraries that could assist in the identification of an unknown sample. Two software programs were used for the analysis for the ATR data, namely the GRAMS Spectral ID program and the OMNIC program, and for the analysis of the pyrolysis data the software program used was the GRAMS Spectral ID program.

ATR Libraries

The neat ink samples were collected and processed as discussed previously in the ATR results section. Two main search libraries were created for both software programs. Though the libraries contained the same ink samples ATR spectra, the libraries had to be created separately for each software program. The first library was created based on the neat ink samples ATR spectra. The first library was termed in the software as the "Neat Ink Standard ATR Library". The neat ink samples were prepared on glass microscope slides, so to remove any interference from the glass slides on the neat ink samples ATR spectra a subtraction was preformed. For all of the neat ink samples ATR spectra, the averaged clean microscope slide ATR spectrum was subtracted and the resulting slide subtracted ATR spectra were used to create the second library. The resulting slide subtracted ATR spectra were labeled with "slide subtraction" to differentiate them from the initial neat ink samples ATR spectra. Thus the second library that was created was based on the subtraction results and was termed in the software as the "Slide Subtracted Neat Ink Standard ATR Library".

A third library was also created and used predominately with the GRAMS Spectral ID software program. The third library consisted of the blank paper ATR spectra, which were used to subtract the blank paper sample ATR spectrum from the ink on paper sample ATR spectrum for each sample. This library was used for the Spectral ID software as this software program allowed the user to do a subtraction step during a search operation. The OMNIC software, on the other hand, did not have this feature. The ink on paper samples ATR spectra must have the blank paper sample ATR spectrum

subtracted prior to the search with the OMNIC libraries and it was the subtraction results ink on paper ATR spectra that were tested against the libraries in the OMNIC program.

The ink samples in the study were collected using the EZ OMNIC software program, and as a result the data files were immediately compatible with the OMNIC software program. In order for the data files to be used in the GRAMS Spectral ID software program, they had to be converted into a GRAMS compatible format. Within the OMNIC software program it was possible to save, and thus convert, the OMNIC ".spa" file to a GRAMS ".spc" file, with the latter format necessary for the Spectral ID program to recognize the data. Each neat ink standard, slide subtracted neat ink standard, blank paper sample and dissertation ink sample had to be converted to the GRAMS ".spc" file format prior to the creation and testing of the Spectral ID libraries.

The samples that were tested against the search libraries consisted of the samples ATR spectra of the thirty-five different ink cartridges used in the study. A single cartridge of each of the thirty-five ink cartridge types was selected and all ATR spectra collected from that cartridge were tested against the standard ink libraries. This resulted in 215 ink on paper samples ATR spectra being tested against the Neat Ink Standard ATR library and the Slide Subtracted Neat Ink Standard ATR library of both the OMNIC and the GRAMS Spectral ID software programs.

Three main libraries were first created within the GRAMS Spectral ID software program. As discussed previously, these libraries consisted of the neat ink standards, the slide subtracted neat ink standards and the blank paper standard samples. To create a library within the GRAMS Spectral ID program, the user uses the library manager to create, name and set the parameters for the new library. For these three libraries, the

parameters were all consistent with resolutions of 8 cm^{-1}, and a range of 610 cm^{-1} to 4000 cm^{-1}. After setting up the new library, the user then manually adds in each sample to the library. The user could provide as little or as much information as deemed necessary. For both the Spectral ID Neat Ink Standard ATR library and the Spectral ID Slide Subtracted Neat Ink Standard ATR library there were 191 neat ink samples contained in each respective library. For the Spectral ID Blank Paper Standard ATR library there were 42 samples contained within the library.

As each sample was loaded into the GRAMS Spectral ID program, the first library it was tested against was the Blank Paper Standard ATR library. In order for the ink sample to be identified, the paper ATR spectrum had to be subtracted first from the ink on paper sample ATR spectrum. Searching the 215 ink on paper samples ATR spectra against the Spectral ID Blank Paper Standard ATR library allowed for the identification of the best paper match to the sample, which was then subsequently subtracted from the ink on paper sample ATR spectrum. As each ink on paper sample ATR spectrum was searched against the Spectral ID Blank Paper Standard ATR library in the GRAMS Spectral ID program, the best paper match and the quality of the match was noted. In the GRAMS Spectral ID program, the closer the match quality was to zero the better the match and the closer the match quality was to one, the poorer the match. The match qualities for the 215 ink on paper samples ATR spectra tested ranged from 0.992722 to 0.00107274, with the vast majority having a match quality less than 0.1. Refer to Table 18 for the paper matches and match quality for the 215 ink on paper samples ATR spectra as searched against the Blank Paper Standard ATR library.

Table 18: Paper Match and Match Quality for the 215 Ink on Paper Samples ATR Spectra Searched Against the Spectral ID Blank Paper Standard ATR Library.

Sample						
Date	**Okidata 04**	**Date**	**Xerox 13**	**Date**	**Kodak 17**	**Kodak 22**
20071112	Paper1 Run2 20071112 0.742227	**20071112**	Paper1 Run1 20080117 0.281325	**20071112**	Paper1 Run1 20080117 0.250851	Paper1 Run1 20080117 0.012497
20080117	Paper1 Run1 20080117 0.0393195	**20080117**	Paper2 Run1 20071112 0.987272	**20080117**	Paper1 Run1 20080117 0.131955	Paper2 Run1 20080627 0.0832646
20080627	Paper1 Run1 20080627 0.00612555	**20080627**	Paper1 Run1 20080117 0.177415	**20080627**	Paper1 Run1 20080117 0.177892	Paper1 Run1 20080627 0.00243653
20080711	Paper1 Run8 20080711 0.00343308	**20080711**	Paper1 Run1 20080117 0.0297553	**20080711**	Paper1 Run1 20080117 0.176624	Paper1 Run2 20080711 0.00361729
20081128	Paper1 Run4 20081214 0.00338848	**20081128**	Paper1 Run3 20081214 0.262378	**20081128**	Paper1 Run3 20081214 0.147906	Paper1 Run3 20081214 0.00135219
20081214	Paper1 Run1 20081214 0.00377991	**20081214**	Paper1 Run3 20081214 0.0692075	**20081214**	Paper1 Run3 20081214 0.128269	Paper1 Run5 20081214 0.00107274
20080117 Run2	Paper1 Run2 20071112 0.166726	**20080117 Run2**	Paper2 Run1 20071112 0.992722	**Average**	Paper1 Run3 20081214 0.0934822	Paper1 AVERAGE 0.00322151
20080711 Run2	Paper1 Run4 20080711 0.00437866	**20081128 Run2**	Paper1 Run3 20081214 0.26117			
20081128 Run2	Paper3 Run1 20081214 0.00372939	**20081214 Run2**	Paper1 Run3 20081214 0.124802			
20081214 Run2	Paper1 Run5 20081214 0.0026816	**Average**	Paper1 Run1 20080117 0.115276			
20071112 Run3	Paper2 Run1 20080627 0.11153					
Average	Paper1 AVERAGE 0.00225071					

Table 18: Paper Match and Match Quality for the 215 Ink on Paper Samples ATR Spectra Searched Against the Spectral ID Blank Paper Standard ATR Library cont.

Sample						
Date	**Xerox 24**	**Date**	**Epson 30**	**Epson 33**	**Epson 60**	**Epson 63**
20071112	Paper1 Run1 20080117 0.16667	**20071112**	Paper1 Run1 20080117 0.271124	Paper1 Run1 20080117 0.120737	Paper1 Run1 20080117 0.0496965	Paper1 Run1 20080117 0.0273054
20080627	Paper1 Run1 20080117 0.264545	**20080627**	Paper1 Run1 20081128 0.0420377	Paper1 Run1 20080627 0.00528599	Paper2 Run1 20081128 0.0203628	Paper2 Run1 20080627 0.038764
20080711	Paper1 Run1 20080117 0.246933	**20080711**	Paper1 Run3 20080711 0.00333179	Paper1 Run3 20080711 0.0026411	Paper2 Run2 20080711 0.00747815	Paper1 Run8 20080711 0.00773342
20081128	Paper1 Run3 20081214 0.16117	**20081128**	Paper1 Run3 20081214 0.00488642	Paper1 Run3 20081214 0.00178839	Paper3 Run1 20081214 0.00158877	Paper1 Run5 20081214 0.00187624
20081214	Paper1 Run3 20081214 0.0919162	**20081214**	Paper1 Run3 20081214 0.00146405	Paper1 Run3 20081214 0.00206305	Paper1 Run3 20081214 0.00153924	Paper1 Run5 20081214 0.00286121
20080627 Run2	Paper1 Run1 20080117 0.104642	**20080711 Run2**	Paper1 Run7 20080711 0.00316203	Paper1 Run4 20080711 0.00648921	Paper1 Run7 20080711 0.00175448	Paper1 Run2 20080711 0.00235217
Average	Paper1 Run1 20080117 0.110425	**Average**	Paper1 AVERAGE 0.00169545	Paper1 Run4 20080711 0.00207903	Paper1 Run2 20080711 0.00209487	Paper1 Run2 20080711 0.00189826

Sample				
Date	**Epson 66**	**Epson 84**	**Epson 90**	**Epson 93**
20071112	Paper1 Run1 20080117 0.0327233	Paper1 Run1 20080117 0.0364587	Paper1 Run1 20080117 0.0223735	Paper1 Run1 20080117 0.0147311
20080627	Paper2 Run1 20080627 0.0629475	Paper1 Run1 20080117 0.0874738	Paper2 Run1 20080627 0.042298	Paper1 Run3 20080711 0.00806369
20080711	Paper3 Run3 20080711 0.00413649	Paper1 Run1 20080627 0.00446234	Paper1 Run4 20080711 0.00181272	Paper3 Run3 20080711 0.006657
20081128	Paper3 Run1 20081214 0.00189481	Paper1 Run3 20081214 0.0115633	Paper1 Run3 20081214 0.00207472	Paper1 Run3 20081214 0.00354422
20081214	Paper1 Run3 20081214 0.00322252	Paper1 Run3 20081214 0.0197334	Paper1 Run3 20081214 0.00141987	Paper1 Run5 20081214 0.00147677
Average	Paper1 AVERAGE 0.00247377	Paper1 Run3 20081214 0.0200764	Paper1 Run3 20081214 0.00705336	Paper1 AVERAGE 0.002777463

Table 18: Paper Match and Match Quality for the 215 Ink on Paper Samples ATR Spectra Searched Against the Spectral ID Blank Paper Standard ATR Library cont.

Sample						
Date	**Epson 120**	**Date**	**Epson 123**	**Epson 156**	**Date**	**HP 198**
20071112	Paper1 Run1 20080117 0.0131703	**20071112**	Paper1 Run1 20080117 0.101495	Paper1 Run1 20080117 0.183999	**20071112**	Paper1 Run1 20080117 0.0884428
20080627	Paper1 Run6 20080711 0.00951348	**20080627**	Paper2 Run1 20080627 0.0733322	Paper1 Run1 20080627 0.00775067	**20080627**	Paper2 Run1 20080627 0.0864423
20080711	Paper1 Run7 20080711 0.00406668	**20080711**	Paper1 Run6 20080711 0.00451782	Paper1 Run4 20081214 0.00463466	**20080711**	Paper1 Run1 20080117 0.0563486
20081128	Paper1 Run3 20081214 0.00342246	**20081128**	Paper1 Run3 20081214 0.00411734	Paper3 Run3 20081214 0.00174145	**20081128**	Paper1 Run3 20081214 0.130134
20081214	Paper1 Run3 20081214 0.0016559	**20081214**	Paper1 Run3 20081214 0.00359362	Paper1 Run3 20081214 0.00213302	**20081214**	Paper1 Run3 20081214 0.112308
20080711 Run2	Paper1 Run4 20081214 0.016009	**Average**	Paper1 Run3 20081214 0.00996282	Paper1 Run2 20081214 0.00265826	**20080711 Run2**	Paper1 Run1 20080117 0.0754167
Average	Paper2 Run3 20081214 0.00499469				**20081214 Run2**	Paper1 Run3 20081214 0.0289663
					Average	Paper1 Run1 20080117 0.079484

Sample						
Date	HP 199	HP 200	HP 201	HP 205	**Date**	Canon 217
20071112	Paper1 Run1 20080117 0.0818758	Paper1 Run1 20080117 0.123461	Paper1 Run1 20080117 0.259998	Paper1 Run1 20080117 0.16865	**20071112**	Paper1 Run1 20080117 0.0204005
20080627	Paper1 Run1 20080117 0.0549888	Paper1 Run3 20080711 0.102228	Paper2 Run1 20080627 0.0203153	Paper1 Run1 20081128 0.0582947	**20080627**	Paper2 Run1 20080627 0.023094
20080711	Paper1 Run1 20080117 0.0284591	Paper1 Run1 20080117 0.0267749	Paper1 Run1 20080117 0.0794121	Paper3 Run3 20080711 0.00401671	**20080711**	Paper13 Run1 20080711 0.00484348
20081128	Paper1 Run3 20081214 0.0453782	Paper1 Run3 20081214 0.142999	Paper1 Run3 20081214 0.116363	Paper1 Run3 20081214 0.00206298	**20081128**	Paper1 Run5 20081214 0.00210204
20081214	Paper1 Run3 20081214 0.0790198	Paper1 Run3 20081214 0.109537	Paper1 Run3 20081214 0.0397233	Paper1 Run5 20081214 0.00132275	**20081214**	Paper1 Run3 20081214 0.00162132
Average	Paper1 Run1 20080117 0.0638155	Paper1 Run1 20080117 0.0700481	Paper1 Run1 20080117 0.0772619	Paper1 AVERAGE 0.00220272	**Average**	Paper1 AVERAGE 0.00245139

Table 18: Paper Match and Match Quality for the 215 Ink on Paper Samples ATR Spectra Searched Against the Spectral ID Blank Paper Standard ATR Library cont.

Sample						
Date	Canon 223	Xerox 244	Canon 282	**Date**	Canon 306	Canon 312
20071112	Paper1 Run1 20080117 0.135545	Paper1 Run1 20080117 0.296143	Paper1 Run1 20080117 0.0708759	**20080627**	Paper1 Run1 20080627 0.0052443	Paper1 Run1 20080117 0.0781387
20080627	Paper2 Run1 20080627 0.0314514	Paper2 Run1 20080627 0.254075	Paper2 Run1 20080627 0.0218202	**20080711**	Paper2 Run2 20080711 0.00297177	Paper1 Run1 20080117 0.0471442
20080711	Paper3 Run3 20080711 0.00486763	Paper1 Run1 20080117 0.134274	Paper1 Run4 20080711 0.00432914	**20081128**	Paper1 Run3 20081214 0.00453641	Paper1 Run3 20081214 0.107205
20081128	Paper1 Run4 20081214 0.00664325	Paper1 Run3 20081214 0.0171369	Paper1 Run5 20081214 0.00210582	**20081214**	Paper1 Run3 20081214 0.00227129	Paper1 Run3 20081214 0.03969
20081214	Paper1 Run3 20081214 0.00281327	Paper1 Run3 20081214 0.0653698	Paper1 Run3 20081214 0.00237928	**Average**	Paper1 AVERAGE 0.00173557	Paper1 Run1 20080117 0.0724879
Average	Paper1 Run3 20081214 0.00585494	Paper1 Run1 20080117 0.0694852	Paper2 Run3 20081214 0.00323841			

Sample						
Date	Canon 318	**Date**	Canon 318a	**Date**	Canon 327	Canon 348
20080627	Paper1 Run1 20080627 0.0081943	**20080711**	Paper1 Run10 20080711 0.00251995	**20080627**	Paper1 Run4 2008 0711 0.0106185	Paper1 Run2 20071112 0.0652017
20080711	Paper3 Run3 20080711 0.00484253	**20081128**	Paper1 Run1 20081128 0.00939185	**20080711**	Paper3 Run2 20080711 0.00287592	Paper1 Run2 20081214 0.00803637
20081128	Paper1 Run3 20081214 0.00367916	**20081214**	Paper2 Run2 20081214 0.00540555	**20081128**	Paper2 Run1 20081214 0.00548584	Paper1 Run1 20081128 0.00415936
20081214	Paper1 Run3 20081214 0.00285795	**Average**	Paper2 AVERAGE 0.00331322	**20081214**	Paper1 Run4 20081214 0.00435351	Paper1 Run3 20081214 0.00254473
Average	Paper1 Run3 20081214 0.00356266			**Average**	Paper1 Run4 20081214 0.00561689	Paper1 Run2 20081214 0.0033661

Table 18: Paper Match and Match Quality for the 215 Ink on Paper Samples ATR Spectra Searched Against the Spectral ID Blank Paper Standard ATR Library cont.

	Sample			
Date	Canon 384	Canon 402	Canon 492	Canon 522
20080711	Paper1 Run9 20080711 0.0043514	Paper3 Run1 20080711 0.00212381	Paper1 Run1 20080117 0.174797	Paper1 Run7 20080711 0.00882772
20081128	Paper3 Run4 20081214 0.00310088	Paper3 Run4 20081214 0.00363979	Paper1 Run3 20081214 0.160294	Paper2 Run1 20081214 0.00679314
20081214	Paper1 Run5 20081214 0.00512859	Paper1 Run5 20081214 0.00331443	Paper1 Run3 20081214 0.123408	Paper1 Run5 20081214 0.00456118
Average	Paper2 AVERAGE 0.00266518	Paper3 AVERAGE 0.00260709	Paper1 Run3 20081214 0.139264	Paper2 AVERAGE 0.00523731

After the paper sample ATR spectrum that ranked number one on the match list was subtracted from the ink on paper sample ATR spectrum, the subtracted results were searched against the Spectral ID Neat Ink Standard ATR library. The search process was programmed to operate in the correlation mode with the top 20 matches listed. The correlation mode was the default mode in the Spectral ID program, and the one recommended when searching an unknown sample against a standard library. As discussed previously in the ATR FT-IR results section, some of the ink cartridges had ATR spectra that could not be distinguished from each other. As a result, the ink cartridges whose spectra could not be distinguished from one another were grouped together, and were considered to be one and the same. Thus, in examining the results of the library searches, a match to any neat ink standard member of a specific group of ink cartridges was counted as a positive result for the ink cartridge being studied. The groupings of the ink cartridges with respect to their ATR spectra can be found in Table 19.

Table 19: Grouping of the Different Ink Cartridges with Indistinguishable ATR Spectra

Manufacturer	Sample
Epson	33, 60, 63, 66, 90, 93, 120 and 123
Epson	30
Epson	84
Epson	156
Canon	217, 223, 282, 306, 318, 327, 348 and 384
Canon	402 and 522
Canon	318a
Canon	312
Canon	492
Xerox	13, 24 and 244
Kodak	17
Kodak	22
Okidata	04
Hewlett Packard	198, 199, 200 and 201
Hewlett Packard	205

The top library match was noted for each of the 215 ink on paper sample ATR spectrum tested, along with the correct match, if present and if not the top match. If the correct match was not the top match, then in addition to the top match and the correct match, if present, the manufacturer group match, if applicable, was also noted. The manufacturer group matches listed were restricted to those match listings between the top match and the correct match. If the correct match was not listed, then the top manufacturer group match listed in the library results was noted. Refer to Table 20 for the match results for the 215 ink on paper samples ATR spectra using Neat Ink Standard ATR library in the GRAMS Spectral ID program. The complete match list for these ink on paper samples ATR spectra using the Neat Ink Standard ATR library in the GRAMS Spectral ID program can be found in Appendix I.

Table 20: Spectral ID Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra

Sample					
Date	**Okidata 04**	**Date**	**Xerox 13**	**Date**	**Kodak 17**
20071112	Can312Avg (0.79676) Oki04BrnSpR5 (#15) (0.878729)	**20071112**	HP201R1 (0.0892303) Xer13R6 (#2) (0.109138)	**20071112**	HP201R1 (0.0799878) Kod17R1 (#3) (0.106086)
20080117	Xer24R1 (0.607827) No Oki04 match	**20080117**	Can312R1 (0.892332) Xer13R2 (#5) (0.926535)	**20080117**	HP198R4 (0.103254) Kod17R1 (#18) (0.136028)
20080627	Ep30Avg (0.279122) No Oki04 match	**20080627**	HP198R4 (0.11878) Xer13R1 (#14) (0.146914)	**20080627**	HP198R4 (0.129471) Kod17R1 (#20) (0.167528)
20080711	Xer13R2 (0.568271) No Oki04 match	**20080711**	HP205Avg (0.277604) No Xer13 or any Xerox match	**20080711**	HP210R1 (0.130055) Kod17R3 (#2) (0.149293)
20081128	Can492R4 (0.698504) Oki04BrnSpR1 (#2) (0.707556)	**20081128**	HP200R2 (0.165313) Xer13R1 (#12) (0.193272)	**20081128**	Ep84R3 (0.19567) Kod17R1 (#7) (0.376306)
20081214	Xer13R2 (0.589674) No Oki04 match	**20081214**	Ep84R3 (0.195529) Xer244R2 (#3) (0.278544) Xer13R6 (#6) (0.288318)	**20081214**	HP205Avg (0.233771) Kod17R3 (#8) (0.298259)
20080117 Run2	Ep84R3 (0.850769) Oki04BrnSpR2 (#4) (0.875632)	**20080117 Run2**	Can312R1 (0.902226) Xer13R2 (#5) (0.917673)	**Average**	Ep84R3 (0.157947) Kod17R1 (#7) (0.281445)
20080711 Run2	Oki04BlkSpR1 (0.375324) Oki04Avg (#5) (0451188)	**20081128 Run2**	HP199R2 (0.140518) Xer13R1 (#6) (0.149749)		
20081128 Run2	Oki04BlkSpR1 (0.848684)	**20081214 Run2**	Ep84R3 (0.224517) Xer244R2 (#2) (0.347011) Xer13R6 (#3) (0.347644)		
20081214 Run2	Xer13R2 (0.645605) No Oki04 match	**Average**	Ep30R2 (0.297261) No Xer13 or any Xerox match		
20071112 Run3	HP205R4 (0.376604) Oki04Avg (#2) (0.395808)				
Average	Oki04BlkSpR2 (0.447556)				

Table 20: Spectral ID Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample					
Date	**Kodak 22**	**Date**	**Xerox 24**	**Date**	**Epson 30**
20071112	Xer13R2 (0.234892) No Kod22 match	**20071112**	HP201R1 (0.115054) Xer13R6 (#9) (0.167165) Xer24R1 (#19) (0.206733)	**20071112**	Xer24R1 (0.0938624) No Ep30 or any Epson match
20080117	HP205R4 (0.368363) Kod22R3 (#4) (0.496214)	**20080627**	HP199R2 (0.123134) Xer13R1 (#7) (0.133757) Xer24R4 (#15) (0.155347)	**20080627**	Oki04BrnSpR2 (0.579434) Ep30R2 (#7) (0.621754)
20080627	HP205Avg (0.825728) Kod22R3 (#2) (0.827897)	**20080711**	HP199R2 (0.125081) Xer13R1 (#4) (0.131713) Xer24Avg (#13) (0.156679)	**20080711**	HP205Avg (0.427448) Ep30R3 (#5) (0.528753)
20080711	HP205R2 (0.87738) Kod22R1 (#6) (0.928285)	**20081128**	HP201R1 (0.165969) Xer13R6 (#2) (0.175382) No Xer24 match	**20081128**	Ep156R4 (0.695115) No Ep30 match
20081128	Xer13R2 (0.797164) No Kod22 match	**20081214**	Ep84R3 (0.21757) Xer13R6 (#11) (0.267413) No Xer24 match	**20081214**	HP200R4 (0.858447) No Ep30 match
20081214	Ep84R3 (0.626683) No Kod22 match	**20080627 Run2**	Kod17R3 (0.217694) Xer244R1 (#13) (0.263481) No Xer24 match	**20080711 Run2**	Ep30R1 (0.411817)
Average	Ep84R3 (0.542214) No Kod22 match	**Average**	Kod17R3 (0.264275) Xer244R1 (#18) No Xer24 match	**Average**	Xer13R2 (0.797003) Ep30R1 (#9) (0872352)

Table 20: Spectral ID Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample					
Date	**Epson 33**	**Epson 60**	**Epson 63**	**Date**	**Epson 66**
20071112	Xer13R2 (0.119138) No Ep33 or any Epson match	Xer13R2 (0.11441) No Ep60 or any Epson match	HP201R1 (0.270862) No Ep63 match	**20071112**	HP201R1 (0.215149) No Ep66 match
20080627	Oki04BlkSpR1 (0.594048) Ep33BlkSpR1 (#4) (0.605113)	Ep84R1 (0.846785) No Ep60 match	Hp205R4 (0.279666) No Ep63 or any Epson match	**20080627**	HP205R2 (0.184079) No Ep66 match
20080711	HP205R2 (0.280448) No Ep33 or any Epson match	HP205Avg (0.473253) No Ep60 match	Ep30R1 (0.496896) No Ep63 match	**20080711**	Can306Avg (0.397019) No Ep66 or any Epson match
20081128	HP199R5 (0.93707) Ep33BrnSpR2 (#13) (0.967813)	Ep84R1 (0.88606) Ep66R2 (#17) (0.992682) No Ep60 match	Ep63GrnSpR1 (0.848936)	**20081128**	Can223R3 (0.921766) No Ep66 match
20081214	Can384R1 (0.663302) No Ep33 or any Epson match	HP199R5 (0.83983) No Ep60 match	Can384R1 (0.530472) No Ep63 or any Epson match	**20081214**	Ep84R3 (0.956137) No Ep66 match
20080711 Run2	Ep30R4 (0.240089) No Ep33 match	Xer13R2 (0.703693) No Ep60 or any Epson match	Ep33BlkSpR1 (0.56367) Ep63GrnSpR1 (#6) (0.599142)	**Average**	Ep84R3 (0.826191) No Ep66 match
Average	HP205R2 (0.214494) No Ep33 match	HP205Avg (0.43311) No Ep60 match	HP205Avg (0.479493) No Ep63 match		

Table 20: Spectral ID Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample					
Date	**Epson 84**	**Epson 90**	**Epson 93**	**Date**	**Epson 120**
20071112	HP201R1 (0.189964) No Ep84 match	HP205Avg (0.278758) No Ep90 match	HP205Avg (0.339019) No Ep93 match	**20071112**	HP205Avg (0.256254) No Ep120 match
20080627	Oki04BrnSpR2 (0.353463) Ep84R3 (#3) (0.370099)	Can223R3 (0.291764) No Ep90 or any Epson match	Xer244R3 (0.877336) No Ep93 match	**20080627**	Ep33BlkSpR1 (0.757898) No Ep120 match
20080711	HP205Avg (0.219613) No Ep84 match	HP205Avg (0.429799) No Ep90 match	Can223R3 (0.414342) No Ep93 or any Epson match	**20080711**	HP205Avg (0.494659) No Ep120 match
20081128	Ep84R3 (0.430931)	HP199R5 (0.943163) No Ep90 match	Xer244R5 (0.577196) No Ep93 match	**20081128**	HP199R6 (0.520037) No Ep120 match
20081214	Ep84R3 (0.466046)	Ep33BlkSpR1 (0.780145) No Ep90 match	Ep84R3 (0.842899) No Ep93 match	**20081214**	Ep33BlkSpR1 (0.535394) No Ep120 match
Average	Ep84R3 (0.208717)	Xer24R1 (0.299475) No Ep90 or any Epson match	Oki04BrnSpR7 (0.89228) No Ep93 match	**20080711 Run2**	Can492R2 (0.43712) Ep66R1 (#14) (0.543536) No Ep120 match
				Average	Xer24R1 (0.680078) No Ep120 or any Epson match

Table 20: Spectral ID Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample				
Date	**Epson 123**	**Epson 156**	**Date**	**HP 198**
20071112	Xer13R2 (0.123163) No Ep123 match	Xer24R1 (0.132402) No Ep156 or any Epson match	**20071112**	HP201R1 (0.148949) HP198R4 (#13) (0.243719)
20080627	HP205R4 (0.265013) No Ep123 or any Epson match	Xer244R3 (0.772796) No Ep156 match	**20080627**	Xer244R4 (0.415771) HP199R1 (#2) (0.43808) No HP198 match
20080711	Can223R3 (0.320117) No Ep123 or any Epson match	Ep84R2 (0.767665) Ep156R4 (#10) (0.914793)	**20080711**	HP200Avg (0.203903) No HP198 match
20081128	Ep33BlkSpR1 (0.743372) No Ep123 match	Ep84R2 (0.892597) No Ep156 match	**20081128**	Ep84R3 (0.176459) HP201R1 (#2) (0.210742) HP198R4 (#19) (0.277846)
20081214	Ep33BlkSpR1 (0.853556) No Ep123 match	Can217R4 (0.779185) Ep156R3 (#17) (0.819312)	**20081214**	Ep84R3 (0.18542) HP201R1 (#2) (0.192425) HP198R4 (#15) (0.255426)
Average	Xer24R1 (0.308967) No Ep123 or any Epson match	HP205R4 (0.727098) No Ep156 or any Epson match	**20080711 Run2**	HP201Avg (0.209238) No HP198 match
			20081214 Run2	Ep84R3 (0.240467) HP201R1 (#2) (0.241415) HP198R1 (#16) (0.267438)
			Average	Ep30R2 (0.275022) HP201Avg (#5) (0.293544) No HP198 match

Table 20: Spectral ID Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

	Sample				
Date	**HP 199**	**HP 200**	**HP 201**	**HP 205**	**Canon 217**
20071112	HP201R1 (0.162605) No HP199 match	HP201R1 (0.109899) HP200R3 (#5) (0.142252)	HP201R1 (0.121229)	Xer13R2 (0.119936) No HP205 match	HP205Avg (0.293798) Can318R1 (#8) (0.348759) No Can217 match
20080627	HP200R4 (0.355403) HP199R6 (#2) (0.374751)	Ep84R3 (0.262263) HP201R1 (#2) (0.267841) HP200Avg (#4) (0.281504)	Can318aR4 (0.416204) HP200R4 (#5) (0.456006) No HP201 match	Ep84R3 (0.533623) No HP205 match	Can318aR3 (0.736097) No Can217 match
20080711	HP205Avg (0.187984) HP201Avg (#9) (0.250628) No HP199 match	Ep30R2 (0.209525) HP200Avg (#18) (0.269942)	HP201Avg (0.233372)	Ep30R1 (0.338852) No HP205 match	Oki04BlkSpR2 (0.605013) Can306R3 (#5) (0.617029) No Can217 match
20081128	HP201R3 (0.146653) HP199R2 (#10) (0.167621)	HP201R1 (0.163542) HP200R3 (#4) (0.19579)	Ep84R3 (0.185394) HP201R1 (#2) (0.208798)	Can318aR1 (0.790997) No HP205 match	Ep84R3 (0.809241) Can223R3 (#15) (0.929296) Can217R1 (#16) (0.930658)
20081214	HP201R3 (0.132985) HP199R2 (#7) (0.140531)	HP201R1 (0.141438) HP200R2 (#11) (0.164233)	Ep84R3 (0.182632) HP200Avg (#2) (0.358815) HP201R1 (#3) (0.367595)	Can318aR1 (0.911383) HP205R1 (#20) (0.946828)	Xer244R5 (0.797905) No Can217 or any Canon match
Average	HP205Avg (0.271404) HP201Avg (#8) (0.331631) No HP199 match	HP205Avg (0.271686) HP200Avg (#8) (0.328645)	Ep30R2 (0.294864) HP201Avg (#6) (0.330085)	Can318aR1 (0.687335) No HP205 match	Can492R1 (0.917302) No Can217 match

Table 20: Spectral ID Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample					
Date	**Canon 223**	**Xerox 244**	**Canon 282**	**Date**	**Canon 306**
20071112	Xer13R2 (0.152208) No Can223 or any Canon match	Xer24Avg (0.0779816) No Xer244 match	Xer13R2 (0.215636) No Can282 or any Canon match	**20080627**	Oki04BrnSpR2 (0.7915) Can384R1 (#3) (0.815021) Can306R1 (#16) (0.835529)
20080627	HP205R2 (0.731886) Can348R1 (#18) (0.843293) No Can223 match	Ep84R2 (0.43779) Xer244R3 (#6) (0.550824)	Can522R1 (0.246274) Can223R3 (#8) (0.287) No Can282 match	**20080711**	HP205Avg (0.214167) Can348Avg (#4) (0.293812) No Can306 match
20080711	Can306R3 (0.375427) Can223R3 (#11) (0.534869)	HP201R1 (0.248588) Xer244R1 (#13) (0.299752)	Can282R4 (0.374513)	**20081128**	Ep84R4 (0.928295) Can223R3 (#13) (0.950274) No Can306 match
20081128	Ep84R3 (0.513142) No Can223 or any Canon match	EP84R3 (0.380666) Xer13R6 (#2) (0.581414) Xer244R2 (#3) (0.595026)	Ep84R3 (0.737813) No Can282 or any Canon match	**20081214**	HP199R5 (0.90124) No Can306 match
20081214	Ep84R4 (0.817061) Can306R3 (#17) (0.88997) No Can223 match	Ep84R3 (0.191693) Xer244R2 (#2) (0.273286)	HP199R5 (0.777722) No Can282 match	**Average**	EP84R3 (0.826856) Can223R3 (#2) (0.880778) Can306R1 (#5) (0.888895)
Average	HP199Avg (0.449366) No Can223 or any Canon match	HP205Avg (0.342951) No Xer244 or any Xerox match	Can492R3 (0.931263) No Can282 match		

Table 20: Spectral ID Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample				
Date	**Canon 312**	**Canon 318**	**Date**	**Canon 318a**
20080627	HP198R4 (0.238101) No Can312 or any Canon match	Ep30R1 (0.310685) No Can318 or any Canon match	**20080711**	Can318aR3 (0.492865)
20080711	Ep30R2 (0.356481) No Can312 match	Can348Avg (0.355731) Can318R2 (#6) (0.397472)	**20081128**	HP199R6 (0.453945) No Can318a match
20081128	Ep84R3 (0.171473) No Can312 or any Canon match	Can306R3 (0.695751) No Can318 match	**20081214**	Can327R1 (0.407668) No Can318a match
20081214	Ep84R3 (0.208107) No Can312 or any Canon match	Can312R3 (0.319828) Can282R1 (#3) (0.333684) No Can318 match	**Average**	Can306R3 (0.863746) No Can318a match
Average	HP205Avg (0.355796) No Can312 match	Xer24R1 (0.742815) Can348Avg (#10) (0.807415) Can318R2 (#15) (0.819841)		

Table 20: Spectral ID Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample				
Date	**Canon 327**	**Canon 348**	**Date**	**Canon 384**
20080627	Can402R3 (0.781757) Can306Avg (#5) (0.7985) No Can327 match	Oki04BrnSpR7 (0.749576) No Can348 match	**20080711**	Xer13R2 (0.697127) Can327R1 (#18) (0.779507) No Can384 match
20080711	Can348R2 (0.339148) Can327R1 (#13) (0.403474)	Xer24R1 (0.959208) Can306R3 (#6) (0.97222) No Can348 match	**20081128**	HP199R5 (0.579128) Can217R4 (#18) (0.927759) No Can384 match
20081128	HP205R1 (0.626552) Can217R4 (#15) (0.710532) No Can327 match	HP199R5 (0.59091) No Can348 or any Canon match	**20081214**	Ep84R3 (0.644393) No Can384 or any Canon match
20081214	HP205R2 (0.380648) No Can327 match	HP199R5 (0.748658) No Can348 or any Canon match	**Average**	Ep84R3 (0.880185) No Can384 match
Average	HP205R2 (0.649978) Can384R2 (#14) (0.792611) No Can327 match	HP205R2 (0.671827) No Can348 or any Canon match		

Sample			
Date	**Canon 402**	**Canon 492**	**Canon 522**
20080711	Can348R2 (0.598715) No Can402 match	HP201R1 (0.241715) No Can492 or any Canon match	Can522R1 (0.473748)
20081128	Xer13R3 (0.579128) No Can402 match	Ep84R3 (0.187405) No Can492 or any Canon match	HP205R1 (0.396547) No Can522 match
20081214	Can522R1 (0.811001) Can402R3 (#10) (0.839862)	Ep84R43 (0.236962) No Can492 or any Canon match	HP199R5 (0.86388) Can522R1 (#5) (0.89912)
Average	Can522R1 (0.828991) Can402R3 (#12) (0.858087)	Ep84R3 (0.204484) No Can492 or any Canon match	Can522R1 (0.805745)

The 215 ink on paper samples were also tested against the Spectral ID Slide Subtracted Neat Ink Standard ATR library. The parameters of the Spectral ID Slide Subtracted Neat Ink Standard ATR library were the same as the Spectral ID Neat Ink Standard ATR library, and the same paper subtracted ink on paper samples ATR spectra were used. Once again, the top match, the correct match, if present, and any manufacturer group matches were noted. Refer to Table 21 for the match results of the 215 ink on paper samples using the Slide Subtracted Neat Ink Standard ATR library in the GRAMS Spectral ID program. The complete match list for the 215 ink on paper samples ATR spectra using the Spectral ID Slide Subtracted Neat Ink Standard ATR library can be found in Appendix I.

Table 21: Spectral ID Slide Subtracted Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra

Sample					
Date	**Okidata 04**	**Date**	**Xerox 13**	**Date**	**Kodak 17**
20071112	Xer24R3 (0.586705) No Oki04 match	**20071112**	Xer13R6 (0.774695)	**20071112**	Xer13R6 (0.805663) Kod17R3 (#9) (0.901944)
20080117	Xer13R6 (0.63076) No Oki04 match	**20080117**	Xer24R3 (0.527996) Xer13R2 (#3) (0.674856)	**20080117**	Xer13R6 (0.771187) Kod17R3 (#6) (0.878282)
20080627	HP205R4 (0.89824) Oki04BrnSpR4 (#9) (0.913092)	**20080627**	Xer13R6 (0.809254)	**20080627**	Xer13R6 (0.765054) Kod17R3 (#7) (0.867813)
20080711	HP205R2 (0.81281) Oki04BlkSpR1 (#2) (0.835465)	**20080711**	HP205R4 (0.869144) No Xer13 or any Xerox match	**20080711**	Ep84R3 (0.835646) Kod17R3 (#7) (0.943341)
20081128	Can312R1 (0.646784) Oki04BrnSpR7 (#3) (0.671833)	**20081128**	Xer13R6 (0.818912)	**20081128**	Ep84R3 (0.598683) Kod17R1 (#13) (0.909823)
20081214	Xer13R2 (0.765291) Oki04BlkSpR2 (#2) (0.775951)	**20081214**	Ep84R3 (0.701473) Xer13R6 (#2) (0.858816)	**20081214**	HP205R4 (0.798643) No Kod17 match
20080117 Run2	Xer24R3 (0.771455) Oki04BrnSpR1 (#14) (0.93569)	**20080117 Run2**	Xer24R3 (0.578259) Xer13R2 (#3) (0.668109)	**Average**	Ep84R3 (0.633051) Kod17R1 (#11) (0.908418)
20080711 Run2	Oki04BlkSpR1 (0.415174)	**20081128 Run2**	Xer13R6 (0.765531)		
20081128 Run2	Can217R2 (0.78656) Oki04BlkSpR2 (#16) (0.81673)	**20081214 Run2**	Ep84R3 (0.652476) Xer13R6 (#2) (0.82382)		
20081214 Run2	Oki04BlkSpR2 (0.79197)	**Average**	HP205R4 (0.897866) No Xer13 or any Xerox match		
20071112 Run3	HP205R4 (0.390518) Oki04Avg (#3) (0.454109)				
Average	Oki04BlkSpR2 (0.450217)				

Table 21: Spectral ID Slide Subtracted Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample					
Date	**Kodak 22**	**Date**	**Xerox 24**	**Date**	**Epson 30**
20071112	Kod17R3 (0.806534) No Kod22 match	**20071112**	Xer13R6 (0.823653) Xer24R4 (#6) (0.897926)	**20071112**	Xer13R6 (0.643644) No Ep30 match
20080117	HP205R4 (0.682909) No Kod22 match	**20080627**	Xer13R6 (0.80547) Xer24Avg (#13) (0.910707)	**20080627**	Ep84R2 (0.878801) No Ep30 match
20080627	Kod22R1 (0.835217)	**20080711**	Xer13R6 (0.809264) Xer24Avg (#9) (0.908885)	**20080711**	HP205R2 (0.603566) Ep30R3 (#8) (0.692138)
20080711	HP205R2 (0.889419) Kod22R1 (#8) (0.946713)	**20081128**	Ep84R3 (0.754659) Xer13R6 (#2) (0.764133) Xer24Avg (#9) (0.886117)	**20081128**	Xer13R2 (0.598536) No Ep30 or any Epson match
20081128	Xer13R2 (0.62002) No Kod22 match	**20081214**	Ep84R3 (0.732897) Xer13R6 (#2) (0.853579) Xer24R4 (#7) (0.924688)	**20081214**	Oki04BrnSpR2 (0.762193) Ep30R1 (#3) (0.879214)
20081214	Ep84Avg (0.754286) No Kod22 match	**20080627 Run2**	Ep84R3 (0.867425) Xer13R6 (#2) (0.948515) Xer24R4 (#3) (0.953645)	**20080711 Run2**	HP201Avg (0.771599) No Ep30 match
Average	Xer13R6 (0.562108) No Kod22 match	**Average**	Ep84R3 (0.894837) Xer24R4 (#11) (0.955781)	**Average**	Xer13R2 (0.775563) Ep30R1 (#13) (0.887695)

Table 21: Spectral ID Slide Subtracted Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample					
Date	**Epson 33**	**Epson 60**	**Epson 63**	**Date**	**Epson 66**
20071112	Xer13R6 (0.737845) No Ep33 or any Epson match	Xer13R6 (0.725748) No Ep60 or any Epson match	Can318aR3 (0.838275) No Ep63 match	**20071112**	Xer13R6 (0.857656) No Ep66 match
20080627	Ep33BlkSpR2 (0.615445)	Ep84R1 (0.802856) No Ep60 match	HP205R4 (0.417705) Ep33BlkSpR1 (#10) (0.589214) No Ep63 match	**20080627**	HP205R4 (0.464544) Ep33BlkSpR1 (#19) (0.65106) No Ep66 match
20080711	HP205Avg (0.552004) Ep33BlkSpR1 (#15) (0.670082)	HP205R2 (0.635747) No Ep60 match	HP205R2 (0.81252) No Ep63 match	**20080711**	HP205R1 (0.350672) No Ep66 match
20081128	Xer13R1 (0.718073) No Ep33 match	Ep84R1 (0.865381) No Ep60 match	Oki04BrnSpR5 (0.709543) No Ep63 match	**20081128**	Xer13R2 (0.870029) No Ep66 match
20081214	Can318aR1 (0.76774) No Ep33 match	Oki04BrnSpR2 (0.741719) No Ep60 match	Ep84R3 (0.766398) No Ep63 match	**20081214**	Ep156R3 (0.806161) No Ep66 match
20080711 Run2	HP205R4 (0.812952) Ep33BlkSpR3 (#15) (0.873212)	Xer13R6 (0.75156) No Ep60 or any Epson match	HP205R2 (0.537308)Ep33BlkSpR1 (#2) (0.555726) Ep63GrnSpR1 (#9) (0.597794)	**Average**	Xer13R6 (0.526086) No Ep66 match
Average	HP205R4 (0.671713) Ep33BlkSpR1 (#14) (0.782684)	HP205R2 (0.794119) Ep33BlkSpR1 (#6) (0.82009) No Ep60 match	HP205R2 (0.59756) Ep33BlkSpR1 (#6) (0.689851) Ep63GrnSpR1 (#19) (0.728894)		

Table 21: Spectral ID Slide Subtracted Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample					
Date	**Epson 84**	**Epson 90**	**Epson 93**	**Date**	**Epson 120**
20071112	Hp205R4 (0.886148) Ep84R3 (#15) (0.906303)	HP205R2 (0.763193) Ep33BlkSpR1 (#20) (0.858748) No Ep90 match	HP205R2 (0.668456) Ep33BlkSpR1 (#13) (0.780083) No Ep93 match	**20071112**	HP205R4 (0.646395) Ep33BlkSpR1 (#15) (0.760962) No Ep120 match
20080627	Ep84R3 (0.761591)	HP205R4 (0.337535) No Ep90 match	HP200R5 (0.708018) No Ep93 or any Epson match	**20080627**	Kod22R1 (0.738911) Ep33BlkSpR1 (#3) (0.764661) No Ep120 match
20080711	HP205R4 (0.719244) No Ep84 match	HP205R2 (0.678666) Ep33BlkSpR1 (#6) (0.707056) No Ep90 match	HP205R1 (0.438288) No Ep93 match	**20080711**	Kod22R1 (0.623504) Ep33BlkSprR1 (#7) (0.653607) No Ep120 match
20081128	Ep84R3 (0.584818)	Xer13R1 (0.72556) No Ep90 match	Ep30R2 (0.696343) No Ep93 match	**20081128**	HP198R2 (0.811791) No Ep120 match
20081214	Ep84R3 (0.544413)	Ep33BlkSpR1 (0.786227) No Ep90 match	Ep84R3 (0.806446) No Ep93 match	**20081214**	Ep33BlkSpR1 (0.543601) No Ep120 match
Average	Ep84R3 (0.603859)	Xer13R6 (0.504351) No Ep90 match	Xer13R1 (0.748795) No Ep93 of any Epson match	**20080711 Run2**	Can492R3 (0.422121) Ep66R1 (#15) (0.522433) No Ep120 match
				Average	Xer24R1 (0.5979) No Ep120 match

Table 21: Spectral ID Slide Subtracted Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample				
Date	**Epson 123**	**Epson 156**	**Date**	**HP 198**
20071112	Xer13R6 (0.776749) No Ep123 or any Epson match	Xer13R6 (0.639524) No Ep156 or any Epson match	**20071112**	Ep84R3 (0.83533) HP200R3 (#10) (0.923327) HP198R4 (#18) (0.938114)
20080627	HP205R4 (0.337885) Ep33BlkSpR1 (#10) (0.52435) No Ep123 match	Xer244R3 (0.757684) No Ep156 match	**20080627**	Can312R2 (0.821263) No HP198 or any HP match
20080711	Ep30R4 (0.521613) No Ep123 match	Ep156R4 (0.729654)	**20080711**	Ep84R3 (0.913067) No HP198 match
20081128	Xer13R2 (0.692735) Ep33BlkSpR1 (#20) (0.744913) No Ep123 match	Xer244R2 (0.882365) No Ep156 match	**20081128**	Ep84R3 (0.695716) HP200R2 (#8) (0.91117) HP198Avg (#16) (0.942832)
20081214	Ep30R3 (0.788804) No Ep123 match	HP198R2 (0.849178) Ep156R2 (#2) (0.865473)	**20081214**	Ep84R3 (0.706978) HP200R2 (#7) (0.906168) HP198Avg (#14) (0.933448)
Average	Xer13R6 (0.543377) No Ep123 or any match	HP205R4 (0.740791) No Ep156 or any Epson match	**20080711 Run2**	Ep84R3 (0.878974) No HP198 match
			20081214 Run2	Ep84R3 (0.759119) HP200R2 (#8) (0.928371) HP198Avg (#17) (0.956933)
			Average	HP205R4 (0.8780711) No HP198 match

Table 21: Spectral ID Slide Subtracted Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

	Sample				
Date	**HP 199**	**HP 200**	**HP 201**	**HP 205**	**Canon 217**
20071112	Xer13R6 (0.817551) HP200R3 (#13) (0.906289) No HP199 match	Xer13R6 (0.795364) HP200R3 (#16) (0.905668)	Xer13R6 (0.719831) HP200R2 (#15) (0.888052) No HP201 match	Xer13R6 (0.747963) No HP205	HP205R2 (0.75866) Can348R2 (#20) (0.858201) No Can217 match
20080627	Ep84R3 (0.848815) No HP199 match	Ep84R3 (0.755745) HP200R2 (#7) (0.889391)	Can492R1 (0.695634) No HP201 match	Ep84R3 (0.743549) No HP205 or any HP match	HP205R4 (0.930693) No Can217 match
20080711	HP205R4 (0.826887) No HP199 match	HP205R4 (0.83692) No HP200 match	Ep84R3 (0.877532) No HP201 match	Oki04BlkSpR1 (0.869593) HP205R2 (#3) (0.873143)	Ep30R4 (0.510559) Can348Avg (#3) (0.51669) Can217R2 (#9) (0.527077)
20081128	Xer13R6 (0.743136) HP200R2 (#6) (0.808221) HP199R2 (#8) (0.834953)	Ep84R3 (0.71944) HP200R2 (#7) (0.885249)	Ep84R# (0.686966) HP200R2 (#7) (0.893899) HP201Avg (#20) (0.934186)	Xer13R2 (0.830186) No HP205 match	Ep84R3 (0.716881) No Can217 or any Canon match
20081214	Xer13R6 (0.791763) HP200R2 (#6) (0.849548) HP199R2 (#9) (0.874407)	Xer13R6 (0.745285) HP200R2 (#6) (0.822061)	Ep84R3 (0.596943) HP200R2 (#8) (0.924727) No HP201 match	Xer13R2 (0.919767) No HP205 match	Can522R1 (0.681757) Can384R1 (#2) (0.591343) Can217R1 (#8) (0.696123)
Average	HP205R4 (0.833994) No HP199 match	HP205R4 (0.839175) No HP200 match	HP205R4 (0.866334) No HP201 match	Can492R1 (0.869493) No HP205 match	Xer13R6 (0.686782) No Can217 or any Canon match

Table 21: Spectral ID Slide Subtracted Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample					
Date	**Canon 223**	**Xerox 244**	**Canon 282**	**Date**	**Canon 306**
20071112	Xer13R6 (0.670631) No Can223 or any Canon match	Xer13R6 (0.666929) No Xer244 match	Xer13R6 (0.791595) No Can282 match	**20080627**	Xer244R4 (0.878529) Can384R1 (#16) (0.936106) No Can306 match
20080627	HP205R4 (0.816463) No Can223 match	Ep84R4 (0.568434) Xer244R3 (#6) (0.629696)	Can217R4 (0.282313) Can282R1 (#6) (0.309869)	**20080711**	HP205R4 (0.691421) Can282R4 (#14) (0.797835) No Can306 match
20080711	Can282R2 (0.225616) No Can223 match	Ep84R3 (0.859333) Xer13R6 (#2) (0.943813) No Xer244 match	Kod22R3 (0.62514) Can282R4 (#2) (0.625893)	**20081128**	Oki04BrnSpR2 (0.517762) Can384R1 (#19) (0.707299) No Can306 match
20081128	Ep84R3 (0.691159) No Can223 match	Ep84R3 (0.610166) Xer13R6 (#3) (0.851188) No Xer244 match	Ep84R3 (0.697361) No Can282 or any Canon match	**20081214**	Oki04BrnSpR2 (0.653965) Can384R1 (#6) (0.725764) Can306R1 (#20) (0.745137)
20081214	Can384R1 (0.588824) Can2223R2 (#5) (0.591903)	Ep84R3 (0.682279) Xer13R6 (#2) (0.843299) Xer244R2 (#13) (0.938853)	Xer13R3 (0.817041) No Can282	**Average**	Ep84R3 (0.787037) Can384R1 (#5) (0.877248) Can306R1 (#19) (0.893678)
Average	Can217R1 (0.814175) Can223R2 (#4) (0.820081)	HP205R4 (0.864856) No Xer244 or any Xerox match	Xer13R6 (0.682707) No Can282 or any Canon match		

Table 21: Spectral ID Slide Subtracted Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample				
Date	**Canon 312**	**Canon 318**	**Date**	**Canon 318a**
20080627	Ep84R3 (0.862083) No Can312 match	Oki04BlkSpR1 (0.849011) No Can318 or any Canon match	**20080711**	Ep84R3 (0.874534) Can318aR4 (#8) (0.904106)
20080711	HP205R4 (0.887826) Can492R2 (#12) (0.93622) No Can312 match	Can282R4 (0.73146) No Can318 match	**20081128**	HP198R2 (0.854737) No Can318a or any Canon match
20081128	Ep84R3 (0.628642) No Can312 or any Canon match	Can384R1 (0.450902) No Can318 match	**20081214**	Can318aR3 (0.783173)
20081214	Ep84R3 (0.698948) No Can312 or any Canon match	Can312R3 (0.851507) No Can318 match	**Average**	Can318aR1 (0.511878)
Average	HP205R4 (0.85788) Can492R5 (#7) (0.91938) No Can312 match	Xer24R1 (0.761283) Can217R1 (#10) (0.855724) No Can318 match		

Sample				
Date	**Canon 327**	**Canon 348**	**Date**	**Canon 384**
20080627	Can306R3 (0.822281) No Can327 match	Oki04BrnSpR7 (0.754861) No Can348 match	**20080711**	Ep84R3 (0.802427) No Can384 match
20080711	Can282R4 (0.721852) No Can327 match	Ep156R1 (0.735374) Can217R1 (#20) (0.871553) No Can348 match	**20081128**	Ep156R3 (0.776966) No Can384 or any Canon match
20081128	Xer244R2 (0.762274) No Can327 match	Can217R2 (0.69088) No Can348 match	**20081214**	Xer13R6 (0.541196) No Can384 or any Canon match
20081214	HP205R4 (0.849542) No Can327 or any Canon match	Xer13R1 (0.824824) Can217R1 (#13) (0.892123) No Can348 match	**Average**	Xer13R6 (0.691385) No Can384 or any Canon match
Average	HP205R4 (0.751566) No Can327 or any Canon match	Xer244R2 (0.853538) No Can348 or any Canon match		

Table 21: Spectral ID Slide Subtracted Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

	Sample		
Date	**Canon 402**	**Canon 492**	**Canon 522**
20080711	Can318aR4 (0.852684) No Can402 match	Ep84R3 (0.799366) Can312R3 (#11) (0.971397) No Can492 match	Can217R1 (0.336416) No Can522 match
20081128	Xer13R6 (0.633993) No Can402 or any Canon match	Ep84R3 (0.637604) No Can492 or any Canon match	Can492R5 (0.843333) No Can522 match
20081214	Can217R2 (0.639354) No Can402 match	Ep84R3 (0.63553) No Can492 or any Canon match	Can217R2 (0.663189) Can522R1 (#4) (0.674891)
Average	Can217R2 (0.770923) Can522R1 (#20) (0.768615) No Can402 match	Ep84R3 (0.621704) No Can492 or any Canon match	Can217R2 (0.521405) Can522R1 (#4) (0.528157)

For the GRAMS Spectral ID program the blank paper sample ATR spectrum could be subtracted directly from the ink on paper sample ATR spectrum during the search process. For the OMNIC software program the paper subtraction had to be done prior to searching the ink on paper samples ATR spectra against the standard libraries. In order to keep the analysis consistent, the paper sample matches for each ink on paper sample ATR spectrum noted with the Spectral ID software were used to subtract the blank paper sample ATR spectrum from each ink on paper sample ATR spectrum. Consequently, the same subtraction results would be created for both software programs, allowing for truly comparable results. Thus, for each of the 215 ink on paper sample ATR spectrum, the respective blank paper sample ATR spectrum was subtracted and the subtracted results ATR spectra were saved as separate files.

Two main libraries were created within the OMNIC program. These libraries consisted of the neat ink standards and the slide subtracted neat ink standards. To create a library within the OMNIC program, the user uses the library manager to create, name and set the parameters of the library. For these two standard libraries the parameters were all consistent with a resolution of 8 cm^{-1} and a range of 652 cm^{-1} to 4000 cm^{-1}. After setting up the library, the user then manually adds in each sample to the library. Unlike the Spectral ID program, the user could not add in additional information for each library standard other than entering the sample's file name. For both the OMNIC Neat Ink Standard ATR library and the OMNIC Slide Subtracted Neat Ink Standard ATR library there were 191 neat ink samples contained within each respective library.

As each paper subtracted ink on paper sample ATR spectrum was loaded into the OMNIC program, the first library it was tested against was the Neat Ink Standard ATR library. The search process was programmed to operate in the correlation mode with the top 20 matches listed. The reason the program was set in the correlation mode was two-fold. Firstly, this mode was used due to the fact that this mode was recommended when searching an unknown sample against a standard library. Secondly, this mode was used in the OMNIC program because this mode was used in the Spectral ID program. In order for the results to be comparable, the same conditions must be used. Therefore, even though the default mode for the OMNIC program was the search expert mode, which displays only the single best match, the correlation mode was programmed as the search mode for the OMNIC ink sample searches.

Each of the 215 ink on paper samples ATR spectra were tested against the OMNIC Neat Ink Standard ATR library and the results were recorded. The top library

match was noted for each of the 215 ink on paper samples ATR spectra tested, along with the correct match for the sample if this was not the top match listed. In addition, if the correct match was not the top match, then any manufacturer group match listed before the correct match was also noted. Refer to Table 22 for the match results for the 215 ink on paper samples ATR spectra tested against the OMNIC Neat Ink Standard ATR library. The complete match list for the 215 ink on paper samples ATR spectra using the OMNIC Neat Ink Standard ATR library can be found in Appendix H.

Table 22: OMNIC Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra

Sample					
Date	**Okidata 04**	**Date**	**Xerox 13**	**Date**	**Kodak 17**
20071112	Xer13R2 (75.13) No Oki04 match	**20071112**	Xer13R2 (36.43)	**20071112**	HP205R4 (33.31) No Kod17 or any Kodak match
20080117	Xer13R2 (22.33) No Oki04 match	**20080117**	Xer13R2 (77.62)	**20080117**	Xer13R2 (40.75) No Kod17 or any Kodak match
20080627	Xer13R5 (17.18) No Oki04 match	**20080627**	Oki04BrnSpR4 (31.99) Xer13R2 (#3) (31.26)	**20080627**	Oki04BrnSpR4 (34.97) No Kod17 or any Kodak match
20080711	Oki04BlkSpR3 (29.19)	**20080711**	Xer13R2 (26.42)	**20080711**	HP205R2 (40.43) No Kod17 or any Kodak match
20081128	Can282R3 (36.00) No Oki04 match	**20081128**	HP205R2 (37.61) No Xer13 or any Xerox match	**20081128**	HP205R4 (40.43) No Kod17 or any Kodak match
20081214	Oki04BlkSpR2 (34.52)	**20081214**	HP205R4 (40.83) No Xer13 or any Xerox match	**20081214**	HP205R4 (41.41) No Kod17 or any Kodak match
20080117 Run2	Xerox13R2 (48.49) Oki04BlkSpR2 (#20) (17.63)	**20080117 Run2**	Xer13R2 (75.18)	**Average**	HP205R4 (41.13) No Kod17 or any Kodak match
20080711 Run2	Oki04BlkSpR1 (42.14)	**20081128 Run2**	HP205R2 (38.33) Xer13R2 (#20) (31.02)		
20081128 Run2	Oki04Avg (45.44)	**20081214 Run2**	HP205R4 (39.61) No Xer13 or any Xerox match		
20081214 Run2	Oki04BrnSpR4 (27.21)	**Average**	Oki04BrnSpR1 (25.07) Xer13R2 (#3) (22.88)		
20071112 Run3	Oki04BrnSpR4 (29.10)				
Average	Oki04Avg (43.47)				

Table 22: OMNIC Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample					
Date	**Kodak 22**	**Date**	**Xerox 24**	**Date**	**Epson 30**
20071112	Oki04BrnSpR4 (12.89) Kod22R3 (#3) (10.60)	**20071112**	HP205R4 (30.27) Xer13R2 (#7) (26.52) No Xer24 match	**20071112**	HP205R3 (29.64) No Ep30 or any Epson match
20080117	Xer13R2 (23.12) No Kod22 or any Kodak match	**20080627**	Oki04BrnSpR4 (33.92) Xer13R2 (#10) (25.57) No Xer24 match	**20080627**	Ep63PrpSpR2 (21.99) No Ep30 match
20080627	Oki04BrnSpR4 (22.63) Kod22R3 (#4) (15.43)	**20080711**	Oki04BrnSpR4 (29.10) Xer13R2 (#19) (23.24) No Xer24 match	**20080711**	Oki04BrnSpR4 (34.18) No Ep30 match
20080711	Can282R3 (23.94) Kod22R3 (#5) (21.56)	**20081128**	HP205R4 (42.86) No Xer24 or any Xerox match	**20081128**	Ep156R4 (60.89) No Ep30 match
20081128	Can223R3 (29.68) No Kod22 or any Kodak match	**20081214**	HP205R4 (41.27) No Xer24 or any Xerox match	**20081214**	Ep33BrnSpR2 (47.06) No Ep30 match
20081214	Ep33BlkSpR1 (25.35) No Kod22 or any Kodak match	**20080627 Run2**	Oki04BrnSpR4 (35.03) Xer13R2 (#3) (29.50) Xer24R2 (#15) (20.06)	**20080711 Run2**	Ep33BrnSpR2 (21.68) No Ep30 match
Average	Kod22R3 (23.51)	**Average**	Oki04Avg (23.26) Xer13R2 (#18) (20.01) No Xer24 match	**Average**	Kod22R1 (18.44) No Ep30 or any Epson match

Table 22: OMNIC Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample					
Date	**Epson 33**	**Epson 60**	**Epson 63**	**Date**	**Epson 66**
20071112	Xer13R2 (26.74) No Ep33 or any Epson match	Can492R1 (15.38) No Ep60 match	Xer13R2 (27.22) Ep33BlkSpR1 (#20) (11.47) No Ep63 match	**20071112**	Xer13R2 (32.26) No Ep66 or any Epson match
20080627	Ep90R3 (28.02) Ep33BrnSpR3 (#8) (26.88)	Ep63PrpSpR2 (24.88) Ep60R3 (#19) (17.98)	Oki04BrnSpR4 (22.58) Ep33BlkSpR1 (#4) (12.05) Ep63GrnSpR1 (#8) (10.43)	**20080627**	Oki04BrnSpR4 (20.70) Ep33BlkSpR1 (#6) (6.83) No Ep66 match
20080711	Ep156R4 (30.04) Ep66R1 (#2) (27.84) Ep33BrnSpR1 (#14) (22.92)	Oki04BrnSpR4 (20.73) Ep63PrpSpR2 (#7) (9.01) No Ep60 match	Oki04BrnSpR4 (24.72) No Ep63 match	**20080711**	Ep33BlkSpR2 (45.18) No Ep66 match
20081128	Ep66Avg (60.14) Ep33BrnSpR2 (#7) (59.85)	Ep33Avg (48.82) No Ep60 match	Ep63GrnSpR1 (55.69)	**20081128**	Ep66R2 (50.65)
20081214	Ep66R3 (45.24) No Ep33 match	Ep33Avg (55.34) No Ep60 match	Ep33BlkSpR1 (35.54) Ep63GrnSpR1 (#2) (35.47)	**20081214**	Ep33BlkSpR2 (45.35) Ep66R1 (#11) (43.24)
20080711 Run2	Ep33BrnSpR1 (15.69)	Ep33BlkSpR2 (39.79) No Ep60 match	Ep33BlkSpR2 (48.64) Ep63GrnSpR1 (#6) (46.74)	**Average**	Ep33Avg (51.17) Ep66Avg (#14) (47.35)
Average	Ep66R1 (19.42) Ep33BrnSpR1 (#3) (18.73)	Ep33BlkSpR1 (29.05) No Ep60 match	Ep33BlkSpR2 (33.01) Ep63GrnSpR1 (#6) (31.32)		

Table 22: OMNIC Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample					
Date	**Epson 84**	**Epson 90**	**Epson 93**	**Date**	**Epson 120**
20071112	Xer13R2 (22.58) No Ep84 or any Epson match	Xer13R2 (23.96) Ep33BlkSpR1 (#8) (16.11) Ep90R3 (#16) (14.50)	Ep33BlkSpR1 (23.79) No Ep93 match	**20071112**	Ep33BlkSpR1 (25.45) No Ep120 match
20080627	Oki04BrnSpR4 (32.23) No Ep84 match	Oki04BrnSpR4 (19.99) Ep33BlkSpR1 (#3) (16.05) No Ep90 match	Ep90R2 (40.30) Ep93R1 (#5) (39.90)	**20080627**	Ep63PRpSpR2 (24.71) Ep120R2 (#13) (23.04)
20080711	Oki04BrnSpR4 (20.26) No Ep84 match	Ep33BrnSpR1 (45.52) Ep90R2 (#13) (42.63)	Ep33BlkSpR2 (33.85) No Ep93 match	**20080711**	Ep33BrnSpR3 (43.02) Ep120R2 (#7) (41.26)
20081128	HP205R4 (30.61) Ep84R3 (#15) (17.56)	Ep63GrnSpR1 (59.35) Ep90R2 (#15) (58.06)	Ep33BlkSpR2 (55.61) No Ep93 match	**20081128**	Ep33BrnSpR2 (50.55) Ep120R2 (#6) (49.51)
20081214	HP205R4 (29.47) Ep84R4 (#7) (18.26)	Ep33Avg (53.37) Ep90R3 (#12) (51.23)	Ep66R2 (50.28) No Ep93 match	**20081214**	Ep33BlkSpR2 (56.03) Ep120R2 (#15) (51.96)
Average	HP205R4 (34.75) No Ep84 or any Epson match	Ep33BrnSpR1 (46.78) Ep90R3 (#12) (45.11)	Ep33BlkSpR1 (50.32) No Ep93 match	**20080711 Run2**	Ep33BlkSpR2 (30.44) Ep120R3 (#16) (28.77)
				Average	Ep33BlkSpR2 (32.06) Ep120R3 (#17) (30.28)

Table 22: OMNIC Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample				
Date	**Epson 123**	**Epson 156**	**Date**	**HP 198**
20071112	Oki04BlkSpR2 (12.07) No Ep123 or any Epson match	Can492R2 (18.09) No Ep156 or any Epson match	**20071112**	HP205R4 (27.83) No HP198 match
20080627	Oki04BrnSpR4 (25.04) Ep33BlkSpR1 (#4) (12.01) No Ep123 match	Oki04BrnSpR4 (24.86) No Ep156 match	**20080627**	HP201R4 (27.28) HP198R5 (#11) (23.52)
20080711	Ep33Avg (47.18) No Ep123 match	Oki04BrnSpR3 (18.21) No Ep156 match	**20080711**	Xer13R2 (32.61) No HP198 match
20081128	Ep63GrnSpR1 (47.15) No Ep123 match	Ep33BlkSpR1 (30.65) No Ep156 match	**20081128**	HP205R4 (45.20) No HP198 match
20081214	Ep33BlkSpR2 (50.29) No Ep123 match	Ep33BlkSpR1 (38.97) No Ep156 match	**20081214**	HP205R4 (44.18) No HP198 match
Average	Ep33Avg (40.45) No Ep123 match	Ep33BlkSpR1 (34.61) No Ep156 match	**20080711 Run2**	HP205R2 (31.66) No HP198 match
			20081214 Run2	HP205R4 (33.38) HP201R4 (#17) (21.54) No HP198 match
			Average	Oki04Avg (24.19) No HP198 match

Table 22: OMNIC Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

	Sample				
Date	**HP 199**	**HP 200**	**HP 201**	**HP 205**	**Canon 217**
20071112	HP205R3 (24.94) No HP199 match	Oki04BlkSpR2 (21.43) No HP200 match	HP205R3 (25.75) No HP201 match	Oki04BrnSpR4 (13.85) No HP205 or any HP match	Xer24R2 (19.52) No Can217 or any Canon match
20080627	Oki04BrnSpR4 (37.37) No HP199 match	HP205R4 (39.61) No HP200 match	HP201R4 (25.27)	Ep63PrpSpR2 (22.84) HP205AVG (#14) (18.19)	Oki04BrnSpR 4 (27.73) Can282R3 (#5) (10.49) Can217R1 (#15) (9.43)
20080711	Xer13R2 (29.76) No HP199 or any HP match	Xer13R2 (35.87) No HP200 or any HP match	HP205R2 (30.84) No HP201 match	Kod22R3 (25.66) No HP205 or any HP match	Can217R2 (48.18)
20081128	HP205R4 (40.68) No HP199 match	HP205R4 (38.43) No HP200 match	HP205R4 (44.12) No HP201 match	Ep33BlkSpR1 (39.77) HP205R2 (#6) (36.28)	Can217R2 (42.77)
20081214	HP205R4 (42.81) No HP199 match	HP205R4 (44.82) No HP200 match	HP205R4 (37.83) No HP201 match	Can217R2 (43.65) No HP205 or any HP match	Can282R3 (52.87) Can217R2 (#6) (47.61)
Average	Oki04Avg (23.29) No HP199 match	Oki04Avg (24.53) No HP200 match	Oki04Avg (25.29) No HP201 match	Ep33BlkSpR1 (41.36) No HP205 or any HP match	Can282R3 (44.32) Can217R2 (#2) (43.47)

Table 22: OMNIC Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample					
Date	**Canon 223**	**Xerox 244**	**Canon 282**	**Date**	**Canon 306**
20071112	Oki04BrnSpR4 (19.13) Can282R2 (#18) (9.52) No Can223 match	HP205R4 (24.49) No Xer244 or any Xerox match	Oki04BrnSpR4 (20.38) No Can282 or any Canon match	**20080627**	Oki04BrnSpR4 (21.27) No Can306 or any Canon match
20080627	Oki04BrnSpR4 (28.40) Can282R4 (#14) (8.00) No Can223 match	Oki04BrnSpR1 (25.03) No Xer244 or any Xerox match	Can217R2 (18.17) Can282R3 (#9) (17.20)	**20080711**	HP205R3 (15.26) Can306R1 (#5) (12.93)
20080711	Can282R3 (38.33) Can223R3 (#5) (36.91)	HP205R2 (32.88) Xer13R2 (#14) (26.01) No Xer244 match	Can282R3 (32.42)	**20081128**	Can306R3 (36.00)
20081128	Can282R3 (54.24) Can223R3 (#4) (53.38)	Xer13R2 (29.24) No Xer244 match	Can217R3 (33.14) Can282R3 (#5) (32.42)	**20081214**	Can348R3 (42.09) Can306R3 (#2) (41.52)
20081214	Can223R3 (49.63)	HP205R4 (34.24) No Xer244 or any Xerox match	Can217R2 (36.09) Can282R3 (#18) (28.93)	**Average**	Can348R3 (35.37) No Can306 match
Average	Can223R3 (54.91)	Can312R4 (21.92) Xer13R2 (#2) (21.61) No Xer244 match	Can282R3 (40.69)		

Sample				
Date	**Canon 312**	**Canon 318**	**Date**	**Canon 318a**
20080627	Oki04BrnSpR4 (25.70) Can312R4 (#17) (13.57)	Oki04BrnSpR4 (22.10) No Can318 or any Canon match	**20080711**	Xer24R2 (29.78) Can318aR4 (#13) (19.75)
20080711	Xer13R2 (31.38) Can312R4 (#2) (25.56)	Can223R3 (33.48) No Can318 match	**20081128**	Can223R3 (31.14) No Can318a match
20081128	HP205R4 (38.09) No Can312 match	Can223R3 (53.08) No Can318 match	**20081214**	Can223R3 (25.99) No Can318a match
20081214	HP205R4 (30.99) Can312R4 (#16) (20.19)	Xer13R4 (24.97) Can282R3 (#8) (21.05) No Can318 match	**Average**	Can223R3 (42.95) No Can318a match
Average	Can312R4 (21.62)	Can223R3 (39.38) No Can318 match		

Table 22: OMNIC Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample				
Date	**Canon 327**	**Canon 348**	**Date**	**Canon 384**
20080627	Oki04BrnSpR4 (19.39) No Can327 or any Canon match	Oki04BrnSpR4 (32.05) No Can348 match	**20080711**	Ep66R1 (20.72) Can223R3 (#10) (18.11) Can384R1 (#12) (19.46)
20080711	Can217R2 (32.50) No Can327 match	Can223R3 (23.73) Can348R3 (#4) (22.18)	**20081128**	Kod22R3 (36.87) Can282R3 (#2) (35.94) Can384R1 (#9) (33.02)
20081128	Can223R3 (52.22) No Can327 match	Can217R1 (60.49) Can348R2 (#12) (54.12)	**20081214**	Can217R3 (31.44) Can384R1 (#8) (28.87)
20081214	Can223R3 (44.34) No Can327 match	Can223R3 (42.00) Can348R1 (#15) (38.82)	**Average**	Kod22R3 (41.23) Can384R1 (#5) (35.47)
Average	Can282R3 (28.92) No Can327 match	Can282R3 (48.25) Can348R3 (#10) (45.86)		

Sample			
Date	**Canon 402**	**Canon 492**	**Canon 522**
20080711	Can223R3 (40.67) No Can402 match	HP205Avg (28.98) No Can492 match	Can217R2 (46.66) Can522R1 (#16) (41.38)
20081128	Can223R3 (43.63) No Can402 match	HP205R4 (37.28) No Can492 match	Can223R3 (57.63) No Can522 match
20081214	Can223R3 (44.35) No Can402 match	HP205R4 (39.07) No Can492 match	Can217R3 (57.41) Can522R1 (#15) (52.02)
Average	Can223R3 (49.06) No Can402 match	HP205R4 (38.44) No Can492 match	Can217R2 (61.83) No Can522 match

The 215 ink on paper samples ATR spectra were also tested against the OMNIC Slide Subtracted Neat Ink Standard ATR library. The parameters for this library were the same as for the OMNIC Neat Ink Standard ATR library and the same paper subtracted ink on paper samples ATR spectra were used. Once again, the top match, the

correct match, if present, and any manufacturer group match were noted. Refer to Table 23 for the match results of the 215 ink on paper samples ATR spectra tested against the OMNIC Slide Subtracted Neat Ink Standard ATR library. The complete match list results for the 215 ink on paper samples ATR spectra using the OMNIC Slide Subtracted Neat Ink Standard ATR library can be found in Appendix H.

Table 23: OMNIC Slide Subtracted Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra

Sample					
Date	**Okidata 04**	**Date**	**Xerox 13**	**Date**	**Kodak 17**
20071112	Ep156R4 (76.95) No Oki04 match	**20071112**	HP205R4 (32.98) Xer13R2 (#5) (30.66)	**20071112**	Hp205R4 (33.70) No Kod17 or any Kodak match
20080117	Xer24R4 (21.35) Oki04BrnSpR5 (#15) (11.66)	**20080117**	Ep156R4 (81.75) Xer13R2 (#3) (73.60)	**20080117**	Xer13R2 (35.07) No Kod17 or any Kodak match
20080627	Xer13R5 (15.08) No Oki04 match	**20080627**	Oki04BrnSpR4 (32.91) Xer13R2 (#16) (26.36)	**20080627**	Oki04BrnSpR4 (35.83) No Kod17 or any Kodak match
20080711	Oki04BlkSpR2 (29.23)	**20080711**	Ep156R4 (25.98) Xer13R2 (#4) (23.62)	**20080711**	HP205R4 (32.17) No Kod17 or any Kodak match
20081128	Can282R3 (36.42) No Oki04 match	**20081128**	HP205R4 (39.69) No Xer13 or any Xerox match	**20081128**	HP205R4 (39.62) No Kod17 or any Kodak match
20081214	Oki04BlkSpR2 (35.01)	**20081214**	HP205R4 (42.51) No Xer13 or any Xerox match	**20081214**	HP205R4 (41.87) No Kod17 or any Kodak match
20080117 Run2	Xer13R2 (45.25) No Oki04 match	**20080117 Run2**	Ep156R4 (78.70) Xer13R2 (#3) (71.42)	**Average**	HP205R4 (41.07) No Kod17 or any Kodak match
20080711 Run2	Oki04BlkSpR1 (42.43)	**20081128 Run2**	HP205R3 (39.83) No Xer13 or any Xerox match		
20081128 Run2	Oki04Avg (46.45)	**20081214 Run2**	HP205R4 (40.27) No Xer13 or any Xerox match		
20081214 Run2	Oki04BrnSpR4 (28.38)	**Average**	Oki04BrnSpR5 (25.46) No Xer13 or any Xerox match		
20071112 Run3	Oki04BrnSpR4 (30.12)				
Average	Oki04Avg (44.21)				

Table 23: OMNIC Slide Subtracted Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample					
Date	**Kodak 22**	**Date**	**Xerox 24**	**Date**	**Epson 30**
20071112	Oki04BrnSpR4 (13.99) Kod22R1 (#2) (13.83)	**20071112**	HP205R4 (30.87) No Xer24 or any Xerox match	**20071112**	Can492R2 (29.17) No Ep30 or any Epson match
20080117	Xer13R2 (22.02) No Kod22 or any Kodak match	**20080627**	Oki04BrnSpR4 (34.89) No Xer24 or any Xerox match	**20080627**	Ep63PrpSpR2 (21.68) Ep30R4 (#9) (16.33)
20080627	Oki04BrnSpR4 (23.13) Kod22R3 (#3) (17.95)	**20080711**	Oki04BrnSpR4 (30.12) No Xer24 or any Xerox match	**20080711**	Oki04BrnSpR4 (35.85) No Ep30 match
20080711	Can282R3 (27.29) Kod22R3 (#7) (24.02)	**20081128**	HP205R4 (43.71) No Xer24 or any Xerox match	**20081128**	Ep156R4 (61.39) Ep30R1 (#5) (47.66)
20081128	Can384R2 (35.49) No Kod22 or any Kodak match	**20081214**	HP205R4 (43.14) No Xer24 or any Xerox match	**20081214**	Ep33BrnSpR2 (46.89) No Ep30 match
20081214	Can282R2 (27.08) Kod22R3 (#19) (22.70)	**20080627 Run2**	Oki04BrnSpR4 (36.26) Xer13R2 (#11) (25.53) No Xer24 match	**20080711 Run2**	Kod22R3 (23.65) Ep30R4 (#9) (20.50)
Average	Kod22R1 (28.98)	**Average**	HP205R4 (24.37) No Xer24 or any Xerox match	**Average**	Kod22R1 (21.50) Ep30R1 (#18) (13.51)

Table 23: OMNIC Slide Subtracted Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample					
Date	**Epson 33**	**Epson 60**	**Epson 63**	**Date**	**Epson 66**
20071112	Xer13R2 (20.82) No Ep33 match	Can492R1 (15.57) Ep84 R3 (#9) (11.61) No Ep60 match	Xer13R2 (22.07) No Ep63 match	**20071112**	Xer13R2 (27.60) No Ep66 match
20080627	Ep90R3 (27.96) Ep33BrnSpR3 (#9) (26.86)	Ep63PrpSpR2 (24.62) Ep60R3 (#19) (17.85)	Oki04BrnSpR4 (23.46) Ep33BlkSpR1 (#4) (12.05) Ep63GrnSpR1 (#8) (10.43)	**20080627**	Oki04rnSpR4 (21.51) Ep33BlkSpR1 (#12) (6.83) No Ep66 match
20080711	Ep156R5 (33.39) Ep66R1 (#4) (27.27) Ep33Avg (#15) (22.71)	Oki04BrnSpR4 (21.38) No Ep60 or any Epson match	Oki04BrnSpR4 (25.63) No Ep63 match	**20080711**	Ep33BlkSpR2 (45.15) No Ep66 match
20081128	Ep33BrnSpR2 (59.45)	Ep33Avg (48.82) No Ep60 match	Ep63GrnSpR1 (55.65)	**20081128**	Ep66R2 (50.08)
20081214	Ep63Avg (44.90) Ep33Avg (#18) (43.91)	Ep33Avg (55.33) No Ep60 match	Can384R2 (36.01) Ep33BlkSpR1 (#2) (35.68) Ep63GrnSpR1 (#5) (35.42)	**20081214**	Ep33BrnSpR2 (45.22) Ep66R1 (#12) (42.79)
20080711 Run2	Ep33BrnSpR1 (15.64)	Ep33BlkSpR2 (39.86) No Ep60 match	Ep33BlkSpR2 (48.71) Ep63GrnSpR1 (#11) (46.71)	**Average**	Ep33Avg (51.51) Ep66Avg (#16) (46.60)
Average	Ep66R1 (19.15) Ep33BrnSpR1 (#3) (18.62)	Ep33BlkSpR1 (29.13) No Ep60 match	Ep30R4 (33.79) Ep33BlkSpR2 (#2) (33.06) Ep63GrnSpR1 (#9) (31.28)		

Table 23: OMNIC Slide Subtracted Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample					
Date	**Epson 84**	**Epson 90**	**Epson 93**	**Date**	**Epson 120**
20071112	Xer13R2 (18.47) No Ep84 match	Xer13R2 (19.47) Ep33BlkSpR1 (#10) (16.18) No Ep90 match	Ep33BlkSpR1 (23.87) No Ep93 match	**20071112**	Ep33BlkSpR1 (25.48) No Ep120 match
20080627	Oki04BrnSpR4 (33.04) No Ep84 match	Oki04BrnSpR4 (20.85) Ep33BlkSpR1 (#4) (16.06) No Ep90 match	Ep33Avg (39.65) Ep93R1 (#6) (39.36)	**20080627**	Oki04BrnSpR4 (24.53) Ep63PrpSpR2 (#2) (24.49) Ep120R2 (#13) (22.72)
20080711	Oki04BrnSpR4 (21.08) No Ep84 match	Ep33BrnSpR1 (45.28) Ep90R2 (#16) (42.10)	Can282R3 (36.61) Ep33BlkSpR2 (#13) (33.85) No Ep93 match	**20080711**	Ep33BrnSpR3 (42.86) Ep120R2 (#7) (40.84)
20081128	HP205R4 (29.19) Ep84R3 (#12) (20.42)	Ep63GrnSpR1 (59.28) Ep90R2 (#17) (57.02)	Ep30R4 (56.73) Ep33BlkSpR3 (#3) (55.71) No Ep93 match	**20081128**	Can384R2 (50.28) Ep33BrnSpR2 (#2) (50.21) Ep120R2 (#17) (48.62)
20081214	HP205R4 (28.07) Ep84R3 (#6) (20.32)	Ep33Avg (53.57) Ep90R3 (#14) (50.63)	Ep66R2 (49.43) No Ep93 match	**20081214**	Ep33BlkSpR2 (56.09) Ep120R2 (#18) (51.35)
Average	HP205R4 (32.57) Ep84R3 (#15) (19.09)	Ep33BrnSpR2 (46.38) Ep90R3 (#15) (44.21)	Ep33BlkSpR1 (50.48) No Ep93 match	**20080711 Run2**	Ep33BlkSpR2 (30.43) Ep120R3 (#16) (28.70)
				Average	Ep33BlkSpR2 (32.11) Ep120R3 (#19) (29.79)

Table 23: OMNIC Slide Subtracted Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample				
Date	**Epson 123**	**Epson 156**	**Date**	**HP 198**
20071112	Oki04BrnSpR4 (12.49) No Ep123 or any Epson match	Can492R2 (18.18) No Ep156 or any Epson match	**20071112**	HP205R4 (27.59) No HP198 match
20080627	Ok04BrnSpR4 (26.05) Ep33BlkSpR1 (#4) (12.02) No Ep123 match	Oki04BrnSpR4 (25.58) Ep156R5 (#4) (14.24)	**20080627**	HP199R3 (30.83) HP198R3 (#6) (28.95)
20080711	Ep33Avg (47.17) No Ep123 match	Oki04BrnSpR3 (19.33) No Ep156 match	**20080711**	Ep156R4 (32.38) HP199R5 (#14) (25.29) No HP198 match
20081128	Ep63GrnSpR1 (47.09) No Ep123 match	Can384R2 (32.52) No Ep156 match	**20081128**	HP205R4 (45.69) HP199Avg (#6) (34.96) No HP198 match
20081214	Ep33BlkSpR2 (50.40) No Ep123 match	Ep33BlkSpR1 (39.10) No Ep156 match	**20081214**	HP205R4 (44.43) HP199R6 (#6) (34.34) HP198R3 (#19) (30.94)
Average	Ep33BlkSpR2 (40.49) No Ep123 match	Ep33BlkSpR1 (34.71) No Ep156 match	**20080711 Run2**	HP205R4 (31.62) HP199R6 (#5) (29.26)HP198R3 (#12) (26.13)
			20081214 Run2	HP205R4 (34.05) HP199R6 (#6) (30.84) HP198R3 (#20) (25.09)
			Average	Oki04Avg (23.99) HP199R6 (#14) (20.89) No HP198 match

Table 23: OMNIC Slide Subtracted Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

	Sample				
Date	**HP 199**	**HP 200**	**HP 201**	**HP 205**	**Canon 217**
20071112	HP205R4 (24.19) No HP199 match	Oki04BrnSpR2 (21.25) No HP200 match	HP205R4 (25.12) No HP201 match	Oki04BrnSpR2 (14.86) No HP205 or any HP match	Oki04BrnSpR4 (17.95) No Can217 match
20080627	Oki04BrnSpR4 (38.48) HP199R6 (#13) (18.93)	HP205R4 (37.33) HP199R6 (#3) (36.63) HP200R6 (#10) (34.24)	HP199R6 (29.45) HP201R5 (#6) (26.94)	Ep63PrpSpR2 (22.60) HP205R3 (#11) (20.83)	Oki04BrnSpR4 (28.56) Can217R4 (#9) (15.65)
20080711	Ep156R4 (30.74) No HP199 or any HP match	Ep156R4 (35.91) HP199R6 (#18) (22.78) No HP200 match	HP199R6 (31.28) No HP201 match	HP205R1 (27.61)	Can282R2 (53.96) Can217R4 (#5) (52.15)
20081128	HP205R4 (39.15) HP199R3 (#2) (38.76)	HP205R4 (37.59) HP199R3 (#4) (35.94) HP200R2 (#16) (31.01)	HP205R4 (44.10) HP199Avg (#6) (36.65) No HP201 match	HP205R1 (46.02)	Can217R2 (47.51)
20081214	HP205R4 (43.13) HP199R6 (#5) (37.13)	HP205R4 (44.47) HP199R6 (#6) (35.36) No HP200 match	HP205R4 (37.59) HP199R6 (#4) (34.99) No HP201 match	Can217R2 (46.90) No HP205 or any HP match	Can282R3 (60.49) Can217R4 (#7) (53.45)
Average	Oki04Avg (22.99) HP199R6 (#10) (20.14)	Oki04Avg (24.37) HP199R6 (#11) (21.52) No HP200 match	Oki04Avg (24.37) HP199R6 (#4) (23.10) No HP201 match	Can348R2 (42.69) HP205R1 (#16) (39.71)	Can282R3 (52.13) Can217Avg (#5) (48.75)

Table 23: OMNIC Slide Subtracted Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample					
Date	**Canon 223**	**Xerox 244**	**Canon 282**	**Date**	**Canon 306**
20071112	Oki04BrnSpR4 (20.32) No Can223 match	HP205R4 (23.63) No Xer244 or any Xerox match	Oki04BrnSpR4 (21.59) No Can282 or any Canon match	**20080627**	Oki04BrnSpR4 (22.04) Can217R4 (#15) (10.37) No Can306 match
20080627	Oki04BrnSpR4 (29.37) Can217R4 (#11) (11.51) No Can223 match	Oki04BrnSpR1 (24.95) No Xer244 or any Xerox match	Can217R4 (21.60) Can282R3 (#4) (19.68)	**20080711**	HP205R4 (15.78) Can217R4 (#6) (13.62) Can306Avg (#11) (12.69)
20080711	Can217R4 (43.40) Can223R3 (#18) (36.16)	HP205R4 (34.30) No Xer244 or any Xerox match	Can282R3 (30.65)	**20081128**	Can348R3 (41.85) Can306Avg (#19) (38.21)
20081128	Can282R3 (57.62) Can223R3 (#10) (51.29)	HP205R4 (29.70) Xer13R2 (#12) (24.44) No Xer244 match	Can282R3 (38.72)	**20081214**	Can348R3 (46.82) Can306Avg (#14) (42.39)
20081214	Can348R3 (56.38) Can223R3 (#12) (52.62)	HP205R4 (35.82) No Xer244 or any Xerox match	Can217R2 (45.47) No Can282 match	**Average**	Can348R3 (39.11) Can306Avg (#18) (32.95)
Average	Can348R3 (59.92) Can223R3 (#9) (57.18)	Can312R4 (22.53) Xer13R2 (#6) (19.61) No Xer244 match	Can282R3 (48.19)		

Sample				
Date	**Canon 312**	**Canon 318**	**Date**	**Canon 318a**
20080627	Oki04BrnSpR4 (26.76) No Can312 or any Canon match	Xer244R5 (27.81) No Can318 or any Canon match	**20080711**	Ep156R4 (32.74) Can318aR4 (#15) (21.65)
20080711	Xer13R2 (26.78) Can312R4 (#2) (26.74)	Can348R3 (36.29) No Can318 match	**20081128**	Can327R1 (37.99) Can318aR2 (#20) (35.25)
20081128	HP205R4 (38.50) No Can312 match	Can348R3 (59.60) No Can318 match	**20081214**	Can327R1 (31.89) No Can318a match
20081214	HP205R4 (31.39) Can312R4 (#14) (21.42)	Can282R3 (23.52) No Can318 match	**Average**	Can327R1 (48.22) No Can318a match
Average	Can312R4 (22.40)	Can282R3 (44.21) No Can318 match		

Table 23: OMNIC Slide Subtracted Neat Ink Standard ATR Library Match Results for the 215 Ink on Paper Samples ATR Spectra cont.

Sample				
Date	**Canon 327**	**Canon 348**	**Date**	**Canon 384**
20080627	Xer244R1 (23.94) No Can327 or any Canon match	Oki04BrnSpR4 (33.16) No Can348 match	**20080711**	Kod22R1 (25.79) Can384R1 (#7) (21.98)
20080711	Can217R4 (35.81) No Can327 match	Can282R3 (26.56) Can348R3 (#5) (25.38)	**20081128**	Can282R3 (41.34) Can384R1 (#10) (37.09)
20081128	Can348R2 (56.54) No Can327 match	Can217Avg (67.78) Can348R2 (#11) (64.39)	**20081214**	Can217R3 (37.70) Can384R1 (#5) (36.65)
20081214	Can348R3 (45.26) No Can327 match	Can282R2 (46.85) Can348R1 (#8) (45.89)	**Average**	Kod22R1 (49.14) Can217R4 (#5) (44.95) Can384R1 (#6) (43.35)
Average	Can282R3 (30.42) No Can327 match	Can282R3 (54.18) Can348R3 (#6) (50.99)		

Sample			
Date	**Canon 402**	**Canon 492**	**Canon 522**
20080711	Can348R3 (43.00) No Can402 match	HP205R4 (29.78) No Can492 match	Can217Avg (53.09) No Can522 match
20081128	Can223R3 (47.59) No Can402 match	HP205R4 (37.52) No Can492 match	Can282R3 (63.70) No Can522 match
20081214	Can223R3 (48.39) No Can402 match	HP205R4 (39.26) No Can492 match	Can217R2 (63.12) No Can522 match
Average	Can223R3 (52.39) No Can402 match	HP205R4 (38.66) No Can492 match	Can217R2 (67.76) No Can522 match

An analysis of the results of the library searches in the Spectral ID and OMNIC software programs can be found in the Discussion Section.

Pyrolysis Library

Two types of libraries were created within the GRAMS Spectral ID software program for use with the pyrolysis data. The first type of library created was the neat ink standard pyrogram library of the thirty-five different ink cartridge types. The second type of library created consisted of the blank paper pyrograms, which were used to subtract the paper peaks from the ink on paper sample pyrograms. As discussed previously in the Pyrolysis GC-MS results section, the pyroprobe start time varied depending on the sample. Two pyroprobe start times were noted, with one occurring when there was 21.4 minutes remaining in the GC method and the other when there was 21.6 minutes remaining in the GC method. Thus, two neat ink standard libraries had to be created to reflect the two pyroprobe start times. As a result, a total of three libraries were ultimately created for use with the pyrolysis data.

Of the thirty-five neat ink samples, four of these neat ink samples had a pyroprobe start time with 21.6 minutes remaining and thirty-one neat ink samples had a pyroprobe start time with 21.4 minutes remaining. The four neat ink samples with a pyroprobe start time with 21.6 minutes remaining were the Okidata 04, Epson 66, Hewlett Packard 199 and Canon 348 neat ink samples. As stated previously, two libraries were created with the neat ink standard pyrograms, one with a start time with 21.4 minutes remaining and the other with a start time with 21.6 minutes remaining. Thus, in order for the Okidata 04, Epson 66, Hewlett Packard 199 and Canon 348 neat ink sample pyrograms to be added to the 21.4 minutes neat ink standard library their pyrogram peaks had to be corrected accordingly to match the peak position of the neat ink standards with 21.4 minutes remaining. Conversely, the thirty-one neat ink samples that had a pyroprobe

start time of 21.4 minutes remaining had to be corrected before they could be added to the 21.6 minutes neat ink standard library.

To correct the peak positions within the neat ink standard pyrograms there were two possible methods available for the user. The first method involved the manual changing of the peak position values for each individual peak in the pyrogram. To manually change the individual peak values, the user clicks on each peak that needed to be corrected in the pyrogram and then a new numerical peak position was entered for that specific peak. To enter in a new numerical peak position, it was important to first establish the differences in peak positions that occurred between the 21.4 minute remaining and the 21.6 minute remaining start times neat ink standards. By comparing the neat ink sample pyrograms of similar neat ink samples with the different start times it was discovered that the peaks that exhibited the most difference in peak position between the two neat ink standards occurred significantly during the first four minutes, with differences in the peak positions occurring up to approximately 7.5 minutes. After 7.5 minutes the peak position differences were within the normal range for the neat ink samples analyzed at different times. By comparing the neat ink sample pyrograms, a table of peak correction values could be created, allowing for a sample that started at 21.6 minutes remaining to be corrected to a start time of 21.4 minutes remaining. These values, and specifically the time ranges listed within the table, had to be adjusted slightly for the peak correction from 21.4 minutes to 21.6 minutes. Refer to Table 24 for the peak correction values for the manual correction of the pyroprobe start times.

Table 24: Peak Correction Values for Manual Correction of the Pyroprobe Start Times.

Peak Correction from 21.6X remaining to 21.4X remaining start time	
Retention Time Range in Pyrogram(min)	**Peak Adjustment (min)**
0.0 to 2.5	0.20
2.6 to 3.3	0.18
3.4 to 3.9	0.15
4.0 to 4.5	0.12
4.6 to 5.2	0.10
5.3 to 6.0	0.08
6.1 to 7.0	0.05
7.1 to 7.5	0.03

Peak Correction from 21.4X remaining to 21.6X remaining start time	
Retention Time Range in Pyrogram(min)	**Peak Adjustment (min)**
0.0 to 2.3	0.20
2.4 to 3.1	0.18
3.2 to 3.7	0.15
3.8 to 4.3	0.12
4.4 to 5.0	0.10
5.1 to 5.8	0.08
5.9 to 6.8	0.05
6.9 to 7.3	0.03

The second method available for correcting the differences in the peak positions that occurred between the two pyroprobe start times involved the use of a reference file to assist in the peak position correction. In this method, the user loads a reference file that was then overlaid onto the sample that needed to be corrected. The user then manually selects the peak(s) within both files that needed to be corrected and the software program then corrects the peak position(s) of the peak(s) selected in the sample file to correspond to the peak position(s) of the selected peak(s) in the reference file. In this method, the user was not changing the peak values directly by altering the numerical value, but rather by linking the peak in the sample file to the same peak in the reference file the peak values were modified by the software program. Though the two results gave similar results, the second method was the preferred method. Thus, whenever possible, a reference file was used for the peak position correction between the 21.4 minutes remaining and 21.6 minutes remaining start times. For the samples that did not have a reference file, for example the Okidata 04 neat ink sample, then the manual peak value correction method was used.

Using the peak position correction methods described above, the four neat ink samples that had a pyroprobe start time of 21.6 minutes remaining had their peak positions corrected to the 21.4 minute remaining pyroprobe start time. In addition, the thirty-one neat ink samples that had a pyroprobe start time of 21.4 minutes remaining had their peak positions corrected to the 21.6 minute remaining start time. As a result, two complete sets of neat ink standard pyrograms were created, one with a 21.4 minute remaining start time and the other with a 21.6 minute remaining start time. Two libraries were then created in the Spectral ID software program, representing the two pyroprobe start times. The libraries were labeled "21.4 minutes neat ink standard" and "21.6 minutes neat ink standard" respectively. In addition to the two neat ink standard pyrogram libraries, a blank paper pyrogram library was also created.

The method for creating the three pyrogram libraries was the same as previously described for creating the ATR data libraries. The user uses the library manager to create, name and set the parameters for each library. For these three libraries the parameters were all consistent, having a range of 1 to 22 minutes and baseline correction. After setting up the library, the user then manually enters each neat ink standard sample individually into the library. For the 21.4 minutes neat ink standard pyrogram library there were 37 entries, for the 21.6 minute neat ink standard pyrogram library there were 36 entries and for the blank paper pyrogram library there were 63 entries. The difference between the number of entries in the two neat ink standard libraries was due to the fact that Canon 348, which had a pyroprobe start time of 21.6 minutes, was peak position corrected using both methods. As there was no significant difference between the two methods, both were included in the 21.4 minute neat ink standard library. In addition,

prior to their incorporation into the library, each neat ink sample was normalized. It was recommend for the Spectral ID program to normalize the data prior to inclusion into a library and prior to search against the library, so all 73 neat ink standard pyrograms and 63 blank paper sample pyrograms used to create the libraries and all 526 dissertation ink on paper sample pyrograms were normalized prior to their use in the Spectral ID software program.

The libraries were tested initially with the 155 ink on paper sample pyrograms of the thirty-five different ink cartridge types. During the data collection some of the sample replicates had flow issues resulting in poor pyrograms. These pyrograms were listed as bad during the sample collection and they would not be counted as part of the library results. Consequently, 144 ink on paper sample pyrograms were tested against the different search libraries.

The first library the ink on paper sample pyrograms were searched against was the blank paper pyrogram library. The blank paper sample pyrograms were subtracted from the ink on paper sample pyrograms in order for the ink sample peaks to be identified. As each ink on paper sample pyrogram was searched against the blank paper pyrogram library in the Spectral ID program, the best paper match and the quality of the match was noted. In the Spectral ID program, the closer the match quality was to zero the better the mach and the closer the match quality was to one the poorer the match. The match quality of the 144 ink on paper sample pyrograms ranged from 0.81375 to 0.0208179. The best matched blank paper sample pyrogram was subtracted from the ink on paper sample pyrogram and the resulting paper subtracted ink on paper sample pyrogram was tested against its respective neat ink standard library. The ink on paper sample

pyrograms that had a pyroprobe start time of 21.4 minutes were searched against the neat ink 21.4 minute standard library and the ink on paper sample pyrograms that had a pyroprobe start time of 21.6 minutes were searched against the neat ink 21.6 minute standard library. Refer to Table 25 for the blank paper sample pyrogram matches and match quality of these matches for the 144 ink on paper sample pyrograms.

Table 25: Paper Match and Match Quality for the 144 Ink on Paper Sample Pyrograms Searched Against the Spectral ID Blank Paper Standard ATR Library.

	Sample					
	Okidata 04	**Xerox 13**	**Kodak 17**	**Kodak 22**	**Xerox 24**	**Epson 30**
Run1	Paper1 Run4 0.224866	Paper1 Run15 0.0852267	Paper3 Run8 0.097424	Paper2 Run8 0.81375	Paper3 Run1 0.191442	Paper1 Run3 0.210508
Run2	Paper1 Run8 0.08812	Paper2 Run4 0.0716415	Paper3 Run2 0.0781438	Paper1 Run19 0.08889	Paper1 Run23 0.036391	Paper1 Run8 0.139082
Run3	Paper2 Run4 0.0602372	Paper2 Run1 0.804519	Paper2 Run6 0.0658353	Paper3 Run13 0.0668555	Paper1 Run20 0.0442237	Paper2 Run1 0.110241
Run4	Paper3 Run6 0.190658	Paper3 Run6 0.880901	Paper3 Run10 0.163761	Paper1 Run32 0.233411	Paper2 Run1 0.349103	Paper1 Run2 0.056603
Run5	Paper2 Run1 0.0890895	Paper3 Run8 0.0286921	Paper3Run8 0.0252443	Paper1 Run13 0.212623	---	Paper3 Run13 0.0657476
Run6	Paper3 Run10 0.139667	Paper3 Run10 0.0607892	Paper2 Run2 0.178263	Paper2 Run4 0.117614	---	Paper1 Run30 0.106146
Run7	Paper1 Run29 0.114856	Paper3 Run14 0.0516571	Paper1 Run29 0.139363	---	---	Paper3 Run14 0.119139
Run8	Paper3 Run15 0.0936184	Paper2 Run15 0.11902	Paper3 Run14 0.0441134	---	---	Paper3 Run4 0.130953

	Sample Run had problems.		Pyroprobe start time at 21.6X minutes
	Pyroprobe start time at 21.4X minutes	---	No sample run

Table 25: Paper Match and Match Quality for the 144 Ink on Paper Sample Pyrograms Searched Against the Spectral ID Blank Paper Standard ATR Library cont.

	Sample					
	Epson 33	**Epson 60**	**Epson 63**	**Epson 66**	**Epson 84**	**Epson 90**
Run1	Paper2 Run1 0.122309	Paper2 Run1 0.0994429	Paper1 Run27 0.861218	Paper1 Run4 0.102178	Paper1 Run21 0.276813	Paper3 Run7 0.768512
Run2	Paper1 Run4 0.217519	Paper3 Run13 0.0608127	Paper1 Run15 0.107597	Paper2 Run4 0.180313	Paper1 Run12 0.158094	Paper1 Run16 0.195209
Run3	Paper1 Run15 0.267615	Paper1 Run23 0.058349	Paper1 Run15 0.0707796	Paper1 Run23 0.0508975	Paper3 Run6 0.110356	Paper1 Run21 0.248768
Run4	Paper1 Run12 0.0440478	Paper3 Run13 0.131193	Paper3 Run6 0.167037	Paper2 Run1 0.202477	Paper1 Run27 0.110162	Paper3 Run13 0.14915
Run5	Paper3 Run6 0.0551784	---	Paper2 Run1 0.13663	Paper2 Run1 0.178777	---	---
Run6	Paper1 Run15 0.0984928	---	Paper1 Run27 0.121463	---	---	---

	Sample					
	Epson 93	**Epson 120**	**Epson 123**	**Epson 156**	**HP 198**	**HP 199**
Run1	Paper1 Run23 0.120785	Paper1 Run8 0.148038	Paper1 Run16 0.143842	Paper1 Run13 0.326242	Paper3 Run8 0.0575522	Paper1 Run13 0.115388
Run2	Paper1 Run16 0.0611286	Paper3 Run6 0.150106	Paper1 Run16 0.0407348	Paper1 Run15 0.330052	Paper2 Run1 0.0652438	Paper2 Run1 0.106335
Run3	Paper2 Run1 0.155845	Paper1 Run16 0.0429672	Paper1 Run14 0.0838624	Paper3 Run2 0.368028	Paper1 Run21 0.0728623	Paper1 Run12 0.0609657
Run4	Paper2 Run9 0.187385	Paper1 Run30 0.126868	Paper3 Run10 0.121121	Paper3 Run10 0.278094	Paper1 Run21 0.0772054	Paper2 Run13 0.0696229
Run5	---	---	---	---	Paper2 Run14 0.0440786	---
Run6	---	---	---	---	Paper2 Run14 0.0658712	---

	Sample Run had problems.		Pyroprobe start time at 21.6X minutes
	Pyroprobe start time at 21.4X minutes	---	No sample run

Table 25: Paper Match and Match Quality for the 144 Ink on Paper Sample Pyrograms Searched Against the Spectral ID Blank Paper Standard ATR Library cont.

	Sample					
	HP 200	**HP 201**	**HP 205**	**Canon 217**	**Canon 223**	**Xerox 244**
Run1	Paper1 Run13 0.106806	Paper1 Run13 0.164435	Paper1 Run21 0.291661	Paper1 Run21 0.28123	Paper3 Run8 0.161359	Paper1 Run19 0.0713804
Run2	Paper1 Run27 0.11375	Paper1 Run23 0.107657	Paper1 Run23 0.223568	Paper2 Run4 0.251506	Paper1 Run15 0.0440568	Paper1 Run21 0.137695
Run3	Paper1 Run13 0.0478809	Paper2 Run8 0.0755254	Paper2 Run1 0.810189	Paper3 Run6 0.128603	Paper1 Run23 0.0706076	Paper1 Run27 0.0208179
Run4	Paper3 Run2 0.0957663	Paper2 Run13 0.122154	Paper2 Run1 0.751316	Paper1 Run29 0.271718	---	---
Run5	---	---	Paper3 Run6 0.216248	Paper1 Run33 0.259367	---	---

	Sample					
	Canon 282	**Canon 306**	**Canon 312**	**Canon 318**	**Canon 318a**	**Canon 327**
Run1	Paper1 Run8 0.129474	Paper1 Run13 0.0443104	Paper1 Run2 0.0501202	Paper1 Run2 0.0516128	Paper1 Run7 0.0492127	Paper1 Run13 0.0525781
Run2	Paper1 Run21 0.0872708	Paper3 Run6 0.294725	Paper3 Run6 0.11359	Paper1 Run12 0.0516163	Paper3 Run6 0.162749	Paper1 Run31 0.106055
Run3	Paper3 Run6 0.166601	Paper1 Run17 0.109874	Paper1 Run11 0.0853137	Paper2 Run9 0.0678572	Paper1 Run22 0.0511408	Paper2 Run13 0.0409397
Run4	---	Paper3 Run13 0.0640762	---	---	---	---

	Sample				
	Canon 348	**Canon 384**	**Canon 402**	**Canon 492**	**Canon 522**
Run1	Paper1 Run9 0.0728158	Paper2 Run6 0.0436878	Paper2 Run13 0.0480973	Paper1 Run7 0.0747987	Paper1 Run15 0.114789
Run2	Paper3 Run5 0.0790361	Paper1 Run20 0.0346727	Paper2 Run13 0.0267139	Paper3 Run2 0.0780469	Paper3 Run6 0.0461966
Run3	Paper2 Run7 0.0526319	Paper1 Run17 0.0407117	Paper1 Run22 0.0802875	Paper3 Run11 0.0621342	Paper1 Run13 0.0723876

	Sample Run had problems.		Pyroprobe start time at 21.6X minutes
	Pyroprobe start time at 21.4X minutes	---	No sample run

After the paper pyrogram that ranked number one on the match list was subtracted from the ink on paper sample pyrogram, the resulting paper subtracted ink on paper sample pyrogram was searched against the appropriate neat ink standard pyrogram library, either the 21.4 minute or the 21.6 minute neat ink standard library. The search process was programmed to operate in the correlation mode with the top 20 matches listed. The correlation mode was the default mode in the Spectral ID program, and the one recommended when searching an unknown sample against a standard library. As discussed previously in the pyrolysis GC-MS results section, some of the ink cartridges had pyrograms that could not be distinguished from one another, so these ink samples were grouped together, and which were then referred to as a manufacturer group. Thus, in examining the results of the library searches, a match to any neat ink standard member of the manufacturer group was counted as a positive result for the ink cartridge being studied. The groupings of the ink cartridges with respect to their pyrograms were listed in Table 26.

Table 26: Grouping of the Ink Cartridges with Indistinguishable Pyrograms

Manufacturer	Sample
Epson	33, 60, 63, 66, 90, 93, 120 and 123
Epson	30
Epson	84
Epson	156
Canon	223, 348 and 384
Canon	217 and 522
Canon	327 and 402
Canon	312 and 492
Canon	282
Canon	318
Canon	318a
Canon	306
Xerox	13, 24 and 244
Kodak	17
Kodak	22
Okidata	04
Hewlett Packard	198, 199, 200 and 201
Hewlett Packard	205

The top library match was noted for each of the 144 ink on paper sample pyrograms tested, along with the correct match, if present and if not the top match. If the correct match was not the top match, then in addition to the top match and the correct match, if present, the manufacturer group match, if applicable, was also noted. The manufacturer group matches listed were restricted to those match listings between the top match and the correct match. If the correct match was not listed, then the top manufacturer group match listed in the library search results was noted. Refer to Table 27 for the match results for the 144 ink on paper sample pyrograms using the appropriate neat ink standard library in the GRAMS Spectral ID program. The complete match list for these 144 ink on paper sample pyrograms using the appropriate neat ink standard library in the GRAMS Spectral ID program can be found in Appendix J.

Table 27: Spectral ID Neat Ink Standard Pyrogram Library Match Results for the 144 Ink on Paper Sample Pyrograms

	Sample					
	Okidata 04	**Xerox 13**	**Kodak 17**	**Kodak 22**	**Xerox 24**	**Epson 30**
Run1	HP201R1 (0.966507) Oki04R1 (#8) (0.994238)	Ep156R1 (0.996458) Xer244R1 (#18) (0.999307) Xer13R1 (#20) (0.999463)	Kod22R1 (0.974518) Kod17R1 (#14) (0.999061)	Can402R1 (0.945734) Kod22R1 (#10) (0.99345)	Can282R1 (0.992324) Xer24R1 (#9) (0.998768)	HP201R1 (0.990391) Ep30R1 (#5) (0.994549)
Run2	Can282R1 (0.980656) No Oki04 match	Can282R1 (0.984117) Xer244R1 (#7) (0.995529) Xer13R1 (#10) (0.996534)	Kod22R1 (0.996264) Kod17R1 (#17) (0.999658)	Kod22R1 (0.99337)	Kod22R1 (0.984439) Xer13R1 (#16) (0.999053) Xer24R1 (#17) (0.999162)	Ep30R1 (0.973428)
Run3	Can282R1 (0.959877) Oki04R1 (#3) (0.976369)	Can402R1 (0.927549) No Xer13 match	Kod22R1 (0.994303) No Kod17 match	Kod22R1 (0.983704)	Kod22R1 (0.975675) Xer13R1 (#6) (0.99803) Xer24R2 (#7) (0.998329)	Kod22R1 (0.952565) Ep30R1 (#2) (0.962364)
Run4	Kod22R1 (0.973331) Oki04R1 (#19) (0.995578)	Can402R1 (0.964017) Xer244R1 (#11) (0.995783) No Xer13 match	Kod22R1 (0.833273) Kod17R1 (#17) (0.995921)	Kod22R1 (0.710089)	Kod22R1 (0.875106) Xer13R1 (#11) (0.991619) No Xer24 match	Kod22R1 (0.849705) Ep30R1 (#2) (0.951197)
Run5	Kod22R1 (0.851016) Oki04R1 (#13) (0.983754)	Ep156R1 (0.984513) Xer244R1 (#8) (0.997905) No Xer13 match	Can402R1 (0.993096) No Kod17 match	Kod22R1 (0.812398)	---	Kod22R1 (0.942452) Ep30R1 (#13) (0.988098)
Run6	Kod22R1 (0.983053) Oki04R1 (#10) (0.995364)	Can282R1 (0.971406) Xer13R1 (#3) (0.979415)	Kod22R1 (0.849116) Kod17R1 (#20) (0.996373)	Kod22R1 (0.787516)	---	Kod22R1 (0.956872) Ep30R1 (#6) (0.992405)
Run7	Ep30R1 (0.972158) Oki04R1 (#10) (0.998251)	Ep156R1 (0.965067) Xer13R1 (#3) (0.97873)	Ep84R1 (0.988066) Kod17R1 (#4) (0.996875)	---	---	Can282R1 (0.950074) Ep30R1 (#3) (0.969132)
Run8	Kod22R1 (0.831061) Oki04R1 (#7) (0.974763)	Kod22R1 (0.984714) Xer244R1 (#3) (0.997115) No Xer13 match	Kod22R1 (0.981327) Kod17R1 (#5) (0.993472)	---	---	Kod22R1 (0.911544) Ep30R1 (#2) (0.955426)

	Sample Run had problems.		Pyroprobe start time at 21.6X minutes
	Pyroprobe start time at 21.4X minutes	---	No sample run

Table 27: Spectral ID Neat Ink Standard Pyrogram Library Match Results for the 144 Ink on Paper Sample Pyrograms cont.

	Sample					
	Epson 33	**Epson 60**	**Epson 63**	**Epson 66**	**Epson 84**	**Epson 90**
Run1	Can282R1 (0.977298) Ep123R1 (#2) (0.978992) Ep33R1 (#10) (0.992743)	Kod22R1 (0.960453) Ep123R1 (#2) (0.970754) Ep60R1 (#4) (0.977306)	Can402R1 (0.974304) Ep63R3 (#5) (0.991584)	Kod22R1 (0.974061) Ep123R1 (#11) (0.998614) No Ep66 match	HP205R1 (0.9824) Ep84R1 (#2) (0.995281)	Ep30R1 (0.978353) Ep123R1 (#11) (0.997744) Ep90R1 (#16) (0.998532)
Run2	Kod22R1 (0.971678) Ep123R1 (#14) (0.999238) No Ep33 match	Kod22R1 (0.926566) Ep123R1 (#2) (0.962692) Ep60R1 (#5) (0.967067)	Ep123R1 (0.978973) Ep63R3 (#5) (0.984629)	Ep123R1 (0.981331) Ep66R1 (#9) (0.991404)	Kod22R1 (0.988742) Ep84R1 (#17) (0.998902)	Ep123R1 (0.979154) Ep90R1 (#5) (0.986499)
Run3	Can282R1 (0.972299) Ep123R1 (#3) (0.983885) Ep33R1 (#11) (0.992705)	Kod22R1 (0.967133) Ep93R1 (#3) (0.977047) Ep60R1 (#6) (0.981641)	Kod22R1 (0.927654) Ep93R1 (#2) (0.96847) Ep63R3 (#5) (0.972578)	Ep123R1 (0.971588) Ep66R1 (#11) (0.991111)	Kod22R1 (0.978438) No Ep84 match	Kod22R1 (0.966148) Ep66R1 (#3) (0.989148) Ep90R1 (#7) (0.993402)
Run4	Can282R1 (0.961607) Ep66R1 (#2) (0.97005) Ep33R1 (#6) (0.985243)	Kod22R1 (0.831397) Ep90R1 (#3) (0.974428) Ep60R1 (#10) (0.98122)	Kod22R1 (0.916073) Ep66R1 (#2) (0.977363) Ep63R3 (#7) (0.985932)	Kod22R1 (0.970217) Ep123R1 (#3) (0.985328) Ep66R1 (#8) (0.990486)	Kod22R1 (0.945337) Ep84R1 (#4) (0.985768)	Kod22R1 (0.934903) Ep33R1 (#2) (0.97371) Ep90R1 (#3) (0.974548)
Run5	Kod22R1 (0.893429) Ep66R1 (#2) (0.966277) Ep33R1 (#7) (0.978286)	---	Kod22R1 (0.925518) Ep63R3 (#3) (0.983456)	Kod22R1 (0.863432) Ep90R1 (#4) (0.981106) Ep66R1 (#10) (0.98667)	---	---
Run6	Kod22R1 (0.919152) Ep90R1 (#2) (0.976439) Ep33R1 (#3) (0.977215)	---	Can282R1 (0.981227) Ep123R1 (#4) (0.988878) Ep63R3 (#7) (0.990148)	---	---	---

	Sample Run had problems.		Pyroprobe start time at 21.6X minutes
	Pyroprobe start time at 21.4X minutes	---	No sample run

Table 27: Spectral ID Neat Ink Standard Pyrogram Library Match Results for the 144 Ink on Paper Sample Pyrograms cont.

	Sample					
	Epson 93	**Epson 120**	**Epson 123**	**Epson 156**	**HP 198**	**HP 199**
Run1	Ep123R1 (0.97684) Ep93R1 (#2) (0.978795)	Ep123R1 (0.984191) Ep120R1 (#17) (0.99826)	Ep123R1 (0.979437)	Ep156R1 (0.984459)	HP198R1 (0.98597)	HP198R1 (0.98385) HP199R1 (#8) (0.996382)
Run2	Can318R1 (0.94042) Ep60R1 (#2) (0.946361) Ep93R1 (#3) (0.947148)	Xer244R1 (0.982684) Ep66R1 (#2) (0.986275) Ep120R1 (#7) (0.992264)	Ep60R1 (0.969561) Ep123R1 (#3) (0.970925)	Ep156R1 (0.986799)	Kod22R1 (0.974722) HP198R1 (#2) (0.985356)	HP198R1 (0.974031) HP199R1 (#12) (0.993823)
Run3	Kod22R1 (0.886996) Ep66R1 (#3) (0.979502) Ep93R1 (#5) (0.982242)	Kod22R1 (0.891298) Ep90R1 (#2) (0.95262) Ep120R1 (#8) (0.962906)	Kod22R1 (0.85841) Ep66R1 (#2) (0.976779) Ep123R1 (#9) (0.981628)	Ep156R1 (0.980941)	Can282R1 (0.970083) HP200R1 (#4) (0.983127) HP198R1 (#7) (0.987016)	HP200R1 (0.953061) HP199R1 (#9) (0.977496)
Run4	Kod22R1 (0.937334) Ep66R1 (#2) (0.983077) Ep93R1 (#4) (0.984502)	Kod22R1 (0.825375) Ep123R1 (#3) (0.964692) Ep120R1 (#12) (0.98307)	Kod22R1 (0.824548) Ep123R1 (#3) (0.972652)	Kod22R1 (0.903273) Ep156R1 (#2) (0.940603)	HP200R1 (0.962948) HP198R1 (#4) (0.982713)	HP200R1 (0.884852) HP199R1 (#3) (0.961768)
Run5	---	---	---	---	Xer13R1 (0.917207) HP201R1 (#2) (0.943437) HP198R1 (#5) (0.955523)	---
Run6	---	---	---	---	Xer13R1 (0.922934) HP201R1 (#3) (0.954287) HP198R1 (#5) (0.964602)	---

	Sample Run had problems.		Pyroprobe start time at 21.6X minutes
	Pyroprobe start time at 21.4X minutes	---	No sample run

Table 27: Spectral ID Neat Ink Standard Pyrogram Library Match Results for the 144 Ink on Paper Sample Pyrograms cont.

	Sample					
	HP 200	**HP 201**	**HP 205**	**Canon 217**	**Canon 223**	**Xerox 244**
Run1	HP198R1 (0.97721) HP200R1 (#2) (0.978627)	HP200R1 (0.941092) HP201R1 (#4) (0.970639)	Ep33R1 (0.986419) HP205R1 (#3) (0.987299)	Ep84R1 (0.967346) Can522R1 (#8) (0.996973) Can217R1 (#15) (0.998159)	Ep123R1 (0.991249) Can223R1 (#14) (0.998369)	Can282R1 (0.990396) Xer13R1 (#5) (0.997728) No Xer244 match
Run2	Xer244R1 (0.983484) HP198R1 (#2) (0.986374) HP200R1 (#3) (0.987295)	HP200R1 (0.908774) HP201R1 (#3) (0.951834)	Ep60R1 (0.988631) HP205R1 (#11) (0.994414)	Kod22R1 (0.973325) No Can217 match	Kod22R1 (0.861037) Can223R1 (#18) (0.99806)	Kod22R1 (0.980884) Xer244R1 (#2) (0.988659)
Run3	Xer13R1 (0.973188) HP200R1 (#3) (0.989215)	Kod22R1 (0.901919) HP200R1 (#2) (0.908252) HP201R1 (#3) (0.918365)	Can402R1 (0.943853) HP205R1 (#3) (0.970684)	Kod22R1 (0.943609) No Can217 match	Ep30R1 (0.959722) Can348R1 (#5) (0.989396)	Can318aR1 (0.983046) Xer244R1 (#17) (0.998217)
Run4	Xer13R1 (0.947752) HP201R1 (#5) (0.988339) HP200R1 (#9) (0.994187)	HP200R1 (0.813642) HP201R1 (#2) (0.849528)	Can402R1 (0.925846) HP205R1 (#3) (0.958126)	Can318R1 (0.977107) Can217R1 (#12) (0.9935)	---	---
Run5	---	---	Ep66R1 (0.987216) Hp205R1 (#16) (0.99766)	Kod22R1 (0.942824) No Can217 match	---	---

	Sample Run had problems.		Pyroprobe start time at 21.6X minutes
	Pyroprobe start time at 21.4X minutes	---	No sample run

Table 27: Spectral ID Neat Ink Standard Pyrogram Library Match Results for the 144 Ink on Paper Sample Pyrograms cont.

	Sample					
	Canon 282	**Canon 306**	**Canon 312**	**Canon 318**	**Canon 318a**	**Canon 327**
Run1	Kod22R1 (0.985371) Can282R1 (#2) (0.989472)	Can312R1 (0.972545) No Can306 match	Ep30R1 (0.952123) Can312R1 (#5) (0.986569)	Kod22R1 (0.887326) Can318R1 (#3) (0.951893)	Can282R1 (0.961004) Can318aR1 (#13) (0.993454)	Ep156R1 (0.979009) Can402R1 (#8) (0.997408) Can327R1 (#11) (0.999112)
Run2	Kod22R1 (0.980982) Can282R1 (#2) (0.982879)	Kod22R1 (0.975957) Can306R1 (#15) (0.998571)	Xer244R1 (0.992643) No Can312 match	Kod22R1 (0.983624) Can318R1 (#13) (0.997818)	Kod22R1 (0.954007) Can318aR1 (#10) (0.991766)	Kod22R1 (0.950536) No Can327 match
Run3	Kod22R1 (0.966346) Can282R1 (#10) (0.995179)	Kod22R1 (0.85455) Can306R1 (#17) (0.995717)	Kod22R1 (0.91793) No Can312 match	Can318aR1 (0.976427) Can318R1 (#9) (0.997635)	Can282R1 (0.943518) Can318aR1 (#8) (0.978739)	Kod22R1 (0.967584) No Can327 match
Run4	---	Kod22R1 (0.947855) Can306R1 (#10) (0.996138)	---	---	---	---

	Sample				
	Canon 348	**Canon 384**	**Canon 402**	**Canon 492**	**Canon 522**
Run1	Kod22R1 (0.98265) Can348R1 (#4) (0.995424)	Can282R1 (0.966881) Can348R1 (#4) (0.983931) Can384R1 (#13) (0.99063)	Kod22R1 (0.941681) No Can402 match	Can318R1 (0.971567) Can312R1 (#2) (0.977414) Can492R1 (#3) (0.983459)	Can318R1 (0.969545) Can217R1 (#3) (0.983722) Can522R1 (#17) (0.992762)
Run2	Ep66R1 (0.988473) Can348R1 (#5) (0.99407)	Can282R1 (0.976465) Can384R1 (#19) (0.995465)	Can282R1 (0.972465) No Can402 match	Kod22R1 (0.974574) CAn492R1 (#7) (0.996195)	Kod22R1 (0.913492) Can217R1 (#17) (0.992031) No Can522 match
Run3	Kod22R1 (0.943266) No Can348 match	Ep30R1 (0.979656) Can223R1 (#15) (0.999148) No Can384 match	Kod22R1 (0.961668) No Can402 match	Kod22R1 (0.951889) Can492R1 (#2) (0.973439)	Kod22R1 (0.890577) No Can522 match

	Sample Run had problems.		Pyroprobe start time at 21.6X minutes
	Pyroprobe start time at 21.4X minutes	---	No sample run

During the subtraction step, the D-Allose peak was not always completely eliminated in the resulting paper subtracted ink on paper sample pyrogram and consequently the pyrogram could be left with a residual D-Allose peak that could be quite significant. The residual D-Allose peak tended to cause the library to match the ink on paper sample pyrogram to the Kodak 22 neat ink standard, even when the ink on paper sample was not a Kodak 22 ink sample. One method used to reduce the effect of the residual D-Allose peak was to create a D-Allose mask within the "spectral preprocessing" option of the Spectral ID software. The D-Allose mask was created for the time period of 13.2 minutes to 13.8 minutes, and when the mask was in place the library would ignore this region during the search process. The D-Allose mask was created and installed and the 144 ink on paper sample pyrograms were then researched against their respective neat ink standard pyrogram library. The top library match was noted for each of the 144 ink on paper sample pyrograms tested, along with the correct match, if present and if not the top match. If the correct match was not the top match, then in addition to the top match and the correct match, if present, the manufacturer group match, if applicable, was also noted. The manufacturer group matches listed were restricted to those match listings between the top match and the correct match. If the correct match was not listed, then the top manufacturer group match listed in the library results was noted. Refer to Table 28 for the match results of the 144 ink on paper sample pyrograms using the neat ink standard library with the D-Allose mask in place for the GRAMS Spectral ID program. The complete match list for the 144 ink on paper sample pyrograms using the neat ink standard library with the D-Allose mask in place for the GRAMS Spectral ID program can be found in Appendix J.

Table 28: Spectral ID Neat Ink Standard Pyrogram Library Match with the D-Allose Mask in Place Results for the 144 Ink on Paper Sample Pyrograms

	Sample					
	Okidata 04	**Xerox 13**	**Kodak 17**	**Kodak 22**	**Xerox 24**	**Epson 30**
Run1	HP205R1 (0.964235) Oki04R1 (#8) (0.994064)	Ep156R1 (0.996653) Xer244R1 (#17) (0.999282) No Xer13 match	Can312R1 (0.993948) Kod17R1 (#9) (0.998223)	Kod22R1 (0.931811)	Can282R1 (0.991982) Xer24R1 (#4) (0.9983)	HP201R1 (0.990167) Ep30R1 (#7) (0.995917)
Run2	Can282R1 (0.980628) No Oki04 match	Can282R1 (0.98129) Xer244R1 (#9) (0.997001) Xer13R1 (#19) (0.998294)	Can318aR1 (0.991859) Kod17R1 (#20) (0.998832)	Kod22R1 (0.985039)	Can312R1 (0.988378) Xer13R1 (#10) (0.998262) Xer24R1 (#16) (0.998858)	Ep30R1 (0.975584)
Run3	Can282R1 (0.955226) Oki04R1 (#3) (0.073043)	Kod22R1 (0.906973) No Xer13 match	Can282R1 (0.983351) Kod17R1 (#16) (0.996262)	Can282R1 (0.987154) Kod22R1 (#5) (0.992635)	Can318R1 (0.978632) Xer13R1 (#3) (0.992065) Xer24R2 (#14) (0.994275)	Ep30R1 (0.967372)
Run4	Xer244R1 (0.967741) Oki04R1 (#20) (0.995156)	Kod22R1 (0.947596) Xer244R1 (#11) (0.995945) No Xer13 match	Can282R1 (0.941152) No Kod17 match	Can282R1 (0.933603) Kod22R1 (#2) (0.949583)	Kod22R1 (0.905789) Xer13R1 (#10) (0.992022) No Xer24 match	Ep30R1 (0.953999)
Run5	Ep30R1 (0.942137) Oki04R1 (#10) (0.978027)	Ep156R1 (0.982874) Xer244R1 (#10) (0.997311) No Xer13 match	Ep30R1 (0.978223) Kod17R1 (#6) (0.994975)	Ep30R1 (0.973242) Kod17R1 (#7) (0.996125)	---	Ep33R1 (0.968597) Ep30R1 (#16) (0.992205)
Run6	Ep156R1 (0.974435) Oki04R1 (#5) (0.987085)	CAn282R1 (0.971578) Xer13R1 (#3) (0.978706)	Ep30R1 (0.957844) No Kod17 match	Can282R1 (0.955142) Kod22R1 (#2) (0.968052)	---	Can282R1 (0.969853) Ep30R1 (#13) (0.988119)
Run7	Ep30R1 (0.969169) Oki04R1 (#16) (0.998108)	Ep156R1 (0.963696) Xer13R1 (#3) (0.977096)	Ep30R1 (0.973634) Kod17R1 (#10) (0.997673)	---	---	Can282R1 (0.938781) Ep30R1 (#3) (0.97049)
Run8	Xer13R1 (0.961327) Oki04R1 (#4) (0.970177)	Can282R1 (0.99544) Xer244R1 (#2) (0.995716) Xer13R1 (#5) (0.998905)	Can282R1 (0.991184) Kod17R1 (#8) (0.998632)	---	---	Ep30R1 (0.96353)

	Sample Run had problems.		Pyroprobe start time at 21.6X minutes
	Pyroprobe start time at 21.4X minutes	---	No sample run

Table 28: Spectral ID Neat Ink Standard Pyrogram Library Match with the D-Allose Mask in Place Results for the 144 Ink on Paper Sample Pyrograms cont.

	Sample					
	Epson 33	**Epson 60**	**Epson 63**	**Epson 66**	**Epson 84**	**Epson 90**
Run1	Can282R1 (0.977329) Ep123R1 (#2) (0.979382) Ep33R1 (#10) (0.992809)	Ep123R1 (0.973063) Ep60R1 (#3) (0.978927)	Kod22R1 (0.949264) Ep63R3 (#6) (0.991456)	Xer24R2 (0.993134) Ep123R1 (#13) (0.998622) No Ep66 match	HP205R1 (0.979574) Ep84R1 (#3) (0.994251)	Ep30R1 (0.981851) Ep63R3 (#13) (0.998683) No Ep90 match
Run2	HP201R1 (0.978288) Ep123R1 (#18) (0.999745) No Ep33 match	Can282R1 (0.958138) Ep123R1 (#2) (0.958265) Ep60R1 (#4) (0.962549)	Ep93R1 (0.978744) Ep63R3 (#4) (0.984605)	Ep123R1 (0.981328) Ep66R1 (#13) (0.993443)	Kod22R1 (0.978634) Ep84R1 (#18) (0.998304)	Ep123R1 (0.980725) Ep90R1 (#5) (0.988297)
Run3	Can282R1 (0.971791) Ep123R1 (#3) (0.983969) Ep33R1 (#9) (0.992407)	Ep30R1 (0.973168) Ep93R1 (#2) (0.978773) Ep60R1 (#5) (0.983232)	Ep93R1 (0.963462) Ep63R3 (#4) (0.968536)	Ep123R1 (0.971208) Ep66R1 (#14) (0.992072)	Kod22R1 (0.964306) No Ep84 match	Kod22R1 (0.974304) Ep66R1 (#4) (0.989717) Ep90R1 (#10) (0.994043)
Run4	Can282R1 (0.958644) Ep66R2 (#2) (0.968074) Ep33R1 (#6) (0.983114)	Can282R1 (0.967446) Ep123R1 (#3) (0.971218) Ep60R1 (#8) (0.978936)	Kod22R1 (0.960828) Ep66R1 (#3) (0.970456) Ep63R3 (#9) (0.98246)	Kod22R1 (0.945932) Ep123R1 (#2) (0.986643) Ep66R1 (#8) (0.991596)	Ep156R1 (0.977937) Ep84R1 (#4) (0.992751)	Ep123R1 (0.976851) Ep90R1 (#3) (0.978405)
Run5	Ep66R1 (0.954673) Ep33R1 (#6) (0.970895)	---	Kod22R1 (0.959438) Ep63R3 (#2) (0.985691)	Kod22R1 (0.967886) Ep90R1 (#4) (0.983407) Ep66R1 (#12) (0.99075)	---	---
Run6	Can282R1 (0.978425) Ep33R1 (#3) (0.979605)	---	Can282R1 (0.978009) Ep123R1 (#3) (0.987128) Ep63R3 (#6) (0.989786)	---	---	---

	Sample Run had problems.		Pyroprobe start time at 21.6X minutes
	Pyroprobe start time at 21.4X minutes	---	No sample run

Table 28: Spectral ID Neat Ink Standard Pyrogram Library Match with the D-Allose Mask in Place Results for the 144 Ink on Paper Sample Pyrograms cont.

	Sample					
	Epson 93	**Epson 120**	**Epson 123**	**Epson 156**	**HP 198**	**HP 199**
Run1	Ep123R1 (0.979181) Ep93R1 (#2) (0.981067)	Ep123R1 (0.98201) EP120R1 (#16) (0.997898)	Ep123R1 (0.977455)	Ep156R1 (0.98394)	HP198R1 (0.982681)	HP198R1 (0.981697) HP199R1 (#9) (0.996144)
Run2	Can318R1 (0.936561) Ep60R1 (#2) (0.946915) Ep93R1 (#3) (0.947838)	Kod22R1 (0.96458) Ep66R1 (#4) (0.982743) Ep120R1 (#8) (0.989595)	Ep60R1 (0.967344) Ep123R1 (#3) (0.968712)	Ep156R1 (0.986467)	HP198R1 (0.98598)	HP198R1 (0.974983) HP199R1 (#11) (0.9944116)
Run3	Kod22R1 (0.960605) Ep63R3 (#2) (0.981841) Ep93R1 (#5) (0.98327)	Ep93R1 (0.943148) Ep120R1 (#7) (0.953324)	Can282R1 (0.952955) Ep66R1 (#3) (0.961766) Ep123R1 (#7) (0.971044)	Ep156R1 (0.976746)	Can282R1 (0.957486) HP200R1 (#3) (0.973602) HP198R1 (#7) (0.981975)	HP200R1 (0.943667) HP199R1 (#8) (0.973313)
Run4	Kod22R1 (0.967016) Ep66R1 (#2) (0.985979) Ep93R1 (#4) (0.986677)	Ep123R1 (0.935002) Ep120R1 (#11) (0.970902)	Kod22R1 (0.960093) Ep123R1 (#2) (0.966694)	Ep156R1 (0.910139)	HP200R1 (0.958923) HP198R1 (#4) (0.979069)	HP200R! (0.884507) HP199R1 (#3) (0.961533)
Run5	---	---	---	---	Xer13R1 (0.919045) HP201R1 (#2) (0.94409) HP198R1 (#5) (0.955844)	---
Run6	---	---	---	---	Xer13R1 (0.921044) HP201R1 (#2) (0.953676) HP198R1 (#5) (0.963841)	---

	Sample Run had problems.		Pyroprobe start time at 21.6X minutes
	Pyroprobe start time at 21.4X minutes	---	No sample run

Table 28: Spectral ID Neat Ink Standard Pyrogram Library Match with the D-Allose Mask in Place Results for the 144 Ink on Paper Sample Pyrograms cont.

	Sample					
	HP 200	**HP 201**	**HP 205**	**Canon 217**	**Canon 223**	**Xerox 244**
Run1	HP200R1 (0.975807)	HP200R1 (0.9342) HP201R1 (#4) (0.967035)	Ep84R1 (0.984636) HP205R1 (#3) (0.986051)	Ep84R1 (0.966109) Can522R1 (#7) (0.996977) Can217R1 (#14) (0.998165)	Ep123R1 (0.991345) Can223R1 (#14) (0.998336)	Can282R1 (0.986974) Xer13R1 (#3) (0.995973) No Xer244 match
Run2	Xer244R1 (0.981617) HP198R1 (#3) (0.986182) HP200R1 (#4) (0.986865)	HP200R1 (0.908169) HP201R1 (#3) (0.951273)	Ep60R1 (0.989308) HP205R1 (#11) (0.994294)	Ep30R1 (0.981108) No Can217 match	Kod22R1 (0.981518) Can223R1 (#15) (0.996977)	Kod22R1 (0.962092) Xer244R1 (#2) (0.975576)
Run3	Xer13R1 (0.953764) HP200R1 (#2) (0.982275)	HP200R1 (0.886808) HP201R1 (#2) (0.902485)	Kod22R1 (0.934207) HP205R1 (#4) (0.970832)	Ep66R1 (0.989516) Can217R1 (#20) (0.998578)	Ep30R1 (0.960332) Can348R1 (#5) (0.989205)	Ep84R1 (0.985277) Xer13R1 (#9) (0.99705) Xer244R1 (#17) (0.998529)
Run4	Xer13R1 (0.931956) HP201R1 (#4) (0.985505) HP200R1 (#7) (0.992514)	HP200R1 (0.807248) HP201R1 (#2) (0.84467)	Kod22R1 (0.923553) HP205R1 (#4) (0.958153)	Can318R1 (0.977671) Can217R1 (#12) (0.993057)	---	---
Run5	---	---	Ep66R1 (0.985171) HP205R1 (#15) (0.996706)	Ep66R1 (0.978754) No Can217 match	---	---

	Sample Run had problems.		Pyroprobe start time at 21.6X minutes
	Pyroprobe start time at 21.4X minutes	---	No sample run

Table 28: Spectral ID Neat Ink Standard Pyrogram Library Match with the D-Allose Mask in Place Results for the 144 Ink on Paper Sample Pyrograms cont.

	Sample					
	Canon 282	**Canon 306**	**Canon 312**	**Canon 318**	**Canon 318a**	**Canon 327**
Run1	Can282R1 (0.985651)	Can312R1 (0.966521) No Can306 match	Ep30R1 (0.955356) Can312R1 (#5) (0.985537)	Can318R1 (0.941134)	Can282R1 (0.960865) Can318aR1 (#16) (0.994963)	Ep156R1 (0.977215) Can402R1 (#5) (0.997275) Can327R1 (#10) (0.999074)
Run2	Can282R1 (0.965548)	Kod22R1 (0.930632) Can306R1 (#17) (0.998709)	Xer244R1 (0.982366) No Can312 match	Ep84R1 (0.977964) Can318R1 (#20) (0.999521)	Kod22R1 (0.933067) Can318aR1 (#11) (0.99216)	Kod22R1 (0.984308) No Can327 match
Run3	Kod22R1 (0.971422) Can282R1 (#7) (0.993524)	Can282R1 (0.93748) No Can306 match	HP199R1 (0.99323) Can492R1 (#15) (0.999623) No Can312 match	Can282R1 (0.986594) Can318R1 (#4) (0.995448)	Can282R1 (0.940834) Can318aR1 (#9) (0.975457)	Can282R1 (0.972053) No Can327 match
Run4	---	Can318R1 (0.971632) No Can306 match	---	---	---	---

	Sample				
	Canon 348	**Canon 384**	**Canon 402**	**Canon 492**	**Canon 522**
Run1	Can282R1 (0.990711) Can348R1 (#2) (0.991947)	Can282R1 (0.950449) Can348R1 (#5) (0.97701) Can384R1 (#14) (0.98684)	Ep30R1 (0.887958) No Can402 match	Can318R1 (0.97096) Can312R1 (#2) (0.975721) Can492R1 (#3) (0.981222)	Can318R1 (0.960111) Can217R1 (#4) (0.979381) Can522R1 (#17) (0.990842)
Run2	Ep66R1 (0.986293) Can348R1 (#8) (0.992778)	Can282R1 (0.972444) Can384R1 (#19) (0.99523)	Can282R1 (0.957671) No Can402 match	Can282R1 (0.965426) Can492R1 (#5) (0.994045)	Ep66R1 (0.921967) Can217R1 (#15) (0.989112) Can522R1 (#19) (0.992764)
Run3	Can282R1 (0.952419) Can348R1 (#12) (0.998038)	Ep30R1 (0.984193) Can223R1 (#14) (0.999131) No Can384 match	Can282R1 (0.96423) No Can402 match	Can312R1 (0.972607) Can492R1 (#2) (0.972742)	Can384R1 (0.982573) Can217R1 (#20) (0.994456) No Can522 match

	Sample Run had problems.		Pyroprobe start time at 21.6X minutes
	Pyroprobe start time at 21.4X minutes	---	No sample run

An analysis of the results of the library searches with the Spectral ID software program can be found in the Discussion Section.

H. Blind Study

The blind study portion of this project consisted of fifteen unknown ink samples prepared by an independent third person. The preparer was given a standard set and was allowed to use any standards from the standard set or any outside ink sample to prepare the blind study unknowns. The fifteen unknowns were placed into individually labeled small coin-sized manila envelopes. The size of the paper containing the ink sample was approximately 3.5 by 8.5 cm. The unknown ink sample on the paper filled between 1/3 and ½ the size of the paper matrix. To determine the identity of the fifteen unknown ink samples in the blind study, each unknown ink sample was analyzed using the four methods previously discussed with the standard analysis.

The first step in the blind study was to do an extraction of the ink sample from the paper matrix. Three punches with a standard hole punch were removed from the stained portion of the unknown sample and placed into a clean, labeled vial. After the ink sample was placed into the vial, 0.25 ml of distilled water and 0.25 ml of ethanol were added to the vial. Of the fifteen unknown ink samples, five of unknown ink samples, namely Unknown 02, Unknown 03, Unknown 06, Unknown 07 and Unknown 13, did not extract out into the extraction solvent. The remaining ten unknown ink samples all had ink extract out into the extraction solvent using the extraction solvent of a 50:50 mixture of ethanol:distilled water. With the exception of the Unknown 09, Unknown 11 and Unknown 12 ink samples, the extractable Unknown ink samples were all medium to dark

blue-black in color. The Unknown 11 ink sample was dark purple-black in color, the Unknown 09 ink sample was light blue in color and the Unknown 12 ink sample was light to medium blue-black in color. Refer to Table 29 for the extraction results of the fifteen unknown ink samples from the blind study.

Table 29: Extraction Results for the Fifteen Unknown Ink Samples from the Blind Study

Sample #	Manufacturer	Color with EtOH:dH2O (50:50 mixture)
01	Unknown	Dark Blue-Black
02	Unknown	Clear
03	Unknown	Clear
04	Unknown	Dark Blue-Black
05	Unknown	Dark Blue-Black
06	Unknown	Clear
07	Unknown	Clear
08	Unknown	Medium Blue-Black
09	Unknown	Light Blue
10	Unknown	Medium Blue-Black
11	Unknown	Dark Purple-Black
12	Unknown	Light-Medium Blue-Black
13	Unknown	Clear
14	Unknown	Medium-Dark Blue-Black
15	Unknown	Medium-Dark Blue-Black

The fifteen extracted unknown ink samples were also examined under the compound microscope. Approximately 5 µl or one half of a microcap of the extracted sample was placed onto a clean, labeled microscope slide and then was covered with a microscope coverslip. The sample was examined immediately after being placed onto the slide to minimize any effects of the extraction solvent evaporating. The unknown ink samples dried quickly under the microscope coverslip so the initial color observed and any changes in the sample's color were noted. The unknown ink samples were examined using transmitted light on medium setting on a compound microscope using the 4X, 10X and 40X objectives. The non-extractable unknown ink samples were all clear under the microscope with no particles observed. The colors of the extractable unknown ink

samples were lighter than those observed for the neat ink samples, which was not unexpected as the unknown ink samples were diluted with ethanol and distilled water. No particles were observed in any of the unknown ink samples, except for when the extraction solvent evaporated. Once the extraction solvent dried, the residual colorants for three of the unknown ink samples appeared as residue along the edge of the coverslip. If the drying of the extraction solvent was not noted, this could lead to misinformation and possible misidentification of the sample. Refer to Table 30 for the observations of the fifteen blind study unknown ink samples as viewed under the compound microscope.

Table 30: Observations for the Fifteen Unknown Ink Samples of the Blind Study as Viewed Under the Compound Microscope.

Sample #	Manufacturer	Color Under Microscope (4X objective)	Solid Particles (Y/N) Description? (10X and 40X objective)
01	Unknown	Faint purple in color turns brown in color as it dries.	No particles. As sample dries see dark "particles" (very small) along edge of coverslip
02	Unknown	Clear	No particles
03	Unknown	Clear	No particles
04	Unknown	Medium purple in color.	No particles. As sample dries see dark "particles" (very small) along edge of coverslip
05	Unknown	Purple in color, turns light brown in color as it dries.	No particles. At 40X see small circular like substances but only when dry. Uniform distribution.
06	Unknown	Clear	No particles
07	Unknown	Clear	No particles
08	Unknown	Faint purple in color	No particles
09	Unknown	Very faint purple-gray tint	No particles
10	Unknown	Light purple in color	No particles
11	Unknown	Light pink in color	No particles
12	Unknown	Very faint purple color	No particles
13	Unknown	Clear	No particles
14	Unknown	Light purple in color	No particles
15	Unknown	Light purple in color	No particles

The fifteen unknown ink samples of the blind study were analyzed using Thin Layer Chromatography (TLC). The results were then compared to the previously

analyzed ink standards in order for their identity to be established. Two sets of the fifteen unknown ink samples were analyzed on a set of TLC plates. The TLC plates were labeled with the fifteen unknown numbers and aliquots of the extracted ink samples were spotted in their appropriately labeled location. Each unknown ink sample was spotted with approximately 10 µl of sample, or two half-filled microcaps of the sample. Though not all of the unknown ink samples required this much sample to be spotted, to keep the parameters consistent for all fifteen unknown ink samples, it was decided to treat all of the unknown ink samples in the same manner. The two sets of TLC plates were developed in a solvent system of n-butanol:ethanol:distilled water:acetic acid (470ml:235ml:235ml:59ml) or an approximate 8:4:4:1 ratio.

After removal of the TLC plates from the TLC tanks, the TLC plates were allowed to dry and then were examined under short and long wave UV light. Under the short wave UV light, all of the visible colored bands that were noticed on the TLC plates for the unknown ink samples using normal white light appeared dark. In addition, there was a dark spot located approximately 2 cm from the starting line for all of the unknown ink samples. No other noticeable results were observed under the short wave UV light for the fifteen unknown ink samples. Under the long wave UV light, for all of the unknown ink samples it was noted that there was a pale blue fluorescent spot located approximately 2 cm from the starting line, corresponding to the dark spot observed under the short wave UV light. The only unknown ink sample that showed any additional fluorescence under the long wave UV light was the Unknown 11 ink sample. For the Unknown 11 ink sample a bright orange fluorescent spot was present under the long

wave UV light that was associated with the pink spot that was visible on the TLC plate using normal white light.

For each unknown ink sample, the Rf values for all of the spots observed was calculated and entered into an Excel spreadsheet. In addition, as what was done for the standard ink samples, the various colored spots visible for the fifteen unknown ink samples were noted on the Excel spreadsheet. Part of this spreadsheet can be found at the end of this section, while the complete spreadsheet for all of the TLC results for the blind study can be found in Appendix G.

Examining the TLC plates of the unknown ink samples could help in identifying the manufacturer and/or specific cartridge type(s) within a specific manufacturer. Five unknown ink samples did not extract out from the paper and as such did not have visible spots on the TLC plates. For these five unknown ink samples, twenty-three of the thirty-five standards could be excluded as being the source of these unknown ink samples. These twenty-three ink standards were all extractable ink samples and hence could not be the source of the non-extractable unknown ink samples. Twelve of the remaining ink standards were non-extractable ink samples and hence could be the source of the non-extractable unknown ink samples. One of the twelve non-extractable ink standards, specifically the Canon 318a ink standard, could not be the source of the unknown non-extractable ink samples due to the fact that Canon 318a was a slightly yellow liquid and all of the unknown non-extractable ink samples were black in color. Thus, the Unknown 02, Unknown 03, Unknown 06, Unknown 07 and Unknown 13 ink samples could be tentatively identified as being either a Xerox 13 (8R7994), Xerox 24 (8R7660), Xerox 244 (M-Series), Epson 84 (T0321), Canon 492 (BCI-3eBk), Canon 312 (BC-23), Kodak

17 (#1369511), Hewlett Packard 198 (#29), Hewlett Packard 199 (#56), Hewlett Packard 200 (#27) or Hewlett Packard 201 (#45) ink sample. Refer to Figure 145 for the TLC results of the Unknown 02, Unknown 03, Unknown 06, Unknown 07 and Unknown 13 ink samples.

Figure 145: TLC results of the blind study Unknown 02, Unknown 03, Unknown 06, Unknown 07 and Unknown 13 ink samples.

The Unknown 01 and Unknown 05 ink samples separated out into four spots, having a color pattern of purple-yellow-purple-purple (bottom to top of the TLC plate respectively). This was the TLC color pattern exhibited by the Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples. For the Unknown 01 ink sample, there was an extremely faint purple spot present between the bottom purple spot and the yellow spot. However, this spot was not as pronounced as the other spots in this unknown ink sample and it may be an artifact of the sample migrating up the TLC plate. When the TLC results for the Unknown 01 ink sample were compared to the TLC results for the Epson 33, Epson 60 and Epson 63 ink samples, of which the latter three had five spots on their TLC plate in a color pattern of purple-purple-yellow-purple-purple (bottom to top of the TLC plate respectively), differences were observed. For the Epson 33, Epson 60 and Epson 63 ink samples, all five spots on the TLC plate were distinct, which

was not what was observed for the Unknown 01 ink sample. In some of the TLC results for the Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples, there were some faint spots present on the TLC plate that could be due to the migration of the sample up the TLC plate, which was similar to the results observed for the Unknown 01 ink sample. Additionally, at low concentrations, the Epson 33, Epson 60 and Epson 63 ink samples separated out into only four spots with a color pattern of purple-yellow-purple-purple (bottom to top of the TLC plate respectively). Therefore, the Unknown 01 and Unknown 05 ink samples could be tentatively identified as being an Epson ink sample, most likely either ink cartridge type Epson T026, Epson T019, Epson T028, Epson S020187 or Epson T017, however the Epson T003, Epson T007 and Epson S020189 ink cartridges could not be completely excluded as a possible source for these unknown ink samples. This was especially true for the Unknown 01 ink sample. Refer to Figure 146 for the TLC results of the Unknown 01 and Unknown 05 ink samples and the Epson 33 (T003), 60 (T007), 63 (S020189), 66 (T026), 90 (T019), 93 (T028), 120 (S020187) and 123 (T017) ink samples.

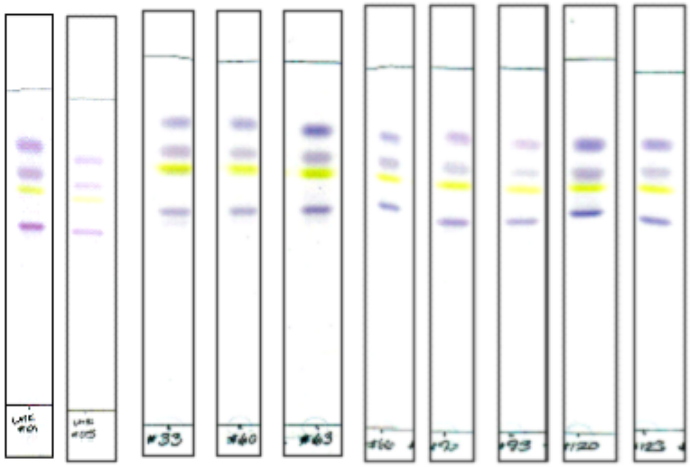

Figure 146: TLC results of the blind study Unknown 01 and Unknown 05 ink samples and the Epson 33 (T003), Epson 60 (T007), Epson 63 (S020189), Epson 66 (T026), Epson 90 (T019), Epson 93 (T028), Epson 120 (S020187) and Epson 123 (T017) ink samples.

The Unknown 04 and Unknown 14 ink samples both separated out into two spots, having a color pattern of brown-brown (bottom to top of the TLC plate respectively). This was the TLC color pattern exhibited by the Kodak 22, Canon 217, Canon 282 and Canon 522 ink samples. Thus, the Unknown 04 and Unknown 14 ink samples could be tentatively identified as being either a Kodak #1754852, Canon BCI-6Bk, Canon BC-02 or Canon BCI-3ePBk ink sample. Refer to Figure 147 for the TLC results of the Unknown 04 and Unknown 14 ink samples and the Kodak 22 (#1754852), Canon 217 (BCI-6Bk), Canon 282 (BC-02) and Canon 522 (BCI-3ePBk) ink samples.

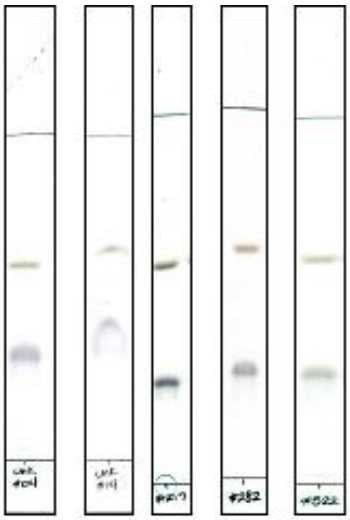

Figure 147: TLC results of the blind study Unknown 04 and Unknown 14 ink samples and the Kodak 22 (#1754852), Canon 217 (BCI-6Bk), Canon 282 (BC-02) and Canon 522 (BCI-3ePBk) ink samples.

The Unknown 08, Unknown 10 and Unknown 15 ink samples each separated out into three spots, having a color pattern of brown-brown-purple (bottom to top of the TLC plate respectively). This was the TLC color pattern exhibited by Canon 223, Canon 348 and Canon 384 ink samples. Thus, the Unknown 08, Unknown 10 and Unknown 15 ink samples could be tentatively identified as being a Canon ink sample, either ink cartridge type Canon BCI-10, Canon BCI-21 or Canon BCI-11. Refer to Figure 148 for the TLC

results of the Unknown 08, Unknown 10 and Unknown 15 ink samples, and the Canon 223 (BCI-10), Canon 348 (BCI-21) and Canon 384 (BCI-11) ink samples.

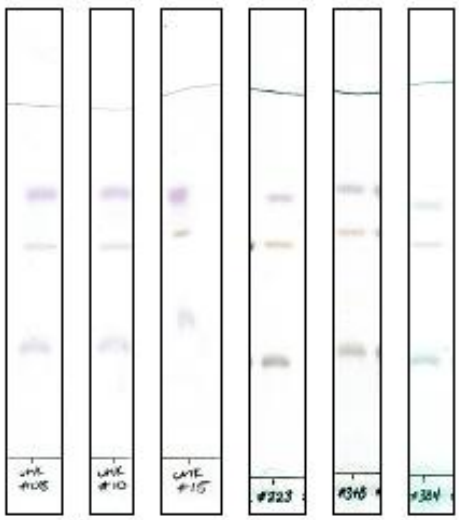

Figure 148: TLC results of the blind study Unknown 08, Unknown 10 and Unknown 15 ink samples, and the Canon 223 (BCI-10), Canon 348 (BCI-21) and Canon 384 (BCI-11) ink samples.

The Unknown 09 and Unknown 12 ink samples both separated out into a single purple spot. This was the TLC color pattern exhibited by the Epson 156, Canon 327, Canon 402 and Canon 306 ink samples. Thus, the Unknown 09 and Unknown 12 ink samples could be tentatively identified as being either an Epson T015, Canon BC-22e, Canon BCI-12 or Canon BC-20 ink sample. Refer to Figure 149 for the TLC results of the Unknown 09 and Unknown 12 ink samples and the Epson 156 (T015) Canon 327 (BC-22e), Canon 402 (BCI-12) and Canon 306 (BC-20) ink samples.

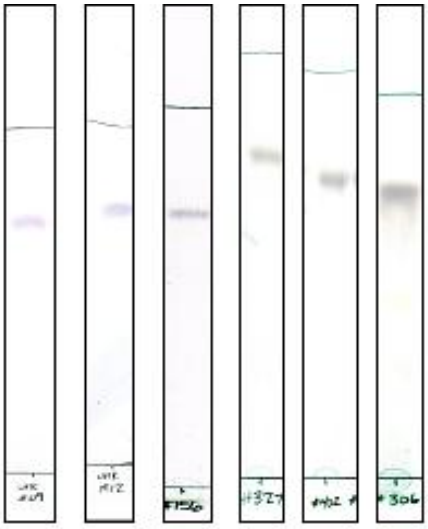

Figure 149: TLC results of the blind study Unknown 09 and Unknown 12 ink samples, and Epson 156 (T015), Canon 327 (BC-22e), Canon 402 (BCI-12) and Canon 306 (BC-20) ink samples.

The Unknown 11 ink sample separated out into three spots, having a color pattern of purple-pink-yellow (bottom to top of the TLC plate respectively). This was the TLC color pattern exhibited by the Okidata 04 ink sample. In addition, the Unknown 11 ink sample exhibited the same orange fluorescent spot under the long wave UV light that was observed with the Okidata 04 ink standard. Thus, Unknown 11 ink sample could be tentatively identified as being an Okidata #52110001 ink sample. Refer to Figure 150 for the TLC results of the Unknown 11 ink sample and the Okidata 04 (#52110001) ink standard.

Figure 150: TLC results of the blind study Unknown 11 ink sample and Okidata 04 (#52110001) ink standard.

Table 31 shows the results of one set of the TLC plates for the fifteen unknown ink samples of the blind study. The distance traveled by the mobile phase and any spot(s) noted for a specific unknown ink sample were noted in the following table. The Rf value was calculated for each spot, if applicable, and was also included in the table. The colors within the following table represented the colors observed for the visible spots on the TLC plate for the specific unknown ink sample. For complete TLC results of all of the unknown blind study ink samples analyzed refer to the tables in Appendix G.

Table 31: TLC Results and Rf Calculations for the Fifteen Ink Unknowns of the Blind Study.

Sample #		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	MISC
01	UNK01	11.7	6.7	7.9	8.4	9.2		
	Rf Values		0.57265	0.67521	0.71795	0.78632	0	
02	UNK02	11.7						
	Rf Values		0	0	0	0	0	
03	UNK03	11.6						
	Rf Values		0	0	0	0	0	
04	UNK04	11.6	4	7.1				
	Rf Values		0.34483	0.61207	0	0	0	
05	UNK05	11.5	6.55	7.8	8.4	9.3		
	Rf Values		0.56957	0.67826	0.73043	0.8087	0	
06	UNK06	11.5						
	Rf Values		0	0	0	0	0	
07	UNK07	11.5						
	Rf Values		0	0	0	0	0	
08	UNK08	11.4	3.9	7.1	8.3			
	Rf Values		0.34211	0.62281	0.72807	0	0	
09	UNK09	11.5	8.4					
	Rf Values		0.73043	0	0	0	0	
10	UNK10	11.55	3.9	7.1	8.4			
	Rf Values		0.33766	0.61472	0.72727	0	0	
11	UNK11	11.6	2.1	6.75	7			
	Rf Values		0.18103	0.5819	0.60345	0	0	
12	UNK12	11.3	8.5					
	Rf Values		0.75221	0	0	0	0	
13	UNK13	11.3						
	Rf Values		0	0	0	0	0	
14	UNK14	11.4	4.9	7.4				
	Rf Values		0.42982	0.64912	0	0	0	
15	UNK15	11.2	4.9	7.45	8.8			
	Rf Values		0.4375	0.66518	0.78571	0	0	

The fifteen unknown ink samples of the blind study were then analyzed by High Performance Liquid Chromatography (HPLC) using the same conditions as the standard ink samples analyses. The HPLC was operated in the gradient method, with a two solvent mobile phase system of 0.02M Acetic Acid:Methanol (8:2) mixture and 100% Methanol. All of the solvents used in the experiment were HPLC grade solvents. The initial mobile phase mixture was 100% 0.02M Acetic Acid:Methanol and 0% Methanol,

which was gradually changed to a 90% 0.02M Acetic Acid:Methanol and 10% Methanol mixture by 3.5 minutes. The mobile phase mixture was then gradually changed to 70% 0.02M Acetic Acid:Methanol and 30% Methanol from 3.5 minutes to 15.0 minutes, where it was held constant for an additional 2 minutes. The total analysis time for the HPLC method was 17 minutes.

As stated previously, the results of the HPLC analysis were not as definitive as other methods, however some useful characteristics were noted with the standard ink samples that could aid in the identification of the unknown ink samples. For six of the fifteen unknown ink samples there was only a single peak present in the HPLC chromatogram. This single peak was present at approximately 1.5 minutes. Four of the six unknown ink samples that had this chromatogram pattern were non-extractable ink samples and two were extractable ink samples. The ink standards that also produced an HPLC chromatogram with a single peak at 1.5 minutes were the Xerox 13, Xerox 24, Xerox 244, Kodak 17, Epson 84, Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200, Canon 312, Canon 318a, Canon 306, Canon 327 ink samples and sometimes the Epson 156 and Canon 402 ink samples. The HPLC chromatogram for the Epson 156 ink sample was a bit misleading due to the fact that the peak at approximately 1.1 minutes was not always recognized, which resulted in an HPLC chromatogram with only a single peak at 1.5 minutes. In addition, the HPLC chromatogram for the Canon 402 ink sample was a bit misleading due to the fact that the peak at approximately 6.6 minutes was not always recognized, which resulted in an HPLC chromatogram with only a single peak at 1.5 minutes. For the six unknown ink samples that had an HPLC chromatogram that contained a single peak at approximately 1.5 minutes, the possible

source of the unknown ink sample could be narrowed down from the above list if the extractable nature of the unknown ink sample was taken into account. The Unknown 03, Unknown 06, Unknown 07 and Unknown 13 ink samples were all black non-extractable ink samples and as such the possible sources for these unknown ink samples were the Xerox 13 (8R7994), Xerox 24 (8R7660), Xerox 244 (M-Series), Kodak 17 (#1369511), Epson 84 (T0321), Hewlett Packard 198 (#29), Hewlett Packard 199 (#56), Hewlett Packard 200 (#27) and Canon 312 (BC-23) ink samples. The Canon 318a (BC-60) was a non-extractable ink sample but it was a slightly yellow liquid so it could be excluded as the ink source for these four unknown ink samples. The Unknown 09 and Unknown 12 ink samples were all black extractable ink samples and as such the possible sources of these ink samples were the Canon 306 (BC-20), Canon 327 (BC-22e), Epson 156 (T015) and Canon 402 (BCI-12) ink samples.

For the Unknown 01 and Unknown 05 ink samples, their HPLC chromatograms had some peaks in common. In their HPLC chromatograms, both unknown ink samples contained two peaks at approximately 1.5 minutes and 10.8 minutes. The Unknown 05 ink sample HPLC chromatogram also contained a peak at approximately 7.2 minutes. The ink standards that had HPLC chromatograms that were the closest to the HPLC chromatograms of these two unknown ink samples were Epson ink samples. The Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples all had similar HPLC chromatograms that contained four peaks located at approximately 1.1 minutes, 1.5 minutes, 7.8 minutes and 10.7 minutes. The peaks at approximately 1.1 minutes and 7.8 minutes were not always recognized in these Epson ink samples HPLC chromatograms, which was the reason that the Unknown 01 ink

sample was grouped with these Epson ink standards as well as the Unknown 05 ink sample. The Epson 30 ink sample also had four peaks located at approximately 1.1 minutes, 1.5 minutes, 7.0 minutes and 10.9 minutes, however it also contained a peak at approximately 12 minutes. The reason the Epson 30 ink standard was excluded as being the possible source of the Unknown 01 and Unknown 05 ink samples was due to the fact that neither of these two unknown ink sample HPLC chromatograms contained at peak at approximately 12 minutes. Since the 12 minute peak was never excluded in the Epson 30 ink sample HPLC chromatogram, the fact that it was not present in the Unknown 01 and Unknown 05 ink sample HPLC chromatograms precluded the Epson 30 ink sample from being the source of these unknown ink samples. Thus, the Unknown 01 and Unknown 05 ink samples could be tentatively identified as being an Epson ink sample, and specifically an Epson 33 (T003), Epson 60 (T007), Epson 63 (S020189), Epson 66 (T026), Epson 90 (T019), Epson 93 (T028), Epson 120 (S020187) and Epson 123 (T017) ink samples.

The Unknown 08, Unknown 10, Unknown 14 and Unknown 15 ink samples had similar HPLC chromatograms which contained two main peaks. The two peaks in these HPLC chromatograms were located at approximately 1.1 minutes and 1.5 minutes. The ink standards that produced similar HPLC chromatograms included the Hewlett Packard 205, Hewlett Packard 201, Kodak 22, Canon 223, Canon 348, Canon 384, Canon 318, Epson 156 ink samples and sometimes the Canon 282 and Canon 522 ink samples. These latter two ink standards could also have a peak present in their HPLC chromatograms that was located at approximately 8.5 minutes, which was not always recognized and as a result these two ink standards were included in this grouping.

Furthermore, all four of these unknown ink samples were extractable ink samples, and as such their source of the ink sample could not be the Hewlett Packard 201 ink standard because this standard was a non-extractable ink sample. Thus, the Unknown 08, Unknown 10, Unknown 14 and Unknown 15 ink samples could be tentatively identified as being a Hewlett Packard 205 (#58), Kodak 22 (#1754852), Epson 156 (T015), Canon 223 (BCI-10), Canon 348 (BCI-21), Canon 384 (BCI-11), Canon 318 (BC-60), Canon 282 (BC-02) and Canon 522 (BCI-3ePBk) ink samples.

The Unknown 02 ink sample had an HPLC chromatogram that consisted of two peaks at approximately 1.5 minutes and 6.8 minutes. This chromatogram was similar to the HPLC chromatograms of the Epson 30, Canon 492 and Canon 522 ink samples. The Unknown 02 ink sample was a non-extractable ink sample and the only ink standard that had a similar HPLC chromatogram pattern and that was also a non-extractable ink sample was the Canon 492 ink standard. Thus, the Unknown 02 was tentatively identified as being a Canon 492 (BCI-3eBk) ink sample.

The Unknown 04 ink sample had an HPLC chromatogram pattern that consisted of three peaks at approximately 1.1 minutes, 1.5 minutes 8.6 minutes. The only ink standards that had HPLC chromatograms similar to this unknown ink sample were the Canon 217, Canon 282 and Canon 522 ink samples. Thus, based on their HPLC chromatograms, the Unknown 04 ink sample was tentatively identified as being a Canon extractable ink sample, and specifically the Canon 217 (BCI-6Bk), Canon 282 (BC-02) and Canon 522 (BCI-3ePBk) ink samples.

The Unknown 11 ink sample had an HPLC chromatogram pattern of three peaks located at approximately 1.1 minute, 1.5 minutes and 12.6 minutes. The Okidata 04 ink

sample HPLC chromatogram had a similar HPLC peak pattern, and was the only ink standard that had only these three peaks. The Epson 30 ink standard HPLC chromatogram had three peaks located at approximately 1.1 minute, 1.5 minutes and 12.5 minutes, but it also had a peak at approximately 10.9 minutes and sometimes a peak at approximately 7.0 minutes. Thus, the Epson 30 ink standard could not be the source of the Unknown 11 ink sample because the Unknown 11 ink sample HPLC chromatogram lacked the peaks at approximately 7.0 minutes and 10.9 minutes. As a result, the Unknown 11 ink sample was tentatively identified as being an Okidata 04 (#5211001) ink sample.

The fifteen unknown ink samples of the blind study were analyzed using pyrolysis gas chromatography-mass spectrometry. Using the primary peaks identified in the thirty-five standard ink samples, the tentative identification of the unknown ink samples was done. As noted previously, the peaks in an ink on paper sample pyrogram attributed to the ink samples were significantly lower than the peaks attributed to the paper matrix. This was due to the fact that the paper sample was larger than the ink sample for the ink on paper sample being tested. Depending on the ink sample, and in particular depending on the specific component of the ink sample being investigated, the paper matrix may overpower the ink sample and thereby interfere with the ink component identification. Thus, not all of the primary peaks identified for the thirty-five neat ink standard pyrograms were identified in an unknown ink on paper sample pyrogram. As a result, the discriminating components of the ink standards, namely those compounds not found in other ink cartridge types and/or manufacturers, were the focus of the analysis and identification.

The Unknown 01 and Unknown 05 ink on paper sample pyrograms were examined and the peaks that were identified occurred with retention times of approximately 1.7 minutes, 6.3 minutes, 7.3 minutes, 10.9 minutes and 12.1 minutes. These peaks were identified by the NIST library as the compounds Sulfur Dioxide, Benzonitrile, 2-Methyl-Phenol, Indole and 2-methyl-1-H-Indole. As observed with the ink on paper standard pyrograms, the peak at approximately 1.71 minutes was identified as being Sulfur Dioxide; however the match quality value for this identification was less than 10%. The peak at approximately 12.1 minutes, identified as 2-methyl-1-H-Indole in one replicate of the Unknown 01 ink on paper sample pyrogram, was also identified as being 3-methyl-1-H-Indole and 7-methyl-1-H-Indole. Additionally, the peak at approximately 12.1 minutes, identified as 2-methyl-1-H-Indole in one replicate of the Unknown 05 ink on paper sample pyrogram, was identified as being 5-methyl-1-H-Indole in a second replicate of this unknown ink sample. For this peak in the ink on paper standard pyrograms, the identified compounds included 2-methyl-1-H-Indole, 3-methyl-1-H-Indole, 4-methyl-1-H-Indole, 5-methyl-1-H-Indole and 6-methyl-1-H-Indole, though 2-methyl-1-H-Indole and 6-methyl-1-H-Indole identifications were the most common compounds identified for this peak. Thus, the identifications found in the Unknown 01 and Unknown 05 ink on paper sample pyrograms fell within the range of compound identifications found for the ink on paper standard pyrograms. Looking at the primary peaks of the ink standards, the Epson 30 ink sample was the only ink standard that contained all five of these compounds. The Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples had four of these compounds listed as their primary peaks. The compound that was not associated with these eight

Epson ink standards was 2-methyl-Phenol, which had a retention time of approximately 7.3 minutes. This compound, at this approximate retention time, was also found in the blank paper sample pyrograms, thus its presence in the Unknown 01 and Unknown 05 ink on paper sample pyrograms was not sufficient to exclude the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples as being the source of these unknown ink samples. In addition, the Epson ink standards were the only ink standards that contained Indole, so the presence of Indole in the Unknown 01 and Unknown 05 ink on paper sample pyrograms identified this sample as an Epson ink sample. However, the Epson 30 ink on paper sample pyrogram contained two peaks at approximately 10.86 minutes and 11.08 minutes, and which were identified as .gamma,.gamma,2,3-tetramethyl-2-Cyclopentene-1-butanal and 6-Mehtyl-6-hepten-4-yn-3-ol respectively, that were not found in the Unknown 01 and Unknown 05 ink on paper sample pyrograms. Therefore, the Epson 30 ink sample could be excluded as a possible source for the Unknown 01 and Unknown 05 ink samples. Consequently, the Unknown 01 and Unknown 05 ink samples could be tentatively identified as being an Epson 33 (T003), Epson 60 (T007), Epson 63 (S020189), Epson 66 (T026), Epson 90 (T019), Epson 93 (T028), Epson 120 (S020187) or Epson 123 (T017) ink sample.

The Unknown 03, Unknown 07 and Unknown 13 ink on paper sample pyrograms were examined and four peaks were identified that occurred with retention times of approximately 3.2 minutes, 3.8 minutes, 7.0 minutes, and 11.4 minutes. These four peaks were identified by the NIT library as Toluene, Hexamethyl-Cyclotrisiloxane, Benzyl Alcohol and Benzyl Methacrylate respectively. In addition, the Unknown 03 and Unknown 07 ink on paper sample pyrograms had a peak at approximately 10.6 minutes

that was not found in the Unknown 13 ink on paper sample pyrogram, and which was identified by the NIST library as 2-[2-(2-ethoxyethoxy)ethoxy]-Ethanol. These five compounds were primary peaks for the Xerox 244 ink standard, though all five compounds were found in all three Xerox ink samples if the secondary peaks for Xerox 13 and Xerox 24 ink standards were taken into account. Additionally, for the peaks at approximately 8.8 minutes and 11.2 minutes the compounds of Decamethyl-Cyclopentasiloxane and Dodecamethyl-Cyclohexasiloxane were not identified in the three unknown ink on paper sample pyrograms or in the ink on paper standard pyrograms, however both of these compounds contained main ions that were rather large and distinctive for these compounds. The compound Decamethyl-Cyclopentasiloxane had a m/z ion of 355 and the compound Dodecamethyl-Cyclohexasiloxane had two unusual m/z ions of 341 and 429. Though the Unknown 03, Unknown 07 and Unknown 13 ink on paper sample pyrograms did not list these compounds at the respective retention times of 8.8 minutes and 11.2 minutes, for each unknown ink on paper sample pyrogram tested the ions for these compounds were detected at their respective retention times, allowing for these compounds to be identified. A reason that Decamethyl-Cyclopentasiloxane and Dodecamethyl-Cyclohexasiloxane were not identified in the ink on paper standard pyrograms and the three unknown ink on paper sample pyrograms, even though their ions were present, could be due to interference from the paper matrix. Since the amount of ink present in an ink on paper sample was so low in comparison to the amount of paper sample present, the mass spectral data for the paper at this retention time had interfered with the mass spectral data of the ink sample and hence the component of the ink was not identified. In addition, the compound Hexamethyl-

Cyclotrisiloxane, which had a retention time of approximately 3.8 minutes and which was identified in all three unknown ink on paper sample pyrograms, was found only in the Xerox ink on paper standard pyrograms. Thus, its presence in the three unknown ink on paper sample pyrograms indicated that these three unknown ink samples were from a Xerox ink source. Thus, the Unknown 03, Unknown 07 and Unknown 13 ink samples could be tentatively identified as being a Xerox 13 (8R7994), Xerox 24 (8R7660) or Xerox 244 (M-Series) ink sample.

The Unknown 10 and Unknown 15 ink on paper sample pyrograms were examined and the peaks that were identified occurred with retention times of approximately 1.7 minutes and 7.6 minutes. The peak at approximately 1.71 minutes was identified as being Sulfur Dioxide; however the quality match for this identification was less than 10%, which was the result that occurred when this peak was examined in the ink on paper standard pyrograms. The peak at approximately 7.6 minutes was identified by the NIST library as o-Toluidine. The ink on paper standard pyrograms that contained Sulfur Dioxide at approximately 1.7 minutes and o-Toluidine at approximately 7.6 minutes included the Canon 217, Canon 223, Canon 348, Canon 384, Canon 522, Epson 30, Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples. The Epson 30, Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples had a peak at approximately 12.1 minutes, and which was identified as either 2-methyl-1-H-Indole or 6-methyl-1-H-Indole, was not present in the Unknown 10 and Unknown 15 ink on paper sample pyrogram. As a result, the Epson 30, Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples could not be the source of ink for these two

unknown ink samples. Therefore, the Unknown 10 and Unknown 15 ink samples could be tentatively identified as being a Canon 217 (BCI-6Bk), Canon 223 (BCI-10), Canon 348 (BCI-21), Canon 384 (BCI-11) or Canon 522 (BCI-3ePBk) ink sample.

The Unknown 12 ink on paper sample pyrogram was examined and the peaks that were identified occurred with retention times of approximately 1.7 minutes and 9.3 minutes. As stated previously, the peak at approximately 1.71 minutes was identified as being Sulfur Dioxide; however the quality match for this identification was less than 10%, which was the result that occurred when this peak was examined in the ink on paper standard pyrograms. The peak at approximately 9.3 minutes was identified by the NIST library as the compound Naphthalene. The ink on paper standard pyrograms that contained Sulfur Dioxide at approximately 1.7 minutes and Naphthalene at approximately 9.3 minutes included the Canon 306, Canon 327, Canon 348, Canon 384 and Canon 402 ink samples. Therefore, the Unknown 12 was tentatively identified as being a Canon 306 (BC-20), Canon 327 (BC-22e), Canon 348 (BCI-21), Canon 384 (BCI-11) or Canon 402 (BCI-12) ink sample.

The Unknown 09 ink on paper sample pyrogram was examined and the peaks that were identified occurred with retention times of approximately 1.7 minutes 4.8 minutes and 9.3 minutes. As stated previously, the peak at approximately 1.71 minutes was identified as being Sulfur Dioxide; however the quality match for this identification was less than 10%, which was the result that occurred when this peak was examined in the ink on paper standard pyrograms. The peaks located at approximately 4.8 minutes and 9.3 minutes were identified by the NIST library as Styrene and Naphthalene respectively. The Epson 156 ink on paper standard pyrogram contained the three peaks located at

approximately 1.7 minutes, 4.8 minutes and 9.3 minutes, but the peak at 9.3 minutes was identified by the NIST library as 2-ethenyl-1,3,3-trimethyl-cyclohexene not Naphthalene. The Canon 306, Canon 327, Canon 348, Canon 384 and Canon 402 ink on paper sample pyrograms had two peaks located at approximately 1.7 minute and 9.3 minutes with the correct identifications, but they lacked the peak located at approximately 4.8 minutes, which was identified as Styrene. The peak at approximately 4.8 minutes and identified as Styrene, however, was also present in the blank paper sample and this fact could aid in the identification of the Unknown 09 ink on paper sample pyrogram. The peak for Styrene in the Unknown 09 ink on paper sample pyrogram was consistent with the Styrene peak in the blank paper sample pyrogram and not consistent with the Styrene peak in the Epson 156 ink on paper sample pyrogram. This fact, along with the peak located at approximately 9.3 minutes being identified as Naphthalene and not 2-ethenyl-1,3,3-trimethyl-cyclohexene, allowed the Unknown 09 ink on paper sample pyrogram to be tentatively identified as being a Canon 306 (BC-20), Canon 327 (BC-22e), Canon 348 (BCI-21), Canon 384 (BCI-11) or Canon 402 (BCI-12) ink sample.

The Unknown 02 ink on paper sample pyrogram was examined and the peaks that were identified occurred with retention times of approximately 2.4 minutes, 12.0 minutes and 20.4 minutes. These peaks were identified by the NIST library as the compounds of Benzene, Biphenyl and m-Terphenyl. The Unknown 02 ink sample was a non-extractable ink sample and the only non-extractable ink standards that had these three compounds present in their ink on paper sample pyrograms at the approximately same retention times were the Canon 312 and Canon 492 ink on paper sample pyrograms.

Thus, the Unknown 02 ink sample could be tentatively identified as being either a Canon 312 (BC-23) or Canon 492 (BCI-3eBk) ink sample.

The Unknown 04 and Unknown 14 ink on paper sample pyrograms were examined and the peaks that were identified occurred with retention times of approximately 1.7 minutes and 17.3 minutes. As stated previously, the peak at approximately 1.71 minutes was identified as being Sulfur Dioxide; however the quality match for this identification was less than 10%, which was the result that occurred when this peak was examined in the ink on paper standard pyrograms. The peak at approximately 17.3 minutes was identified by the NIST library as either Benzo[f]quinoline or Benzo[h]quinoline. The peak at approximately 17.3 minutes that was found in the Unknown 04 and Unknown 14 ink on paper sample pyrograms was the key to unlocking the possible source of these unknown ink samples. The peak at 17.3 minutes, which was identified as either Benzo[f]quinoline or Benzo[h]quinoline, was found as a primary peak in only the Canon 217, Canon 282, Canon 306 and Canon 522 ink samples. Therefore, the Unknown 04 and Unknown 14 ink samples could be tentatively identified as being either a Canon 217 (BCI-6Bk), Canon 282 (BC-02), Canon 306 (BC-20) or Canon 522 (BCI-3ePBk) ink sample.

The Unknown 08 ink on paper sample pyrogram was examined and the peaks that were identified occurred with retention times of approximately 1.7 minutes and 16.9 minutes. As stated previously, the peak at approximately 1.71 minutes was identified as being Sulfur Dioxide; however the quality match for this identification was less than 10%, which was the result that occurred when this peak was examined in the ink on paper standard pyrograms. The peak at approximately 16.9 minute was identified by the NIST

library as Benzo[g]quinoline. The peak at approximately 16.9 minutes that was found in the Unknown 08 ink on paper sample pyrogram was the key to unlocking the possible source of this unknown ink sample. The peak at 16.9 minutes, which was identified as Benzo[g]quinoline, was found as a primary peak in only the Canon 223, Canon 306, Canon 348 and Canon 384 neat ink samples. Therefore, the Unknown 08 ink sample could be tentatively identified as being either a Canon 223 (BCI-10), Canon 306 (BC-20) Canon 348 (BCI-21) or Canon 384 (BCI-11) ink sample.

The Unknown 06 ink on paper sample pyrogram was examined and the peaks that were identified occurred with retention times of approximately 3.1 minutes, 7.0 minutes and 10.9 minutes. These peaks were identified by the NIST library as Toluene, Benzyl Alcohol and 5-[5-methylfurfuryl]hydantoin respectively. Additionally, the Unknown 06 ink sample was found to be a non-extractable ink sample. The Xerox 13, Xerox 24 and Xerox 244 ink on paper sample pyrograms contained the first two substances but they did not have either a peak located at approximately 10.8 minutes or the compound 5-[5-methylfurfuryl]hydantoin present in their ink on paper pyrograms. The Hewlett Packard ink on paper sample pyrograms contained peaks at all three retention times, but the peak at approximately 10.9 minutes was identified as being 1,4,7,10,13,16-Hexaoxacyclooctadecane and not 5-[5-methylfurfuryl]hydantoin in the Hewlett Packard ink on paper sample pyrograms. As a result, neither the Xerox non-extractable ink samples nor the Hewlett Packard non-extractable ink samples could be the source of the Unknown 06 ink sample. The Epson 84 ink on paper sample pyrogram had peaks at all three retention times with the same compounds identified for each peak as the Unknown 06 ink on paper sample pyrogram. Additionally, the Epson 84 ink sample was a non-

extractable ink sample. Thus, the Unknown 06 ink sample could be tentatively identified as being an Epson 84 (T0321) ink sample.

The Unknown 11 ink on paper sample pyrogram was examined and five peaks were found that were located at approximately 7.3 minutes, 10.84 minutes, 10.87 minutes, 10.9 minutes and 11.1 minutes. These five peaks were identified by the NIST library as 2-Methyl-Phenol, 1-[2-(2-methoxy-1-methylethoxy)-1-methylethoxy)-2-Propanol, 1-[2-(2-methoxy-1-methylethoxy)-1-methylethoxy)-2-Propanol, 1-[2-(2-methoxy-1-methylethoxy)-1-methylethoxy)-2-Propanol and 1,1'-[(1-methyl-1,2-ethanediyl)bis(oxy)]bis-2-Propanol respectively. As discussed previously, the three peaks located at approximately 10.84 minutes, 10.87 minutes, 10.9 minutes had similar mass spectral data, and as a result the same compound was identified by the NIST library for all three of these peaks. The compound 2-Methyl-Phenol was also found in the blank paper sample pyrograms at this approximate retention time so it could not be an identifying feature of this unknown ink on paper sample pyrogram. The compounds 1-[2-(2-methoxy-1-methylethoxy)-1-methylethoxy)-2-Propanol and 1,1'-[(1-methyl-1,2-ethanediyl)bis(oxy)]bis-2-Propanol were found only in the Okidata 04 ink on paper sample pyrogram and as such their presence in the Unknown 11 ink on paper sample pyrogram was the key to identifying the source of this unknown ink sample. Thus, the Unknown 11 ink sample could be tentatively identified as being an Okidata 04 (#52110001) ink sample.

The fifteen unknown ink samples of the blind study were also analyzed using Attenuated Total Reflection Fourier Transform Infrared Spectroscopy (ATR FT-IR). As what was done for the ink samples described previously, the unknown ink samples were

analyzed directly on the paper (*in situ*), which was done so that these results would be comparable to the results obtained with the ink on paper standards. As discussed previously, the neat ink samples of the thirty-five different ink cartridges were analyzed to establish the ATR FT-IR spectrum for each ink sample and to see if there were any inter- and intra-manufacturer similarities. Some of the ink cartridges had ATR spectra that could not be distinguished from each other so they were grouped together. Refer to the ATR results section for the groupings of the ink standards. Thus, the unknown ink ATR spectra were compared to the representative members for each of the groups rather than to all thirty-five ink standards. The type of ink, extractable or non-extractable, was also taken into account and the unknown ink samples were compared only to standards of the same type.

Due to the nature of the ink on paper sample, the ATR spectrum of the paper matrix dominated the results, but it was hypothesized that the different ink formulations present in an ink on paper sample would alter the paper sample ATR spectrum and aid in the identification of an unknown ink sample. This hypothesis was proven correct as discussed in the ATR results section. Not only did the different manufacturers produce slightly different ink on paper samples ATR spectra, but the different types of ink samples, extractable versus non-extractable ink samples, produced different ink on paper samples ATR spectra that allowed for their identification and discrimination.

The ATR spectrum of the Unknown 01 ink on paper sample was examined first in order to determine the possible source of this unknown ink sample. The Unknown 01 ink sample was an extractable ink sample so it was compared to the extractable ink standards. In the region between 1700 cm^{-1} and 1500 cm^{-1}, there were two small peaks

present in the Unknown 01 ink on paper sample ATR spectrum. These two peaks were similar in shape to the Epson 90 and the Epson 63 ink on paper samples ATR spectra; though the latter standard had a higher first peak than what was found in the Unknown 01 and Epson 90 ink on paper samples ATR spectra. The Epson 30, Epson 156, Kodak 22, Okidata 04 and Hewlett Packard 205 ink on paper samples ATR spectra all had a single, broad peak in this region, while the Canon 217, Canon 306, Canon 327 and Canon 402 ink on paper samples ATR spectra all had a group of three peaks in this region, the third peak of the group being smaller than the first two peaks in the group.

In the region between 1500 cm^{-1} and 1200 cm^{-1}, Unknown 01 ink on paper sample ATR spectrum overlapped almost perfectly with the Epson 63 ink on paper sample ATR spectrum. In addition to being similar in peak shape and peak pattern to the Epson 63 ink on paper sample ATR spectrum, the Unknown 01 ink on paper sample ATR spectrum was similar in peak shape and peak pattern to the Epson 90, Epson 156 and Epson 30 ink on paper samples ATR spectra for the region between 1500 cm^{-1} and 1300 cm^{-1}. In the region between 1280 cm^{-1} and 1220 cm^{-1}, the peak shape was different for the Unknown 01, Epson 90 and Epson 63 ink on paper samples ATR spectra as compared to the peak shape for the Epson 30 and Epson 156 ink on paper samples ATR spectra. The former were more asymmetrical in appearance, while the latter were more symmetrical in appearance. For the Canon 217, Canon 306, Canon 327, Canon 402, Hewlett Packard 205, Kodak 22 and Okidata 04 ink on paper samples ATR spectra, in the region between 1500 cm^{-1} and 1300 cm^{-1} the peak patterns for these ink standards were similar in appearance to that of the Unknown 01 ink on paper sample ATR spectrum. However, in the region from 1280 cm^{-1} to 1220 cm^{-1}, a difference was noted in the peak shape, with

the peak in the Unknown 01 ink on paper sample ATR spectrum being more asymmetrical and the peaks in the Canon, 217, Canon 306, Canon 327, Canon 402, Hewlett Packard 205, Kodak 22 and Okidata 04 ink on paper samples ATR spectra being more symmetrical. Thus, based on their ink on paper samples ATR spectra, the Unknown 01 could be tentatively identified as an Epson ink sample, specifically an Epson 33 (T003), Epson 60 (T007), Epson 63 (S020189), Epson 66 (T026), Epson 90 (T019), Epson 93 (T028), Epson 120 (S020187) or Epson 123 (T017) ink sample. Refer to Figures 151 through 153 for the ATR differences between the Unknown 01 ink on paper sample and the extractable ink on paper standards ATR spectra.

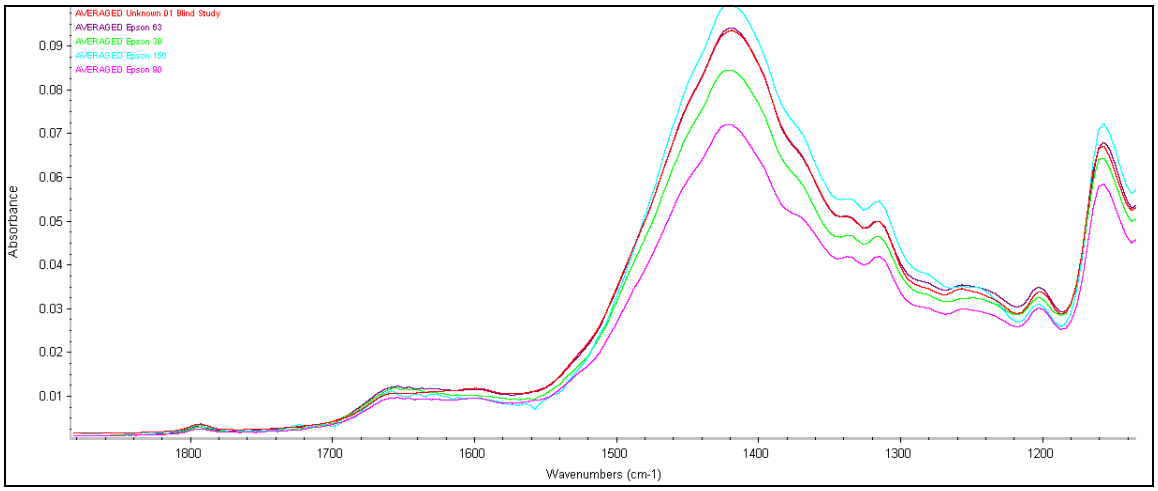

Figure 151: ATR spectra for the region between 1880 cm^{-1} and 1140 cm^{-1} comparing Unknown 01 (red) to Epson 30 (light green), Epson 63 (dark purple), Epson 90 (light purple) and Epson 156 (light blue) ink standards.

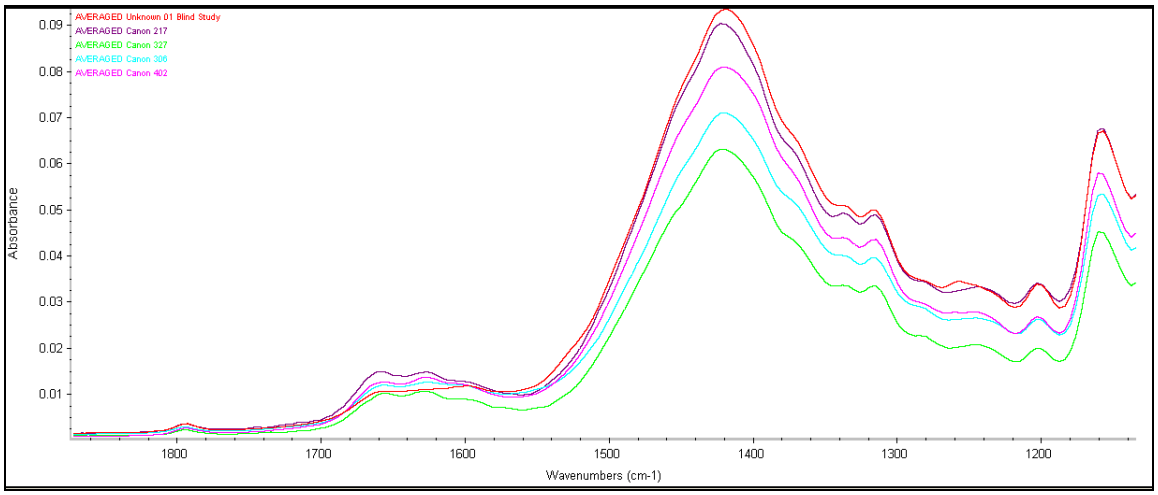

Figure 152: ATR spectra for the region between 1860 cm^{-1} and 1140 cm^{-1} comparing Unknown 01 (red) to Canon 217 (dark purple), Canon 306 (light blue), Canon 327 (light green) and Canon 402 (light purple) ink standards.

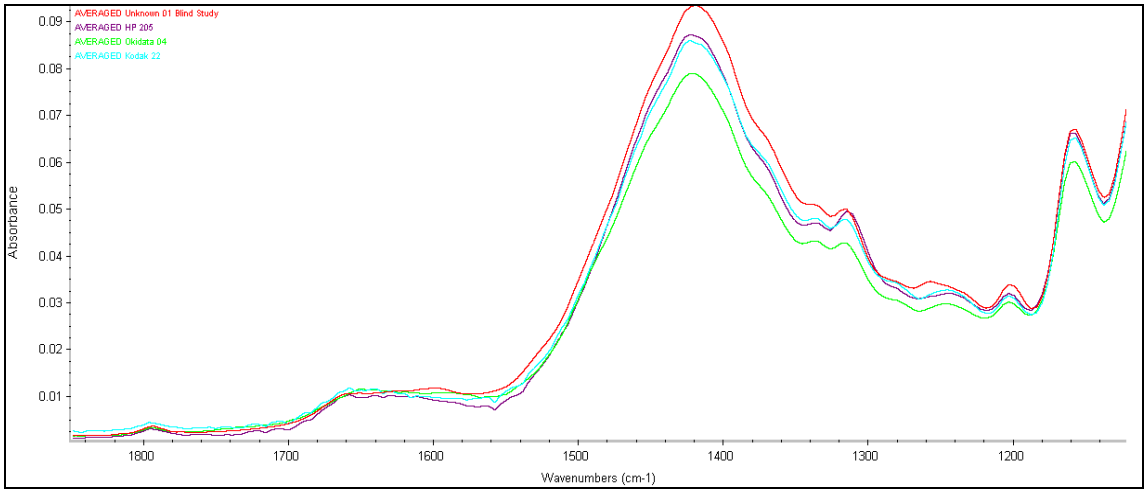

Figure 153: ATR spectra for the region between 1840 cm^{-1} and 1140 cm^{-1} comparing Unknown 01 (red) to Hewlett Packard 205 (dark purple), Kodak 22 (light blue) and Okidata 04 (light green) ink standards.

The ATR spectrum of the Unknown 02 ink on paper sample was examined in order to determine the possible source of this ink sample. The Unknown 02 ink sample was a non-extractable ink sample so it was compared to the non-extractable ink standards. In the region between 1700 cm^{-1} and 1500 cm^{-1}, there was a group of three peaks present in the Unknown 02 ink on paper sample ATR spectrum. The Xerox 244

ink on paper sample ATR spectrum also had three peaks in this region, while the other two Xerox ink on paper samples ATR spectra, namely the Xerox 13 and Xerox 24 ink samples, had only two peaks in this region. The Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200, Hewlett Packard 201 and Kodak 17 ink on paper samples ATR spectra had a single peak at approximately 1660 cm^{-1}, while the Epson 84 ink on paper sample ATR spectrum had a broad single peak that spanned the region from approximately 1680 cm^{-1} to 1570 cm^{-1}. Both the Canon 312 and Canon 492 ink on paper samples ATR spectra had similar three peak patterns to that found in the Unknown 02 ink on paper sample ATR spectrum.

In the region between 1500 cm^{-1} and 1300 cm^{-1}, the Xerox 13, Xerox 24 and Xerox 244 ink on paper samples ATR spectra had a strong hump on the right side of the main peak that Unknown 02 did not have in its ink on paper sample ATR spectrum. This was also true for the Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200, Hewlett Packard 201 and Kodak 17 ink on paper samples ATR spectra, though the latter also had some peak shape differences when compared to the Unknown 02 ink on paper sample ATR spectrum. Not only did the Canon 312 ink on paper sample ATR spectrum have a small hump on the right side of the main peak in this region that was not found in the Unknown 02 ink on paper sample ATR spectrum, but the maximum of the peak was located at a lower wavenumber as compared to peak maximum in the Unknown 02 ink on paper sample ATR spectrum. This difference in the peak maximum position was found with the Canon 492 ink on paper sample ATR spectrum; however this was the only ink on paper standard ATR spectrum that did not have a noticeable hump on the right side of the main peak in this region. The Epson 84 ink on paper sample ATR

spectrum had the same shape as the Unknown 02 ink on paper sample ATR spectrum in this region; however the Epson 84 ink on paper sample ATR spectrum also had the slight hump on the right side of the main peak in this region that was not observed in the Unknown 02 ink on paper sample ATR spectrum. However, the Epson 84 ink sample could be excluded as the source of the Unknown 02 ink sample when the group of three peaks found in the region from 1100 cm^{-1} to 900 cm^{-1} was examined. For the majority of the non-extractable ink on paper samples ATR spectra, this group of three peaks was asymmetrical, with the third peak in the group being higher than the first peak in the group. For the Epson 84 ink on paper sample ATR spectrum, this group of three peaks was symmetrical. Since the group of three peaks in the region between 1100 cm^{-1} and 900 cm^{-1} for the Unknown 02 ink on paper sample ATR spectrum was asymmetrical, the Epson 84 ink standard was excluded as being the source of this unknown ink sample. Thus, based on their ink on paper samples ATR spectra, the Unknown 02 ink sample was more closely aligned to and hence could be tentatively identified as a Canon ink sample, specifically either a Canon 312 (BC-23) or Canon 492 (BCI-3eBk) ink sample. Refer to Figures 154 through 158 for the ATR differences between the Unknown 02 ink on paper sample and the non-extractable ink on paper standards ATR spectra.

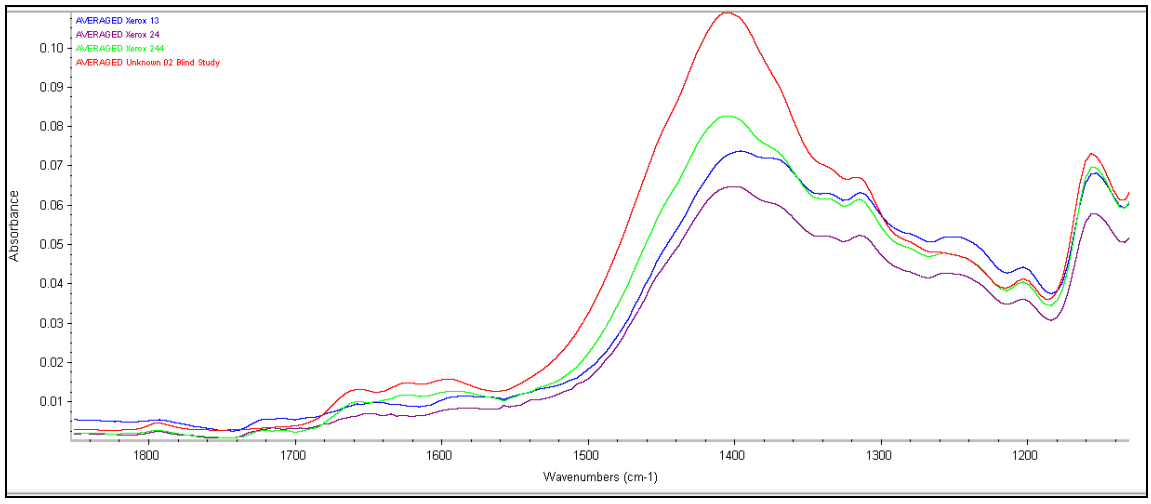

Figure 154: ATR spectra for the region between 1840 cm^{-1} and 1140 cm^{-1} comparing Unknown 02 (red) to Xerox 13 (blue), Xerox 24 (dark purple) and Xerox 244 (light green) ink standards.

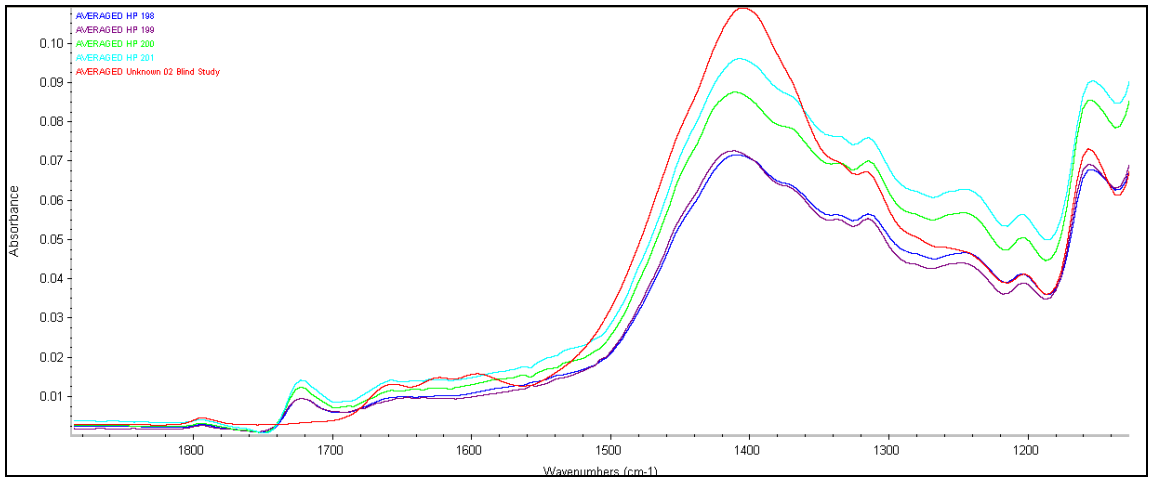

Figure 155: ATR spectra for the region between 1880 cm^{-1} and 1140 cm^{-1} comparing Unknown 02 (red) to Hewlett Packard 198 (blue), Hewlett Packard 199 (dark purple), Hewlett Packard 200 (light green) and Hewlett Packard 201 (light blue) ink standards.

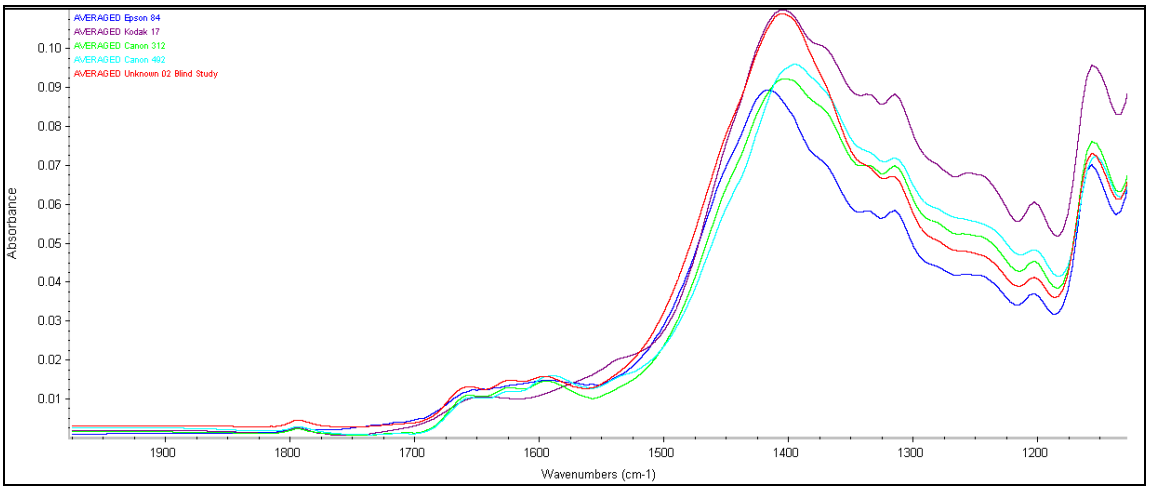

Figure 156: ATR spectra for the region between 1960 cm^{-1} and 1140 cm^{-1} comparing Unknown 02 (red) to Epson 84 (blue), Canon 312 (light green), Canon 492 (light blue) and Kodak 17 (dark purple) ink standards.

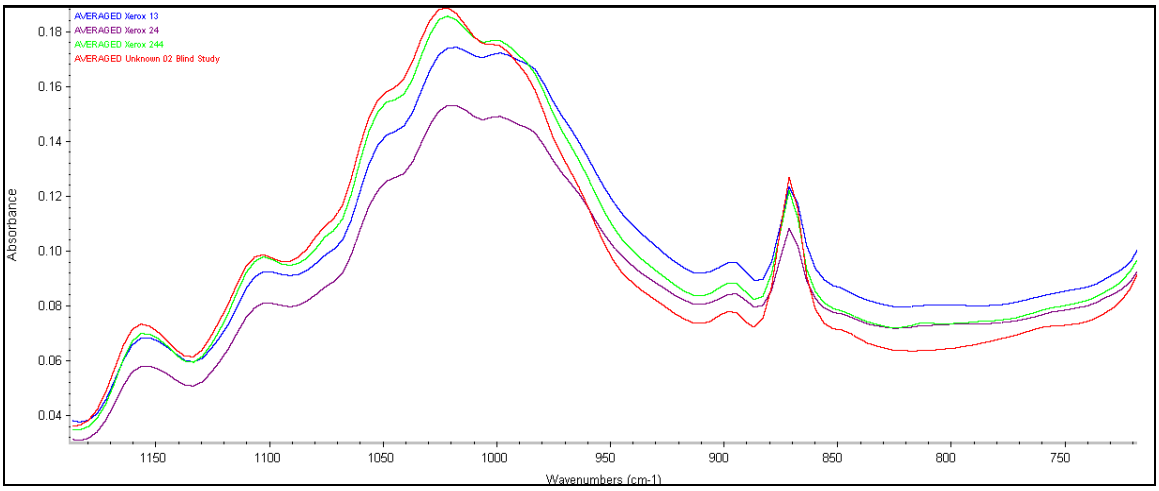

Figure 157: ATR spectra for the region between 1180 cm^{-1} and 720 cm^{-1} comparing Unknown 02 (red) to Xerox 13 (blue), Xerox 24 (dark purple) and Xerox 244 (light green) ink standards.

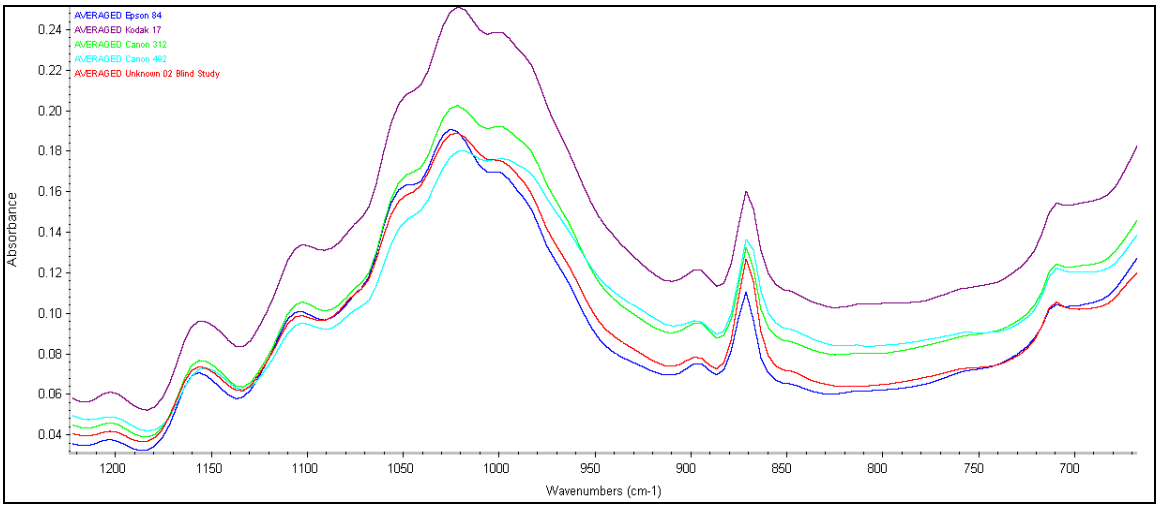

Figure 158: ATR spectra for the region between 1220 cm^{-1} and 670 cm^{-1} comparing Unknown 02 (red) to Epson 84 (blue), Canon 312 (light green), Canon 492 (light blue) and Kodak 17 (dark purple) ink standards.

The ATR spectrum of the Unknown 03 ink on paper sample was examined in order to determine the possible source of this ink sample. The Unknown 03 ink sample was a non-extractable ink sample so it was compared to the non-extractable ink standards. In the region between 1700 cm^{-1} and 1500 cm^{-1}, there were two small peaks present in the Unknown 03 ink on paper sample ATR spectrum. The Xerox 13 ink on paper sample ATR spectrum had a similar peak pattern in this region, as did the Xerox 24 ink on paper sample ATR spectrum. The Xerox 244, Canon 312 and Canon 492 ink on paper samples ATR spectra, had three peaks in this region which distinguished their peak pattern from the peak pattern found in the Unknown 03 ink on paper sample ATR spectrum in this region. The Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200, Hewlett Packard 201 and Kodak 17 ink on paper samples ATR spectra had a single peak at approximately 1660 cm^{-1}, which distinguished their peak pattern from the peak pattern found in the Unknown 03 ink on paper sample ATR spectrum in this region. The Epson 84 ink on paper sample ATR spectrum, on the other hand, had a broad single

peak that spanned the region from approximately 1680 cm^{-1} to 1570 cm^{-1}, which could be mistaken for two small peaks if not examined closely.

In the region between 1500 cm^{-1} and 1300 cm^{-1}, the peak pattern exhibited by the Unknown 03 ink on paper sample ATR spectrum was similar to the peak pattern exhibited by the Xerox 244 ink on paper sample ATR spectrum. The Xerox 13 and Xerox 24 ink on paper samples ATR spectra had a more pronounced hump on the right side of the main peak in this region than what was found in the Unknown 03 ink on paper sample ATR spectrum. In the Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200, Hewlett Packard 201 and Kodak 17 ink on paper samples ATR spectra, there were some peak shape differences as compared to the Unknown 03 ink on paper sample ATR spectrum, and the hump on the right side of the main peak in this region was more pronounced in the Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200, Hewlett Packard 201 and Kodak 17 ink on paper samples ATR spectra than in the Unknown 03 ink on paper sample ATR spectrum. Additionally, not only did the Canon 492 ink on paper sample ATR spectrum lack the small hump on the right side of the main peak in this region, but the peak maximum position was located at a lower wavenumber as compared to the peak maximum position in the Unknown 03 ink on paper sample ATR spectrum. This difference in the peak maximum position was also found with the Canon 312 ink on paper sample ATR spectrum, though there were also some peak shape differences between the Canon 312 ink on paper sample ATR spectrum and the Unknown 03 ink on paper sample ATR spectrum. The Epson 84 ink on paper sample ATR spectrum had the same peak shape as the Unknown 03 ink on paper sample ATR spectrum in this region; however the peak maximum position of the main peak in the

Epson 84 in on paper sample ATR spectrum was located at a slightly higher wavenumber as compared to the peak maximum position for this peak in the Unknown 03 ink on paper sample ATR spectrum. Additionally, the Epson 84 ink on paper sample ATR spectrum could be excluded as the source of the Unknown 03 ink sample when the group of three peaks found in the region from 1100 cm^{-1} to 900 cm^{-1} was examined. For the majority of the non-extractable ink samples, this group of three peaks was asymmetrical, with the third peak in the group being higher than the first peak in the group. For the Epson 84 ink on paper sample ATR spectrum, this group of three peaks was symmetrical. Since the group of three peaks for the Unknown 03 ink on paper sample ATR spectrum was asymmetrical, the Epson 84 ink sample was excluded as being the source of this unknown ink sample. Thus, based on their ink on paper ATR spectra, the Unknown 03 ink sample was more closely aligned to and hence could be tentatively identified as a Xerox ink sample, specifically a Xerox 13 (8R7994), Xerox 24 (8R7660) or Xerox 244 (M-Series) ink sample. Refer to Figures 159 through 163 for the ATR differences between the Unknown 03 ink on paper sample and the non-extractable ink on paper standards ATR spectra.

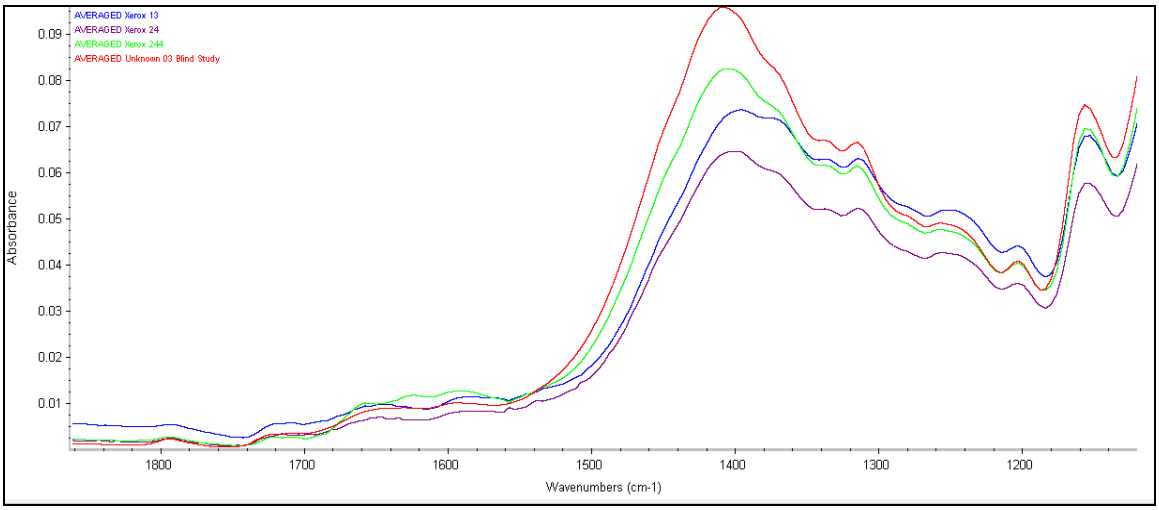

Figure 159: ATR spectra for the region between 1860 cm^{-1} and 1140 cm^{-1} comparing Unknown 03 (red) to Xerox 13 (blue), Xerox 24 (dark purple) and Xerox 244 (light green) ink standards.

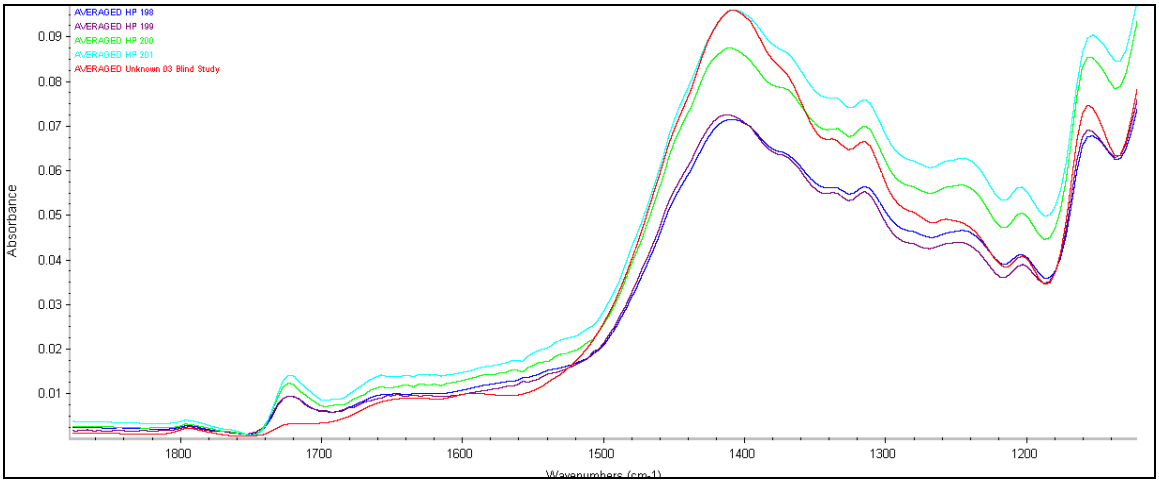

Figure 160: ATR spectra for the region between 1860 cm^{-1} and 1140 cm^{-1} comparing Unknown 03 (red) to Hewlett Packard 198 (blue), Hewlett Packard 199 (dark purple), Hewlett Packard 200 (light green) and Hewlett Packard 201 (light blue) ink standards.

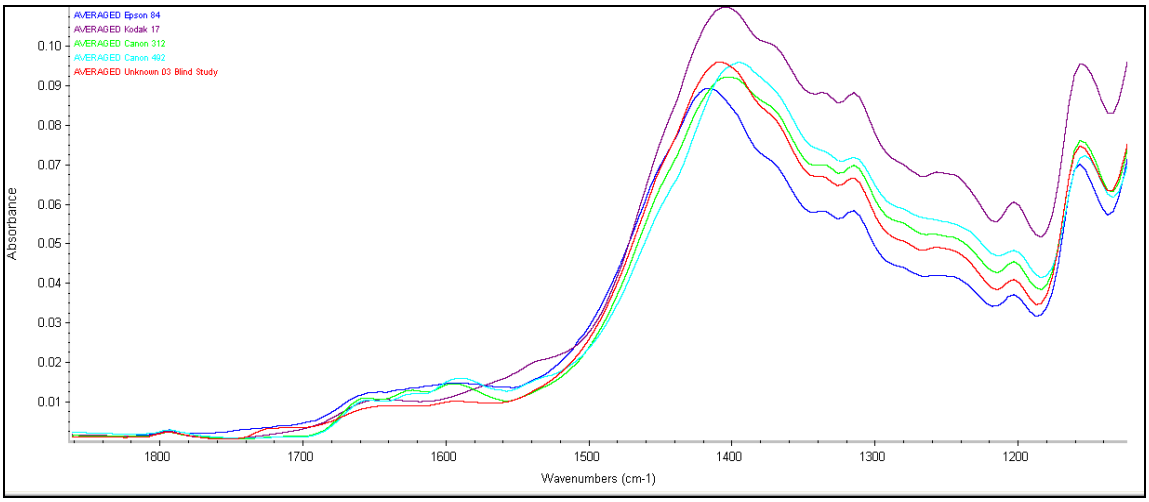

Figure 161: ATR spectra for the region between 1860 cm^{-1} and 1140 cm^{-1} comparing Unknown 03 (red) to Epson 84 (blue), Canon 312 (light green), Canon 492 (light blue) and Kodak 17 (dark purple) ink standards.

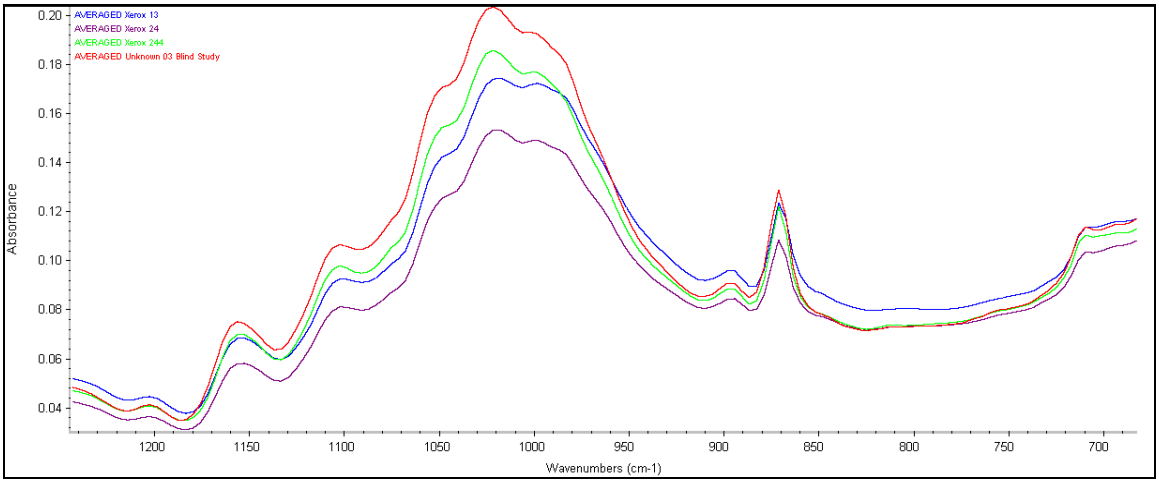

Figure 162: ATR spectra for the region between 1240 cm^{-1} and 690 cm^{-1} comparing Unknown 03 (red) to Xerox 13 (blue), Xerox 24 (dark purple) and Xerox 244 (light green) ink standards.

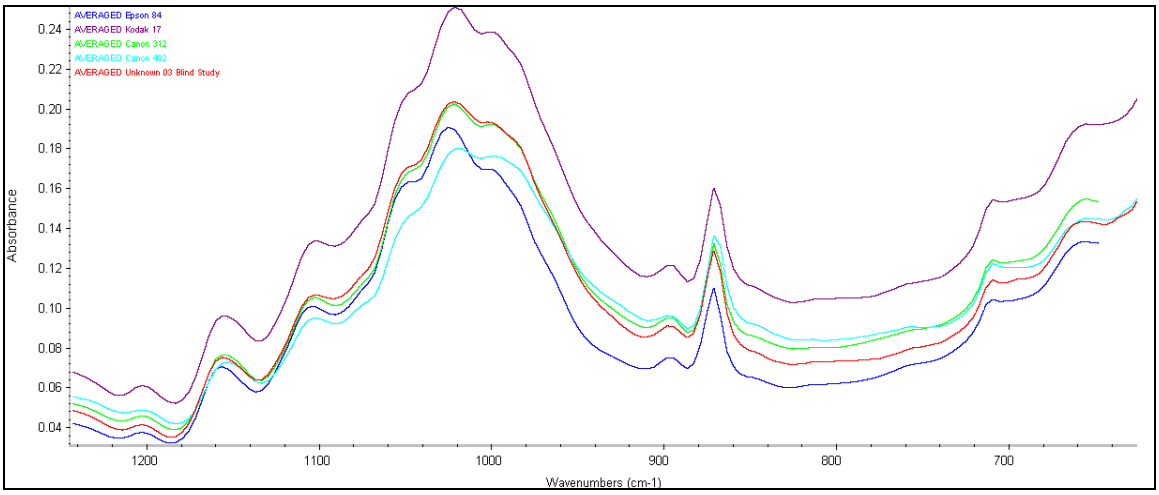

Figure 163: ATR spectra for the region between 1240 cm^{-1} and 640 cm^{-1} comparing Unknown 03 (red) to Epson 84 (blue), Canon 312 (light green), Canon 492 (light blue) and Kodak 17 (dark purple) ink standards.

The ATR spectrum of the Unknown 04 ink on paper sample was examined in order to determine the possible source of this ink sample. The Unknown 04 ink sample was an extractable ink sample so it was compared to the extractable ink standards. In the region between 1700 cm^{-1} and 1500 cm^{-1}, there were two pronounced peaks and a minor third peak present in the Unknown 04 ink on paper sample ATR spectrum. This peak pattern was different from the peak patterns exhibited by the Epson 30, Epson 63, Epson 90, Epson 156, Kodak 22, Okidata 04 and Hewlett Packard 205 ink on paper samples ATR spectra in this region. The Canon 217, Canon 306, Canon 327, Canon 402 and Canon 522 ink on paper samples ATR spectra had a similar peak pattern to the peak pattern found in the Unknown 04 ink on paper sample ATR spectrum. The Canon 217, Canon 327, Canon 402, Canon 522 ink on paper samples ATR spectra, and the Canon 306 ink on paper sample ATR spectrum to a lesser degree, all had three peaks in this region, the third peak of the group being smaller than the first two peaks in the group.

For the Canon 306 ink on paper sample ATR spectrum the third peak was barely discernable from the baseline in the ink on paper sample ATR spectrum.

In the region between 1500 cm^{-1} and 1300 cm^{-1}, the main peak in the Unknown 04 ink on paper sample ATR spectrum was broader and less symmetrical than the main peak in the Epson extractable ink on paper samples ATR spectra. This peak was also broader than the main peaks found in the Hewlett Packard 205, Okidata 04 and Kodak 22 ink on paper samples ATR spectra. The Canon 306, Canon 327 and Canon 402 ink on paper samples ATR spectra had a broader, less symmetrical main peak, which was similar in appearance to the peak found in the Unknown 04 ink on paper sample ATR spectrum. The main peak in the Canon 522 ink on paper sample ATR spectrum was slightly narrower than the main peak in the Unknown 04 ink on paper sample ATR spectrum; however, the same overall peak shape was similar for these two ink on paper samples ATR spectra. The main peak in the Canon 217 ink on paper sample ATR spectrum was sharper and narrower than the main peak in the Unknown 04 ink on paper sample ATR spectrum. In addition, in the region between 1350 cm^{-1} and 1200 cm^{-1}, there were slight peak shape differences between the Canon 306 and Unknown 04 ink on paper samples ATR spectra. The Canon 217, Canon 327 and Canon 522 ink on paper samples ATR spectra, and to a lesser extent the Canon 402 ink on paper sample ATR spectrum were similar in peak shape to the Unknown 04 ink on paper sample ATR spectrum. Thus, based on their ink on paper ATR spectra, the Unknown 04 ink sample could be tentatively identified as a Canon ink sample, specifically a Canon 217 (BCI-6Bk), Canon 327 (BC-22e), Canon 402 (BCI-12) or Canon 522 (BCI-3ePBk) ink sample. Refer to

Figures 164 through 166 for the ATR differences between the Unknown 04 ink on paper sample and the extractable ink on paper standards ATR spectra.

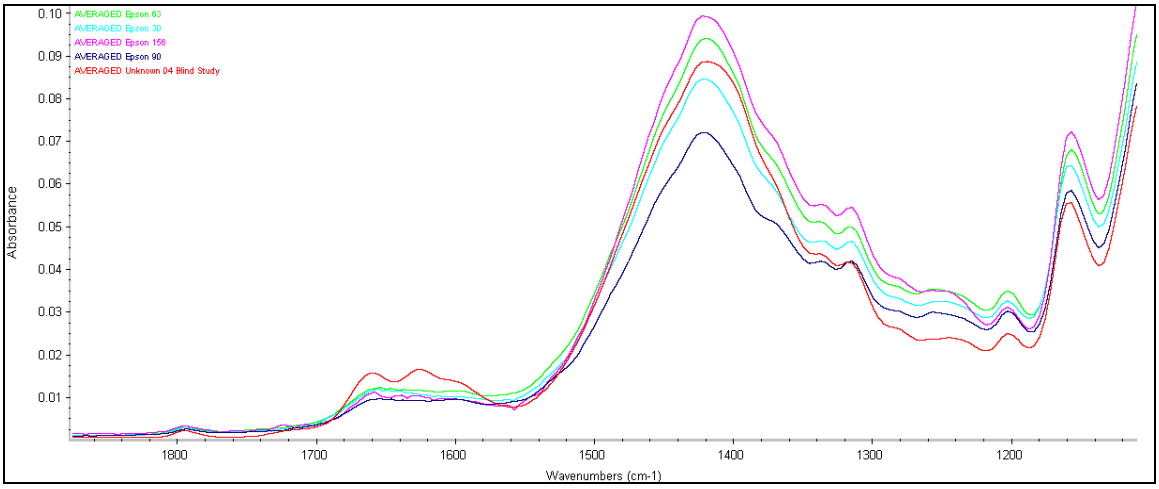

Figure 164: ATR spectra for the region between 1860 cm^{-1} and 1120 cm^{-1} comparing Unknown 04 (red) to Epson 30 (light blue), Epson 63 (light green), Epson 90 (dark blue) and Epson 156 (light purple) ink standards.

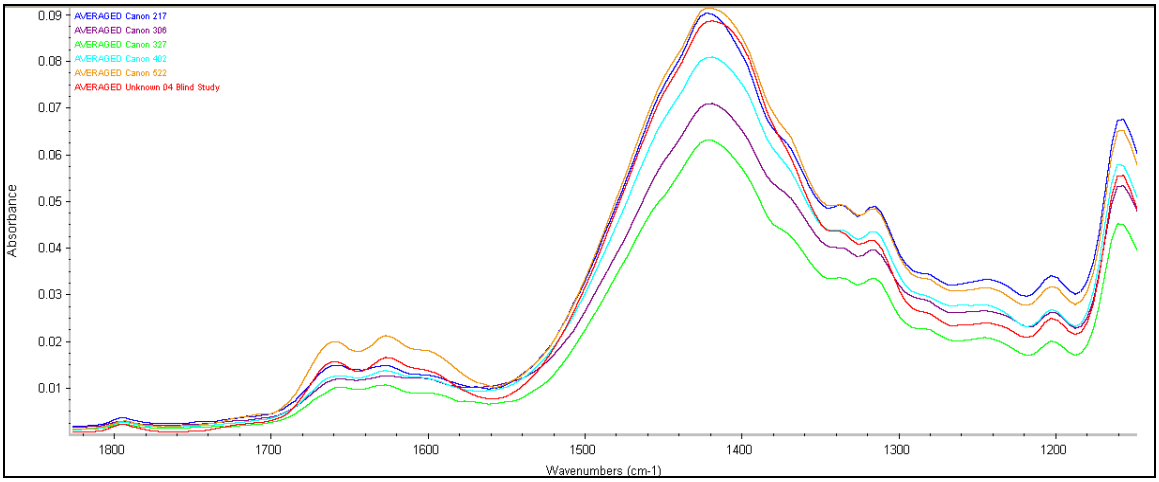

Figure 165: ATR spectra for the region between 1820 cm^{-1} and 1160 cm^{-1} comparing Unknown 04 (red) to Canon 217 (blue), Canon 306 (dark purple), Canon 327 (light green), Canon 402 (light blue) and Canon 522 (yellow) ink standards.

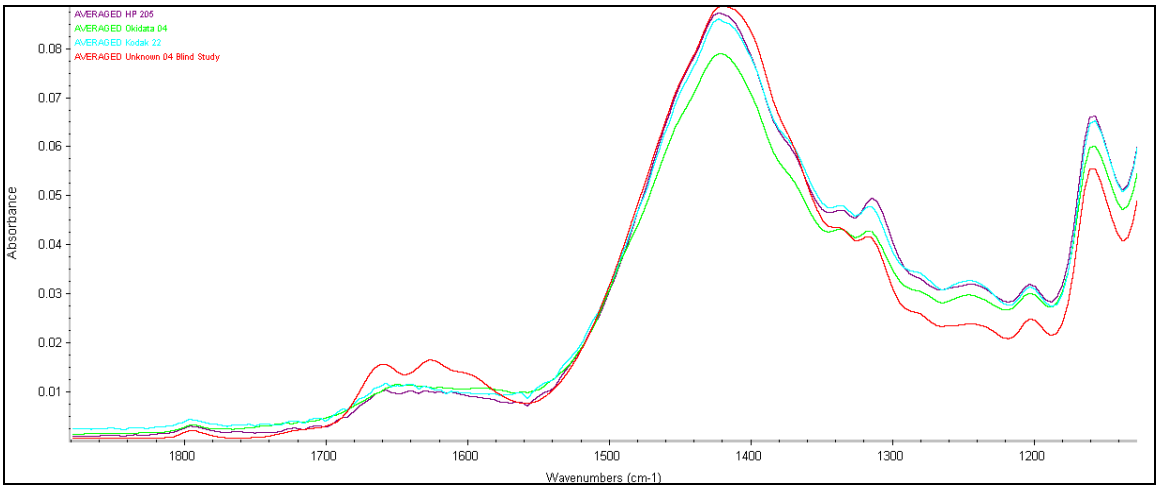

Figure 166: ATR spectra for the region between 1880 cm^{-1} and 1140 cm^{-1} comparing Unknown 04 (red) to Hewlett Packard 205 (dark purple), Kodak 22 (light blue) and Okidata 04 (light green) ink standards.

The ATR spectrum of the Unknown 05 ink on paper sample was examined in order to determine the possible source of this ink sample. The Unknown 05 ink sample was an extractable ink sample so it was compared to the extractable ink standards. In the region between 1700 cm^{-1} and 1500 cm^{-1}, there were two small peaks present in the Unknown 05 ink on paper sample ATR spectrum. These two peaks were similar in shape to the Epson 90 and Epson 63 ink on paper samples ATR spectra; though the latter had a higher first peak than what was found in the Unknown 05 and Epson 90 ink on paper samples ATR spectra. The Epson 30, Epson 156, Kodak 22, Okidata 04 and Hewlett Packard 205 ink on paper samples ATR spectra all had a single, broad peak in this region, while the Canon 217, Canon 306, Canon 327 and Canon 402 ink on paper samples ATR spectra all had three peaks in this region, the third peak of the group being smaller than the first two peaks in the group.

In the region between 1500 cm^{-1} and 1300 cm^{-1}, the Unknown 05 ink on paper sample ATR spectrum was similar in peak pattern and peak shape to the Epson 90, Epson

156 and Epson 30 ink on paper samples ATR spectra. In the region between 1280 cm^{-1} and 1220 cm^{-1}, the peak shape was different for the Unknown 05, Epson 90 and Epson 63 ink on paper samples ATR spectra as compared to the peak shape for the Epson 30 and Epson 156 ink on paper samples ATR spectra. The peak shape in the former was more asymmetrical in appearance, while the peak shape in the latter was more symmetrical in appearance. For the Canon 217, Canon 306, Canon 327, Canon 402, Hewlett Packard 205, Kodak 22 and Okidata 04 ink on paper samples ATR spectra, in the region between 1500 cm^{-1} and 1300 cm^{-1} the peak patterns were similar in appearance to that of the Unknown 05 ink on paper sample ATR spectrum. However, in the region from 1280 cm^{-1} to 1220 cm^{-1}, a difference was noted in the peak shape between these ink on paper samples ATR spectra, with the peak in the Unknown 05 ink on paper sample ATR spectrum being more asymmetrical and the peak in the Canon, Hewlett Packard, Kodak and Okidata ink on paper samples ATR spectra being more symmetrical. Thus, based on their ink on paper ATR spectra, the Unknown 05 ink sample could be tentatively identified as an Epson ink sample, specifically an Epson 33 (T003), Epson 60 (T007), Epson 63 (S020189), Epson 66 (T026), Epson 90 (T019), Epson 93 (T028), Epson 120 (S020187) or Epson 123 (T017) ink sample. Refer to Figures 167 through 169 for the ATR differences between the Unknown 05 ink on paper sample and the extractable ink on paper standards ATR spectra.

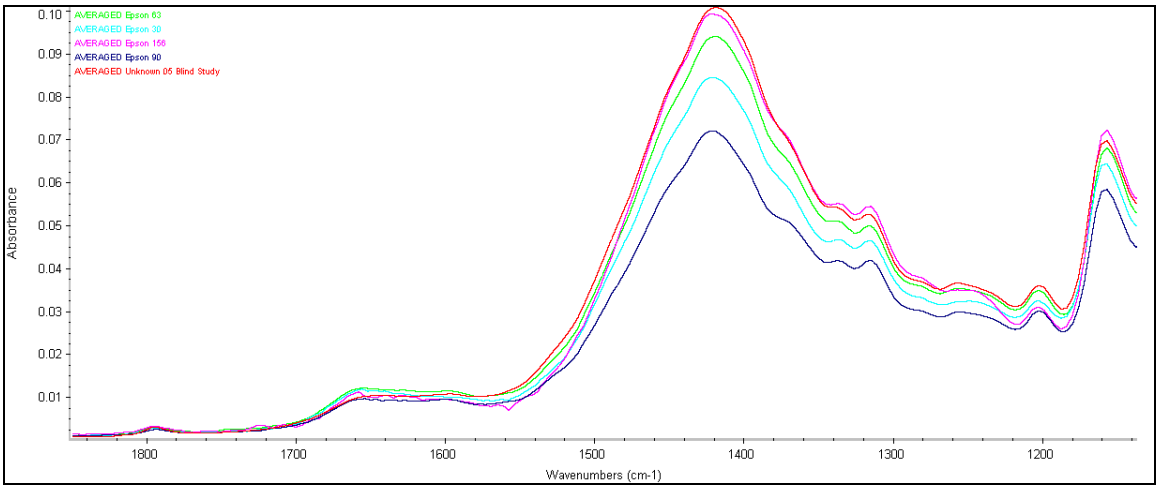

Figure 167: ATR spectra for the region between 1840 cm^{-1} and 1140 cm^{-1} comparing Unknown 05 (red) to Epson 30 (light blue), Epson 63 (light green), Epson 90 (dark blue) and Epson 156 (light purple) ink standards.

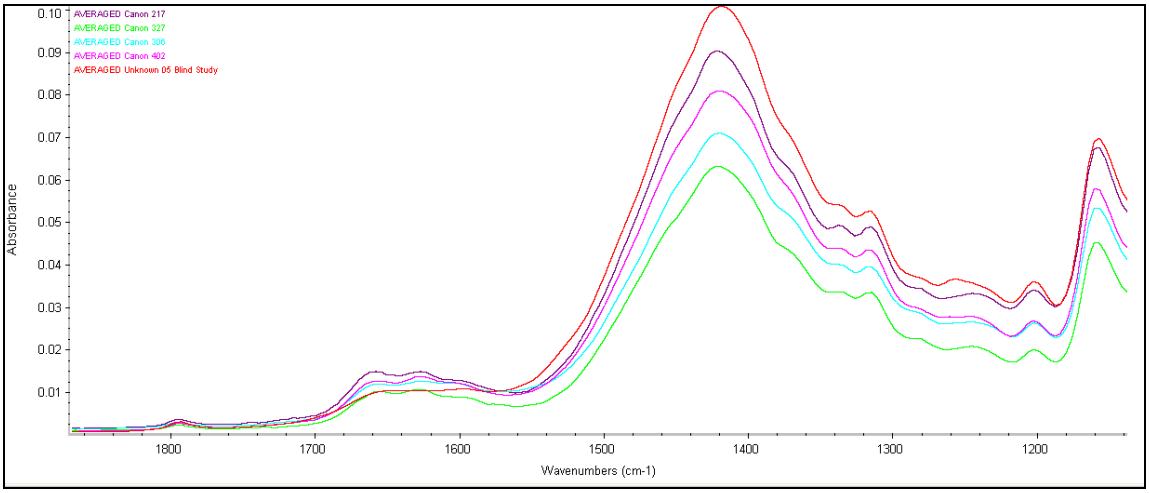

Figure 168: ATR spectra for the region between 1860 cm^{-1} and 1140 cm^{-1} comparing Unknown 05 (red) to Canon 217 (dark purple), Canon 306 (light blue), Canon 327 (light green) and Canon 402 (light purple) ink standards.

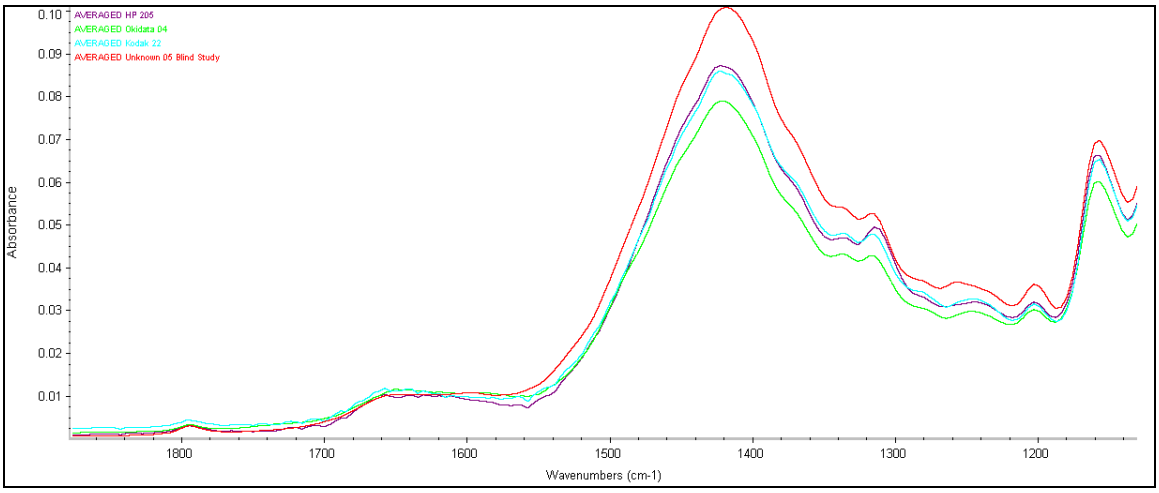

Figure 169: ATR spectra for the region between 1860 cm^{-1} and 1140 cm^{-1} comparing Unknown 05 (red) to Hewlett Packard 205 (dark purple), Kodak 22 (light blue) and Okidata 04 (light green) ink standards.

The ATR spectrum of the Unknown 06 ink on paper sample was examined in order to determine the possible source of this ink sample. The Unknown 06 ink sample was a non-extractable ink sample so it was compared to the non-extractable ink standards. In the region between 1700 cm^{-1} and 1500 cm^{-1}, there was a single peak present in the Unknown 06 ink on paper sample ATR spectrum. This was different from the peak pattern of the Xerox 13 and Xerox 24 ink on paper samples ATR spectra, which had two peaks in this region and was different from the peak patterns of the Xerox 244, Canon 312 and Canon 492 ink on paper samples ATR spectra, which had three peaks in this region. Though the Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200, Hewlett Packard 201 and Kodak 17 ink on paper samples ATR spectra had a single peak in this region, the peak maximum position was located at approximately 1660 cm^{-1} which distinguished their peak pattern from the peak pattern found in the Unknown 06 ink on paper sample ATR spectrum. The Epson 84 ink on paper sample ATR spectrum had a broad single peak that spanned the region from approximately 1680 cm^{-1} to 1570

cm^{-1}, which was similar to what was observed for the Unknown 06 ink on paper sample ATR spectrum. The left side of the single peak in the Epson 84 ink on paper sample ATR spectrum was higher on the left side than the same peak found in the Unknown 06 ink on paper sample ATR spectrum, but the Epson 84 ink on paper sample ATR spectrum was the only non-extractable ink sample that had a single peak in a similar location to the Unknown 06 ink on paper sample.

In the region between 1500 cm^{-1} and 1300 cm^{-1}, differences existed in the peak patterns of the Unknown 06 ink on paper sample ATR spectrum and the majority of the non-extractable ink on paper samples ATR spectra. With the exception of the Epson 84 ink on paper sample ATR spectrum, the peaks in the non-extractable ink on paper samples ATR spectra tended to be wider, with a more pronounced hump on the right side of the main peak in this region. In addition, the peak maximum position for the main peak in this region was located at a slightly higher wavenumber for the Unknown 06 ink on paper sample ATR spectrum as compared to these non-extractable ink on paper samples ATR spectra. The main peak in this region in the Epson 84 ink on paper sample ATR spectrum, on the other hand, was narrower and more symmetrical than the main peak in the other non-extractable ink on paper samples ATR spectra, and was similar in peak pattern and peak shape to the Unknown 06 ink on paper sample ATR spectrum. In addition, in the region of 1100 cm^{-1} to 900 cm^{-1}, the group of three peaks in the Unknown 06 ink on paper sample ATR spectrum was more symmetrical than this group of three peaks in the majority of the non-extractable ink on paper samples ATR spectra. The Epson 84 ink on paper sample ATR spectrum was the only non-extractable ink standard that had a symmetrical appearance to the group of three peaks in this region, and this

pattern matched the pattern exhibited by the Unknown 06 ink on paper sample ATR spectrum. Thus, based on their ink on paper ATR spectra, Unknown 06 was more closely aligned to and hence could be tentatively identified as the Epson 84 (T0321) ink sample. Refer to Figures 170 through 174 for the ATR differences between the Unknown 06 ink on paper sample and the non-extractable ink on paper standards ATR spectra.

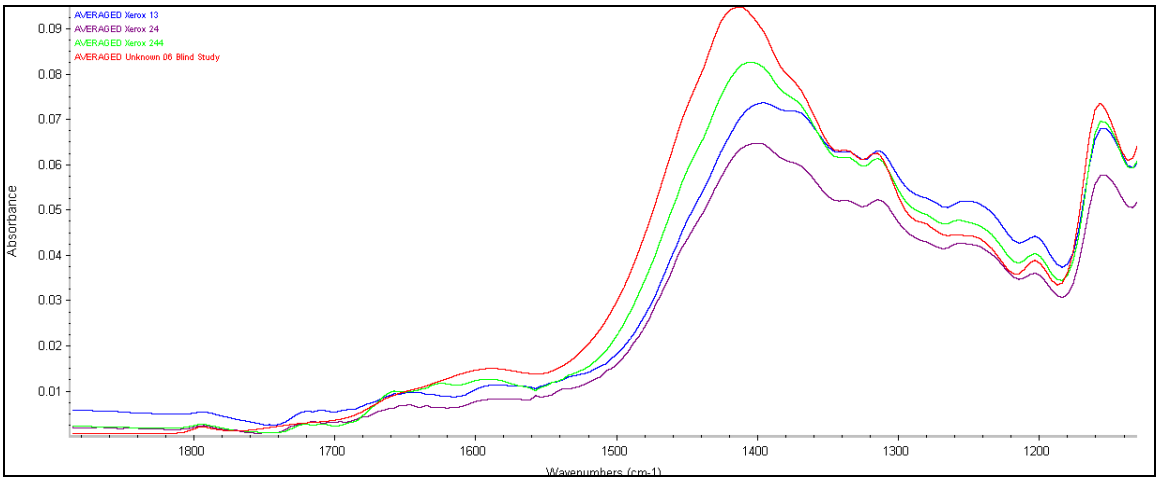

Figure 170: ATR spectra for the region between 1880 cm^{-1} and 1140 cm^{-1} comparing Unknown 06 (red) to Xerox 13 (blue), Xerox 24 (dark purple) and Xerox 244 (light green) ink standards.

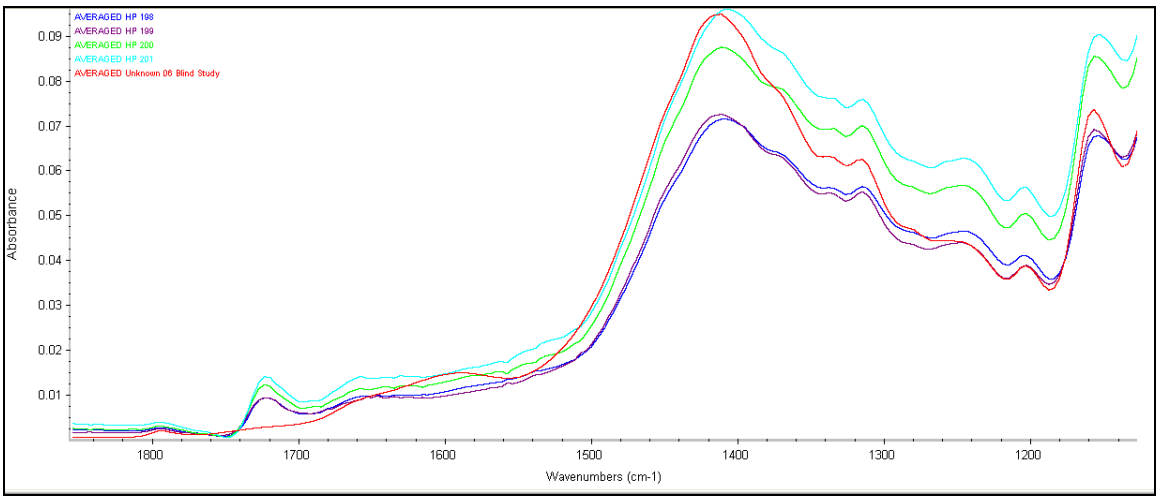

Figure 171: ATR spectra for the region between 1840 cm^{-1} and 1140 cm^{-1} comparing Unknown 06 (red) to Hewlett Packard 198 (blue), Hewlett Packard 199 (dark purple), Hewlett Packard 200 (light green) and Hewlett Packard 201 (light blue) ink standards.

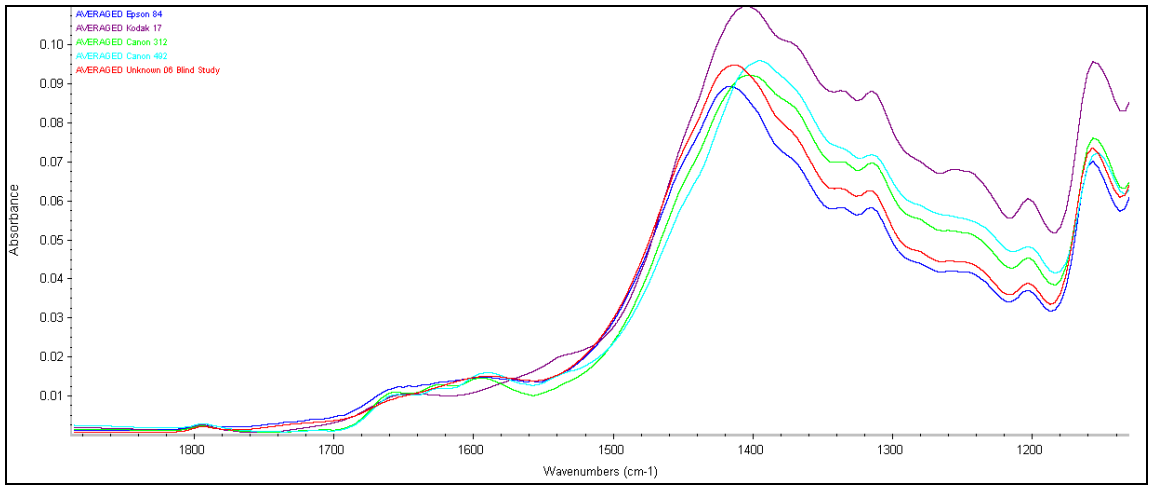

Figure 172: ATR spectra for the region between 1880 cm^{-1} and 1140 cm^{-1} comparing Unknown 06 (red) to Epson 84 (blue), Canon 312 (light green), Canon 492 (light blue) and Kodak 17 (dark purple) ink standards.

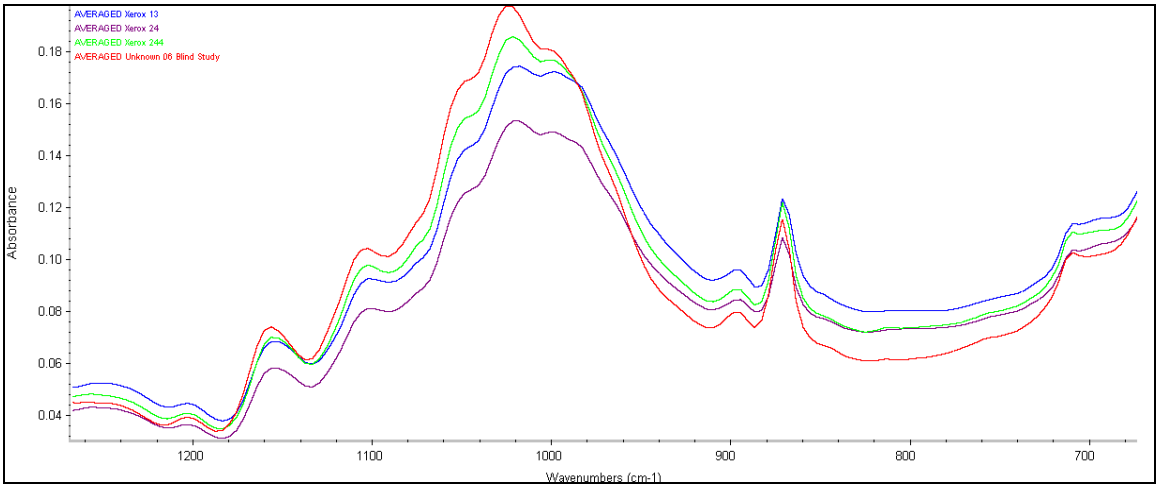

Figure 173: ATR spectra for the region between 1260 cm^{-1} and 680 cm^{-1} comparing Unknown 06 (red) to Xerox 13 (blue), Xerox 24 (dark purple) and Xerox 244 (light green) ink standards.

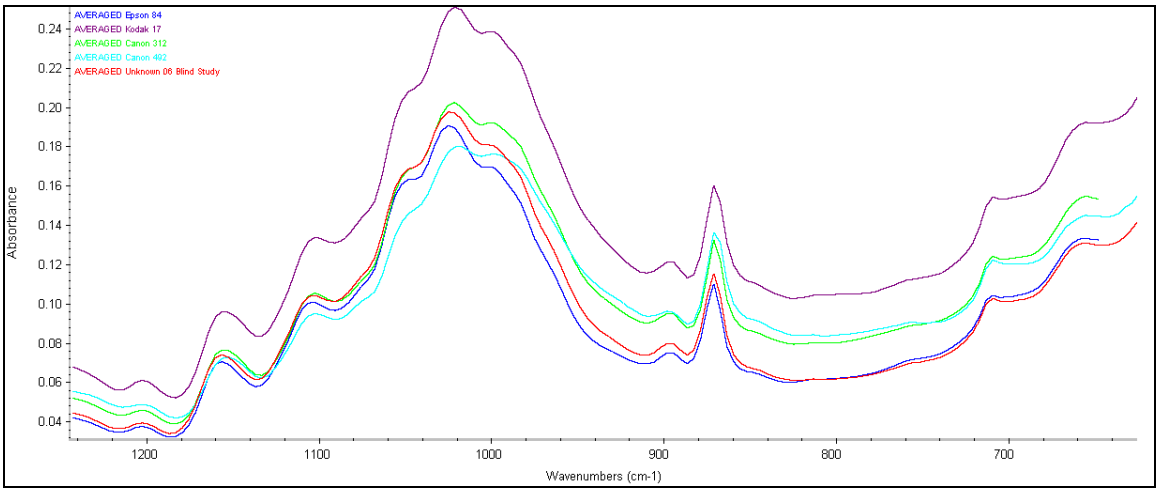

Figure 174: ATR spectra for the region between 1240 cm^{-1} and 640 cm^{-1} comparing Unknown 06 (red) to Epson 84 (blue), Canon 312 (light green), Canon 492 (light blue) and Kodak 17 (dark purple) ink standards.

The ATR spectrum of the Unknown 07 ink on paper sample was examined in order to determine the possible source of this ink sample. The Unknown 07 ink sample was a non-extractable ink sample so it was compared to the non-extractable ink standards. In the region between 1700 cm^{-1} and 1500 cm^{-1}, there were three peaks present in the Unknown 07 ink on paper sample ATR spectrum. The Xerox 244 ink on paper sample ATR spectrum also had three peaks in this region, while the Xerox 13 and Xerox 24 ink on paper samples ATR spectra had only two peaks in this region. The Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200, Hewlett Packard 201 and Kodak 17 ink on paper samples ATR spectra had a single peak at approximately 1660 cm^{-1}, while the Epson 84 ink on paper sample ATR spectrum had a broad single peak that spanned the region from approximately 1680 cm^{-1} to 1570 cm^{-1}. The Canon 312 and Canon 492 ink on paper samples ATR spectra had a three peak pattern in this region but the three peaks found in the Canon 312 and Canon 492 ink on paper samples

ATR spectra were more pronounced than the three peaks found in the Unknown 07 ink on paper sample ATR spectrum.

In the region between 1500 cm^{-1} and 1300 cm^{-1}, the peak pattern in the Unknown 07 ink on paper sample ATR spectrum was similar to the pattern exhibited by the Xerox 244 ink on paper sample ATR spectrum. In fact, the Xerox 244 and Unknown 07 ink on paper samples ATR spectra overlapped almost perfectly in this region. The Xerox 13 and Xerox 24 ink on paper samples ATR spectra had a more pronounced hump on the right side of the main peak in this region than what was found in the Unknown 07 ink on paper sample ATR spectrum. For the Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200 and Hewlett Packard 201 ink on paper samples ATR spectra there were some differences in the peak shapes of the peaks in this region as compared to the peak shapes found in the Unknown 07 ink on paper sample ATR spectrum, and the hump on the right side of the main peak in this region was more pronounced in the Hewlett Packard ink on paper samples ATR spectra than in the Unknown 07 ink on paper sample ATR spectrum. The peak pattern and overall shape was similar between the Kodak 17 and Unknown 07 ink on paper samples ATR spectra in this region. Not only did the Canon 492 ink on paper sample ATR spectrum lack the small hump on the right side of the main peak in this region, but the peak maximum position of the main peak was located at a lower wavenumber as compared to the peak maximum position for the main peak in the Unknown 07 ink on paper sample ATR spectrum. This difference in the peak maximum position was also found with the Canon 312 ink on paper sample ATR spectrum, though the peak pattern and peak shape were similar between the Canon 312 ink on paper sample ATR spectrum and the Unknown 07 ink on paper sample ATR

spectrum. The Epson 84 ink on paper sample ATR spectrum had a different peak pattern in this region as compared to the Unknown 07 ink on paper sample ATR spectrum. When the group of three peaks located in the region of 1100 cm^{-1} to 900 cm^{-1} was examined, the Xerox 244 and Unknown 07 ink on paper samples ATR spectra again had such similar patterns that their spectra overlapped in this region. This group of three peaks for the Unknown 07 ink on paper sample ATR spectrum was asymmetrical, which was similar for all of the non-extractable ink on paper samples ATR spectra except for the Epson 84 ink on paper sample ATR spectrum, which allowed for exclusion of the Epson 84 ink sample as the source of the Unknown 07 ink sample. Based on their ink on paper ATR spectra, the Unknown 07 was more closely aligned to and hence could be tentatively identified as a Xerox ink sample, specifically a Xerox 13 (8R7994), Xerox 24 (8R7660) or Xerox 244 (M-Series) ink sample. Refer to Figures 175 through 179 for the ATR differences between the Unknown 07 ink on paper sample and the non-extractable ink on paper standards ATR spectra.

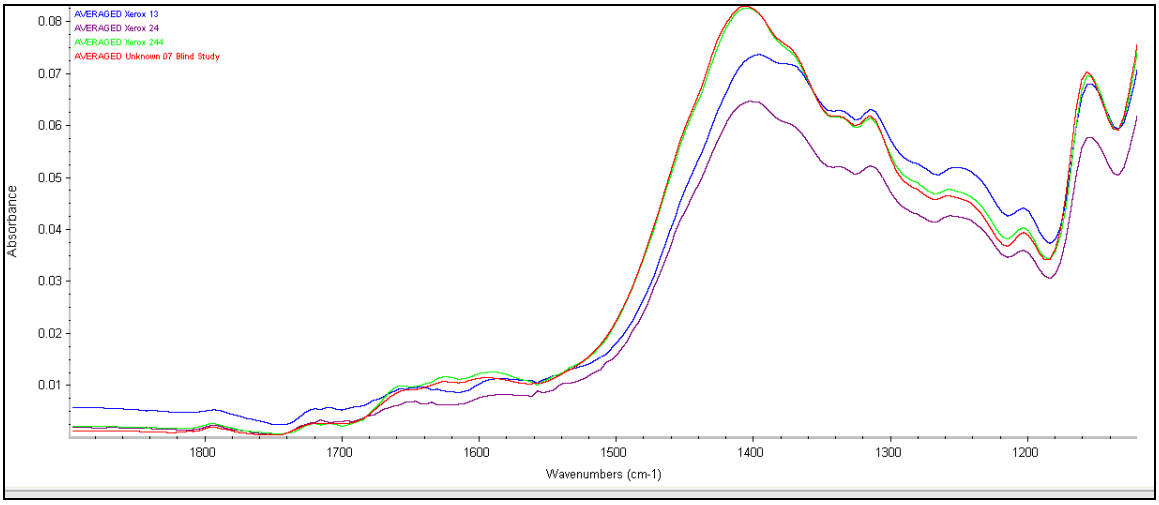

Figure 175: ATR spectra for the region between 1880 cm^{-1} and 1140 cm^{-1} comparing Unknown 07 (red) to Xerox 13 (blue), Xerox 24 (dark purple) and Xerox 244 (light green) ink standards.

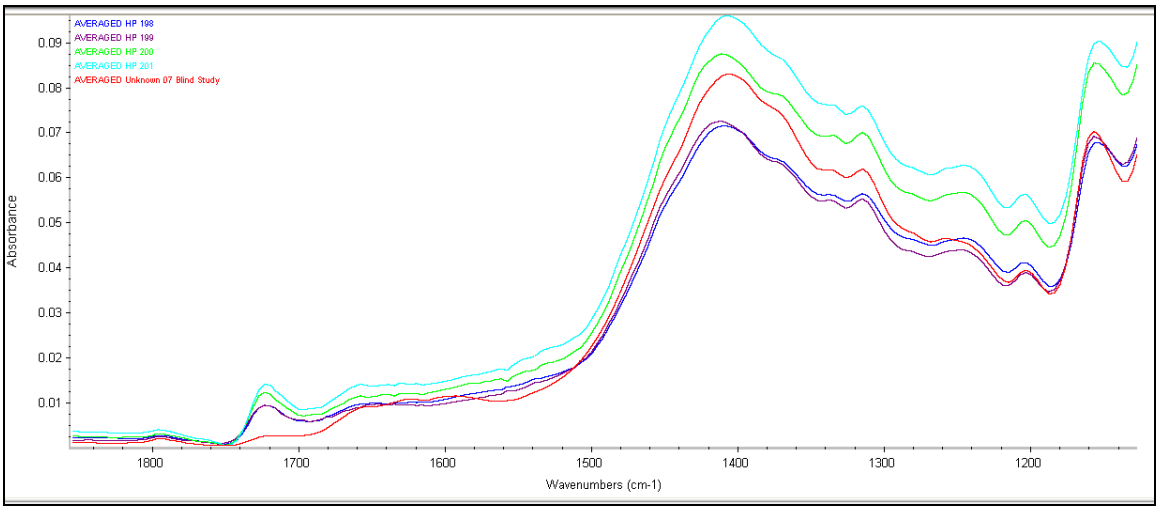

Figure 176: ATR spectra for the region between 1840 cm^{-1} and 1140 cm^{-1} comparing Unknown 07 (red) to Hewlett Packard 198 (blue), Hewlett Packard 199 (dark purple), Hewlett Packard 200 (light green) and Hewlett Packard 201 (light blue) ink standards.

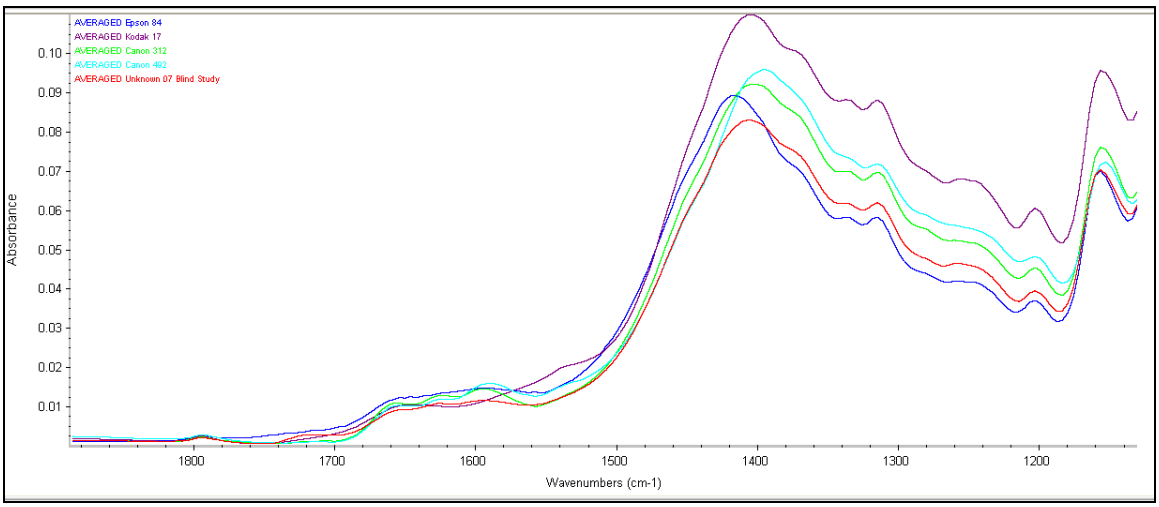

Figure 177: ATR spectra for the region between 1880 cm^{-1} and 1140 cm^{-1} comparing Unknown 07 (red) to Epson 84 (blue), Canon 312 (light green), Canon 492 (light blue) and Kodak 17 (dark purple) ink standards.

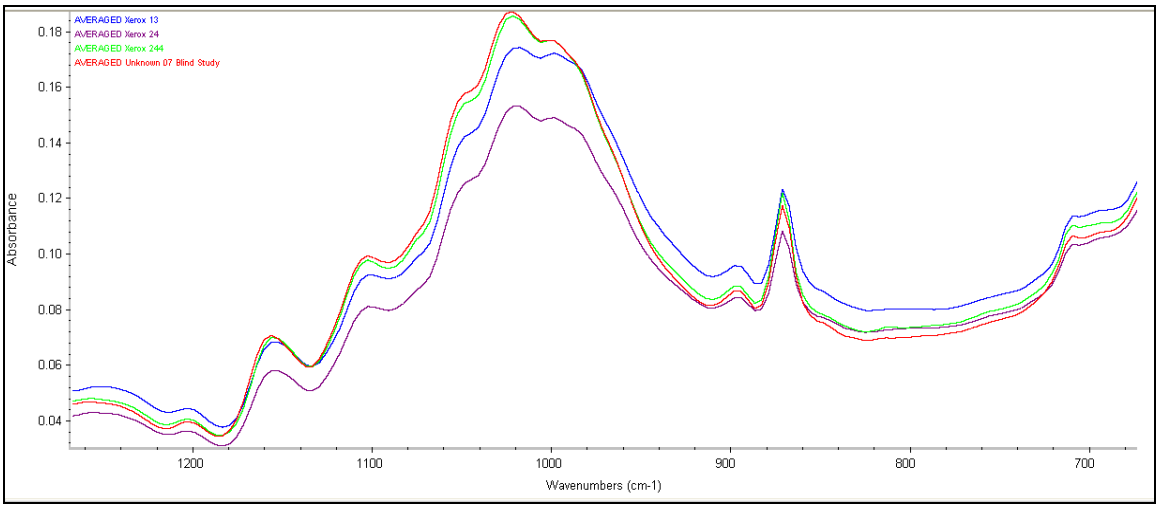

Figure 178: ATR spectra for the region between 1260 cm^{-1} and 680 cm^{-1} comparing Unknown 07 (red) to Xerox 13 (blue), Xerox 24 (dark purple) and Xerox 244 (light green) ink standards.

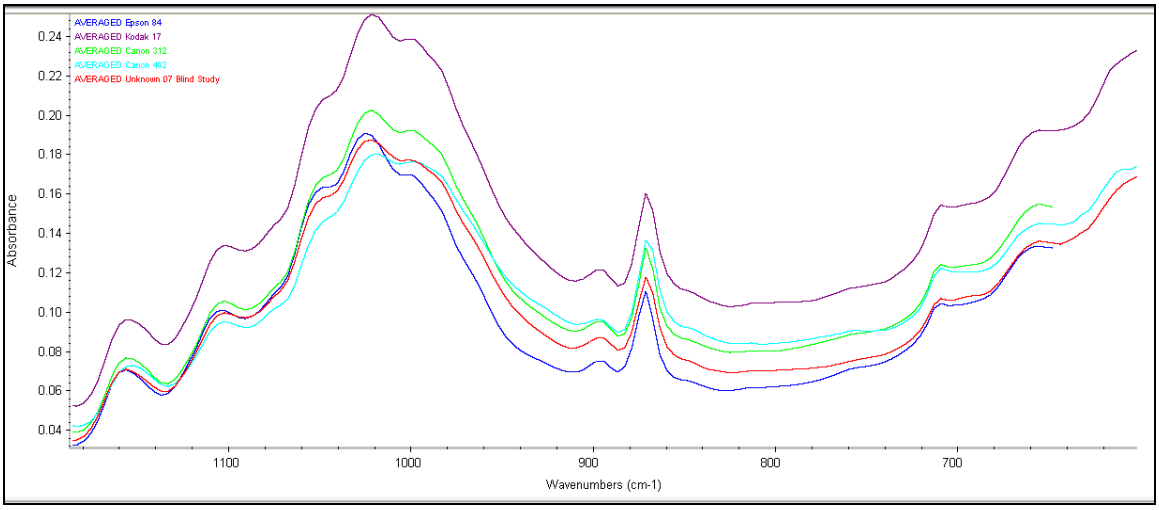

Figure 179: ATR spectra for the region between 1180 cm^{-1} and 620 cm^{-1} comparing Unknown 07 (red) to Epson 84 (blue), Canon 312 (light green), Canon 492 (light blue) and Kodak 17 (dark purple) ink standards.

The ATR spectrum of the Unknown 08 ink on paper sample was examined in order to determine the possible source of this ink sample. The Unknown 08 ink sample was an extractable ink sample so it was compared to the extractable ink standards. In the region between 1700 cm^{-1} and 1500 cm^{-1}, there were two small peaks present in this region. Though the Epson 30, Epson 63, Epson 90 and Epson 156 ink on paper samples

ATR spectra also contained two peaks in this region, their peak maxima positions were located at different wavenumbers from the peak maximum positions in the Unknown 08 ink on paper sample ATR spectrum, and as such the peak patterns were not the same between the Epson ink on paper samples ATR spectra and the Unknown 08 ink on paper sample ATR spectrum. The Hewlett Packard 205, Kodak 22 and Okidata 04 ink on paper samples ATR spectra had a single peak in this region, thus the Hewlett Packard 205, Kodak 22 and Okidata 04 ink on paper samples ATR spectra could be distinguished from the Unknown 08 ink on paper sample ATR spectrum. The Canon 217, Canon 327 and Canon 402 ink on paper samples ATR spectra had three peaks in this region and as such the Canon 217, Canon 327 and Canon 402 ink on paper samples ATR spectra could be distinguished from the Unknown 08 ink on paper sample ATR spectrum. The Canon 306 ink on paper sample ATR spectrum, as discussed previously, had two identifiable peaks present in this region and a third minor peak that was not readily discernable from the baseline of the ink on paper sample ATR spectrum. The Canon 384 ink on paper sample ATR spectrum had two peaks in this region and was similar in appearance to the peak pattern exhibited by the Unknown 08 ink on paper sample ATR spectrum.

In the region between 1500 cm^{-1} and 1300 cm^{-1}, the main peak in the Unknown 08 ink on paper sample ATR spectrum was broader and less symmetrical than the main peak in the Epson ink on paper samples ATR spectra. The peak in the Unknown 08 ink on paper sample ATR spectrum was also broader than the main peak found in the Hewlett Packard 205, Okidata 04, Kodak 22, Canon 217, Canon 306, Canon 327 and Canon 402 ink on paper samples ATR spectra. The main peak in the Canon 384 ink on paper sample ATR spectrum was broad, broader than any of the peaks found in the other Canon ink on

paper samples ATR spectra, and was similar in appearance to the main peak in the Unknown 08 ink on paper sample ATR spectrum. Thus, based on their ink on paper ATR spectra, the Unknown 08 ink sample could be tentatively identified as a Canon 384 (BCI-11) ink sample. Refer to Figures 180 through 182 for the ATR differences between the Unknown 08 ink on paper sample and the extractable ink on paper standards ATR spectra.

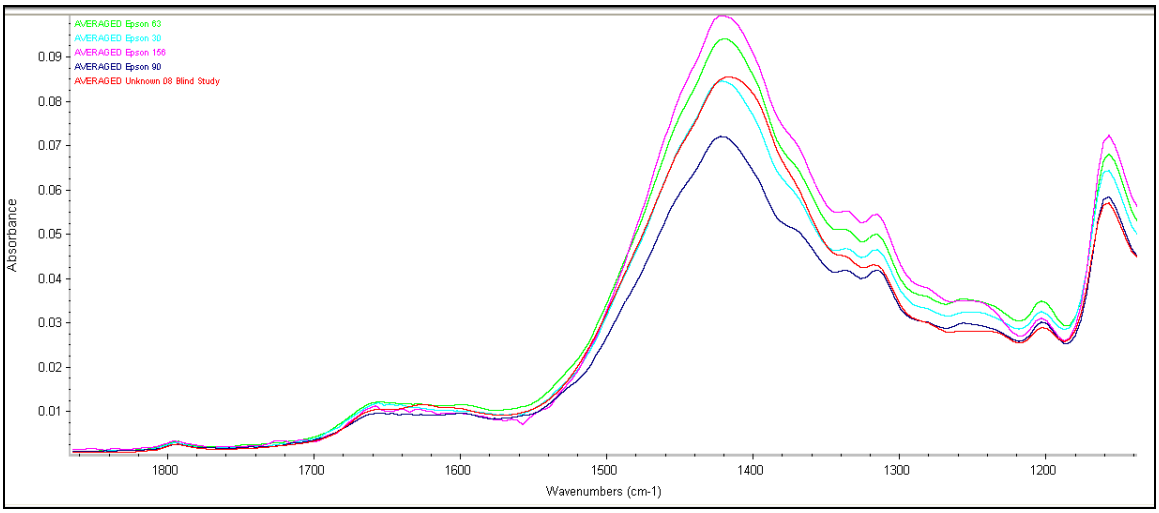

Figure 180: ATR spectra for the region between 1860 cm^{-1} and 1140 cm^{-1} comparing Unknown 08 (red) to Epson 30 (light blue), Epson 63 (light green), Epson 90 (dark blue) and Epson 156 (light purple) ink standards.

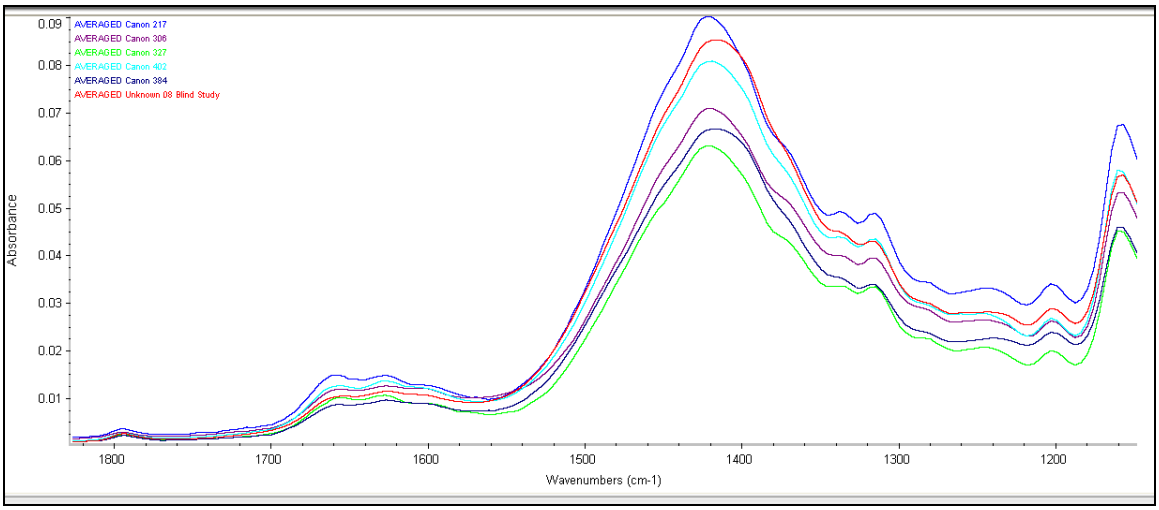

Figure 181: ATR spectra for the region between 1820 cm^{-1} and 1160 cm^{-1} comparing Unknown 08 (red) to Canon 217 (blue), Canon 306 (dark purple), Canon 327 (light green), Canon 402 (light blue) and Canon 384 (dark blue) ink standards.

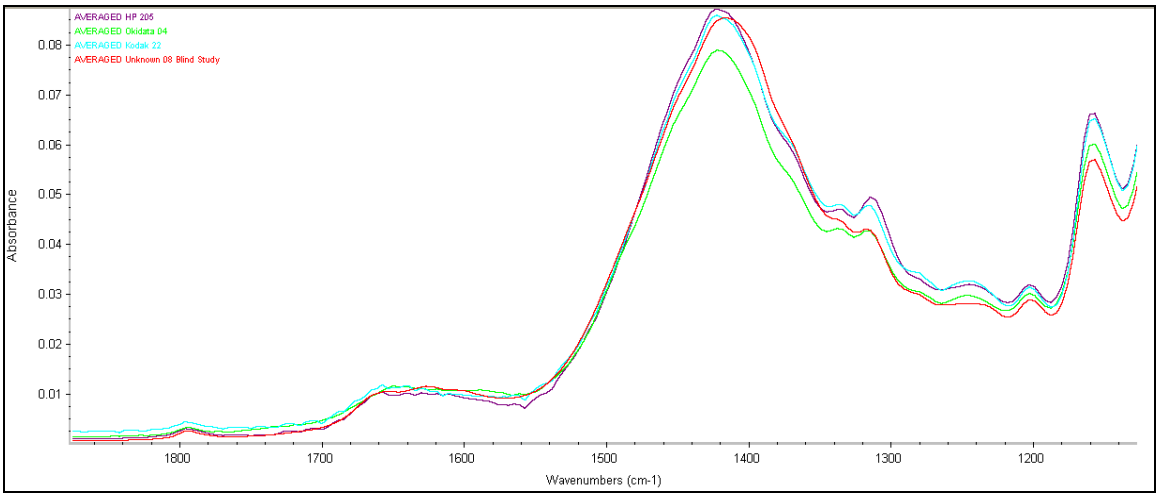

Figure 182: ATR spectra for the region between 1860 cm^{-1} and 1140 cm^{-1} comparing Unknown 08 (red) to Hewlett Packard 205 (dark purple), Kodak 22 (light blue) and Okidata 04 (light green) ink standards.

The ATR spectrum of the Unknown 09 ink on paper was examined in order to determine the possible source of this ink sample. The Unknown 09 ink sample was an extractable ink sample so it was compared to the extractable ink standards. For this unknown, in the region between 1700 cm^{-1} and 1500 cm^{-1}, there were three peaks present

with the third peak being minor compared to the first two peaks in the pattern. This peak pattern was different from the peak patterns exhibited by the Epson 30, Epson 63, Epson 90, Epson 156, Kodak 22, Okidata 04 and Hewlett Packard 205 ink on paper samples ATR spectra in this region. With the exception of the Canon 384 ink on paper sample ATR spectrum, which had two peaks in this region, the Canon ink on paper samples ATR spectra had a similar peak pattern to the peak pattern found in the Unknown 09 ink on paper sample ATR spectrum. The Canon 217, Canon 327 and Canon 402 ink on paper samples ATR spectra, and the Canon 306 ink on paper sample ATR spectrum to a lesser degree, all had three peaks in this region, with the third peak of the group being smaller than the first two peaks in the group. For the Canon 306 ink on paper sample ATR spectrum the third peak was barely discernable from the baseline in the ink on paper ATR spectrum.

In the region between 1500 cm^{-1} and 1300 cm^{-1}, the main peak in the Unknown 09 ink on paper ATR spectrum was broader than the main peak in the Epson ink on paper samples ATR spectra. This peak was also broader than the main peak found in the Hewlett Packard 205, Okidata 04 and Kodak 22 ink on paper samples ATR spectra. The Canon 306, Canon 327, Canon 402 and Canon 384 ink on paper samples ATR spectra had a broader main peak, which was similar in appearance to the main peak found in the Unknown 09 ink on paper sample ATR spectrum. The main peak in the Canon 217 ink on paper sample ATR spectrum was more symmetrical and narrower than the main peak in the Unknown 09 ink on paper sample ATR spectrum, which allowed it to be distinguished from the Unknown 09 ink sample.

In the region between approximately 1280 cm^{-1} and 1200 cm^{-1}, there were differences in the peak shape for the Unknown 09 ink on paper sample ATR spectrum as compared to some of the extractable ink on paper samples ATR spectra. For the Epson extractable ink on paper samples ATR spectra, the peak appearance in this region was different in peak shape and peak maxima position than in the Unknown 09 ink on paper sample ATR spectrum. For the Okidata 04, Hewlett Packard 205, Kodak 22, Canon 217, Canon 306, Canon 327 and Canon 384 ink on paper samples ATR spectra, the peak present in this region was more symmetrical in appearance than the peak found in the Unknown 09 ink on paper sample ATR spectrum. For both the Unknown 09 and Canon 402 ink on paper samples ATR spectra, the main peak was asymmetrical with the left side being higher and flatter than the right side. Thus, based on their ink on paper ATR spectra, the Unknown 09 ink sample could be tentatively identified as a Canon 402 (BCI-12) ink sample. Refer to Figures 183 through 185 for the ATR differences between the Unknown 09 ink on paper sample and the extractable ink on paper standards ATR spectra.

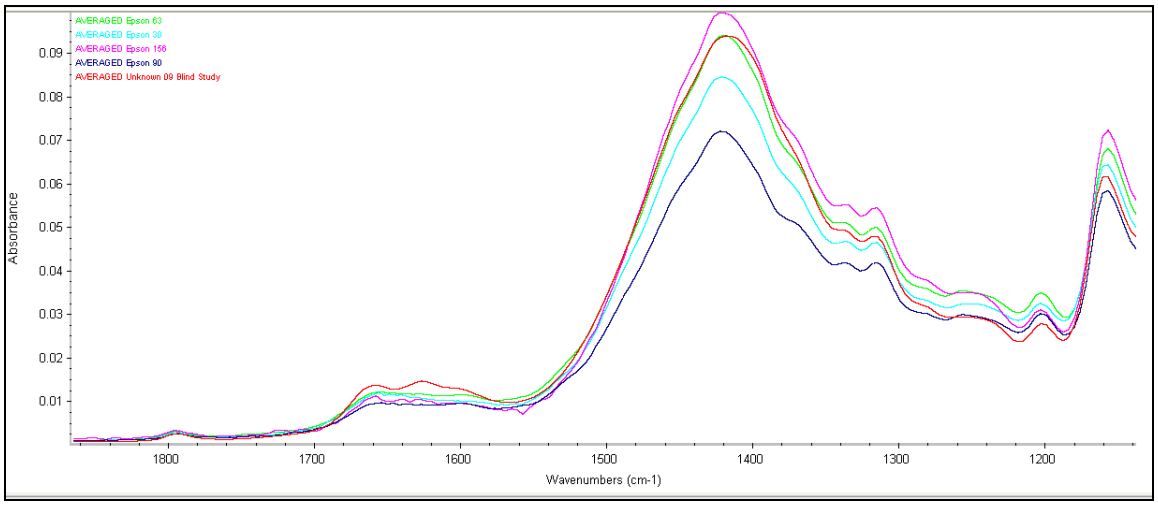

Figure 183: ATR spectra for the region between 1860 cm^{-1} and 1140 cm^{-1} comparing Unknown 09 (red) to Epson 30 (light blue), Epson 63 (light green), Epson 90 (dark blue) and Epson 156 (light purple) ink standards.

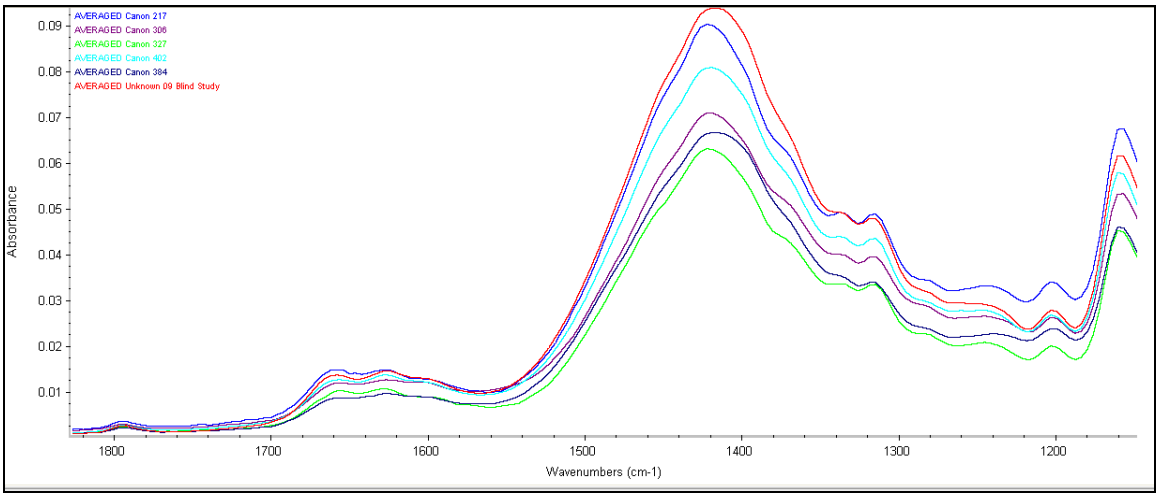

Figure 184: ATR spectra for the region between 1820 cm^{-1} and 1160 cm^{-1} comparing Unknown 09 (red) to Canon 217 (blue), Canon 306 (dark purple), Canon 327 (light green), Canon 402 (light blue) and Canon 384 (dark blue) ink standards.

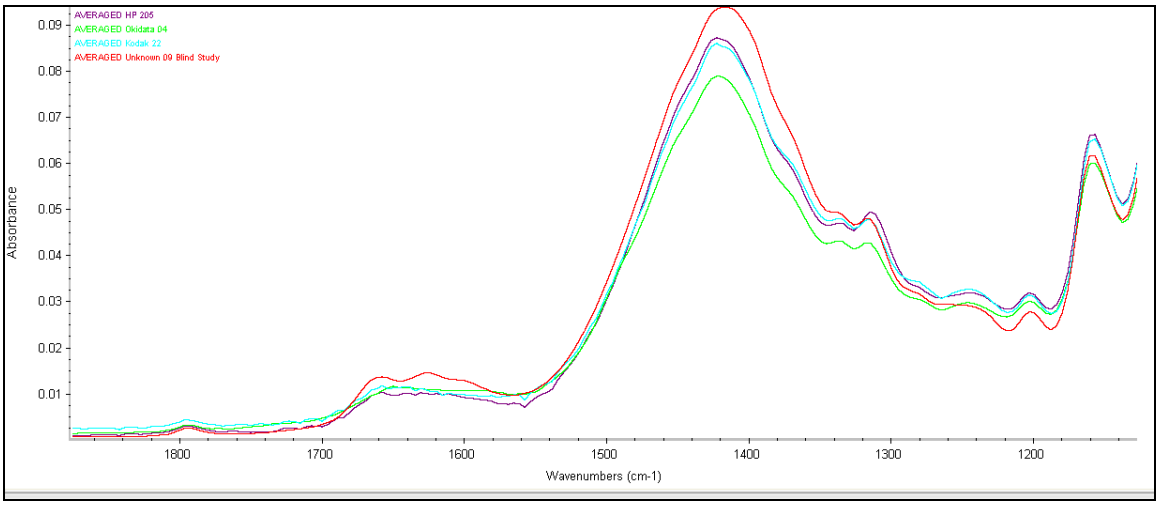

Figure 185: ATR spectra for the region between 1860 cm^{-1} and 1140 cm^{-1} comparing Unknown 09 (red) to Hewlett Packard 205 (dark purple), Kodak 22 (light blue) and Okidata 04 (light green) ink standards.

The ATR spectrum of the Unknown 10 ink on paper sample was examined in order to determine the possible source of this ink sample. The Unknown 10 ink sample was an extractable ink sample so it was compared to the extractable ink standards. In the region between 1700 cm^{-1} and 1500 cm^{-1}, there were three peaks present with the third peak being minor and almost indiscernible in the Unknown 10 ink on paper sample ATR spectrum. This peak pattern was different from the peak patterns exhibited by the Epson 30, Epson 63, Epson 90, Epson 156, Kodak 22, Okidata 04 and Hewlett Packard 205 ink on paper samples ATR spectra in this region. The Canon ink on paper samples ATR spectra had a similar peak pattern to the peak pattern found in the Unknown 10 ink on paper sample ATR spectrum. The Canon 217, Canon 327, Canon 348 and Canon 402 ink on paper sample ATR spectrum, and the Canon 306 ink on paper sample ATR spectrum to a lesser degree, all had three peaks in this region, with the third peak of the group being smaller than the first two peaks in the group.

In the region between 1500 cm^{-1} and 1300 cm^{-1}, the main peak in the Unknown 10 ink on paper sample ATR spectrum was slightly broader than the main peak in the Epson ink on paper samples ATR spectra. In addition, the hump on the right side of the main peak in this region was more pronounced in the Unknown 10 ink on paper sample ATR spectrum than in the Epson ink on paper samples ATR spectra. For the Hewlett Packard 205, Okidata 04 and Kodak 22 ink on paper samples ATR spectra, the overall shape of the main peak in the region was consistent with the main peak found in the Unknown 10 ink on paper sample ATR spectrum; however the hump on the right side of the main peak in the Unknown 10 ink on paper sample ATR spectrum was more pronounced than the humps found in the Hewlett Packard 205, Okidata 04 and Kodak 22 ink on paper samples ATR spectra. With the exception of the Canon 402 ink on paper sample ATR spectrum, which had a wider main peak than the Unknown 10 ink on paper sample, the main peak in the remaining Canon ink on paper samples ATR spectra, and the humps on the right side of that peak, were similar in shape to the Unknown 10 ink on paper sample ATR spectrum. In fact the Canon 348 ink on paper sample ATR spectrum overlapped with the Unknown 10 ink on paper ATR spectrum almost perfectly in this region.

In the region between approximately 1280 cm^{-1} and 1200 cm^{-1}, there were differences in the peak shape for the Unknown 10 ink on paper sample ATR spectrum as compared to some of the extractable ink on paper samples ATR spectra, which allowed them to be distinguished from one another. Based on the peak pattern in this region, the Unknown 10 ink on paper sample ATR spectrum could be distinguished from the Epson 90, Epson 156, Canon 217, Canon 327, Kodak 22 and Okidata 04 ink on paper samples ATR spectra. Additionally, there were similarities in this region between the Unknown

10 ink on paper sample ATR spectrum and some other the extractable ink on paper samples ATR spectra. The main peak in this region for the Canon 306, Canon 348, Canon 402, Epson 30, Epson 63 and Hewlett Packard 205 ink on paper samples ATR spectra were flatter and slightly asymmetrical, which was similar in appearance to the peak found in the Unknown 10 ink on paper sample ATR spectrum. Thus, based on their ink on paper ATR spectra, the Unknown 10 ink sample could be tentatively identified as being either a Canon 348 (BCI-21) or a Canon 306 (BC-20) ink sample. Refer to Figures 186 through 188 for the differences between the Unknown 10 ink on paper sample and the extractable ink on paper standards ATR spectra.

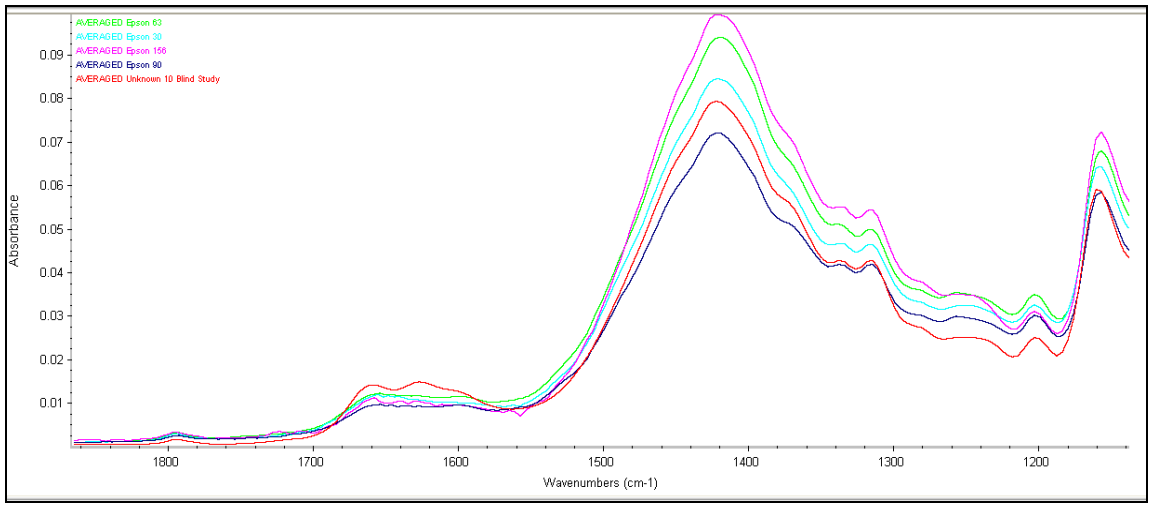

Figure 186: ATR spectra for the region between 1860 cm^{-1} and 1140 cm^{-1} comparing Unknown 10 (red) to Epson 30 (light blue), Epson 63 (light green), Epson 90 (dark blue) and Epson 156 (light purple) ink standards.

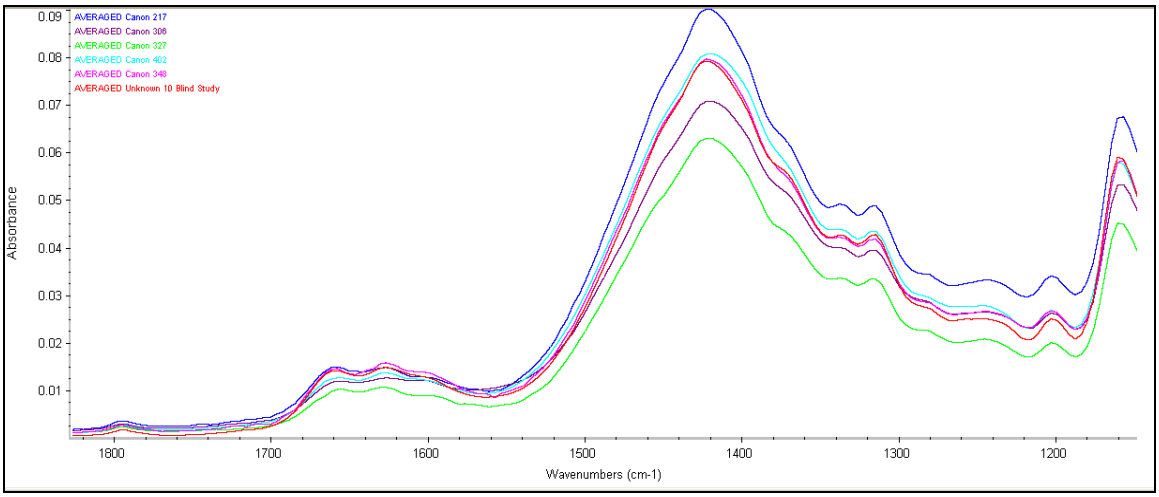

Figure 187: ATR spectra for the region between 1820 cm^{-1} and 1160 cm^{-1} comparing Unknown 10 (red) to Canon 217 (blue), Canon 306 (dark purple), Canon 327 (light green), Canon 402 (light blue) and Canon 348 (light purple) ink standards.

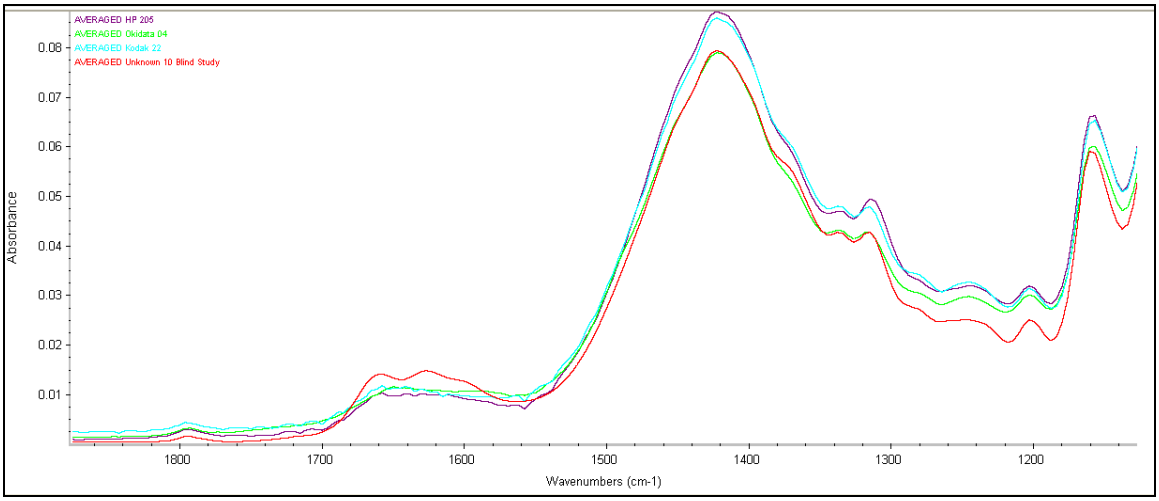

Figure 188: ATR spectra for the region between 1860 cm^{-1} and 1140 cm^{-1} comparing Unknown 10 (red) to Hewlett Packard 205 (dark purple), Kodak 22 (light blue) and Okidata 04 (light green) ink standards.

The ATR spectrum of the Unknown 11 ink on paper sample was examined in order to determine the possible source of this ink sample. The Unknown 11 ink sample was an extractable ink sample so it was compared to the extractable ink standards. In the region between 1700 cm^{-1} and 1500 cm^{-1}, there was a single broad peak present in the

Unknown 11 ink on paper sample ATR spectrum. This peak pattern was different from the Epson 63 and Epson 90 ink on paper samples ATR spectra, both of which had two peaks in this region, and different from the Canon 217, Canon 306, Canon 327 and Canon 402 ink on paper samples ATR spectra, all of which had three peaks in this region. The Epson 30, Epson 156, Hewlett Packard 205, Kodak 22 and Okidata 04 ink on paper samples ATR spectra all had a single broad peak in this region but differences between some of these ink on paper samples ATR spectra and the Unknown 11 ink on paper sample ATR spectrum were noted. The Epson 156, Epson 30 and Hewlett Packard 205 ink on paper samples ATR spectra, the main peak had a peak maximum position that was located at approximately 1660 cm^{-1}, while the Kodak 22 and Okidata 04 ink on paper samples ATR spectra, the main peak had a peak maximum position that was located at approximately 1650 cm^{-1}. In the Unknown 11 ink on paper sample ATR spectrum, the main peak was broad and spanned the region from 1680 cm^{-1} to 1560 cm^{-1}, which distinguished it from the previously mentioned standard ink on paper samples ATR spectra. Even though five ink standards had a single peak in the region between 1700 cm^{-1} and 1500 cm^{-1}, there was no single extractable ink on paper standard ATR spectrum that had the exact same peak pattern in this region as the peak pattern found in the Unknown 11 ink on paper sample ATR spectrum.

In the region between 1500 cm^{-1} and 1300 cm^{-1}, the main peak in the Unknown 11 ink on paper sample ATR spectrum was similar in appearance to the Epson ink on paper samples ATR spectra, and in fact the Unknown 11 ink on paper sample ATR spectrum overlapped with the Epson 30 ink on paper sample ATR spectrum within this region. However, the hump on the right side of the main peak was slight in the Unknown 11 ink

on paper sample ATR spectrum and was more pronounced in the Epson 90 and Epson 156 ink on paper samples ATR spectra. The Canon 217, Canon 306, Canon 327, Canon 402 and Kodak 22 ink on paper samples ATR spectra were similar in appearance to the Unknown 11 ink on paper sample ATR spectrum in this region, but the hump on the right side of the main peak in this region was more pronounced for the Canon 217, Canon 306, Canon 327 and Kodak 22 ink on paper samples ATR spectra than in the Unknown 11 ink on paper sample ATR spectrum. The Hewlett Packard 205 and Okidata 04 ink on paper samples ATR spectra were similar in appearance to the Unknown 11 ink on paper sample ATR spectrum, and the hump on the right side of the main peak in this region was slight and similar to the hump found in the Unknown 11 ink on paper sample ATR spectrum.

In the region between approximately 1280 cm^{-1} and 1200 cm^{-1}, there were differences in the peak shape for the Unknown 11 ink on paper sample ATR spectrum as compared to some of the extractable ink on paper samples ATR spectra, which allowed them to be distinguished from one another. The main peak in this region for the Unknown 11 ink on paper sample ATR spectrum was symmetrical in appearance, whereas the main peak in the Epson 30, Epson 63, Epson 90 and Epson 156 ink on paper samples ATR spectra was less symmetrical and had a different shape. With the exception of the Canon 402 ink on paper sample ATR spectrum, the main peak in the Canon ink on paper samples ATR spectra were similar in appearance to the peak in the Unknown 11 ink on paper sample ATR spectrum. The main peak in the Canon 402 ink on paper sample ATR spectrum was more asymmetrical in appearance than the main peak found in the Unknown 11 ink on paper sample ATR spectrum. The main peak in the Hewlett Packard 205, Kodak 22 and Okidata 04 ink on paper samples ATR spectra were also

similar in appearance to the main peak in the Unknown 11 ink on paper sample ATR spectrum. However, the Kodak 22 ink on paper sample ATR spectrum had a more definitive peak at approximately 1280 cm^{-1} than what was observed in the Unknown 11 ink on paper sample ATR spectrum. In addition, the ratio between the two peaks in the region of approximately 1350 cm^{-1} and 1290 cm^{-1} was different for the Hewlett Packard 205 ink on paper sample ATR spectrum as compared to the Unknown 11 ink on paper sample ATR spectrum. Thus, based on their ink on paper ATR spectra, the Unknown 11 ink sample could be tentatively identified as an Okidata 04 (#52110001) ink sample. Refer to Figures 189 through 191 for the differences between the Unknown 11 ink on paper sample and the extractable ink on paper standards ATR spectra.

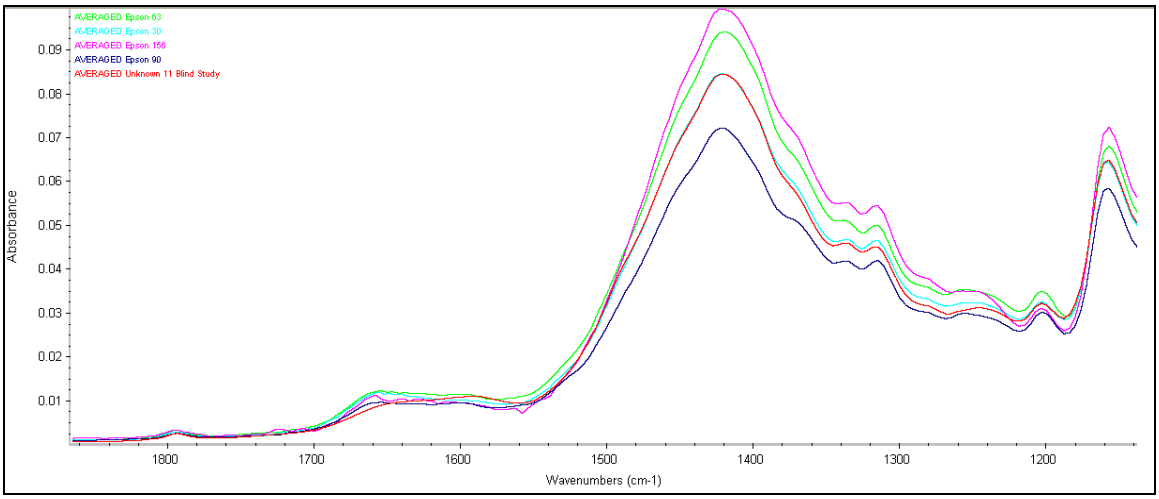

Figure 189: ATR spectra for the region between 1860 cm^{-1} and 1140 cm^{-1} comparing Unknown 11 (red) to Epson 30 (light blue), Epson 63 (light green), Epson 90 (dark blue) and Epson 156 (light purple) ink standards.

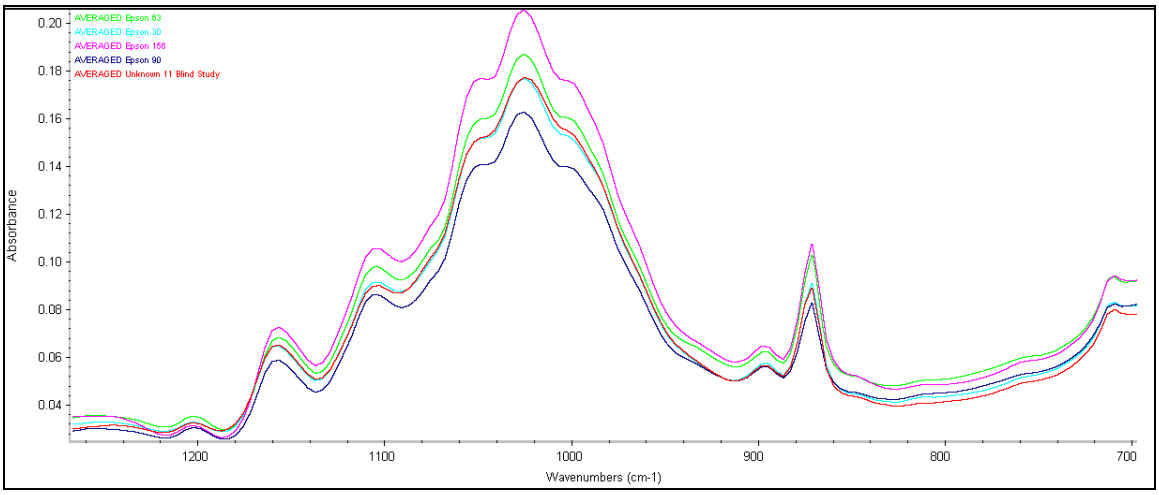

Figure 190: ATR spectra for the region between 1260 cm^{-1} and 700 cm^{-1} comparing Unknown 11 (red) to Canon 217 (dark purple), Canon 306 (light blue), Canon 327 (light green) and Canon 402 (light purple) ink standards.

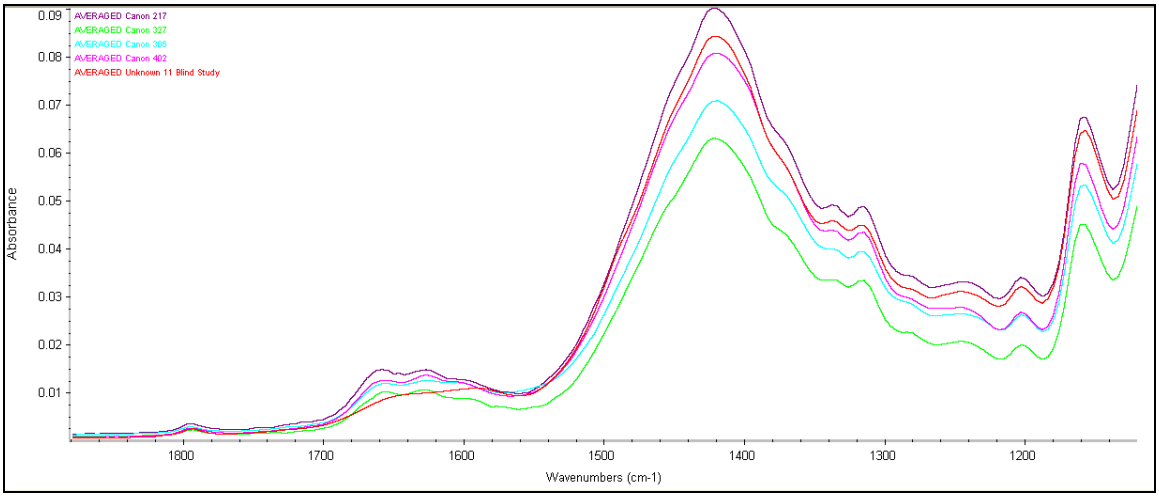

Figure 191: ATR spectra for the region between 1880 cm^{-1} and 1140 cm^{-1} comparing Unknown 11 (red) to Hewlett Packard 205 (dark purple), Kodak 22 (light blue) and Okidata 04 (light green) ink standards.

The ATR spectrum of the Unknown 12 ink on paper sample was examined in order to determine the possible source of this ink sample. The Unknown 12 ink sample was an extractable ink sample so it was compared to the extractable ink standards. For the Unknown 12 ink on paper sample ATR spectrum, in the region between 1700 cm^{-1}

and 1500 cm^{-1}, there were three peaks present with the third peak being minor compared to the other two peaks in the pattern. This peak pattern was different from the peak patterns exhibited by the Epson 30, Epson 63, Epson 90, Epson 156, Kodak 22, Okidata 04 and Hewlett Packard 205 ink on paper samples ATR spectra in this region. With the exception of the Canon 384 ink on paper sample ATR spectrum, which had two peaks in this region, the Canon ink on paper samples ATR spectra had similar peak pattern to the peak pattern found in the Unknown 12 ink on paper sample ATR spectrum. The Canon 217, Canon 327 and Canon 402 ink on paper samples ATR spectra, and the Canon 306 ink on paper sample ATR spectrum to a lesser degree, all had three peaks in this region, with the third peak of the group being smaller than the first two peaks in the group. For the Canon 306 ink on paper sample ATR spectrum, the third peak was barely discernable from the baseline in its ink on paper sample ATR spectrum.

In the region between 1500 cm^{-1} and 1300 cm^{-1}, the main peak in the Unknown 12 ink on paper ATR spectrum was broader than the main peak in the Epson ink on paper samples ATR spectra and the hump on the right side of the main peak in the Epson ink on paper samples ATR spectra was more pronounced than in the Unknown 12 ink on paper sample ATR spectrum. The main peak in the Hewlett Packard 205, Okidata 04 and Kodak 22 ink on paper samples ATR spectra was close in appearance to the main peak found in the Unknown 12 ink on paper sample ATR spectrum, but the main peak in the Unknown 12 ink on paper sample ATR spectrum was slightly wider than the main peak in the Hewlett Packard 205, Okidata 04 and Kodak 22 ink on paper samples ATR spectra. The Canon 306, Canon 327, Canon 402 and Canon 384 ink on paper samples ATR spectra had a broader main peak, which was similar in appearance to the main peak found

in the Unknown 12 ink on paper sample ATR spectrum. The main peak in the Canon 217 ink on paper sample ATR spectrum was narrower and had a slightly different shape than the main peak in the Unknown 12 ink on paper sample ATR spectrum, which allowed it to be distinguished from the Unknown 12 ink sample.

In the region between approximately 1280 cm^{-1} and 1200 cm^{-1}, there were differences in the peak shape for the Unknown 12 ink on paper sample ATR spectrum as compared to some of the extractable ink on paper samples ATR spectra. For the Epson extractable ink on paper samples ATR spectra, the peak appearance in this region was different in peak shape and peak maximum position than what was observed in the Unknown 12 ink on paper sample ATR spectrum. For the Okidata 04, Hewlett Packard 205, Kodak 22, Canon 217, Canon 306, Canon 327 and Canon 384 ink on paper samples ATR spectra, the peak present in this region was more symmetrical in appearance than the peak found in the Unknown 12 ink on paper sample ATR spectrum. For the Unknown 12 and Canon 402 ink on paper samples ATR spectra, the main peak in this region was asymmetrical with the left side being higher and flatter than the right side. Thus, based on their ink on paper ATR spectra, the Unknown 12 ink sample could be tentatively identified as a Canon 402 (BCI-12) ink sample. Refer to Figures 192 through 194 for the differences between the Unknown ink on paper sample and the extractable ink on paper standards ATR spectra.

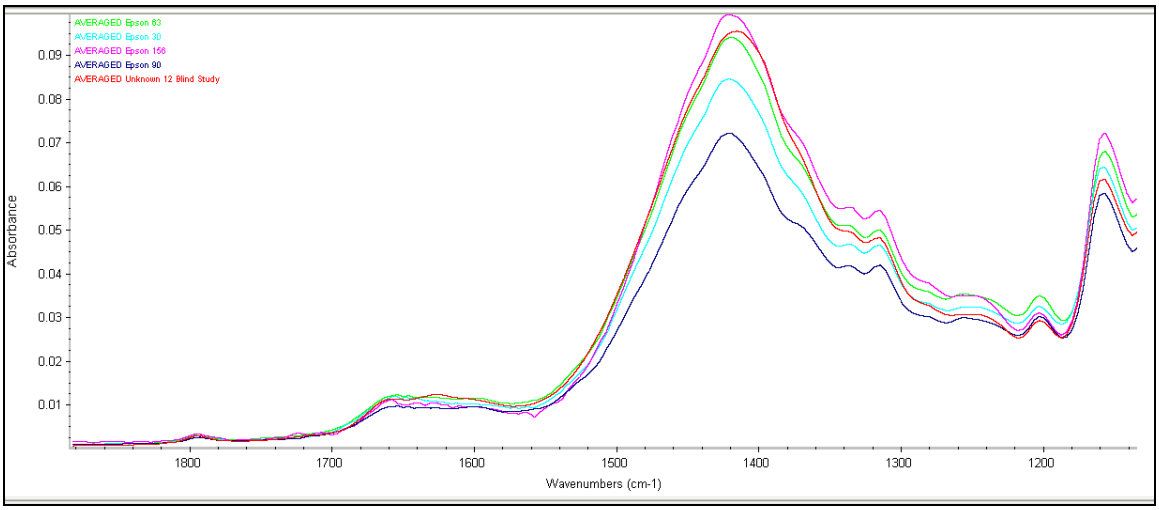

Figure 192: ATR spectra for the region between 1880 cm^{-1} and 1140 cm^{-1} comparing Unknown 12 (red) to Epson 30 (light blue), Epson 63 (light green), Epson 90 (dark blue) and Epson 156 (light purple) ink standards.

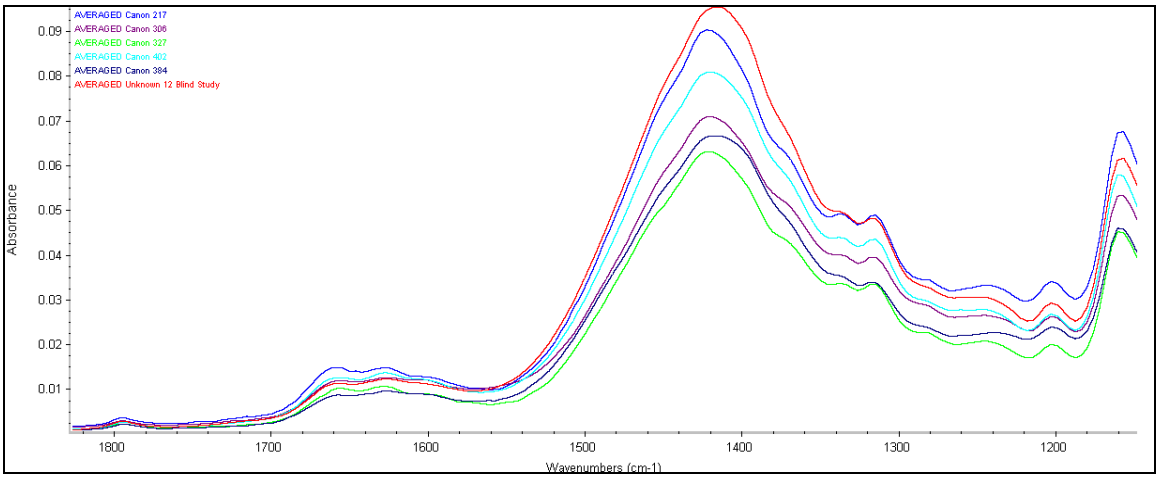

Figure 193: ATR spectra for the region between 1820 cm^{-1} and 1160 cm^{-1} comparing Unknown 12 (red) to Canon 217 (blue), Canon 306 (dark purple), Canon 327 (light green), Canon 402 (light blue) and Canon 384 (dark blue) ink standards.

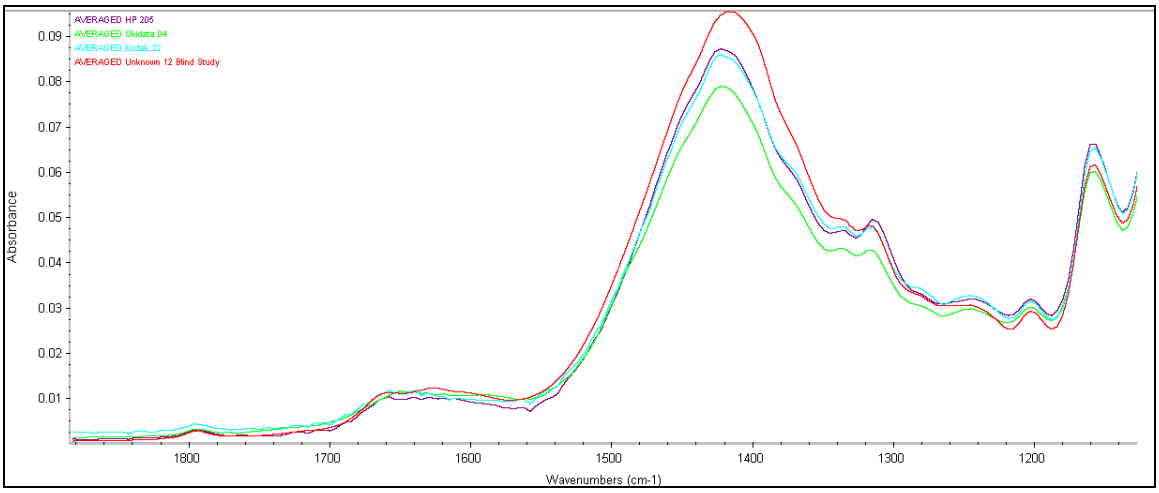

Figure 194: ATR spectra for the region between 1880 cm^{-1} and 1140 cm^{-1} comparing Unknown 12 (red) to Hewlett Packard 205 (dark purple), Kodak 22 (light blue) and Okidata 04 (light green) ink standards.

The ATR spectrum of the Unknown 13 ink on paper sample was examined in order to determine the possible source of this ink sample. The Unknown 13 ink sample was a non-extractable ink sample so it was compared to the non-extractable ink standards. In the region between 1700 cm^{-1} and 1500 cm^{-1}, in the Unknown 13 ink on paper sample ATR spectrum there was a single peak present that had a peak maximum position at approximately 1640 cm^{-1}. The Xerox 13 and Xerox 24 ink on paper samples ATR spectra had two peaks in this region, which was different from the peak pattern of the Unknown 13 ink on paper sample ATR spectrum. The Xerox 244, Canon 312 and Canon 492 ink on paper samples ATR spectra had three peaks in this region which distinguished their ink on paper samples ATR spectra from the Unknown 13 ink on paper sample ATR spectrum. The Epson 84 ink on paper sample ATR spectrum had a broad single peak that spanned the region from approximately 1680 cm^{-1} to 1570 cm^{-1}, which was different from the peak pattern exhibited by the Unknown 13 ink on paper sample ATR spectrum. The Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200,

Hewlett Packard 201 and Kodak 17 ink on paper samples ATR spectra had a single peak at approximately 1660 cm^{-1}, which was similar in appearance to the peak found in the Unknown 13 ink on paper sample ATR spectrum. The Kodak 17 ink on paper sample ATR spectrum, however, had an additional slight peak at the base of the main peak in this region that was not found in the Unknown 13 ink on paper sample ATR spectrum.

In the region between 1500 cm^{-1} and 1300 cm^{-1}, the peak pattern and peak shape were different for the Xerox 13, Xerox 24, Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200, Hewlett Packard 201 and Kodak 17 ink on paper samples ATR spectra as compared to the Unknown 13 ink on paper sample ATR spectrum, and the Kodak 17 ink on paper sample ATR spectrum exhibited some difference in the peak maximum position as compared to the Unknown 13 ink on paper sample ATR spectrum. The Canon 312 and Canon 492 ink on paper samples ATR spectra not only had a wider peak shape as compared to the Unknown 13 ink on paper sample ATR spectrum, but the peak maxima were located at a lower wavenumber for the Canon 312 and Canon 492 ink on paper samples ATR spectra as compared to the Unknown 13 ink on paper sample ATR spectrum. The Xerox 244 ink on paper sample ATR spectrum had some similarities in peak shape to the Unknown 13 ink on paper sample ATR spectrum, but the peak in the Xerox 244 ink on paper sample ATR spectrum was wider than the peak found in the Unknown 13 ink on paper sample ATR spectrum. The main peak in the Epson 84 ink on paper sample ATR spectrum had the same peak shape as the main peak in the Unknown 13 ink on paper sample ATR spectrum; however the main peak in the Epson 84 ink on paper sample ATR spectrum had a different peak maximum position, located at a slightly

higher wavenumber, than the main peak in the Unknown 13 ink on paper sample ATR spectrum.

However, when the group of three peaks identified in the region between 1100 cm^{-1} and 900 cm^{-1} was examined differences were observed between the Epson 84 ink on paper sample ATR spectrum and the Unknown 13 ink on paper sample ATR spectrum. The group of three peaks in the Epson 84 ink on paper sample ATR spectrum was symmetrical in appearance while the group of three peaks in the Unknown 13 ink on paper sample ATR spectrum was asymmetrical in appearance. Since the group of three peaks for the Unknown 13 ink on paper sample ATR spectrum was asymmetrical and the group of three peaks in the Epson 84 ink on paper sample ATR spectrum was symmetrical, the Epson 84 ink sample was excluded as being the source of the Unknown 13 ink sample. For the remaining non-extractable ink on paper samples ATR spectra, this group of three peaks was asymmetrical, with the third peak in the group being higher than the first peak in the group. Thus, based on their ink on paper ATR spectra, the Unknown 13 was more closely aligned to and hence could be tentatively identified as either a Xerox 13 (8R7994), Xerox 24 (8R7660), Xerox 244 (M-Series) or a Kodak 17 (#1369511) ink sample. Refer to Figures 195 through 199 for the differences between the Unknown 13 ink on paper sample and the non-extractable ink on paper standards ATR spectra.

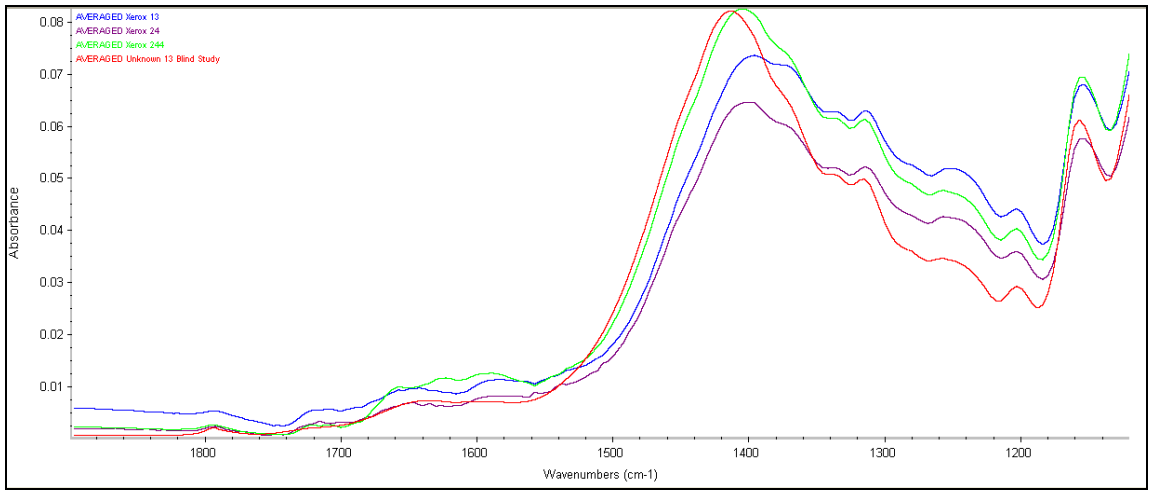

Figure 195: ATR spectra for the region between 1880 cm^{-1} and 1140 cm^{-1} comparing Unknown 13 (red) to Xerox 13 (blue), Xerox 24 (dark purple) and Xerox 244 (light green) ink standards.

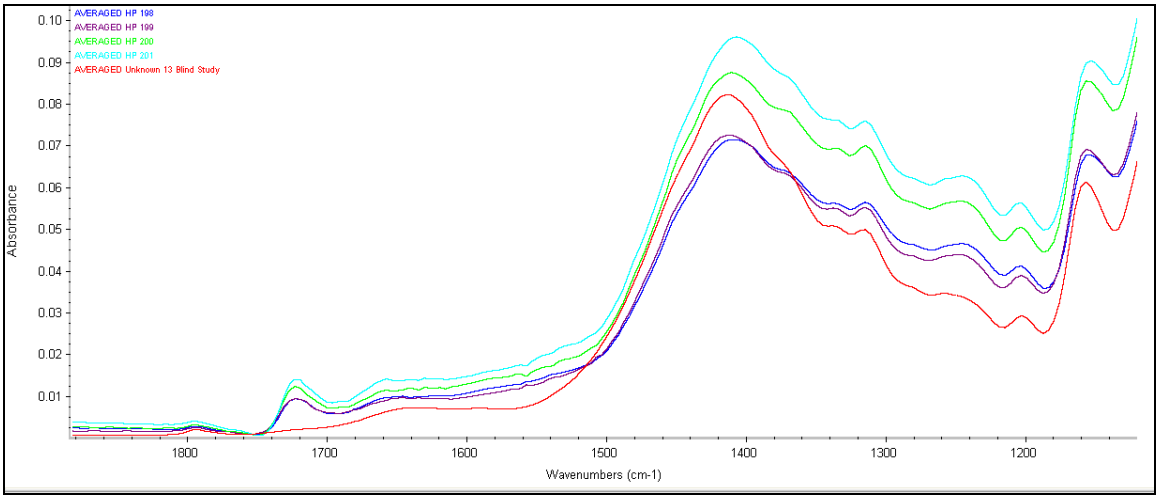

Figure 196: ATR spectra for the region between 1880 cm^{-1} and 1140 cm^{-1} comparing Unknown 13 (red) to Hewlett Packard 198 (blue), Hewlett Packard 199 (dark purple), Hewlett Packard 200 (light green) and Hewlett Packard 201 (light blue) ink standards.

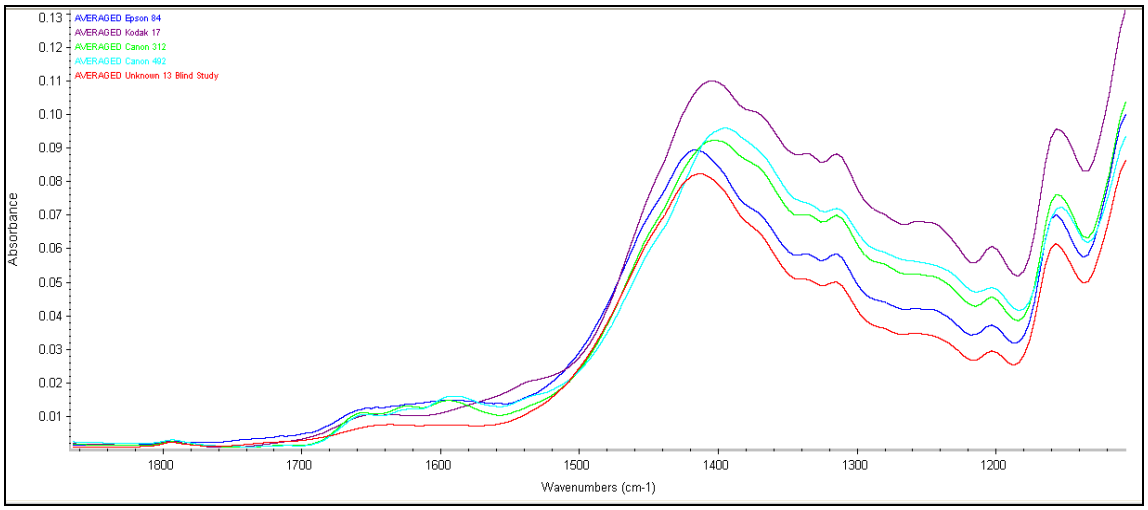

Figure 197: ATR spectra for the region between 1860 cm^{-1} and 1120 cm^{-1} comparing Unknown 13 (red) to Epson 84 (blue), Canon 312 (light green), Canon 492 (light blue) and Kodak 17 (dark purple) ink standards.

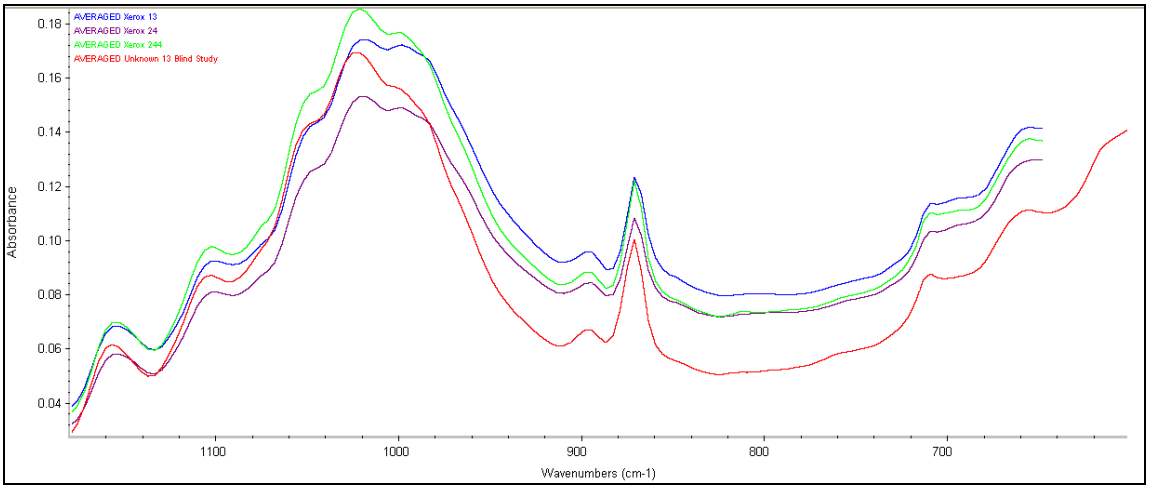

Figure 198: ATR spectra for the region between 1160 cm^{-1} and 620 cm^{-1} comparing Unknown 13 (red) to Xerox 13 (blue), Xerox 24 (dark purple) and Xerox 244 (light green) ink standards.

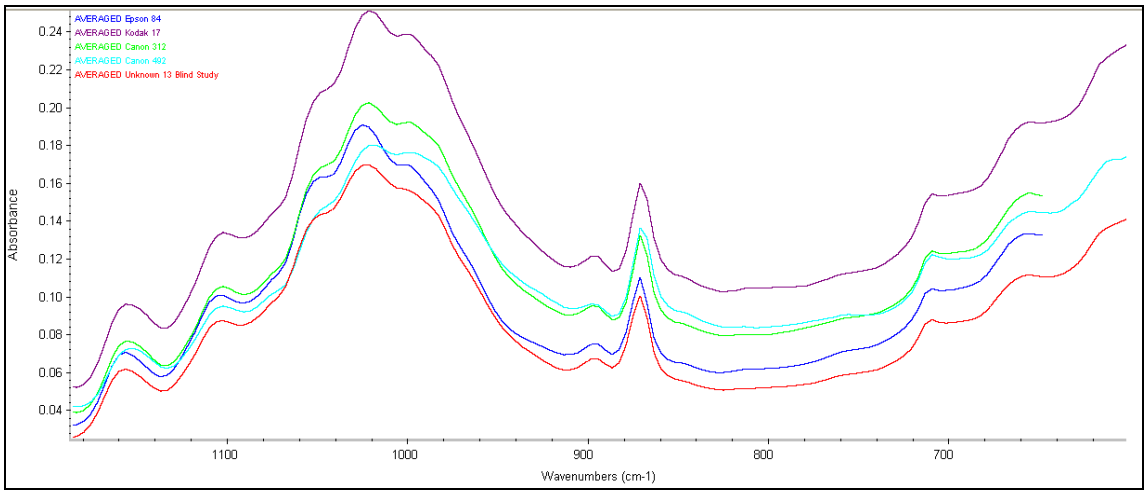

Figure 199: ATR spectra for the region between 1180 cm^{-1} and 620 cm^{-1} comparing Unknown 13 (red) to Epson 84 (blue), Canon 312 (light green), Canon 492 (light blue) and Kodak 17 (dark purple) ink standards.

The ATR spectrum of the Unknown 14 ink on paper sample was examined in order to determine the possible source of this ink sample. The Unknown 14 ink sample was an extractable ink sample so it was compared to the extractable ink standards. In the region between 1700 cm^{-1} and 1500 cm^{-1}, there were two small peaks, with very small differences between the peaks and valleys, present in this region. Though the Epson 30, Epson 63, Epson 90 and Epson 156 ink on paper samples ATR spectra also contained two peaks in this region, their peak maxima positions were located at different wavenumbers than the Unknown 14 ink on paper sample ATR spectrum, and as such the Epson ink on paper samples ATR spectra could be distinguished from the Unknown 14 ink on paper sample ATR spectrum. The Hewlett Packard 205, Kodak 22 and Okidata 04 ink on paper samples ATR spectra had a single peak in this region, and as a result the Hewlett Packard 205, Kodak 22 and Okidata 04 ink on paper samples ATR spectra could be distinguished from the Unknown 14 ink on paper sample ATR spectrum. The Canon 217, Canon 327 and Canon 402 ink on paper samples ATR spectra each had three peaks in this region and

as such the Canon 217, Canon 327 and Canon 402 ink on paper samples ATR spectra could be distinguished from the Unknown 14 ink on paper sample ATR spectrum. The Canon 306 ink on paper sample ATR spectrum, as discussed previously, had two identifiable peaks present in this region and a third minor peak that was not readily discernable from the baseline of the ink on paper sample ATR spectrum so the Canon 306 ink sample could be mistaken for the Unknown 14 ink sample if not examined closely. The Canon 384 and Canon 282 ink on paper samples ATR spectra had two peaks in this region that were similar in appearance to the peak pattern exhibited by the Unknown 14 ink on paper sample ATR spectrum.

In the region between 1500 cm^{-1} and 1300 cm^{-1}, the main peak in the Epson extractable ink on paper samples ATR spectra was similar in shape to the Unknown 14 ink on paper sample ATR spectrum. However, the hump on the right side of the main peak in this region was more pronounced in the Unknown 14 ink on paper sample ATR spectrum than what was observed in the Epson 30, Epson 63 and Epson 156 ink on paper samples ATR spectra. For the Canon 402, Canon 217, Canon 384, Hewlett Packard 205, Kodak 22 and Okidata 04 ink on paper samples ATR spectra, the hump on the right side of the main peak in the region was less pronounced than what was observed in the Unknown 14 ink on paper sample ATR spectrum. In addition, for the Canon 384 ink on paper sample ATR spectrum, the main peak was also wider and had a different peak shape than the main peak in the Unknown 14 ink on paper sample ATR spectrum. The Canon 306, Canon 327 and Canon 282 ink on paper samples ATR spectra had a similar peak pattern to the peak pattern exhibited by the Unknown 14 ink on paper sample ATR spectrum.

In the region between approximately 1280 cm^{-1} and 1200 cm^{-1}, there were differences in the peak shape for the Unknown 14 ink on paper sample ATR spectrum as compared to some of the extractable ink on paper samples ATR spectra. For the Epson 30, Epson 63, Epson 90, Epson 156, Okidata 04, Kodak 22 and Canon 384 ink on paper samples ATR spectra, and to a lesser degree the Canon 402 ink on paper sample ATR spectrum, the peak appearance in this region was different in peak shape and peak maximum position than what was observed in the Unknown 14 ink on paper sample ATR spectrum. For the Canon 217, Canon 306, Canon 327 and Canon 282 ink on paper samples ATR spectra, the main peak present in this region was similar in peak position and peak appearance as compared to the main peak found in the Unknown 14 ink on paper sample ATR spectrum. Thus, based on their ink on paper ATR spectra, the Unknown 14 ink sample could be tentatively identified as a Canon 282 (BC-02) ink sample. Refer to Figures 200 through 202 for the differences between the Unknown 14 ink on paper sample and the extractable ink on paper standards ATR spectra.

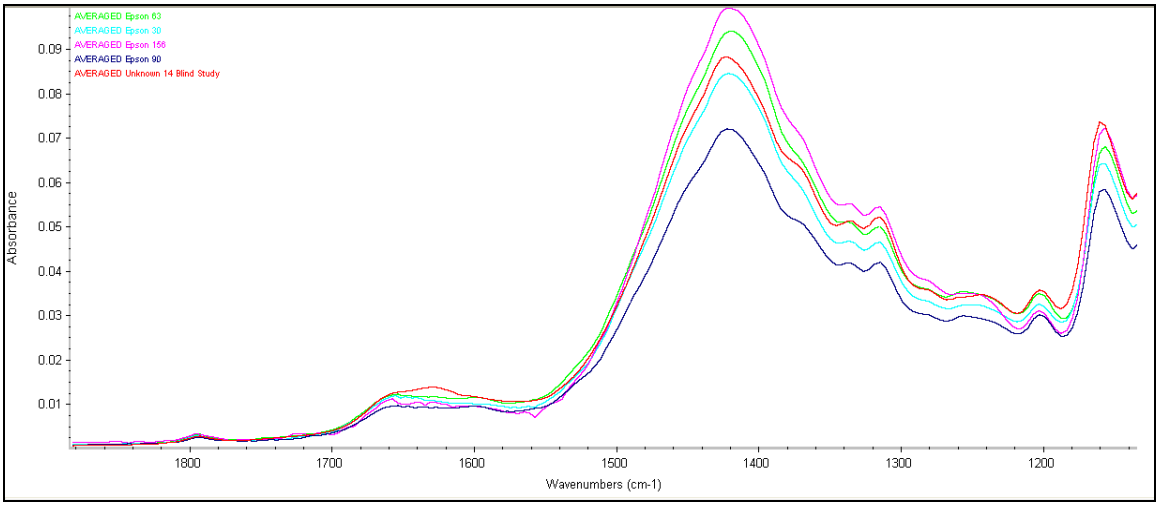

Figure 200: ATR spectra for the region between 1880 cm^{-1} and 1140 cm^{-1} comparing Unknown 14 (red) to Epson 30 (light blue), Epson 63 (light green), Epson 90 (dark blue) and Epson 156 (light purple) ink standards.

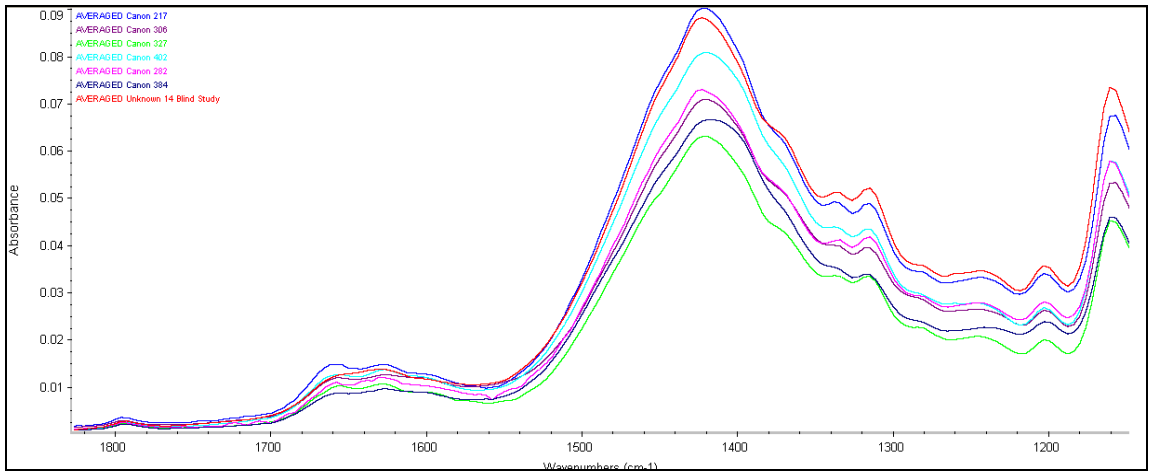

Figure 201: ATR spectra for the region between 1820 cm^{-1} and 1160 cm^{-1} comparing Unknown 14 (red) to Canon 217 (blue), Canon 306 (dark purple), Canon 327 (light green), Canon 402 (light blue), Canon 282 (light purple) and Canon 384 (dark blue) ink standards.

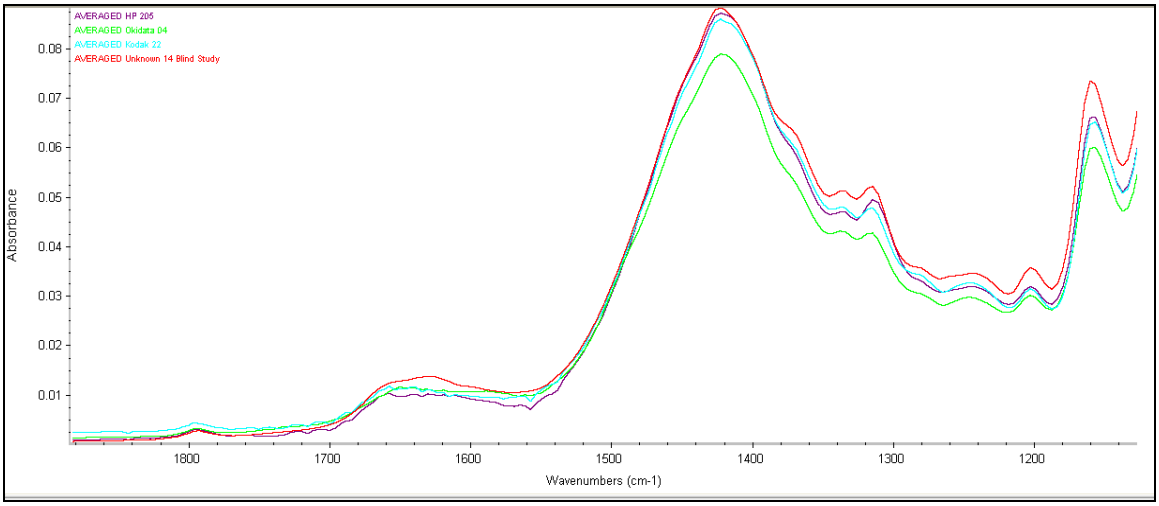

Figure 202: ATR spectra for the region between 1880 cm^{-1} and 1140 cm^{-1} comparing Unknown 14 (red) to Hewlett Packard 205 (dark purple), Kodak 22 (light blue) and Okidata 04 (light green) ink standards.

The ATR spectrum of the Unknown 15 ink on paper sample was examined in order to determine the possible source of this ink sample. The Unknown 15 ink sample was an extractable ink sample so it was compared to the extractable ink standards. In the region between 1700 cm^{-1} and 1500 cm^{-1}, there were three peaks present with the third

peak being minor and almost indiscernible in the ink on paper sample ATR spectrum. This peak pattern was different from the peak patterns exhibited by the Epson 30, Epson 63, Epson 90, Epson 156, Kodak 22, Okidata 04 and Hewlett Packard 205 ink on paper samples ATR spectra. The Canon ink standards had similar peak pattern to the peak pattern found in the Unknown 15 ink on paper sample ATR spectrum. The Canon 217, Canon 327, Canon 384, Canon 348 and Canon 402 ink on paper samples ATR spectra, and the Canon 306 ink on paper sample ATR spectrum to a lesser degree, all had three peaks in this region, with the third peak of the group being smaller than the first two peaks in the group.

In the region between 1500 cm^{-1} and 1300 cm^{-1}, the main peak in the Unknown 15 ink on paper sample ATR spectrum was similar in appearance to the majority of the extractable ink on paper samples ATR spectra, however the hump on the right side of the main peak was more pronounced in the Unknown 15 ink on paper sample ATR spectrum than what was observed in the Epson 30, Epson 63, Canon 217, Canon 402, Canon 384, Hewlett Packard 205, Kodak 22 and Okidata 04 ink on paper samples ATR spectra. In addition, the main peak in the Canon 402 ink on paper sample ATR spectrum was slightly wider than the peak found in the Unknown 15 ink on paper sample ATR spectrum. The Canon 306, Canon 348 and Canon 327 ink on paper samples ATR spectra had similar peak patterns to that found in the Unknown 15 ink on paper sample ATR spectrum.

In the region between approximately 1280 cm^{-1} and 1200 cm^{-1}, there were differences in the peak shape for the Unknown 15 ink on paper sample ATR spectrum as compared to some of the extractable ink on paper samples ATR spectra. For the Epson

30, Epson 63, Epson 90, Epson 156, Okidata 04, Kodak 22, Canon 327, Canon 384 and Canon 402 ink on paper samples ATR spectra, the peak appearance in this region was different in peak shape and peak maximum position than what was observed in the Unknown 15 ink on paper sample ATR spectrum. The peak appearance was similar in terms of peak shape and peak maximum position for the Canon 348, Canon 217, Canon 306 and Unknown 15 ink on paper samples ATR spectra. Thus, based on their ink on paper ATR spectra, the Unknown 15 ink sample could be tentatively identified as either a Canon 348 (BCI-21) or a Canon 306 (BC-20) ink sample. Refer to Figures 203 through 205 for the differences between the Unknown 15 ink on paper sample and the extractable ink on paper standards ATR spectra.

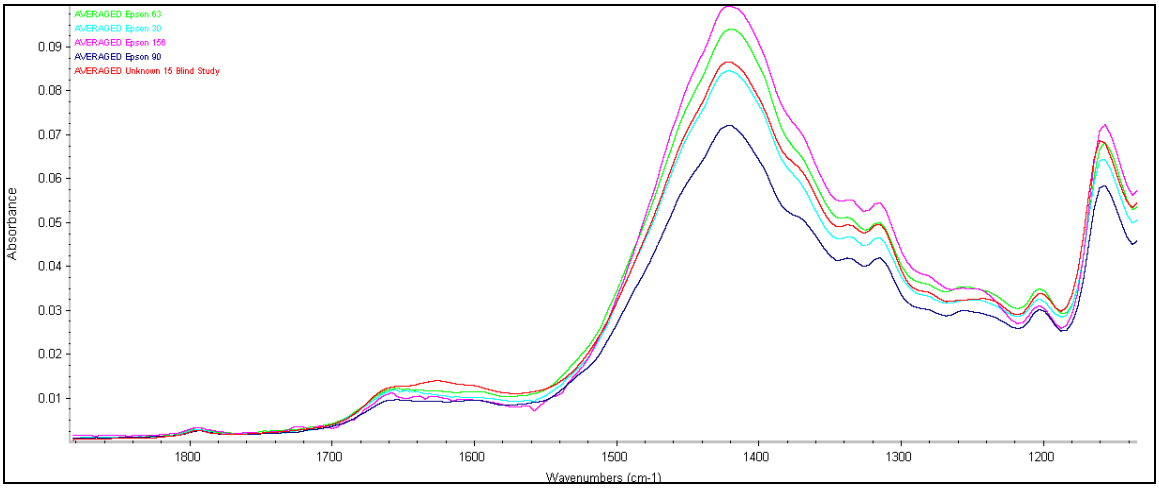

Figure 203: ATR spectra for the region between 1880 cm^{-1} and 1140 cm^{-1} comparing Unknown 15 (red) to Epson 30 (light blue), Epson 63 (light green), Epson 90 (dark blue) and Epson 156 (light purple) ink standards.

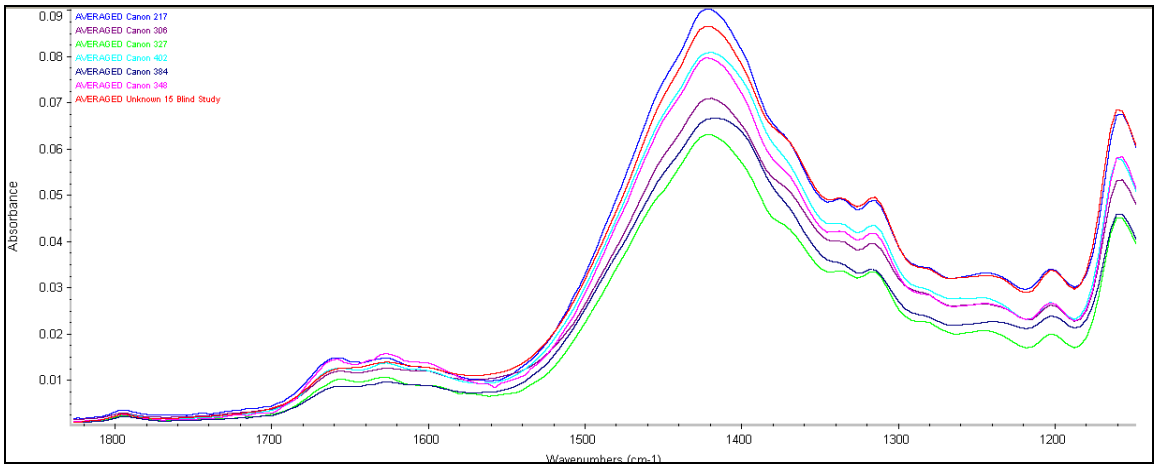

Figure 204: ATR spectra for the region between 1820 cm^{-1} and 1160 cm^{-1} comparing Unknown 15 (red) to Canon 217 (blue), Canon 306 (dark purple), Canon 327 (light green), Canon 402 (light blue), Canon 384 (dark blue) and Canon 348 (light purple) ink standards.

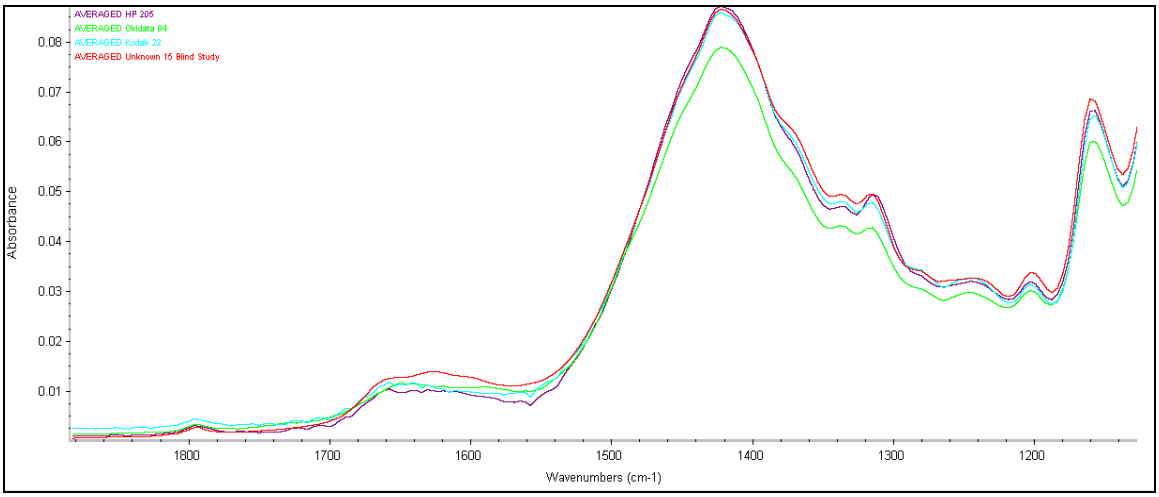

Figure 205: ATR spectra for the region between 1880 cm^{-1} and 1140 cm^{-1} comparing Unknown 15 (red) to Hewlett Packard 205 (dark purple), Kodak 22 (light blue) and Okidata 04 (light green) ink standards.

THE CHARACTERIZATION OF BLACK INKJET COMPUTER PRINTER INKS USING PYROLYSIS GAS CHROMATOGRAPHY-MASS SPECTROMETRY (Py-GC-MS), HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC), THIN LAYER CHROMATOGRAPHY (TLC) AND ATTENUATED TOTAL REFLECTION FOURIER TRANSFORM INFRARED SPECTROSCOPY (ATR FT-IR)

by

Michelle Margaret Boileau

VOLUME TWO

A dissertation submitted to the Graduate Faculty in Criminal Justice in partial fulfillment of the requirements for the degree of Doctor of Philosophy,

The City University of New York.

2012

CHAPTER VIII. DISCUSSION OF RESULTS

A. Analytical Results of the Inkjet Ink Samples

When comparing the results from the four methods of analysis some useful indicators could be found to aid in the identification of an unknown ink sample. There were eleven black ink samples that did not extract from the paper, namely the Xerox 13, Xerox 24, Xerox 244, Kodak 17, Epson 84, Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200, Hewlett Packard 201, Canon 306 and Canon 492 ink samples, and as such these ink samples did not produce any spots or colored results on the TLC plate after development. In addition, the Canon 318a ink sample, the slightly yellow liquid from the Canon BC-60 ink cartridge, also did not produce spots or colored results with TLC plate after development. Ten of these non-extractable ink samples also produced similar results on the HPLC, with the Hewlett Packard 201 and Canon 492 ink samples being the exceptions. For the ten non-extractable ink samples that had similar HPLC results, with the 236nm monitoring wavelength, their HPLC chromatograms all contained a peak which was located at approximately 1.52-1.53 minutes, though the peak in the Canon 318a ink sample had a slight difference in its retention time and its peak was located at approximately 1.55 minutes. There were no other peaks present at the 236nm wavelength for these ten non-extractable ink samples.

When the ink on paper sample pyrolysis data was factored in to the analysis, these ten non-extractable ink samples could be divided into six groups. The Hewlett Packard 198, Hewlett Packard 199 and Hewlett Packard 200 ink samples could be found in the first group, the Xerox 13, Xerox 24 and Xerox 244 ink samples could be found in the

second group, the Kodak 17 ink sample could be found in the third group, the Epson 84 ink sample could be found in the fourth group, the Canon 312 ink sample could be found in the fifth group and the Canon 318a ink sample could be found in the sixth group. These six groupings of the ink on paper sample pyrolysis data allowed for the differentiation between the ten non-extractable ink samples that was not found with the TLC and HPLC methods of analysis. Additionally, the inclusion of the results of the neat ink standard ATR analysis and ink on paper sample ATR analysis could further discriminate the non-extractable ink samples. The Canon 318a ink sample was included in the following discussion as it had the similar TLC and HPLC results as the other nine non-extractable ink samples, however this sample was different from the other nine non-extractable ink samples due to the fact that it was a slightly yellow liquid sample and was not a black ink sample.

The non-extractable Hewlett Packard 198, Hewlett Packard 199 and Hewlett Packard 200 ink samples produced similar ink on paper sample pyrograms that could be differentiated from the other ink on paper sample pyrograms, with the exception of the Hewlett Packard 201 ink on paper sample pyrogram. These Hewlett Packard 198, Hewlett Packard 199 and Hewlett Packard 200 ink on paper sample pyrograms contained six peaks located at approximately 3.2 minutes, 7.1 minutes, 10.7 minutes, 11.4 minutes, 14.9 minutes and 15.2 minutes. Taking the highest match quality of the NIST library search, these six peaks were identified as the compounds Toluene, Benzyl Alcohol, 2-[2-(2-methoxyethoxy)ethoxy]-Ethanol, Benzyl Methacrylate, 4-Fluoro-6-Aminopyrimidine and unidentified respectively. As stated previously in the Results section, the peak at 15.15 minutes was searched against the NIST library, however there was no definitive

compound identified by the NIST library and hence this peak was labeled as unidentified. With the exception of the Hewlett Packard 201 ink on paper sample pyrogram, none of the other ink on paper sample pyrograms contained this unique combination of compounds, which allowed for these Hewlett Packard ink samples to be distinguished from the other ink samples in the study.

These three Hewlett Packard ink samples could be further differentiated from the other non-extractable ink samples and amongst themselves when their neat ink sample ATR data was examined. Comparing the results of the neat ink sample ATR analysis for the Hewlett Packard 198, Hewlett Packard 199 and Hewlett Packard 200 neat ink samples, differences emerged in their neat ink samples ATR spectra, which allowed them to be differentiated from one another. The neat ink samples ATR spectra of the Hewlett Packard 198, Hewlett Packard 199 and Hewlett Packard 200 neat ink samples showed some similarities between the three neat ink samples ATR spectra. In the three neat ink samples ATR spectra, eight peaks were observed at approximately 1246 cm^{-1}, 1288 cm^{-1}, 1347 cm^{-1}, 1385 cm^{-1}, 1450 cm^{-1}, 1640 cm^{-1}, 1723 cm^{-1} and 1951 cm^{-1} that were common to all three of the Hewlett Packard neat ink samples ATR spectra. The Hewlett Packard 198 neat ink sample ATR spectrum could be differentiated from the Hewlett Packard 200 neat ink sample ATR spectrum by the fact that in the Hewlett Packard 198 neat ink sample ATR spectrum there were two peaks located at approximately 930 cm^{-1} and 1660 cm^{-1} that were not found in the Hewlett Packard 200 neat ink sample ATR spectrum and that the Hewlett Packard 200 neat ink sample ATR spectrum contained a peak at approximately 948 cm^{-1} that was not found in the Hewlett Packard 198 neat ink sample ATR spectrum. The Hewlett Packard 199 neat ink sample ATR spectrum could be

differentiated from the Hewlett Packard 198 and Hewlett Packard 200 neat ink samples ATR spectra by the fact that in the Hewlett Packard 199 neat ink sample ATR spectrum there was a peak located at approximately 1028 cm^{-1} that was not found in the Hewlett Packard 198 and Hewlett Packard 200 neat ink samples ATR spectra. Additionally, there were differences in the peak maximum position for two peaks for these three Hewlett Packard neat ink samples ATR spectra. In the Hewlett Packard 198 neat ink sample ATR spectrum the two peaks were located at approximately 1094 cm^{-1} and 1553 cm^{-1}, in the Hewlett Packard 199 neat ink sample ATR spectrum the two peaks were located at approximately 1104 cm^{-1} and 1560 cm^{-1} and in Hewlett Packard 200 neat ink sample ATR spectrum the two peaks were located at approximately 1098 cm^{-1} and 1553 cm^{-1}. This was a difference in the peak maxima positions for the three Hewlett Packard neat ink samples of between 4 cm^{-1} and 10 cm^{-1}, depending on the peak and depending on the Hewlett Packard neat ink sample. Thus, the Hewlett Packard 198, Hewlett Packard 199 and Hewlett Packard 200 neat ink samples could be differentiated from one another based on their neat ink samples ATR spectra. However, the ink on paper samples ATR spectra for the Hewlett Packard 198, Hewlett Packard 199 and Hewlett Packard 200 ink on paper samples did not provide the same degree of discrimination as the neat ink samples ATR spectra. For the Hewlett Packard 198, Hewlett Packard 199 and Hewlett Packard 200 ink on paper samples ATR spectra it was not possible to differentiate between the different Hewlett Packard ink on paper samples. Therefore, based on the results of all four analytical methods, the Hewlett Packard 198, Hewlett Packard 199 and Hewlett Packard 200 ink samples could not be differentiated from one another, however with the exception of the Hewlett Packard 201 ink sample, the Hewlett Packard 198, Hewlett

Packard 199 and Hewlett Packard 200 ink samples could be differentiated from the other ink samples in this study.

The non-extractable Xerox 13, Xerox 24 and Xerox 244 ink samples also produced ink on paper pyrograms that were similar to each other and distinct from the other ink samples in the study. The Xerox 13, Xerox 24 and Xerox 244 neat ink sample pyrograms contained six peaks located at approximately 3.2 minutes, 3.8 minutes, 7.0 minutes, 8.8 minutes, 11.3 minutes and 11.4 minutes. Taking the highest match quality of the NIST library search, these six peaks were identified as Toluene, Hexamethyl-Cyclotrisiloxane, Benzyl Alcohol, Decamethyl-Cyclopentasiloxane, Dodecamethyl-Cyclohexasiloxane and Benzyl Methacrylate. Of the six compounds listed above, the most discriminating were the siloxanes, and in particular the Hexamethyl-Cyclotrisiloxane. This compound was identified in all of the Xerox 13, Xerox 24 and Xerox 244 ink on paper sample pyrograms, and only in the Xerox ink on paper sample pyrograms. None of the other ink samples in this study contained the compound Hexamethyl-Cyclotrisiloxane in their ink on paper sample pyrograms, so its presence in an ink on paper sample pyrogram was an indication that the source of the ink sample was a Xerox ink cartridge. The compounds Decamethyl-Cyclopentasiloxane and Dodecamethyl-Cyclohexasiloxane identified in the Xerox 13, Xerox 24 and Xerox 244 neat ink sample pyrograms were not identified in the Xerox 13, Xerox 24 and Xerox 244 ink on paper sample pyrograms. The characteristic ions for these two compounds were found in the Xerox ink on paper sample pyrograms; however these characteristic ions were at too low an abundance for the compounds to be distinguished from the paper matrix by the NIST library. The presence of the characteristic ions for these two

compounds in the Xerox ink on paper sample pyrogram allowed for a determination of their presence in the ink on paper sample pyrogram, even if they were not identified by the computer. The Xerox 13, Xerox 24 and Xerox 244 ink samples could be further differentiated when the ATR data of the Xerox neat ink samples and Xerox ink on paper samples were examined.

Comparing the results of the ATR analysis for the Xerox 13, Xerox 24 and Xerox 244 neat ink samples, differences emerged in their neat ink samples ATR spectra. The ATR spectra of the Xerox 13, Xerox 24 and Xerox 244 neat ink samples showed some similarities between the samples. In the neat ink samples ATR spectra, four peaks were observed at approximately 1013 cm^{-1}, 1255 cm^{-1}, 1450 cm^{-1} and 1552 cm^{-1} that were common to all three of the Xerox neat ink samples ATR spectra. The Xerox 13 neat ink sample ATR spectrum could be differentiated from the Xerox 24 neat ink sample ATR spectrum by the fact that in the Xerox 13 neat ink sample ATR spectrum there was a peak located at approximately 1648 cm^{-1} that was not found in the Xerox 24 neat ink sample ATR spectrum. The Xerox 244 neat ink sample ATR spectrum could be differentiated from the Xerox 13 and Xerox 24 neat ink samples ATR spectra by the fact that in the Xerox 244 neat ink sample ATR spectrum there were five peaks located at approximately 1104 cm^{-1}, 1141 cm^{-1}, 1607 cm^{-1}, 1621 cm^{-1} and 1680 cm^{-1} that were not found in the Xerox 13 and Xerox 24 neat ink samples ATR spectra. Additionally, there were differences in the peak maximum position for three peaks for these three Xerox neat ink samples ATR spectra. In the Xerox 13 neat ink sample ATR spectrum the three peaks were located at approximately 1092 cm^{-1}, 1371 cm^{-1} and 1714 cm^{-1}; in the Xerox 24 neat ink sample ATR spectrum the three peaks were located at approximately 1086 cm^{-1}, 1369

cm^{-1} and 1713 cm^{-1}, and in Xerox 244 neat ink sample ATR spectrum the three peaks were located at approximately 1079 cm^{-1}, 1350 cm^{-1} and 1723 cm^{-1}. This was a difference in the peak maxima positions for the three Xerox neat ink samples of between 2 cm^{-1} and 21 cm^{-1}, depending on the peak and depending on the Xerox neat ink sample. Thus, the Xerox 13, Xerox 24 and Xerox 244 ink samples could be differentiated from each other based on their neat ink samples ATR spectra. However, the ink on paper samples ATR spectra for the Xerox 13, Xerox 24 and Xerox 244 ink samples did not have the same degree of discrimination as the neat ink samples ATR spectra. For the Xerox ink on paper samples ATR spectra, however, it was not possible to differentiate between the Xerox ink on paper samples, though their ink on paper samples ATR spectra could be differentiated from the ink on paper samples ATR spectra of the other ink samples in this study. Therefore, based on the results of all four analytical methods, the Xerox 13, Xerox 24 and Xerox 244 ink samples could not be differentiated from one another; however the Xerox 13, Xerox 24 and Xerox 244 ink samples could be differentiated from the other ink samples in this study.

The Kodak 17 ink sample had a unique neat ink sample pyrogram, which allowed it to be differentiated from the other ink samples in the study. The Kodak 17 neat ink sample pyrogram contained two peaks at approximately 15.1 minutes and 19.7 minutes, which were identified by the NIST library as 1-methylamino-Bicyclo(2,2,2)oct-2-ene and Cyclohexadecane or 1-Nonadecene respectively. None of the other non-extractable neat ink sample pyrograms, or additionally none of the extractable neat ink sample pyrograms, contained these two compounds at their respective retention times, and as such the Kodak 17 ink sample could be differentiated from the other ink samples in the study. The

compound 1-methylamino-Bicyclo(2,2,2)oct-2-ene identified in the Kodak 17 neat ink sample pyrograms was not identified in the Kodak 17 ink on paper sample pyrograms. The characteristic ions for this compound were found in the Kodak 17 ink on paper sample pyrogram; however these characteristic ions were at too low an abundance for the compound to be distinguished from the paper matrix by the NIST library. The presence of the characteristic ions for this compounds in the Kodak 17 ink on paper sample pyrogram allowed for a determination of its presence in the Kodak 17 ink on paper sample pyrogram, even if it was not identified by the computer. The Kodak 17 ink sample could be further differentiated when the ATR data of the Kodak 17 neat ink sample and Kodak 17 ink on paper sample were examined. Comparing the results of the ATR analysis for the Kodak 17 ink sample, it could be found that the Kodak 17 neat ink sample ATR spectrum contained ten peaks at approximately 944 cm^{-1}, 1089 cm^{-1}, 1141 cm^{-1}, 1239 cm^{-1}, 1278 cm^{-1}, 1340 cm^{-1}, 1449 cm^{-1}, 1552 cm^{-1}, 1714 cm^{-1} and 1950 cm^{-1}. Though some of these peaks could be found in other non-extractable neat ink samples ATR spectra, especially the Hewlett Packard neat ink samples ATR spectra, none of the other non-extractable ink samples, or additionally none of the extractable neat ink, contained all of these peaks in their neat ink sample ATR spectrum. The Kodak 17 ink on paper sample ATR spectrum had distinctive peaks, which allowed it to be differentiated from the ink on paper samples ATR spectra of the other ink samples in this study. Consequently, by incorporating the results of all four analytical methods, the Kodak 17 ink sample could be differentiated from all of the ink samples in this study.

The Epson 84 ink on paper sample had a unique pyrogram, which allowed it to be differentiated from the other ink on paper sample pyrograms in the study. The Epson 84

ink on paper sample pyrogram contained two peaks located at approximately 10.85 minutes and 11.1 minutes, which were both identified by the NIST library as the compound 5-[5-methylfurfuryl]hydantoin. As discussed previously, the mass spectral data for the compounds 5-[5-methylfurfuryl]hydantoin, .gamma,.gamma,2,3-tetramethyl-2-cyclopentene-1-butanal and 6-methyl-6-hepten-4-yn-3-ol were similar, and as a result, for the peaks located at approximately 10.85 minutes and 11.1 minutes the match lists for the two peaks may contain one or all of these compounds. This was the only non-extractable ink on paper sample pyrogram that contained these three compounds, and as such allowed the Epson 84 ink sample to be differentiated from all other non-extractable ink samples in this study. The Epson 30 and Epson 156 ink on paper sample pyrograms also contained these three compounds, however the Epson 30 and Epson 156 ink samples were extractable ink samples and their ink on paper sample pyrograms contained additional peaks and compounds in addition to 5-[5-methylfurfuryl]hydantoin, 6-Methyl-6-hepten-4-yn-3-ol, .gamma,.gamma,2,3-tetramethyl-2-cyclopentene-1-butanal and which allowed them to be distinguished from the Epson 84 ink sample.

The Epson 84 ink sample could be further differentiated when the ATR data of the Epson 84 neat ink sample and Epson 84 ink on paper sample were examined. Comparing the results of the ATR analysis, the Epson 84 neat ink sample ATR spectrum contained a peak at approximately 1178 cm^{-1} that was also identified in the Canon 312 neat ink sample ATR spectrum. Additionally, the Epson 84 neat ink sample ATR spectrum contained a peak at approximately 1264 cm^{-1} that was similar to a peak found in the Canon 492 neat ink sample ATR spectrum. In the Canon 492 neat ink sample ATR spectrum there was a peak located at approximately 1259 cm^{-1}, which was a difference in

the peak maximum position of approximately 5 cm^{-1}. For the Epson 84 neat ink sample ATR spectrum there was a peak located at approximately 1072 cm^{-1}, which was similar to a peak at approximately 1079 cm^{-1} in the Xerox 244 neat ink sample ATR spectrum, to a peak at approximately 1086 cm^{-1} in the Xerox 24 neat ink sample ATR spectrum and to a peak at approximately 1089 cm^{-1} in the Kodak 17 neat ink sample ATR spectrum. This was a difference in the peak maximum position of between 7 cm^{-1} and 17 cm^{-1} depending on the neat ink sample ATR spectrum. In addition, six peaks were located in the Epson 84 neat ink sample ATR spectrum at approximately 976 cm^{-1}, 1325 cm^{-1}, 1503 cm^{-1}, 1538 cm^{-1}, 1643 cm^{-1} and 1735 cm^{-1} that were not found in any of the other non-extractable black neat ink samples ATR spectra. The Canon 318a neat ink sample ATR spectrum did contain three peaks at approximately 1326 cm^{-1}, 1500 cm^{-1} and 1640 cm^{-1}; however the Canon 318a neat ink sample was a slightly yellow liquid, not a black ink sample, so these two neat ink samples ATR spectra could be differentiated from one another. Though some of the peaks identified in the Epson 84 neat ink sample ATR spectrum could be found in the other non-extractable neat ink samples ATR spectra, there was no other non-extractable neat ink sample ATR spectrum that contained all of the peaks identified in the Epson 84 neat ink sample ATR spectrum. The ATR spectrum for the Epson 84 ink on paper sample was also distinct and allowed for the Epson 84 ink on paper sample ATR spectrum to be differentiated from the other non-extractable and extractable ink on paper samples ATR spectra. Therefore, by incorporating the results of all four analytical methods, the Epson 84 ink sample could be differentiated from the other ink samples in this study.

The Canon 312 ink sample had an ink on paper sample pyrogram that consisted of four main peaks, located at approximately 2.4 minutes, 9.2 minutes, 12.0 minutes and 20.4 minutes. These four peaks were identified by the NIST library as the compounds Benzene, Benzenecarboxylic acid, Biphenyl and m-Terphenyl respectively. The only other ink on paper sample pyrogram that contained these four compounds was the Canon 492 ink on paper sample pyrogram, which was also the only other black Canon non-extractable ink sample. However, as the HPLC chromatograms were different for the Canon 312 and Canon 492 ink samples, the fact that their ink on paper sample pyrograms were similar did not hinder their differentiation. In addition, when the neat ink sample ATR data was factored in, the Canon 312 neat ink sample could be further differentiated from the Canon 492 neat ink sample. The Canon 312 neat ink sample ATR spectrum contained five peaks at approximately 999 cm^{-1}, 1178 cm^{-1}, 1205 cm^{-1}, 1312 cm^{-1} and 1640 cm^{-1} that were not found in the Canon 492 neat ink sample ATR spectrum. In addition, the peak at approximately 1350 cm^{-1} in the Canon 312 neat ink sample ATR spectrum was located at approximately 1358 cm^{-1} in the Canon 492 neat ink sample ATR spectrum, which was a difference in the peak maximum position of approximately 8 cm^{-1}. Finally, the Canon 492 neat ink sample ATR spectrum contained two peaks at approximately 1150 cm^{-1} and 1259 cm^{-1} that were not found in the Canon 312 neat ink sample ATR spectrum. The discriminating ability of the ATR method was still valid for the Canon 312 and Canon 492 ink samples when their ink on paper ATR data was examined. The Canon 312 and Canon 492 ink on paper samples ATR spectra exhibited differences that allowed for the Canon 312 ink sample to be differentiated from the Canon 492 ink sample. Thus, by incorporating the results of all four analytical methods,

the Canon 312 ink sample could be differentiated from the Canon 492 ink sample and the other ink samples in this study.

The Canon 318a ink sample was the only non-black ink sample analyzed in this study. The Canon 318a ink sample was the slightly yellow liquid portion of the Canon BC-60 ink cartridge, and was treated as a non-extractable ink sample. The Canon 318a ink sample had a unique ink on paper sample pyrogram, which consisted of two peaks at approximately 6.1 minutes and 13.3 minutes. These peaks were identified by the NIST library as 3,4-dimethyl-pyridine and D-Allose respectively. The presence of D-Allose in this sample was not extremely helpful, as D-Allose was a main component of the paper sample. However, the compound 3,4-dimethyl-pyridine was found only in the Canon 318a ink sample, and as such, based on its ink on paper pyrogram, the Canon 318a ink sample could be differentiated from the other ink samples in this study.

The Canon 318a ink sample could be further differentiated when the ATR data of the Canon 318a neat ink sample and Canon 318a ink on paper sample were examined. Comparing the results of the ATR analysis, the Canon 318a neat ink sample ATR spectrum contained a peak at approximately 1405 cm^{-1} that was not found in any other sample. Additionally, the Canon 318a neat ink sample ATR spectrum contained peaks in common with some of the other non-extractable ink samples ATR spectra. The Canon 318a neat ink sample ATR spectrum contained a peak at approximately 1111 cm^{-1} that was similar to a peak identified in the Canon 312 and Canon 492 neat ink samples ATR spectra, the Canon 318a neat ink sample ATR spectrum contained a peak at approximately 1241 cm^{-1} that was similar to a peak identified in the Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200 and Hewlett Packard 201 neat ink samples

ATR spectra and the Canon 318a neat ink sample contained three peaks at approximately 1326 cm^{-1}, 1500 cm^{-1} and 1640 cm^{-1} that were similar to peaks identified in the Epson 84 neat ink sample ATR spectrum. Though some of the peaks identified in the Canon 318a neat ink sample ATR spectrum could be found in the other non-extractable neat ink samples ATR spectra, there was no other non-extractable neat ink sample ATR spectrum that contained all of the peaks identified in the Canon 318a neat ink sample ATR spectrum. Thus, the Canon 318a ink sample could be differentiated from the other non-extractable ink samples based on its neat ink sample ATR spectrum. The ATR spectrum of the Canon 318a ink on paper sample was also distinct, which allowed the Canon 318a ink on paper sample ATR spectrum to be differentiated from the other ink on paper ATR spectra. Therefore, by analyzing the results of the four analytical methods, the Canon 318a ink sample could be differentiated from all of the other ink samples in this study.

For the Hewlett Packard 201 ink sample there were actually two peaks present in its HPLC chromatogram, one peak was located at approximately 1.07 minutes and the other peak was located at approximately 1.53 minutes. There were no other peaks present in the HPLC chromatogram for the Hewlett Packard 201 ink sample at the 236nm wavelength. The Hewlett Packard 201 ink sample was also slightly different from the other non-extractable Hewlett Packard ink samples, in that under reflected light microscopy it showed the presence of tiny particles, whereas the other non-extractable Hewlett Packard ink samples did not show any particles using reflected light microscopy. The Hewlett Packard 201 non-extractable ink sample had the same ink on paper pyrogram as the other non-extractable Hewlett Packard ink on paper sample pyrograms. The Hewlett Packard 201 ink on paper sample pyrogram contained six peaks located at

approximately 3.2 minutes, 7.1 minutes, 10.7 minutes, 11.4 minutes, 14.9 minutes and 15.2 minutes, and which were identified by the NIST library as the compounds Toluene, Benzyl Alcohol, 2-[2-(2-methoxyethoxy)ethoxy]-Ethanol, Benzyl Methacrylate, 4-Fluoro-6-aminopyrimidine and unidentified respectively. As stated previously in the Results section, the peak at 15.15 minutes was searched against the NIST library, however there was no definitive compound identified by the NIST library and hence this peak was labeled as unidentified. However, the results of the neat ink sample ATR analysis were different for the Hewlett Packard 201 neat ink sample as compared to the other non-extractable Hewlett Packard neat ink samples. The Hewlett Packard 201 neat ink sample ATR spectrum could be differentiated from the Hewlett Packard 198 neat ink sample ATR spectrum by the fact that the Hewlett Packard 198 neat ink sample ATR spectrum had a peak at approximately 1659 cm^{-1} that was not found in the Hewlett Packard 201 neat ink sample ATR spectrum. The Hewlett Packard 201 neat ink sample ATR spectrum could be differentiated from the Hewlett Packard 199 neat ink sample ATR spectrum by the fact that the Hewlett Packard 199 neat ink sample ATR spectrum had three peaks at approximately 1028 cm^{-1}, 1104 cm^{-1} and 1661 cm^{-1} that were not found in the Hewlett Packard 201 neat ink sample ATR spectrum and the Hewlett Packard 199 neat ink sample ATR spectrum did not have the peak at approximately 1094 cm^{-1} that was found in the Hewlett Packard 201 neat ink sample ATR spectrum. The Hewlett Packard 201 neat ink sample ATR spectrum could not be differentiated from the Hewlett Packard 200 neat ink sample ATR spectrum. The Hewlett Packard 200 and Hewlett Packard 201 neat ink samples had the same neat ink samples ATR spectra. Thus, the Hewlett Packard 201 ink sample could be differentiated from the Hewlett

Packard 198 and Hewlett Packard 199 ink samples, but could not be differentiated from the Hewlett Packard 200 ink sample, based on their neat ink samples ATR spectra. The Hewlett Packard 201 ink on paper ATR spectrum, on the other hand, was not distinct from the other non-extractable Hewlett Packard ink on paper ATR spectra. As a result, the Hewlett Packard 201 ink sample could not be differentiated from the other non-extractable Hewlett Packard ink samples based on their ink on paper ATR spectra. However, based on their ink on paper ATR spectra, the Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200 and Hewlett Packard 201 ink samples could be differentiated from the other ink samples in this study. By comparing the results of all four analytical methods, and the HPLC method in particular, the Hewlett Packard 201 ink sample could be differentiated not only from the other Hewlett Packard non-extractable ink samples, but from all other ink samples in the study.

The Canon 492 was the other ink cartridge type that appeared different from the majority of the non-extractable ink samples during the HPLC analysis. For the Canon 492 ink sample, three peaks were identified in its HPLC chromatogram. A single peak was present at approximately 1.56 minutes, and a twinned peak was present at approximately 6.77 minutes and 7.27 minutes. The twinned peak was not always separated on the HPLC, and hence was sometimes labeled as a single peak, usually with a retention time of approximately 7.27 minutes. As such, the Canon 492 ink sample could be distinguished from the other non-extractable ink samples by examining their HPLC data. As stated previously, the Canon 492 and Canon 312 ink samples had the same ink on paper sample pyrogram, however, the Canon 492 and Canon 312 ink on paper sample pyrogram was different from the other ink samples in the study. The Canon 492 and

Canon 312 ink on paper sample pyrograms consisted of four main peaks, located at approximately 2.4 minutes, 9.2 minutes, 12.0 minutes and 20.4 minutes. These peaks were identified by the NIST library as Benzene, Benzenecarboxylic acid, Biphenyl and m-Terphenyl respectively. However, as the HPLC chromatograms were different for the Canon 492 and Canon 312 ink samples, the fact that their ink on paper sample pyrograms were similar did not hinder their differentiation. The Canon 492 and Canon 312 ink samples could be further differentiated by examining their ATR spectral data. The Canon 492 and Canon 312 neat ink samples ATR spectra had some peaks in common, however the Canon 492 neat ink sample ATR spectrum contained two peaks located at approximately 1150 cm^{-1} and 1259 cm^{-1} that were not found in the Canon 312 neat ink sample ATR spectrum. The Canon 312 neat ink sample ATR spectrum, on the other hand, had five peaks located at approximately 999 cm^{-1}, 1070 cm^{-1}, 1205 cm^{-1}, 1312 cm^{-1} and 1624 cm^{-1} that were not found in the Canon 492 neat ink sample ATR spectrum. In addition, the peak located at approximately 1358 cm^{-1} in the Canon 492 neat ink sample ATR spectrum was located at approximately 1350 cm^{-1} in the Canon 312 neat ink sample ATR spectrum, which was a difference in the peak maximum position of approximately 8 cm^{-1}. The discriminating ability of the ATR method was still valid for the Canon 492 and Canon 312 ink samples when their ink on paper ATR data was examined. The Canon 492 and Canon 312 ink on paper samples ATR spectra exhibited differences that allowed for the Canon 492 ink on paper sample ATR spectrum to be differentiated from the Canon 312 ink on paper sample ATR spectrum. Therefore, by examining the results of the four analytical methods, the Canon 492 ink sample could be differentiated from not only the Canon 312 ink sample but from all of the ink samples in this study.

The results of the twenty-three extractable ink samples from the four analytical methods of analysis also showed some useful indicators that could assist in the identification of an unknown ink sample. For the Okidata 04 ink sample results, the TLC analysis produced a distinct and unique color pattern, and the uniqueness of the Okidata 04 ink sample results was continued with the HPLC data. With the TLC analysis, the black Okidata 04 ink sample separated out into three spots with a color arrangement of purple-pink-yellow (bottom to top of the TLC plate respectively). None of the other ink samples showed this TLC color pattern. Additionally, under long wave UV light the Okidata 04 ink sample had a fluorescent orange spot that corresponded to the pink color spot on the TLC plate. The Okidata 04 ink sample was the only ink sample whose TLC results exhibited fluorescence under the UV light source. With respect to the HPLC data, the Okidata 04 ink sample separated out into three peaks, with retention times of approximately 1.05 minutes, 1.55 minutes and 12 minutes. None of the other ink samples showed this combination of peaks in their HPLC chromatograms. The Epson 30 ink sample HPLC chromatogram contained three peaks at approximately 1.06 minutes, 1.56 minutes and 12 minutes, however it also contained a peak at approximately 10.9 minutes and sometimes at approximately 6.95 minutes, depending on the concentration of the ink sample. Thus the Okidata 04 ink sample could be distinguished from all of the other ink samples in this study by comparing the results of the TLC and HPLC methods.

In addition to its unique TLC and HPLC results, the Okidata 04 ink sample had a unique ink on paper sample pyrogram that allowed it to be differentiated from the other ink samples in the study. The Okidata 04 ink on paper sample pyrogram contained the compounds 1-[2-(2-methoxy-1-methylethoxy)-1-methylethoxy)-2-Propanol and 1,1'-[(1-

methyl-1,2-ethanediyl)bis(oxy)]bis-2-Propanol and/or 1-[2-ethoxypropoxy]-2-Propanol that were not found in any other ink on paper sample pyrogram. Based on these compounds alone, the Okidata 04 ink sample could be differentiated from the other ink samples in the study. In addition, the Okidata 04 ink sample had a unique ATR result for both the neat ink sample and the ink on paper sample that further allowed it to be differentiated from the other ink samples in this study. The Okidata 04 neat ink sample ATR spectrum contained ten peaks located at approximately 1020 cm^{-1}, 1033 cm^{-1}, 1070 cm^{-1}, 1175 cm^{-1}, 1278 cm^{-1}, 1341 cm^{-1}, 1398 cm^{-1}, 1421 cm^{-1}, 1488 cm^{-1} and 1590 cm^{-1}. Though some of these peaks were found in other neat ink samples ATR spectra, all of these peaks may not be found in the same neat ink sample ATR spectrum and the other neat ink samples ATR spectra also contained additional peaks that were not found in the Okidata 04 neat ink sample ATR spectrum. Consequently, the Okidata 04 neat ink sample ATR spectrum could be differentiated from the other neat ink samples ATR spectra in this study. The Okidata 04 ink on paper sample ATR spectrum also had distinctive peaks, which allowed it to be differentiated from the ink on paper samples ATR spectra of the other ink samples in this study. Thus, based on the results of each of the four analytical methods, the Okidata 04 ink sample could be differentiated from all of the other ink samples in this study.

For the Kodak 22 sample ink cartridge, there were two types of TLC results obtained that depended on the concentration of the ink sample spotted on the TLC plate. At the lower concentration of the Kodak 22 ink sample, only a single brown spot was observed on the TLC plate, whereas at the medium and the higher concentration the TLC plate showed two brown spots. When only one brown spot was present on the TLC plate,

an unknown ink sample could be either the Kodak 22 ink sample or the Hewlett Packard 205 ink sample, depending on the intensity of the spot on the TLC plate. If the brown spot on the TLC plate was medium brown to dark brown in color, this indicated that the ink sample was a Hewlett Packard 205 ink sample. At the higher extracted ink concentration the Kodak 22 sample had two brown spots on the TLC plate, which allowed it to be distinguished from the Hewlett Packard 205 ink sample. When the Kodak 22 and Hewlett Packard 205 ink samples were compared based on their HPLC data, a difference was noticed for their HPLC chromatograms using the 236nm monitoring wavelength. The Kodak 22 ink sample HPLC chromatogram had two peaks located at approximately 1.03 minutes and 1.52 minutes. The Hewlett Packard 205 ink sample HPLC chromatogram, on the other hand, had two peaks located at approximately 1.06 minutes and 1.50 minutes, and sometimes there was a peak at approximately 1.85 minutes. This latter peak was not always identified by the detector, and additionally both the Kodak 22 and Hewlett Packard 205 ink samples had a peak at approximately 1.8 minutes at the other four wavelengths that were monitored. However, the peak shape of the identified peaks in the Kodak 22 and Hewlett Packard 205 ink sample HPLC chromatograms were different. The Kodak 22 ink sample had two distinct peaks with the retention times of approximately 1.03 minutes and 1.52 minutes. The three peaks in the Hewlett Packard 205 ink sample chromatogram were not present as distinct peaks but rather these three peaks had a step-down appearance. In the situations where only two peaks were identified in the Hewlett Packard 205 ink sample HPLC chromatogram, the peaks still had the step-down appearance and could still be distinguished from the distinct peak pattern of the Kodak 22 ink sample HPLC chromatogram. As such, the HPLC

chromatograms could be used to differentiate between the Kodak 22 and Hewlett Packard 205 ink samples.

In addition, when the Kodak 22 ink on paper sample pyrogram and the Hewlett Packard 205 ink on paper sample pyrogram were compared, differences were observed between the two samples that would allow them to be differentiated from each other. The Kodak ink on paper sample pyrogram consisted of three peaks at approximately 1.7 minutes, 13.3 minutes and 13.6 minutes, which were identified by the NIST library as the compounds Sulfur Dioxide, D-Allose and 2,2'-(oxybis(2,1-ethanediyloxy))bis-Ethanol or Pentaethylene glycol respectively. The D-Allose peak in the Kodak 22 ink on paper sample pyrogram was not helpful in discriminating between the samples because it was a main component of the paper sample and hence would be present in all ink on paper sample pyrograms. The Hewlett Packard 205 ink on paper sample pyrogram, on the other hand, consisted of a single peak at approximately 1.7 minutes, which was identified by the NIST library as Sulfur Dioxide. Thus, it was the peak at approximately 13.6 minutes that differentiated these two ink on paper sample pyrograms. Since the Hewlett Packard 205 ink on paper sample pyrogram did not contain the peak at approximately 13.6 minutes, it could be differentiated from the Kodak 22 ink on paper sample pyrogram. Additionally, the ATR spectra of the neat ink samples and the ink on paper samples for the Kodak 22 and the Hewlett Packard 205 ink samples were different from one another. The Kodak 22 neat ink sample ATR spectrum had five peaks located at approximately 1192 cm^{-1}, 1282 cm^{-1}, 1397 cm^{-1}, 1572 cm^{-1} and 1604 cm^{-1} that were not found in the Hewlett Packard 205 neat ink sample ATR spectrum. The Hewlett Packard 205 neat ink sample ATR spectrum, on the other hand, had four peaks located at

approximately 1217 cm^{-1}, 1308 cm^{-1}, 1590 cm^{-1} and 1660 cm^{-1} that were not found in the Kodak 22 neat ink sample ATR spectrum. Furthermore, The Kodak 22 and Hewlett Packard 205 ink on paper samples ATR spectra had distinctive peaks, which allowed them to be differentiated from one another and from the ink on paper samples ATR spectra of the other ink samples in this study. Thus, by comparing the results of all four analytical methods, the Kodak 22 ink sample and the Hewlett Packard 205 ink sample could be differentiated from one another and from the other ink samples in this study.

The Kodak 22 ink sample also exhibited two brown spots on the TLC plate when a higher concentration of the ink sample was used in the analysis. The brown-brown TLC pattern was the same color TLC pattern that was produced by the Canon 217, Canon 282 and Canon 522 ink samples. However, when the HPLC data of these four ink samples was compared, differences were observed which allowed Kodak 22 ink sample to be distinguished from the Canon 217, Canon 282 and Canon 522 ink samples. As stated previously, the HPLC data for the Kodak 22 ink sample showed two peaks at approximately 1.03 minutes and 1.52 minutes, whereas for the Canon 217, Canon 282 and Canon 522 ink samples, the HPLC data showed three peaks at approximately 1.07 minutes, 1.51 minutes and 8.3 minutes. This latter peak was unique to the Canon 217, Canon 282 and Canon 522 ink samples and was not observed in the Kodak 22 ink samples. Therefore, the HPLC data allowed for the differentiation between the Kodak 22 ink sample and the Canon 217, Canon 282 and Canon 522 ink samples.

When the Kodak 22 ink on paper sample pyrogram and the Canon 217, Canon 282 and Canon 522 ink on paper sample pyrograms were compared, differences were observed between the ink samples that allowed them to be differentiated from one

another. As stated previously, the Kodak 22 ink on paper sample pyrogram had three peaks located at approximately 1.7 minutes, 13.3 minutes and 13.6 minutes, which were identified by the NIST library as the compounds Sulfur Dioxide, D-Allose and 2,2'-(oxybis(2,1-ethanediyloxy))bis-Ethanol or Pentaethylene glycol respectively. The D-Allose peak was not helpful in discriminating between the ink on paper sample pyrograms because it was a main component of the paper sample and hence would be present in all ink on paper sample pyrograms. The Canon 217 and Canon 522 ink on paper sample pyrograms had the same sample ink on paper sample pyrogram, which consisted of three peaks located at approximately 1.7 minutes, 7.6 minutes and 17.3 minutes. These peaks were identified by the NIST library as Sulfur Dioxide, o-Toluidine and Benzo[f]quinoline or Benzo[f]isoquinoline respectively. The Canon 282 ink on paper sample pyrogram was different from the Canon 217 and Canon 522 ink on paper sample pyrograms, and consisted of three peaks located at approximately 1.7 minutes, 2.0 minutes and 17.3 minutes. These three peaks were identified by the NIST library as Sulfur Dioxide, Thiirane and Benzo[f]quinoline or Benzo[f]isoquinoline respectively. However, the compound o-Toluidine located at approximately 7.6 minutes and the compound Thiirane located at approximately 2.0 minute were also observed in the blank paper sample pyrogram. Consequently, the ink on paper sample pyrograms contained the same identifying compounds and hence were considered to be the same for the Canon 217, Canon 522 and Canon 282 ink samples. Thus based on their ink on paper sample pyrograms, the Kodak 22 ink sample could be differentiated from the Canon 217, Canon 522 and Canon 282 ink samples. The Canon 217, Canon 282 and Canon 522 ink samples could be differentiated from the Kodak 22 but not from one another. The Kodak 22,

Canon 217, Canon 282 and Canon 522 ink samples could be further differentiated by examining their ATR spectral data.

Comparing the results from the ATR analysis of the neat ink samples further discrimination was possible between these samples. The Kodak 22 neat ink sample ATR spectrum differed from the Canon 217, Canon 282 and Canon 522 neat ink samples ATR spectra by the fact that the Kodak 22 neat ink sample ATR spectrum contained five peaks at approximately 1099 cm^{-1}, 1397 cm^{-1}, 1426 cm^{-1}, 1572 cm^{-1} and 1604 cm^{-1} that were not found in the Canon 217, Canon 282 and Canon 522 neat ink samples ATR spectra. In addition, the Canon 217 and Canon 282 neat ink samples ATR spectra contained two peaks at approximately 1620 cm^{-1} and 1660 cm^{-1}, and the Canon 522 neat ink sample ATR spectrum contained four peaks at approximately 1157 cm^{-1}, 1595 cm^{-1}, 1621 cm^{-1} and 1671 cm^{-1} that were not found in the Kodak 22 neat ink sample ATR spectrum. The Canon 217 neat ink sample ATR spectrum and the Canon 282 neat ink sample ATR spectrum were similar, with differences in the peak maxima positions the main distinction between the neat ink samples ATR spectra. For example, the Canon 217 neat ink sample ATR spectrum contained four peaks at approximately 1030 cm^{-1}, 1189 cm^{-1}, 1349 cm^{-1} and 1454 cm^{-1} that were identified in the Canon 282 neat ink sample ATR spectrum at approximately 1027 cm^{-1}, 1194 cm^{-1}, 1342 cm^{-1} and 1458 cm^{-1} respectively. This was a difference in the peak maxima positions of approximately 3 cm^{-1}, 5 cm^{-1}, 7 cm^{-1} and 4 cm^{-1} respectively. The Canon 217 and Canon 282 neat ink samples ATR spectra differed from the Canon 522 neat ink sample ATR spectrum by the fact that the Canon 217 neat ink sample ATR spectrum contained two peaks at approximately 1454 cm^{-1} and 1660 cm^{-1} and the Canon 282 neat ink sample ATR spectrum contained two

peaks at approximately 1458 cm^{-1} and 1661 cm^{-1} that were not found in the Canon 522 neat ink sample ATR spectrum, and the Canon 522 neat ink sample ATR spectrum contained three peaks at approximately 1157 cm^{-1}, 1595 cm^{-1} and 1671 cm^{-1} that were not found in the Canon 217 and Canon 282 neat ink samples ATR spectra. In addition, there was a peak located at approximately 1466 cm^{-1} in the Canon 522 neat ink sample ATR spectrum, which was located at approximately 1454 cm^{-1} in the Canon 217 neat ink sample ATR spectrum and at approximately 1454 cm^{-1} in the Canon 282 neat ink sample ATR spectrum. This was a difference in the peak maximum position of approximately 4 cm^{-1} to 12 cm^{-1}, depending on the ink sample. Thus, the Canon 217 and Canon 282 ink samples could be differentiated from the Kodak 22 and Canon 522 ink samples but the Canon 217 and Canon 282 ink samples could not be differentiated from each other based on their neat ink samples ATR spectra,. However, the ink on paper sample ATR data was not as discriminating as the neat ink sample ATR data. The Canon 217, Canon 282 and Canon 522 ink on paper ATR spectra were similar and these three Canon ink samples were classified into the same ATR group. However, the Canon 217, Canon 282 and Canon 522 ink on paper samples ATR spectra was different from the Kodak 22 ink on paper sample ATR spectrum. Thus, the Kodak 22 ink sample could be differentiated from the Canon 217, Canon 282 and Canon 522 ink samples based on their ink on paper ATR data. By comparing the results of all four analytical methods, the Kodak 22 ink sample could be differentiated from the Canon 217, Canon 282 and Canon 522 ink samples, along with the other ink samples in this study, whereas the Canon 217, Canon 282 and Canon 522 ink samples could not be differentiated from one another but could be differentiated from the other ink samples in this study.

The Epson 30 ink sample produced a distinctive TLC pattern of five spots with a color pattern of purple-pink-yellow-yellow-purple (bottom to top of the TLC plate respectively). This ink sample also produced a unique HPLC chromatogram, which would aid in its identification. When this ink sample was analyzed on the HPLC, peaks were observed with retention times of approximately 1.06 minutes, 1.56 minutes, 10.97 minutes and 12.1 minutes, and sometimes at approximately 6.95 minutes. This was the only ink sample tested that showed a peak at both 10.97 minutes and at 12.1 minutes. The Okidata 04 ink sample had a peak at approximately 12 minutes but did not have a peak at approximately 10.97 minutes. Additionally, the Okidata 04 ink sample HPLC chromatogram lacked the peak at approximately 6.95 minutes that was detected in the Epson 30 ink sample HPLC chromatogram. The Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples had a peak at approximately 10.7 minutes in their HPLC chromatograms, but these Epson extractable ink samples did not have the two peaks at approximately 6.95 minutes and 12.1 minutes. Thus the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples could be distinguished from the Epson 30 ink sample. The Epson 30 ink sample's distinctive HPLC and TLC results allowed for its identification and discrimination from the other ink samples tested in this study.

In addition, the Epson 30 ink sample had a unique ink on paper sample pyrogram that included the compounds .gamma,.gamma,2,3-tetramethyl-2-cyclopentene-1-butanal, 6-methyl-6-hepten-4-yn-ol, Indole and 3-methyl-1H-Indole. None of the other ink samples in this study had ink on paper sample pyrograms that contained all of these compounds. Thus, the Epson 30 ink sample could be differentiated from the other ink

samples in this study based on their ink on paper sample pyrograms. The Epson 30 ink sample could be further differentiated from the other ink samples in this study by examining its ATR spectral data. The Epson 30 ink sample had a unique ATR result for both the neat ink sample and the ink on paper sample that allowed it to be differentiated from the other ink samples in this study. The Epson 30 neat ink sample ATR spectrum contained ten peaks at approximately 1034 cm^{-1}, 1105 cm^{-1}, 1205 cm^{-1}, 1345 cm^{-1}, 1397 cm^{-1}, 1482 cm^{-1}, 1530 cm^{-1}, 1604 cm^{-1}, 1622 cm^{-1} and 1660 cm^{-1}. Though some of these peaks were found in other neat ink samples ATR spectra, all of these peaks may not be found in the same neat ink sample ATR spectrum and the other neat ink samples ATR spectra also contained additional peaks that were not found in the Epson 30 neat ink sample ATR spectrum. Consequently, the Epson 30 neat ink sample ATR spectrum could be differentiated from the other neat ink samples ATR spectra in this study. The Epson 30 ink on paper sample ATR spectrum also had distinctive peaks, which allowed it to be differentiated from the ink on paper samples ATR spectra of the other ink samples in this study. Thus, based on the results of each of the four analytical methods, the Epson 30 ink sample could be differentiated from the other ink samples in this study.

For eight of the Epson ink cartridge types, namely the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples, the HPLC data showed similar peak patterns. In particular, the HPLC chromatograms for these eight Epson ink samples contained three peaks at approximately 1.17 minutes, 1.56 minutes and 10.7 minutes, and sometimes a fourth peak was observed at approximately 8 minutes. The Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples could be differentiated from the other Epson ink samples

used in this study by comparing their HPLC chromatograms. The Epson 30 ink sample HPLC chromatogram had a peak at approximately 7 minutes, not at approximately 8 minutes as observed with the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink sample HPLC chromatograms. In addition, the Epson 30 ink sample HPLC chromatogram had a peak at approximately 12 minutes, which was not present in the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink sample HPLC chromatograms. The Epson 84 ink sample HPLC chromatogram, on the other hand, differed from the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink sample HPLC chromatograms due to the fact that the Epson 84 ink sample HPLC chromatogram contained only a single peak at approximately 1.54 minutes. The Epson 156 ink sample HPLC chromatogram differed from the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink sample HPLC chromatograms due to the fact that the Epson 156 ink sample HPLC chromatogram contained only two peaks, with retention times of at approximately 1.14 minutes and 1.53 minutes. Furthermore, the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples could be differentiated from the other ink samples tested since the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples were the only ink samples to have peaks at both 8 minutes and 10.7 minutes in their HPLC chromatograms.

The Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples could be further distinguished among themselves based on the results of the TLC analysis. The Epson 33, Epson 60, Epson 63, Epson 66, Epson 90,

Epson 93, Epson 120 and Epson 123 ink samples could be divided into two groups based on the color arrangement on the developed TLC plates. The Epson 33, Epson 60 and Epson 63 ink samples, had five spots develop on the TLC plate with a color arrangement of purple-purple-green-purple-purple (bottom to top of the TLC plate respectively). The other five Epson ink samples, namely the Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples, had four spots develop on the TLC plate, with a color arrangement of purple-green-purple-purple (bottom to top of the TLC plate respectively). The Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples differed from the Epson 33, Epson 60 and Epson 63 ink samples due to the fact that the Epson 33, Epson 60 and Epson 63 ink samples had an extra purple spot towards the bottom of the TLC plate that was not observed on the Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples. The TLC patterns observed with the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples were characteristic of the Epson ink manufacturer and were useful in the identification of an unknown ink sample. It should be cautioned, however, that depending on the concentration of the Epson 33, Epson 60 and Epson 63 ink samples spotted onto the TLC plate, the TLC pattern that resulted could be similar in appearance to the TLC pattern observed for the Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples. Additionally, the TLC results of the Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples showed some faint tailing at higher concentrations that could be misidentified as being a spot on the TLC plate, making the TLC patterns for the Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples similar to the TLC patterns of the Epson 33, Epson 60 and Epson 63 ink samples.

The Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples, however, had the same ink on paper sample pyrogram which consisted of six peaks at approximately 1.7 minutes, 6.2 minutes, 7.6 minutes, 10.1 minutes, 10.9 minutes and 12.1 minutes. Taking the highest match quality as determined by the NIST library, these peaks were identified as the compounds Sulfur Dioxide, Benzonitrile, o-Toluidine, Quinoline, Indole and 6-methyl-1H-Indole respectively. The Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples were the only ink samples whose ink on paper sample pyrograms contained this combination of compounds, which allowed them to be differentiated from the other ink samples in the study. Unfortunately, the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples could not be differentiated from each other based on their ink on paper sample pyrograms. The results of the ATR analysis were compared to determine if this method was able to differentiate between the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples. For the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 neat ink samples, all eight of the neat ink samples ATR spectra contained eleven peaks located at approximately 1031 cm^{-1}, 1105 cm^{-1}, 1150 cm^{-1}, 1189 cm^{-1}, 1257 cm^{-1}, 1352 cm^{-1}, 1415 cm^{-1}, 1489 cm^{-1}, 1524 cm^{-1}, 1592 cm^{-1} and 1698 cm^{-1}. In addition, the Epson 33, Epson 60, Epson 63, Epson 93 and Epson 123 neat ink samples ATR spectra contained a peak located at approximately 1401 cm^{-1} that was not observed in the Epson 66, Epson 90 and Epson 120 neat ink samples ATR spectra. In seven of these Epson neat ink samples ATR spectra, the exception being the Epson 123 neat ink sample ATR spectrum, a peak located at approximately 1633 cm^{-1} was observed. Thus,

based on their neat ink sample ATR results, these eight Epson neat ink samples could be placed into three groups, where the first group contained the Epson 33, Epson 60, Epson 63 and Epson 93 neat ink samples, the second group contained the Epson 66, Epson 90 and Epson 120 neat ink samples and the third group contained the Epson 123 neat ink sample. When the ink on paper ATR spectra were compared, the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples could not be differentiated from one another, but were still distinct from the other ink samples in the study. Therefore, the four analytical methods had limited success in differentiating between the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples. However, based on the results of the four analytical methods, the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples could be differentiated from the other ink samples in this study.

When developing the ink samples on the TLC plates, some of the ink samples had a single spot develop, which was purple in color. Four ink samples produced this TLC result, namely the Epson 156, Canon 306, Canon 327 and Canon 402 ink samples. When the HPLC data was compared for these four ink samples, some differences were observed between the HPLC chromatograms. The Epson 156 ink sample had two main peaks with retention times of approximately 1.14 minutes and 1.53 minutes. No other peaks were observed in the HPLC chromatogram, at the 236 nm wavelength, for the Epson 156 ink sample. For the Canon 306 sample, at the 236 nm wavelength, the HPLC chromatogram contained a single peak with a retention time of approximately 1.53 minutes. This pattern of a single peak at approximately 1.53-1.54 minutes was observed in the Canon 327 and

Canon 402 ink sample HPLC chromatograms. Thus, at the 236 nm wavelength, the Epson 156 ink sample could be differentiated from the Canon 306, Canon 327 and Canon 402 ink samples by the presence of the peak at approximately 1.1 minutes in the Epson 156 ink sample HPLC chromatogram. However, the peak at approximately 1.1 minutes was not always present in the HPLC chromatograms of the Epson 156 ink sample replicates, so it was not a reliable discriminator.

If the monitoring wavelengths were expanded to the 256nm and 417 nm wavelengths, then some further discriminating information was obtained. For the Epson 156 ink sample at the 256 nm wavelength, there were still two peaks present at approximately 1.1 minutes and 1.6 minutes, but at the 417 nm wavelength there was only a single peak present at approximately 1.6 minutes. For the Canon 327 ink sample, at the 256 nm wavelength, there were two peaks occurring at approximately 1.1 minutes and 1.6 minutes. If the monitoring wavelength was switched to 417 nm, then the retention times of the peaks changed to approximately 1.3 minutes and 1.6 minutes. For the Canon 402 ink sample, at the 256 nm wavelength there were three peaks present that had retention times of approximately 1.1 minutes, 1.3 minutes and 1.6 minutes, whereas at the 417 nm wavelength there were only two peaks present with retention times of approximately 1.3 minutes and 1.6 minutes. Finally for the Canon 306 ink samples, at both the 256 nm and the 417 nm wavelengths, there were two peaks present with retention times of approximately 1.3 minutes and 1.6 minutes. Thus the Canon 306, Canon 327 and Canon 402 ink samples differed from the Epson 156 ink sample by the fact that there was a difference in the peak maximum position for the first peak in the HPLC chromatograms of approximately 0.2 minutes. This was not a significant

difference between the HPLC chromatograms and it could be due to a variety of factors, however it could serve as a tentative indicator for the identification of an unknown ink sample. Additionally, at the 417 nm wavelength, the Epson 156 ink sample had only a single peak present in its HPLC chromatogram, while the Canon 306, Canon 327 and Canon 402 ink samples had two peaks present, which could serve as a tentative indicator for the identification of an unknown ink sample.

When the ink on paper sample pyrograms were compared for the Epson 156, Canon 306, Canon 327 and Canon 402 ink samples some differences were observed that could assist in differentiating between these four ink samples. The Epson 156 ink on paper sample pyrogram contained five peaks at approximately 4.8 minutes, 6.1 minutes, 10.86 minutes, 11.1 minutes and 13.1 minutes, which were identified by the NIST library as Styrene, hexyl ester 2-Butenoic acid, .gamma,.gamma,2,3-tetramethyl-2-cyclopenten-1-butanal, 6-methyl-6-hepten-4-yn-3-ol and 2-[2-(2-butoxyethoxy)ethoxy]-Ethanol. Of the five compounds, the most discriminating was the Styrene peak. Though Styrene was found in the blank paper samples pyrograms, it was present in the Epson 156 ink on paper sample pyrogram at a significantly higher abundance than what it was found in the blank paper sample pyrogram. Thus, a strong Styrene peak was indicative of the Epson 156 ink sample. The Canon 306, Canon 327 and Canon 402 ink on paper sample pyrograms did not contain this Styrene peak, which allowed the Epson 156 ink sample to be differentiated from the Canon 306, Canon 327 and Canon 402 ink samples. The Canon 306, Canon 327 and Canon 402 ink on paper sample pyrograms all contained two peaks at approximately 1.7 minutes and 9.3 minutes, which were identified by the NIST library as Sulfur Dioxide and Naphthalene. However the Canon 306 ink on paper sample

pyrogram also contained a peak at approximately 16.9 minutes, which was identified by the NIST library as Benzo[h]quinoline or Benzo[h]isoquinoline. Since this compound was not found in the Canon 327 and Canon 402 ink on paper sample pyrograms, the Canon 306 ink sample could be differentiated from the Canon 327 and Canon 402 ink samples. Unfortunately, the ink on paper sample pyrograms could not differentiate between the Canon 327 and the Canon 402 ink samples.

. Comparing the results of the ATR analysis, differences were observed between the Epson 156, Canon 306, Canon 327 and Canon 402 ink samples in their neat ink samples ATR spectra and their ink on paper samples ATR spectra that allowed the ink samples to be differentiated from one another. The Epson 156 neat ink sample ATR spectrum differed from the Canon 327 neat ink sample ATR spectrum by the fact that the Epson 156 neat ink sample ATR spectrum contained eight peaks at approximately 1023 cm^{-1}, 1093 cm^{-1}, 1132 cm^{-1}, 1228 cm^{-1}, 1388 cm^{-1}, 1566 cm^{-1}, 1603 cm^{-1} and 1721 cm^{-1} that were not found in the Canon 327 neat ink sample ATR spectrum and the Canon 327 neat ink sample ATR spectrum contained four peaks at approximately 1040 cm^{-1}, 1163 cm^{-1}, 1210 cm^{-1} and 1621 cm^{-1} that were not found in the Epson 156 neat ink sample ATR spectrum. The Epson 156 neat ink sample ATR spectrum differed from the Canon 402 neat ink sample ATR spectrum by the fact that the Epson 156 neat ink sample ATR spectrum contained eight peaks at approximately 1023 cm^{-1}, 1093 cm^{-1}, 1132 cm^{-1}, 1228 cm^{-1}, 1388 cm^{-1}, 1566 cm^{-1}, 1662 cm^{-1} and 1721 cm^{-1} that were not found in the Canon 402 neat ink sample ATR spectrum and the Canon 402 neat ink sample ATR spectrum contained four peaks at approximately 1040 cm^{-1}, 1154 cm^{-1}, 1191 cm^{-1} and 1623 cm^{-1} that were not found in the Epson 156 neat ink sample ATR spectrum. The Epson 156

neat ink sample ATR spectrum differed from the Canon 306 neat ink sample ATR spectrum by the fact that the Epson 156 neat ink sample ATR spectrum contained eight peaks at approximately 1023 cm^{-1}, 1093 cm^{-1}, 1132 cm^{-1}, 1228 cm^{-1}, 1388 cm^{-1}, 1566 cm^{-1}, 1603 cm^{-1} and 1721 cm^{-1} that were not found in the Canon 306 neat ink sample ATR spectrum and the Canon 306 neat ink sample ATR spectrum contained four peaks at approximately 1039 cm^{-1}, 1149 cm^{-1}, 1202 cm^{-1} and 1622 cm^{-1} that were not found in the Epson 156 neat ink sample ATR spectrum. The Canon 327 neat ink sample ATR spectrum differed from the Canon 402 neat ink sample ATR spectrum by the fact that the Canon 327 neat ink sample ATR spectrum contained two peaks at approximately 1210 cm^{-1} and 1658 cm^{-1} that were not found in the Canon 402 neat ink sample ATR spectrum and the Canon 402 neat ink sample ATR spectrum contained two peaks at approximately 1191 cm^{-1} and 1597 cm^{-1} that were not found in the Canon 327 neat ink sample ATR spectrum. In addition, there were three peaks located at approximately 1163 cm^{-1}, 1354 cm^{-1} and 1455 cm^{-1} in the Canon 327 neat ink sample ATR spectrum that were located at approximately 1154 cm^{-1}, 1364 cm^{-1} and 1463 cm^{-1} in the Canon 402 neat ink sample ATR spectrum. This was a difference in the peak maxima positions of approximately 9 cm^{-1}, 10 cm^{-1} and 8 cm^{-1} respectively for the two neat ink samples ATR spectra. The Canon 327 neat ink sample ATR spectrum differed from the Canon 306 neat ink sample ATR spectrum by the fact that the Canon 327 neat ink sample ATR spectrum contained three peaks at approximately 1163 cm^{-1}, 1210 cm^{-1} and 1289 cm^{-1} that were found in the Canon 306 neat ink sample ATR spectrum at approximately 1149 cm^{-1}, 1202 cm^{-1} and 1283 cm^{-1}. This was a difference in the peak maxima positions of approximately 14 cm^{-1}, 8 cm^{-1} and 6 cm^{-1} respectively for the two neat ink samples ATR spectra. The Canon 402

neat ink sample ATR spectrum differed from the Canon 306 neat ink sample ATR spectrum by the fact that the Canon 402 neat ink sample ATR spectrum contained a peak at approximately 1663 cm^{-1} that was not present in the Canon 306 neat ink sample ATR spectrum and the Canon 306 neat ink sample ATR spectrum contained a peak at approximately 1597 cm^{-1} that was not found in the Canon 402 neat ink sample ATR spectrum. In addition, the Canon 402 neat ink sample ATR spectrum had four peaks located at approximately 1191 cm^{-1}, 1292 cm^{-1}, 1364 cm^{-1} and 1463 cm^{-1} that were found at approximately 1202 cm^{-1}, 1283 cm^{-1}, 1351 cm^{-1} and 1455 cm^{-1} in the Canon 306 neat ink sample ATR spectrum. This was a difference in the peak maxima positions approximately 11 cm^{-1}, 9 cm^{-1}, 13 cm^{-1} and 8 cm^{-1} respectively for the two neat ink samples ATR spectra. Thus, the Epson 156, Canon 327, Canon 402 and Canon 306 neat ink samples could be differentiated from one another based on their neat ink samples ATR spectra. The ink on paper samples ATR spectra, however, was not as discriminating as the neat ink samples ATR spectra. The Epson 156 and Canon 402 ink samples had distinct ink on paper samples ATR spectra that were different from one another and from the other ink samples in the study. The Canon 306 and Canon 327 ink on paper samples ATR spectra were indistinguishable from one another, but could be differentiated from the Epson 156 and Canon 402 ink on paper samples ATR spectra. However, based on the results of all four analytical methods, the Epson 156, Canon 327, Canon 402 and Canon 306 ink samples could be differentiated not only from one another but from the other ink samples in the study.

The Canon 306 ink sample had another feature that aided in its identification. Depending on the concentration of the ink sample spotted on the TLC plate, the TLC

pattern changed slightly. At the lower concentrations of the extracted ink, the Canon 306 ink sample produced only a single purple spot on the TLC plate. At the higher concentrations of the extracted ink, the TLC plate had two spots, with a color arrangement of yellow-purple (bottom to top of the TLC plate respectively). The Canon 306 ink sample was the only ink sample to produce a color arrangement of yellow-purple (bottom to top of the TLC plate respectively), which allowed it to be identified in an unknown ink sample. It should be cautioned, however, that unless sufficient ink was spotted onto the TLC plate, only a single purple spot would develop on the TLC plate. Thus, if a TLC result showed the color pattern of yellow-purple (bottom to top of the TLC plate respectively), it could be tentatively identified as being Canon 306 ink sample, however, the absence of a yellow-purple combination did not preclude the possibility of the Canon 306 ink sample being present.

For three of the Canon ink samples, namely the Canon 223, Canon 348 and Canon 384 ink samples respectively, the TLC results showed three spots on the developed TLC plate with a color arrangement of brown-brown-purple (bottom to top of the TLC plate respectively). For all three of these ink samples, the HPLC data showed two main peaks with retention times of approximately 1.08 minutes and 1.53 minutes. However for Canon 384 ink sample, a peak was observed in the HPLC chromatogram with a retention time of approximately 1.25 minutes for the second replicate of this ink sample instead of a retention time of approximately 1.1 minutes. This difference in retention time could be due to a number of factors, one of which was a change in ambient temperature. When the second replicate of the Canon 384 ink sample was analyzed on the HPLC instrument, the room temperature was increased due to the fact that other instruments, including gas

chromatographs, were in use. This change in ambient temperature could cause shifts in the retention times of the sample peaks in the HPLC chromatograms.

When the ink on paper sample pyrograms were compared for the Canon 223, Canon 348 and Canon 384 ink samples, it was determined that there was no difference observed between their ink on paper sample pyrograms. The Canon 223, Canon 348 and Canon 384 ink on paper sample pyrograms consisted of four peaks located at approximately 1.7 minutes, 6.2 minutes, 7.6 minutes and 9.3 minutes. Taking the compound with the top match quality as determined by the NIST library, these peaks were identified as Sulfur Dioxide, Benzonitrile, o-Toluidine and Naphthalene. The Canon 223, Canon 348 and Canon 384 ink samples were the only ink samples that contained these four compounds in their ink on paper sample pyrograms. Other ink on paper samples pyrograms contained some of these compounds, but these ink samples tended to also contain other compounds in their ink on paper sample pyrograms that were not present in the Canon 223, Canon 348 and Canon 384 ink on paper sample pyrograms. Therefore, though the ink on paper sample pyrograms did not allow for the Canon 223, Canon 348 and Canon 384 ink samples to be differentiated from one another, it did allow these samples to be differentiated from the other ink samples in the study. In addition, when the results of the neat ink sample ATR analysis were compared, there was no difference observed between the neat ink samples ATR spectra of the Canon 223, Canon 348 and Canon 384 ink samples. The neat ink samples ATR spectra of the Canon 223, Canon 348 and Canon 384 neat ink samples were similar in terms of peak patterns and peak positions. There were only slight differences, generally in the range of 1-2 cm^{-1}, in the peak maxima positions for these three Canon ink samples. The ink on paper samples

ATR spectra for the Canon 223, Canon 348 and Canon 384 ink samples were also similar for all three of these ink samples, and the Canon 223, Canon 348 and Canon 384 ink samples could not be differentiated from one another based on their ink on paper samples ATR spectra. However, based on the results of all four analytical methods, the Canon 223, Canon 348 and Canon 384 ink samples could be differentiated from the rest of the ink samples analyzed in this study, even if they could not be differentiated from one another.

The final ink type examined was the Canon 318 ink sample. This cartridge was different from all of the other ink cartridges tested in the fact that it contained two liquids, one that was black in color and one that was slightly yellow. This latter liquid was labeled Canon 318a through Canon 323a, and was previously discussed. Samples of the black ink were labeled Canon 318 through Canon 323 and exhibited TLC results of three spots with a color arrangement of grey-yellow-purple (bottom to top of the TLC plate respectively). This was the only ink sample tested that produced this TLC pattern. The HPLC data of the Canon 318 ink sample showed two main peaks with retention times of approximately 1.08 minutes and 1.53 minutes. This was the same HPLC result that was obtained with the Epson 156, Kodak 22, Canon 223, Canon 348 and Canon 384 ink samples, as well as for some of the Canon 282 and Canon 522 ink sample replicates. Though the HPLC results did not allow for discrimination of the Canon 318 ink sample from these other ink samples, when the TLC results were factored in discrimination was possible. The Canon 318 ink sample produced an ink on paper sample pyrogram that consisted of two peaks at approximately 1.7 minutes and 2.0 minutes. These peaks were identified by the NIST library as Sulfur Dioxide and Thiirane, and these two compounds

were also identified in the Canon 282 ink on paper sample pyrogram. However, the Canon 282 ink on paper sample pyrogram also contains a peak at approximately 17.3 minutes, and identified as Benzo[f]quinoline or Benzo[f]isoquinoline, that was not found in the Canon 318 ink on paper sample pyrogram. In addition, the results of the Canon 318 neat ink sample ATR analysis were similar to those observed for the Canon 306, Canon 223, Canon 327, Canon 348 and Canon 384 neat ink samples. The Canon 318 neat ink sample ATR spectrum had a single peak difference as compared to these five Canon neat ink samples ATR spectra. The Canon 318 neat ink sample ATR spectrum contained a peak at approximately 1163 cm^{-1} that was not observed in the Canon 223, Canon 348 and Canon 384 neat ink samples ATR spectra. The Canon 318 neat ink sample ATR spectrum had a peak at approximately 1163 cm^{-1} that was observed at approximately 1149 cm^{-1} in the Canon 306 neat ink sample ATR spectrum, which was a peak maximum position difference of approximately 14 cm^{-1}. The Canon 318 neat ink sample ATR spectrum had a peak at approximately 1200 cm^{-1} that was observed at approximately 1210 cm^{-1} in the Canon 327 neat ink sample ATR spectrum, which was a peak maximum position difference of approximately 10 cm^{-1}. The result for the ink on paper ATR analysis were similar to those observed for the Canon 217, Canon 223, Canon 282, Canon 306, Canon 327, Canon 348 and Canon 384 ink samples, and hence these eight Canon ink on paper samples ATR spectra were grouped together. However, when the results of the TLC, HPLC and Py-GC-MS analyses were taken into account, the differences between these Canon ink samples and the Canon 318 ink sample could be readily observed. Thus, based on the results of all four analytical methods, and especially

the results of the TLC analysis, the Canon 318 ink sample could be differentiated from the other ink samples in the study.

The results from the TLC analysis allowed for the classification of the 176 ink samples, or 35 cartridge types, into eleven groups. By incorporating the results of the HPLC analysis, the Py-GC-MS analysis and the ATR FT-IR analysis into the results of the TLC analysis, as well as incorporating the results of the interaction of an ink sample with the extraction solvent, further discrimination or classification could be done within the groups. As such, ink samples that could not be distinguished based on a single method could now be discriminated by the addition of the other data. The results of the four methods of analysis, along with the extraction step, were compared and the results were compiled into a table for the extractable ink samples and a separate table for the non-extractable ink samples. The different non-extractable and extractable ink samples could be differentiated from the other members of their group by comparing the results of each method.

Refer to Table 32 and Table 33 for the classification scheme for the non-extractable ink samples and for the extractable ink samples respectively, which was based on the results of the four analytical methods for the various ink cartridge types. As stated previously, for the TLC and HPLC methods of analysis, the ink was first extracted from the ink on paper sample prior to their analysis, whereas for the Py-GC-MS and ATR FT-IR methods of analysis, the ink sample was analyzed directly on the ink on paper sample. Additionally, the results of the neat ink sample ATR FT-IR analysis were also included in classifications scheme for the non-extractable and extractable ink samples listed in Table 32 and Table 33 respectively.

Table 32 : Classification Scheme for the Non-Extractable Ink Samples

Analytical Methods, Results and Possible Identification of the Non-Extractable Ink Samples										
Add Extraction Solvent of EtOH:dH$_2$O (50:50)	**Possible Ink Samples**	**TLC Color Pattern Ink on Paper Samples (Extracted)**	**Possible Ink Samples**	**HPLC (min) Ink on Paper Samples (Extracted)**	**Possible Ink Samples**	**Py-GC-MS (min) Ink on Paper Sample**	**Possible Ink Samples**	**ATR FT-IR (cm^{-1}) Neat Ink Samples**	**ATR FT-IR Groupings based on Ink on Paper Samples**	**Possible Ink Samples**
Non-Extractable Ink	Kodak 17, HP 198, HP 199, HP 200, HP 201, Xerox 13, Xerox 24, Xerox 244, Canon 312, Canon 492 and Epson 84 plus Canon 318a	Clear	Kodak 17, HP 198, HP 199, HP 200, HP 201, Xerox 13, Xerox 24, Xerox 244, Canon 312, Canon 492 and Epson 84 plus Canon 318a	1.5	Kodak 17, HP 198, HP 199, HP 200, Xerox 13, Xerox 24, Xerox 244, Canon 312 and Epson 84 plus Canon 318a	15.123 and 19.66	Kodak 17	944, 1091,1241, 1281, 1337, 1449, 1553, 1716 and 1948	I	Kodak 17
						3.2, 7.1, 10.7, 11.4, 14.9 and 15.2	HP 198, HP 199 and HP 200	938, 1092, 1247, 1284, 1344, 1449, 1554, 1719 and 1955	II	HP 198
								946, 1025, 1106, 1249, 1289, 1348, 1454, 1560 and 1723	II	HP 199
								1085, 1245, 1341, 1447, 1550, 1636 and 1716	II	HP 200
						3.2, 3.8, 7.0, 8.8, 11.3 and 11.4	Xerox 13, Xerox 24 and Xerox 244	1091, 1252, 1367, 1451, 1543, 1714 and 1931	III	Xerox 13
								1017, 1084, 1249, 1358, 1448, 1556, 1712 and 1954	III	Xerox 24
								1015, 1106, 1253, 1297, 1362, 1454, 1612 and 1718	III	Xerox 244
						2.4, 9.2, 12.0 and 20.4	Canon 312	986, 1123, 1170, 1349, 1456 and 1602	IV	Canon 312
						10.9 and 11.1	Epson 84	912, 973, 1078, 1179, 1325, 1549, 1646 and 1728	V	Epson 84
						6.1 and 13.3	Canon 318a	921, 1038, 1109, 1325, 1404 and 1560	VI	Canon 318a
				1.1 and 1.5	HP 201	3.2, 7.1, 10.7, 11.4, 14.9 and 15.2	HP 201	944, 1086, 1246, 1342, 1447, 1549, 1716 and 1950	II	HP 201
				1.5, 6.7 and 7.2	Canon 492	2.4, 9.2, 12.0 and 20.4	Canon 492	933, 1020, 1115, 1360, 1457 and 1605	VII	Canon 492

Table 33: Classification Scheme for the Extractable Ink Samples

Analytical Methods, Results and Possible Identification of the Extractable Ink Samples										
Add Extraction Solvent of EtOH:dH_2O (50:50)	**Possible Ink Samples**	**TLC Color Pattern Ink on Paper Samples (Extracted)**	**Possible Ink Samples**	**HPLC (min) Ink on Paper Samples (Extracted)**	**Possible Ink Samples**	**Py-GC-MS (min) Ink on Paper Sample**	**Possible Ink Samples**	**ATR FT-IR (cm^{-1}) Neat Ink Samples**	**ATR FT-IR Groupings based on Ink on Paper Samples**	**Possible Ink Samples**
Extractable Ink	Okidata 04, Kodak 22, Epson 30, Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123, Epson 156, HP 205, Canon 217, Canon 223, Canon 282, Canon 306, Canon 318, Canon 327, Canon 348, Canon 384, Canon 402 and Canon 522	Purple-Pink-Yellow	Okidata 04	1.1, 1.5 and 12.0	Okidata 04	1.5, 7.3, 7.6, 10.83, 10.86, 10.9 and 11.1	Okidata 04	908, 1025, 1178, 1341, 1406, 1482 and 1594	I	Okidata 04
		Purple-Pink-Yellow-Yellow-Purple	Epson 30	1.1, 1.5, 10.9 and 12.0	Epson 30	1.7, 7.3, 10.86, 10.88, 11.1 and 12.1	Epson 30	921, 1033, 1102, 1202, 1399, 1480, 1613 and 1658	II	Epson 30
		Purple-Purple-Yellow-Purple-Purple	Epson 33, Epson 60 and Epson 63	1.1, 1.5, 7.8 and 10.6	Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123	1.7, 6.2, 7.6, 10.1, 10.87 and 12.1	Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123	919, 1033, 1104, 1187, 1257, 1349, 1408 1485, 1523, 1592 and 1698	III	Epson 33
								922, 1031, 1103, 1186, 1350, 1408, 1486, 1591 and 1698	III	Epson 60
								921, 1032, 1103, 1187, 1350, 1408, 1486, 1523, 1592 and 1696	III	Epson 63
								902, 1033, 1105, 1189, 1353, 1410, 1488, 1593 and 1699	III	Epson 66
		Purple-Yellow-Purple-Purple	Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123					921, 1032, 1104, 1186, 1353, 1409, 1487, 1592 and 1696	III	Epson 90
								922, 1032, 1103, 1186, 1351, 1408, 1487, 1593 and 1695	III	Epson 93
								921, 1033, 1104, 1187, 1353, 1409, 1487, 1593 and 1696	III	Epson 120
								922, 1032, 1102, 1186, 1352, 1407, 1487, 1594 and 1695	III	Epson 123
		Yellow-Purple	Canon 306	1.5	Canon 306	1.7, 2.9, 9.3 and 16.9	Canon 306	922, 1040, 1107, 1199, 1278, 1354, 1454 and 1618	IV	Canon 306
		Grey-Yellow-Purple	Canon 318	1.1 and 1.5	Canon 318	1.7, 2.0 and 2.9	Canon 318	922, 1038, 1108, 1202, 1283, 1344, 1454 and 1617	IV	Canon 318

Table 33: Classification Scheme for the Extractable Ink Samples cont.

Analytical Methods, Results and Possible Identification of the Extractable Ink Samples										
Add Extraction Solvent of EtOH:dH_2O (50:50)	**Possible Ink Samples**	**TLC Color Pattern Ink on Paper Samples (Extracted)**	**Possible Ink Samples**	**HPLC (min) Ink on Paper Samples (Extracted)**	**Possible Ink Samples**	**Py-GC-MS (min) Ink on Paper Sample**	**Possible Ink Samples**	**ATR FT-IR (cm^{-1}) Neat Ink Samples**	**ATR FT-IR Groupings based on Ink on Paper Samples**	**Possible Ink Samples**
Extractable Ink	Okidata 04, Kodak 22, Epson 30, Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123, Epson 156, HP 205, Canon 217, Canon 223, Canon 282, Canon 306, Canon 318, Canon 327, Canon 348, Canon 384, Canon 402 and Canon 522	Purple	Epson 156, Canon 327, Canon 402 and at low conc. Canon 306	1.1 and 1.5	Epson 156	4.8, 6.1, 10.86, 11.1 and 13.1	Epson 156	1026, 1103, 1228, 1286, 1353, 1449, 1563 and 1714	V	Epson 156
				1.5	Canon 327, Canon 402 and at times Canon 306	1.7, 2.9 and 9.3	Canon 327 and Canon 402	923, 1041, 1107, 1210, 1289, 1455 and 1616	IV	Canon 327
								922, 1042, 1106, 1163, 1288, 1459 and 1607	VI	Canon 402
						1.7, 2.9, 9.3 and 16.9	Canon 306	922, 1040, 1107, 1199, 1278, 1354, 1454 and 1618	IV	Canon 306
		Brown	HP 205 and at low conc. Kodak 22	1.1 and 1.5	Kodak 22	1.7, 13.3 and 13.6	Kodak 22	1035, 1112, 1198, 1356, 1390, 1416, 1490 and 1610	VII	Kodak 22
				1.1, 1.5 and 1.8	HP 205	1.7	HP 205	1037, 1216, 1309, 1421, 1461 and 1659	VIII	HP 205
		Brown-Brown	Kodak 22, Canon 217, Canon 282 and Canon 522	1.1 and 1.5	Kodak 22 and at times Canon 282 and Canon 522	1.7, 13.3 and 13.6	Kodak 22	1035, 1112, 1198, 1356, 1390, 1416, 1490 and 1610	VII	Kodak 22
				1.1, 1.5 and 8.2	Canon 217, Canon 282 and Canon 522	1.7, 2.9, 7.6 and 17.3	Canon 217 and Canon 522	923, 1037, 1111, 1198, 1454 and 1615	IV	Canon 217
								924, 1036, 1112, 1169, 1348, 1462, 1602 and 1666	VI	Canon 522
						1.7, 2.0 and 2.9	Canon 282	922, 1032, 1112, 1192, 1286, 1348, 1458 and 1617	IV	Canon 282
		Brown-Brown-Purple	Canon 223, Canon 348 and Canon 384	1.1 and 1.5	Canon 223, Canon 348 and Canon 384	1.7, 2.9, 6.2, 7.6 and 9.3	Canon 223, Canon 348 and Canon 384	923, 1037, 1110, 1199, 1278, 1349, 1454 and 1616	IV	Canon 223
								921, 1037, 1107, 1201, 1282, 1455 and 1617	IV	Canon 348
								923, 1037, 1110, 1200, 1278, 1352, 1455 and 1617	IV	Canon 384

B. Comparison of the Analytical Methods

A comparison of the results of the four analytical methods was done in order to determine the effectiveness of the methods, alone and in conjunction with one another, in discriminating between the different black ink samples. This comparison was done by first classifying the ink samples into extractable ink samples and non-extractable ink samples. Based on the results of the ink samples with the extraction solvent, the Okidata 04, Kodak 22, Canon 217, Canon 223, Canon 282, Canon 306, Canon 318, Canon 327, Canon 348, Canon 384, Canon 402, Canon 522, Epson 30, Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123, Epson 156 and Hewlett Packard 205 ink samples were classified as extractable ink samples and the Xerox 13, Xerox 24, Xerox 244, Kodak 17, Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200, Hewlett Packard 201, Epson 84, Canon 312, Canon 492 and Canon 318a ink samples were classified as non-extractable ink samples. The comparison of the four analytical methods was done based on the results of the ink on paper samples, and not based on the results of the neat ink samples, as the former was typically the format received for analysis in a forensic laboratory.

The effectiveness of the four analytical methods separately in discriminating between the extractable ink samples was examined first. Each separate analytical method had some success in discriminating between the twenty-three extractable ink samples. The Thin Layer Chromatography (TLC) method was able to place the twenty-three extractable ink samples into nine groups. The TLC groupings tended to be manufacturer specific, with the exception of the Epson 156 ink sample which was grouped with the Canon 327 and Canon 402 ink samples, and the Kodak 22 ink sample which was grouped

with the Canon 217, Canon 282 and Canon 522 ink samples. The other seven TLC groups contained ink samples of a single manufacturer. For the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples, depending on the concentration of the ink placed on the TLC plate, it was possible to separate these ink samples into two groups based on their TLC results. The first group consisted of the Epson 33, Epson 60 and Epson 63 ink samples, while the second group consisted of the Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples. This would bring the number of different TLC patterns, and hence groups, to ten. However, it was decided that for this discussion the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples would be placed into the same group. The overlap of the TLC results for these eight Epson ink samples across the various concentrations made the differentiation of these ink samples difficult. If the concentration of the ink sample spotted on the TLC plate was not correct, then there could be confusion or misidentification of these ink samples. To avoid any bias or overestimation in the discussion on the discriminating ability of the TLC method, these ink samples were considered to be part of the same group. Thus, the total number of groups that the extractable ink samples could be placed into based on their TLC results was nine.

The High Performance Liquid Chromatography (HPLC) method, by itself, had the lowest discriminating ability for the extractable ink samples of all four of the individual analytical methods. The HPLC method was able to place the twenty-three extractable ink samples into seven different groups. Thus, the HPLC method was not as successful as the TLC method in discriminating between the samples. The HPLC groupings also

tended to be manufacturer specific, with the exception of the Epson 156 and Kodak 22 ink samples which were grouped with the Canon 318, Canon 223, Canon 348 and Canon 384 ink samples. The other six HPLC groups contained ink samples of a single manufacturer.

The Attenuated Total Reflection Fourier Transform Infrared Spectroscopy (ATR FT-IR) method was only slightly better at discriminating between the extractable ink samples than the HPLC method. The results of the ATR FT-IR method were examined, and the twenty-three ink samples were able to be placed into eight different groups. Though this was a slight improvement in the discriminating ability over the HPLC method, it was poorer at discriminating between the extractable ink samples than the TLC method. However, unlike the TLC and HPLC groupings, the ATR FT-IR groupings were all manufacturer specific. For each of the eight ATR FT-IR groups, only ink sample(s) of a single manufacturer was listed within a specific group.

Of all of the analytical methods used to analyze the extractable ink samples, the Pyrolysis Gas Chromatography-Mass Spectrometry (Py-GC-MS) method had the highest discriminating ability. Using this method of analysis, the twenty-three extractable ink samples were able to be placed into eleven different groups, with over half of those groups containing a single member. Additionally, the Py-GC-MS groupings were manufacturer specific. For each of the eleven Py-GC-MS groups, only ink sample(s) of a single manufacturer was listed within a specific group. The largest Py-GC-MS group consisted of the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples. Though the Py-GC-MS method had the highest discriminating ability, it was not the easiest method of analysis. The interference caused

by the paper matrix was a concern, and this may lead the analyst to accept a slightly lower discriminating ability, at least for an initial examination, and use an alternate method of analysis that was easier to perform and interpret.

The groupings of the twenty-three extractable ink samples by the individual analytical methods are shown in Table 34.

Table 34: Grouping of the Twenty-Three Extractable Ink Samples Based on Their Results with the Individual Analytical Methods.

TLC	HPLC	Py-GC-MS	ATR FT-IR
Okidata 04	Okidata 04	Okidata 04	Okidata 04
Epson 30	Epson 30	Epson 30	Epson 30
Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123	Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123	Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123	Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123
Epson 156, Canon 327, Canon 402	Canon 306, Canon 327, Canon 402	Canon 306	Epson 156
Canon 306	Epson 156, Kodak 22, Canon 318, Canon 223, Canon 348, Canon 384	Canon 327, Canon 402	Canon 217, Canon 223, Canon 282, Canon 306, Canon 318, Canon 327, Canon 348, Canon 384
Canon 318	HP 205	Canon 318, Canon 282	Canon 402, Canon 522
HP 205	Canon 217, Canon 282, Canon 522	Epson 156	Kodak 22
Kodak 22, Canon 217, Canon 282, Canon 522		Kodak 22	HP 205
Canon 223, Canon 348, Canon 384		HP 205	
		Canon 217, Canon 522	
		Canon 223, Canon 348, Canon 384	

The results of the analytical methods were examined to determine if the discriminating ability could be increased by pairing two different analytical methods. Six different pairings of the analytical methods were done, namely the pairings of the TLC and HPLC methods, the TLC and Py-GC-MS methods, the TLC and ATR FT-IR methods, the HPLC and Py-GC-MS methods, the HPLC and ATR FT-IR methods and the Py-GC-MS and ATR FT-IR methods. An increase in the discriminating ability was

found for each pairing as compared to the individual analytical methods making up the specific pairing. For both the TLC and HPLC pairing and the HPLC and ATR FT-IR pairing, the results of the analyses were able to separate the twenty-three extractable ink samples into eleven different groups. This was an increase in the number of groupings found for the TLC, HPLC and ATR FT-IR methods individually, and in some cases a significant increase in the ability to differentiate between the samples. It should be noted, however, that these two pairings had the same discriminating ability as the Py-GC-MS method by itself. A factor that was helpful in the discrimination of an ink sample was that in seven of the eleven groups, there was only a single ink sample listed, and in three of the remaining four groups, there were three or less ink samples listed per group. Thus, it was possible to not only reduce the possible source of an ink sample using these two methods, but it was possible to identify the single source of the ink sample. The largest group consisted of eight ink samples, and was the group that contained the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples.

Even though the TLC and HPLC pairing and the HPLC and ATR FT-IR pairing resulted in the twenty-three extractable ink samples being separated out into the same number of groups, the groupings of the ink samples were not the same between the two pairings. For the TLC and HPLC pairing and the HPLC and ATR FT-IR pairing, there were five groups out of the eleven that differed between these two pairings. For the TLC and HPLC pairing, the Canon 327 and Canon 402 ink samples were in one group, the Canon 217, Canon 282 and Canon 522 ink samples were in another group, the Canon 223, Canon 348 and Canon 384 ink samples were in a third group, the Canon 306 ink

sample was in a separate group and the Canon 318 ink sample was in a separate group. For the HPLC and ATR FT-IR pairing, the Canon 306 and Canon 327 ink samples were in one group and the Canon 402 ink sample was in a separate group, the Canon 318 ink sample was grouped with the Canon 223, Canon 348 and Canon 384 ink samples, the Canon 217 and Canon 282 ink samples were in one group and the Canon 522 ink sample was in a separate group. Thus, even though both of these pairings showed the same level of discrimination between the twenty-three extractable ink samples, there were differences in how this differentiation occurred.

For both the TLC and Py-GC-MS pairing and the HPLC and Py-GC-MS pairing, the results of the analyses were able to separate the twenty-three extractable ink samples into twelve different groups. This was, once again, an increase in the number of groupings found for the TLC, HPLC and Py-GC-MS methods individually; however it was only a slight increase in the ability of the Py-GC-MS method to differentiate between the samples. As stated previously, the Py-GC-MS method was able to place the twenty-three extractable ink samples into eleven groups, which was only one group less than the results of the TLC and Py-GC-MS and the HPLC and Py-GC-MS pairings. Unlike the previous pairings, the groupings from both the TLC and Py-GC-MS pairing and the HPLC and Py-GC-MS pairing produced the same twelve groups. A factor that was helpful was the fact that in eight of the twelve groups, there was only a single ink sample listed, and in three of the remaining four groups, there were three or less ink samples listed per group. Thus, it was possible to not only reduce the possible source of an ink sample using these two methods, but it was possible to identify the single source of the ink sample. Once again, the largest group consisted of eight ink samples, and was the

group that contained the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples.

For both the TLC and ATR FT-IR pairing and the Py-GC-MS and ATR FT-IR pairing, the results of the analyses were able to separate the twenty-three extractable ink samples into thirteen different groups. This was the highest number of groupings that was determined when two different analytical methods were paired together. Thus, the TLC and ATR FT-IR pairing and the Py-GC-MS and ATR FT-IR pairing were able to differentiation between the largest number of extractable ink samples out of all of the other pairings. It was interesting to note that the same degree of discrimination was obtained from these pairings, even though the initial individual degree of discrimination was so different for these analytical methods. The TLC and ATR FT-IR pairing and the Py-GC-MS and ATR FT-IR pairing resulted in an overall increase in the ability to distinguish between two ink samples, and in some cases a significant increase in the discriminating ability, as compared to the discriminating ability of the individual methods. The addition of the ATR FT-IR results to the TLC results produced an almost 45% increase in the ability to differentiate between the extractable ink samples as compared to the TLC results alone. However, the addition of the ATR FT-IR results to the Py-GC-MS results produced only an 18% increase in the ability to differentiate between the extractable ink samples as compared to the Py-GC-MS results alone.

Although the TLC and ATR FT-IR pairing and the Py-GC-MS and ATR FT-IR pairing resulted in the twenty-three extractable ink samples being separated out into the same number of groups, once again the groupings of the ink samples were not the same between the two pairings. Between the TLC and ATR FT-IR pairing and the Py-GC-MS

and ATR FT-IR pairing, there were two groups out of the thirteen that differed. For the TLC and ATR FT-IR pairing, the Canon 217 and Canon 282 ink samples were grouped together in one group, while the Canon 318 ink sample was placed in a separate group. However, for the Py-GC-MS and ATR FT-IR pairing, the Canon 217 ink sample was placed into a separate group and the Canon 282 and Canon 318 ink samples were grouped together in one group. Thus, even though both of these pairings showed the same level of discrimination between the twenty-three extractable ink samples, there were differences in how this differentiation occurred.

The groupings of the twenty-three extractable ink samples by the pairing of the analytical methods are shown in Table 35.

Table 35: Grouping of the Twenty-Three Extractable Ink Samples Based on Their Results with the Paired Analytical Methods.

TLC + HPLC
Okidata 04
Epson 30
Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123
Epson 156
Canon 327, Canon 402
Canon 306
Canon 318
HP 205
Kodak 22
Canon 217, Canon 282, Canon 522
Canon 223, Canon 348, Canon 384

TLC + Py-GC-MS
Okidata 04
Epson 30
Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123
Epson 156
Canon 327, Canon 402
Canon 306
Canon 318
HP 205
Kodak 22
Canon 282
Canon 217, Canon 522
Canon 223, Canon 348, Canon 384

TLC + ATR FT-IR
Okidata 04
Epson 30
Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123
Epson 156
Canon 327
Canon 402
Canon 306
Canon 318
HP 205
Kodak 22
Canon 217, Canon 282
Canon 522
Canon 223, Canon 348, Canon 384

HPLC + Py-GC-MS
Okidata 04
Epson 30
Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123
Canon 306
Canon 327, Canon 402
Epson 156
Kodak 22
Canon 318
Canon 223, Canon 348, Canon 384
HP 205
Canon 282
Canon 217, Canon 522

HPLC + ATR FT-IR
Okidata 04
Epson 30
Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123
Canon 306, Canon 327
Canon 402
Epson 156
Kodak 22
Canon 318, Canon 223, Canon 348, Canon 384
HP 205
Canon 217, Canon 282
Canon 522

Py-GC-MS + ATR FT-IR
Okidata 04
Epson 30
Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123
Canon 306
Canon 327
Canon 402
Canon 318, Canon 282
Epson 156
Kodak 22
HP 205
Canon 217
Canon 522
Canon 223, Canon 348, Canon 384

The results of the analytical methods were examined to determine if the discriminating ability could be increased by grouping together the results from three different analytical methods. As a result, four different sets of three analytical methods were created, namely the sets of the TLC, HPLC and Py-GC-MS methods; the TLC, HPLC and ATR FT-IR methods; the TLC, Py-GC-MS and ATR FT-IR methods and the HPLC, Py-GC-MS and ATR FT-IR methods. By comparing the results of these sets of

analytical methods, an increase in the discriminating ability was found for each set as compared to the individual analytical methods making up the specific pairing. For the TLC, HPLC and Py-GC-MS set of analytical methods; the results of these analyses were able to place the twenty-three extractable ink samples into twelve different groups. This was the same level of discrimination that was obtained when the TLC and Py-GC-MS methods and the HPLC and Py-GC-MS methods were paired together. Thus, the addition of a third analytical method to either pairing did not result in an increase in its ability to differentiate between the twenty-three extractable ink samples. It should also be noted that not only was there no increase in the discriminating ability from either pairing, the twenty-three extractable ink samples were placed in the same twelve groups. In other words, not only was there no increase in the discriminating ability by adding in a third analytical technique, but there was no difference in which ink samples could be differentiated from one another. This was an important factor to note, since it was noted previously that the same degree of discrimination did not necessarily mean that the same ink samples were grouped together.

For the TLC, HPLC and ATR FT-IR set of analytical methods, the results of these analyses were able to place the twenty-three extractable ink samples into thirteen different groups. This was the same degree of discrimination that was obtained when the TLC and ATR FT-IR methods and the Py-GC-MS and ATR FT-IR methods were paired together. Not only was the same degree of discrimination obtained from the TLC, HPLC and ATR FT-IR set of analytical methods as compared to what was obtained from the TLC and ATR FT-IR pairing, but the twenty-three ink samples were classified into the same groups as compared to what was found for the TLC and ATR FT-IR pairing. Thus,

the addition of a third analytical method to this pairing did not result in any additional information or ability to differentiate between the samples.

For the final two sets of the three analytical methods, the results of these analyses were able to place the twenty-three extractable ink samples into fourteen different groups. This was the highest number of groupings that was determined when three different analytical methods were analyzed together. Thus, the TLC, Py-GC-MS and ATR FT-IR set of methods and the HPLC, Py-GC-MS and ATR FT-IR set of methods were able to differentiation between the largest number of extractable ink samples out of all of the other individual methods, pairings or sets of analytical methods. In addition, for twelve of the fourteen groups, there was only a single ink sample listed, which allowed for the identification of a single source for an unknown ink sample to be determined. Of the remaining two groups, one group had eight ink samples listed and the other had three ink samples listed. The Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples could be found in the first group and the Canon 223, Canon 348 and Canon 384 ink samples could be found in the second group. These ink samples could not be differentiated from the other members of their respective groups using any single analytical method, pairing of analytical methods or sets of three analytical methods. Thus, these two groups could not be differentiated further, limiting the overall number of groups of extractable ink samples that were possible.

The groupings of the twenty-three extractable ink samples by the sets of three analytical methods are shown in Table 36.

Table 36: Grouping of the Twenty-Three Extractable Ink Samples Based on Their Results with a Set of Three Analytical Methods.

TLC + HPLC + Py-GC-MS	TLC + HPLC + ATR FT-IR	TLC + Py-GC-MS + ATR FT-IR	HPLC + Py-GC-MS + ATR FT-IR
Okidata 04	Okidata 04	Okidata 04	Okidata 04
Epson 30	Epson 30	Epson 30	Epson 30
Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123	Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123	Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123	Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123
Epson 156	Epson 156	Epson 156	Epson 156
Canon 327, Canon 402	Canon 327	Canon 327	Canon 327
Canon 306	Canon 402	Canon 402	Canon 402
Canon 318	Canon 306	Canon 306	Canon 306
HP 205	Canon 318	Canon 318	Canon 318
Kodak 22	HP 205	HP 205	HP 205
Canon 217, Canon 522	Kodak 22	Kodak 22	Kodak 22
Canon 282	Canon 217, Canon 282	Canon 282	Canon 282
Canon 223, Canon 348, Canon 384	Canon 522	Canon 217	Canon 217
	Canon 223, Canon 348, Canon 384	Canon 522	Canon 522
		Canon 223, Canon 348, Canon 384	Canon 223, Canon 348, Canon 384

When all four analytical methods were compared together, the results of these analyses were able to place the twenty-three extractable ink samples into fourteen different groups. This was the highest number of groupings that was determined when the results of any individual analytical method or combination of analytical methods were analyzed. Additionally, this was the same degree of discrimination that was obtained with the TLC, Py-GC-MS and ATR FT-IR set of methods and the HPLC, Py-GC-MS and ATR FT-IR set of methods. Not only was this the same degree of discrimination, the twenty-three extractable ink samples were placed into the exact same groupings. The addition of a fourth method to the TLC, Py-GC-MS and ATR FT-IR set of methods and the HPLC, Py-GC-MS and ATR FT-IR set of methods did not produce any further information nor provide an increase in the ability to differentiate between the different ink samples.

The groupings of the twenty-three extractable ink samples by all four of the analytical methods are shown in Table 37.

Table 37: Grouping of the Twenty-Three Extractable Ink Samples Based on Their Results with all Four Analytical Methods.

TLC + HPLC + Py-GC-MS + ATR FT-IR
Okidata 04
Epson 30
Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123
Epson 156
Canon 327
Canon 402
Canon 306
Canon 318
HP 205
Kodak 22
Canon 282
Canon 217
Canon 522
Canon 223, Canon 348, Canon 384

By comparing the results of the above analysis, it was apparent that the analytical method, or combination of analytical methods, that had the highest degree of discrimination were able to place the twenty-three extractable ink samples into fourteen groups. The TLC, Py-GC-MS and ATR FT-IR set of methods and the HPLC, Py-GC-MS and ATR FT-IR set of methods had this level of discrimination, so the addition of another method to these sets did not increase their ability to differentiate between the extractable ink samples. Though both sets of analytical methods had the same degree of discrimination, the use of TLC to screen the extractable ink samples allowed for a rapid visualization of the differences between the ink samples as compared to the HPLC method. The use of the TLC method to analyze the black extractable ink samples could result in the identification of a set of ink cartridges or a single ink cartridge type

associated with an unknown ink sample. This was due to the fact that some of the ink samples produced unique TLC patterns. If an ink sample had a unique TLC pattern, then its identity could be confirmed through the use of the Py-GC-MS or ATR FT-IR method of analysis. The use of the TLC, Py-GC-MS and ATR FT-IR set of methods over the HPLC, Py-GC-MS and ATR FT-IR set of methods may be preferable due to the ease of analysis, the increased discriminating ability and the relative inexpensive nature of the TLC method over the HPLC method.

The effectiveness of the four analytical methods separately in discriminating between the non-extractable ink samples was also examined. Three of the four analytical methods had some success in discriminating between the twelve non-extractable ink samples. The Thin Layer Chromatography (TLC) method was the exception and did not allow for any differentiation between the non-extractable ink samples. Since the non-extractable ink samples were all colorless on the TLC plate, there was no way to differentiate between the samples, and as such all twelve non-extractable ink samples could be placed into a single group.

The High Performance Liquid Chromatography (HPLC) method, by itself, had the second lowest discriminating ability of all four of the individual analytical methods. The HPLC method was able to place the twelve non-extractable ink samples into three different groups. Thus, the HPLC method was slightly better at discriminating between the samples than the TLC method. For two of the three groups, a single ink sample was listed as member, whereas in the third group there were ten ink samples listed. Though this method did not have a high degree of differentiation for the non-extractable ink samples, it was the identification of the single source for two of the groups that was the

main advantage of the HPLC method. The Pyrolysis Gas Chromatography-Mass Spectrometry (Py-GC-MS) method was significantly better at discriminating between the extractable ink samples than the HPLC method. The results of the Py-GC-MS method were examined, and the twelve non-extractable ink samples were able to be placed into six different groups. Three of the six groups of ink samples contained a single ink sample, while the three remaining groups were manufacturer specific. All of the Hewlett Packard non-extractable ink samples were listed in one group, all of the Xerox non-extractable ink samples were listed in another group and the two black Canon non-extractable ink samples were listed in the third group.

The Attenuated Total Reflection Fourier Transform Infrared Spectroscopy (ATR FT-IR) method had the highest discriminating ability out of all of the analytical methods used to analyze the non-extractable ink samples. Using the ATR FT-IR method of analysis, the twelve non-extractable ink samples were able to be placed into seven different groups, with five of the seven groups containing a single member. Based on the ATR spectral data, the Hewlett Packard non-extractable ink samples could not be differentiated from one another and the Xerox non-extractable ink samples could not be differentiated from one another. As a result, all four of the Hewlett Packard non-extractable ink samples were listed in one group and all three of the Xerox non-extractable ink samples were listed in another group.

The groupings of the twelve non-extractable ink samples by the individual analytical methods are shown in Table 38.

Table 38: Grouping of the Twelve Non-Extractable Ink Samples Based on Their Results with the Individual Analytical Methods.

TLC
Xerox 13, Xerox 24, Xerox 244, Epson 84, Kodak 17, Canon 312, Canon 492, Canon 318a, HP 198, HP 199, HP 200, HP 201

HPLC
Canon 492
HP 201
Xerox 13, Xerox 24, Xerox 244, Epson 84, Kodak 17, Canon 312, Canon 318a, HP 198, HP 199, HP 200

Py-GC-MS
Canon 312, Canon 492
HP 198, HP 199, HP 200, HP 201
Xerox 13, Xerox 24, Xerox 244
Epson 84
Kodak 17
Canon 318a

ATR FT-IR
Canon 492
Canon 312
HP 198, HP 199, HP 200, HP 201
Xerox 13, Xerox 24, Xerox 244
Epson 84
Kodak 17
Canon 318a

The results of the analytical methods were examined to determine if the discriminating ability could be increased by pairing two different analytical methods. Six different pairings of the analytical methods was done, namely the pairings of the TLC and HPLC methods, the TLC and Py-GC-MS methods, the TLC and ATR FT-IR methods, the HPLC and Py-GC-MS methods, the HPLC and ATR FT-IR methods and the Py-GC-MS and ATR FT-IR methods. For four of the six pairings, there was no increase in the discriminating ability of the pairing, whereas for the other two pairings an increase in the discriminating ability was found for each pairing as compared to the individual analytical methods making up the specific pairing. For the TLC and HPLC pairing, the TLC and Py-GC-MS pairing and the TLC and ATR FT-IR pairing, the results of the analyses were able to separate the twelve non-extractable ink samples into three, six and seven groups respectively. This was the same number of groups that were formed for the HPLC, Py-GC-MS and ATR FT-IR analyses by themselves, and the reason for the lack of increased discriminating ability was due to the fact that the TLC method of

analysis did not allow for any of the non-extractable ink samples to be differentiated from one another. Consequently, the addition of the TLC results did not add any information or discriminating ability to the results obtained by the HPLC, Py-GC-MS and ATR FT-IR methods by themselves. For the Py-GC-MS and ATR FT-IR pairing, the results of the analyses were able to separate the twelve non-extractable ink samples into seven different groups. This was an increase in the number of groupings found for the Py-GC-MS method individually; however it was the same degree of discrimination that was found with the ATR FT-IR method individually. Therefore, the addition of the results of the Py-GC-MS method to the results of the ATR FT-IR method did not provide any additional information or discriminating ability for the analysis of the non-extractable ink samples.

For both the HPLC and Py-GC-MS pairing and the HPLC and ATR FT-IR pairing, the results of the analyses were able to separate the twelve non-extractable ink samples into eight different groups. This was the highest number of groupings that was determined when two different analytical methods were paired together. Thus, the TLC and ATR FT-IR pairing and the Py-GC-MS and ATR FT-IR were able to differentiate between the largest number of non-extractable ink samples out of all of the other pairings. Six of the eight groups for both sets of methods contained only a single ink sample, and the remaining two groups were manufacturer specific. Three of the four Hewlett Packard non-extractable ink samples were found in one group, while all three of the Xerox non-extractable ink samples were found in the other group.

The groupings of the twelve non-extractable ink samples by the pairing of the analytical methods are shown in Table 39.

Table 39: Grouping of the Twelve Non-Extractable Ink Samples Based on Their Results with the Paired Analytical Methods.

TLC + HPLC
Canon 492
HP 201
Xerox 13, Xerox 24, Xerox 244, Epson 84, Kodak 17, Canon 312, Canon 318a, HP 198, HP 199, HP 200

TLC + Py-GC-MS
Canon 312, Canon 492
HP 198, HP 199, HP 200, HP 201
Xerox 13, Xerox 24, Xerox 244
Epson 84
Kodak 17
Canon 318a

TLC + ATR FT-IR
Canon 492
Canon 312
HP 198, HP 199, HP 200, HP 201
Xerox 13, Xerox 24, Xerox 244
Epson 84
Kodak 17
Canon 318a

HPLC + Py-GC-MS
Canon 492
Canon 312
HP 198, HP 199, HP 200
HP 201
Xerox 13, Xerox 24, Xerox 244
Epson 84
Kodak 17
Canon 318a

HPLC + ATR FT-IR
Canon 492
Canon 312
HP 198, HP 199, HP 200
HP 201
Xerox 13, Xerox 24, Xerox 244
Epson 84
Kodak 17
Canon 318a

Py-GC-MS + ATR FT-IR
Canon 492
Canon 312
HP 198, HP 199, HP 200, HP 201
Xerox 13, Xerox 24, Xerox 244
Epson 84
Kodak 17
Canon 318a

The results of the analytical methods were examined to determine if the discriminating ability could be increased by grouping together the results from three different analytical methods. As a result, four different sets of three analytical methods were created, namely the sets of the TLC, HPLC and Py-GC-MS methods; the TLC, HPLC and ATR FT-IR methods; the TLC, Py-GC-MS and ATR FT-IR methods and the HPLC, Py-GC-MS and ATR FT-IR methods. With the exception of one of the sets, an increase in the discriminating ability was found for each set of analytical methods as compared to the individual analytical methods making up the specific pairing. The exception was the TLC, Py-GC-MS and ATR FT-IR set of analytical methods. For the TLC, Py-GC-MS and ATR FT-IR set of analytical methods; the results of these analyses were able to place the twelve non-extractable ink samples into seven different groups. This was the same level of discrimination that was obtained when the Py-GC-MS and ATR FT-IR methods were paired together. Thus, the addition of a third analytical

method, and in particular the addition of the TLC method, to this pairing did not result in an increase in its ability to differentiate between the twelve non-extractable ink samples.

For the TLC, HPLC and Py-GC-MS set of analytical methods; the TLC, HPLC and ATR FT-IR set of analytical methods and the HPLC, Py-GC-MS and ATR FT-IR set of analytical methods, the results of these analyses were able to place the twelve non-extractable ink samples into eight different groups. This was the same degree of discrimination that was obtained when the HPLC and Py-GC-MS methods and the HPLC and ATR FT-IR methods were paired together. The addition of the TLC method to the first two sets of analytical methods did not provide any further information or increase the discriminating ability of the HPLC and Py-GC-MS pairing or the HPLC and ATR FT-IR pairing. In addition, the addition of the Py-GC-MS method to the HPLC and ATR FT-IR pairing also did not provide any further information or increase its discriminating ability.

The groupings of the twelve non-extractable ink samples by the sets of three analytical methods are shown in Table 40.

Table 40: Grouping of the Twelve Non-Extractable Ink Samples Based on Their Results with a Set of Three Analytical Methods.

TLC + HPLC + Py-GC-MS
Canon 492
Canon 312
HP 198, HP 199, HP 200
HP 201
Xerox 13, Xerox 24, Xerox 244
Epson 84
Kodak 17
Canon 318a

TLC + HPLC + ATR FT-IR
Canon 492
Canon 312
HP 198, HP 199, HP 200
HP 201
Xerox 13, Xerox 24, Xerox 244
Epson 84
Kodak 17
Canon 318a

TLC + Py-GC-MS + ATR FT-IR
Canon 492
Canon 312
HP 198, HP 199, HP 200, HP 201
Xerox 13, Xerox 24, Xerox 244
Epson 84
Kodak 17
Canon 318a

HPLC + Py-GC-MS + ATR FT-IR
Canon 492
Canon 312
HP 198, HP 199, HP 200
HP 201
Xerox 13, Xerox 24, Xerox 244
Epson 84
Kodak 17
Canon 318a

When all four analytical methods were compared together, the results of these analyses were able to place the twelve non-extractable ink samples into eight different groups. This was the highest number of groupings that was determined when the results of any individual analytical method or combination of analytical methods were analyzed. Additionally, this was the same degree of discrimination that was obtained with the HPLC and Py-GC-MS pairing, the HPLC and ATR FT-IR pairing, the TLC, HPLC and Py-GC-MS set of methods, the TLC, HPLC and ATR FT-IR set of methods and the HPLC, Py-GC-MS and ATR FT-IR set of methods. Not only was this the same degree of discrimination that was found in the other sets of analytical methods, the twelve non-extractable ink samples were placed into the exact same groupings as found in the other method comparisons. The inclusion of all four analytical methods did not provide any additional information or increase in the ability to differentiate between the samples.

The groupings of the twelve non-extractable ink samples by all four of the analytical methods are shown in Table 41.

Table 41: Grouping of the Twelve Non-Extractable Ink Samples Based on Their Results with all Four Analytical Methods.

TLC + HPLC + Py-GC-MS + ATR FT-IR
Canon 492
Canon 312
HP 198, HP 199, HP 200
HP 201
Xerox 13, Xerox 24, Xerox 244
Epson 84
Kodak 17
Canon 318a

By comparing the results of the above analysis, it was apparent that the analytical method, or combination of analytical methods, that had the highest degree of discrimination were able to place the twelve non-extractable ink samples into eight groups. The HPLC and Py-GC-MS pairing and the HPLC and ATR FT-IR pairings had this level of discrimination, so the addition of another method to their pairing did not increase their ability to differentiate between the non-extractable ink samples. However, depending on the non-extractable ink sample, one analytical method result was easier to interpret, and hence discriminate between the ink samples, than another. For example, for the Xerox ink samples, it was easier to differentiate between the Xerox ink samples and the rest of the non-extractable ink samples using the Py-GC-MS method of analysis, whereas for the Epson 84 ink sample it was easier to differentiate the Epson 84 ink sample from the other non-extractable ink samples using the ATR FT-IR method of analysis. Even though both ink samples could be differentiated using both methods, the ease of interpretation may result in the forensic examiner selecting one analytical method over another.

C. Computerized Search Libraries

ATR Libraries

The results of the ATR library searches were examined to determine the effectiveness of a library to correctly identify an unknown ink sample. Unless otherwise stated, the ink samples tested against the ATR search libraries were the ink on paper samples. As stated previously, the results of the ink on paper samples that produced indistinguishable ATR spectra were grouped together with the correct match and were used in the calculation of the effectiveness of the search libraries. Using these manufacturer groupings and the matches listed after comparing the 215 ink on paper samples against the Spectral ID Neat Ink Standard ATR library, a comparison of the results could be accomplished. The assignment of a correct identification was given when either the correct ink standard or any member of the manufacturer group was listed as the top match. Using the Spectral ID Neat Ink Standard ATR library, the percentage of the correct identification of an ink on paper sample ranged from 0% to 67%. The match listings of the Spectral ID Neat Ink Standard ATR library were also examined to determine how often the correct identification of the ink on paper sample was listed in the #2 to #20 position in the match list. The percentage for placement within the #2 to #20 position ranged from 0% to 100%, depending on the ink standard being searched. Refer to Table 42 for the percentage of correct identification and placement within the #2 to #20 position for the 215 ink on paper samples using the Spectral ID Neat Ink Standard ATR library. It should be noted that only one placement within the #2 to #20 position was recorded per sample replicate.

Table 42: Spectral ID Correct Identification Percentages and Placement within the #2 to #20 Position for the 215 Ink on Paper Samples using the Neat Ink Standard ATR Library

Sample	Number in the #1 position			Number in the #2 to #20 position (only noting one per sample replicate)		
	Correct ID	Same ATR Group	TOTAL (Correct and Same ATR)	Correct ID	Same ATR Group	TOTAL (Correct and Same ATR)
Okidata 04	3/12 25%	n/a	3/12 25%	4/12 33%	n/a	4/12 33%
Xerox 13	0/10 0%	0/10 0%	0/10 0%	8/10 80%	3/10 30%	8/10 80%
Kodak 17	0/7 0%	n/a	0/7 0%	7/7 100%	n/a	7/7 100%
Kodak 22	0/7 0%	n/a	0/7 0%	3/7 43%	n/a	3/7 43%
Xerox 24	0/7 0%	0/7 0%	0/7 0%	3/7 43%	7/7 100%	7/7 100%
Epson 30	1/7 14%	n/a	1/7 14%	3/7 43%	n/a	3/7 43%
Epson 33	0/7 0%	0/7 0%	0/7 0%	2/7 29%	0/7 0%	2/7 29%
Epson 60	0/7 0%	0/7 0%	0/7 0%	0/7 0%	1/7 14%	1/7 14%
Epson 63	1/7 14%	1/7 14%	2/7 29%	1/7 14%	0/7 0%	1/7 14%
Epson 66	0/6 0%	0/6 0%	0/6 0%	0/6 0%	0/6 0%	0/6 0%
Epson 84	3/6 50%	n/a	3/6 50%	1/6 17%	n/a	1/6 17%
Epson 90	0/6 0%	1/6 17%	1/6 17%	0/6 0%	0/6 0%	0/6 0%
Epson 93	0/6 0%	0/6 0%	0/6 0%	0/6 0%	0/6 0%	0/6 0%
Epson 120	0/7 0%	2/7 29%	2/7 29%	0/7 0%	1/7 14%	1/7 14%
Epson 123	0/6 0%	2/6 33%	2/6 33%	0/6 0%	0/6 0%	0/6 0%
Epson 156	0/6 0%	n/a	0/6 0%	2/6 33%	n/a	2/6 33%
HP 198	0/8 0%	3/8 38%	3/8 38%	4/8 50%	5/8 63%	5/8 63%
HP 199	0/6 0%	4/6 67%	4/6 67%	3/6 50%	2/6 33%	2/6 33%
HP 200	0/6 0%	3/6 50%	3/6 50%	6/6 100%	2/6 33%	3/6 50%
HP 201	2/6 33%	0/6 0%	2/6 33%	3/6 50%	3/6 50%	4/6 67%
HP 205	0/6 0%	n/a	0/6 0%	1/6 17%	n/a	1/6 17%
Canon 217	0/6 0%	0/6 0%	0/6 0%	1/6 17%	3/6 50%	3/6 50%
Canon 223	0/6 0%	1/6 17%	1/6 17%	1/6 17%	2/6 33%	2/6 33%
Xerox 244	0/6 0%	1/6 17%	1/6 17%	4/6 67%	1/6 17%	4/6 67%
Canon 282	1/6 17%	0/6 0%	1/6 17%	0/6 0%	1/6 17%	1/6 17%
Canon 306	0/5 0%	0/5 0%	0/5 0%	2/5 40%	4/5 80%	4/5 80%
Canon 312	0/5 0%	n/a	0/5 0%	0/5 0%	n/a	0/5 0%
Canon 318	0/5 0%	2/5 40%	2/5 40%	2/5 40%	2/5 40%	2/5 40%
Canon 318a	1/4 25%	n/a	1/4 25%	0/4 0%	n/a	0/4 0%
Canon 327	0/5 0%	1/5 20%	1/5 20%	1/5 20%	3/5 60%	3/5 60%
Canon 348	0/5 0%	0/5 0%	0/5 0%	0/5 0%	1/5 20%	1/5 20%
Canon 384	0/4 0%	0/4 0%	0/4 0%	0/4 0%	2/4 50%	2/4 50%
Canon 402	0/4 0%	2/4 50%	2/4 50%	2/4 50%	0/4 0%	0/4 0%
Canon 492	0/4 0%	n/a	0/4 0%	0/4 0%	n/a	0/4 0%
Canon 522	2/4 50%	0/4 0%	2/4 50%	1/4 25%	0/4 0%	1/4 25%

As noted in the table above, the Epson and Hewlett Packard non-extractable ink standards showed the highest percentage of correct identification, with values ranging

from 38% to 67%. One exception noted was with the Canon 318 extractable ink standard that had a 40% correct identification rate. When examining the results of the placement within the #2 to #20 position in the match list, the results were more varied. The ink standards with the highest percentages included the Xerox, Kodak and Hewlett Packard non-extractable ink standards that had percentages that ranged from of 50% to 100%, as well as some of the Epson and Canon extractable ink standards that had percentages that ranged from 43% to 80%.

When examining the library results in more detail, some helpful information was noted for some of the ink on paper samples. For the Okidata 04, Canon 217, Canon 306, Canon 318, Canon 348 and Canon 522 extractable ink standards, one ink on paper sample replicate for each of these ink standards had only non-extractable ink samples listed before the correct match. For the Epson 84, Hewlett Packard 198, Hewlett Packard 199 and Hewlett Packard 200 non-extractable ink standards, one ink on paper sample replicate for each of these ink standards had only extractable ink samples listed before the correct match. As a result, the correct identification percentages for these ten ink standards could be increased after taking into account the presence of the opposite type of ink sample listed prior to the listing of the correct match. The correct identification percentages for the Okidata 04 ink standard increased from 25% to 33%, for the Canon 217 ink standard the correct matches increased from 0% to 17%, for the Canon 306 ink standard the correct matches increased from 0% to 20%, for the Canon 318 ink standard the correct matches increased from 40% to 60%, for the Canon 348 ink standard the correct matches increased from 0% to 20% and for the Canon 522 ink standard the correct matches increased from 50% to 75%. In addition, the correct identification

percentages for the Epson 84 ink standard increased from 50% to 67%, for the Hewlett Packard 198 ink standard the correct matches increased from 38% to 50%, for the Hewlett Packard 199 ink standard the correct matches increased from 67% to 83% and for the Hewlett Packard 200 ink standard the correct matches increased from 50% to 67%.

The results of the 215 ink on paper sample searched against the Spectral ID Slide Subtracted Neat Ink Standard ATR library were examined to determine the effectiveness of the library. As stated previously, the averaged glass microscope slide ATR spectrum was subtracted from the neat ink samples ATR spectra and the resulting subtraction ATR spectra were labeled with "slide subtraction" to differentiate them from the initial neat ink samples ATR spectra. The association of a correct identification was given when either the correct standard or any member of the group were listed as the top match for that sample. The percentage of correctly identified ink on paper samples ranged from 0% to 67%. This was the same range as listed for the Spectral ID Neat Ink Standard ATR library; however these percentages did not necessarily correspond to the same ink standards. For example, the Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200 and Hewlett Packard 201 ink standards had a correct identification rate with the Spectral ID Neat Ink Standard ATR library of 38%, 67%, 50% and 33% respectively, whereas with the Spectral ID Slide Subtracted Neat Ink Standard ATR library the correct identification rate were 0%, 0%, 0% and 0% respectively. The percentage of placement within the #2 to #20 positions in the match list for each ink on paper sample was also calculated, and this ranged from 0% to 86%. Refer to Table 43 for the percentage of correct identification and placement within the #2 to #20 position for the 215 ink on

paper samples using the Spectral ID Slide Subtracted Neat Ink Standard ATR library. It should be noted that only one placement within the #2 to #20 position was recorded per sample replicate.

Table 43: Spectral ID Correct Identification Percentages and Placement within the #2 to #20 Position for the 215 Ink on Paper Samples using the Slide Subtracted Neat Ink Standard ATR Library

Sample	Number in the #1 position			Number in the #2 to #20 position (only noting one per sample replicate)		
	Correct ID	Same ATR Group	TOTAL (Correct and Same ATR)	Correct ID	Same ATR Group	TOTAL (Correct and Same ATR)
Okidata 04	3/12 25%	n/a	3/12 25%	7/12 58%	n/a	7/12 58%
Xerox 13	4/10 40%	2/10 20%	6/10 60%	4/10 40%	0/10 0%	2/10 20%
Kodak 17	0/7 0%	n/a	0/7 0%	6/7 86%	n/a	6/7 86%
Kodak 22	1/7 14%	n/a	1/7 14%	1/7 14%	n/a	1/7 14%
Xerox 24	0/7 0%	3/7 43%	3/7 43%	7/7 100%	0/7 0%	4/7 57%
Epson 30	0/7 0%	n/a	0/7 0%	3/7 43%	n/a	3/7 43%
Epson 33	1/7 14%	0/7 0%	1/7 14%	3/7 43%	0/7 0%	3/7 43%
Epson 60	0/7 0%	0/7 0%	0/7 0%	0/7 0%	1/7 14%	1/7 14%
Epson 63	0/7 0%	0/7 0%	0/7 0%	2/7 29%	3/7 43%	3/7 43%
Epson 66	0/6 0%	0/6 0%	0/6 0%	0/6 0%	1/6 17%	1/6 17%
Epson 84	4/6 67%	n/a	4/6 67%	1/6 17%	n/a	1/6 17%
Epson 90	0/6 0%	1/6 17%	1/6 17%	0/6 0%	2/6 33%	2/6 33%
Epson 93	0/6 0%	0/6 0%	0/6 0%	0/6 0%	1/6 17%	1/6 17%
Epson 120	0/7 0%	0/7 0%	0/7 0%	0/7 0%	5/7 71%	5/7 71%
Epson 123	0/6 0%	0/6 0%	0/6 0%	0/6 0%	2/6 33%	2/6 33%
Epson 156	1/6 17%	n/a	1/6 17%	1/6 17%	n/a	1/6 17%
HP 198	0/8 0%	0/8 0%	0/8 0%	4/8 50%	4/8 50%	4/8 50%
HP 199	0/6 0%	0/6 0%	0/6 0%	2/6 33%	3/6 50%	3/6 50%
HP 200	0/6 0%	0/6 0%	0/6 0%	4/6 67%	0/6 0%	4/6 67%
HP 201	0/6 0%	0/6 0%	0/6 0%	1/6 17%	3/6 50%	3/6 50%
HP 205	0/6 0%	n/a	0/6 0%	1/6 17%	n/a	1/6 17%
Canon 217	0/6 0%	0/6 0%	0/6 0%	2/6 33%	3/6 50%	3/6 50%
Canon 223	0/6 0%	3/6 50%	3/6 50%	2/6 33%	0/6 0%	0/6 0%
Xerox 244	0/6 0%	1/6 17%	1/6 17%	2/6 33%	3/6 50%	4/6 67%
Canon 282	0/6 0%	1/6 17%	1/6 17%	2/6 33%	0/6 0%	1/6 17%
Canon 306	0/5 0%	0/5 0%	0/5 0%	2/5 40%	5/5 100%	5/5 100%
Canon 312	0/5 0%	n/a	0/5 0%	0/5 0%	n/a	0/5 0%
Canon 318	0/5 0%	2/5 40%	2/5 40%	0/5 0%	1/5 20%	1/5 20%
Canon 318a	2/4 50%	n/a	2/4 50%	1/4 25%	n/a	1/4 25%
Canon 327	0/5 0%	2/5 40%	2/5 40%	0/5 0%	0/5 0%	0/5 0%
Canon 348	0/5 0%	1/5 20%	1/5 20%	0/5 0%	2/5 40%	2/5 40%
Canon 384	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%
Canon 402	0/4 0%	0/4 0%	0/4 0%	0/4 0%	1/4 25%	1/4 25%
Canon 492	0/4 0%	n/a	0/4 0%	0/4 0%	n/a	0/4 0%
Canon 522	0/4 0%	0/4 0%	0/4 0%	2/4 50%	0/4 0%	2/4 50%

As noted in the table above, the Xerox 13, Xerox 24, Epson 84 and Canon 318a non-extractable ink standards, and the Canon 318 and Canon 327 extractable ink standards had the highest percentage of correct identification. The percentages of correct identification ranged from 43% to 67% for the non-extractable ink standards and the percentage of correct identification was 40% for the extractable ink standards. With regards to the placement within the #2 to #20 position in the match list, the Okidata 04, Canon 217, Canon 306 and Canon 522 extractable ink standards and the Kodak 17, Xerox 24, Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200, Hewlett Packard 201 and Xerox 244 non-extractable ink standards had the higher percentages listed. The percentage of placement in the #2 to #20 position ranged from 50% to 100% for the extractable ink standards and 50% to 86% for the non-extractable ink standards.

Once again, when the results were examined in more detail some useful information was obtained, which increased the correct identification percentage for three of the ink standards. For two ink on paper sample replicates of the Okidata 04 extractable ink standard and one ink on paper sample replicate for each of the Epson 156 and Canon 318 extractable ink standards, the ink samples listed before the correct identification were all non-extractable ink samples. Consequently, the percentage of correct matches for the Okidata 04 ink standard increased from 25% to 42%, for the Epson 156 ink standard the percentage of correct matches increased from 17% to 33% and for the Canon 318 ink standard the percentage of correct matches increased from 40% to 60%.

The results of the 215 ink on paper samples using the OMNIC Neat Ink Standard ATR library were also examined to determine the effectiveness of the library. As stated previously, the manufacturers that produced indistinguishable ATR spectra were grouped together with the correct match and were used in the calculation of the effectiveness of the library. Using the groupings and the matches listed after comparing the 215 ink on paper samples against the OMNIC Neat Ink Standard ATR library, a comparison of the results could be accomplished. Additionally, the assignment of a correct identification was given when either the correct ink standard or any manufacturer group standard was listed as the top match. Using the OMNIC Neat Ink Standard ATR library, the percentage of correct matches for the ink on paper samples ranged from 0% to 100%. The match listings of the OMNIC Neat Ink Standard ATR library were also examined to determine how often the correct identification of the ink on paper sample was listed in the #2 to #20 position in the match list. The percentage of placement within the #2 to #20 position in the match ranged from 0% to 75%. Refer to Table 44 for the percentages of the correct identification and placement within the #2 to #20 position for the 215 ink on paper samples using the OMNIC Neat Ink Standard ATR library. It should be noted that only one placement within the #2 to #20 position was recorded per sample replicate.

Table 44: OMNIC Correct Identification Percentages and Placement within the #2 to #20 Position for the 215 Ink on Paper Samples using the Neat Ink Standard ATR Library

Sample	Number in the #1 position			Number in the #2 to #20 position (only noting one per sample replicate)		
	Correct ID	Same ATR Group	TOTAL (Correct and Same ATR)	Correct ID	Same ATR Group	TOTAL (Correct and Same ATR)
Okidata 04	7/12 58%	n/a	7/12 58%	1/12 8%	n/a	1/12 8%
Xerox 13	4/10 40%	0/10 0%	4/10 40%	3/10 30%	0/10 0%	3/10 30%
Kodak 17	0/7 0%	n/a	0/7 0%	0/7 0%	n/a	0/7 0%
Kodak 22	1/7 14%	n/a	1/7 14%	3/7 43%	n/a	3/7 43%
Xerox 24	0/7 0%	0/7 0%	0/7 0%	1/7 14%	5/7 71%	5/7 71%
Epson 30	0/7 0%	n/a	0/7 0%	0/7 0%	n/a	0/7 0%
Epson 33	1/7 14%	4/7 57%	5/7 71%	4/7 57%	1/7 14%	1/7 14%
Epson 60	0/7 0%	5/7 71%	5/7 71%	1/7 14%	1/7 14%	1/7 14%
Epson 63	1/7 14%	3/7 43%	4/7 57%	4/7 57%	2/7 29%	2/7 29%
Epson 66	1/6 17%	3/6 50%	4/6 67%	2/6 33%	1/6 17%	1/6 17%
Epson 84	0/6 0%	n/a	0/6 0%	2/6 33%	n/a	2/6 33%
Epson 90	0/6 0%	4/6 67%	4/6 67%	5/6 83%	2/6 33%	2/6 33%
Epson 93	0/6 0%	6/6 100%	6/6 100%	1/6 17%	0/6 0%	0/6 0%
Epson 120	0/7 0%	7/7 100%	7/7 100%	6/7 86%	0/7 0%	0/7 0%
Epson 123	0/6 0%	4/6 67%	4/6 67%	0/6 0%	1/6 17%	1/6 17%
Epson 156	0/6 0%	n/a	0/6 0%	0/6 0%	n/a	0/6 0%
HP 198	0/8 0%	1/8 13%	1/8 13%	1/8 13%	1/8 13%	1/8 13%
HP 199	0/6 0%	0/6 0%	0/6 0%	0/6 0%	0/6 0%	0/6 0%
HP 200	0/6 0%	0/6 0%	0/6 0%	0/6 0%	0/6 0%	0/6 0%
HP 201	1/6 17%	0/6 0%	1/6 17%	0/6 0%	0/6 0%	0/6 0%
HP 205	0/6 0%	n/a	0/6 0%	2/6 33%	n/a	2/6 33%
Canon 217	2/6 33%	2/6 33%	4/6 67%	3/6 50%	1/6 17%	1/6 17%
Canon 223	2/6 33%	2/6 33%	4/6 67%	2/6 33%	2/6 33%	2/6 33%
Xerox 244	0/6 0%	1/6 17%	1/6 17%	0/6 0%	2/6 33%	2/6 33%
Canon 282	2/6 33%	3/6 50%	5/6 83%	3/6 50%	0/6 0%	0/6 0%
Canon 306	1/5 20%	2/5 40%	3/5 60%	2/5 40%	0/5 0%	1/5 20%
Canon 312	1/5 20%	n/a	1/5 20%	3/5 60%	n/a	3/5 60%
Canon 318	0/5 0%	3/5 60%	3/5 60%	0/5 0%	1/5 20%	1/5 20%
Canon 318a	0/4 0%	n/a	0/4 0%	1/4 25%	n/a	1/4 25%
Canon 327	0/5 0%	4/5 80%	4/5 80%	0/5 0%	0/5 0%	0/5 0%
Canon 348	0/5 0%	4/5 80%	4/5 80%	4/5 80%	0/5 0%	0/5 0%
Canon 384	0/4 0%	1/4 25%	1/4 25%	4/4 100%	2/4 50%	3/4 75%
Canon 402	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%
Canon 492	0/4 0%	n/a	0/4 0%	0/4 0%	n/a	0/4 0%
Canon 522	0/4 0%	0/4 0%	0/4 0%	2/4 50%	0/4 0%	2/4 50%

As noted in the table above, the higher percentages of correct match identification occurred with the extractable ink standards. Eight of the ten Epson extractable ink standards, seven of the ten Canon extractable ink standards and the Okidata 04

extractable ink standard all had percentages greater than 50%. None of the non-extractable ink standards had percentages that exceeded 40%. When examining the percentage of placement within the #2 to #20 position in the match list, the majority of both the extractable and the non-extractable ink standards had percentages less than or equal to 33%. The Xerox 24 and Canon 312 non-extractable ink standards and the Kodak 22, Canon 384 and Canon 522 extractable ink standards were the exceptions, and these ink standards had percentages equal to or greater than 43%.

Once again it was noted that for seven of the ink standards the match listings provided some useful information that changed the percentage of correct identification for these ink standards. For one ink on paper sample replicate for each of the Epson 90 and Canon 318 extractable ink standards, and three ink on paper sample replicates of the Xerox 13 non-extractable ink standard, five ink on paper sample replicates of the Xerox 24 non-extractable ink standard and one ink on paper sample replicate for each for the Hewlett Packard 198, Xerox 244 and Canon 312 non-extractable ink standards, the matches preceding the correct identification was of a different type. For the extractable ink standards the matches listed before were all non-extractable ink samples and for the non-extractable ink standards the matches before were all extractable ink samples. As a result, the correct identification percentages for these ink standards were increased. The percentage of correct matches for the Epson 90 ink standard increased from 67% to 83%, for the Canon 318 ink standard the correct matches increased from 60% to 80%, for the Xerox 13 ink standard the correct matches increased from 40% to 70%, for the Xerox 24 ink standard the correct matches increased from 0% to 71%, for the Hewlett Packard 198 ink standard the correct matches increased from 13% to 25%, for the Xerox 244 ink

standard the correct matches increased from 17% to 33% and for the Canon 312 ink standard the correct matches increased from 20% to 40%.

The 215 ink on paper samples were also tested against the OMNIC Slide Subtracted Neat Ink Standard ATR library. As stated previously, for all of the neat ink samples ATR spectra, the averaged glass microscope slide ATR spectrum was subtracted and the resulting subtraction ATR spectra were labeled with "slide subtraction" to differentiate them from the initial neat ink samples ATR spectra. The association of a correct identification was given when either the correct standard or any member of the manufacturer group were listed as the top match for that sample. Using this criterion, the percentage of correct identification matches for the 215 ink on paper samples ranged from 0% to 83%. This range was lower than the range found with the OMNIC Neat Ink Standard ATR library. The percentage of placement within the #2 to #20 position in the match list also ranged from 0% to 83%, which was higher than the range noted for the OMNIC Neat Ink Standard ATR library. Refer to Table 45 for the percentages of correct identification and placement within the #2 to #20 position for the 215 ink on paper samples using the OMNIC Slide Subtracted Neat Ink Standard ATR library. It should be noted that only one placement in the #2 to #20 position within the match list was recorded per sample replicate.

Table 45: OMNIC Correct Identification Percentages and Placement within the #2 to #20 Position for the 215 Ink on Paper Samples using the Slide Subtracted Neat Ink Standard ATR Library

Sample	Number in the #1 position			Number in the #2 to #20 position (only noting one per sample replicate)		
	Correct ID	Same ATR Group	TOTAL (Correct and Same ATR)	Correct ID	Same ATR Group	TOTAL (Correct and Same ATR)
Okidata 04	7/12 58%	n/a	7/12 58%	1/12 8%	n/a	1/12 8%
Xerox 13	0/10 0%	0/10 0%	0/10 0%	5/10 50%	0/10 0%	5/10 50%
Kodak 17	0/7 0%	n/a	0/7 0%	0/7 0%	n/a	0/7 0%
Kodak 22	1/7 14%	n/a	1/7 14%	3/7 43%	n/a	3/7 43%
Xerox 24	0/7 0%	0/7 0%	0/7 0%	0/7 0%	1/7 14%	1/7 14%
Epson 30	0/7 0%	n/a	0/7 0%	4/7 57%	n/a	4/7 57%
Epson 33	2/7 29%	3/7 43%	5/7 71%	4/7 57%	1/7 14%	1/7 14%
Epson 60	0/7 0%	5/7 71%	5/7 71%	1/7 14%	0/7 0%	0/7 0%
Epson 63	1/7 14%	1/7 14%	2/7 29%	4/7 57%	3/7 43%	3/7 43%
Epson 66	1/6 17%	3/6 50%	4/6 67%	2/6 33%	1/6 17%	1/6 17%
Epson 84	0/6 0%	n/a	0/6 0%	3/6 50%	n/a	3/6 50%
Epson 90	0/6 0%	4/6 67%	4/6 67%	4/6 67%	2/6 33%	2/6 33%
Epson 93	0/6 0%	4/6 67%	4/6 67%	1/6 17%	2/6 33%	2/6 33%
Epson 120	0/7 0%	5/7 71%	5/7 71%	6/7 86%	2/7 29%	2/7 29%
Epson 123	0/6 0%	4/6 67%	4/6 67%	0/6 0%	1/6 17%	1/6 17%
Epson 156	0/6 0%	n/a	0/6 0%	1/6 17%	n/a	1/6 17%
HP 198	0/8 0%	1/8 13%	1/8 13%	4/8 50%	6/8 75%	6/8 75%
HP 199	0/6 0%	0/6 0%	0/6 0%	4/6 67%	0/6 0%	4/6 67%
HP 200	0/6 0%	0/6 0%	0/6 0%	2/6 33%	5/6 83%	5/6 83%
HP 201	0/6 0%	2/6 33%	2/6 33%	1/6 17%	3/6 50%	3/6 50%
HP 205	2/6 33%	n/a	2/6 33%	2/6 33%	n/a	2/6 33%
Canon 217	1/6 17%	3/6 50%	4/6 67%	4/6 67%	0/6 0%	1/6 17%
Canon 223	0/6 0%	4/6 67%	4/6 67%	4/6 67%	1/6 17%	1/6 17%
Xerox 244	0/6 0%	0/6 0%	0/6 0%	0/6 0%	2/6 33%	2/6 33%
Canon 282	3/6 50%	2/6 33%	5/6 83%	1/6 17%	0/6 0%	0/6 0%
Canon 306	0/5 0%	3/5 60%	3/5 60%	4/5 80%	2/5 40%	2/5 40%
Canon 312	1/5 20%	n/a	1/5 20%	2/5 40%	n/a	2/5 40%
Canon 318	0/5 0%	4/5 80%	4/5 80%	0/5 0%	0/5 0%	0/5 0%
Canon 318a	0/4 0%	n/a	0/4 0%	2/4 50%	n/a	2/4 50%
Canon 327	0/5 0%	4/5 80%	4/5 80%	0/5 0%	0/5 0%	0/5 0%
Canon 348	0/5 0%	4/5 80%	4/5 80%	4/5 80%	0/5 0%	0/5 0%
Canon 384	0/4 0%	2/4 50%	2/4 50%	4/4 100%	1/4 25%	2/4 50%
Canon 402	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%
Canon 492	0/4 0%	n/a	0/4 0%	0/4 0%	n/a	0/4 0%
Canon 522	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%

As noted in the table above, seven of the ten Epson extractable ink standards, eight of the ten Canon extractable ink standards and the Okidata 04 extractable ink standard had correct identification percentages equal to or greater than 50%, with the

majority of these ink standards having percentages equal to or greater than 67%. None of the non-extractable ink standards had correct identification percentages exceeded 33% and the majority of the non-extractable ink standards had a correct identification percentage of 0%. When examining the percentage of placement within the #2 to #20 position in the match list, it appeared that the ink standards with low correct identification percentages had high placement in the #2 to #20 position percentages, and those ink standards with high correct identification percentages had low placement in the #2 to #20 position percentages. The latter observation was not unexpected, as once an ink on paper sample had been correctly identified, that ink on paper sample search results would not have a match in the placement in the #2 to #20 position.

As described previously, some of the ink on paper samples contained match lists where the correct identification in the list was preceded entirely by ink samples of the different type, either extractable or non-extractable. As a consequence, the percentage of correct identification could be increased for these ink standards to reflect the fact that their proper identification could be ascertained from the match list. For the OMNIC Slide Subtracted Neat Ink Standard ATR library match lists this phenomenon was noted for ten of the non-extractable ink standards. Four ink on paper sample replicates for each of the Xerox 13 and Hewlett Packard 200 non-extractable ink standards, five ink on paper sample replicates for the Hewlett Packard 198 non-extractable ink standard, three ink on paper sample replicates each for the Hewlett Packard 199 and Hewlett Packard 201 non-extractable ink standards and one ink on paper sample replicate for each for the Xerox 24, Epson 84, Xerox 244, Canon 312 and Canon 318a non-extractable ink standards all had only extractable ink samples listed before the correct match in the match list. As such,

the correct identification percentage increased, and in some cases significantly, for these ink standards. The percentage of correct matches for the Xerox 13 ink standard increased from 0% to 40%, for the Hewlett Packard 200 ink standard the correct matches increased from 0% to 67%, for the Hewlett Packard 198 ink standard the correct matches increased from 13% to 75%, for the Hewlett Packard 199 ink standard the correct matches increased from 0% to 50%, for the Hewlett Packard 201 ink standard the correct matches increased from 33% to 83%, for the Xerox 24 ink standard the correct matches increased from 0% to 14%, for the Epson 84 ink standard the correct matches increased from 0% to 17%, for the Xerox 244 ink standard the correct matches increased from 0% to 17%, for the Canon 312 ink standard the correct matches increased from 20% to 40% and for the Canon 318a ink standard the correct matches increased from 0% to 25%.

The above results were for all 215 ink on paper samples ATR spectra of the thirty-five ink standards. However, in order to reduce peaks in the ATR spectrum that were due to water vapor and carbon dioxide, the ATR system was purged with nitrogen. The purging system was not installed on the ATR FT-IR instrument until the beginning of July 2008, thus all of the ink on paper sample analyzed before this time were done in a non-purged system. The results were re-examined looking solely at the purged ink on paper samples analyzed from July 2008 until December 2008, which resulted in 152 ink on paper samples being examined against the Spectral ID Neat Ink Sample ATR library, the Spectral ID Slide Subtracted Neat Ink Standard ATR library, the OMNIC Neat Ink Sample ATR library and the OMNIC Slide Subtracted Neat Ink Sample ATR library.

The Spectral ID Neat Ink Standard ATR library results of the 152 purged ink on paper samples results were examined first. The percentage of correctly identified

matches for these 152 purged ink on paper samples ranged from 0% to 75%. This was an 8% increase in the correct identification matches as compared to the results observed previously with the Spectral ID Neat Ink Standard ATR library. The percentage of placement within the #2 to #20 position in the match list for the 152 purged ink on paper samples ranged from 0% to 100%, which was the same percentage range as noted for the previous Spectral ID Neat Ink Standard ATR library results. Refer to Table 46 for the percentages of correct identification and placement within the #2 to #20 position for the 152 purged ink on paper samples using the Spectral ID Neat Ink Standard ATR library. It should be noted that only one placement in the #2 to #20 position was recorded per sample replicate.

Table 46: Spectral ID Correct Identification Percentages and Placement within the #2 to #20 Position for the 152 Purged Ink on Paper Samples using Neat Ink Standard ATR Library

Sample	Number in the #1 position			Number in the #2 to #20 position (only noting one per sample replicate)		
	Correct ID	Same ATR Group	TOTAL (Correct and Same ATR)	Correct ID	Same ATR Group	TOTAL (Correct and Same ATR)
Okidata 04	3/7 43%	n/a	3/7 43%	1/7 14%	n/a	1/7 14%
Xerox 13	0/6 0%	0/6 0%	0/6 0%	4/6 67%	2/6 33%	4/6 67%
Kodak 17	0/4 0%	n/a	0/4 0%	4/4 100%	n/a	4/4 100%
Kodak 22	0/4 0%	n/a	0/4 0%	2/4 50%	n/a	2/4 50%
Xerox 24	0/4 0%	0/4 0%	0/4 0%	1/4 25%	4/4 100%	4/4 100%
Epson 30	1/5 20%	n/a	1/5 20%	2/5 40%	n/a	2/5 40%
Epson 33	0/5 0%	0/5 0%	0/5 0%	1/5 20%	0/5 0%	1/5 20%
Epson 60	0/5 0%	0/5 0%	0/5 0%	0/5 0%	1/5 20%	1/5 20%
Epson 63	1/5 20%	1/5 20%	2/5 40%	1/5 20%	0/5 0%	0/5 0%
Epson 66	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%
Epson 84	3/4 75%	n/a	3/4 75%	0/4 0%	n/a	0/4 0%
Epson 90	0/4 0%	1/4 25%	1/4 25%	0/4 0%	0/4 0%	0/4 0%
Epson 93	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%
Epson 120	0/5 0%	1/5 20%	1/5 20%	0/5 0%	1/5 20%	1/5 20%
Epson 123	0/4 0%	2/4 50%	2/4 50%	0/4 0%	0/4 0%	0/4 0%
Epson 156	0/4 0%	n/a	0/4 0%	2/4 50%	n/a	2/4 50%
HP 198	0/6 0%	2/6 33%	2/6 33%	3/6 50%	4/6 67%	4/6 67%
HP 199	0/4 0%	2/4 50%	2/4 50%	2/4 50%	2/4 50%	2/4 50%
HP 200	0/4 0%	2/4 50%	2/4 50%	4/4 100%	0/4 0%	2/4 50%
HP 201	1/4 25%	0/4 0%	1/4 25%	3/4 75%	2/4 50%	3/4 75%
HP 205	0/4 0%	n/a	0/4 0%	1/4 25%	n/a	1/4 25%
Canon 217	0/4 0%	0/4 0%	0/4 0%	1/4 25%	2/4 50%	2/4 50%
Canon 223	0/4 0%	1/4 25%	1/4 25%	1/4 25%	1/4 25%	1/4 25%
Xerox 244	0/4 0%	0/4 0%	0/4 0%	3/4 75%	1/4 25%	3/4 75%
Canon 282	1/4 25%	0/4 0%	1/4 25%	0/4 0%	0/4 0%	0/4 0%
Canon 306	0/4 0%	0/4 0%	0/4 0%	1/4 25%	3/4 75%	3/4 75%
Canon 312	0/4 0%	n/a	0/4 0%	0/4 0%	n/a	0/4 0%
Canon 318	0/4 0%	2/4 50%	2/4 50%	2/4 50%	2/4 50%	2/4 50%
Canon 318a	1/4 25%	n/a	1/4 25%	0/4 0%	n/a	0/4 0%
Canon 327	0/4 0%	1/4 25%	1/4 25%	1/4 25%	2/4 50%	2/4 50%
Canon 348	0/4 0%	0/4 0%	0/4 0%	0/4 0%	1/4 25%	1/4 25%
Canon 384	0/4 0%	0/4 0%	0/4 0%	0/4 0%	2/4 50%	2/4 50%
Canon 402	0/4 0%	2/4 50%	2/4 50%	2/4 50%	0/4 0%	0/4 0%
Canon 492	0/4 0%	n/a	0/4 0%	0/4 0%	n/a	0/4 0%
Canon 522	2/4 50%	0/4 0%	2/4 50%	1/4 25%	0/4 0%	1/4 25%

As noted in the above table, the higher percentage of correctly identified ink on paper samples occurred with both the non-extractable and the extractable ink standards. The highest percentage of correctly identified ink on paper samples occurred with the

Epson 84 non-extractable ink standard, which had a correct identification percentage of 75%. The Hewlett Packard 199 and Hewlett Packard 200 non-extractable ink standards, and the Epson 123, Canon 318, Canon 402 and Canon 522 extractable ink standards had a correct identification percentage of 50%. The Xerox 13, Kodak 17, Xerox 24, Hewlett Packard 198, Hewlett Packard 199, Hewlett Packard 200, Hewlett Packard 201 and Xerox 244 non-extractable ink standards had placement within the #2 to #20 position percentages of between 50% and 100%, while the majority of the extractable ink standards had percentages less than 50% for placement within the #2 to #20 position in the match lists. The Canon 306 ink standard with a percentage of 75% and the Epson 156, Kodak 22, Canon 217, Canon 318, Canon 327 and Canon 384 ink standards with percentages of 50% were the exceptions found within the extractable ink standards.

As discussed previously, for some of the ink samples the correct match in the list was preceded solely by the opposite type of ink. By identifying this phenomenon, it allowed for the positive identification of the ink sample from within the match list. For one ink on paper sample replicate in each of the Okidata 04, Canon 217, Canon 306, Canon 318, Canon 348 and Canon 522 extractable ink standards, only non-extractable ink samples were listed before the correct identification. For one replicate in each of the Hewlett Packard 198, Hewlett Packard 199 and Hewlett Packard 200 ink standards, all of the matches listed before the correct match were extractable ink samples. As a result, the percentages of the correctly identified ink on paper samples were increased for these nine ink standards. The percentage of correct matches increased for the Okidata 04 ink standard from 43% to 57%, for the Canon 217 ink standard the correct matches increased from 0% to 25%, for the Canon 306 ink standard the correct matches increased from 0%

to 25%, for the Canon 318 ink standard the correct matches increased from 50% to 75%, for the Canon 348 ink standard the correct matches increased from 0% to 25% and for the Canon 522 ink standard the correct matches increased from 50% to 75%. In addition, the percentage of correct matches increased for Hewlett Packard 198 ink standard from 33% to 50%, for the Hewlett Packard 199 ink standard the correct matches increased from 50% to 75% and for the Hewlett Packard 200 ink standard the correct matches increased from 50% to 75%.

The results of the 152 purged ink on paper samples with the Spectral ID Slide Subtracted Neat Ink Standard ATR library were examined to determine the effectiveness of this library. As stated previously, the averaged glass microscope slide ATR spectrum was subtracted from the neat ink samples ATR spectra and the resulting subtraction ATR spectra were labeled with "slide subtraction" to differentiate them from the initial neat ink samples ATR spectra. The association of a correct identification was given when either the correct standard or any member of the group were listed as the top match for that ink sample. The percentage of correctly identified ink on paper samples ranged from 0% to 75%, with the majority of the ink on paper samples having a value of 0%. This was an increase of 8% in the amount of correctly identified ink on paper samples as compared to the previous results of the Spectral ID Slide Subtracted Neat Ink Standard ATR library. The percentage of placement within the #2 to #20 position for the 152 purged ink on paper samples ranged from 0% to 100%, which was 14% higher than what was noted for the previous Spectral ID Slide Subtracted Neat Ink Standard ATR library results. Refer to Table 47 for the percentages of correct identification and placement within the #2 to #20 position for the 152 purged ink on paper samples using the Spectral

ID Slide Subtracted Neat Ink Standard ATR library. It should be noted that only one placement in the #2 to #20 position was recorded per sample replicate.

Table 47: Spectral ID Correct Identification Percentages and Placement within the #2 to #20 Position for the 152 Purged Ink on Paper Samples using the Slide Subtracted Neat Ink Standard ATR Library

Sample	Number in the #1 position			Number in the #2 to #20 position (only noting one per sample replicate)		
	Correct ID	Same ATR Group	TOTAL (Correct and Same ATR)	Correct ID	Same ATR Group	TOTAL (Correct and Same ATR)
Okidata 04	3/7 43%	n/a	3/7 43%	4/7 57%	n/a	4/7 57%
Xerox 13	2/6 33%	0/6 0%	2/6 33%	2/6 33%	0/6 0%	2/6 33%
Kodak 17	0/4 0%	n/a	0/4 0%	3/4 75%	n/a	3/4 75%
Kodak 22	0/4 0%	n/a	0/4 0%	1/4 25%	n/a	1/4 25%
Xerox 24	0/4 0%	1/4 25%	1/4 25%	4/4 100%	0/4 0%	3/4 75%
Epson 30	0/5 0%	n/a	0/5 0%	3/5 60%	n/a	3/5 60%
Epson 33	0/5 0%	0/5 0%	0/5 0%	3/5 60%	0/5 0%	3/5 60%
Epson 60	0/5 0%	0/5 0%	0/5 0%	0/5 0%	1/5 20%	1/5 20%
Epson 63	0/5 0%	0/5 0%	0/5 0%	2/5 40%	2/5 40%	2/5 40%
Epson 66	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%
Epson 84	3/4 75%	n/a	3/4 75%	0/4 0%	n/a	0/4 0%
Epson 90	0/4 0%	1/4 25%	1/4 25%	0/4 0%	1/4 25%	1/4 25%
Epson 93	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%
Epson 120	0/5 0%	0/5 0%	0/5 0%	0/5 0%	3/5 60%	3/5 60%
Epson 123	0/4 0%	0/4 0%	0/4 0%	0/4 0%	1/4 25%	1/4 25%
Epson 156	1/4 25%	n/a	1/4 25%	1/4 25%	n/a	1/4 25%
HP 198	0/6 0%	0/6 0%	0/6 0%	3/6 50%	3/6 50%	3/6 50%
HP 199	0/4 0%	0/4 0%	0/4 0%	2/4 50%	2/4 50%	2/4 50%
HP 200	0/4 0%	0/4 0%	0/4 0%	2/4 50%	2/4 50%	2/4 50%
HP 201	0/4 0%	0/4 0%	0/4 0%	1/4 25%	2/4 50%	2/4 50%
HP 205	0/4 0%	n/a	0/4 0%	1/4 25%	n/a	1/4 25%
Canon 217	0/4 0%	0/4 0%	0/4 0%	2/4 50%	2/4 50%	2/4 50%
Canon 223	0/4 0%	3/4 75%	3/4 75%	2/4 50%	0/4 0%	0/4 0%
Xerox 244	0/4 0%	0/4 0%	0/4 0%	1/4 25%	3/4 75%	3/4 75%
Canon 282	0/4 0%	0/4 0%	0/4 0%	1/4 25%	0/4 0%	1/4 25%
Canon 306	0/4 0%	0/4 0%	0/4 0%	2/4 50%	4/4 100%	4/4 100%
Canon 312	0/4 0%	n/a	0/4 0%	2/4 50%	n/a	2/4 50%
Canon 318	0/4 0%	2/4 50%	2/4 50%	0/4 0%	1/4 25%	1/4 25%
Canon 318a	2/4 50%	n/a	2/4 50%	1/4 25%	n/a	1/4 25%
Canon 327	0/4 0%	1/4 25%	1/4 25%	0/4 0%	0/4 0%	0/4 0%
Canon 348	0/4 0%	1/4 25%	1/4 25%	0/4 0%	2/4 50%	2/4 50%
Canon 384	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%
Canon 402	0/4 0%	0/4 0%	0/4 0%	0/4 0%	1/4 25%	1/4 25%
Canon 492	0/4 0%	n/a	0/4 0%	1/4 25%	n/a	1/4 25%
Canon 522	0/4 0%	0/4 0%	0/4 0%	2/4 50%	0/4 0%	2/4 50%

As noted in the above table, the higher percentage of correctly identified ink on paper samples occurred with both the non-extractable and the extractable ink standards. The Epson 84 and Canon 318a non-extractable ink standards had correct identification percentages of 75% and 50% respectively, whereas the Canon 223 and Canon 318 extractable ink standards also had correct identification percentages of 75% and 50% respectively. The percentages of the ink standards with placement within the #2 to #20 position in the match list ranged from 0% to 100%. The percentages of placement within the #2 to #20 position in the match lists were higher overall for the thirty-five ink standards than the percentages observed for the correct identification of the ink samples. The Kodak 17, Xerox 24 and Xerox 244 non-extractable ink standards had a placement within the #2 to #20 position in the match list percentage of 75%, which was the highest percentages of all of the non-extractable ink standards. The Canon 306 extractable ink standard was the only ink standard with a higher percentage, and its percentage of placement within the #2 to #20 position in the match list was 100%.

For three of the extractable ink standards, the matches listed before the correct matches were all non-extractable ink samples. Consequently, it was possible to ascertain the correct identity of these extractable ink standards from the match lists. For two replicates of the Okidata 04 extractable ink standard, and one replicate for each of Canon 318 and Epson 156 extractable ink standards the matches listed before the correct match were all non-extractable ink samples. Thus, the correct identification percentages could be increased for the Okidata 04, Canon 318 and Epson 156 ink standards from 43%, 50% and 25% respectively to 71%, 75% and 50% respectively

The results of the 152 purged ink on paper samples with the OMNIC Neat Ink Standard ATR library search were also checked to determine how effective the library was at identifying an unknown ink sample. The percentage of correctly identified ink on paper samples ranged from 0% to 100%. The extractable ink on paper samples tended to be closer to the 100% end of the percentage range, while the non-extractable ink on paper samples tended to be closer to the 0% end of the percentage range. Though this was the same percentage range that was observed previously with the OMNIC Neat Ink Standard ATR library, the percentages for the extractable ink on paper samples had increased, and in some cases significantly. The non-extractable ink on paper samples, however, never exceeded a correct identification percentage of 25%, which was a lower percentage range than what was observed previously with the OMNIC Neat Ink Standard ATR library results. The percentage of the ink on paper samples listed in the #2 to #20 position in the match list ranged from 0% to 75%, which was the same range that was observed previously for the OMNIC Neat Ink Standard ATR library results. The percentage for placement within the #2 to #20 position tended to be lower for the extractable ink on paper samples when the correct identification percentages were higher. Conversely, when the percentages for placement within the #2 to #20 position were higher for the extractable ink on paper samples, the correct identification percentages for the ink on paper samples were lower. Refer to Table 48 for the percentages of correctly identified samples and placement within the #2 to #20 position for the 152 purged ink on paper samples using the OMNIC Neat Ink Standard ATR library. It should be noted that only one placement in the #2 to #20 position was recorded per sample replicate.

Table 48: OMNIC Correct Identification Percentages and Placement within the #2 to #20 Position for the 152 Purged Ink on Paper Samples using the Neat Ink Standard ATR Library

Sample	Number in the #1 position			Number in the #2 to #20 position (only noting one per sample replicate)		
	Correct ID	Same ATR Group	TOTAL (Correct and Same ATR)	Correct ID	Same ATR Group	TOTAL (Correct and Same ATR)
Okidata 04	6/7 86%	n/a	6/7 86%	0/7 0%	n/a	0/7 0%
Xerox 13	1/6 17%	0/6 0%	1/6 17%	2/6 33%	0/6 0%	2/6 33%
Kodak 17	0/4 0%	n/a	0/4 0%	0/4 0%	n/a	0/4 0%
Kodak 22	1/4 25%	n/a	1/4 25%	1/4 25%	n/a	1/4 25%
Xerox 24	0/4 0%	0/4 0%	0/4 0%	0/4 0%	2/4 50%	2/4 50%
Epson 30	0/5 0%	n/a	0/5 0%	0/5 0%	n/a	0/5 0%
Epson 33	1/5 20%	3/5 60%	4/5 80%	3/5 60%	1/5 20%	1/5 20%
Epson 60	0/5 0%	4/5 80%	4/5 80%	0/5 0%	1/5 20%	1/5 20%
Epson 63	1/5 20%	3/5 60%	4/5 80%	3/5 60%	0/5 0%	0/5 0%
Epson 66	1/4 25%	3/4 75%	4/4 100%	2/4 50%	0/4 0%	0/4 0%
Epson 84	0/4 0%	n/a	0/4 0%	2/4 50%	n/a	2/4 50%
Epson 90	0/4 0%	4/4 100%	4/4 100%	4/4 100%	0/4 0%	0/4 0%
Epson 93	0/4 0%	4/4 100%	4/4 100%	0/4 0%	0/4 0%	0/4 0%
Epson 120	0/5 0%	5/5 100%	5/5 100%	5/5 100%	0/5 0%	0/5 0%
Epson 123	0/4 0%	4/4 100%	4/4 100%	0/4 0%	0/4 0%	0/4 0%
Epson 156	0/4 0%	n/a	0/4 0%	0/4 0%	n/a	0/4 0%
HP 198	0/6 0%	0/6 0%	0/6 0%	0/6 0%	1/6 17%	1/6 17%
HP 199	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%
HP 200	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%
HP 201	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%
HP 205	0/4 0%	n/a	0/4 0%	1/4 25%	n/a	1/4 25%
Canon 217	2/4 50%	2/4 50%	4/4 100%	2/4 50%	0/4 0%	0/4 0%
Canon 223	2/4 50%	2/4 50%	4/4 100%	2/4 50%	0/4 0%	0/4 0%
Xerox 244	0/4 0%	1/4 25%	1/4 25%	0/4 0%	2/4 50%	2/4 50%
Canon 282	2/4 50%	2/4 50%	4/4 100%	2/4 50%	0/4 0%	0/4 0%
Canon 306	1/4 25%	2/4 50%	3/4 75%	2/4 50%	0/4 0%	1/4 25%
Canon 312	1/4 25%	n/a	1/4 25%	2/4 50%	n/a	2/4 50%
Canon 318	0/4 0%	3/4 75%	3/4 75%	0/4 0%	1/4 25%	1/4 25%
Canon 318a	0/4 0%	n/a	0/4 0%	1/4 25%	n/a	1/4 25%
Canon 327	0/4 0%	4/4 100%	4/4 100%	0/4 0%	0/4 0%	0/4 0%
Canon 348	0/4 0%	4/4 100%	4/4 100%	4/4 100%	0/4 0%	0/4 0%
Canon 384	0/4 0%	1/4 25%	1/4 25%	4/4 100%	2/4 50%	3/4 75%
Canon 402	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%
Canon 492	0/4 0%	n/a	0/4 0%	0/4 0%	n/a	0/4 0%
Canon 522	0/4 0%	0/4 0%	0/4 0%	2/4 50%	0/4 0%	2/4 50%

As noted in the table above, eight of the ten Epson extractable ink standards, seven of the ten Canon extractable ink standards and the Okidata 04 extractable ink standard all had correct identification percentages that ranged from 75% to 100%. Only

two of the twelve non-extractable ink standards had percentages above zero, and these were the Xerox 13 and Canon 312 ink standards, which had correct identification percentages of 17% and 25% respectively. The majority of the ink standards had percentage of placement within the #2 to #20 position in the match list that were less than or equal to 33%. This was not necessarily unexpected, as the majority of the ink standards, and predominately the extractable ink standards, had correct identification percentages equal to or greater than 75%. The Canon 384 extractable ink standard had a placement within the #2 to #20 position percentage of 75%, while the Canon 522 extractable ink standard and the Xerox 24, Epson 84, Xerox 244 and Canon 312 non-extractable ink standards all had percentages of 50% for placement within the #2 to #20 position in the match list.

When the results were examined in more detail, it was noted that for five non-extractable ink standards and one extractable ink standard, the matches listed before the correct match were all the opposite type of ink sample. For the five non-extractable ink standards, the matches listed before the correct match were all extractable ink samples, while for the one extractable ink standard, the matches listed before the correct match were all non-extractable ink samples. For two ink on paper sample replicates of each of the Xerox 13 and Xerox 24 non-extractable ink standards and for one ink on paper sample replicate of each of the Hewlett Packard 198, Xerox 244 and Canon 312 non-extractable ink standards, only extractable ink samples were listed before the correct match. For one ink on paper sample replicate for the Canon 318 extractable ink standard, only non-extractable ink samples listed before the correct match. Consequently, the percentages of correctly identified ink on paper samples were increased, and in some

cases significantly, for these six ink standards. The percentage of correct matches increased for the Xerox 13 ink standard from 17% to 50%, for the Xerox 24 ink standard the correct matches increased from 0% to 50%, for the Hewlett Packard 198 ink standard the correct matches increased from 0% to 17%, for the Xerox 244 ink standard the correct matches increased from 25% to 50% and for the Canon 312 ink standard the correct matches increased from 25% to 50%. In addition, the percentage of correct matches increased for the Canon 318 ink standard from 75% to 100%.

The results of the 152 purged ink on paper sample searched against the OMNIC Slide Subtracted Neat Ink Standard ATR library were also examined. As stated previously, for all of the neat ink samples ATR spectra, the averaged glass microscope slide ATR spectrum was subtracted and the resulting subtraction ATR spectra were labeled with "slide subtraction" to differentiate them from the initial neat ink samples ATR spectra. The association of a correct identification was given when either the correct standard or any member of the group were listed as the top match for that sample. The percentage of correctly identified ink on paper samples ranged from 0% to 100%. The extractable ink on paper samples tended to be closer to the 100% end of the percentage range, while the non-extractable ink on paper samples tended to be closer to the 0% end of the percentage range. Though this was the same percentage range that was observed previously with the OMNIC Slide Subtracted Neat Ink Standard ATR library, the correct identification percentages for some of the extractable ink on paper samples had increased, while for some of the non-extractable ink on paper samples the correct identification percentages had decreased. The percentage of placement within the #2 to #20 position in the match list ranged from 0% to 100%. Unlike the results observed with

the correct identification percentages, with the placement within the #2 to #20 position percentages the non-extractable ink on paper samples tended to be closer to the 100% end of the percentage range, while the extractable ink on paper samples tended to be closer to the 0% end of the percentage range. This was not necessarily unexpected, as the majority of the extractable ink on paper samples had correct identification percentages equal to or greater than 75% and the majority of the non-extractable ink on paper samples had correct identification percentages less than or equal to 25%. Refer to Table 49 for the percentages of correctly identified ink on paper samples and placement within the #2 to #20 position in the match list for the 152 purged ink on paper samples searched against the OMNIC Slide Subtracted Neat Ink Standard ATR library. It should be noted that only one placement within the #2 to #20 position was recorded per sample replicate.

Table 49: OMNIC Correct Identification Percentages and Placement within the #2 to #20 Position for the 152 Purged Ink on Paper Samples using the Slide Subtracted Neat Ink Standard ATR Library

Sample	Number in the #1 position			Number in the #2 to #20 position (only noting one per sample replicate)		
	Correct ID	Same ATR Group	TOTAL (Correct and Same ATR)	Correct ID	Same ATR Group	TOTAL (Correct and Same ATR)
Okidata 04	6/7 86%	n/a	6/7 86%	0/7 0%	n/a	0/7 0%
Xerox 13	0/6 0%	0/6 0%	0/6 0%	1/6 17%	0/6 0%	1/6 17%
Kodak 17	0/4 0%	n/a	0/4 0%	0/4 0%	n/a	0/4 0%
Kodak 22	0/4 0%	n/a	0/4 0%	1/4 25%	n/a	1/4 25%
Xerox 24	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%
Epson 30	0/5 0%	n/a	0/5 0%	2/5 40%	n/a	2/5 40%
Epson 33	2/5 40%	2/5 40%	4/5 80%	3/5 60%	1/5 20%	1/5 20%
Epson 60	0/5 0%	4/5 80%	4/5 80%	0/5 0%	0/5 0%	0/5 0%
Epson 63	1/5 20%	1/5 20%	2/5 40%	3/5 60%	1/5 20%	2/5 40%
Epson 66	1/4 25%	3/4 75%	4/4 100%	2/4 50%	0/4 0%	0/4 0%
Epson 84	0/4 0%	n/a	0/4 0%	3/4 75%	n/a	3/4 75%
Epson 90	0/4 0%	4/4 100%	4/4 100%	4/4 100%	0/4 0%	0/4 0%
Epson 93	0/4 0%	2/4 50%	2/4 50%	0/4 0%	2/4 50%	2/4 50%
Epson 120	0/5 0%	4/5 80%	4/5 80%	5/5 100%	1/5 20%	1/5 20%
Epson 123	0/4 0%	4/4 100%	4/4 100%	0/4 0%	0/4 0%	0/4 0%
Epson 156	0/4 0%	n/a	0/4 0%	0/4 0%	n/a	0/4 0%
HP 198	0/6 0%	0/6 0%	0/6 0%	3/6 50%	6/6 100%	6/6 100%
HP 199	0/4 0%	0/4 0%	0/4 0%	3/4 75%	0/4 0%	3/4 75%
HP 200	0/4 0%	0/4 0%	0/4 0%	1/4 25%	4/4 100%	4/4 100%
HP 201	0/4 0%	1/4 25%	1/4 25%	0/4 0%	3/4 75%	3/4 75%
HP 205	2/4 50%	n/a	2/4 50%	1/4 25%	n/a	1/4 25%
Canon 217	1/4 25%	3/4 75%	4/4 100%	3/4 75%	0/4 0%	0/4 0%
Canon 223	0/4 0%	4/4 100%	4/4 100%	4/4 100%	0/4 0%	0/4 0%
Xerox 244	0/4 0%	0/4 0%	0/4 0%	0/4 0%	2/4 50%	2/4 50%
Canon 282	3/4 75%	1/4 25%	4/4 100%	0/4 0%	0/4 0%	0/4 0%
Canon 306	0/4 0%	3/4 75%	3/4 75%	4/4 100%	1/4 25%	1/4 25%
Canon 312	1/4 25%	n/a	1/4 25%	2/4 50%	n/a	2/4 50%
Canon 318	0/4 0%	4/4 100%	4/4 100%	0/4 0%	0/4 0%	0/4 0%
Canon 318a	0/4 0%	n/a	0/4 0%	2/4 50%	n/a	2/4 50%
Canon 327	0/4 0%	4/4 100%	4/4 100%	0/4 0%	0/4 0%	0/4 0%
Canon 348	0/4 0%	4/4 100%	4/4 100%	4/4 100%	0/4 0%	0/4 0%
Canon 384	0/4 0%	2/4 50%	2/4 50%	4/4 100%	1/4 25%	2/4 50%
Canon 402	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%
Canon 492	0/4 0%	n/a	0/4 0%	0/4 0%	n/a	0/4 0%
Canon 522	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%	0/4 0%

As noted in the above table, six of the ten Epson extractable ink standards, seven of the ten Canon extractable ink standards and the Okidata 04 extractable ink standard had correct identification percentages that ranged from 75% to 100%. One additional

Epson extractable ink standard, one additional Canon extractable ink standard and the Hewlett Packard 205 extractable ink standard all had correct identification percentages of 50%. With the exception of the Hewlett Packard 201 and the Canon 312 non-extractable ink standards, which had correct identification percentages of 25%, the non-extractable ink standards had a 0% success rate for correctly identifying an ink on paper sample. With regards to the percentage for placement within the #2 to #20 position in the match list, the percentages for the extractable ink standards never exceeded 50%, with more than half of the extractable ink standards having a value of 0%. The highest percentages for placement within the #2 to #20 position were found to be associated with the non-extractable ink standards. The Epson 84, Hewlett Packard 199 and Hewlett Packard 201 non-extractable ink standards had percentage of placement within the #2 to #20 position in the match list of 75%, whereas Hewlett Packard 198 and Hewlett Packard 200 non-extractable ink standards had percentages of 100%.

For eight of the non-extractable ink standards, the ink samples listed in the matches before the correct match were all extractable ink samples. Thus, by excluding these matches the correct identification of the ink on paper sample could be made. For five ink on paper sample replicates of Hewlett Packard 198 non-extractable ink standard, for three ink on paper sample replicates for each of Hewlett Packard 199, Hewlett Packard 200 and Hewlett Packard 201 non-extractable ink standards and for one ink on paper sample replicate for each of Epson 84, Xerox 244, Canon 312 and Canon 318a non-extractable ink standards all of the matches preceding the correct match were extractable ink samples. Consequently, the percentage of correctly identified ink samples increased, and in some cases significantly, for these eight ink standards. The percentage

of correct matches for the Hewlett Packard 198 ink standard increased from 0% to 83%, for the Hewlett Packard 199 ink standard the correct matches increased from 0% to 75%, for the Hewlett Packard 200 ink standard the correct matches increased from 0% to 100%, for the Hewlett Packard 201 ink standard the correct matches increased from 25% to 100%, for the Epson 84 ink standard the correct matches increased from 0% to 25%, for the Xerox 244 ink standard the correct matches increased from 0% to 25%, for the Canon 312 ink standard the correct matches increased from 25% to 50% and for the Canon 318a ink standard the correct matches increased from 0% to 25%.

Focusing solely on the 152 purged ink on paper samples, the results from the Spectral ID and OMNIC Neat Ink Standard and Slide Subtracted Neat Ink Standard ATR library searches were compared. The results from the OMNIC ATR search libraries showed that these libraries were more effective at successfully identifying the correct identification of an ink on paper sample than the Spectral ID ATR search libraries. With the exception of the Epson 30, Epson 156, Canon 402 and Canon 522 ink on paper samples, the OMNIC ATR libraries were more successful in identifying the extractable ink on paper samples than the Spectral ID ATR libraries. In addition, with only a few exceptions, the OMNIC Neat Ink Standard ATR library produced the same or better results than the OMNIC Slide Subtracted Neat Ink Standard ATR library for the extractable ink on paper samples. The Hewlett Packard 205 and Canon 384 ink on paper samples were the only extractable ink samples that had a higher percentage of correct matches with the OMNIC Slide Subtracted Neat Ink Standard ATR library than with the OMNIC Neat Ink Standard ATR library. For the Xerox 13, Xerox 24, Xerox 244, Canon 312, Hewlett Packard 198 and Hewlett Packard 201 non-extractable ink standards, the

percentages of correctly identified ink samples were higher with the OMNIC ATR search libraries than with the Spectral ID ATR search libraries. The Xerox 13, Xerox 24, Xerox 244 and Canon 312 non-extractable ink standards had higher percentages of correctly identified ink samples using the OMNIC Neat Ink Standard ATR library, while the Hewlett Packard 198 and Hewlett Packard 201 non-extractable ink standards had higher percentages of correctly identified ink samples using the OMNIC Slide Subtracted Neat Ink Standard ATR library. The Spectral ID ATR search libraries were more successful at correctly identifying the ink on paper sample for only nine ink standards tested in this study. For the Kodak 17, Epson 84, Hewlett Packard 199, Hewlett Packard 200 and Canon 318a non-extractable ink standards and the Epson 30, Epson 156, Canon 402 and Canon 522 extractable ink standards, the percentages of correctly identified ink samples were higher with the Spectral ID ATR search libraries than with the OMNIC ATR search libraries. In addition, with the exception of the Epson 156 extractable ink standard, the Spectral ID Neat Ink Standard ATR library had the same or higher percentage of correctly identified ink on paper samples as compared to the Spectral ID Slide Subtracted Neat Ink Standard ATR library. Refer to Table 50 below for the comparison between the OMNIC and Spectral ID Neat Ink Standard and Slide Subtracted Neat Ink Standard ATR search libraries.

For Table 50, the percentages of correctly identified ink samples and placement within the #2 to #20 position in the match list for each ink standard were listed. The first percentage listed for a specific ink standard and search library was the percentage of correctly identified ink on paper samples, whereas the second percentage listed was the percentage of placement within the #2 to #20 position in the match list. The percentages

highlighted in yellow represented the software program that produced the best results for a specific ATR search library. If both sets of percentages were highlighted for a specific ink standard for a specific ATR library, then it meant that the same results were given for the two software programs. A determination of the best software program for a particular ink standard was done and recorded in the final section of Table 50.

Table 50: Comparison of the Spectral ID and OMNIC Library Results

Sample #	Manu.	Spectral ID vs. OMNIC		Spectral ID vs. OMNIC		Overall Better	
		Spec ID Neat	OMNIC Neat	Spec ID Slide Sub	OMNIC Slide Sub	Spectral ID	OMNIC
04	Okidata	57% 0%	86% 0%	71% 29%	86% 0%		X
13	Xerox	0% 67%	50% 0%	33% 33%	0% 17%		X
17	Kodak	0% 100%	0% 0%	0% 75%	0% 0%	X	
22	Kodak	0% 50%	25% 25%	0% 25%	0% 25%		X
24	Xerox	0% 100%	50% 0%	25% 75%	0% 0%		X
30	Epson	20% 40%	0% 0%	0% 60%	0% 40%	X	
33	Epson	0% 20%	80% 20%	0% 60%	80% 20%		X
60	Epson	0% 20%	80% 20%	0% 20%	80% 0%		X
63	Epson	40% 0%	80% 0%	0% 40%	40% 40%		X
66	Epson	0% 0%	100% 0%	0% 0%	100% 0%		X
84	Epson	75% 0%	0% 50%	75% 0%	25% 50%	X	
90	Epson	25% 0%	100% 0%	25% 25%	100% 0%		X
93	Epson	0% 0%	100% 0%	0% 0%	50% 50%		X
120	Epson	20% 20%	100% 0%	0% 60%	80% 20%		X
123	Epson	50% 0%	100% 0%	0% 25%	100% 0%		X
156	Epson	0% 50%	0% 0%	50% 0%	0% 0%	X	
198	HP	50% 50%	17%/0%	0% 50%	83% 17%		X
199	HP	75% 25%	0% 0%	0% 50%	75% 0%	X	
200	HP	75% 25%	0% 0%	0% 50%	75% 25%	X	
201	HP	25% 75%	0% 0%	0% 50%	100% 0%		X
205	HP	0% 25%	0% 25%	0% 25%	50% 25%		X
217	Canon	25% 25%	100% 0%	0% 50%	100% 0%		X
223	Canon	25% 25%	100% 0%	75% 0%	100% 0%		X
244	Xerox	0% 75%	50% 25%	0% 75%	25% 25%		X
282	Canon	25% 0%	100% 0%	0% 25%	100% 0%		X
306	Canon	25% 50%	75% 25%	0% 100%	75% 25%		X
312	Canon	0% 0%	50% 25%	0% 50%	50% 25%		X
318	Canon	75% 25%	100% 0%	75% 0%	100% 0%		X
318a	Canon	25% 0%	0% 25%	50% 25%	25% 25%	X	
327	Canon	25% 50%	100% 0%	25% 0%	100% 0%		X
348	Canon	25% 0%	100% 0%	25% 50%	100% 0%		X
384	Canon	0% 50%	25% 75%	0% 0%	50% 50%		X
402	Canon	50% 0%	0% 0%	0% 25%	0% 0%	X	
492	Canon	0% 0%	0% 0%	0% 0%	0% 0%	SA	ME
522	Canon	75% 0%	0% 50%	0% 50%	0% 0%	X	

A final note on the effectiveness of the OMNIC and Spectral ID search libraries dealt with the success and the misidentification rate associated with the manufacturer identification of an ink sample. The correct identification of the 152 purged ink on paper samples was the focus of this discussion for both the Spectral ID and OMNIC programs. The success rates or the correct identification percentages for the Okidata, Kodak, Xerox, Hewlett Packard, Epson and Canon ink on paper samples using the Spectral ID Neat Ink Standard ATR library were 57%, 0%, 0%, 50%, 39% and 40% respectively. The rate of the misidentification of an ink on paper sample as being a certain manufacturer when it was not that manufacturer for the Okidata, Kodak, Xerox, Hewlett Packard, Epson and Canon ink manufacturers using the Spectral ID Neat Ink Standard ATR library were 1%, 0.7%, 9%, 31%, 29% and 11% respectively. For the Epson ink on paper samples the success rate of identification was only a few percentage points higher than its misidentification rate, and for the Canon ink on paper samples the misidentification of an ink on paper sample was expected to occur in approximately a fourth of the time an ink on paper sample was identified as being a Canon ink sample. For the Xerox ink on paper samples, the success rate of identification was 0%, whereas the misidentification rate for the Xerox ink on paper samples was 9%. Thus, using the Spectral ID Neat Ink Standard ATR library, if an unknown ink on paper sample was identified as a Xerox ink sample this identification would, in all probability, be a misidentification. The Okidata ink on paper samples were the only ink on paper samples that were reliably identified using the Spectral ID Neat Ink Standard ATR search library.

For the Spectral ID Slide Subtracted Neat Ink Standard ATR library, the success rates or the correct identification percentages for the Okidata, Kodak, Xerox, Hewlett

Packard, Epson and Canon ink on paper samples were 71%, 0%, 21%, 27%, 29% and 37% respectively. This was a decrease in the successful identification of the Hewlett Packard, Epson and Canon ink on paper samples but an increase for the Okidata and Xerox ink on paper samples. The success rate for the Kodak ink on paper samples remained the same, with a correct identification percentage of 0% for both search libraries. The rate of the misidentification of an ink on paper sample as being a certain manufacturer when it was not that manufacturer for the Okidata, Kodak, Xerox, Hewlett Packard, Epson and Canon ink manufacturers using the Spectral ID Slide Subtracted Neat Ink Standard ATR library were 4%, 1%, 21%, 22%, 35% and 4% respectively. Once again, the misidentification rate for the Okidata ink on paper samples was low enough that there was confidence in the search results obtained. The misidentification rate for the Canon ink on paper samples, however, had decreased significantly and the misidentification of an unknown ink on paper sample as being a Canon ink sample would theoretically occur in approximately one tenth of the time instead of approximately a fourth of the time. For the Epson ink on paper samples, the misidentification rate exceeded the correct identification rate for these samples, while for the Hewlett Packard ink on paper samples, the correct identification rate was only slightly higher than the misidentification rate for these ink on paper samples. For the Xerox ink on paper samples, the correct identification rate and the misidentification rate were the same using the Slide Subtracted Neat Ink Standard ATR library. Thus, with the exception of the Okidata ink on paper samples, and possible the exception of the Canon ink on paper samples, the effectiveness of the Spectral ID ATR search libraries in identifying an ink on paper sample was extremely low.

The success rates for the correct identification of the Okidata, Kodak, Xerox, Hewlett Packard, Epson and Canon ink on paper samples using the OMNIC Neat Ink Standard ATR library were 71%, 13%, 50%, 50%, 82% and 79% respectively. The rate of the misidentification of an ink on paper sample as being a certain manufacturer when it was not that manufacturer for the Okidata, Kodak, Xerox, Hewlett Packard, Epson and Canon ink manufacturers using the OMNIC Neat Ink Standard ATR library were 6%, 3%, 4%, 15%, 4% and 5% respectively. The Hewlett Packard ink on paper samples had the highest misidentification rate of all of the manufacturers, and all of the incorrect identifications were misidentified as being the Hewlett Packard 205 ink on paper sample. With the exception of the Okidata and Kodak misidentification rates, the misidentification rates of the ink manufacturers decreased with the OMNIC Neat Ink Standard ATR library as compared to the Spectral ID Neat Ink Standard ATR library, and in the case of the Epson ink samples this decrease was significant. The Kodak misidentification rate may have increased for the OMNIC Neat Ink Standard ATR library; however the correct identification of this ink manufacturer also increased, allowing for an unknown ink on paper sample to be successfully identified as an Epson ink sample.

For the OMNIC Slide Subtracted Neat Ink Standard ATR library, the success rate of identification for the Okidata, Kodak, Xerox, Hewlett Packard, Epson and Canon ink samples were 71%, 13%, 7%, 77%, 73% and 83% respectively. This was a decrease in the successful identification of the Xerox and Epson ink on paper samples but an increase for the Hewlett Packard and Canon ink on paper samples. The rate of the misidentification of an ink on paper sample as being a certain manufacturer when it was

not that manufacturer for the Okidata, Kodak, Xerox, Hewlett Packard, Epson and Canon ink manufacturers using the OMNIC Slide Subtracted Neat Ink Standard ATR library were 5%, 2%, 1%, 16%, 4% and 11% respectively. The misidentification rate for the Canon ink on paper samples had actually doubled with the use of the OMNIC Slide Subtracted Neat Ink Standard ATR library. With the OMNIC Neat Ink Standard ATR library, approximately one out of every sixteen ink on paper samples identified as Canon ink samples would theoretically be incorrect, whereas with the OMNIC Slide Subtracted Neat Ink Standard ATR library approximately one out of every eight ink on paper samples identified as Canon ink samples would theoretically be incorrect. The misidentification rate for the Hewlett Packard ink samples was still the highest at 16%, but once again this misidentification rate could be attributed solely to the misidentification of an ink on paper sample as being a Hewlett Packard 205 ink sample. Thus, if an unknown ink sample was identified as being any Hewlett Packard ink sample other than the Hewlett Packard 205 ink sample, the assumption would be that this identification would be correct. Overall, the OMNIC ATR search libraries had a higher correct identification rate and a lower misidentification rate for all six manufacturers tested in this study than the Spectral ID ATR search libraries.

Pyrolysis Library

The results of the pyrolysis library searches were examined to determine the effectiveness of a library to correctly identify an unknown ink sample. Unless otherwise stated, the ink samples tested against the pyrolysis search libraries were the ink on paper samples. As stated previously, the results of the ink on paper samples that produced

indistinguishable ink on paper pyrograms were grouped together with the correct match and were used in the calculation of the effectiveness of the search libraries. Using these groupings and the matches listed after comparing the 144 ink on paper sample pyrograms against the Spectral ID Neat Ink Standard 21.4 minute Pyrolysis library and the Spectral ID Neat Ink Standard 21.6 minute Pyrolysis library, a comparison of the results could be accomplished. With the Spectral ID program and the appropriate Neat Ink Standard Pyrolysis library, the percentages of correctly identified ink on paper sample pyrograms ranged from 0% to 100%. The match listings were also examined to determine how often the correct match was listed in the #2 to #20 position in the match list. The percentage for placement within the #2 to #20 position in the match list ranged from 0% to 100%, depending on the ink on paper sample pyrogram. Refer to Table 51 for the percentages of correct identification and placement within the #2 to #20 position in the match list for the 144 ink on paper sample pyrograms tested against the appropriate Spectral ID Neat Ink Standard Pyrolysis library. It should be noted that only one placement within the #2 to #20 position in the match list was recorded per sample replicate.

Table 51: Spectral ID Correct Identification Percentages and Placement within the #2 to #20 Position for the 144 Ink on Paper Sample Pyrograms using the Neat Ink Standard Pyrolysis Library

Sample	Number in the #1 position			Number in the #2 to #20 position (only noting one per sample replicate)		
	Correct ID	Same Pyrogram Group	TOTAL (Correct and Same Pyrogram)	Correct ID	Same Pyrogram Group	TOTAL (Correct and Same Pyrogram)
Okidata 04	0/7 0%	n/a	0/7 0%	6/7 86%	n/a	6/7 86%
Xerox 13	0/6 0%	0/6 0%	0/6 0%	4/6 67%	4/6 67%	4/6 67%
Kodak 17	0/6 0%	n/a	0/6 0%	4/6 67%	n/a	4/6 67%
Kodak 22	4/5 80%	n/a	4/5 80%	1/5 20%	n/a	1/5 20%
Xerox 24	0/4 0%	0/4 0%	0/4 0%	3/4 75%	3/4 75%	4/4 100%
Epson 30	1/7 14%	n/a	1/7 14%	6/7 86%	n/a	6/7 86%
Epson 33	0/5 0%	0/5 0%	0/5 0%	5/5 100%	5/5 100%	5/5 100%
Epson 60	0/4 0%	0/4 0%	0/4 0%	4/4 100%	4/4 100%	4/4 100%
Epson 63	0/5 0%	1/5 20%	1/5 20%	5/5 100%	3/5 60%	4/5 80%
Epson 66	0/4 0%	2/4 50%	2/4 50%	4/4 100%	2/4 50%	2/4 50%
Epson 84	0/4 0%	n/a	0/4 0%	3/4 75%	n/a	3/4 75%
Epson 90	0/4 0%	1/4 25%	1/4 25%	4/4 100%	3/4 75%	3/4 75%
Epson 93	0/4 0%	1/4 25%	1/4 25%	4/4 100%	3/4 75%	3/4 75%
Epson 120	0/4 0%	1/4 25%	1/4 25%	4/4 100%	3/4 75%	3/4 75%
Epson 123	1/4 25%	1/4 25%	2/4 50%	3/4 75%	2/4 50%	2/4 50%
Epson 156	3/3 100%	n/a	3/3 100%	0/3 0%	n/a	0/3 0%
HP 198	1/6 17%	1/6 17%	2/6 33%	5/6 83%	3/6 50%	4/6 67%
HP 199	0/4 0%	4/4 100%	4/4 100%	4/4 100%	0/4 0%	0/4 0%
HP 200	0/4 0%	1/4 25%	1/4 25%	4/4 100%	2/4 50%	3/4 75%
HP 201	0/4 0%	3/4 75%	3/4 75%	4/4 100%	1/4 25%	1/4 25%
HP 205	0/5 0%	n/a	0/5 0%	5/5 100%	n/a	5/5 100%
Canon 217	0/5 0%	0/5 0%	0/5 0%	2/5 40%	1/5 20%	2/5 40%
Canon 223	0/3 0%	0/3 0%	0/3 0%	2/3 67%	1/3 33%	3/3 100%
Xerox 244	0/3 0%	0/3 0%	0/3 0%	2/3 67%	1/3 33%	3/3 100%
Canon 282	0/3 0%	n/a	0/3 0%	3/3 100%	n/a	3/3 100%
Canon 306	0/4 0%	n/a	0/4 0%	3/4 75%	n/a	3/4 75%
Canon 312	0/3 0%	0/3 0%	0/3 0%	1/3 33%	0/3 0%	1/3 33%
Canon 318	0/3 0%	n/a	0/3 0%	3/3 100%	n/a	3/3 100%
Canon 318a	0/3 0%	n/a	0/3 0%	3/3 100%	n/a	3/3 100%
Canon 327	0/3 0%	0/3 0%	0/3 0%	1/3 33%	1/3 33%	1/3 33%
Canon 348	0/3 0%	0/3 0%	0/3 0%	2/3 67%	0/3 0%	2/3 67%
Canon 384	0/3 0%	0/3 0%	0/3 0%	2/3 67%	2/3 67%	3/3 100%
Canon 402	0/3 0%	0/3 0%	0/3 0%	0/3 0%	0/3 0%	0/3 0%
Canon 492	0/3 0%	0/3 0%	0/3 0%	3/3 100%	1/3 33%	3/3 100%
Canon 522	0/3 0%	0/3 0%	0/3 0%	1/3 33%	2/3 67%	2/3 67%

As noted in the table above, the Canon, Xerox and Okidata ink on paper samples did not have a correct identification with the appropriate Spectral ID Neat Ink Standard Pyrolysis library. In addition, the Kodak 17, Epson 33, Epson 60, Epson 84 and Hewlett

Packard 205 ink on paper samples also did not have a correct identification with the appropriate Spectral ID Neat Ink Standard Pyrolysis library. Only thirteen of the thirty-five ink standards had correct identification percentages that were greater than 0%. Four of the thirteen ink standards that had correct identification percentages that were greater than 0% were the Hewlett Packard non-extractable ink standards and their correct identification percentages ranged from 25% to 100%. The remaining nine ink standards that had correct identification percentages greater than 0% were all extractable ink standards. Eight of the nine extractable ink standards with correct identification percentages greater than 0% were Epson extractable ink standards. Of the eight Epson extractable ink standards, five had correct identification percentages of less than or equal to 25% and of the remaining three Epson ink standards, two had correct identification percentages of 50% and the third had a correct identification percentage of 100%. The remaining ink standard that had a correct identification percentage greater than 0% was the Kodak 22 ink standard, which had a correct identification percentage of 80%. However, the correct identification percentage for the Kodak 22 ink standard was misleading due to the fact that the main peak in the Kodak 22 ink standard pyrogram co-eluted with the peak for D-Allose, which was a component of the paper sample. During the subtraction step, the D-Allose peak was not always completely eliminated in the resulting subtracted ink on paper sample pyrogram and consequently an ink on paper sample pyrogram with a residual D-Allose peak was matched to the Kodak 22 ink standard. Thus, the correct identification percentage of 80% for the Kodak 22 ink sample could be due to the fact that the unknown ink on paper sample was a Kodak 22 ink sample or due to fact that the subtracted ink on paper sample pyrogram had the presence

of a residual D-Allose peak, which influenced the results of the Spectral ID library search. When examining the placement within the #2 to #20 position in the match list, the percentages were significantly higher than the correct identification percentages. Only three of the thirty-five ink standards had placement in the #2 to #20 position percentages of 0%, and two of the three ink standards had correct identification percentages of 100%, thus the percentage of 0% for the placement within the #2 to #20 position was not unexpected. The majority of the remaining ink standards had placement within the #2 to #20 position percentages that ranged from 75% to 100%.

When the results were examined in more detail, for seven of the non-extractable ink standards only extractable ink samples were listed before the correct identification. This occurred for the Xerox 13, Xerox 24, Xerox 244, Epson 84, Hewlett Packard 198, Hewlett Packard 201 and Canon 492 ink standards. For a total of 15 ink on paper sample replicates of these seven ink standards, only extractable ink samples were listed before the correct identification of the ink sample. As a result, the correct identification percentages could be increased to reflect this new information. For a further three ink on paper sample replicates, one each for the three Xerox non-extractable ink standards, the matches listed before the correct match included both extractable ink samples and the Canon 318a ink sample. Even though the Canon 318a ink sample was classified as a non-extractable ink sample, it was not a true non-extractable ink. The printing of the Canon 318a ink sample onto a document only occurred during the printing process with the Canon 318 ink sample, which was an extractable ink sample. The Canon 318a ink sample would never appear on its own in a document, and even if it did, its slightly yellow color would allow for it to be excluded from the other black non-extractable ink

samples in this study. Therefore, for these three Xerox ink standards, the Canon 318a ink sample was considered as an extractable ink and hence the number of correctly identified ink samples was increased further for the three Xerox ink standards. The percentage of correct matches increased for the Xerox 13 ink standard from 0% to 83%, for the Xerox 24 ink standard the correct matches increased from 0% to 50%, for the Xerox 244 ink standard the correct matches increased from 0% to 67%, for the Epson 84 ink standard the correct matches increased from 0% to 50%, for the Hewlett Packard 198 ink standard the correct matches increased from 33% to 67%, for the Hewlett Packard 201 ink standard the correct matches increased from 75% to 100%, and for the Canon 492 ink standard the correct matches increased from 0% to 100%.

As stated previously, during the subtraction step, the D-Allose peak was not always completely eliminated in the resulting paper subtracted ink on paper sample pyrogram and consequently the pyrogram could be left with a residual D-Allose peak that could be quite significant. The residual D-Allose peak tended to cause the Spectral ID search library to match the ink on paper sample pyrogram to the Kodak 22 neat ink standard, even when the ink on paper sample was not a Kodak 22 ink sample. One method used to reduce the effect of the D-Allose peak in the search results was to create a D-Allose mask within the "spectral preprocessing" option of the Spectral ID software. When the mask was in place the library would ignore this region during the search process. The D-Allose mask was created and installed and the 144 ink on paper sample pyrograms were then researched against their respective Spectral ID Neat Ink Standard Pyrolysis library. Using the groupings of the ink on paper samples with similar pyrograms and the matches listed after comparing the 144 ink on paper sample

pyrograms against the Spectral ID Neat Ink Standard 21.4 minute Pyrolysis library with the D-Allose mask in place and the Spectral ID Neat Ink Standard 21.6 minute Pyrolysis library with the D-Allose mask in place, a comparison of the results could be accomplished. Using the D-Allose mask and searching against the appropriate Spectral ID Neat Ink Standard Pyrolysis library, the percentages of correctly identified ink on paper samples ranged from 0% to 100%. The percentages of the placement within the #2 to #20 position in the match list also ranged from 0% to 100%. Some of the ink on paper samples had an increase in their correct identification percentages, many of the ink on paper samples had similar results as observed without the use of the D-Allose mask and some of the ink on paper samples had a decrease in the percentages of placement within the #2 to #20 position in the match list. The ink on paper samples that had a decrease in the percentages of placement within the #2 to #20 position in the match list also had an increase in the correct identification percentages. Since there was an inverse correlation between the correctly identified ink on paper results and the placement in the #2 to #20 position results, an increase in one generally resulted in a decrease in the other. Thus, since there was an increase in the percentages of correctly identified ink on paper samples, this decrease in the placement in the #2 to #20 position percentage was not unexpected. Refer to Table 52 for the percentages of the correctly identified ink on paper samples and the placement within the #2 to #20 position in the match list for the 144 ink on paper sample pyrograms tested against the appropriate Spectral ID Neat Ink Standard Pyrolysis library with D-Allose mask in place. It should be noted that only one placement in the #2 to #20 position was recorded per sample replicate.

Table 52: Spectral ID Correct Identification Percentages and Placement within the #2 to #20 Position for the 144 Ink on Paper Sample Pyrolysis using the Neat Ink Standard Pyrogram Library with the D-Allose Mask in Place.

Sample	Number in the #1 position			Number in the #2 to #20 position (only noting one per sample replicate)		
	Correct ID	Same Pyrogram	TOTAL (Correct and Same Pyrogram)	Correct ID	Same Pyrogram	TOTAL (Correct and Same Pyrogram)
Okidata 04	0/7 0%	n/a	0/7 0%	6/7 86%	n/a	6/7 86%
Xerox 13	0/6 0%	0/6 0%	0/6 0%	4/6 67%	4/6 67%	4/6 67%
Kodak 17	0/6 0%	n/a	0/6 0%	6/6 100%	n/a	6/6 100%
Kodak 22	2/5 40%	n/a	2/5 40%	3/5 60%	n/a	3/5 60%
Xerox 24	0/4 0%	0/4 0%	0/4 0%	3/4 75%	3/4 75%	4/4 100%
Epson 30	4/7 57%	n/a	4/7 57%	3/7 43%	n/a	3/7 43%
Epson 33	0/5 0%	0/5 0%	0/5 0%	5/5 100%	4/5 80%	5/5 100%
Epson 60	0/4 0%	1/4 25%	1/4 25%	4/4 100%	3/4 75%	3/4 75%
Epson 63	0/5 0%	2/5 40%	2/5 40%	5/5 100%	2/5 40%	3/5 60%
Epson 66	0/4 0%	2/4 50%	2/4 50%	4/4 100%	2/4 50%	2/4 50%
Epson 84	0/4 0%	n/a	0/4 0%	3/4 75%	n/a	3/4 75%
Epson 90	0/4 0%	2/4 50%	2/4 50%	3/4 75%	2/4 50%	2/4 50%
Epson 93	0/4 0%	1/4 25%	1/4 25%	4/4 100%	3/4 75%	3/4 75%
Epson 120	0/4 0%	3/4 75%	3/4 75%	4/4 100%	1/4 25%	1/4 25%
Epson 123	1/4 25%	1/4 25%	2/4 50%	3/4 75%	1/4 25%	2/4 50%
Epson 156	3/3 100%	n/a	3/3 100%	0/3 0%	n/a	0/3 0%
HP 198	2/6 33%	1/6 17%	3/6 50%	4/6 67%	3/6 50%	3/6 50%
HP 199	0/4 0%	4/4 100%	4/4 100%	4/4 100%	0/4 0%	0/4 0%
HP 200	1/4 25%	0/4 0%	1/4 25%	3/4 75%	2/4 50%	3/4 75%
HP 201	0/4 0%	4/4 100%	4/4 100%	4/4 100%	0/4 0%	0/4 0%
HP 205	0/5 0%	n/a	0/5 0%	5/5 100%	n/a	5/5 100%
Canon 217	0/5 0%	0/5 0%	0/5 0%	3/5 60%	1/5 20%	3/5 60%
Canon 223	0/3 0%	0/3 0%	0/3 0%	2/3 67%	1/3 33%	3/3 100%
Xerox 244	0/3 0%	0/3 0%	0/3 0%	2/3 67%	2/3 67%	3/3 100%
Canon 282	2/3 67%	n/a	2/3 67%	1/3 33%	n/a	1/3 33%
Canon 306	0/4 0%	n/a	0/4 0%	1/4 25%	n/a	1/4 25%
Canon 312	0/3 0%	0/3 0%	0/3 0%	1/3 33%	1/3 33%	2/3 67%
Canon 318	1/3 33%	n/a	1/3 33%	2/3 67%	n/a	2/3 67%
Canon 318a	0/3 0%	n/a	0/3 0%	3/3 100%	n/a	3/3 100%
Canon 327	0/3 0%	0/3 0%	0/3 0%	1/3 33%	1/3 33%	1/3 33%
Canon 348	0/3 0%	0/3 0%	0/3 0%	3/3 100%	0/3 0%	3/3 100%
Canon 384	0/3 0%	0/3 0%	0/3 0%	2/3 67%	2/3 67%	3/3 100%
Canon 402	0/3 0%	0/3 0%	0/3 0%	0/3 0%	0/3 0%	0/3 0%
Canon 492	0/3 0%	1/3 33%	1/3 33%	3/3 100%	1/3 33%	2/3 67%
Canon 522	0/3 0%	0/3 0%	0/3 0%	2/3 67%	3/3 100%	3/3 100%

As noted in the table above, both extractable and non-extractable ink standards had correctly identified ink on paper samples. The ink standards with the highest correct identification percentages, 100% to be exact, were the Hewlett Packard 199 and Hewlett

Packard 201 non-extractable ink standards and the Epson 156 extractable ink standards. With the exception of the Epson 120, Canon 282 and Epson 30 extractable ink standards, which had percentages of 75%, 67% and 57% respectively, the remaining eleven ink standards that had correctly identified ink on paper samples had correct identification percentages that were less than or equal to 50% but greater than 0%.

When examining the percentages of placement within the #2 to #20 position in the match list, four ink standards had a value of 0%, and three of the four of these ink standards had a correct identification percentage of 100%, so their percentage of placement within the #2 to #20 position of 0% was not unexpected. The remaining thirty-one ink standards showed a greater range of correct identification percentages, with the majority being equal to or greater than 60%. As the percentages of the ink standards having correctly identified ink on paper samples increased, this cause a decrease in the percentages of placement within the #2 to #20 position in the match list. Additionally, the ink standards with a correct identification percentage of 0% tended to have placement within the #2 to #20 position percentages of 100%, though the Canon ink manufacturer had low percentages for both the correctly identified ink samples and the placement within the #2 to #20 position for some of its ink standards.

When the results were examined in more detail, six non-extractable ink standards had only extractable ink samples listed before the correct match. This occurred for the Xerox 13, Xerox 24, Xerox 244, Epson 84, Hewlett Packard 198 and Canon 492 ink standards. For eleven of the twelve ink on paper sample replicates for these non-extractable ink standards, there were only extractable ink samples listed before the correct non-extractable ink sample match. For one of the twelve ink on paper sample

replicates, namely one of the Xerox 13 ink on paper samples, there was extractable ink samples and the Canon 318a ink sample listed before the correct match. As discussed previously, since Canon 318a ink sample only appeared on the document during the printing process with the Canon 318 extractable ink sample, it could be viewed as an extractable ink. Additionally, the Canon 318a ink sample was the only non-black ink sample tested in this study. Consequently, for this one ink on paper sample replicate of the Xerox 13 ink standard, all of the matches listed before the correct match were extractable ink samples. Therefore, the correct identification percentages for these six non-extractable ink standards had been increased. The percentage of correct matches increased for the Xerox 13 ink standard from 0% to 50%, for the Xerox 24 ink standard the correct matches increased from 0% to 50%, for the Xerox 244 ink standard the correct matches increased from 0% to 67%, for the Epson 84 ink standard the correct matches increased from 0% to 50%, for the Hewlett Packard 198 ink standard the correct matches increased from 50% to 67% and for the Canon 492 ink standard the correct matches increased from 33% to 100%.

The results from the library search results from the Spectral ID Neat Ink Standard Pyrolysis libraries and the Neat Ink Standard Pyrolysis libraries with D-Allose mask were compared. Of the thirty-five different ink standards used in this study, thirty-two of the ink standards had the same or better results with the appropriate Spectral ID Neat Ink Standard Pyrolysis library with D-Allose mask than with the appropriate Spectral ID Neat Ink Standard Pyrolysis library. The Xerox 13 non-extractable ink standard and the Kodak 22 and Canon 306 extractable ink standards were the exception to this observation. It was not surprising that the Kodak 22 ink standard had better results with

the Spectral ID Neat Ink Standard Pyrolysis library without the use of the D-Allose mask, as the main peak of the Kodak 22 ink standard co-eluted with D-Allose and as such the D-Allose mask would also mask this Kodak 22 ink component. The association of the D-Allose mask with the appropriate Spectral ID Neat Ink Standard Pyrolysis library allowed for the residual D-Allose peak effect on the potential identification of the ink on paper sample to be minimized, which in turn allowed for ink samples other than the Kodak 22 ink sample to be identified. However, this D-Allose mask also had the effect of preventing the identification of the main peak in the Kodak 22 ink on paper sample pyrogram from being identified, and hence reduced the number of correctly identified Kodak 22 ink samples. Refer to Table 53 below for the comparison between the Spectral ID Neat Ink Standard Pyrolysis library and the Spectral ID Neat Ink Standard Pyrolysis library with D-Allose mask.

For Table 53, the percentages of correctly identified ink samples and placement within the #2 to #20 position in the match list for each ink standard and for each search library were listed. The first percentage listed for a specific ink standard and search library was the percentage of correctly identified ink on paper samples, whereas the second percentage listed was the percentage of placement within the #2 to #20 position in the match list. The percentages highlighted in yellow represented the search library that produced the best results for a specific ink standard. If both sets of percentages were highlighted for a specific ink standard, then it meant that the same results were given by the two search libraries. A determination of the best search library for a particular ink standard was done and recorded in the final section of Table 53.

Table 53: Comparison of the Search Results of the Spectral ID Neat Ink Standard Pyrolysis Library and Neat Ink Standard Pyrolysis Library with D-Allose Mask in Place.

Sample #	Manu.	Spectral ID		Overall Better	
		Neat	with D-Allose Mask	Neat	with D-Allose Mask
04	Okidata	0% 86%	0% 86%	SA	ME
13	Xerox	83% 17%	50% 50%	X	
17	Kodak	0% 67%	0% 100%		X
22	Kodak	80% 20%	40% 60%	X	
24	Xerox	50% 50%	50% 50%	SA	ME
30	Epson	14% 86%	57% 43%		X
33	Epson	0% 100%	0% 100%	SA	ME
60	Epson	0% 100%	25% 75%		X
63	Epson	20% 80%	40% 60%		X
66	Epson	50% 50%	50% 50%	SA	ME
84	Epson	50% 25%	50% 25%	SA	ME
90	Epson	25% 75%	50% 50%		X
93	Epson	25% 75%	25% 75%	SA	ME
120	Epson	50% 50%	75% 25%		X
123	Epson	50% 50%	50% 50%	SA	ME
156	Epson	100% 0%	100% 0%	SA	ME
198	HP	67% 33%	67% 33%	SA	ME
199	HP	100% 0%	100% 0%	SA	ME
200	HP	25% 75%	25% 75%	SA	ME
201	HP	100% 0%	100% 0%	SA	ME
205	HP	0% 100%	0% 100%	SA	ME
217	Canon	0% 40%	0% 60%		X
223	Canon	0% 100%	0% 100%	SA	ME
244	Xerox	67% 33%	67% 33%	SA	ME
282	Canon	0% 100%	67% 33%		X
306	Canon	0% 75%	0% 25%	X	
312	Canon	0% 33%	0% 67%		X
318	Canon	0% 100%	33% 67%		X
318a	Canon	0% 100%	0% 100%	SA	ME
327	Canon	0% 33%	0% 33%	SA	ME
348	Canon	0% 67%	0% 100%		X
384	Canon	0% 100%	0% 100%	SA	ME
402	Canon	0% 0%	0% 0%	SA	ME
492	Canon	100% 0%	100% 0%	SA	ME
522	Canon	0% 0%	0% 100%		X

A final note on the effectiveness of the Spectral ID search libraries dealt with the success and the misidentification rates associated with the manufacturer identification of an ink on paper sample. The success rates or the correct identification percentages of the Okidata, Kodak, Xerox, Hewlett Packard, Epson and Canon ink on paper samples using

the appropriate Spectral ID Neat Ink Standard Pyrolysis library were 0%, 73%, 69%, 57%, 33% and 29% respectively. The rate of the misidentification of an ink sample as being a certain manufacturer when it was not that manufacturer for the Okidata, Kodak, Xerox, Hewlett Packard, Epson and Canon ink manufacturer using the appropriate Spectral ID Neat Ink Standard Pyrolysis library were 0%, 40%, 5%, 0%, 14% and 14% respectively. It was not surprising that the Kodak ink samples had the highest misidentification rate since the majority of the misidentifications that occurred were due to the presence of the residual D-Allose peak and hence the incorrect identification of the ink on paper sample being the Kodak 22 ink sample. For the Epson and Canon ink on paper samples, the misidentification rate was almost half the success rate for these samples. In fact, for the Canon ink on paper samples, approximately one in two identifications would be theoretically incorrect using the appropriate Spectral ID Neat Ink Standard Pyrolysis library. For the Epson ink on paper samples approximately two out five identifications would be theoretically incorrect using the appropriate Spectral ID Neat Ink Standard Pyrolysis library. The Xerox, Hewlett Packard and Okidata ink standards had the lowest misidentification rates, however the Okidata ink on paper samples also had a 0% correct identification rate. It was not surprising that the Hewlett Packard and Xerox ink on paper samples had the best identification rates and the lowest misidentification rates, as the pyrolysis method seemed to work best with the non-extractable ink samples, and the majority of the non-extractable ink samples were either a Xerox or Hewlett Packard ink sample.

The success rates or the correct identification percentages of the Okidata, Kodak, Xerox, Hewlett Packard, Epson and Canon ink on paper samples using the appropriate

Spectral ID Neat Ink Standard Pyrolysis library with D-Allose mask were 0%, 18%, 54%, 57%, 54% and 52% respectively. The rate of the misidentification of an ink sample as being a certain manufacturer when it was not that manufacturer for the Okidata, Kodak, Xerox, Hewlett Packard, Epson and Canon ink manufacturer using the appropriate Spectral ID Neat Ink Standard Pyrolysis library with D-Allose mask were 0%, 14%, 6%, 0.8%, 26% and 22% respectively. For the Kodak ink on paper samples, the correct identification rate decreased with the use of the D-Allose mask in the search process. This was not unexpected as the main component of the Kodak 22 ink on paper sample pyrogram co-eluted with the D-Allose compound, so by using a D-Allose mask the main component of the Kodak 22 ink on paper sample pyrogram was not being search against the library. The misidentification rate for the Kodak ink on paper samples had also decreased significantly with the use of the D-Allose mask in the search process, as the effect of the residual D-Allose peak in the identification of the non-Kodak 22 ink on paper samples had been reduced. The misidentification rate was again almost half the success rate for the Epson and Canon ink on paper samples. In fact, for the Epson ink on paper samples, approximately one in two identifications would be theoretically incorrect using the appropriate Spectral ID Neat Ink Standard Pyrolysis library with D-Allose mask. Additionally, for the Canon ink on paper samples approximately two out five identifications would be theoretically incorrect using the appropriate Spectral ID Neat Ink Standard Pyrolysis library with D-Allose mask. Without the use of the D-Allose mask in the search process the Epson ink on paper sample identification was slightly better than the Canon ink on paper sample identification, whereas with the use of the D-Allose mask the Canon ink on paper sample identification was slightly better than the Epson ink on

paper sample identification. The Xerox, Hewlett Packard and Okidata ink on paper samples again had the lowest misidentification rates, however the Okidata ink on paper sample also had a 0% correct identification rate. The Xerox ink on paper sample correct identification rate decreased from 69% to 54% with the use of the D-Allose mask in the search process, but it was still the second best identification rate found for the results with the appropriate Spectral ID Neat Ink Standard Pyrolysis library with D-Allose mask. As stated above, it was not surprising that the Hewlett Packard and Xerox ink on paper samples had the best identification rates and the lowest misidentification rates out of all of the ink manufacturers, as the pyrolysis method, and the pyrolysis search library in particular, seemed to work best with the non-extractable ink samples, and the majority of the non-extractable ink samples were either a Xerox or Hewlett Packard ink sample.

D. Blind Study

The results from the four analytical methods of the unknowns of the blind study were compared to see if the identity of the unknown ink samples could be determined. Prior to any analytical methods of analysis, the fifteen unknown ink samples were placed into a labeled vial and the extraction solvent of ethanol:distilled water (50:50) was added. Of the fifteen unknown ink samples, ten unknown ink samples exhibited extraction of the ink sample from the paper matrix, while five unknown ink samples did not extract out from the paper matrix. Therefore based on the results of the extraction analysis, the sources of the Unknown 02, Unknown 03, Unknown 06, Unknown 07 and Unknown 13 ink samples, which were the non-extractable ink samples, could be tentatively identified as being the Kodak 17, Xerox 13, Xerox 24, Xerox 244, Hewlett Packard 198, Hewlett

Packard 199, Hewlett Packard 200, Hewlett Packard 201, Epson 84, Canon 312 and Canon 492 ink samples. The Unknown 02, Unknown 03, Unknown 06, Unknown 07 and Unknown 13 ink samples could not be the non-extractable Canon 318a ink sample due to the fact the Canon 318a ink sample was slightly yellow in color and all five of the unknown non-extractable ink samples were black ink samples. Based on their behavior with the extraction solvent, the possible sources for the Unknown 01, Unknown 04, Unknown 05, Unknown 08, Unknown 09, Unknown 10, Unknown 11, Unknown 12, Unknown 14 and Unknown 15 ink samples, which were the extractable ink samples, could be tentatively identified as being the Okidata 04, Kodak 22, Hewlett Packard 205, Epson 30, Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123, Epson 156, Canon 217, Canon 223, Canon 282, Canon 306, Canon 318, Canon 327, Canon 348, Canon 384, Canon 402 and Canon 522 ink samples.

For each analytical method, the ink on paper standard that contained the same results of a specific unknown ink on paper sample were listed into an excel spreadsheet. Each method was analyzed separately; with the only extraneous information applied to the analysis of a specific method was whether or not the ink sample was extractable or non-extractable in the extraction solvent. The listed possible sources for a specific unknown ink sample were compared across all four analytical methods to determine if it was possible to ascertain the identity of each unknown ink sample in the blind study. The determination of the identity of each unknown ink sample was followed by a discussion on the correctness of the blind study results. For the detailed descriptions of the results of the four analytical methods for each of the unknown ink samples, please refer to the blind study section under the results heading. It should be stressed that the unknown ink

samples were analyzed as ink on paper samples, not neat ink samples, and the results of the blind study unknown ink on paper samples were compared to the results of the thirty-five ink standards ink on paper samples.

The results obtained for the Unknown 01 ink on paper sample were consistent for all four analytical methods. The results of the HPLC, Py-GC-MS and ATR FT-IR methods indicated the possible sources of the Unknown 01 ink sample as being the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink standards. The results from the TLC analysis narrowed the possible sources of the Unknown 01 ink sample to the Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples, however the Epson 33, Epson 60 and Epson 63 ink samples could not be completely ruled out as the possible source of the Unknown 01 ink sample. At lower concentrations, the TLC results for the Epson 33, Epson 60 and Epson 63 ink standards were similar to the TLC results for the Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink standards. As a result, the identity of the Unknown 01 ink sample could be determined with a high degree of certainty to be an Epson ink sample, and most likely an Epson 66 (T026), Epson 90 (T019), Epson 93 (T028), Epson 120 (S020187) or Epson 123 (T017) ink sample, though the Epson 33 (T003), Epson 60 (T007) and Epson 63 (S020189) ink samples could not be ruled out as the possible source.

The results obtained for the Unknown 02 ink on paper sample were again consistent for all four analytical methods. The results of the TLC analysis were not helpful in identifying the possible source of the Unknown 02 ink sample, since the Unknown 02 ink sample was a non-extractable ink sample, and as such did not produce any visible spots on the TLC plate. As a consequence, based on the results of the TLC

analysis, the Unknown 02 ink sample could not be differentiated from the other non-extractable ink samples in this study. Therefore, the determination of the identity of the Unknown 02 ink sample was made based on the results of the HPLC, Py-GC-MS and ATR FT-IR methods. The results of the Py-GC-MS and ATR FT-IR analyses for the Unknown 02 ink on paper sample were consistent with the results obtained with the Canon 312 and Canon 492 ink on paper samples. For the HPLC analysis, the Unknown 02 ink sample had an HPLC chromatogram that was consistent with the HPLC chromatogram of the Canon 492 ink sample. Thus, the results of the HPLC analysis were able to narrow the possible source down to a single ink standard, namely the Canon 492 ink standard. Thus, based on the results of the HPLC, Py-GC-MS and ATR FT-IR methods, the Unknown 02 ink sample could be identified as a Canon 492 (BCI-3eBk) ink sample.

For the Unknown 03 ink on paper sample, a non-extractable unknown ink sample, the results of the TLC analysis were not helpful in identifying the possible source of this unknown ink sample. Since the Unknown 03 ink sample was a non-extractable ink sample, its TLC results were consistent with all of the non-extractable ink samples. For the HPLC analysis, the Unknown 03 ink sample had an HPLC chromatogram that was consistent with nine of the black non-extractable ink samples. Thus, the HPLC analysis was only able to exclude two non-extractable ink samples, namely the Canon 492 and Hewlett Packard 201 ink standards, as being the source of the Unknown 03 ink sample. It was the results of the Py-GC-MS and ATR FT-IR methods that allowed for the identity of the Unknown 03 ink sample to be determined. The results of the Py-GC-MS and ATR FT-IR methods for the Unknown 03 ink on paper sample were consistent with the

results obtained with the Xerox ink on paper samples. Thus, the Unknown 03 ink sample could be identified as being a Xerox ink sample, and specifically a Xerox 13 (8R7994), Xerox 24 (8R7660) or Xerox 244 (M-Series) ink sample.

The results for the Unknown 04 ink on paper sample were consistent across the four analytical methods. Based on the results of the TLC analysis, the possible source of the Unknown 04 ink sample was narrowed down to the Kodak 22, Canon 217, Canon 282 and Canon 522 ink samples. When the HPLC results were factored in, the Kodak 22 ink sample was eliminated as a possible source for the Unknown 04 ink sample. For both the Py-GC-MS and ATR FT-IR analyses, the possible sources of the Unknown 04 ink sample were increased. The results of the Py-GC-MS analysis for the Unknown 04 ink on paper sample was consistent with the results obtained with the Canon 217, Canon 282, Canon 306 and Canon 522 ink on paper samples. The results of the ATR FT-IR analysis for the Unknown 04 ink on paper sample were consistent with the results obtained for the Canon 217, Canon 306, Canon 327, Canon 402 and Canon 522 ink on paper samples. Comparing the results of all four methods, the Unknown 04 ink sample was determined to be a Canon ink sample, specifically a Canon 217 (BCI-6Bk) or a Canon 522 (BCI-3ePBk) ink sample.

The results obtained for the Unknown 05 ink on paper sample were consistent for all four analytical methods. The results of the HPLC, Py-GC-MS and ATR FT-IR analyses indicated the possible sources of the Unknown 05 ink sample as being the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples. The results from the TLC analysis narrowed the possible sources of this ink sample to the Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples,

however the Epson 33, Epson 60 and Epson 63 ink samples could not be completely ruled out as the possible source of the Unknown 05 ink sample. At lower concentrations, the TLC results for the Epson 33, Epson 60 and Epson 63 ink samples were similar to the TLC results for the Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples. As a result, the identity of the Unknown 05 ink sample could be determined with a high degree of certainty to be an Epson ink sample, and most likely either an Epson 66 (T026), Epson 90 (T019), Epson 93 (T028), Epson 120 (S020187) or Epson 123 (T017) ink sample, though the Epson 33 (T003), Epson 60 (T007) and Epson 63 (S020189) ink samples could not be ruled out as the possible source.

For the Unknown 06 ink on paper sample, a non-extractable ink sample, the results of the TLC analysis were not helpful in identifying the possible source of this unknown ink sample. Since the Unknown 06 ink sample was a non-extractable ink sample, its TLC results were consistent with the results of all of the non-extractable ink samples. For the HPLC analysis, the Unknown 06 ink sample had an HPLC chromatogram that was consistent with nine of the black non-extractable ink samples. Thus, the HPLC analysis was only able to exclude two non-extractable ink samples, namely the Canon 492 and Hewlett Packard 201 ink samples, as being the source of the Unknown 06 ink sample. It was the results of the Py-GC-MS and ATR FT-IR methods that allowed for the identity of the Unknown 06 ink sample to be determined. The results of the Py-GC-MS and ATR FT-IR analyses for the Unknown 06 ink on paper sample were consistent with the results obtained with the Epson 84 ink on paper sample. Thus, the Unknown 06 ink sample could be identified as being an Epson 84 (T0321) ink sample.

For the Unknown 07 ink on paper sample, a non-extractable ink sample, the results of the TLC analysis were not helpful in identifying the possible source of this unknown ink sample. Since the Unknown 07 ink sample was a non-extractable ink sample, its TLC results were consistent with the results of all of the non-extractable ink samples. For the HPLC analysis, the Unknown 07 ink sample had an HPLC chromatogram that was consistent with nine of the black non-extractable ink samples. Thus, the HPLC analysis was only able to exclude two non-extractable ink samples, namely the Canon 492 and Hewlett Packard 201 ink samples, as being the source of the Unknown 07 ink sample. It was the results of the Py-GC-MS and ATR FT-IR methods that allowed for the identity of the Unknown 07 ink sample to be determined. The results of the Py-GC-MS and ATR FT-IR analyses for the Unknown 07 ink on paper sample were consistent with the results obtained with the with the Xerox ink on paper samples. Thus, the Unknown 07 ink sample could be identified as a Xerox ink sample, and specifically a Xerox 13 (8R7994), Xerox 24 (8R7660) or Xerox 244 (M-Series) ink sample.

The analytical results for the Unknown 08 ink on paper sample were more varied than what had been found with the previous unknown ink on paper samples. The results of the TLC analysis tentatively identified the possible sources of the Unknown 08 ink sample as being the Canon 223, Canon 348 and Canon 384 ink samples. However, when the results of the HPLC analysis were examined, the possible sources of the Unknown 08 ink sample were expanded to include not just the Canon 223, Canon 348 and Canon 384 ink samples but the Hewlett Packard 205, Kodak 22, Epson 156, Canon 306, Canon 282 and Canon 522 ink samples as well. The problem with the HPLC analysis in this

situation was the fact that the HPLC chromatogram of the Unknown 08 ink sample did not contain any identifying peaks, and as such the number of possible sources increased. The results of the Py-GC-MS analysis narrowed down the possible sources of the Unknown 08 ink on paper sample to the Canon 223, Canon 306, Canon 348 and Canon 384 ink samples, while the results of the ATR FT-IR analysis identified the source of the Unknown 08 ink on paper sample as the Canon 384 ink sample. As stated previously in the Results section, some of the ink on paper samples had similar ink on paper sample pyrograms and ink on paper samples ATR spectra that allowed them to be grouped together, which could aid in the identification of an unknown ink sample when apparent inconsistent results were presented. The Canon 223, Canon 348 and/or Canon 384 ink samples could be found in one or more of the analytical results for the Unknown 08 ink sample. Since the Canon 223, Canon 348 and Canon 384 ink samples had indistinguishable ink on paper sample pyrograms, ink on paper samples ATR spectra, HPLC chromatograms and TLC color patterns; the identification of one of these ink standards implied the indication of the other ink standards in the group, which allowed a final determination of the identity of the Unknown 08 to be accomplished. Thus, based on the results of the four analytical methods, the Unknown 08 ink sample was identified as being a Canon ink sample, and specifically a Canon 223 (BCI-10), Canon 348 (BCI-21) or Canon 384 (BCI-11) ink sample.

For the Unknown 09 ink on paper sample, there was some consistency in the results obtained for several of the analytical methods. The results of the TLC analysis and the HPLC analysis identified the possible sources of the Unknown 09 ink sample as being the Canon 306, Canon 327, Canon 402 and Epson 156 ink samples. The results of

the Py-GC-MS analysis eliminated the Epson 156 ink sample as being a possible source of the Unknown 09 ink sample, but included the Canon 306, Canon 327, Canon 384, Canon 384 and Canon 402 ink samples as possible ink sources for this unknown ink sample. The results of the ATR analysis identified a single ink sample, namely the Canon 402 ink sample, as the possible source of the Unknown 09 ink sample. The first three analytical methods narrowed down the possible sources of the Unknown 09 ink sample to the Canon 306, Canon 327 and Canon 402 ink samples, and the ATR FT-IR method allowed for a single source of the Unknown 09 ink sample to be identified. Thus, based on the results of the four analytical methods, the Unknown 09 ink sample could be identified as being a Canon ink sample, and specifically a Canon 402 (BCI-12) ink sample.

The analytical results for the Unknown 10 ink on paper sample were more varied than what had been found with some of the previous unknown ink samples. The results of the TLC analysis tentatively identified the sources of the Unknown 10 ink sample as being the Canon 223, Canon 348 and Canon 384 ink samples. However, when the results of the HPLC analysis were examined, the possible sources of the Unknown 10 ink sample were expanded to include not just the Canon 223, Canon 348 and Canon 384 ink samples, but the Hewlett Packard 205, Kodak 22, Epson 156, Canon 306, Canon 282 and Canon 522 ink samples as well. The problem with the HPLC analysis in this situation was the fact that the HPLC chromatogram of the Unknown 10 ink sample did not contain any identifying peaks, and as such the number of possible sources increased. The results of the Py-GC-MS analysis narrowed down the possible sources of the Unknown 10 ink sample to the Canon 217, Canon 223, Canon 348, Canon 384 and Canon 522 ink

samples, while the results of the ATR FT-IR analysis identified the sources of the Unknown 10 ink sample as being the Canon 348 and Canon 306 ink samples. The first three analytical methods narrowed down the possible sources of this ink sample to the Canon 223, Canon 348 and Canon 384 ink samples, and the ATR method allowed for a single source, namely the Canon 348 ink sample, of the Unknown 10 ink sample to be identified. However, the ATR FT-IR results for the Canon 348 ink sample were indistinguishable to the results of the Canon 223 and Canon 384 ink samples, so these two Canon ink samples could not be excluded as a potential source of the Unknown 10 ink sample. Thus, based on the results of the four analytical methods, the Unknown 10 ink sample was identified as being a Canon ink sample, and specifically a Canon 348 (BCI-21), Canon 223 (BCI-10) or Canon 384 (BCI-11) ink sample.

For the Unknown 11 ink on paper sample, all four of the analytical methods identified the same single possible source for this unknown ink sample. In all four analytical methods, the results for the Unknown 11 ink sample was found to be consistent with the results for the Okidata 04 ink sample. This determination was made easier by the fact that the Okidata 04 ink sample produced unique results in all four analytical methods, which allowed the other ink samples used in this study to be eliminated as being the possible source of the Unknown 11 ink sample. Thus, the Unknown 11 ink sample was determined with a high degree of certainty to be the Okidata 04 (52110001) ink sample.

For the Unknown 12 ink on paper sample, there was some consistency in the results obtained for several of the analytical methods. The results of the TLC analysis and the HPLC analysis identified the possible sources of the Unknown 12 ink sample as

being the Canon 306, Canon 327, Canon 402 and Epson 156 ink samples. The results of the Py-GC-MS analysis eliminated the Epson 156 ink sample as being a possible source of the Unknown 12 ink sample, but included the Canon 306, Canon 327, Canon 384, Canon 384 and Canon 402 ink samples as possible ink sources for this unknown ink sample. The results of the ATR analysis identified a single ink sample, namely the Canon 402 ink sample, as the possible source of the Unknown 12 ink sample. The first three analytical methods narrowed down the possible sources of the Unknown 12 ink sample to the Canon 306, Canon 327 and Canon 402 ink samples, and the ATR FT-IR method allowed for a single source of the Unknown 12 ink sample to be identified. Thus, based on the results of the four analytical methods, the Unknown 12 ink sample could be identified as being a Canon ink sample, and specifically a Canon 402 (BCI-12) ink cartridge type.

For the Unknown 13 ink on paper sample, a non-extractable unknown ink sample, the results of the TLC analysis were not helpful in identifying the possible source of this unknown ink sample. Since the Unknown 13 ink sample was a non-extractable ink sample, its TLC results were consistent with the results of all of the non-extractable ink samples. For the HPLC analysis, the Unknown 13 ink sample had an HPLC chromatogram that was consistent with the HPLC chromatograms of nine of the black non-extractable ink samples. Thus, the HPLC analysis was only able to exclude two non-extractable ink samples, namely the Canon 492 and Hewlett Packard 201 ink samples, as being the possible sources of the Unknown 13 ink sample. It was the results of the Py-GC-MS and ATR FT-IR methods that allowed for the identity of the Unknown 13 ink sample to be determined. The results of the Py-GC-MS analysis were able to

narrow down the possible sources of the Unknown 13 ink sample to the Xerox non-extractable ink samples. The Unknown 13 ink on paper sample pyrogram was consistent with the Xerox 13, Xerox 24 and Xerox 244 ink on paper sample pyrograms. The results of the ATR FT-IR analysis, on the other hand, were not as easy to interpret as the previous analytical results for the Unknown 13 ink sample. The Unknown 13 ink on paper sample ATR spectrum showed characteristics in common with the Epson 84, Kodak 17, Xerox 13, Xerox 24 and Xerox 244 ink on paper samples ATR spectra. In fact, it was extremely hard to identify the possible sources of the Unknown 13 ink sample using the ATR spectral data. The Unknown 13 ink on paper sample ATR spectrum gave conflicting information and had peak maxima positions, peak shapes and peak patterns in common with the Epson 84, Kodak 17, Xerox 13, Xerox 24 and Xerox 244 ink on paper samples ATR spectra. It was eventually possible, after looking at the ink on paper samples ATR spectra in detail, to eliminate the Epson 84 ink sample as a possible source for the Unknown 13 ink sample. Based on their ink on paper samples ATR spectra, the Kodak 17, Xerox 13, Xerox 24 and Xerox 244 ink samples were determined to be the possible sources for the Unknown 13 ink sample. By comparing the results of all four analytical methods, a final determination of the source of the Unknown 13 ink sample could be accomplished. Thus, the Unknown 13 ink sample could be identified as being a Xerox ink sample, and specifically a Xerox 13 (8R7994), Xerox 24 (8R7660) or Xerox 244 (M-Series) ink sample.

The analytical results for the Unknown 14 ink on paper sample were more varied than what had been found with some of the previous unknown ink samples. The results of the TLC analysis tentatively identified the sources of the Unknown 14 ink sample as

being the Kodak 22, Canon 217, Canon 282 and Canon 522 ink samples. However, when the results of the HPLC analysis were examined, the possible sources of the Unknown 14 ink sample were expanded to include not just the Kodak 22, Canon 217, Canon 282 and Canon 522 ink samples, but the Hewlett Packard 205, Epson 156, Canon 306, Canon 223, Canon 348 and Canon 384 ink samples as well. The problem with the HPLC analysis in this situation was the fact that the HPLC chromatogram of the Unknown 14 ink sample did not contain any identifying peaks, and as such the number of possible sources for this unknown ink sample increased. The results of the Py-GC-MS analysis narrowed down the possible sources of the Unknown 14 ink sample to the Canon 217, Canon 282, Canon 306 and Canon 522 ink samples, while the results of the ATR FT-IR analysis identified the source of the Unknown 14 ink sample as being the Canon 282 ink sample. The first three analytical methods narrowed down the possible sources of this ink sample to the Canon 217, Canon 282 and Canon 522 ink samples, and the ATR FT-IR analysis identified a single ink sample, namely the Canon 282 ink sample, as the possible source of the Unknown 14 ink sample to be identified. However, as stated in the Results section, the Canon 282 and Canon 217 ink samples had similar ink on paper samples ATR spectra that allowed them to be grouped together, and as a result, the Canon 217 ink sample could not be excluded as a potential source of the Unknown 14 ink sample. Thus, based on the results of the four analytical methods, the Unknown 14 ink sample was identified as being a Canon ink, and specifically a Canon 282 (BC-02) or Canon 217 (BCI-6Bk) ink sample.

The analytical results for the Unknown 15 ink on paper sample were again more varied than what had been found with some of the previous unknown ink samples. The

results of the TLC analysis tentatively identified the source of the Unknown 15 ink sample as being the Canon 223, Canon 348 and Canon 384 ink samples. However, when the results of the HPLC analysis were examined, the possible sources of the Unknown 15 ink sample were expanded to include not just the Canon 223, Canon 348 and Canon 384 ink samples but the Hewlett Packard 205, Kodak 22, Epson 156, Canon 306, Canon 282 and Canon 522 ink samples as well. The problem with the HPLC analysis in this situation was the fact that the HPLC chromatogram of the Unknown 15 ink sample did not contain any identifying peaks, and as such the number of possible sources for the Unknown 15 ink sample increased. The results of the Py-GC-MS analysis narrowed down the possible sources of the Unknown 15 ink sample to the Canon 217, Canon 223, Canon 348, Canon 384 and Canon 522 ink samples, while the results of the ATR FT-IR analysis identified the possible sources of the Unknown 15 ink sample as being the Canon 348 and Canon 306 ink samples. The first three analytical methods narrowed down the possible sources of the Unknown 15 ink sample to the Canon 223, Canon 348 and Canon 384 ink samples, and the ATR FT-IR method allowed for a single source of the Unknown 15 ink sample to be identified. However, the ATR FT-IR results for the Canon 348 ink sample were indistinguishable to the ATR FT-IR results of the Canon 223 and Canon 384 ink samples, so these two Canon ink samples could not be excluded as a potential source of the Unknown 15 ink sample. Thus, based on the results of the four analytical methods, the Unknown 15 ink sample was identified as being a Canon ink, and specifically a Canon 348 (BCI-21), Canon 223 (BCI-10) or Canon 384 (BCI-11) ink sample.

In Table 54 the identification of the possible sources of a specific unknown ink sample based on the results of each analytical method was listed, as was the final determination of the identity for each of the unknown ink sample based on their results with the four analytical results.

Table 54: Analytical Results and Determination of the Unknown ink Samples of the Blind Study.

Unknown	TLC Results	HPLC Results	Py-GC/MS Results	ATR Results	FINAL DETERMINATION
01	Epson 66, Epson 90, Epson 93, Epson 120, Epson 123 PLUS Epson 33, Epson 60, Epson 63	Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123	Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123	Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123	Epson ink sample, most likely Epson 66, Epson 90, Epson 93, Epson 120 or Epson 123 BUT Epson 33, Epson 60 and Epson 63 could not be completely excluded
02	Kodak 17, Xerox 13, Xerox 24, Xerox 244, HP 198, HP 199, HP 200, HP 201 Epson 84, Canon 312, Canon 492	Canon 492	Canon 312, Canon 492	Canon 312, Canon 492	Canon 492
03	Kodak 17, Xerox 13, Xerox 24, Xerox 244, HP 198, HP 199, HP 200, HP 201 Epson 84, Canon 312, Canon 492	Kodak 17, Xerox 13, Xerox 24, Xerox 244, HP 198, HP 199, HP 200, Epson 84, Canon 312	Xerox 13, Xerox 24, Xerox 244	Xerox 13, Xerox 24, Xerox 244	Xerox ink sample, either Xerox 13, Xerox 24 or Xerox 244
04	Kodak 22, Canon 217, Canon 282, Canon 522	Canon 217, Canon 282, Canon 522	Canon 217, Canon 282, Canon 306, Canon 522	Canon 217, Canon 306, Canon 327, Canon 402, Canon 522	Canon ink sample, either Canon 217 or Canon 522

Table 54: Analytical Results and Determination of the Unknown ink Samples of the Blind Study cont.

Unknown	TLC Results	HPLC Results	Py-GC/MS Results	ATR Results	FINAL DETERMINATION
05	Epson 66, Epson 90, Epson 93, Epson 120, Epson 123 PLUS Epson 33, Epson 60, Epson 63	Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123	Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123	Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120, Epson 123	Epson ink sample, most likely Epson 66, Epson 90, Epson 93, Epson 120 or Epson 123 BUT Epson 33, Epson 60 and Epson 63 could not be completely excluded
06	Kodak 17, Xerox 13, Xerox 24, Xerox 244, HP 198, HP 199, HP 200, HP 201 Epson 84, Canon 312, Canon 492	Kodak 17, Xerox 13, Xerox 24, Xerox 244, HP 198, HP 199, HP 200, Epson 84, Canon 312	Epson 84	Epson 84	Epson 84
07	Kodak 17, Xerox 13, Xerox 24, Xerox 244, HP 198, HP 199, HP 200, HP 201 Epson 84, Canon 312, Canon 492	Kodak 17, Xerox 13, Xerox 24, Xerox 244, HP 198, HP 199, HP 200, Epson 84, Canon 312	Xerox 13, Xerox 24, Xerox 244	Xerox 13, Xerox 24, Xerox 244	Xerox ink sample, either Xerox 244, Xerox 13 or Xerox 24
08	Canon 223, Canon 348, Canon 384	HP 205, Kodak 22, Epson 156, Canon 223, Canon 348, Canon 384, Canon 306, Canon 282, Canon 522	Canon 306, Canon 223, Canon 348, Canon 384	Canon 384 PLUS Canon 223, Canon 348	Canon ink sample, either Canon 384, Canon 223 or Canon 348
09	Epson 156, Canon 327, Canon 402, Canon 306	Canon 306, Canon 327, Canon 402, Epson 156	Canon 306, Canon 327, Canon 348, Canon 384, Canon 402	Canon 402	Canon 402

Table 54: Analytical Results and Determination of the Unknown ink Samples of the Blind Study cont.

Unknown	TLC Results	HPLC Results	Py-GC/MS Results	ATR Results	FINAL DETERMINATION
10	Canon 223, Canon 348, Canon 384	HP 205, Kodak 22, Epson 156, Canon 223, Canon 348, Canon 384, Canon 306, Canon 282, Canon 522	Canon 217, Canon 223, Canon 348, Canon 384, Canon 522	Canon 306, Canon 348 PLUS Canon 223, Canon 384	Canon ink sample, either Canon 348, Canon 223 or Canon 384
11	Okidata 04	Okidata 04	Okidata 04	Okidata 04	Okidata 04
12	Epson 156, Canon 327, Canon 402, Canon 306	Canon 306, Canon 327, Canon 402, Epson 156	Canon 306, Canon 327, Canon 348, Canon 384, Canon 402	Canon 402	Canon 402
13	Kodak 17, Xerox 13, Xerox 24, Xerox 244, HP 198, HP 199, HP 200, HP 201 Epson 84, Canon 312, Canon 492	Kodak 17, Xerox 13, Xerox 24, Xerox 244, HP 198, HP 199, HP 200, Epson 84, Canon 312	Xerox 13, Xerox 24, Xerox 244	Xerox 13, Xerox 24, Xerox 244, Kodak 17	Xerox ink sample, either Xerox 244, Xerox 13 or Xerox 24
14	Kodak 22, Canon 217, Canon 282, Canon 522	HP 205, Kodak 22, Epson 156, Canon 223, Canon 348, Canon 384, Canon 306, Canon 282, Canon 522	Canon 217, Canon 282, Canon 306, Canon 522	Canon 282 PLUS Canon 217	Canon ink sample, either Canon 217 or Canon 282
15	Canon 223, Canon 348, Canon 384	HP 205, Kodak 22, Epson 156, Canon 223, Canon 348, Canon 384, Canon 306, Canon 282, Canon 522	Canon 217, Canon 223, Canon 348, Canon 384, Canon 522	Canon 306, Canon 348 PLUS Canon 223, Canon 384	Canon ink sample, either Canon 348, Canon 223 or Canon 384

The results of the blind study discussed above were compared to the blind study answer key. As stated previously, the person preparing the blind study was not restricted to choosing ink samples for the fifteen unknowns that were included in the standard ink samples. In other words, the blind study was an open set and not a close set of unknown samples. Consequently, though the conclusions listed above focused on the ink standards used in this study, the actual results of the blind study may not necessarily be from those ink standards. However, in actuality, it was found that all of the sources of the unknown ink samples in the blind study were from the standard ink samples used in this study.

For the Unknown 01 ink sample, it was determined that the ink sample was an Epson ink sample, and that it was either an Epson 66 (T026), Epson 90 (T019), Epson 93 (T028), Epson 120 (S020187) or Epson 123 (T017) ink sample, though the Epson 33 (T003), Epson 60 (T007) and Epson 63 (S020189) ink samples could not be ruled out as the possible source. The answer key confirmed the identity of the Unknown 01 ink sample as being an Epson ink sample from the Epson T028 ink cartridge.

For the Unknown 02 ink sample, it was determined that the ink sample was a Canon ink sample, and that it was a Canon 492 (BCI-3eBk) ink sample. The answer key confirmed the identity of the Unknown 02 ink sample as being a Canon ink sample from the Canon BCI-3eBk ink cartridge.

For the Unknown 03 ink sample, it was determined that the ink sample was a Xerox ink sample, and that it was either a Xerox 13 (8R7994), Xerox 24 (8R7660) or Xerox 244 (M-Series) ink sample. The answer key confirmed the identity of the Unknown 03 ink sample as being a Xerox ink sample from the Xerox 8R7660 ink cartridge.

For the Unknown 04 ink sample, it was determined that the ink sample was a Canon ink sample, and that it was either a Canon 217 (BCI-6Bk) or Canon 522 (BCI-3ePBk) ink sample. The answer key confirmed the identity of the Unknown 04 ink sample as being a Canon ink sample from the Canon BCI-3ePBk ink cartridge.

For the Unknown 05 ink sample, it was determined that the ink sample was an Epson ink sample, and that it was either an Epson 66 (T026), Epson 90 (T019), Epson 93 (T028), Epson 120 (S020187) or Epson 123 (T017) ink sample, though the Epson 33 (T003), Epson 60 (T007) and Epson 63 (S020189) ink samples could not be ruled out as the possible source. The answer key confirmed the identity of the Unknown 05 ink sample as being an Epson ink sample from the Epson T007 ink cartridge.

For the Unknown 06 ink sample, it was determined that the ink sample was an Epson ink sample, and that it was an Epson 84 (T0321) ink sample. The answer key confirmed the identity of the Unknown 06 ink sample as being an Epson ink sample from the Epson T0321 ink cartridge.

For the Unknown 07 ink sample, it was determined that the ink sample was a Xerox ink sample, and that it was either a Xerox 13 (8R7994), Xerox 24 (8R7660) or Xerox 244 (M-Series) ink sample. The answer key confirmed the identity of the Unknown 07 ink sample as being a Xerox ink sample from the Xerox M-Series ink cartridge.

For the Unknown 08 ink sample, it was determined that the ink sample was a Canon ink sample, and that it was either a Canon 348 (BCI-21), Canon 384 (BCI-11) or Canon 223 (BCI-10) ink sample. The answer key confirmed the identity of the Unknown 08 ink sample as being a Canon ink sample from the Canon BCI-11 ink cartridge.

For the Unknown 09 ink sample, it was determined that the ink sample was a Canon ink sample, and that it was a Canon 402 (BCI-12) ink sample. The answer key confirmed the identity of the Unknown 09 ink sample as being a Canon ink sample from the Canon BCI-12 ink cartridge.

For the Unknown 10 ink sample, it was determined that the ink sample was a Canon ink sample, and that it was either a Canon 348 (BCI-21), Canon 384 (BCI-11) or Canon 223 (BCI-10) ink sample. The answer key confirmed the identity of the Unknown 10 ink sample as being a Canon ink sample from the Canon BCI-10 ink cartridge.

For the Unknown 11 ink sample, it was determined that the ink sample was an Okidata ink sample, and that it was an Okidata 04 (#52110001) ink sample. The answer key confirmed the identity of the Unknown 11 ink sample as being an Okidata ink sample from the Okidata #52110001 ink cartridge.

For the Unknown 12 ink sample, it was determined that the ink sample was a Canon ink sample, and that it was a Canon 402 (BCI-12) ink sample. The answer key confirmed the identity of the Unknown 12 ink sample as being a Canon ink sample from the Canon BCI-12 ink cartridge.

For the Unknown 13 ink sample, it was determined that the ink sample was a Xerox ink sample, and that it was either a Xerox 13 (8R7994), Xerox 24 (8R7660) or Xerox 244 (M-Series) ink sample. The answer key confirmed the identity of the Unknown 13 ink sample as being a Xerox ink sample from the Xerox 8R7994 ink cartridge.

For the Unknown 14 ink sample, it was determined that the ink sample was a Canon ink sample, and that it was either a Canon 217 (BCI-6Bk) or Canon 282 (BC-02)

ink sample. The answer key confirmed the identity of the Unknown 14 ink sample as being a Canon ink sample from the Canon BC-02 ink cartridge.

For the Unknown 15 ink sample, it was determined that the ink sample was a Canon ink sample, and that it was either a Canon 348 (BCI-21), Canon 384 (BCI-11) or Canon 223 (BCI-10) ink sample. The answer key confirmed the identity of the Unknown 15 ink sample as being a Canon ink sample from the Canon BCI-10 ink cartridge.

The fifteen unknown ink samples were all correctly identified based on the results of the four analytical methods and the established classification scheme. There were no misidentifications made with the blind study unknown ink samples, suggesting that the methods developed and used in this study were successful in identifying an unknown ink sample. Refer to Table 55 for a comparison between the experimental and actual identification for the fifteen unknown ink samples in the blind study.

Table 55: Comparison between the Experimental and Actual Identification for the Fifteen Unknown Ink Samples in the Blind Study

Unknown #	EXPERIMENTAL IDENTITY		ACTUAL IDENTITY		
	Manu.	Ink Cartridge(s)	Ink Sample Number	Manu.	Ink Cartridge(s)
01	Epson	T026, T019, T028, S020189, T017, T003, T007, S020187	95	Epson	T028
02	Canon	BCI-3eBk	496	Canon	BCI-3eBk
03	Xerox	8R7994, 8R7660, M-Series	28	Xerox	8R7660
04	Canon	BCI-6Bk, BCI-3ePBk	525	Canon	BCI-3ePBk
05	Epson	T026, T019, T028, S020189, T017, T003, T007, S020187	60	Epson	T007
06	Epson	T0321	86	Epson	T0321
07	Xerox	8R7994, 8R7660, M-Series	248	Xerox	M-Series
08	Canon	BCI-21, BCI-11, BCI-10	393	Canon	BCI-11
09	Canon	BCI-12	418	Canon	BCI-12
10	Canon	BCI-21, BCI-11, BCI-10	223	Canon	BCI-10
11	Okidata	52110001	09	Okidata	52110001
12	Canon	BCI-12	414	Canon	BCI-12
13	Xerox	8R7994, 8R7660, M-Series	16	Xerox	8R7994
14	Canon	BCI-6Bk, BC-02	282	Canon	BC-02
15	Canon	BCI-21, BCI-11, BCI-10	378	Canon	BCI-10

As exhibited by Table 55, all fifteen of the unknown ink samples were correctly identified using the developed classification scheme developed with the ink standards. Thus, the results of the blind study confirmed the usefulness of the classification scheme in distinguishing between the different ink cartridge types. When the blind study results were examined in more detail, some useful information on the effectiveness of the classification scheme was obtained. All fifteen unknown ink samples were correctly identified with respect to the specific manufacturer of the ink sample. The Unknown 01, Unknown 05 and Unknown 06 ink samples were correctly identified as Epson ink samples, the Unknown 02, Unknown 04, Unknown 08, Unknown 09, Unknown 10, Unknown 12, Unknown 14 and Unknown 15 ink samples were correctly identified as Canon ink samples, the Unknown 11 ink sample was correctly identified as an Okidata ink sample and the Unknown 3, Unknown 07 and Unknown 13 ink samples were correctly identified as Xerox ink samples.

In addition, five of the fifteen unknown ink samples were correctly identified to a single source of the ink sample. The Unknown 02 ink sample was identified as the Canon BCI-3eBk ink sample, the Unknown 06 ink sample was identified as the Epson T0321 ink sample, the Unknown 11 ink sample was identified as the Okidata #52110001 ink sample and the Unknown 09 and Unknown 12 ink samples were identified as the Canon BCI-12 ink samples. Eight of the remaining ten unknown ink samples could be placed into groups that contained ink samples with indistinguishable results with the four analytical methods used in this study. The Unknown 08, Unknown 10 and Unknown 15 ink samples were identified as the Canon 223, Canon 348 or Canon 384 ink samples, the Unknown 03, Unknown 07 and Unknown 13 ink samples were identified as the Xerox

13, Xerox 24 or Xerox 244 ink samples and the Unknown 01 and Unknown 05 ink samples were identified as the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 or Epson 123 ink samples. The Canon 223, Canon 348 and Canon 384 ink samples were indistinguishable from one another in this study, the Xerox 13, Xerox 24 and Xerox 244 ink samples were indistinguishable from one another in this study and the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink samples were indistinguishable from one another in this study. Since these ink standards were indistinguishable from the other members in the group, it could be concluded that these ink standards had a common ink formulation. Consequently, these eight unknown ink samples were in fact identified to a single ink formulation, though not necessarily to a single ink cartridge type. Therefore, thirteen of the fifteen unknown ink samples, or 87%, were identified to a single ink formulation using the established classification scheme.

For the remaining two unknown ink samples, namely the Unknown 04 and Unknown 14 ink samples, the possible sources of these unknown ink samples was narrowed down to two ink standards. For both of the unknown ink samples, the two possible ink standards had similar ink formulations and their results were similar on the analytical methods. For the Unknown 04 ink sample, the possible source of the unknown ink sample was concluded to be either the Canon 217 or Canon 522 ink samples. The Canon 217 and Canon 522 ink samples had indistinguishable results using the TLC, HPLC and Py-GC-MS methods of analysis. These two samples differed with respect to their results using the ATR FT-IR method of analysis. The Canon 217 and Canon 522 ATR spectra differed in peak maxima positions and additional peaks were found in the

Canon 522 ATR spectrum that were not found in the Canon 217 ATR spectrum. This was true for both the neat ink samples ATR spectra and for the ink on paper samples ATR spectra. The differences between the two Canon ink samples were slight, but the differences did exist, which should have allowed for these two ink standards to be differentiated from one another. The Unknown 04 ink on paper sample ATR spectrum had characteristics of both the Canon 217 and Canon 522 ink on paper samples ATR spectra, and as such both of these Canon ink samples were listed as the possible source for the Unknown 04 ink sample. The ink formulations, however, for the Canon 217 and Canon 522 ink samples were extremely similar, since the results from the other three analytical methods were indistinguishable between these two Canon ink samples.

For the Unknown 14 ink sample, the possible source of the unknown ink sample was concluded to be either the Canon 217 or Canon 282 ink samples. The Canon 217 and Canon 282 ink samples had indistinguishable results using the TLC, HPLC and ATR FT-IR methods of analysis. These two Canon ink samples differed on with respect to their results on the Py-GC-MS analysis, and in particular they differed in their neat ink sample pyrograms. The Canon 217 and Canon 282 neat ink sample pyrograms contained some common peaks and identified compounds, but there were also some peak and compound differences observed with these two neat ink standards. However, when the Canon 217 ink on paper sample pyrogram and the Canon 282 ink on paper sample pyrogram were compared, the Canon 217 and Canon 282 ink samples had indistinguishable results. The differences noted with the neat ink sample pyrograms were lost with the ink on paper sample pyrograms. Since the Unknown 14 ink sample was compared to the standard ink on paper sample pyrograms, and the Canon 217 and Canon

282 ink samples had indistinguishable ink on paper sample pyrograms, both Canon ink samples were included as the possible source for this unknown ink sample. The ink formulations, however, for the Canon 217 and Canon 282 ink samples were extremely similar, since the ink on paper sample pyrograms and the results from the other three analytical methods were indistinguishable between these two Canon ink samples.

For the non-extractable ink samples, the combination of analytical methods that resulted in the correct identification of the unknown ink sample was dependent on the ink cartridge being analyzed. In general, the HPLC, Py-GC-MS and ATR FT-IR methods provided the best discrimination between the non-extractable ink samples. For the Unknown 02 ink sample, the Canon 492 (BCI-3eBk) ink sample, the HPLC was the best method for the identification of this unknown ink sample, and the HPLC method was able to identify the single source for the Unknown 02 ink sample. The additional methods did not provide any additional information or discriminating ability for this particular unknown ink sample, but these methods were able to confirm the conclusions reached using the HPLC method. For the Unknown 03, Unknown 07 and Unknown 13 ink samples, namely the Xerox ink samples, the results of the Py-GC-MS analysis provided the strongest evidence for the source of these unknown ink samples. The Xerox ink on paper sample pyrograms contained the compound of Hexamethyl-Cyclotrisiloxane, as well as the ions for the compounds Decamethyl-Cyclopentasiloxane and Dodecamethyl-Cyclohexasiloxane, which were not found in any of the other ink samples in this study. Thus, the identification of Hexamethyl-Cyclotrisiloxane and the main ions for Decamethyl-Cyclopentasiloxane and Dodecamethyl-Cyclohexasiloxane in the Unknown 03, Unknown 07 and Unknown 13 ink on paper sample pyrograms allowed

for the identification of the source of these unknown ink samples. The results of the ATR FT-IR method confirmed the identification reached using the results of the Py-GC-MS method, whereas the results of the HPLC method did not provide any information or discriminating ability for the Unknown 03, Unknown 07 and Unknown 13 ink samples. For the Unknown 06 ink sample, the Epson 84 (T0321) ink sample, it was a combination of the Py-GC-MS and ATR FT-IR methods that allowed for its identification, with the latter method being the most discriminating. The results of the HPLC method for this unknown ink sample did not provide any assistance in identifying the source of the Unknown 06 ink sample or in confirming its identity.

With regards to the extractable ink samples, the method that visually demonstrated the differences between the black extractable ink samples the best was the TLC method. Though the Py-GC-MS method had the highest discriminating ability of all four analytical methods, the extractable ink on paper sample pyrograms were influenced more by the paper matrix than the non-extractable ink on paper sample pyrograms. Consequently the interpretations of the extractable ink on paper sample pyrograms were more difficult than the interpretation of the extractable ink sample TLC plates. In general, the determination of the unknown extractable ink sample could be accomplished by using the combination of either the TLC, Py-GC-MS and ATR FT-IR set of methods or the HPLC, Py-GC-MS and ATR FT-IR set of methods. As discussed previously, due to its ease of analysis, high discriminating ability and relative low cost, the TLC method should be the preferred method over the HPLC method. However, the HPLC method did provide some useful information and it should not be discounted entirely for the analysis of the extractable ink samples.

For the Unknown 01, Unknown 05, Unknown 08, Unknown 10, Unknown 11 and Unknown 15 ink samples, the results of the TLC analysis was sufficient to allow for the identification of the source of these unknown ink samples to be determined. The TLC pattern for the Unknown 01 and Unknown 05 ink samples were unique to the Epson 33, Epson 60, Epson 63, Epson 66, Epson 90, Epson 93, Epson 120 and Epson 123 ink standards, the TLC pattern for the Unknown 08, Unknown 10 and Unknown 15 ink samples were unique to the Canon 223, Canon 348 and Canon 384 ink standards and the TLC pattern for the Unknown 11 ink sample was unique to the Okidata 04 ink standard. The additional methods did not provide any further information or discriminating ability, but were able to confirm the identification made with the results of the TLC analysis. For the Unknown 09 and Unknown 12 ink samples, the Canon 402 (BCI-12) ink sample, a combination of methods, and in particular the TLC and ATR FT-IR combination of methods, was needed to determine the identity of these unknown ink samples. The results of the TLC analysis identified the possible sources of the Unknown 09 and Unknown 12 ink samples to four different types of ink samples, while the results of the ATR FT-IR analysis narrowed down the possibilities and allowed for the identification of a single source for these unknown ink samples. For the Unknown 14 ink sample, the Canon 282 (BC-02) ink sample, again a combination of analytical methods was necessary in order for an identification to be made. In this case, the combination of the TLC, HPLC, ATR FT-IR and Py-GC-MS methods was needed to differentiate and identify the Unknown 14 ink sample to a group of two Canon ink samples, namely the Canon 217 and Canon 282 ink samples. The Canon 217 and Canon 282 TLC pattern, HPLC chromatogram, ink on paper sample ATR FT-IR spectra and ink on paper sample

pyrograms were indistinguishable from one another, which resulted in the source of the Unknown 14 ink sample being identified as either the Canon 217 ink sample or the Canon 282 ink sample. For the Unknown 04 ink sample, the Canon 522 (BCI-3ePBk) ink sample, again a combination of analytical methods was necessary in order for an identification to be made. In this case, the combination of the TLC, HPLC, ATR FT-IR and Py-GC-MS methods was needed to differentiate and identify the Unknown 04 ink sample to a group of two Canon ink samples, namely the Canon 217 and Canon 522 ink samples. The Canon 217 and Canon 522 TLC pattern, HPLC chromatogram and ink on paper sample pyrograms were indistinguishable from one another, however these two Canon ink samples had slightly different ink on paper samples ATR spectra, which should have allowed these two Canon ink samples be differentiated from one another. However, the Unknown 04 ink on paper ATR spectrum had characteristics in common with both the Canon 217 and Canon 522 ink on paper samples ATR spectra, which did not allow this unknown ink sample to be differentiated from one or the other of the Canon ink samples. As a result, the source of the Unknown 14 ink sample was identified as either the Canon 217 ink sample or the Canon 522 ink sample.

Therefore, the identification of an unknown ink sample, whether it was an extractable ink sample or a non-extractable ink sample, could be accomplished using the analytical methods used in this study. The specific analytical method or combination of analytical methods that worked the best was dependent on the type of ink sample of the unknown ink sample. In general, for the non-extractable ink samples the HPLC, Py-GC-MS and ATR FT-IR methods allowed for the differentiation and identification of an unknown ink sample, whereas for the extractable ink samples the TLC, Py-GC-MS

and ATR FT-IR methods allowed for the differentiation and identification of an unknown ink sample, though the HPLC method did provide some useful information for the extractable ink samples. In the instances where the identification of an unknown ink sample could be accomplished through the use of a single method, a secondary method should be employed to confirm the results of the primary method.

E. Plain Paper Optimized Printing (P-POP) Technology

For one of the Canon ink cartridges, specifically the Canon BC-60 ink cartridge, there were two liquids present in the cartridge. One of the liquids was a black ink that was used to create a printed document, while the other liquid was a slightly yellow liquid with an unknown function. An investigation into the Canon BC-60 cartridge provided some information on the purpose of this slightly yellow liquid.

The Canon BC-60 ink cartridge was part of Canon's innovated Plain Paper Optimized Printing (P-POP) process. One problem with traditionally produced inkjet printed documents was the tendency of the ink to bleed into the paper fibers, which reduced the sharpness of the printed document. The purpose behind Canon's P-POP technology was to improve both the print quality of both the black ink printing and the color photographic printing on regular plain paper. This increased print quality was achieved through the use of an Ink Optimizer. (Business Wire, 1997)

The Ink Optimizer, also referred to as a water resistant fortifying agent, primed the paper by placing a thin layer of liquid coating over the print area. The black and/or colored ink was then placed on top of the Ink Optimizer on the paper to create the final document. The interaction of the black and/or colored ink with the Ink Optimizer caused

a chemical reaction to occur, which resulted in the rapid setting of the dye on the paper. This process prevented the ink from penetrating deep into the paper fibers, which increased the print quality and overall appearance of the printed document. This process eliminated the effects of feathering and bleeding, as well as to make the document water resistant. (Canon Marketing Malaysia, 2010; Business Wire, 1997) The Plain Paper Optimized Printing (P-POP) process is illustrated in Figure 206.

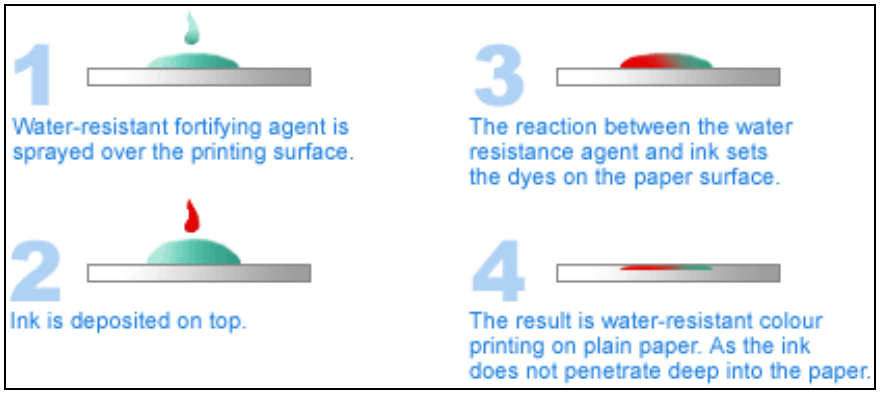

Figure 206: The Plain Paper Optimized Printing (P-POP) process.
(Adapted from Canon Marketing Malaysia; 2010
www.canon.com.my/section/inkjetPrinter/technology/imageoptimizer.jsp)

The Ink Optimizer was contained in a separate chamber on the Canon ink printhead, which was what was observed with the slightly yellow liquid found in the Canon BC-60 ink cartridge. Thus, it could be concluded that the slightly yellow liquid obtained from the Canon BC-60 ink cartridge was the Ink Optimizer described in the P-POP process. This conclusion was verified by the fact that the P-POP technology was offered on the BJC-7000 printer, which was the printer for which the Canon BC-60 ink cartridge was designed.

The Material Safety Data Sheet (MSDS) was located for the Canon BC-60 ink cartridge, which contained information on the black liquid and the slightly yellow liquid. According to the MSDS information provided by Canon, the composition of the slightly

yellow liquid was 5-10% Glycerin, 2-6% Diethylene glycol and 65-85% Water, with a pH value of 6.7-7.7. As a comparison, the black liquid portion of the Canon BC-60 ink cartridge had a composition of 5-10% Glycerin, 2-6% Thiodiglycol, 2-6% Isopropyl alcohol, 5-10% Ammonia derivative and 65-85% Water, with a pH value of 9.5-10.5. The MSDS information provided by Canon did not list a specific black dye and/or pigment for this ink cartridge, unless the Ammonia derivative, which was listed as confidential in the MSDS information, referred to the dye and/or pigment component of the Canon BC-60 ink cartridge. Thus, the MSDS provided preliminary information on the make-up of the ink sample, but due to proprietary considerations it may not contain all of the components included in the ink formulations.

The P-POP technology was important to the discussion of this project for several reasons. Firstly, the Ink Optimizer would be mixed with all of the printing done with the Canon BC-60 ink cartridge. Thus, a black printed document would, in actuality, be a mixture of the black ink and the slightly yellow liquid (Ink Optimizer). Since a forensic analyst may not automatically assume that a black printed document was composed of a mixture of liquids, the results of the analysis may be skewed. The properties of the Ink Optimizer, the slightly yellow liquid, would influence the analytical results of the Canon BC-60 black ink sample, and as such, it is imperative that both samples separately and together be examined as reference samples.

Secondly, one of the purposes of the Ink Optimizer was to make the printed document water resistant. While this is an advantage for the home user, it could cause serious problems for the forensic analyst. The water resistant feature of the P-POP process would inhibit the extraction of the black ink from the paper. Consequently, the

classification of a non-extractable ink sample would be given to a black ink that, by itself, was an extractable ink. As a result, the identification of this black ink sample would be difficult to accomplish since the forensic analyst would not be starting from the same point. Thus it is necessary for the classification results to include information on the Canon BC-60 black ink sample and slightly yellow liquid as separate components and as a mixture. The analyst must always be cognizant of the fact that the black ink printed document could be a pure black ink or a mixture of substances, either a combination of colored ink samples to form the black appearance or the mixture of a black ink with an Ink Optimizer.

The water resistant nature of this process may also be problematic in other situations. The claim by Canon was that the P-POP process made the document 100% water resistant. This may not be the case. In addition, at low levels of the Ink Optimizer in the ink cartridge, the precoating of the paper may not be complete and hence the water resistant function of the printed document may also not be complete. Having some of the black ink extract from a document that was supposed to have undergone a process to prevent extraction, may lead to misclassification and misidentification of the ink sample. Furthermore, if only part of a document extracts from the paper, this may lead the forensic analyst to incorrectly conclude the presence of more than one type of ink sample, and hence conclude that the document was altered, when in fact it was not. Thus, it is important that the forensic examiner test the extractable and non-extractable ink samples from the suspect document against the Canon BC-60 black ink sample and slightly yellow liquid separately and as a mixture in order to prevent possible misidentifications and incorrect conclusions.

CHAPTER IX. CONCLUSIONS

This research was able to demonstrate the effectiveness of the chromatographic and spectrophotometric analytical methods in the evaluation and classification of black inkjet computer printer inks. Through the use of Thin Layer Chromatography (TLC), High Performance Liquid Chromatography (HPLC), Pyrolysis Gas Chromatography-Mass Spectrometry (Py-GC-MS) and Attenuated Total Reflection Fourier Transform Infrared Spectroscopy (ATR FT-IR) methods, the black inkjet computer printer inks of the various manufacturers were able to be differentiated from one another. In addition, not only was it possible to differentiate between the various ink manufacturers, but it was also possible to distinguish between some of the ink cartridges within a specific manufacturer. Based on the results of the four analytical methods, a classification scheme was developed for the analysis, discrimination and identification of an unknown ink sample.

The analytical method, or combination of methods, that proved to be the most effective at differentiating between the black inkjet ink samples was dependent on whether the black inkjet ink sample was an extractable ink sample or a non-extractable ink sample. For the extractable ink samples, it was found that the twenty-three ink samples could be placed into fourteen groups based on the results of the TLC, Py-GC-MS and ATR FT-IR set of methods or the HPLC, Py-GC-MS and ATR FT-IR set of methods. More importantly, of the fourteen groups that were created, twelve of the groups contained a single ink cartridge type. Thus, it was possible to not only differentiate between the extractable ink samples using the combination of the TLC, Py-GC-MS and ATR FT-IR methods or the combination of the HPLC, Py-GC-MS and ATR FT-IR

methods, but it was also possible to determine the single source of an unknown extractable ink sample. The remaining two groups contained a total of eleven ink samples, with eight ink samples found in one group and three ink samples found in the second group. The first group contained the Epson 33 (T003), Epson 60 (T007), Epson 63 (S020189), Epson 66 (T026), Epson 90 (T019), Epson 93 (T028), Epson 120 (S020187) and Epson 123 (T017) ink standards, while the second group contained the Canon 223 (BCI-10), Canon 348 (BCI-21) and Canon 384 (BCI-11) ink standards. The ink formulations for these ink standards were similar for each member of the group, and they could not be distinguished from the other members of their respective groups using the analytical methods in this study. However, even though these ink samples could not be distinguished from the other members of the same group, they could be differentiated from the other extractable ink samples in this study.

For the non-extractable ink samples, it was found that the twelve ink samples could be placed into eight groups based on the results of the pairings of the HPLC and Py-GC-MS methods and the pairings of the HPLC and ATR FT-IR methods. More importantly, of the eight groups that were created, six of the groups contained a single ink cartridge type. Thus, it was possible to not only differentiate between the non-extractable ink samples using the pairings of the HPLC and Py-GC-MS methods or the pairings of the HPLC and ATR FT-IR methods, but it was also possible to determine the single source of an unknown non-extractable ink sample. The remaining two groups contained a total of six ink samples, with three ink samples found in each group. The first group contained the Hewlett Packard 198 (#29), Hewlett Packard 199 (#56) and Hewlett Packard 200 (#27) ink standards, while the second group contained the Xerox 13

(8R7994), Xerox 24 (8R7660) and Xerox 244 (M-Series) ink standards. The ink formulations for these ink standards were similar for each member of the group, and they could not be distinguished from the other members of their respective groups using the analytical methods in this study. However, even though these ink samples could not be distinguished from the other members of the same group, they could be differentiated from the other non-extractable ink samples in this study. What was interesting to note was that the Hewlett Packard 201 (#45) ink sample could be differentiated from the other Hewlett Packard non-extractable ink samples based on the results of the HPLC analysis. For the other three analytical methods used in this study, the Hewlett Packard 201 (#45) ink sample could not be differentiated from the other Hewlett Packard non-extractable ink samples.

For the analysis of the black inkjet ink samples, some characteristics were noted that warrant mentioning. The TLC patterns for the Okidata 04 (#52110001), Epson 30 (T013), Epson 33 (T003), Epson 60 (T007), Epson 63 (S020189), Epson 66 (T026), Epson 90 (T019), Epson 93 (T028), Epson 120 (S020187) and Epson 123 (T017) ink samples had spots that were purple, pink and yellow in color, and in some instances for the Okidata 04 (#52110001) ink sample, some spots that were orange in color. The brightness of these TLC colors was a distinguishing feature of these ink standards. The colors observed on the TLC plate, on the other hand, for the Canon, Hewlett Packard and Kodak extractable ink samples tended to be brown and dark purple in color. Additionally, the ink on paper sample ATR FT-IR spectrum for the Epson 84 (T0321) non-extractable ink sample had a different appearance to the ink on paper sample ATR FT-IR spectra for the other non-extractable ink samples. This was particularly true for

the group of three peaks in the region between approximately 1150 cm^{-1} and 900 cm^{-1}. These differences could be attributed to the fact that the ink formulations for the Okidata and Epson ink samples were designed for use in a piezoelectric inkjet device, whereas the ink formulations for the Canon, Hewlett Packard, Xerox and Kodak ink samples were designed for use in a thermal inkjet device. Thus, it was expected that there would be differences in the ink formulations, and hence differences in the analytical results, for these two groups of ink standards due to the different inkjet technologies used by these manufacturers. Additionally, the difficulty and expense in creating piezoelectric ink formulations, over the ease and cost of creating thermal ink formulations, would result in the piezoelectric inkjet manufacturer in restricting the variations in their ink formulations. This was what was observed for the Epson ink samples. Eleven different ink cartridges were donated from Epson, but there were only four different ink formulations found within these ink cartridges. Canon, on the other hand, a thermal inkjet manufacturer, donated twelve different ink cartridges and it was found that there were eight different ink formulations present within these ink cartridges. Thus, the decrease discrimination in the Epson ink formulations could be due, in part, to the fact that these ink samples were designed to work in a piezoelectric inkjet device rather than in a thermal inkjet device.

The classification scheme that was developed based on the results of the ink standards was tested using a blind study. Fifteen unknown ink samples were prepared by an independent third party, and each unknown ink sample was analyzed on all four analytical methods. The identity for each of the fifteen unknown ink samples was determined, and it was found that the unknown ink samples were correctly identified in all fifteen instances. There was a 100% success rate for the identification of the

manufacturer of an unknown ink sample using the established classification scheme. In addition, the classification scheme was able to identify a single ink formulation in thirteen of the fifteen unknown ink samples, or in 87% of the unknown ink samples. Of those thirteen unknown ink samples, the single ink formulation identified was associated with a single ink cartridge type in five of the unknown ink samples, whereas for eight of the thirteen unknown ink samples, the single ink formulation was associated with a group of ink cartridges that had indistinguishable results with all four analytical methods. In the remaining two unknown ink samples, the classification scheme was able to narrow down the possible sources of the specific unknown ink sample to two ink standards. For one of these unknown ink samples, the two ink standards had indistinguishable results with the ink on paper samples on all four analytical methods, though differences were noted for one analytical method with the neat ink standard. Thus, since the unknown ink samples and the standard ink samples were compared based on their ink on paper results with the four analytical methods, these two ink standards could not be distinguished in this study. For the last unknown ink sample, the two ink standards had indistinguishable results with three of the four analytical methods, and for one analytical method, in this case the ATR FT-IR method, differences were noted between the two standards. However, the unknown ink sample in this situation had characteristics of both ink standards ink on paper ATR spectra, and hence the two standards could not be excluded as the possible source. It could be concluded then, that the classification scheme developed using the standard ink samples was effective in the differentiation and identification of an unknown ink sample.

Computerized search libraries were also created and tested in this research study. The results of the ATR FT-IR search libraries demonstrated the ability of the search library to correctly identify an ink sample. It was found that the OMNIC Neat Ink Standard ATR library and OMNIC Slide Subtracted Neat Ink Standard ATR library were more effective than the Spectral ID Neat Ink Standard ATR library and Spectral ID Slide Subtracted Neat Ink Standard ATR library in the identification of the standard ink samples. Overall, for twenty-five of the thirty-five ink standards, the OMNIC ATR search libraries were more effective in correctly identifying the ink sample, whereas for nine of the thirty-five ink standards, the Spectral ID ATR search libraries were more effective in correctly identifying the ink sample. There were no differences between the results of the OMNIC and Spectral ID ATR search libraries for one ink sample, namely the Canon 492 (BCI-3eBk) ink sample. Additionally, there was no pattern for which ink sample, extractable or non-extractable, was more effective on one type of search library over the other. Additionally, the overall success rate was higher for the extractable ink samples at 70% than for the non-extractable ink samples at 49% using the OMNIC ATR search libraries. The success rate for the extractable ink samples dropped to 29% and the success rate for the non-extractable ink samples dropped to 34% using the Spectral ID ATR search libraries.

The results of the Spectral ID pyrolysis search libraries demonstrated the ability of this library to identify the non-extractable ink samples. However, the pyrolysis search library was not able to reliably identify the source of an extractable ink sample. The Xerox, Epson and Hewlett Packard non-extractable ink samples, which were eight of the twelve non-extractable ink samples used in this study, had a success rate of 68% using

the appropriate Spectral ID Neat Ink Standard Pyrolysis library. The success rate for the extractable ink samples, using the same search library, was found to be only 18%. The success rate for the extractable ink samples increased to 27% when the appropriate Spectral ID Neat Ink Standard Pyrolysis library with D-Allose mask was used, which was a 50% increase over the first standard library. The success rate for the Xerox, Epson and Hewlett Packard non-extractable ink samples, however, decreased slightly to 64% using the appropriate Spectral ID Neat Ink Standard Pyrolysis library with D-Allose mask.

The results of the ATR and Pyrolysis search libraries were disappointing, but part of the problem can be attributed to the way the computerized search libraries operate and to the presence of residual paper peaks in the subtracted spectra and/or pyrograms. Some of the search library programs compare data based on the strongest peaks present in the spectra and/or chromatograms, while other programs compare all the data points between an unknown and a library standard. In each situation, the presence of extraneous peaks, increased noise or an incomplete background subtraction may not be taken into account and therefore may skew the results of the library search. Consequently, if the unknown sample is less than ideal, an incorrect library match can occur. This was what was observed with the library searches in this study. The effect of the paper matrix on the library results, even though the paper sample was subtracted from the ink on paper sample, was significant, especially for the pyrolysis data. By minimizing the peaks due to the paper sample, and thereby increasing the peaks due to the ink sample, the success of the ATR and pyrolysis search libraries in identifying both the non-extractable and the extractable ink samples would increase.

In summary, it was found that the analytical methods used in this study were effective in distinguishing between the different black inkjet ink samples. Depending on the ink sample type, extractable versus non-extractable, specific analytical methods were more effective than other analytical methods in discriminating between the ink samples. In general, for the analysis of the non-extractable ink samples, the use of the pairings of the HPLC and Py-GC-MS methods and the pairings of the HPLC and ATR FT-IR methods allowed for the highest degree of discrimination between the non-extractable ink samples. Whereas, for the extractible ink samples, it was found that the use of the TLC, Py-GC-MS and ATR FT-IR set of methods and the HPLC, Py-GC-MS and ATR FT-IR set of methods allowed for the highest degree of discrimination between the extractable ink samples. The classification scheme that was developed for the analysis of black inkjet ink samples was effective in the identification of an unknown ink sample. For the blind study, 100% of the unknown ink samples were correctly identified by their manufacturer, and 87% of the unknown ink samples were identified to a single ink formulation, though not necessarily to a single ink cartridge. In the remaining 17%, the classification scheme was able to narrow down the potential sources of the unknown ink sample, which had similar but not identical ink formulation. Furthermore, it was possible to create computerize search libraries to assist in the identification of an unknown ink sample, though these libraries needed some refinement before they could reach the same success rate as the manual examination of the unknown ink sample.

CHAPTER X. CONTRIBUTIONS TO THE KNOWLEDGE

This research contributed to the body of knowledge pertaining to the analysis of questioned documents and in particular to the forensic analysis of ink samples. The analysis of black inkjet computer printer inks by the four analytical methods resulted in the production of data, and more importantly in the establishment of a classification scheme that could aid the forensic scientist in the examination, identification and discrimination of the different inkjet computer generated documents they receive. This classification scheme was the first step in the analysis of black inkjet computer printer inks. Before any attempt at individualization or dating of the black inkjet ink samples can be started, it was important to first establish if, and how, the various inkjet computer ink manufacturers differ from one another.

The methods developed for the analysis of the black computer printer inks using Thin Layer Chromatography, High Performance Liquid Chromatography, Pyrolysis Gas Chromatography-Mass Spectrometry and Attenuated Total Reflection Fourier Transform Infrared Spectroscopy would be of value to forensic analysts and to future researchers. This research had demonstrated that it was possible to differentiate among the various inkjet computer printer ink manufacturers, and in some cases to distinguish between ink cartridges of a single manufacturer. This information can be a valuable tool to the forensic examiner who is trying to determine the authenticity of a questioned document or to identify the possible source of a written document. This research adds to the tools available to the forensic document examiner and fills a void in the analysis of inkjet computer printer generated documents.

CHAPTER XI. FUTURE CONSIDERATIONS

The results of this research provided a method for the classification of black inkjet ink samples. During the course of this research, and in the analysis of the data, some future areas of research have been identified. The results of the Pyrolysis Gas Chromatography-Mass Spectrometry method were useful for the analysis of the non-extractable ink samples, but it was not as useful for the analysis of the extractable ink samples. For the extractable ink samples, the effect of the paper matrix was more pronounced and interfered with the identification of these types of ink samples. One method that could be explored to combat the paper issue would be to analyze the extracted ink samples on the pyroprobe directly, thus eliminating the paper matrix completely. Instead of using a coil pyroprobe for introducing the sample into the pyrolysis unit, the ribbon pyroprobe could be used, which would allow for the direct sampling of the ink sample extract into the system. This method would, in theory, improve the results of the extractable ink samples, however the non-extractable ink samples, since they do not extract from the paper matrix, would not be able to be analyzed using this method. Another approach to minimize the effects of the paper matrix in the analysis of the ink on paper samples would be to do a step analysis of the ink samples. By gradually increasing the pyrolysis temperature, different components of the ink on paper sample would pyrolyze at the different temperatures, potentially allowing for the ink sample pyrolysis peaks to be separated from the paper pyrolysis peaks. An added benefit for improving the identification of the ink peaks from the ink on paper samples would be in increasing the discriminating ability of the computerized search library.

Another area of future research would focus on improving the discriminating ability of the High Performance Liquid Chromatography (HPLC) method of analysis. The HPLC diode array detector was set up to monitor five wavelengths during the sample analysis. In this study, even though the detector was set up to monitor five wavelengths, only one wavelength, namely the 236 nm wavelength, was used for the comparison. Increased discrimination may be possible if the other wavelengths were analyzed and the results compared between the different manufacturers. As stated previously, the 236 nm wavelength was selected due to the fact that it allowed for the greatest number of peaks to be identified within the thirty-five different ink cartridges. By comparing the other four wavelengths, and in particular the combination or ratio of the peaks identified by the five wavelengths, further discrimination between the thirty-five ink cartridges may be possible. Additionally, the full spectrum of each standard ink sample was recorded during the sample analysis. The full spectrum of each ink sample may provide additional information that would allow for better discrimination between the samples. Finally, adding a mass spectrometer to the HPLC instrument would allow for the identity of each peak in the sample to be identified, which may allow for the samples with similar HPLC chromatograms to be distinguished from one another.

One of the issues with the High Performance Liquid Chromatography (HPLC) method of analysis was the reproducibility of the results between the replicate ink samples. The results of the HPLC analysis can be effected by the ambient temperature. A difference in the ambient temperature and the column temperature could cause changes in the retention time of compounds, which could lead to misidentifications. Thus, the use of a column oven, which can regulate and maintain the temperature of the HPLC column,

can help minimize differences in retention times, thereby increasing the reproducibility of this method. Controlling the concentration of the extracted ink sample is another way to increase the reproducibility of the HPLC results between the replicate ink samples. If the concentration of the extracted ink is too low, then the detector response will be low and the peaks present in the HPLC chromatogram may not be identified, even though they are present in the ink sample. Analyzing the extracted ink sample on a UV-vis Spectrophotometer using a micro-cell cuvette would allow for the approximation of the concentration of the extracted ink sample prior to the HPLC analysis. By monitoring the concentration of the extracted ink samples, it will be possible to ensure that the concentrations run on the HPLC instrument would be sufficient to allow for the detection of the peaks present in the ink sample. This would, in turn, increase the reproducibility of the ink sample HPLC results, as well as to increase the discriminating ability of the HPLC method. The issue of sample concentration is also critically important in the Thin Layer Chromatography (TLC) method. The results of the TLC analysis are directly related to the amount of ink sample spotted on the TLC plate. Either too little sample or too much sample can skew the results of the analysis. As with HPLC analysis, analyzing the extracted ink sample on a UV-vis Spectrophotometer using a micro-cell cuvette prior to the TLC analysis would allow for the approximation of the concentration of the extracted ink sample, and hence would allow for the proper concentration and/or amount of ink sample to be spotted on the TLC plate to optimize the results.

The results of the TLC analysis could be further examined to provide some useful, and potentially discriminating, information. The colored spots observed on the TLC plate could be removed from the TLC plate and analyzed using Fourier Transform Infrared

Spectrophotometry (FT-IR). Additionally, the colored spots observed on the TLC plate could be analyzed directly on the TLC plate using Attenuated Total Reflection Fourier Transform Infrared Spectroscopy (ATR FT-IR). Some, if not all, of these colored spots may be the dyes and/or pigments used in the ink composition, and the analysis of these spots by FT-IR analysis or by ATR FT-IR analysis may allow for their identification. Thus, the use of the FT-IR method or ATR FT-IR method would allow for additional information of the different ink cartridges to be collected, thereby complementing the results obtained with the TLC analysis.

The classification scheme developed in this study was based on the analysis of the ink samples from six manufacturers of black inkjet ink cartridges. This classification scheme needs to be expanded to the analysis of other black inkjet ink manufacturers, for example Lexmark and Brother, as well as to the analysis of the black inkjet ink refill kits. By incorporating these ink samples into the classification scheme, it would increase its usefulness to law enforcement agencies. This classification scheme also needs to be expanded to the analysis of colored inkjet computer printer ink samples. The methods used to analyze the black inkjet computer printer ink samples should be, and can be, applied to the analysis of the colored inkjet computer printer ink samples.

The extraction solvent traditionally used for the extraction of pen ink from paper has been pyridine. As stated in this study, pyridine was not selected as an extraction solvent for the extraction of the black inkjet ink samples from the paper due to its known health hazards. This was also fortunate as pyridine was a component of some of the black inkjet ink samples, thus, the use of pyridine as the extraction solvent would have had the potential of adding unintended solvent contamination to the ink samples,

hindering their identification. The problem, however, is that pyridine has been shown to be effective at extracting pen ink from paper, and in the current study approximately a third of the black inkjet ink samples did not extract from the paper. One of the stated advantages of using pyridine as an extraction solvent was the fact that it is a polar substance. However, ethanol and water, the components of the extraction solvent used in this study, are also polar, with water having the highest polarity index of the three substances. The polarity of the extraction solvent could not then be the determining factor on the effectiveness of extracting the ink from the paper, since the 50:50 mixture of ethanol and distilled water would have a higher polarity than pyridine. In addition, during the extraction solvent study, methanol was tested for its effectiveness as an extraction solvent, and it was found to be less effective at extracting the black inkjet ink samples from the paper than the 50:50 mixture of ethanol and distilled water. This was noteworthy due to the fact that methanol has a polarity index of 6.6, which is higher than the polarity index of pyridine at 5.3. The use of pyridine as an extraction solvent should be tested for the black inkjet ink samples to determine if it is more effective at extracting the black inkjet ink samples from the paper, especially with regards to the ink samples that have shown to be non-extractable using the extraction solvent of the 50:50 mixture of ethanol and distilled water. If pyridine shows to be a better extraction solvent then it should be used and the presence of pyridine in a pyrogram would then not be used as a discriminating feature of some of the inkjet ink samples. However, it should be noted that the fact that a black inkjet ink sample did not separate from the paper was not necessarily a negative characteristic. Whether or not a black inkjet ink sample extracts from the paper using the extraction solvent, whether it is the 50:50 mixture of ethanol and

distilled water, pyridine or some other extraction solvent, is a discriminating feature that can be used to differentiate between the black inkjet ink samples. Sometimes a negative result is as useful as a positive result, and can provide exclusionary and identifying information.

The ATR FT-IR data in this study, both the standard neat ink samples ATR spectra and the ink on paper samples ATR spectra, were collected using a resolution of 8 cm^{-1}. The search libraries that were created using the OMNIC and Spectral ID software were based on this ATR FT-IR data with resolutions of 8 cm^{-1}. Since the search libraries and the dissertation ink on paper samples were collected with the same resolution, that is the neat ink standards and the ink on paper samples were collected using the same collection parameters, the results of the library searches in this study are valid. The problem, however, is that commercial libraries are based on sample collection parameters with resolutions of 4 cm^{-1}. In order for the ATR FT-IR data collected in this study to be comparable to commercially available libraries, the samples need to be recollected using a resolution of 4 cm^{-1}. Additionally, for the search libraries created in this study using the OMNIC and Spectral ID software to be valid for use by other laboratories and in other studies, they should be recreated using neat ink standard ATR spectra that were collected using a resolution of 4 cm^{-1}.

The analysis of the contents of the Canon BC-60 ink cartridge also needs to be further investigated. The black ink and the slightly yellow liquid of this ink cartridge were analyzed separately using all four analytical methods. However, a mixture of these two substances must also be examined using all four analytical methods. This is especially true for the two ink samples to be analyzed together as an ink on paper sample,

as according to Canon there is a chemical reaction that occurs when these two substances interact on the paper matrix that might produce results on the four analytical methods that are different from the additive results of each component separately. The results for the analysis of the mixture must then be compared to the results obtained by the individual components of the mixture in order for the differences between the two sets of data to be identified. Since it is possible for the forensic analyst to encounter the black ink and the slightly yellow liquid as both individual samples and mixtures, they must be analyzed as both individual samples and as a mixture, and the results of both sets of analysis be included in the classification scheme.

A final area that should be explored further is the statistical evaluation of the results of the analysis of the black ink samples on all four analytical methods. The results of the four methods allowed for the ink samples to be differentiated from one another. The application of statistical methods to these results would make the conclusions more objective. Additionally, though the results of the blind study are valid, the use of statistics in the classification of an unknown ink sample would provide some independent and impartial verification to the results. The statistical methods that appear to be most applicable for the analysis of the results of the four analytical methods are principal component analysis and cluster analysis, though other statistical methods may be found to be more effective at analyzing the results and differentiating between the black inkjet ink samples.

APPENDIX A:

Structures of Common Dyes and Pigments Used in Inkjet Inks.

Information on the common dyes and pigments used in the formulation of inkjet computer printer inks are included below. When available, the structures of these common dyes and pigments are also included.

Black Dyes/Pigments:

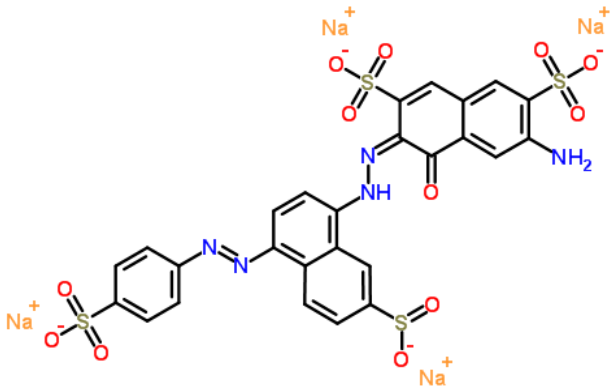

Figure 207: Structure of Food Black 2. (Adapted from www.ChemSpider.com)

Food Black 2
Molecular Formula: $C_{26}H_{15}N_5Na_4O_{12}S_4$
Molecular Weight: 809.64 g/mol
Synonyms: C.I. Food Black 2; 2,7-Naphthalenedisulfonic acid, 6-amino-4-hydroxy-3-((7-sulfo-4-((sulfophenyl)azo)-1-naphthalenyl-)azo)-, tetrasodium salt; CI 27755; Tetrasodium 6-amino-4-hydroxy-3-((7-sulfo-4-((4-sulfophenyl)azo)-1-naphthalen-yl)azo-2,7-naphthalenedisulfonate)
Referenced from: www.ChemSpider.com

Carbon Black
CAS Number: 1333-86-4
Molecular Formula: C
Molecular Weight: 12 g/mol
Synonyms: Acetylene Black; Channel Black; Furnace Black; Gas Black; Lampblack; Thermal Black
Referenced from: www.carbon-black.org

Blue Dyes/Pigments:

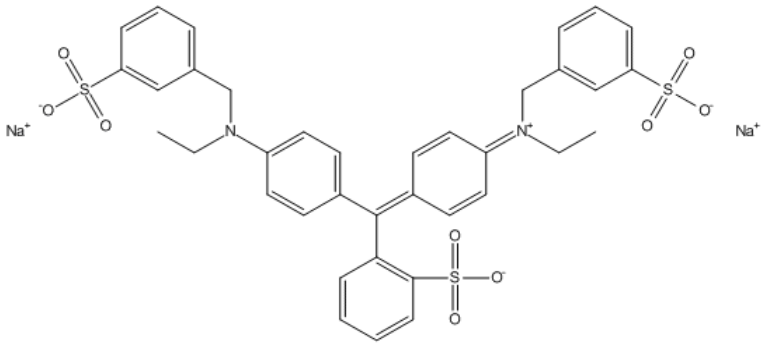

Figure 208: Structure of Acid Blue 9. (Adapted from www.ChemBioFinder.com)

Acid Blue 9
CAS Number: 3844-45-9
Molecular Formula: $C_{37}H_{34}N_2Na_2O_9S_3$
Molecular Weight: 792.85 g/mol
Synonyms: CI Food Blue 2; ABCOL Blue NB; Alphazurine FG; Brilliant Blue E; Brilliant Blue FCF; CI 42090; CI Acid Blue 9; Benzenemethanaminium, N-ethyl-N-[4-[[4-[ethyl[(3-sulfophenyl)methyl]amino]phenyl](2-sulfophenyl)methylene]-2,5-cyclohexadien-1-ylidene]-3-sulfo-, inner salt, diammonium salt; Bis[4-(N-ethyl-N-3-sulfophenylmethyl)aminophenyl]phenylmethylium disodium salt; FD&C Blue No. 1
Referenced from: www.ChemBioFinder.com

CI Direct Blue 199
CAS Number: 12222-04-7
Synonyms: Direct Blue 199; Direct Fast Blue FBL; C.I. 74190; Direct TURQ Blue FBL; Direct turquoise blue FBL; C.I. Direct Blue 199; Direct blue 199 (C.I. 74190); Fast Turquoise Blue FBL
Reference from: www.ChemicalBook.com

Red Dyes/Pigments:

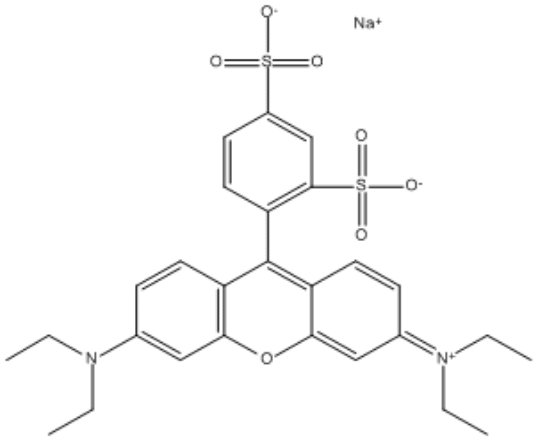

Figure 209: Structure of CI Acid Red 52. (Adapted from www.ChemBioFinder.com)

CI Acid Red 52
CAS Number: 3520-42-1
Molecular Formula: $C_{27}H_{29}N_2NaO_7S_2$
Molecular Weight: 580.65 g/mol
Synonyms: Food Red No. 106; Acid Red 52; Acid Red; CI 45100; 2-(6-Diethylamino-3-diethylazaniymylidene-xanthen-9-yl)-5-sulfo-benzenesulfonate; 9-(2,4-Disulfophenyl)-3,6-bis(diethylamino)xanthylium soidum salt; ABCOL Rhodamine B; Lissamine Rhodamine B; Sulfo Rodhamine B; Xylene red B
Referenced from: www.ChemBioFinder.com

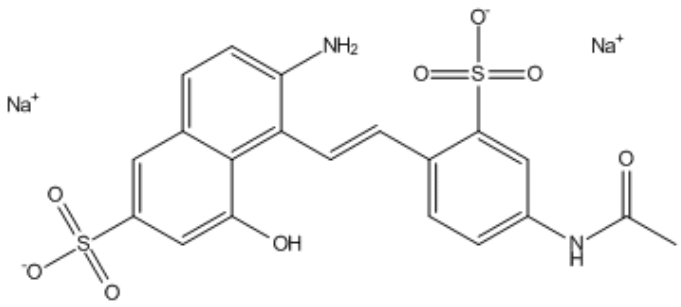

Figure 210: Structure of CI Acid Red 37. (Adapted from www.ChemBioFinder.com)

CI Acid Red 37
CAS Number:
Molecular Formula: $C_{20}H_{16}N_2Na_2O_8S_2$
Molecular Weight: 522.46 g/mol
Synonyms: C.I. 17045; Lissamine Fast Red B; Acid Red 37
Referenced from: www.ChemBioFinder.com

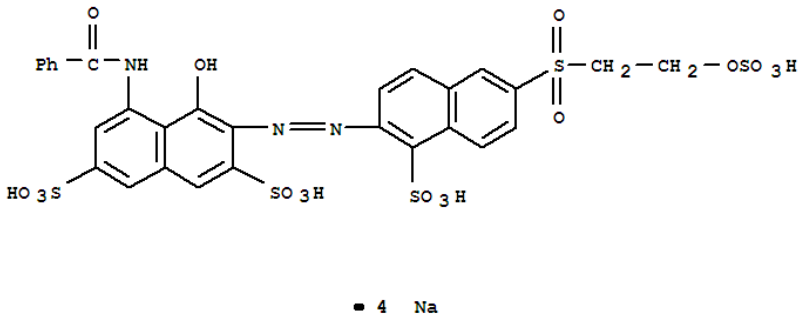

Figure 211: Structure of CI Reactive Red 180. (Adapted from www.ChemBioFinder.com)

CI Reactive Red 180
CAS Number: 72828-03-6
Molecular formula: $C_{29}H_{23}N_3O_{17}S_5 \cdot 4\ Na$
Molecular Weight: 937.79 g/mol
Synonyms: C.I. 181055; 2,7-Naphthalenedisulfonicacid,5-(benzoylamino)-4-hydroxy-3-[[1-sulfo-6-[[2-(sulfooxy)ethyl]sulfonyl]-2-naphthalenyl]azo]-,tetrasodium salt (9CI); Brilliant Red F 3B-SF; Diamira Brilliant Red F 3B; Duasyn Brilliant Red F 3B-SF-VP218; Pro-JetMagenta 1T; Reactive Red 180; Reactive Red 3BS; Remazol Brilliant Red F 3B; Remazol Red F 3B
Referenced from: www.LookChem.com

CI Reactive Red 23
CAS Number: 12769-07-2
Synonyms: Reactive Red 23; 2,7-Naphthalenedisulfonicacid, 3-hydroxy-4-[[2-hydroxy-5-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]azo]-, copper complex; C.I. 16202; Diamira Red 3B; Copper, 3-hydroxy-4-[[2-hydroxy-5-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]azo]-2,7-naphthalenedisulfonic acid complex; Duasyn Red 3B-SF; Reactive Red KN 5B; Remazol Red 3B; Sumifix Red 3B
Referenced from: www.LookChem.com

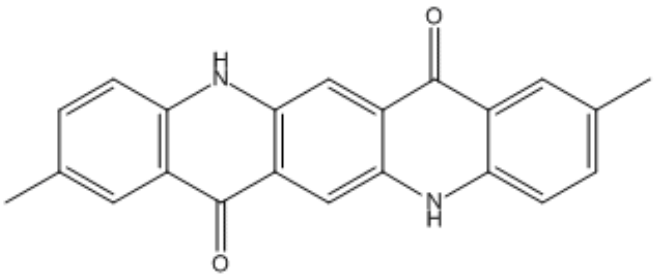

Figure 212: Structure of CI Pigment Red 122. (Adapted from www.ChemBioFinder.com)

CI Pigment Red 122
CAS No.: 980-26-7
Molecular Formula: $C_{22}H_{16}N_2O_2$
Molecular Weight: 340.37 g/mol
Synonyms: Quino[2,3-b]acridine-7,14-dione,5,12-dihydro-2,9-dimethyl-; Pigment Red 122
Referenced from: www.ChemBioFinder.com

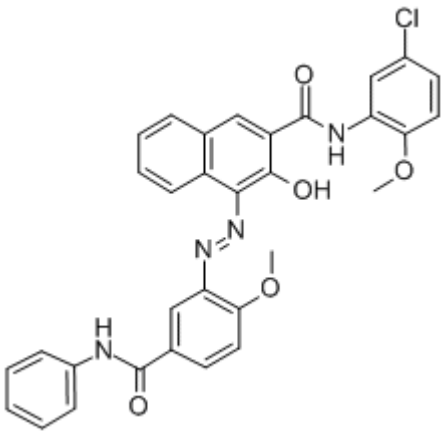

Figure 213: Structure of Pigment Red 184. (Adapted from www.ChemicalBook.com)

CI Pigment Red 184
CAS No.: 99402-80-9
Molecular Formula: $C_{32}H_{25}ClN_4O_5$
Molecular Weight: 581.026 g/mol
Synonyms: Napthol Red F6B BS; Napthol Rubine F6B; C.I. Pigment Red 184; CI 12487; Flexonyl Rubine A-F 6B; Hostafine Rubine F 6B; Microlith Magenta 2BA; Permanent Rubine F 6B and Pigment Red 184
Referenced from: www.ChemicalBook.com

Yellow Dyes/Pigments:

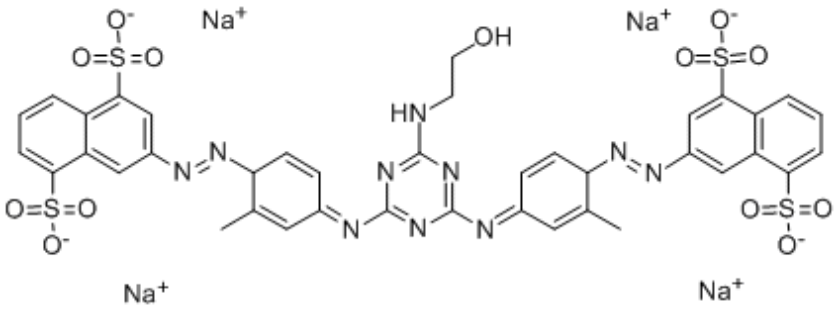

Figure 214: Structure of CI Direct Yellow 86. (Adapted from www.ChemicalBook.com)

CI Direct Yellow 86
CAS Number: 50925-42-3
Molecular Formula: $C_{39}H_{30}N_{10}Na_4O_{13}S_4$
Molecular Weight: 1066.93 g/mol
Synonyms: Yellow RL; Projet Yellow 1; Direct Yellow 86; Kayafect Yellow F; Vicorect Yellow MA.; Suprexcel Yellow RL; C.I. Direct yellow 86; C.I. Direct Yellow 122; Kayarus supra yellow rl; Triumin Supra Yellow RL
Referenced from: www.ChemicalBook.com

Direct Yellow 132
CAS Number: 61968-26-1
Synonyms: Cartasol Yellow 3GF; Daiwa IJ Yellow 306H; Direct Yellow 132; Nylosan Yellow N-CTL; Pro-Jet Yellow 1G; Pro-Jet Yellow 1G Liquid; Rybacel Yellow E 3GF; CI Direct Yellow 132
Referenced from: www.LookChem.com

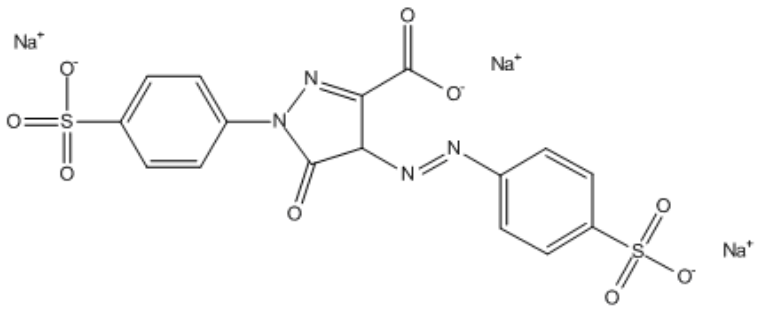

Figure 215: Structure of Acid Yellow 23. (Adapted from www.ChemBioFinder.com)

Acid Yellow 23
CAS Number: 1934-21-0
Molecular Formula: $C_{16}H_9N_4Na_3O_9S_2$
Molecular Weight: 534.36 g/mol
Synonym: Tartrazine; Acid Leather Yellow T; CI 19140; CI Acid Yellow 23; CI Food Yellow 4; D&C Yellow 5; FD&C Yellow 5; Hydrazine Yellow
Referenced from: www.ChemBioFinder.com

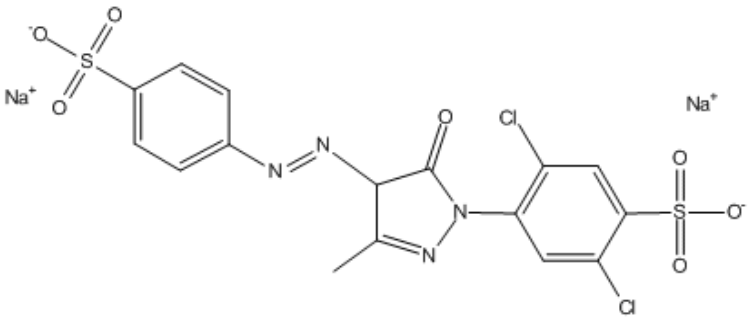

Figure 216: Structure of Acid Yellow 17. (Adapted from www.ChemBioFinder.com)

Acid Yellow 17
CAS Number: 6359-98-4
Molecular Formula: $C_{16}H_{10}Cl_2N_4Na_2O_7S_2$
Molecular Weight: 551.29 g/mol
Synonyms: Acid Fast Yellow G; Acid Light Yellow 2G; Acidine Fast Yellow 2GD; CI Food Yellow 5; Benzenesulfonic acid, 2,5-dichloro-4-[4, 5-dihydro-3-methyl-5-oxo-4-[(4-sulfophenyl)azo]-1H-pyrazol-1-yl]-, disodium salt (9CI); CI 18965; CI Acid Yellow 17; Xylene Fast Yellow 2G; Xylene Yellow 3GS
Referenced from: www.ChemBioFinder.com

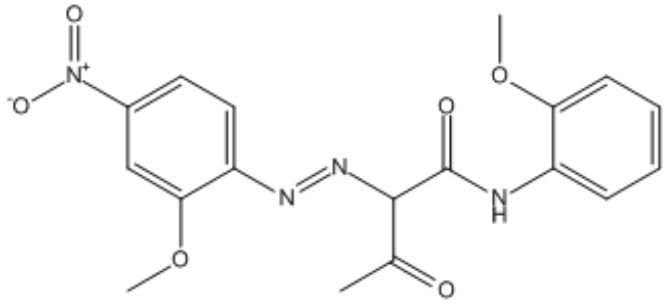

Figure 217: Structure of CI Pigment Yellow 74. (Adapted from www.ChemBioFinder.com)

CI Pigment Yellow 74
CAS No.: 6358-31-2
Molecular Formula: $C_{18}H_{18}N_4O_6$
Molecular Weight: 386.36 g/mol
Synonyms: Pigment Yellow 74; C.I. 11741; 2-((2-methoxy-4-nitrophenyl)azo)-N-(2-methoxyphenyl)-3-oxobutanamide; Dalamar Yellow; Permanent Yellow GX; luna yellow
Referenced from: www.ChemBioFinder.com

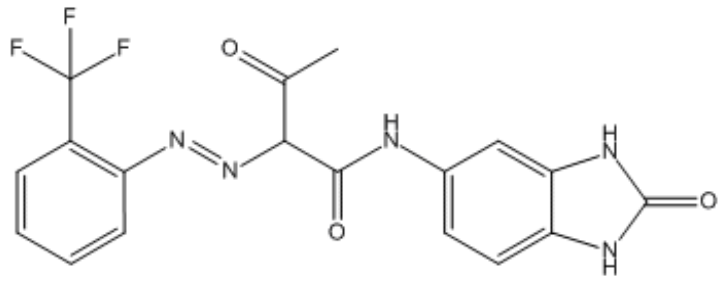

Figure 218: Structure of CI Pigment Yellow 154. (Adapted from www.ChemBioFinder.com)

CI Pigment Yellow 154
CAS No.: 68134-22-5
Molecular Formula: $C_{18}H_{14}F_3N_5O_3$
Molecular Weight: 405.33 g/mol
Synonyms: Pigment Yellow 154; Benzimidazolone Yellos H3G; Pigment Yellow 154; Pigment Yellow 154 (C.I. 11781); n-(2,3-dihydro-2-oxo-1h-benzimidazol-5-yl)-3-oxo-2-[[2-(trifluoromethyl)phenyl]azo]butyramide; 2-(2-Trifluoromethylphenylazo)-N-(2,3-dihydro-2-oxo-1H-benzimidazol-5-yl)-3-oxobutanamide; N-(2,3-dihydro-2-oxo-1H-benzimidazol-5-yl)-3-oxo-2-[[2-(trifluoromethyl) phenyl]azo]-Butanamide; Fast Yellow H3G; C.I. Pigment Yellow 154 and N-(2,3-dihydro-2-oxo-1H-benzimidazol-5-yl)-3-oxo-2-(2-(2-(trifluoromethyl)phenyl)diazenyl)-Butanamide.
Information referenced from: www.ChemicalBook.com; Molecular structure referenced from: www.ChemBioFinder.com

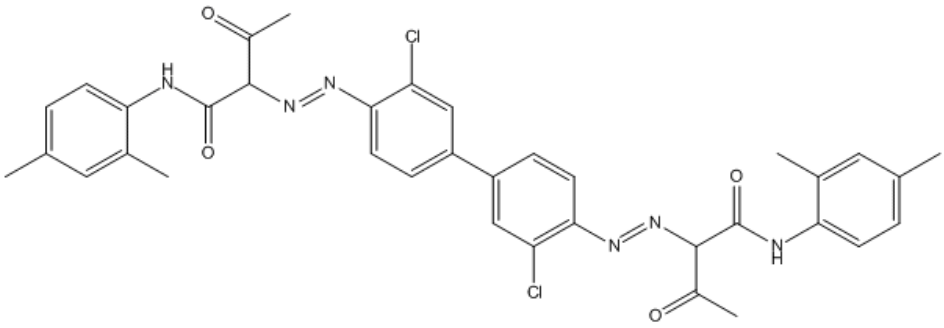

Figure 219: Structure of CI Pigment Yellow 13. (Adapted from www.ChemBioFinder.com)

CI Pigment Yellow 13
CAS No.: 5102-83-0
Molecular Formula: $C_{36}H_{34}Cl_2N_6O_4$
Molecular Weight: 685.60 g/mol
Synonyms: Pigment Yellow 13; Diarylide Yellow; 2,2'-[(3,3'-Dichloro[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[N-(2,4-dimethylphenyl)-3-oxo-butanamide; C.I. 21100; Benzidine Yellow GE; Light Yellow JBR; Yellow Toner YB-5
Referenced from: www.ChemBioFinder.com

APPENDIX B:

List of Manufacturer Inkjet Ink Sample Donation.

The inkjet ink samples that are highlighted in yellow represent the black inkjet ink samples used in this study. The unhighlighted ink samples represent the colored inkjet ink samples donated by the ink manufacturers.

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
01	Okidata	Single	52110002	N/A	0269BD	Cyan	
02	Okidata	Single	52110004	N/A	01333EA	Yellow	
03	Okidata	Single	52110003	N/A	0256AD	Magenta	
04	Okidata	Single	52110001	N/A	99286AD	Black	
05	Okidata	Single	52110001	N/A	0325AD	Black	
06	Okidata	Single	52110002	N/A	0269BD	Cyan	
07	Okidata	Single	52110004	N/A	01333EA	Yellow	
08	Okidata	Single	52110003	N/A	0277CD	Magenta	
09	Okidata	Single	52110001	N/A	99286AD	Black	
10	Okidata	Single	52110002	N/A	0269BD	Cyan	
11	Okidata	Single	52110003	N/A	0256AD	Magenta	
12	Okidata	Single	52110004	N/A	01333EA	Yellow	
13	Xerox	Single	8R7994	N/A	99133CD	Black	
14	Xerox	Single	8R7994	N/A	99133CD	Black	
15	Xerox	Single	8R7994	N/A	99133CD	Black	
16	Xerox	Single	8R7994	N/A	99133CD	Black	
17	Kodak	Single	1369511	N/A	M36974J4	Black	PN15M0335M; EC5M0279; 15M0360
18	Kodak	Multi (3-in-1)	1951730	N/A	M34696J4	Magenta	PN15M0415M; EC5M0279; 15M0370
19	Kodak	Multi (3-in-1)	1951730	N/A	M34696J4	Yellow	PN15M0415M; EC5M0279; 15M0370
20	Kodak	Multi (3-in-1)	1951730	N/A	M34696J4	Cyan	PN15M0415M; EC5M0279; 15M0370
21	Kodak	Multi (3-in-1)	1754852	N/A	M68892G2	Photo Magenta	PN15M0425M; EC5M0279; 15M0380
22	Kodak	Multi (3-in-1)	1754852	N/A	M68892G2	Photo Black	PN15M0425M; EC5M0279; 15M0380
23	Kodak	Multi (3-in-1)	1754852	N/A	M68892G2	Photo Cyan	PN15M0425M; EC5M0279; 15M0380
24	Xerox	Single	8R7660	N/A	N/A	Black	
25	Xerox	Single	8R7660	N/A	N/A	Black	
26	Xerox	Single	8R7660	N/A	N/A	Black	
27	Xerox	Single	8R7660	N/A	N/A	Black	
28	Xerox	Single	8R7660	N/A	N/A	Black	

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
29	Xerox	Single	8R7660	N/A	N/A	Black	
30	Epson	Single	T013	N/A	2729CD	Black	Product Code 1055611
31	Epson	Single	T013	N/A	2729CD	Black	Product Code 1055611
32	Epson	Single	T013	N/A	2729CD	Black	Product Code 1055611
33	Epson	Single	T003	2615AA	2615AA	Black	Product Code 1044636
34	Epson	Single	T003	2615AA	2615AA	Black	Product Code 1044636
35	Epson	Single	T003	2615AA	2615AB	Black	Product Code 1044636
36	Epson	Multi (5-in-1)	T008	N/A	2710IC	Yellow	Product Code 11061856
37	Epson	Multi (5-in-1)	T008	N/A	2710IC	Magenta-1	Product Code 11061856
38	Epson	Multi (5-in-1)	T008	N/A	2710IC	Magenta-2	Product Code 11061856
39	Epson	Multi (5-in-1)	T008	N/A	2710IC	Cyan-1	Product Code 11061856
40	Epson	Multi (5-in-1)	T008	N/A	2710IC	Cyan-2	Product Code 11061856
41	Epson	Multi (5-in-1)	T008	N/A	2710IC	Yellow	Product Code 11061856
42	Epson	Multi (5-in-1)	T008	N/A	2710IC	Magenta-1	Product Code 11061856
43	Epson	Multi (5-in-1)	T008	N/A	2710IC	Magenta-2	Product Code 11061856
44	Epson	Multi (5-in-1)	T008	N/A	2710IC	Cyan-1	Product Code 11061856
45	Epson	Multi (5-in-1)	T008	N/A	2710IC	Cyan-2	Product Code 11061856
46	Epson	Multi (5-in-1)	T008	N/A	2710IC	Yellow	Product Code 11061856
47	Epson	Multi (5-in-1)	T008	N/A	2710IC	Magenta-1	Product Code 11061856
48	Epson	Multi (5-in-1)	T008	N/A	2710IC	Magenta-2	Product Code 11061856
49	Epson	Multi (5-in-1)	T008	N/A	2710IC	Cyan-1	Product Code 11061856

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
50	Epson	Multi (5-in-1)	T008	N/A	2710IC	Cyan-2	Product Code 11061856
51	Epson	Multi (3-in-1)	T005	2416AA	2416AA	Yellow	Product Code
52	Epson	Multi (3-in-1)	T005	2416AA	2416AA	Magenta	Product Code
53	Epson	Multi (3-in-1)	T005	2416AA	2416AA	Cyan	Product Code
54	Epson	Multi (3-in-1)	T005	2416AA	2416AA	Yellow	
55	Epson	Multi (3-in-1)	T005	2416AA	2416AA	Magenta	
56	Epson	Multi (3-in-1)	T005	2416AA	2416AA	Cyan	
57	Epson	Multi (3-in-1)	T005	2416AA	2416AB	Yellow	
58	Epson	Multi (3-in-1)	T005	2416AA	2416AB	Magenta	
59	Epson	Multi (3-in-1)	T005	2416AA	2416AB	Cyan	
60	Epson	Single	T007	N/A	2620IC	Black	Product Code 1061855
61	Epson	Single	T007	N/A	2620IC	Black	Product Code 1061855
62	Epson	Single	T007	N/A	2620IC	Black	Product Code 1061855
63	Epson	Single	S020189	2603HA	2603HA	Black	Product Code 1045752
64	Epson	Single	S020189	2603HA	2603HB	Black	Product Code 1045752
65	Epson	Single	S020189	2603HA	2603HB	Black	Product Code 1045752
66	Epson	Single	T026	N/A	2510AE	Black	Product Code 1081064
67	Epson	Single	T026	N/A	2510AF	Black	Product Code 1081064
68	Epson	Single	T026	N/A	2510AE	Black	Product Code 1081064
69	Epson	Single	T0323	N/A	2427CG	Magenta	Product Code 1080749
70	Epson	Single	T0323	N/A	2427CG	Magenta	Product Code 1080749
71	Epson	Single	T0323	N/A	2427CG	Magenta	Product Code 1080749

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
72	Epson	Single	T0324	N/A	2220CC	Yellow	Product Code
73	Epson	Single	T0324	N/A	2220CC	Yellow	
74	Epson	Single	T0324	N/A	2220CC	Yellow	
75	Epson	Multi (3-in-1)	S020191 / 1C3CL01	1827CD	1827CD	Yellow	Product Code
76	Epson	Multi (3-in-1)	S020191 / 1C3CL01	1827CD	1827CD	Magenta	Product Code
77	Epson	Multi (3-in-1)	S020191 / 1C3CL01	1827CD	1827CD	Cyan	Product Code
78	Epson	Multi (3-in-1)	S020191 / 1C3CL01	1827CD	1827CD	Yellow	
79	Epson	Multi (3-in-1)	S020191 / 1C3CL01	1827CD	1827CD	Magenta	
80	Epson	Multi (3-in-1)	S020191 / 1C3CL01	1827CD	1827CD	Cyan	
81	Epson	Multi (3-in-1)	S020191 / 1C3CL01	1827CD	1827CD	Yellow	
82	Epson	Multi (3-in-1)	S020191 / 1C3CL01	1827CD	1827CD	Magenta	
83	Epson	Multi (3-in-1)	S020191 / 1C3CL01	1827CD	1827CD	Cyan	
84	Epson	Single	T0321	N/A	2104CA	Black	Product Code 1080743
85	Epson	Single	T0321	N/A	1C11CA	Black	Product Code 1080743
86	Epson	Single	T0321	N/A	2104CA	Black	Product Code 1080743
87	Epson	Single	T0322	N/A	1B21CF	Cyan	Product Code 1080750
88	Epson	Single	T0322	N/A	1B21CF	Cyan	Product Code 1080750
89	Epson	Single	T0322	N/A	1B21CF	Cyan	Product Code 1080750
90	Epson	Single	T019	2225CC	2225CC	Black	Product Code 1056231
91	Epson	Single	T019	2225CC	2225CC	Black	Product Code 1056231
92	Epson	Single	T019	2225CC	2225CC	Black	Product Code 1056231
93	Epson	Single	T028	N/A	2613CC	Black	Product Code 1080953
94	Epson	Single	T028	N/A	2613CC	Black	Product Code 1080953

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
95	Epson	Single	T028	N/A	2613CC	Black	Product Code 1080953
96	Epson	Multi (5-in-1)	T027	N/A	2301IA	Yellow	Product Code 1081068
97	Epson	Multi (5-in-1)	T027	N/A	2301IA	Magenta-1	Product Code 1081068
98	Epson	Multi (5-in-1)	T027	N/A	2301IA	Magenta-2	Product Code 1081068
99	Epson	Multi (5-in-1)	T027	N/A	2301IA	Cyan-1	Product Code 1081068
100	Epson	Multi (5-in-1)	T027	N/A	2301IA	Cyan-2	Product Code 1081068
101	Epson	Multi (5-in-1)	T027	N/A	2301IA	Yellow	Product Code 1081068
102	Epson	Multi (5-in-1)	T027	N/A	2301IA	Magenta-1	Product Code 1081068
103	Epson	Multi (5-in-1)	T027	N/A	2301IA	Magenta-2	Product Code 1081068
104	Epson	Multi (5-in-1)	T027	N/A	2301IA	Cyan-1	Product Code 1081068
105	Epson	Multi (5-in-1)	T027	N/A	2301IA	Cyan-2	Product Code 1081068
106	Epson	Multi (5-in-1)	T027	N/A	2301IA	Yellow	Product Code 1081068
107	Epson	Multi (5-in-1)	T027	N/A	2301IA	Magenta-1	Product Code 1081068
108	Epson	Multi (5-in-1)	T027	N/A	2301IA	Magenta-2	Product Code 1081068
109	Epson	Multi (5-in-1)	T027	N/A	2301IA	Cyan-1	Product Code 1081068
110	Epson	Multi (5-in-1)	T027	N/A	2301IA	Cyan-2	Product Code 1081068
111	Epson	Multi (3-in-1)	T020	2322CA	2322CA	Yellow	Product Code
112	Epson	Multi (3-in-1)	T020	2322CA	2322CA	Magenta	Product Code
113	Epson	Multi (3-in-1)	T020	2322CA	2322CA	Cyan	Product Code
114	Epson	Multi (3-in-1)	T020	2322CA	2322CA	Yellow	
115	Epson	Multi (3-in-1)	T020	2322CA	2322CA	Magenta	
116	Epson	Multi (3-in-1)	T020	2322CA	2322CA	Cyan	

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
117	Epson	Multi (3-in-1)	T020	2322CA	2322CA	Yellow	
118	Epson	Multi (3-in-1)	T020	2322CA	2322CA	Magenta	
119	Epson	Multi (3-in-1)	T020	2322CA	2322CA	Cyan	
120	Epson	Single	S020187	2530HA	2530HA	Black	Product Code 1045751
121	Epson	Single	S020187	2530HA	2530HB	Black	Product Code 1045751
122	Epson	Single	S020187	2530HA	2530HA	Black	Product Code 1045751
123	Epson	Single	T017	N/A	2624CB	Black	Product Code 1056272
124	Epson	Single	T017	N/A	2624CB	Black	Product Code 1056272
125	Epson	Single	T017	N/A	2624CB	Black	Product Code 1056272
126	Epson	Multi (5-in-1)	T001	9707AA	9707AB	Yellow	Product Code 1044081
127	Epson	Multi (5-in-1)	T001	9707AA	9707AB	Magenta-1	Product Code 1044081
128	Epson	Multi (5-in-1)	T001	9707AA	9707AB	Magenta-2	Product Code 1044081
129	Epson	Multi (5-in-1)	T001	9707AA	9707AB	Cyan-1	Product Code 1044081
130	Epson	Multi (5-in-1)	T001	9707AA	9707AB	Cyan-2	Product Code 1044081
131	Epson	Multi (5-in-1)	T001	9707AA	9707AB	Yellow	Product Code 1044081
132	Epson	Multi (5-in-1)	T001	9707AA	9707AB	Magenta-1	Product Code 1044081
133	Epson	Multi (5-in-1)	T001	9707AA	9707AB	Magenta-2	Product Code 1044081
134	Epson	Multi (5-in-1)	T001	9707AA	9707AB	Cyan-1	Product Code 1044081
135	Epson	Multi (5-in-1)	T001	9707AA	9707AB	Cyan-2	Product Code 1044081
136	Epson	Multi (5-in-1)	T001	9707AA	9707AA	Yellow	Product Code 1044081
137	Epson	Multi (5-in-1)	T001	9707AA	9707AA	Magenta-1	Product Code 1044081

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
138	Epson	Multi (5-in-1)	T001	9707AA	9707AA	Magenta-2	Product Code 1044081
139	Epson	Multi (5-in-1)	T001	9707AA	9707AA	Cyan-1	Product Code 1044081
140	Epson	Multi (5-in-1)	T001	9707AA	9707AA	Cyan-2	Product Code 1044081
141	Epson	Multi (5-in-1)	T009	0701AA	0701AB	Yellow	Product Code 1051014
142	Epson	Multi (5-in-1)	T009	0701AA	0701AB	Magenta-1	Product Code 1051014
143	Epson	Multi (5-in-1)	T009	0701AA	0701AB	Magenta-2	Product Code 1051014
144	Epson	Multi (5-in-1)	T009	0701AA	0701AB	Cyan-1	Product Code 1051014
145	Epson	Multi (5-in-1)	T009	0701AA	0701AB	Cyan-2	Product Code 1051014
146	Epson	Multi (5-in-1)	T009	0701AA	0701AA	Yellow	Product Code 1051014
147	Epson	Multi (5-in-1)	T009	0701AA	0701AA	Magenta-1	Product Code 1051014
148	Epson	Multi (5-in-1)	T009	0701AA	0701AA	Magenta-2	Product Code 1051014
149	Epson	Multi (5-in-1)	T009	0701AA	0701AA	Cyan-1	Product Code 1051014
150	Epson	Multi (5-in-1)	T009	0701AA	0701AA	Cyan-2	Product Code 1051014
151	Epson	Multi (5-in-1)	T009	0701AA	0701AA	Yellow	Product Code 1051014
152	Epson	Multi (5-in-1)	T009	0701AA	0701AA	Magenta-1	Product Code 1051014
153	Epson	Multi (5-in-1)	T009	0701AA	0701AA	Magenta-2	Product Code 1051014
154	Epson	Multi (5-in-1)	T009	0701AA	0701AA	Cyan-1	Product Code 1051014
155	Epson	Multi (5-in-1)	T009	0701AA	0701AA	Cyan-2	Product Code 1051014
156	Epson	Single	T015	0803AA	0803AA	Black	Product Code 1054650
157	Epson	Single	T015	0803AA	0803AA	Black	Product Code 1054650
158	Epson	Single	T015	0803AA	0803AA	Black	Product Code 1054650

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
159	Epson	Multi (5-in-1)	T016	0831AA	0831AA	Yellow	Product Code 1054667
160	Epson	Multi (5-in-1)	T016	0831AA	0831AA	Magenta-1	Product Code 1054667
161	Epson	Multi (5-in-1)	T016	0831AA	0831AA	Magenta-2	Product Code 1054667
162	Epson	Multi (5-in-1)	T016	0831AA	0831AA	Cyan-1	Product Code 1054667
163	Epson	Multi (5-in-1)	T016	0831AA	0831AA	Cyan-2	Product Code 1054667
164	Epson	Multi (5-in-1)	T016	0831AA	0831AA	Yellow	Product Code 1054667
165	Epson	Multi (5-in-1)	T016	0831AA	0831AA	Magenta-1	Product Code 1054667
166	Epson	Multi (5-in-1)	T016	0831AA	0831AA	Magenta-2	Product Code 1054667
167	Epson	Multi (5-in-1)	T016	0831AA	0831AA	Cyan-1	Product Code 1054667
168	Epson	Multi (5-in-1)	T016	0831AA	0831AA	Cyan-2	Product Code 1054667
169	Epson	Multi (5-in-1)	T016	0831AA	0831AA	Yellow	Product Code 1054667
170	Epson	Multi (5-in-1)	T016	0831AA	0831AA	Magenta-1	Product Code 1054667
171	Epson	Multi (5-in-1)	T016	0831AA	0831AA	Magenta-2	Product Code 1054667
172	Epson	Multi (5-in-1)	T016	0831AA	0831AA	Cyan-1	Product Code 1054667
173	Epson	Multi (5-in-1)	T016	0831AA	0831AA	Cyan-2	Product Code 1054667
174	Epson	Multi (5-in-1)	S020193	9803AE	9803AE	Yellow	Product Code 1041474
175	Epson	Multi (5-in-1)	S020193	9803AE	9803AE	Magenta-1	Product Code 1041474
176	Epson	Multi (5-in-1)	S020193	9803AE	9803AE	Magenta-2	Product Code 1041474
177	Epson	Multi (5-in-1)	S020193	9803AE	9803AE	Cyan-1	Product Code 1041474
178	Epson	Multi (5-in-1)	S020193	9803AE	9803AE	Cyan-2	Product Code 1041474
179	Epson	Multi (5-in-1)	S020193	9803AE	9803AF	Yellow	Product Code 1041474

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
180	Epson	Multi (5-in-1)	S020193	9803AE	9803AF	Magenta-1	Product Code 1041474
181	Epson	Multi (5-in-1)	S020193	9803AE	9803AF	Magenta-2	Product Code 1041474
182	Epson	Multi (5-in-1)	S020193	9803AE	9803AF	Cyan-1	Product Code 1041474
183	Epson	Multi (5-in-1)	S020193	9803AE	9803AF	Cyan-2	Product Code 1041474
184	Epson	Multi (5-in-1)	S020193	9803AE	9803AE	Yellow	Product Code 1041474
185	Epson	Multi (5-in-1)	S020193	9803AE	9803AE	Magenta-1	Product Code 1041474
186	Epson	Multi (5-in-1)	S020193	9803AE	9803AE	Magenta-2	Product Code 1041474
187	Epson	Multi (5-in-1)	S020193	9803AE	9803AE	Cyan-1	Product Code 1041474
188	Epson	Multi (5-in-1)	S020193	9803AE	9803AE	Cyan-2	Product Code 1041474
189	Epson	Multi (3-in-1)	T018	N/A	2204HB	Yellow	Product Code 1056300
190	Epson	Multi (3-in-1)	T018	N/A	2204HB	Magenta	Product Code 1056300
191	Epson	Multi (3-in-1)	T018	N/A	2204HB	Cyan	Product Code 1056300
192	Epson	Multi (3-in-1)	T018	N/A	2204HA	Yellow	Product Code 1056300
193	Epson	Multi (3-in-1)	T018	N/A	2204HA	Magenta	Product Code 1056300
194	Epson	Multi (3-in-1)	T018	N/A	2204HA	Cyan	Product Code 1056300
195	Epson	Multi (3-in-1)	T018	N/A	2204HB	Yellow	Product Code 1056300
196	Epson	Multi (3-in-1)	T018	N/A	2204HB	Magenta	Product Code 1056300
197	Epson	Multi (3-in-1)	T018	N/A	2204HB	Cyan	Product Code 1056300
198	Hewlett Packard	Single	#29 (51629A)	194360	N/A	Black	Puerto Rico Aug 2003
199	Hewlett Packard	Single	#56 (C6656AN)	N/A	AL010303120203/ 14292994; L05 2 22:46:29	Black	Puerto Rico Sep 2004
200	Hewlett Packard	Single	#27 (C8727AN)	N/A	AL010210871955/ 02365797	Black	Puerto Rico Mar 2004

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
201	Hewlett Packard	Single	#45 (19434E)	19434E	T03S310A23E817B; 20040313S	Black	Singapore Sep 2003
202	Hewlett Packard	Multi (3-in-1)	#49 (51649a)	N/A	T1 R-1229351; 20040207A	Yellow	Puerto Rico Aug 2003
203	Hewlett Packard	Multi (3-in-1)	#49 (51649a)	N/A	T1 R-1229351; 20040207A	Magenta	Puerto Rico Aug 2003
204	Hewlett Packard	Multi (3-in-1)	#49 (51649a)	N/A	T1 R-1229351; 20040207A	Cyan	Puerto Rico Aug 2003
205	Hewlett Packard	Multi (3-in-1)	#58 (C6658AN)	N/A	L06 1 14:40:13; 2005/04/21 L	Black	Ireland Oct 2004
206	Hewlett Packard	Multi (3-in-1)	#58 (C6658AN)	N/A	L06 1 14:40:13; 2005/04/21 L	Cyan	Ireland Oct 2004
207	Hewlett Packard	Multi (3-in-1)	#58 (C6658AN)	N/A	L06 1 14:40:13; 2005/04/21 L	Magenta	Ireland Oct 2004
208	Hewlett Packard	Multi (3-in-1)	#28 (C8728a)	N/A	L03 2 17:55:05; 2004/05/15 L	Yellow	Ireland Nov 2003
209	Hewlett Packard	Multi (3-in-1)	#28 (C8728a)	N/A	L03 2 17:55:05; 2004/05/15 L	Magenta	Ireland Nov 2003
210	Hewlett Packard	Multi (3-in-1)	#28 (C8728a)	N/A	L03 2 17:55:05; 2004/05/15 L	Cyan	Ireland Nov 2003
211	Hewlett Packard	Multi (3-in-1)	#57 (C6657a)	N/A	L10 2 01:23:13; 2005/01/24 S	Yellow	Singapore Aug 2004
212	Hewlett Packard	Multi (3-in-1)	#57 (C6657a)	N/A	L10 2 01:23:13; 2005/01/24 S	Magenta	Singapore Aug 2004
213	Hewlett Packard	Multi (3-in-1)	#57 (C6657a)	N/A	L10 2 01:23:13; 2005/01/24 S	Cyan	Singapore Aug 2004
214	Hewlett Packard	Multi (3-in-1)	#23 (C1823D)	194307	C4 031730; 20040308A	Yellow	Puerto Rico Sep 2003
215	Hewlett Packard	Multi (3-in-1)	#23 (C1823D)	194307	C4 031730; 20040308A	Magenta	Puerto Rico Sep 2003
216	Hewlett Packard	Multi (3-in-1)	#23 (C1823D)	194307	C4 031730; 20040308A	Cyan	Puerto Rico Sep 2003
217	Canon	Single	BCI-6BK	3B02G08	3B02G08	Black	
218	Canon	Single	BCI-6BK	3B02G08	3B02G08	Black	
219	Canon	Single	BCI-6BK	3B02G08	3B02G08	Black	
220	Canon	Single	BCI-6BK	3B02G08	3B02G08	Black	
221	Canon	Single	BCI-6BK	3B02G08	3B02G08	Black	
222	Canon	Single	BCI-6BK	3B02G08	3B02G08	Black	
223	Canon	Single	BCI-10	4302E30	432E3022	Black	
224	Canon	Single	BCI-10	4302E30	432E3022	Black	
225	Canon	Single	BCI-10	4302E30	432E3022	Black	
226	Canon	Single	BCI-10	4302E30	432E3022	Black	

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
227	Canon	Single	BCI-10	4302E30	432E3022	Black	
228	Canon	Single	BCI-10	4302E30	432E3022	Black	
229	Canon	Single	BCI-3eC	2702E15	2702E15	Cyan	
230	Canon	Single	BCI-3eC	2702E15	2702E15	Cyan	
231	Canon	Single	BCI-3eC	2702E15	2702E15	Cyan	
232	Canon	Single	BCI-3eC	2702E15	2702E15	Cyan	
233	Canon	Single	BCI-3eC	2702E15	2702E15	Cyan	
234	Canon	Single	BCI-3eC	2702E15	2702E15	Cyan	
235	Epson	Multi (3-in-1)	T029	N/A	B506CC	Yellow	Product Code 1080955
236	Epson	Multi (3-in-1)	T029	N/A	B506CC	Magenta	Product Code 1080955
237	Epson	Multi (3-in-1)	T029	N/A	B506CC	Cyan	Product Code 1080955
238	Epson	Multi (3-in-1)	T029	N/A	B506CC	Yellow	Product Code 1080955
239	Epson	Multi (3-in-1)	T029	N/A	B506CC	Magenta	Product Code 1080955
240	Epson	Multi (3-in-1)	T029	N/A	B506CC	Cyan	Product Code 1080955
241	Epson	Multi (3-in-1)	T029	N/A	B506CC	Yellow	Product Code 1080955
242	Epson	Multi (3-in-1)	T029	N/A	B506CC	Magenta	Product Code 1080955
243	Epson	Multi (3-in-1)	T029	N/A	B506CC	Cyan	Product Code 1080955
244	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00158B06	Black	**Box lot # was a stamp on box flap, may not be a true lot #.
245	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00161A02	Cyan	**Box lot # was a stamp on box flap, may not be a true lot #.
246	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00157B01	Magenta	**Box lot # was a stamp on box flap, may not be a true lot #.
247	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00158C03	Yellow	**Box lot # was a stamp on box flap, may not be a true lot #.

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
248	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00158B06	Black	**Box lot # was a stamp on box flap, may not be a true lot #.
249	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00161A02	Cyan	**Box lot # was a stamp on box flap, may not be a true lot #.
250	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00157B01	Magenta	**Box lot # was a stamp on box flap, may not be a true lot #.
251	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00158C03	Yellow	**Box lot # was a stamp on box flap, may not be a true lot #.
252	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00158B06	Black	**Box lot # was a stamp on box flap, may not be a true lot #.
253	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00161A02	Cyan	**Box lot # was a stamp on box flap, may not be a true lot #.
254	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00158A01	Magenta	**Box lot # was a stamp on box flap, may not be a true lot #.
255	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00158C03	Yellow	**Box lot # was a stamp on box flap, may not be a true lot #.
256	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00158B06	Black	**Box lot # was a stamp on box flap, may not be a true lot #.
257	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00161A02	Cyan	**Box lot # was a stamp on box flap, may not be a true lot #.
258	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00157B01	Magenta	**Box lot # was a stamp on box flap, may not be a true lot #.
259	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00158C03	Yellow	**Box lot # was a stamp on box flap, may not be a true lot #.
260	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00158B06	Black	**Box lot # was a stamp on box flap, may not be a true lot #.

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
261	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00161A02	Cyan	**Box lot # was a stamp on box flap, may not be a true lot #.
262	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00157B01	Magenta	**Box lot # was a stamp on box flap, may not be a true lot #.
263	Xerox	Multi (4-in-a-box)	M-Series	502P18580B	00158C03	Yellow	**Box lot # was a stamp on box flap, may not be a true lot #.
264	Xerox	Single	8R7994	N/A	99133CD	Black	
265	Xerox	Single	8R7994	N/A	99133CD	Black	
266	Xerox	Single	8R7663	N/A	97232CD	Yellow	
267	Xerox	Single	8R7663	N/A	97237BD	Yellow	
268	Xerox	Single	8R7663	N/A	97237BD	Yellow	
269	Xerox	Single	8R7663	N/A	97232CD	Yellow	
270	Xerox	Single	8R7662	N/A	97300BB	Magenta	
271	Xerox	Single	8R7662	N/A	97300BB	Magenta	
272	Xerox	Single	8R7662	N/A	97364CD	Magenta	
273	Xerox	Single	8R7662	N/A	97300BB	Magenta	
274	Xerox	Single	8R7662	N/A	97364CD	Magenta	
275	Xerox	Single	8R7662	N/A	97300BB	Magenta	
276	Xerox	Single	8R7661	N/A	98140BD	Cyan	
277	Xerox	Single	8R7661	N/A	98140BD	Cyan	
278	Xerox	Single	8R7661	N/A	98140BD	Cyan	
279	Xerox	Single	8R7661	N/A	98140BD	Cyan	
280	Xerox	Single	8R7661	N/A	98141CD	Cyan	
281	Xerox	Single	8R7661	N/A	98140BD	Cyan	
282	Canon	Single	BC-02	A902E26	A902E26	Black	
283	Canon	Single	BC-02	A902E26	A902E26	Black	
284	Canon	Single	BC-02	A902E26	A902E26	Black	
285	Canon	Single	BC-02	A902E26	A902E26	Black	
286	Canon	Single	BC-02	A902E26	A902E26	Black	
287	Canon	Single	BC-02	A902E26	A902E26	Black	
288	Canon	Multi (3-in-1)	BC-05	2902F19	2902F19	Yellow	
289	Canon	Multi (3-in-1)	BC-05	2902F19	2902F19	Magenta	
290	Canon	Multi (3-in-1)	BC-05	2902F19	2902F19	Cyan	

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
291	Canon	Multi (3-in-1)	BC-05	2902F19	2902F19	Yellow	
292	Canon	Multi (3-in-1)	BC-05	2902F19	2902F19	Magenta	
293	Canon	Multi (3-in-1)	BC-05	2902F19	2902F19	Cyan	
294	Canon	Multi (3-in-1)	BC-05	2902F19	2902F19	Yellow	
295	Canon	Multi (3-in-1)	BC-05	2902F19	2902F19	Magenta	
296	Canon	Multi (3-in-1)	BC-05	2902F19	2902F19	Cyan	
297	Canon	Multi (3-in-1)	BC-05	2902F19	2902F19	Yellow	
298	Canon	Multi (3-in-1)	BC-05	2902F19	2902F19	Magenta	
299	Canon	Multi (3-in-1)	BC-05	2902F19	2902F19	Cyan	
300	Canon	Multi (3-in-1)	BC-05	2902F19	2902F19	Yellow	
301	Canon	Multi (3-in-1)	BC-05	2902F19	2902F19	Magenta	
302	Canon	Multi (3-in-1)	BC-05	2902F19	2902F19	Cyan	
303	Canon	Multi (3-in-1)	BC-05	2902F19	2902F19	Yellow	
304	Canon	Multi (3-in-1)	BC-05	2902F19	2902F19	Magenta	
305	Canon	Multi (3-in-1)	BC-05	2902F19	2902F19	Cyan	
306	Canon	Single	BC-20	6D02D12	6A2D1234	Black	
307	Canon	Single	BC-20	6D02D12	6A2D1234	Black	
308	Canon	Single	BC-20	6D02D12	6A2D1234	Black	
309	Canon	Single	BC-20	6D02D12	6A2D1234	Black	
310	Canon	Single	BC-20	6D02D12	6A2D1234	Black	
311	Canon	Single	BC-20	6D02D12	6A2D1234	Black	
312	Canon	Single	BC-23	1700H23	1C0H2232	Black	
313	Canon	Single	BC-23	1700H23	1C0H2232	Black	
314	Canon	Single	BC-23	1700H23	1C0H2232	Black	
315	Canon	Single	BC-23	1700H23	1C0H2232	Black	
316	Canon	Single	BC-23	1700H23	1C0H2232	Black	
317	Canon	Single	BC-23	1700H23	1C0H2232	Black	
318	Canon	Single	BC-60	3202F140	3202F140	Black	

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
319	Canon	Single	BC-60	3202F140	3202F140	Black	
320	Canon	Single	BC-60	3202F140	3202F140	Black	
321	Canon	Single	BC-60	3202F140	3202F140	Black	
322	Canon	Single	BC-60	3202F140	3202F140	Black	
323	Canon	Single	BC-60	3202F140	3202F140	Black	
318a	Canon	Single	BC-60	3202F140	3202F140	Clear	
319a	Canon	Single	BC-60	3202F140	3202F140	Clear	
320a	Canon	Single	BC-60	3202F140	3202F140	Clear	
321a	Canon	Single	BC-60	3202F140	3202F140	Clear	
322a	Canon	Single	BC-60	3202F140	3202F140	Clear	
323a	Canon	Single	BC-60	3202F140	3202F140	Clear	
324	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2331	Yellow	
325	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2331	Magenta	
326	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2331	Cyan	
327	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2331	Black	
328	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2331	Yellow	
329	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2331	Magenta	
330	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2331	Cyan	
331	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2331	Black	
332	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2331	Yellow	
333	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2331	Magenta	
334	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2331	Cyan	
335	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2331	Black	
336	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2411	Yellow	
337	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2411	Magenta	
338	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2411	Cyan	
339	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2411	Black	

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
340	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2411	Yellow	
341	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2411	Magenta	
342	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2411	Cyan	
343	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2411	Black	
344	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2411	Yellow	
345	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2411	Magenta	
346	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2411	Cyan	
347	Canon	Multi (4-in-1)	BC-22e	7702D24	7H2D2411	Black	
348	Canon	Single	BCI-21	3502F15	342F1311	Black	
349	Canon	Single	BCI-21	3502F15	342F1311	Black	
350	Canon	Single	BCI-21	3502F15	342F1311	Black	
351	Canon	Single	BCI-21	3502F15	342F1311	Black	
352	Canon	Single	BCI-21	3502F15	342F1311	Black	
353	Canon	Single	BCI-21	3502F15	342F1311	Black	
354	Canon	Multi (3-in-1)	BCI-21	3502E15	342E1312	Yellow	
355	Canon	Multi (3-in-1)	BCI-21	3502E15	342E1312	Magenta	
356	Canon	Multi (3-in-1)	BCI-21	3502E15	342E1312	Cyan	
357	Canon	Multi (3-in-1)	BCI-21	3502E15	342E1312	Yellow	
358	Canon	Multi (3-in-1)	BCI-21	3502E15	342E1312	Magenta	
359	Canon	Multi (3-in-1)	BCI-21	3502E15	342E1312	Cyan	
360	Canon	Multi (3-in-1)	BCI-21	3502E15	342E1312	Yellow	
361	Canon	Multi (3-in-1)	BCI-21	3502E15	342E1312	Magenta	
362	Canon	Multi (3-in-1)	BCI-21	3502E15	342E1312	Cyan	
363	Canon	Multi (3-in-1)	BCI-21	3502E15	342E1312	Yellow	
364	Canon	Multi (3-in-1)	BCI-21	3502E15	342E1312	Magenta	

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
365	Canon	Multi (3-in-1)	BCI-21	3502E15	342E1312	Cyan	
366	Canon	Multi (3-in-1)	BCI-21	3502E15	342E1312	Yellow	
367	Canon	Multi (3-in-1)	BCI-21	3502E15	342E1312	Magenta	
368	Canon	Multi (3-in-1)	BCI-21	3502E15	342E1312	Cyan	
369	Canon	Multi (3-in-1)	BCI-21	3502E15	342E1312	Yellow	
370	Canon	Multi (3-in-1)	BCI-21	3502E15	342E1312	Magenta	
371	Canon	Multi (3-in-1)	BCI-21	3502E15	342E1312	Cyan	
372	Canon	Single	BCI-10	4302E30	432E3022	Black	
373	Canon	Single	BCI-10	4302E30	432E3022	Black	
374	Canon	Single	BCI-10	4302E30	432E3022	Black	
375	Canon	Single	BCI-10	4302E30	432E3022	Black	
376	Canon	Single	BCI-10	4302E30	432E3022	Black	
377	Canon	Single	BCI-10	4302E30	432E3022	Black	
378	Canon	Single	BCI-10	4302E30	432E3022	Black	
379	Canon	Single	BCI-10	4302E30	432E3022	Black	
380	Canon	Single	BCI-10	4302E30	432E3022	Black	
381	Canon	Single	BCI-10	4302E30	432E3022	Black	
382	Canon	Single	BCI-10	4302E30	432E3022	Black	
383	Canon	Single	BCI-10	4302E30	432E3022	Black	
384	Canon	Single	BCI-11	N/A	412F1324	Black	
385	Canon	Single	BCI-11	N/A	412F1324	Black	
386	Canon	Single	BCI-11	N/A	412F1324	Black	
387	Canon	Single	BCI-11	N/A	412F1324	Black	
388	Canon	Single	BCI-11	N/A	412F1324	Black	
389	Canon	Single	BCI-11	N/A	412F1324	Black	
390	Canon	Single	BCI-11	N/A	412F1324	Black	
391	Canon	Single	BCI-11	N/A	412F1324	Black	
392	Canon	Single	BCI-11	N/A	412F1324	Black	
393	Canon	Single	BCI-11	N/A	412F1324	Black	
394	Canon	Single	BCI-11	N/A	412F1324	Black	
395	Canon	Single	BCI-11	N/A	412F1324	Black	
396	Canon	Single	BCI-11	N/A	412F1324	Black	
397	Canon	Single	BCI-11	N/A	412F1324	Black	

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
398	Canon	Single	BCI-11	N/A	412F1324	Black	
399	Canon	Single	BCI-11	N/A	412F1324	Black	
400	Canon	Single	BCI-11	N/A	412F1324	Black	
401	Canon	Single	BCI-11	N/A	412F1324	Black	
402	Canon	Single	BCI-12	N/A	222G0214	Black	
403	Canon	Single	BCI-12	N/A	222G0214	Black	
404	Canon	Single	BCI-12	N/A	222G0214	Black	
405	Canon	Single	BCI-12	N/A	222G0214	Black	
406	Canon	Single	BCI-12	N/A	222G0214	Black	
407	Canon	Single	BCI-12	N/A	222G0214	Black	
408	Canon	Single	BCI-12	N/A	222G0214	Black	
409	Canon	Single	BCI-12	N/A	222G0214	Black	
410	Canon	Single	BCI-12	N/A	222G0214	Black	
411	Canon	Single	BCI-12	N/A	222G0214	Black	
412	Canon	Single	BCI-12	N/A	222G0214	Black	
413	Canon	Single	BCI-12	N/A	222G0214	Black	
414	Canon	Single	BCI-12	N/A	222G0214	Black	
415	Canon	Single	BCI-12	N/A	222G0214	Black	
416	Canon	Single	BCI-12	N/A	222G0214	Black	
417	Canon	Single	BCI-12	N/A	222G0214	Black	
418	Canon	Single	BCI-12	N/A	222G0214	Black	
419	Canon	Single	BCI-12	N/A	222G0214	Black	
420	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Yellow	
421	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Magenta	
422	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Cyan	
423	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Yellow	
424	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Magenta	
425	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Cyan	
426	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Yellow	
427	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Magenta	
428	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Cyan	

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
429	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Yellow	
430	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Magenta	
431	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Cyan	
432	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Yellow	
433	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Magenta	
434	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Cyan	
435	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Yellow	
436	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Magenta	
437	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Cyan	
438	Canon	Multi (3-in-1)	BCI-61	3200K10	320K1011	Yellow	
439	Canon	Multi (3-in-1)	BCI-61	3200K10	320K1011	Magenta	
440	Canon	Multi (3-in-1)	BCI-61	3200K10	320K1011	Cyan	
441	Canon	Multi (3-in-1)	BCI-61	3200K10	320K1011	Yellow	
442	Canon	Multi (3-in-1)	BCI-61	3200K10	320K1011	Magenta	
443	Canon	Multi (3-in-1)	BCI-61	3200K10	320K1011	Cyan	
444	Canon	Multi (3-in-1)	BCI-61	3200K10	320K1011	Yellow	
445	Canon	Multi (3-in-1)	BCI-61	3200K10	320K1011	Magenta	
446	Canon	Multi (3-in-1)	BCI-61	3200K10	320K1011	Cyan	
447	Canon	Multi (3-in-1)	BCI-61	3200K10	320K1011	Yellow	
448	Canon	Multi (3-in-1)	BCI-61	3200K10	320K1011	Magenta	
449	Canon	Multi (3-in-1)	BCI-61	3200K10	320K1011	Cyan	
450	Canon	Multi (3-in-1)	BCI-61	3200K10	320K1011	Yellow	
451	Canon	Multi (3-in-1)	BCI-61	3200K10	320K1011	Magenta	

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
452	Canon	Multi (3-in-1)	BCI-61	3200K10	320K1011	Cyan	
453	Canon	Multi (3-in-1)	BCI-61	3200K10	320K1011	Yellow	
454	Canon	Multi (3-in-1)	BCI-61	3200K10	320K1011	Magenta	
455	Canon	Multi (3-in-1)	BCI-61	3200K10	320K1011	Cyan	
456	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Yellow-1	
457	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Yellow-2	
458	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Magenta-1	
459	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Magenta-2	
460	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Cyan-1	
461	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Cyan-2	
462	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Yellow-1	
463	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Yellow-2	
464	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Magenta-1	
465	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Magenta-2	
466	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Cyan-1	
467	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Cyan-2	
468	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Yellow-1	
469	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Yellow-2	
470	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Magenta-1	
471	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Magenta-2	
472	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Cyan-1	
473	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Cyan-2	
474	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Yellow-1	

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
475	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Yellow-2	
476	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Magenta-1	
477	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Magenta-2	
478	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Cyan-1	
479	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Cyan-2	
480	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Yellow-1	
481	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Yellow-2	
482	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Magenta-1	
483	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Magenta-2	
484	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Cyan-1	
485	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Cyan-2	
486	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Yellow-1	
487	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Yellow-2	
488	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Magenta-1	
489	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Magenta-2	
490	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Cyan-1	
491	Canon	Multi (6-in-1)	BCI-62	3201E30	321E3011	Cyan-2	
492	Canon	Single	BCI-3eBK	2002F19	242F1720	Black	
493	Canon	Single	BCI-3eBK	2002F19	242F1720	Black	
494	Canon	Single	BCI-3eBK	2002F19	242F1720	Black	
495	Canon	Single	BCI-3eBK	2002F19	242F1720	Black	
496	Canon	Single	BCI-3eBK	2002F19	242F1720	Black	
497	Canon	Single	BCI-3eBK	2002F19	242F1720	Black	
498	Canon	Single	BCI-3eM	2802G10	282G1013	Magenta	
499	Canon	Single	BCI-3eM	2802G10	282G1013	Magenta	
500	Canon	Single	BCI-3eM	2802G10	282G1013	Magenta	
501	Canon	Single	BCI-3eM	2802G10	282G1013	Magenta	

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
502	Canon	Single	BCI-3eM	2802G10	282G1013	Magenta	
503	Canon	Single	BCI-3eM	2802G10	282G1013	Magenta	
504	Canon	Single	BCI-3eY	2A02F12	2A2F1221	Yellow	
505	Canon	Single	BCI-3eY	2A02F12	2A2F1221	Yellow	
506	Canon	Single	BCI-3eY	2A02F12	2A2F1221	Yellow	
507	Canon	Single	BCI-3eY	2A02F12	2A2F1221	Yellow	
508	Canon	Single	BCI-3eY	2A02F12	2A2F1221	Yellow	
509	Canon	Single	BCI-3eY	2A02F12	2A2F1221	Yellow	
510	Canon	Single	BCI-3ePC	1000G25	110G2520	Photo Cyan	
511	Canon	Single	BCI-3ePC	1000G25	110G2520	Photo Cyan	
512	Canon	Single	BCI-3ePC	1000G25	110G2520	Photo Cyan	
513	Canon	Single	BCI-3ePC	1000G25	110G2520	Photo Cyan	
514	Canon	Single	BCI-3ePC	1000G25	110G2520	Photo Cyan	
515	Canon	Single	BCI-3ePC	1000G25	110G2520	Photo Cyan	
516	Canon	Single	BCI-3ePM	1000G27	110G2610	Photo Magenta	
517	Canon	Single	BCI-3ePM	1000G27	110G2610	Photo Magenta	
518	Canon	Single	BCI-3ePM	1000G27	110G2610	Photo Magenta	
519	Canon	Single	BCI-3ePM	1000G27	110G2610	Photo Magenta	
520	Canon	Single	BCI-3ePM	1000G27	110G2610	Photo Magenta	
521	Canon	Single	BCI-3ePM	1000G27	110G2610	Photo Magenta	
522	Canon	Single	BCI-3ePBk	2B02E19	2B2E1420	Photo Black	
523	Canon	Single	BCI-3ePBk	2B02E19	2B2E1420	Photo Black	
524	Canon	Single	BCI-3ePBk	2B02E19	2B2E1420	Photo Black	
525	Canon	Single	BCI-3ePBk	2B02E19	2B2E1420	Photo Black	
526	Canon	Single	BCI-3ePBk	2B02E19	2B2E1420	Photo Black	
527	Canon	Single	BCI-3ePBk	2B02E19	2B2E1420	Photo Black	
528	Canon	Single	BCI-6C	4B02G10	4B2G1010	Cyan	
529	Canon	Single	BCI-6C	4B02G10	4B2G1010	Cyan	
530	Canon	Single	BCI-6C	4B02G10	4B2G1010	Cyan	

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
531	Canon	Single	BCI-6C	4B02G10	4B2G1010	Cyan	
532	Canon	Single	BCI-6C	4B02G10	4B2G1010	Cyan	
533	Canon	Single	BCI-6C	4B02G10	4B2G1010	Cyan	
534	Canon	Single	BCI-6M	3002F02	332F0110	Magenta	
535	Canon	Single	BCI-6M	3002F02	332F0110	Magenta	
536	Canon	Single	BCI-6M	3002F02	332F0110	Magenta	
537	Canon	Single	BCI-6M	3002F02	332F0110	Magenta	
538	Canon	Single	BCI-6M	3002F02	332F0110	Magenta	
539	Canon	Single	BCI-6M	3002F02	332F0110	Magenta	
540	Canon	Single	BCI-6Y	3B02G12	3B2G1210	Yellow	
541	Canon	Single	BCI-6Y	3B02G12	3B2G1210	Yellow	
542	Canon	Single	BCI-6Y	3B02G12	3B2G1210	Yellow	
543	Canon	Single	BCI-6Y	3B02G12	3B2G1210	Yellow	
544	Canon	Single	BCI-6Y	3B02G12	3B2G1210	Yellow	
545	Canon	Single	BCI-6Y	3B02G12	3B2G1210	Yellow	
546	Canon	Single	BCI-6PC	3002G12	332G1110	Photo Cyan	
547	Canon	Single	BCI-6PC	3002G12	332G1110	Photo Cyan	
548	Canon	Single	BCI-6PC	3002G12	332G1110	Photo Cyan	
549	Canon	Single	BCI-6PC	3002G12	332G1110	Photo Cyan	
550	Canon	Single	BCI-6PC	3002G12	332G1110	Photo Cyan	
551	Canon	Single	BCI-6PC	3002G12	332G1110	Photo Cyan	
552	Canon	Single	BCI-6PM	3002G10	332G0920	Photo Magenta	
553	Canon	Single	BCI-6PM	3002G10	332G0920	Photo Magenta	
554	Canon	Single	BCI-6PM	3002G10	332G0920	Photo Magenta	
555	Canon	Single	BCI-6PM	3002G10	332G0920	Photo Magenta	
556	Canon	Single	BCI-6PM	3002G10	332G0920	Photo Magenta	
557	Canon	Single	BCI-6PM	3002G10	332G0920	Photo Magenta	
558	Epson	Single	T019	2813CC	2813CC	Black	
559	Epson	Single	T019	2813CC	2813CC	Black	
560	Epson	Multi (3-in-1)	T020	1A29CA	1A29CA	Yellow	
561	Epson	Multi (3-in-1)	T020	1A29CA	1A29CA	Magenta	

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
562	Epson	Multi (3-in-1)	T020	1A29CA	1A29CA	Cyan	
563	Epson	Multi (3-in-1)	T020	1A29CA	1A29CA	Yellow	
564	Epson	Multi (3-in-1)	T020	1A29CA	1A29CA	Magenta	
565	Epson	Multi (3-in-1)	T020	1A29CA	1A29CA	Cyan	
566	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Yellow	
567	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Magenta	
568	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Cyan	
569	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Yellow	
570	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Magenta	
571	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Cyan	
572	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Yellow	
573	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Magenta	
574	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Cyan	
575	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Yellow	
576	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Magenta	
577	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Cyan	
578	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Yellow	
579	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Magenta	
580	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Cyan	
581	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Yellow	
582	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Magenta	
583	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Cyan	
584	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Yellow	

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
585	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Magenta	
586	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Cyan	
587	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Yellow	
588	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Magenta	
589	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Cyan	
590	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Yellow	
591	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Magenta	
592	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Cyan	
593	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Yellow	
594	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Magenta	
595	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Cyan	
596	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Yellow	
597	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Magenta	
598	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Cyan	
599	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Yellow	
600	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Magenta	
601	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Cyan	
602	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Yellow	
603	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Magenta	
604	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Cyan	
605	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Yellow	
606	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Magenta	
607	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Cyan	

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
608	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Yellow	
609	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Magenta	
610	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Cyan	
611	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Yellow	
612	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Magenta	
613	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Cyan	
614	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Yellow	
615	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Magenta	
616	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Cyan	
617	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Yellow	
618	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Magenta	
619	Canon	Multi (3-in-1)	BCI-11	N/A	412E2024	Cyan	
620	Canon	Multi (3-in-1)	BCI-12	N/A	221K2214	Yellow	
621	Canon	Multi (3-in-1)	BCI-12	N/A	221K2214	Magenta	
622	Canon	Multi (3-in-1)	BCI-12	N/A	221K2214	Cyan	
623	Canon	Multi (3-in-1)	BCI-12	N/A	221K2214	Yellow	
624	Canon	Multi (3-in-1)	BCI-12	N/A	221K2214	Magenta	
625	Canon	Multi (3-in-1)	BCI-12	N/A	221K2214	Cyan	
626	Canon	Multi (3-in-1)	BCI-12	N/A	221K2214	Yellow	
627	Canon	Multi (3-in-1)	BCI-12	N/A	221K2214	Magenta	
628	Canon	Multi (3-in-1)	BCI-12	N/A	221K2214	Cyan	
629	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Yellow	
630	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Magenta	

Table 56: List of Black and Colored Inkjet Ink Cartridges Donated by the Various Manufacturers cont.

Sample		Type of Cartridge	Model #	Box Lot #	Cartridge Lot #	Ink Color	Misc
631	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Cyan	
632	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Yellow	
633	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Magenta	
634	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Cyan	
635	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Yellow	
636	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Magenta	
637	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Cyan	
638	Canon	Multi (3-in-1)	BCI-12	N/A	221K2214	Yellow	
639	Canon	Multi (3-in-1)	BCI-12	N/A	221K2214	Magenta	
640	Canon	Multi (3-in-1)	BCI-12	N/A	221K2214	Cyan	
641	Canon	Multi (3-in-1)	BCI-12	N/A	221K2214	Yellow	
642	Canon	Multi (3-in-1)	BCI-12	N/A	221K2214	Magenta	
643	Canon	Multi (3-in-1)	BCI-12	N/A	221K2214	Cyan	
644	Canon	Multi (3-in-1)	BCI-12	N/A	221K2214	Yellow	
645	Canon	Multi (3-in-1)	BCI-12	N/A	221K2214	Magenta	
646	Canon	Multi (3-in-1)	BCI-12	N/A	221K2214	Cyan	
647	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Yellow	
648	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Magenta	
649	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Cyan	
650	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Yellow	
651	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Magenta	
652	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Cyan	
653	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Yellow	
654	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Magenta	
655	Canon	Multi (3-in-1)	BCI-12	N/A	222A0914	Cyan	

APPENDIX C:

Thin Layer Chromatography Data.

The following tables in Appendix C show the results of the TLC analysis of the ink samples extracted from the paper on the various days. The distance traveled by the mobile phase and any spot(s) noted for a specific ink sample were noted in the following table. The Rf value was calculated for each spot, if applicable, and was also included in the table. The colors within the following table represent the colors observed for the visible spots on the TLC plate for the specific ink sample.

TLC Results – Dissertation Ink Samples

Table 57: TLC Results for samples analyzed on July 18th, 2007

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
Blank	Staples Paper	**8.5**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
Blank	Staples Paper	**8.9**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
Blank	Staples Paper	**7.5**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
04	Okidata	**8.4**	**5.15**	**5.25**					
	Rf Values		**0.6131**	**0.625**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV	See bright orange spot							
05	Okidata	**8.2**	**5.15**	**5.25**					
	Rf Values		**0.62805**	**0.64024**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV	See bright orange spot							
09	Okidata	**8.4**	**5.15**	**5.25**					
	Rf Values		**0.6131**	**0.625**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV	See bright orange spot							
13	Xerox	**8.45**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
14	Xerox	**8.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
15	Xerox	**8.55**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
16	Xerox	**8.5**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								

Table 57: TLC Results for samples analyzed on July 18th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
17	Kodak	**8.5**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
22	Kodak	**8.5**	**2.5**						
	Rf Values		**0.29412**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
24	Xerox	**8.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
25	Xerox	**8.65**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
26	Xerox	**8.5**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
27	Xerox	**8.4**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
28	Xerox	**8.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
29	Xerox	**8.65**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
30	Epson	**8.6**	**5.3**	**6**	**7.6**				
	Rf Values		**0.61628**	**0.69767**	**0.88372**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
31	Epson	**8.5**	**5.3**	**6.05**	**7.6**				
	Rf Values		**0.62353**	**0.71176**	**0.89412**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
32	Epson	**8.6**	**5.4**	**6.1**	**7.7**				
	Rf Values		**0.62791**	**0.7093**	**0.89535**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								

Table 57: TLC Results for samples analyzed on July 18th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
33	Epson	**8.6**	**5.1**	**6.1**	**6.7**	**7.4**			
	Rf Values		**0.59302**	**0.7093**	**0.77907**	**0.86047**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
34	Epson	**8.6**	**5.1**	**6**	**6.6**	**7.3**			
	Rf Values		**0.59302**	**0.69767**	**0.76744**	**0.84884**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
35	Epson	**8.6**	**5.1**	**6.1**	**6.7**	**7.4**			
	Rf Values		**0.59302**	**0.7093**	**0.77907**	**0.86047**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
60	Epson	**8.8**	**5.1**	**6**	**6.6**	**7.25**			
	Rf Values		**0.57955**	**0.68182**	**0.75**	**0.82386**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
61	Epson	**8.8**	**5.2**	**6**	**6.6**	**7.35**			
	Rf Values		**0.59091**	**0.68182**	**0.75**	**0.83523**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
62	Epson	**8.4**	**5.3**	**6**	**6.6**	**7.2**			
	Rf Values		**0.63095**	**0.71429**	**0.78571**	**0.85714**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
63	Epson	**8.4**	**5.3**	**6**	**6.6**	**7.2**			
	Rf Values		**0.63095**	**0.71429**	**0.78571**	**0.85714**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
64	Epson	**8.4**	**5.3**	**6**	**6.5**	**7.2**			
	Rf Values		**0.63095**	**0.71429**	**0.77381**	**0.85714**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
65	Epson	**8.5**	**5.4**	**6.1**	**6.7**	**7.35**			Solvent front/ sample curved
	Rf Values		**0.63529**	**0.71765**	**0.78824**	**0.86471**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
66	Epson	**8.95**	**5.5**	**6**	**6.6**	**7.2**			
	Rf Values		**0.61453**	**0.67039**	**0.73743**	**0.80447**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
67	Epson	**9**	**5.45**	**6.05**	**6.6**	**7.25**			
	Rf Values		**0.60556**	**0.67222**	**0.73333**	**0.80556**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								

Table 57: TLC Results for samples analyzed on July 18th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
68	Epson	**8.9**	**5.4**	**6.1**	**6.7**	**7.3**			
	Rf Values		**0.60674**	**0.68539**	**0.75281**	**0.82022**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
84	Epson	**8.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
85	Epson	**8.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
86	Epson	**8.75**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
90	Epson	**8.7**	**5.3**	**6.1**	**6.8**	**7.6**			
	Rf Values		**0.6092**	**0.70115**	**0.78161**	**0.87356**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
91	Epson	**8.65**	**5.4**	**6.2**	**7**	**7.6**			
	Rf Values		**0.62428**	**0.71676**	**0.80925**	**0.87861**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
92	Epson	**8.65**	**5.5**	**6.4**	**7**	**7.6**			
	Rf Values		**0.63584**	**0.73988**	**0.80925**	**0.87861**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
93	Epson	**8.7**	**5.45**	**6.35**	**7**	**7.6**			
	Rf Values		**0.62644**	**0.72989**	**0.8046**	**0.87356**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
94	Epson	**8.8**	**5.5**	**6.35**	**7**	**7.55**			
	Rf Values		**0.625**	**0.72159**	**0.79545**	**0.85795**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
95	Epson	**8.75**	**5.5**	**6.35**	**6.95**	**7.5**			
	Rf Values		**0.62857**	**0.72571**	**0.79429**	**0.85714**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
120	Epson	**8.8**	**5.6**	**6.4**	**6.9**	**7.5**			
	Rf Values		**0.63636**	**0.72727**	**0.78409**	**0.85227**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								

Table 57: TLC Results for samples analyzed on July 18th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
121	Epson	9	5.7	6.4	7	7.6			
	Rf Values		0.63333	0.71111	0.77778	0.84444	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
122	Epson	8.8	5.6	6	6.7	7.2			
	Rf Values		0.63636	0.68182	0.76136	0.81818	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
123	Epson	8.8	5.5	6	6.6	7.2			
	Rf Values		0.625	0.68182	0.75	0.81818	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
124	Epson	8.65	5.4	5.95	6.6	7.2			
	Rf Values		0.62428	0.68786	0.76301	0.83237	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
125	Epson	8.7	5.3	5.95	6.7	7.3			
	Rf Values		0.6092	0.68391	0.77011	0.83908	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
156	Epson	8.7							
	Rf Values		0	0	0	0	0	0	
	Short Wave UV								
	Long Wave UV								
157	Epson	8.65							
	Rf Values		0	0	0	0	0	0	
	Short Wave UV								
	Long Wave UV								
158	Epson	8.6							
	Rf Values		0	0	0	0	0	0	
	Short Wave UV								
	Long Wave UV								
198	Hewlett Packard	8.5							
	Rf Values		0	0	0	0	0	0	
	Short Wave UV								
	Long Wave UV								
199	Hewlett Packard	8.6							
	Rf Values		0	0	0	0	0	0	
	Short Wave UV								
	Long Wave UV								

Table 57: TLC Results for samples analyzed on July 18th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
200	Hewlett Packard	**8.65**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
201	Hewlett Packard	**8.5**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
205	Hewlett Packard	**8.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
217	Canon	**8.8**	**2.5**	**5.45**					
	Rf Values		**0.28409**	**0.61932**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
218	Canon	**8.8**	**2.5**	**5.6**					Solvent front/ sample slightly curved
	Rf Values		**0.28409**	**0.63636**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
219	Canon	**9**	**2.7**	**5.65**					
	Rf Values		**0.3**	**0.62778**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
220	Canon	**9**	**2.6**	**5.6**					
	Rf Values		**0.28889**	**0.62222**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
221	Canon	**9**	**2.7**	**5.65**					
	Rf Values		**0.3**	**0.62778**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
222	Canon	**8.9**	**2.7**	**5.65**					
	Rf Values		**0.30337**	**0.63483**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
223	Canon	**9**	**5.7**						
	Rf Values		**0.63333**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								

Table 57: TLC Results for samples analyzed on July 18th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
224	Canon	**9**	**5.7**						
	Rf Values		**0.63333**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
225	Canon	**8.75**	**5.7**	**6.8**					
	Rf Values		**0.65143**	**0.77714**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
226	Canon	**8.8**	**5.7**	**6.9**					
	Rf Values		**0.64773**	**0.78409**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
227	Canon	**8.9**	**5.9**	**6.9**					
	Rf Values		**0.66292**	**0.77528**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
228	Canon	**8.8**	**6.05**	**7**					
	Rf Values		**0.6875**	**0.79545**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
244	Xerox	**8.7**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
248	Xerox	**8.7**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
252	Xerox	**8.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
256	Xerox	**9**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
260	Xerox	**8.85**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
264	Xerox	**8.75**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								

Table 57: TLC Results for samples analyzed on July 18th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
265	Xerox	**8.65**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
282	Canon	**8.6**	**5.8**						
	Rf Values		**0.67442**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
283	Canon	**8.6**	**5.8**						
	Rf Values		**0.67442**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
284	Canon	**8.6**	**5.9**						
	Rf Values		**0.68605**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
285	Canon	**8.6**	**5.8**						
	Rf Values		**0.67442**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
286	Canon	**8.55**	**5.8**						
	Rf Values		**0.67836**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
287	Canon	**8.5**	**6**						
	Rf Values		**0.70588**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
306	Canon	**8.4**	**6.75**						
	Rf Values		**0.80357**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
307	Canon	**8.4**	**6.6**						
	Rf Values		**0.78571**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
308	Canon	**8.55**	**6.7**						
	Rf Values		**0.78363**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
309	Canon	**8.7**	**6.6**						
	Rf Values		**0.75862**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								

Table 57: TLC Results for samples analyzed on July 18th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
310	Canon	**7.2**	**5.6**						
	Rf Values		**0.77778**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
311	Canon	**7.2**	**5.5**						
	Rf Values		**0.76389**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
312	Canon	**7.25**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
313	Canon	**7.2**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
314	Canon	**7.1**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
315	Canon	**7.1**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
316	Canon	**7.2**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
317	Canon	**7.35**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
318	Canon	**7.3**	**5.6**						
	Rf Values		**0.76712**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
319	Canon	**7.3**	**2.55**	**5.6**					
	Rf Values		**0.34932**	**0.76712**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
320	Canon	**7.2**	**2.5**	**5.65**					
	Rf Values		**0.34722**	**0.78472**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								

Table 57: TLC Results for samples analyzed on July 18th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
321	Canon	**7.35**	**2.6**	**5.75**					
	Rf Values		**0.35374**	**0.78231**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
322	Canon	**7.5**	**2.5**	**5.7**					
	Rf Values		**0.33333**	**0.76**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
323	Canon	**7.8**	**2.5**	**5.7**					
	Rf Values		**0.32051**	**0.73077**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
327	Canon	**8.05**	**5.9**						
	Rf Values		**0.73292**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
331	Canon	**8**	**5.9**						
	Rf Values		**0.7375**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
335	Canon	**8**	**5.9**						
	Rf Values		**0.7375**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
339	Canon	**8**	**6.05**						
	Rf Values		**0.75625**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
343	Canon	**8.1**	**6.1**						
	Rf Values		**0.75309**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
347	Canon	**8.1**	**6.2**						
	Rf Values		**0.76543**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
348	Canon	**8.1**	**5.3**	**6.2**					
	Rf Values		**0.65432**	**0.76543**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
349	Canon	**8.1**	**5.2**	**6.1**					
	Rf Values		**0.64198**	**0.75309**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								

Table 57: TLC Results for samples analyzed on July 18th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
350	Canon	**8**	**5.35**	**6.2**					
	Rf Values		**0.66875**	**0.775**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
351	Canon	**8**	**5.2**	**6.2**					
	Rf Values		**0.65**	**0.775**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
352	Canon	**7.9**	**5.4**	**6.2**					
	Rf Values		**0.68354**	**0.78481**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
353	Canon	**8**	**5.3**	**6.2**					
	Rf Values		**0.6625**	**0.775**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
372	Canon	**8.2**	**5.3**	**6.2**					
	Rf Values		**0.64634**	**0.7561**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
373	Canon	**8.2**	**5.4**	**6.4**					
	Rf Values		**0.65854**	**0.78049**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
374	Canon	**8.2**	**5**	**5.8**					
	Rf Values		**0.60976**	**0.70732**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
375	Canon	**8.1**	**5**	**5.9**					
	Rf Values		**0.61728**	**0.7284**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
376	Canon	**8.05**	**5**	**5.85**					
	Rf Values		**0.62112**	**0.72671**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
377	Canon	**8**	**5**	**5.85**					
	Rf Values		**0.625**	**0.73125**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
378	Canon	**8**	**5**	**5.85**					
	Rf Values		**0.625**	**0.73125**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								

Table 57: TLC Results for samples analyzed on July 18th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
379	Canon	**8.1**	**5.1**	**5.9**					
	Rf Values		**0.62963**	**0.7284**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
380	Canon	**8.1**	**5**	**6**					
	Rf Values		**0.61728**	**0.74074**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
381	Canon	**8.1**	**5.1**	**5.9**					
	Rf Values		**0.62963**	**0.7284**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
382	Canon	**8**	**5.1**	**6**					
	Rf Values		**0.6375**	**0.75**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
383	Canon	**8**	**5.1**	**6**					
	Rf Values		**0.6375**	**0.75**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
384	Canon	**8**	**5.1**	**5.9**					
	Rf Values		**0.6375**	**0.7375**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
385	Canon	**8.25**	**5.1**	**6.1**					
	Rf Values		**0.61818**	**0.73939**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
386	Canon	**8.3**	**5.2**	**6.1**					
	Rf Values		**0.62651**	**0.73494**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
387	Canon	**8.2**	**5.3**	**6.1**					
	Rf Values		**0.64634**	**0.7439**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
388	Canon	**7.45**	**4.7**	**5.3**					
	Rf Values		**0.63087**	**0.71141**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
389	Canon	**7.4**	**4.7**	**5.4**					
	Rf Values		**0.63514**	**0.72973**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								

Table 57: TLC Results for samples analyzed on July 18th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
390	Canon	**7.4**	**4.5**	**5.4**					
	Rf Values		**0.60811**	**0.72973**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
391	Canon	**7.4**	**4.65**	**5.4**					
	Rf Values		**0.62838**	**0.72973**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
392	Canon	**7.3**	**4.7**	**5.5**					
	Rf Values		**0.64384**	**0.75342**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
393	Canon	**7.3**	**4.6**	**5.5**					
	Rf Values		**0.63014**	**0.75342**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
394	Canon	**7.5**	**4.6**	**5.5**					
	Rf Values		**0.61333**	**0.73333**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
395	Canon	**7.6**	**4.7**	**5.6**					
	Rf Values		**0.61842**	**0.73684**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
396	Canon	**7.6**	**4.8**	**5.6**					
	Rf Values		**0.63158**	**0.73684**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
397	Canon	**7.6**	**4.7**	**5.5**					
	Rf Values		**0.61842**	**0.72368**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
398	Canon	**7.7**	**4.9**	**5.6**					
	Rf Values		**0.63636**	**0.72727**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
399	Canon	**7.8**	**4.9**	**5.6**					
	Rf Values		**0.62821**	**0.71795**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
400	Canon	**7.9**	**5**	**5.7**					
	Rf Values		**0.63291**	**0.72152**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								

Table 57: TLC Results for samples analyzed on July 18th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
401	Canon	**7.7**	**4.9**	**5.6**					
	Rf Values		**0.63636**	**0.72727**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
402	Canon	**7.7**	**5.5**						
	Rf Values		**0.71429**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
403	Canon	**7.6**	**5.6**						
	Rf Values		**0.73684**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
404	Canon	**7.5**	**5.6**						
	Rf Values		**0.74667**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
405	Canon	**7.4**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
406	Canon	**7.4**	**5.8**						
	Rf Values		**0.78378**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
407	Canon	**7.5**	**5.9**						
	Rf Values		**0.78667**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
408	Canon	**7.5**	**5.85**						
	Rf Values		**0.78**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
409	Canon	**7.6**	**5.85**						
	Rf Values		**0.76974**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
410	Canon	**7.7**	**5.9**						
	Rf Values		**0.76623**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
411	Canon	**7.7**	**5.7**						
	Rf Values		**0.74026**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								

Table 57: TLC Results for samples analyzed on July 18th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
412	Canon	**7.65**	**5.7**						
	Rf Values		**0.7451**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
413	Canon	**7.65**	**5.75**						
	Rf Values		**0.75163**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
414	Canon	**7.6**	**5.8**						
	Rf Values		**0.76316**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
415	Canon	**7.6**	**5.6**						
	Rf Values		**0.73684**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
416	Canon	**7.7**	**5.6**						
	Rf Values		**0.72727**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
417	Canon	**7.7**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
418	Canon	**7.6**	**5.7**						
	Rf Values		**0.75**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
419	Canon	**7.45**	**5.75**						
	Rf Values		**0.77181**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
492	Canon	**7.35**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
493	Canon	**7.3**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
494	Canon	**7.4**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								

Table 57: TLC Results for samples analyzed on July 18th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
495	Canon	**7.4**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
496	Canon	**7.45**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
497	Canon	**7.4**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
522	Canon	**7.6**	**2.5**	**3.5**	**5.2**				
	Rf Values		**0.32895**	**0.46053**	**0.68421**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
523	Canon	**7.85**	**2.55**	**3.7**	**5.2**				
	Rf Values		**0.32484**	**0.47134**	**0.66242**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
524	Canon	**7.7**	**2.6**	**3.8**	**5.3**				
	Rf Values		**0.33766**	**0.49351**	**0.68831**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
525	Canon	**7.5**	**2.55**	**3.6**	**5**				
	Rf Values		**0.34**	**0.48**	**0.66667**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
526	Canon	**7.5**	**2.5**	**3.6**	**5.1**				
	Rf Values		**0.33333**	**0.48**	**0.68**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
527	Canon	**7.45**	**2.5**	**3.5**	**5.1**				
	Rf Values		**0.33557**	**0.4698**	**0.68456**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
558	Epson	**7.55**	**5.1**	**5.5**	**5.75**	**6.2**			
	Rf Values		**0.6755**	**0.72848**	**0.76159**	**0.82119**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
559	Epson	**7.5**	**5.15**	**5.5**	**5.75**	**6.15**			
	Rf Values		**0.68667**	**0.73333**	**0.76667**	**0.82**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								

Table 57: TLC Results for samples analyzed on July 18th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
Blank	Staples Paper	**7.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
Blank	Staples Paper	**7.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
Blank	Staples Paper	**7.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								

Table 58: TLC Results for samples analyzed on July 23rd, 2007

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
Blank	Staples Paper	**9.55**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
Blank	Staples Paper	**10.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
Blank	Staples Paper	**12**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
04	Okidata	**9.5**	**5.05**	**5.2**					
	Rf Values		**0.53158**	**0.54737**	**0**	**0**	**0**	**0**	
	Short Wave UV	Slight orange fluorescence at pink spot							
	Long Wave UV	See bright orange fluorescent spot							
05	Okidata	**9.45**	**5**	**5.15**					
	Rf Values		**0.5291**	**0.54497**	**0**	**0**	**0**	**0**	
	Short Wave UV	Slight orange fluorescence at pink spot							
	Long Wave UV	See bright orange fluorescent spot							
09	Okidata	**9.35**	**4.95**	**5.1**					
	Rf Values		**0.52941**	**0.54545**	**0**	**0**	**0**	**0**	
	Short Wave UV	Slight orange fluorescence at pink spot							
	Long Wave UV	See bright orange fluorescent spot							

Table 58: TLC Results for samples analyzed on July 23rd, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
13	Xerox	**9.38**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
14	Xerox	**9.2**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
15	Xerox	**9.13**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
16	Xerox	**9.25**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
17	Kodak	**9.2**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
22	Kodak	**9.2**	**2.1**	**2.7**					
	Rf Values		**0.22826**	**0.29348**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
24	Xerox	**9.2**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
25	Xerox	**9.3**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
26	Xerox	**9.38**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
27	Xerox	**9.32**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
28	Xerox	**10.08**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								

Table 58: TLC Results for samples analyzed on July 23rd, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
29	Xerox	**9.95**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
30	Epson	**9.95**	**5.95**	**6.55**					
	Rf Values		**0.59799**	**0.65829**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
31	Epson	**9.9**	**5.95**	**6.55**	**8.6**				
	Rf Values		**0.60101**	**0.66162**	**0.86869**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
32	Epson	**9.9**	**5.95**	**6.6**	**8.7**				
	Rf Values		**0.60101**	**0.66667**	**0.87879**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
33	Epson	**9.8**	**5.8**	**6.7**	**7.25**	**8.2**			
	Rf Values		**0.59184**	**0.68367**	**0.7398**	**0.83673**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
34	Epson	**9.7**	**5.75**	**6.7**	**7.3**	**8.2**			
	Rf Values		**0.59278**	**0.69072**	**0.75258**	**0.84536**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
35	Epson	**9.8**	**5.7**	**6.75**	**7.35**	**8.2**			
	Rf Values		**0.58163**	**0.68878**	**0.75**	**0.83673**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
60	Epson	**9.8**	**5.8**	**6.75**	**7.3**	**8.2**			
	Rf Values		**0.59184**	**0.68878**	**0.7449**	**0.83673**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
61	Epson	**9.8**	**5.8**	**6.7**	**7.5**	**8.3**			
	Rf Values		**0.59184**	**0.68367**	**0.76531**	**0.84694**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
62	Epson	**9.78**	**5.8**	**6.7**	**7.4**	**8.2**			
	Rf Values		**0.59305**	**0.68507**	**0.75665**	**0.83845**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
63	Epson	**9.9**	**5.9**	**6.65**	**7.35**	**8.1**			
	Rf Values		**0.59596**	**0.67172**	**0.74242**	**0.81818**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								

Table 58: TLC Results for samples analyzed on July 23rd, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
64	Epson	9.95	6.05	6.7	7.3	8.25			
	Rf Values		0.60804	0.67337	0.73367	0.82915	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
65	Epson	9.93	6.05	6.85	7.6	8.3			Solvent front/ sample curved
	Rf Values		0.60926	0.68983	0.76536	0.83585	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
66	Epson	10.2	6.35	6.9	7.6	8.2			
	Rf Values		0.62255	0.67647	0.7451	0.80392	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
67	Epson	10.1	6.4	6.95	7.6	8.15			
	Rf Values		0.63366	0.68812	0.75248	0.80693	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
68	Epson	10.1	6.35	7	7.5	8.15			
	Rf Values		0.62871	0.69307	0.74257	0.80693	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
84	Epson	10.05							
	Rf Values		0	0	0	0	0	0	
	Short Wave UV								
	Long Wave UV								
85	Epson	10.05							
	Rf Values		0	0	0	0	0	0	
	Short Wave UV								
	Long Wave UV								
86	Epson	10.1							
	Rf Values		0	0	0	0	0	0	
	Short Wave UV								
	Long Wave UV								
90	Epson	10.1	6.3	7.15	7.85	8.4			
	Rf Values		0.62376	0.70792	0.77723	0.83168	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
91	Epson	10.1	6.2	7.2	7.7	8.45			
	Rf Values		0.61386	0.71287	0.76238	0.83663	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
92	Epson	10.1	6.3	7.2	7.7	8.4			
	Rf Values		0.62376	0.71287	0.76238	0.83168	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								

Table 58: TLC Results for samples analyzed on July 23rd, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
93	Epson	10	6.25	7.15	7.6	8.4			
	Rf Values		0.625	0.715	0.76	0.84	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
94	Epson	10.1	6.25	7.1	7.6	8.2			
	Rf Values		0.61881	0.70297	0.75248	0.81188	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
95	Epson	10.15	6.35	7.1	7.65	8.3			
	Rf Values		0.62562	0.69951	0.75369	0.81773	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
120	Epson	10.2	6.45	7.1	7.6	8.3			Solvent front/ sample slightly curved
	Rf Values		0.63235	0.69608	0.7451	0.81373	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
121	Epson	10.2	6.6	7.2	7.7	8.4			Solvent front/ sample curved
	Rf Values		0.64706	0.70588	0.7549	0.82353	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
122	Epson	10.8	6.7	7.2	7.9	8.6			
	Rf Values		0.62037	0.66667	0.73148	0.7963	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
123	Epson	10.7	6.6	7.2	7.9	8.7			
	Rf Values		0.61682	0.6729	0.73832	0.81308	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
124	Epson	10.8	6.55	7.2	7.9	8.6			
	Rf Values		0.60648	0.66667	0.73148	0.7963	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
125	Epson	10.8	6.5	7.2	8	8.7			
	Rf Values		0.60185	0.66667	0.74074	0.80556	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
156	Epson	10.75	8						
	Rf Values		0.74419	0	0	0	0	0	
	Short Wave UV								
	Long Wave UV								
157	Epson	10.7	7.95						
	Rf Values		0.74299	0	0	0	0	0	
	Short Wave UV								
	Long Wave UV								

Table 58: TLC Results for samples analyzed on July 23rd, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
158	Epson	**10.6**	**8**						
	Rf Values		**0.75472**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
198	Hewlett Packard	**10.65**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
199	Hewlett Packard	**10.7**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
200	Hewlett Packard	**10.7**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
201	Hewlett Packard	**10.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
205	Hewlett Packard	**10.7**	**3.2**						
	Rf Values		**0.29907**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
217	Canon	**10.8**	**2.75**	**3.3**	**6.8**				
	Rf Values		**0.25463**	**0.30556**	**0.62963**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
218	Canon	**10.9**	**2.85**	**3.4**	**7**				Solvent front/ sample curved
	Rf Values		**0.26147**	**0.31193**	**0.6422**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
219	Canon	**10.8**	**2.95**	**3.4**	**7.05**				Solvent front/ sample curved
	Rf Values		**0.27315**	**0.31481**	**0.65278**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
220	Canon	**10.9**	**2.9**	**3.4**	**7**				
	Rf Values		**0.26606**	**0.31193**	**0.6422**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								

Table 58: TLC Results for samples analyzed on July 23rd, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
221	Canon	**10.9**	**2.9**	**3.4**	**6.95**				
	Rf Values		**0.26606**	**0.31193**	**0.63761**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
222	Canon	**10.92**	**2.85**	**3.35**	**6.9**				
	Rf Values		**0.26099**	**0.30678**	**0.63187**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
223	Canon	**10.9**	**6.9**	**8.15**					
	Rf Values		**0.63303**	**0.74771**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
224	Canon	**10.8**	**7**	**8.2**					
	Rf Values		**0.64815**	**0.75926**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
225	Canon	**10.8**	**7**	**8.1**					
	Rf Values		**0.64815**	**0.75**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
226	Canon	**10.75**	**7**	**8.1**					
	Rf Values		**0.65116**	**0.75349**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
227	Canon	**10.8**	**7.1**	**8.1**					
	Rf Values		**0.65741**	**0.75**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
228	Canon	**10.75**	**7.1**	**8.2**					
	Rf Values		**0.66047**	**0.76279**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
244	Xerox	**10.85**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
248	Xerox	**10.9**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
252	Xerox	**10.9**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								

Table 58: TLC Results for samples analyzed on July 23rd, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
256	Xerox	**10.9**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
260	Xerox	**11**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
264	Xerox	**10.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
265	Xerox	**10.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
282	Canon	**10.8**	**3.1**	**3.6**	**6.9**				
	Rf Values		**0.28704**	**0.33333**	**0.63889**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
283	Canon	**10.7**	**3**	**3.5**	**7**				
	Rf Values		**0.28037**	**0.3271**	**0.65421**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
284	Canon	**10.65**	**3.1**	**3.6**	**7**				
	Rf Values		**0.29108**	**0.33803**	**0.65728**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
285	Canon	**10.65**	**3**	**3.5**	**7**				
	Rf Values		**0.28169**	**0.32864**	**0.65728**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
286	Canon	**10.7**	**3.2**	**3.7**	**6.9**				
	Rf Values		**0.29907**	**0.34579**	**0.64486**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
287	Canon	**10.7**	**3.2**	**3.7**	**6.95**				
	Rf Values		**0.29907**	**0.34579**	**0.64953**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
306	Canon	**10.75**	**8.2**						
	Rf Values		**0.76279**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								

Table 58: TLC Results for samples analyzed on July 23rd, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
307	Canon	**10.8**	**8.2**						
	Rf Values		**0.75926**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
308	Canon	**10.75**	**8.2**						
	Rf Values		**0.76279**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
309	Canon	**10.7**	**8.2**						
	Rf Values		**0.76636**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
310	Canon	**10.35**	**8.1**						
	Rf Values		**0.78261**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
311	Canon	**10.2**	**8.1**						
	Rf Values		**0.79412**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
312	Canon	**10.3**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
313	Canon	**10.3**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
314	Canon	**10.3**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
315	Canon	**10.3**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
316	Canon	**10.3**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
317	Canon	**10.2**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								

Table 58: TLC Results for samples analyzed on July 23rd, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
318	Canon	**10.25**	**3.5**	**8**					
	Rf Values		**0.34146**	**0.78049**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
319	Canon	**10.2**	**3.4**	**7.9**					
	Rf Values		**0.33333**	**0.77451**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
320	Canon	**10.33**	**3.5**	**7.8**					
	Rf Values		**0.33882**	**0.75508**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
321	Canon	**10.4**	**3.4**	**7.8**					
	Rf Values		**0.32692**	**0.75**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
322	Canon	**10.5**	**3.4**	**7.8**					
	Rf Values		**0.32381**	**0.74286**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
323	Canon	**10.6**	**7.85**						
	Rf Values		**0.74057**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
327	Canon	**10.6**	**8.1**						
	Rf Values		**0.76415**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
331	Canon	**10.65**	**8.2**						
	Rf Values		**0.76995**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
335	Canon	**10.65**	**8.1**						
	Rf Values		**0.76056**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
339	Canon	**10.6**	**8.1**						
	Rf Values		**0.76415**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
343	Canon	**10.5**	**7.9**						
	Rf Values		**0.75238**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								

Table 58: TLC Results for samples analyzed on July 23rd, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
347	Canon	**10.5**	**7.8**						
	Rf Values		**0.74286**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
348	Canon	**10.7**	**7**	**7.8**					
	Rf Values		**0.65421**	**0.72897**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
349	Canon	**10.5**	**3.7**	**6.95**	**8**				
	Rf Values		**0.35238**	**0.6619**	**0.7619**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
350	Canon	**10.5**	**3.7**	**6.9**	**8.1**				
	Rf Values		**0.35238**	**0.65714**	**0.77143**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
351	Canon	**10.5**	**3.7**	**6.85**	**8**				
	Rf Values		**0.35238**	**0.65238**	**0.7619**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
352	Canon	**10.6**	**6.9**	**7.8**					
	Rf Values		**0.65094**	**0.73585**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
353	Canon	**10.8**	**3.5**	**6.9**	**7.9**				
	Rf Values		**0.32407**	**0.63889**	**0.73148**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
372	Canon	**10.7**	**3.4**	**7.2**	**8**				
	Rf Values		**0.31776**	**0.6729**	**0.74766**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
373	Canon	**10.7**	**3.5**	**6.9**	**7.9**				
	Rf Values		**0.3271**	**0.64486**	**0.73832**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
374	Canon	**10.8**	**6.9**	**7.9**					
	Rf Values		**0.63889**	**0.73148**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
375	Canon	**10.8**	**6.9**	**8**					
	Rf Values		**0.63889**	**0.74074**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								

Table 58: TLC Results for samples analyzed on July 23rd, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
376	Canon	**10.8**	**6.8**	**8**					
	Rf Values		**0.62963**	**0.74074**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
377	Canon	**10.7**	**6.7**	**8**					
	Rf Values		**0.62617**	**0.74766**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
378	Canon	**10.75**	**6.7**	**7.9**					
	Rf Values		**0.62326**	**0.73488**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
379	Canon	**10.7**	**6.7**	**7.7**					
	Rf Values		**0.62617**	**0.71963**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
380	Canon	**10.6**	**6.8**	**7.7**					
	Rf Values		**0.64151**	**0.72642**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
381	Canon	**10.5**	**6.75**	**7.8**					
	Rf Values		**0.64286**	**0.74286**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
382	Canon	**10.7**	**6.8**	**7.8**					
	Rf Values		**0.63551**	**0.72897**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
383	Canon	**10.8**	**6.75**	**7.85**					
	Rf Values		**0.625**	**0.72685**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
384	Canon	**10.8**	**6.7**	**7.75**					
	Rf Values		**0.62037**	**0.71759**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
385	Canon	**10.8**	**6.7**	**7.85**					
	Rf Values		**0.62037**	**0.72685**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
386	Canon	**10.7**	**6.9**	**7.8**					
	Rf Values		**0.64486**	**0.72897**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								

Table 58: TLC Results for samples analyzed on July 23rd, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
387	Canon	**10.7**	**7**						
	Rf Values		**0.65421**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
388	Canon	**11.8**	**6.2**	**7.3**					Solvent front/ sample curved
	Rf Values		**0.52542**	**0.61864**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
389	Canon	**11.8**	**6.3**	**7.4**					Solvent front/ sample curved
	Rf Values		**0.5339**	**0.62712**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
390	Canon	**11.8**	**6.35**	**7.4**					Solvent front/ sample curved
	Rf Values		**0.53814**	**0.62712**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
391	Canon	**11.6**	**6.45**	**7.35**					Solvent front/ sample curved
	Rf Values		**0.55603**	**0.63362**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
392	Canon	**11.4**	**6.4**	**7.35**					Solvent front/ sample curved
	Rf Values		**0.5614**	**0.64474**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
393	Canon	**11.2**	**6.55**	**7.5**					Solvent front/ sample curved
	Rf Values		**0.58482**	**0.66964**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
394	Canon	**11.1**	**6.6**	**7.55**					
	Rf Values		**0.59459**	**0.68018**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
395	Canon	**11**	**6.6**						
	Rf Values		**0.6**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
396	Canon	**11**	**6.6**						
	Rf Values		**0.6**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
397	Canon	**11**	**6.55**						
	Rf Values		**0.59545**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								

Table 58: TLC Results for samples analyzed on July 23rd, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
398	Canon	**11.1**	**6.75**						
	Rf Values		**0.60811**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
399	Canon	**11.1**	**6.75**						
	Rf Values		**0.60811**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
400	Canon	**11.2**	**6.75**						
	Rf Values		**0.60268**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
401	Canon	**11.3**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
402	Canon	**11.2**	**7.8**						
	Rf Values		**0.69643**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
403	Canon	**11.1**	**7.8**						
	Rf Values		**0.7027**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
404	Canon	**11.1**	**7.9**						
	Rf Values		**0.71171**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
405	Canon	**11**	**7.9**						
	Rf Values		**0.71818**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
406	Canon	**10.9**	**8**						
	Rf Values		**0.73394**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
407	Canon	**10.8**	**8.05**						
	Rf Values		**0.74537**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
408	Canon	**11**	**8.1**						
	Rf Values		**0.73636**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								

Table 58: TLC Results for samples analyzed on July 23rd, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
409	Canon	**11**	**8**						
	Rf Values		**0.72727**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
410	Canon	**11**	**8.05**						
	Rf Values		**0.73182**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
411	Canon	**10.95**	**8.1**						
	Rf Values		**0.73973**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
412	Canon	**11**	**8.05**						
	Rf Values		**0.73182**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
413	Canon	**11.1**	**8.05**						
	Rf Values		**0.72523**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
414	Canon	**11**	**8**						
	Rf Values		**0.72727**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
415	Canon	**10.8**	**7.9**						
	Rf Values		**0.73148**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
416	Canon	**10.95**	**7.9**						
	Rf Values		**0.72146**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
417	Canon	**10.9**	**7.95**						
	Rf Values		**0.72936**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
418	Canon	**10.8**	**7.9**						
	Rf Values		**0.73148**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
419	Canon	**10.8**	**7.9**						
	Rf Values		**0.73148**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								

Table 58: TLC Results for samples analyzed on July 23rd, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
492	Canon	**10.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
493	Canon	**10.75**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
494	Canon	**10.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
495	Canon	**10.5**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
496	Canon	**10.7**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
497	Canon	**10.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV								
	Long Wave UV								
522	Canon	**10.7**	**2.9**	**3.2**	**6.75**				
	Rf Values		**0.27103**	**0.29907**	**0.63084**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
523	Canon	**10.6**	**2.85**	**3.2**	**6.8**				Solvent front/ sample slightly curved
	Rf Values		**0.26887**	**0.30189**	**0.64151**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
524	Canon	**10.7**	**2.85**	**3.3**	**7**				Solvent front/ sample curved
	Rf Values		**0.26636**	**0.30841**	**0.65421**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
525	Canon	**9**	**2.2**	**2.75**	**5.1**				
	Rf Values		**0.24444**	**0.30556**	**0.56667**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
526	Canon	**8.95**	**2.3**	**2.75**	**5.1**				
	Rf Values		**0.25698**	**0.30726**	**0.56983**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								

Table 58: TLC Results for samples analyzed on July 23rd, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
527	Canon	9	2.2	2.7	5.05				
	Rf Values		0.24444	0.3	0.56111	0	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
558	Epson	8.9	5.4	6.2	6.85	7.4			
	Rf Values		0.60674	0.69663	0.76966	0.83146	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
559	Epson	8.9	5.4	6.2	6.9	7.5			
	Rf Values		0.60674	0.69663	0.77528	0.8427	0	0	
	Short Wave UV	See visible spots. Appear "dark"							
	Long Wave UV								
Blank	Staples Paper	9.2							
	Rf Values		0	0	0	0	0	0	
	Short Wave UV								
	Long Wave UV								
Blank	Staples Paper	9.1							
	Rf Values		0	0	0	0	0	0	
	Short Wave UV								
	Long Wave UV								
Blank	Staples Paper	9.15							
	Rf Values		0	0	0	0	0	0	
	Short Wave UV								
	Long Wave UV								
375	Canon	9	2.7	5.6	6.9				
	Rf Values		0.3	0.62222	0.76667	0	0	0	
	Short Wave UV								
	Long Wave UV								
376	Canon	8.95	2.7	5.6	6.85				
	Rf Values		0.30168	0.6257	0.76536	0	0	0	
	Short Wave UV								
	Long Wave UV								
527	Canon	9	2.3	2.7	5.1				
	Rf Values		0.25556	0.3	0.56667	0	0	0	
	Short Wave UV								
	Long Wave UV								

Table 59: TLC Results for samples analyzed on November 5th, 2007

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
Blank 1	Staples Paper	**12.5**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
Blank 2	Staples Paper	**12.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
Blank 3	Staples Paper	**12.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
04	Okidata	**12.6**	**2.3**	**7.55**					
	Rf Values		**0.18254**	**0.59921**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	See bright orange spot. Pale blue fluorescent spot approx. 2cm from line.							
05	Okidata	**12.6**	**2.3**	**7.5**					
	Rf Values		**0.18254**	**0.59524**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	See bright orange spot. Pale blue fluorescent spot approx. 2cm from line.							
09	Okidata	**12.6**	**2.3**	**7.5**					
	Rf Values		**0.18254**	**0.59524**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	See bright orange spot. Pale blue fluorescent spot approx. 2cm from line.							
13	Xerox	**12.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
14	Xerox	**12.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
15	Xerox	**12.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
16	Xerox	**12.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							

Table 59: TLC Results for samples analyzed on November 5th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
17	Kodak	**12.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
22	Kodak	**12.6**	**3.9**	**9.5**					
	Rf Values		**0.30952**	**0.75397**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
24	Xerox	**12.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
25	Xerox	**12.7**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
26	Xerox	**12.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
27	Xerox	**12.88**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
28	Xerox	**13.1**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
29	Xerox	**13.2**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
30	Epson	**13.1**	**2.1**	**7.3**	**7.85**	**9.05**	**11.3**		
	Rf Values		**0.16031**	**0.55725**	**0.59924**	**0.69084**	**0.8626**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
31	Epson	**13**	**2.15**	**7.3**	**7.85**	**9.05**	**11.3**		
	Rf Values		**0.16538**	**0.56154**	**0.60385**	**0.69615**	**0.86923**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
32	Epson	**13.02**	**2.15**	**7.25**	**7.85**	**9.05**	**11.35**		
	Rf Values		**0.16513**	**0.55684**	**0.60292**	**0.69508**	**0.87174**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							

Table 59: TLC Results for samples analyzed on November 5th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
33	Epson	13	7.1	7.5	9	9.7	10.75		
	Rf Values		0.54615	0.57692	0.69231	0.74615	0.82692	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
34	Epson	12.9	7.1	7.5	9	9.7	10.75		
	Rf Values		0.55039	0.5814	0.69767	0.75194	0.83333	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
35	Epson	12.82	7.1	7.5	9	9.7	10.75		
	Rf Values		0.55382	0.58502	0.70203	0.75663	0.83853	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
60	Epson	12.9	7.52	9	9.7	10.7			
	Rf Values		0.58295	0.69767	0.75194	0.82946	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
61	Epson	12.9	7.55	9	9.7	10.65			
	Rf Values		0.58527	0.69767	0.75194	0.82558	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
62	Epson	12.85	7.5	8.95	9.65	10.5			
	Rf Values		0.58366	0.6965	0.75097	0.81712	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
63	Epson	12.82	7.6	8.87	9.5	10.45			
	Rf Values		0.59282	0.69189	0.74103	0.81513	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
64	Epson	12.8	7.4	7.65	8.86	9.5	10.4		
	Rf Values		0.57813	0.59766	0.69219	0.74219	0.8125	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
65	Epson	12.9	7.9	8.95	9.7	10.55			Solvent front/ sample curved
	Rf Values		0.6124	0.6938	0.75194	0.81783	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
66	Epson	12.9	7.95	8.9	9.5	10.3			
	Rf Values		0.61628	0.68992	0.73643	0.79845	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
67	Epson	12.85	7.38	7.65	8.75	9.4	10.25		
	Rf Values		0.57432	0.59533	0.68093	0.73152	0.79767	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							

Table 59: TLC Results for samples analyzed on November 5th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
68	Epson	**12.8**	**7.5**	**8.75**	**9.3**	**10.3**			
	Rf Values		**0.58594**	**0.68359**	**0.72656**	**0.80469**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
84	Epson	**12.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
85	Epson	**12.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
86	Epson	**12.9**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
90	Epson	**12.88**	**7.3**	**8.6**	**9.3**	**10.3**			
	Rf Values		**0.56677**	**0.6677**	**0.72205**	**0.79969**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
91	Epson	**12.9**	**7.3**	**8.6**	**9.3**	**10.35**			
	Rf Values		**0.56589**	**0.66667**	**0.72093**	**0.80233**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
92	Epson	**12.9**	**7.15**	**7.3**	**8.6**	**9.27**	**10.3**		
	Rf Values		**0.55426**	**0.56589**	**0.66667**	**0.7186**	**0.79845**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
93	Epson	**12.9**	**7.4**	**8.5**	**9.25**	**10.2**			
	Rf Values		**0.57364**	**0.65891**	**0.71705**	**0.7907**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
94	Epson	**12.88**	**7.43**	**8.5**	**9.2**	**10.15**			
	Rf Values		**0.57686**	**0.65994**	**0.71429**	**0.78804**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
95	Epson	**12.9**	**7.5**	**8.45**	**9.1**	**10.1**			
	Rf Values		**0.5814**	**0.65504**	**0.70543**	**0.78295**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
120	Epson	**12.9**	**7.5**	**8.45**	**9.05**	**9.9**			
	Rf Values		**0.5814**	**0.65504**	**0.70155**	**0.76744**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							

Table 59: TLC Results for samples analyzed on November 5th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
121	Epson	**12.9**	**7.65**	**8.6**	**9.15**	**10.15**			Solvent front/ sample curved
	Rf Values		**0.59302**	**0.66667**	**0.7093**	**0.78682**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
122	Epson	**12.7**	**7.75**	**8.8**	**9.3**	**10.3**			Solvent front/ sample curved
	Rf Values		**0.61024**	**0.69291**	**0.73228**	**0.81102**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
123	Epson	**12.7**	**7.35**	**8.5**	**9.2**	**10.1**			Solvent front/ sample curved
	Rf Values		**0.57874**	**0.66929**	**0.72441**	**0.79528**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
124	Epson	**12.7**	**7.2**	**8.35**	**9.1**	**10**			
	Rf Values		**0.56693**	**0.65748**	**0.71654**	**0.7874**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
125	Epson	**12.6**	**7**	**8.2**	**9**	**9.95**			
	Rf Values		**0.55556**	**0.65079**	**0.71429**	**0.78968**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
156	Epson	**12.5**	**9**						
	Rf Values		**0.72**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
157	Epson	**12.5**	**9**						
	Rf Values		**0.72**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
158	Epson	**12.5**	**9**						
	Rf Values		**0.72**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
198	Hewlett Packard	**12.55**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
199	Hewlett Packard	**12.5**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 59: TLC Results for samples analyzed on November 5th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
200	Hewlett Packard	**12.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
201	Hewlett Packard	**12.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
205	Hewlett Packard	**12.6**	**3.35**						
	Rf Values		**0.26587**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
217	Canon	**12.7**	**3.5**	**78.5**					
	Rf Values		**0.27559**	**6.1811**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
218	Canon	**12.7**	**3.5**	**7.65**					Solvent front/ sample slightly curved
	Rf Values		**0.27559**	**0.60236**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
219	Canon	**12.2**	**3.8**	**7.7**					Solvent front/ sample curved
	Rf Values		**0.31148**	**0.63115**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
220	Canon	**12.2**	**3.65**	**7.4**					Solvent front/ sample curved
	Rf Values		**0.29918**	**0.60656**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
221	Canon	**12.2**	**3.6**	**7.25**					
	Rf Values		**0.29508**	**0.59426**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
222	Canon	**12.1**	**3.6**	**7.15**					
	Rf Values		**0.29752**	**0.59091**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
223	Canon	**11.9**	**3.55**	**7.2**	**8.65**				
	Rf Values		**0.29832**	**0.60504**	**0.72689**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 59: TLC Results for samples analyzed on November 5th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
224	Canon	**11.9**	**3.6**	**7.2**	**8.65**				
	Rf Values		**0.30252**	**0.60504**	**0.72689**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
225	Canon	**12**	**3.6**	**7.2**	**8.65**				
	Rf Values		**0.3**	**0.6**	**0.72083**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
226	Canon	**12.03**	**3.6**	**7.2**	**8.6**				
	Rf Values		**0.29925**	**0.5985**	**0.71488**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
227	Canon	**12.1**	**3.6**	**7.2**	**8.65**				
	Rf Values		**0.29752**	**0.59504**	**0.71488**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
228	Canon	**12.1**	**3.6**	**7.25**	**8.65**				
	Rf Values		**0.29752**	**0.59917**	**0.71488**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
244	Xerox	**12.1**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
248	Xerox	**12.15**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
252	Xerox	**12.2**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
256	Xerox	**12.2**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
260	Xerox	**12.7**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
264	Xerox	**12.75**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 59: TLC Results for samples analyzed on November 5th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
265	Xerox	**12.73**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
282	Canon	**12.7**	**3.7**	**7.9**					
	Rf Values		**0.29134**	**0.62205**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
283	Canon	**12.65**	**3.7**	**7.9**					
	Rf Values		**0.29249**	**0.62451**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
284	Canon	**12.6**	**3.7**	**7.85**					
	Rf Values		**0.29365**	**0.62302**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
285	Canon	**12.5**	**3.7**	**7.85**					
	Rf Values		**0.296**	**0.628**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
286	Canon	**12.5**	**3.7**	**7.85**					
	Rf Values		**0.296**	**0.628**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
287	Canon	**12.45**	**3.65**	**7.8**					
	Rf Values		**0.29317**	**0.62651**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
306	Canon	**12.5**	**5.6**	**9.1**	**9.9**				
	Rf Values		**0.448**	**0.728**	**0.792**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
307	Canon	**12.6**	**5.6**	**9**	**9.9**				First purple spot had clear middle.
	Rf Values		**0.44444**	**0.71429**	**0.78571**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
308	Canon	**12.55**	**5.6**	**9.1**	**9.9**				First purple spot had clear middle.
	Rf Values		**0.44622**	**0.7251**	**0.78884**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
309	Canon	**12.5**	**5.6**	**9.2**	**9.9**				
	Rf Values		**0.448**	**0.736**	**0.792**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 59: TLC Results for samples analyzed on November 5th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
310	Canon	**11.9**	**5.65**	**8.85**	**9.6**				Solvent front/ sample curved
	Rf Values		**0.47479**	**0.7437**	**0.80672**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
311	Canon	**11.9**	**5.5**	**8.6**	**9.4**				
	Rf Values		**0.46218**	**0.72269**	**0.78992**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
312	Canon	**12**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
313	Canon	**12.2**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
314	Canon	**12.1**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
315	Canon	**12.1**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
316	Canon	**12.1**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
317	Canon	**12**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
318	Canon	**11.85**	**3.1**	**8.9**					
	Rf Values		**0.2616**	**0.75105**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
319	Canon	**11.8**	**3.2**	**8.85**					
	Rf Values		**0.27119**	**0.75**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
320	Canon	**12**	**3.2**	**8.8**					
	Rf Values		**0.26667**	**0.73333**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 59: TLC Results for samples analyzed on November 5th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
321	Canon	**11.9**	**3.2**	**8.7**					
	Rf Values		**0.26891**	**0.73109**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
322	Canon	**11.9**	**3.15**	**8.7**					
	Rf Values		**0.26471**	**0.73109**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
323	Canon	**12**	**3.3**	**8.85**					Solvent front/ sample slightly curved
	Rf Values		**0.275**	**0.7375**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
327	Canon	**12.25**	**9**						Solvent front/ sample slightly curved
	Rf Values		**0.73469**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
331	Canon	**12.18**	**8.8**						
	Rf Values		**0.7225**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
335	Canon	**12.2**	**8.9**						
	Rf Values		**0.72951**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
339	Canon	**12.1**	**8.9**						
	Rf Values		**0.73554**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
343	Canon	**12.15**	**8.85**						
	Rf Values		**0.7284**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
347	Canon	**12.05**	**8.85**						
	Rf Values		**0.73444**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
348	Canon	**11.8**	**3.75**	**7.5**	**8.85**				
	Rf Values		**0.3178**	**0.63559**	**0.75**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
349	Canon	**11.8**	**3.75**	**7.5**	**8.8**				
	Rf Values		**0.3178**	**0.63559**	**0.74576**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 59: TLC Results for samples analyzed on November 5th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
350	Canon	11.9	3.8	7.5	8.75				
	Rf Values		0.31933	0.63025	0.73529	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
351	Canon	12	3.7	7.5	8.75				
	Rf Values		0.30833	0.625	0.72917	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
352	Canon	12.05	3.8	7.55	8.7				
	Rf Values		0.31535	0.62656	0.72199	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
353	Canon	12.12	3.7	7.45	8.6				
	Rf Values		0.30528	0.61469	0.70957	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
372	Canon	12.2	3.7	7.5	8.6				Solvent front/ sample curved
	Rf Values		0.30328	0.61475	0.70492	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
373	Canon	12.2	3.9	7.8	8.95				Solvent front/ sample curved
	Rf Values		0.31967	0.63934	0.73361	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
374	Canon	12.2	3.9	7.9	9.1				Solvent front/ sample curved
	Rf Values		0.31967	0.64754	0.7459	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
375	Canon	12.2	3.6	7.5	8.7				
	Rf Values		0.29508	0.61475	0.71311	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
376	Canon	12.3	3.6	7.45	8.7				
	Rf Values		0.29268	0.60569	0.70732	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
377	Canon	12.1	3.6	7.4	8.75				
	Rf Values		0.29752	0.61157	0.72314	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
378	Canon	12.18	3.6	7.35	8.75				
	Rf Values		0.29557	0.60345	0.71839	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 59: TLC Results for samples analyzed on November 5th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
379	Canon	**12.08**	**3.6**	**7.3**	**8.65**				
	Rf Values		**0.29801**	**0.6043**	**0.71606**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
380	Canon	**12.1**	**3.6**	**7.2**	**8.65**				
	Rf Values		**0.29752**	**0.59504**	**0.71488**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
381	Canon	**12.1**	**3.6**	**7.25**	**8.65**				
	Rf Values		**0.29752**	**0.59917**	**0.71488**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
382	Canon	**12.1**	**3.65**	**7.2**	**8.6**				
	Rf Values		**0.30165**	**0.59504**	**0.71074**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
383	Canon	**12.15**	**3.6**	**7.2**	**8.55**				
	Rf Values		**0.2963**	**0.59259**	**0.7037**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
384	Canon	**12.3**	**3.6**	**7.2**	**8.45**				
	Rf Values		**0.29268**	**0.58537**	**0.68699**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
385	Canon	**12.3**	**3.6**	**7.2**	**8.42**				Solvent front/ sample slightly curved
	Rf Values		**0.29268**	**0.58537**	**0.68455**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
386	Canon	**12.3**	**3.6**	**7.3**	**8.42**				Solvent front/ sample curved
	Rf Values		**0.29268**	**0.5935**	**0.68455**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
387	Canon	**12.3**	**3.85**	**7.6**	**8.8**				Solvent front/ sample curved
	Rf Values		**0.31301**	**0.61789**	**0.71545**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
388	Canon	**12.85**	**3.5**	**7.6**	**9.1**				Solvent front/ sample slightly curved
	Rf Values		**0.27237**	**0.59144**	**0.70817**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
389	Canon	**12.7**	**3.5**	**7.45**	**9.1**				
	Rf Values		**0.27559**	**0.58661**	**0.71654**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 59: TLC Results for samples analyzed on November 5th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
390	Canon	12.65	3.48	7.2	9.1				
	Rf Values		0.2751	0.56917	0.71937	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
391	Canon	12.6	3.4	7	9				
	Rf Values		0.26984	0.55556	0.71429	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
392	Canon	12.8	3.4	7	9.05				
	Rf Values		0.26563	0.54688	0.70703	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
393	Canon	12.8	3.4	6.9	9				
	Rf Values		0.26563	0.53906	0.70313	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
394	Canon	12.7	3.35	6.8	8.85				
	Rf Values		0.26378	0.53543	0.69685	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
395	Canon	12.6	3.35	6.8	8.75				
	Rf Values		0.26587	0.53968	0.69444	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
396	Canon	12.55	3.4	6.9	8.7				
	Rf Values		0.27092	0.5498	0.69323	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
397	Canon	12.5	3.4	7	8.7				
	Rf Values		0.272	0.56	0.696	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
398	Canon	12.7	3.5	7.1	8.7				Solvent front/ sample slightly curved
	Rf Values		0.27559	0.55906	0.68504	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
399	Canon	12.7	3.5	7.3	8.8				Solvent front/ sample curved
	Rf Values		0.27559	0.5748	0.69291	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
400	Canon	12.7	3.6	7.6	9				Solvent front/ sample curved
	Rf Values		0.28346	0.59843	0.70866	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 59: TLC Results for samples analyzed on November 5th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
401	Canon	12.6	3.8	8.2	9.5	10.1			Solvent front/ sample curved
	Rf Values		0.30159	0.65079	0.75397	0.80159	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
402	Canon	12.8	9.25	10					
	Rf Values		0.72266	0.78125	0	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
403	Canon	12.9	9.2						
	Rf Values		0.71318	0	0	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
404	Canon	12.9	9.2	9.8					
	Rf Values		0.71318	0.75969	0	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
405	Canon	12.9	9.15	9.9					
	Rf Values		0.7093	0.76744	0	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
406	Canon	12.8	9.15	9.95					
	Rf Values		0.71484	0.77734	0	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
407	Canon	12.75	9.15	10					
	Rf Values		0.71765	0.78431	0	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
408	Canon	12.7	9.1	9.8					
	Rf Values		0.71654	0.77165	0	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
409	Canon	12.7	9.1	9.75					
	Rf Values		0.71654	0.76772	0	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
410	Canon	12.78	9	9.7					
	Rf Values		0.70423	0.759	0	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
411	Canon	12.8	9	9.62					
	Rf Values		0.70313	0.75156	0	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 59: TLC Results for samples analyzed on November 5th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
412	Canon	**12.8**	**9**						
	Rf Values		**0.70313**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
413	Canon	**12.8**	**9.1**	**9.7**					Solvent front/ sample slightly curved
	Rf Values		**0.71094**	**0.75781**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
414	Canon	**12.7**	**9.2**	**9.9**					Solvent front/ sample curved
	Rf Values		**0.72441**	**0.77953**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
415	Canon	**12.9**	**9.6**	**10.2**					Solvent front/ sample slightly curved
	Rf Values		**0.74419**	**0.7907**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
416	Canon	**12.9**	**9.4**	**10.2**					
	Rf Values		**0.72868**	**0.7907**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
417	Canon	**12.8**	**9.35**	**10**					
	Rf Values		**0.73047**	**0.78125**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
418	Canon	**12.8**	**9.3**	**10**					
	Rf Values		**0.72656**	**0.78125**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
419	Canon	**12.8**	**9.3**	**9.95**					
	Rf Values		**0.72656**	**0.77734**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
492	Canon	**12.7**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
493	Canon	**12.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
494	Canon	**12.7**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							

Table 59: TLC Results for samples analyzed on November 5th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
495	Canon	**12.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
496	Canon	**12.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
497	Canon	**12.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
522	Canon	**12.8**	**3.8**	**7.85**					
	Rf Values		**0.29688**	**0.61328**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
523	Canon	**12.82**	**3.8**	**7.85**					
	Rf Values		**0.29641**	**0.61232**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
524	Canon	**12.8**	**3.9**	**7.95**					Solvent front/ sample slightly curved
	Rf Values		**0.30469**	**0.62109**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
525	Canon	**12.6**	**3.9**	**7.95**					
	Rf Values		**0.30952**	**0.63095**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
526	Canon	**12.6**	**3.8**	**7.85**					
	Rf Values		**0.30159**	**0.62302**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
527	Canon	**12.6**	**3.8**	**7.9**					
	Rf Values		**0.30159**	**0.62698**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
558	Epson	**12.7**	**7.25**	**8.65**	**9.15**	**10.15**			Second purple spot had clear middle.
	Rf Values		**0.57087**	**0.6811**	**0.72047**	**0.79921**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
559	Epson	**12.7**	**7.25**	**8.65**	**9.15**	**10.15**			
	Rf Values		**0.57087**	**0.6811**	**0.72047**	**0.79921**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							

Table 59: TLC Results for samples analyzed on November 5th, 2007 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
318a	Canon	**12.7**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
319a	Canon	**12.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
320a	Canon	**12.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
321a	Canon	**12.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
322a	Canon	**12.5**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
323a	Canon	**12.5**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
Blank 1	Staples Paper	**12.65**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
Blank 2	Staples Paper	**12.4**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
Blank 3	Staples Paper	**12.3**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 60: TLC Results for samples analyzed on October 15th, 2008

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
Blank 1	Staples Paper	**13.2**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
Blank 2	Staples Paper	**12.7**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
Blank 3	Staples Paper	**13.2**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
04	Okidata	**13.45**	**2.7**	**7.85**	**8.05**				
	Rf Values		**0.20074**	**0.58364**	**0.59851**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	See bright orange spot. Pale blue fluorescent spot approx. 2cm from line.							
05	Okidata	**13.5**	**2.75**	**7.8**	**8**				
	Rf Values		**0.2037**	**0.57778**	**0.59259**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	See bright orange spot. Pale blue fluorescent spot approx. 2cm from line.							
09	Okidata	**13.4**	**2.7**	**7.7**	**7.9**				
	Rf Values		**0.20149**	**0.57463**	**0.58955**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	See bright orange spot. Pale blue fluorescent spot approx. 2cm from line.							
13	Xerox	**13.5**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
14	Xerox	**13.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
15	Xerox	**13.5**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
16	Xerox	**13.5**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							

Table 60: TLC Results for samples analyzed on October 15th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
17	Kodak	**13.45**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
22	Kodak	**13.45**	**4.25**	**9.8**					
	Rf Values		**0.31599**	**0.72862**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
24	Xerox	**13.4**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
25	Xerox	**13.3**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
26	Xerox	**13.2**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
27	Xerox	**13.3**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
28	Xerox	**13.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
29	Xerox	**13.7**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
30	Epson	**13.9**	**2.9**	**7.7**	**8.4**	**9.35**	**11.8**		
	Rf Values		**0.20863**	**0.55396**	**0.60432**	**0.67266**	**0.84892**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
31	Epson	**13.85**	**2.9**	**7.7**	**8.3**	**9.3**	**11.7**		
	Rf Values		**0.20939**	**0.55596**	**0.59928**	**0.67148**	**0.84477**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
32	Epson	**13.85**	**2.9**	**7.7**	**8.3**	**9.3**	**11.7**		
	Rf Values		**0.20939**	**0.55596**	**0.59928**	**0.67148**	**0.84477**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							

Table 60: TLC Results for samples analyzed on October 15th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
33	Epson	14	7.65	8	9.25	10.05	10.95		
	Rf Values		0.54643	0.57143	0.66071	0.71786	0.78214	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
34	Epson	14	7.8	8.1	9.3	10	11		
	Rf Values		0.55714	0.57857	0.66429	0.71429	0.78571	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
35	Epson	13.85	7.6	8	9.25	10	10.8		
	Rf Values		0.54874	0.57762	0.66787	0.72202	0.77978	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
60	Epson	13.85	7.7	8	9.25	10	10.95		
	Rf Values		0.55596	0.57762	0.66787	0.72202	0.79061	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
61	Epson	13.8	7.7	8	9.2	10.05	10.95		
	Rf Values		0.55797	0.57971	0.66667	0.72826	0.79348	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
62	Epson	13.6	8	9.2	10	10.9			
	Rf Values		0.58824	0.67647	0.73529	0.80147	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
63	Epson	13.7	8.05	9.3	10	10.95			
	Rf Values		0.58759	0.67883	0.72993	0.79927	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
64	Epson	13.5	8.05	9.25	10	10.95			
	Rf Values		0.5963	0.68519	0.74074	0.81111	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
65	Epson	13.5	8.2	9.4	10	11			Solvent front/ sample curved
	Rf Values		0.60741	0.6963	0.74074	0.81481	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
66	Epson	13.2	8.4	9.4	10.2	11.2			Solvent front/ sample curved
	Rf Values		0.63636	0.71212	0.77273	0.84848	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
67	Epson	13.3	7.9	9.1	9.9	10.95			Solvent front/ sample curved
	Rf Values		0.59398	0.68421	0.74436	0.82331	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							

Table 60: TLC Results for samples analyzed on October 15th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
68	Epson	**13.4**	**7.9**	**9.1**	**9.9**	**11**			
	Rf Values		**0.58955**	**0.6791**	**0.73881**	**0.8209**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
84	Epson	**13.3**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
85	Epson	**13.3**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
86	Epson	**13.5**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
90	Epson	**13.5**	**7.9**	**9.1**	**9.9**	**10.9**			
	Rf Values		**0.58519**	**0.67407**	**0.73333**	**0.80741**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
91	Epson	**13.5**	**7.9**	**9.15**	**9.9**	**10.9**			
	Rf Values		**0.58519**	**0.67778**	**0.73333**	**0.80741**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
92	Epson	**13.4**	**7.8**	**9.05**	**9.9**	**10.9**			
	Rf Values		**0.58209**	**0.67537**	**0.73881**	**0.81343**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
93	Epson	**13.5**	**7.9**	**9.1**	**9.9**	**10.95**			
	Rf Values		**0.58519**	**0.67407**	**0.73333**	**0.81111**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
94	Epson	**13.2**	**7.8**	**9.1**	**9.85**	**10.9**			
	Rf Values		**0.59091**	**0.68939**	**0.74621**	**0.82576**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
95	Epson	**13.2**	**7.9**	**9.2**	**9.85**	**10.95**			
	Rf Values		**0.59848**	**0.69697**	**0.74621**	**0.82955**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
120	Epson	**13.4**	**8**	**9.2**	**10**	**11**			Solvent front/ sample curved
	Rf Values		**0.59701**	**0.68657**	**0.74627**	**0.8209**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							

Table 60: TLC Results for samples analyzed on October 15th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
121	Epson	**13.3**	**8.4**	**9.5**	**10.2**	**11.15**			Solvent front/ sample curved
	Rf Values		**0.63158**	**0.71429**	**0.76692**	**0.83835**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
122	Epson	**13.35**	**8.1**	**9.2**	**9.95**	**11**			Solvent front/ sample curved
	Rf Values		**0.60674**	**0.68914**	**0.74532**	**0.82397**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
123	Epson	**13.2**	**7.8**	**8.9**	**9.5**	**10.5**			
	Rf Values		**0.59091**	**0.67424**	**0.7197**	**0.79545**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
124	Epson	**13.3**	**7.85**	**9**	**9.6**	**10.6**			
	Rf Values		**0.59023**	**0.67669**	**0.7218**	**0.79699**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
125	Epson	**13.15**	**7.8**	**9**	**9.55**	**10.55**			
	Rf Values		**0.59316**	**0.68441**	**0.72624**	**0.80228**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
156	Epson	**13.1**	**9.7**						
	Rf Values		**0.74046**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
157	Epson	**13.2**	**9.7**						
	Rf Values		**0.73485**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
158	Epson	**13.1**	**9.7**						
	Rf Values		**0.74046**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
198	Hewlett Packard	**13**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
199	Hewlett Packard	**13**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 60: TLC Results for samples analyzed on October 15th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
200	Hewlett Packard	**13**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
201	Hewlett Packard	**13**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
205	Hewlett Packard	**13.1**	**3.8**						
	Rf Values		**0.29008**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
217	Canon	**13.2**	**4.3**	**8**					
	Rf Values		**0.32576**	**0.60606**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
218	Canon	**13**	**4.35**	**8.1**					
	Rf Values		**0.33462**	**0.62308**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
219	Canon	**13.4**	**4.6**	**8.9**					Solvent front/ sample curved
	Rf Values		**0.34328**	**0.66418**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
220	Canon	**13.2**	**4.4**	**8.4**					
	Rf Values		**0.33333**	**0.63636**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
221	Canon	**13.2**	**4.4**	**8.35**					
	Rf Values		**0.33333**	**0.63258**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
222	Canon	**13.2**	**4.4**	**8.25**					
	Rf Values		**0.33333**	**0.625**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
223	Canon	**13.2**	**4.4**	**8.2**	**9.8**				
	Rf Values		**0.33333**	**0.62121**	**0.74242**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 60: TLC Results for samples analyzed on October 15th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
224	Canon	**13.1**	**4.4**	**8.2**	**9.8**				
	Rf Values		**0.33588**	**0.62595**	**0.74809**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
225	Canon	**13.2**	**4.4**	**8.2**	**9.7**				
	Rf Values		**0.33333**	**0.62121**	**0.73485**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
226	Canon	**13**	**4.3**	**8.1**	**9.7**				
	Rf Values		**0.33077**	**0.62308**	**0.74615**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
227	Canon	**13**	**4.3**	**8.05**	**9.65**				
	Rf Values		**0.33077**	**0.61923**	**0.74231**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
228	Canon	**13**	**4.3**	**8**	**9.7**				
	Rf Values		**0.33077**	**0.61538**	**0.74615**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
244	Xerox	**13**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
248	Xerox	**13.1**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
252	Xerox	**13.1**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
256	Xerox	**13**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
260	Xerox	**13.1**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
264	Xerox	**13.2**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 60: TLC Results for samples analyzed on October 15th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
265	Xerox	**13.2**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
282	Canon	**13.1**	**4.2**	**7.95**					
	Rf Values		**0.32061**	**0.60687**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
283	Canon	**13**	**4.1**	**7.95**					
	Rf Values		**0.31538**	**0.61154**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
284	Canon	**13.1**	**4.2**	**7.95**					
	Rf Values		**0.32061**	**0.60687**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
285	Canon	**13**	**4.15**	**7.9**					
	Rf Values		**0.31923**	**0.60769**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
286	Canon	**12.8**	**4.1**	**7.85**					
	Rf Values		**0.32031**	**0.61328**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
287	Canon	**12.6**	**4.1**	**7.75**					
	Rf Values		**0.3254**	**0.61508**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
306	Canon	**12.5**	**5.8**	**9.3**					
	Rf Values		**0.464**	**0.744**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
307	Canon	**12.5**	**5.9**	**9.3**					
	Rf Values		**0.472**	**0.744**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
308	Canon	**12.6**	**5.8**	**9.4**					
	Rf Values		**0.46032**	**0.74603**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
309	Canon	**12.7**	**6**	**9.4**					
	Rf Values		**0.47244**	**0.74016**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 60: TLC Results for samples analyzed on October 15th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
310	Canon	**13.2**	**10**						Solvent front/ sample curved
	Rf Values		**0.75758**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
311	Canon	**13.2**	**9.6**						
	Rf Values		**0.72727**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
312	Canon	**13.2**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
313	Canon	**13.1**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
314	Canon	**13.1**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
315	Canon	**13.2**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
316	Canon	**13.2**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
317	Canon	**13**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
318	Canon	**13.2**	**4.4**	**6**	**9.8**				
	Rf Values		**0.33333**	**0.45455**	**0.74242**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
319	Canon	**13.1**	**4.4**	**6**	**9.8**				
	Rf Values		**0.33588**	**0.45802**	**0.74809**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
320	Canon	**13**	**4.4**	**6**	**9.8**				
	Rf Values		**0.33846**	**0.46154**	**0.75385**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 60: TLC Results for samples analyzed on October 15th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
321	Canon	**13.1**	**4.4**	**6.1**	**9.8**				
	Rf Values		**0.33588**	**0.46565**	**0.74809**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
322	Canon	**13.2**	**4.4**	**6.1**	**9.8**				
	Rf Values		**0.33333**	**0.46212**	**0.74242**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
323	Canon	**13**	**4.5**	**6.2**	**10**				Solvent front/ sample curved
	Rf Values		**0.34615**	**0.47692**	**0.76923**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
327	Canon	**13.9**	**10.5**						
	Rf Values		**0.7554**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
331	Canon	**13.7**	**10.3**						
	Rf Values		**0.75182**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
335	Canon	**13.8**	**10.3**						
	Rf Values		**0.74638**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
339	Canon	**13.8**	**10.25**						
	Rf Values		**0.74275**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
343	Canon	**13.85**	**10.3**						
	Rf Values		**0.74368**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
347	Canon	**13.8**	**10.2**						
	Rf Values		**0.73913**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
348	Canon	**13.8**	**4.5**	**8.7**	**10.3**				
	Rf Values		**0.32609**	**0.63043**	**0.74638**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
349	Canon	**13.8**	**4.5**	**8.65**	**10.3**				
	Rf Values		**0.32609**	**0.62681**	**0.74638**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 60: TLC Results for samples analyzed on October 15th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
350	Canon	**13.9**	**4.5**	**8.65**	**10.3**				
	Rf Values		**0.32374**	**0.6223**	**0.74101**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
351	Canon	**14.05**	**4.6**	**8.7**	**10.4**				
	Rf Values		**0.3274**	**0.61922**	**0.74021**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
352	Canon	**13.9**	**4.5**	**8.7**	**10.3**				
	Rf Values		**0.32374**	**0.6259**	**0.74101**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
353	Canon	**13.8**	**4.5**	**8.8**	**10.3**				
	Rf Values		**0.32609**	**0.63768**	**0.74638**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
372	Canon	**13.8**	**4.6**	**9**	**10.5**				Solvent front/ sample curved
	Rf Values		**0.33333**	**0.65217**	**0.76087**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
373	Canon	**13.7**	**4.7**	**9.1**	**10.4**				Solvent front/ sample curved
	Rf Values		**0.34307**	**0.66423**	**0.75912**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
374	Canon	**13.7**	**4**	**8.7**	**10**				Solvent front/ sample curved
	Rf Values		**0.29197**	**0.63504**	**0.72993**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
375	Canon	**13.7**	**4.1**	**8.5**	**10**				Solvent front/ sample curved
	Rf Values		**0.29927**	**0.62044**	**0.72993**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
376	Canon	**13.6**	**4.1**	**8.4**	**9.9**				Solvent front/ sample curved
	Rf Values		**0.30147**	**0.61765**	**0.72794**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
377	Canon	**13.55**	**4.2**	**8.2**	**9.8**				Solvent front/ sample curved
	Rf Values		**0.30996**	**0.60517**	**0.72325**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
378	Canon	**13.5**	**4.2**	**8.1**	**9.75**				Solvent front/ sample curved
	Rf Values		**0.31111**	**0.6**	**0.72222**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 60: TLC Results for samples analyzed on October 15th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
379	Canon	13.5	4.2	8.1	9.75				Solvent front/ sample curved
	Rf Values		0.31111	0.6	0.72222	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
380	Canon	13.5	4.1	8	9.8				Solvent front/ sample curved
	Rf Values		0.3037	0.59259	0.72593	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
381	Canon	13.6	4	8	10				Solvent front/ sample curved
	Rf Values		0.29412	0.58824	0.73529	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
382	Canon	13.5	4	7.9	9.85				Solvent front/ sample curved
	Rf Values		0.2963	0.58519	0.72963	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
383	Canon	13.5	4	8	9.8				Solvent front/ sample curved
	Rf Values		0.2963	0.59259	0.72593	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
384	Canon	13.5	4	8	9.8				Solvent front/ sample curved
	Rf Values		0.2963	0.59259	0.72593	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
385	Canon	13.7	4.2	8.4	10				Solvent front/ sample curved
	Rf Values		0.30657	0.61314	0.72993	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
386	Canon	13.7	4.15	8.5	10				Solvent front/ sample curved
	Rf Values		0.30292	0.62044	0.72993	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
387	Canon	13.7	4.2	8.5	10.1				Solvent front/ sample curved
	Rf Values		0.30657	0.62044	0.73723	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
388	Canon	13.2	4.6	8.5	10.1				
	Rf Values		0.34848	0.64394	0.76515	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
389	Canon	13.2	4.6	8.5	10.1				
	Rf Values		0.34848	0.64394	0.76515	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 60: TLC Results for samples analyzed on October 15th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
390	Canon	**13.3**	**4.6**	**8.45**	**10**				
	Rf Values		**0.34586**	**0.63534**	**0.75188**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
391	Canon	**13.45**	**4.7**	**8.5**	**10.05**				
	Rf Values		**0.34944**	**0.63197**	**0.74721**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
392	Canon	**13.4**	**4.7**	**8.5**	**10.1**				
	Rf Values		**0.35075**	**0.63433**	**0.75373**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
393	Canon	**13.55**	**4.7**	**8.5**	**10.1**				
	Rf Values		**0.34686**	**0.62731**	**0.74539**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
394	Canon	**13.4**	**4.65**	**8.5**	**10**				
	Rf Values		**0.34701**	**0.63433**	**0.74627**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
395	Canon	**13.5**	**4.6**	**8.45**	**10**				
	Rf Values		**0.34074**	**0.62593**	**0.74074**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
396	Canon	**13.5**	**4.65**	**8.5**	**10.05**				
	Rf Values		**0.34444**	**0.62963**	**0.74444**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
397	Canon	**13.4**	**4.6**	**8.5**	**10**				
	Rf Values		**0.34328**	**0.63433**	**0.74627**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
398	Canon	**13.4**	**4.6**	**8.55**	**10.1**				
	Rf Values		**0.34328**	**0.63806**	**0.75373**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
399	Canon	**13.4**	**4.7**	**8.6**	**10.1**				Solvent front/ sample curved
	Rf Values		**0.35075**	**0.64179**	**0.75373**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
400	Canon	**13.4**	**4.8**	**8.8**	**10.3**				Solvent front/ sample curved
	Rf Values		**0.35821**	**0.65672**	**0.76866**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 60: TLC Results for samples analyzed on October 15th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
401	Canon	**13.2**	**4.8**	**8.8**	**9.99**				Solvent front/ sample curved
	Rf Values		**0.36364**	**0.66667**	**0.75682**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
402	Canon	**13.2**	**9.7**						
	Rf Values		**0.73485**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
403	Canon	**13.4**	**9.8**						
	Rf Values		**0.73134**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
404	Canon	**13.4**	**9.7**						
	Rf Values		**0.72388**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
405	Canon	**13.4**	**9.7**						
	Rf Values		**0.72388**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
406	Canon	**13.45**	**9.75**						
	Rf Values		**0.72491**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
407	Canon	**13.4**	**9.7**						
	Rf Values		**0.72388**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
408	Canon	**13.6**	**9.8**						
	Rf Values		**0.72059**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
409	Canon	**13.7**	**9.85**						
	Rf Values		**0.71898**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
410	Canon	**13.8**	**9.9**						
	Rf Values		**0.71739**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
411	Canon	**13.7**	**10**						
	Rf Values		**0.72993**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 60: TLC Results for samples analyzed on October 15th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
412	Canon	**13.6**	**10**						
	Rf Values		**0.73529**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
413	Canon	**13.6**	**10**						
	Rf Values		**0.73529**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
414	Canon	**13.5**	**10.1**						Solvent front/ sample curved
	Rf Values		**0.74815**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
415	Canon	**13.3**	**10.5**						Solvent front/ sample curved
	Rf Values		**0.78947**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
416	Canon	**13.4**	**10.2**						
	Rf Values		**0.76119**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
417	Canon	**13.5**	**10.2**						
	Rf Values		**0.75556**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
418	Canon	**13.5**	**10.2**						
	Rf Values		**0.75556**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
419	Canon	**13.4**	**10.2**						
	Rf Values		**0.76119**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
492	Canon	**13.9**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
493	Canon	**14.1**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
494	Canon	**14.1**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							

Table 60: TLC Results for samples analyzed on October 15th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
495	Canon	**14.1**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
496	Canon	**14.1**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
497	Canon	**13.9**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
522	Canon	**14**	**4.6**	**8.9**					
	Rf Values		**0.32857**	**0.63571**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
523	Canon	**14**	**4.6**	**9**					
	Rf Values		**0.32857**	**0.64286**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
524	Canon	**13.8**	**4.7**	**9.2**					Solvent front/ sample curved
	Rf Values		**0.34058**	**0.66667**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
525	Canon	**13**	**4.6**	**8.9**					Solvent front/ sample curved
	Rf Values		**0.35385**	**0.68462**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
526	Canon	**13**	**4.3**	**8.4**					Solvent front/ sample curved
	Rf Values		**0.33077**	**0.64615**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
527	Canon	**13.1**	**4.2**	**8.2**					
	Rf Values		**0.32061**	**0.62595**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
558	Epson	**13.3**	**7.9**	**9**	**9.9**	**10.9**			
	Rf Values		**0.59398**	**0.67669**	**0.74436**	**0.81955**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
559	Epson	**13.3**	**7.8**	**9**	**9.8**	**10.9**			
	Rf Values		**0.58647**	**0.67669**	**0.73684**	**0.81955**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							

Table 60: TLC Results for samples analyzed on October 15th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
318a	Canon	**13.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
319a	Canon	**13.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
320a	Canon	**13.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
321a	Canon	**14**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
322a	Canon	**14**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
323a	Canon	**13.9**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
Blank 1	Staples Paper	**13.9**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
Blank 2	Staples Paper	**13.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
Blank 3	Staples Paper	**13.7**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 61: TLC Results for samples analyzed on October 20th, 2008

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
Blank 1	Staples Paper	**13**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
Blank 2	Staples Paper	**12.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
Blank 3	Staples Paper	**13.4**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
04	Okidata	**13**	**2.8**	**7.8**	**8.2**				
	Rf Values		**0.21538**	**0.6**	**0.63077**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line.							
	Long Wave UV	See bright orange spot. Pale blue fluorescent spot approx. 2cm from line.							
05	Okidata	**13**	**2.8**	**7.8**	**8.1**				
	Rf Values		**0.21538**	**0.6**	**0.62308**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	See bright orange spot. Pale blue fluorescent spot approx. 2cm from line.							
09	Okidata	**12.9**	**2.8**	**7.7**	**8**				
	Rf Values		**0.21705**	**0.5969**	**0.62016**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	See bright orange spot. Pale blue fluorescent spot approx. 2cm from line.							
13	Xerox	**12.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
14	Xerox	**12.9**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
15	Xerox	**12.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
16	Xerox	**12.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							

Table 61: TLC Results for samples analyzed on October 20th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
17	Kodak	**13**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
22	Kodak	**13**	**4.2**	**9.7**					
	Rf Values		**0.32308**	**0.74615**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
24	Xerox	**13**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
25	Xerox	**13**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
26	Xerox	**13**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
27	Xerox	**12.9**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
28	Xerox	**14**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
29	Xerox	**13.9**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
30	Epson	**13.8**	**2.5**	**7.6**	**8.4**	**9.2**	**11.6**		
	Rf Values		**0.18116**	**0.55072**	**0.6087**	**0.66667**	**0.84058**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
31	Epson	**13.8**	**2.5**	**7.5**	**8.2**	**9.1**	**11.65**		
	Rf Values		**0.18116**	**0.54348**	**0.5942**	**0.65942**	**0.8442**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
32	Epson	**13.8**	**2.6**	**7.4**	**8.1**	**9.1**	**11.7**		
	Rf Values		**0.18841**	**0.53623**	**0.58696**	**0.65942**	**0.84783**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							

Table 61: TLC Results for samples analyzed on October 20th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
33	Epson	**13.8**	**7.1**	**7.5**	**9**	**9.8**	**10.9**		
	Rf Values		**0.51449**	**0.54348**	**0.65217**	**0.71014**	**0.78986**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
34	Epson	**13.6**	**7.1**	**7.4**	**8.9**	**9.7**	**10.9**		
	Rf Values		**0.52206**	**0.54412**	**0.65441**	**0.71324**	**0.80147**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
35	Epson	**13.7**	**7.1**	**7.4**	**8.9**	**9.7**	**10.9**		
	Rf Values		**0.51825**	**0.54015**	**0.64964**	**0.70803**	**0.79562**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
60	Epson	**13.8**	**7.2**	**7.5**	**9**	**9.75**	**10.9**		
	Rf Values		**0.52174**	**0.54348**	**0.65217**	**0.70652**	**0.78986**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
61	Epson	**13.9**	**7.2**	**7.6**	**9**	**9.7**	**10.8**		Solvent front/ sample curved
	Rf Values		**0.51799**	**0.54676**	**0.64748**	**0.69784**	**0.77698**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
62	Epson	**13.9**	**7.5**	**7.8**	**9.05**	**9.8**	**10.8**		Solvent front/ sample curved
	Rf Values		**0.53957**	**0.56115**	**0.65108**	**0.70504**	**0.77698**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
63	Epson	**14**	**7.7**	**7.9**	**9.1**	**9.85**	**10.8**		Solvent front/ sample curved
	Rf Values		**0.55**	**0.56429**	**0.65**	**0.70357**	**0.77143**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
64	Epson	**14**	**7.7**	**8**	**9.1**	**9.8**	**10.8**		Solvent front/ sample curved
	Rf Values		**0.55**	**0.57143**	**0.65**	**0.7**	**0.77143**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
65	Epson	**14**	**8.15**	**9.4**	**9.9**	**11**			Solvent front/ sample curved
	Rf Values		**0.58214**	**0.67143**	**0.70714**	**0.78571**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
66	Epson	**13.6**	**7.5**	**9.1**	**9.8**	**10.8**			Solvent front/ sample curved
	Rf Values		**0.55147**	**0.66912**	**0.72059**	**0.79412**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
67	Epson	**13.6**	**7.5**	**8.9**	**9.6**	**10.7**			Solvent front/ sample curved
	Rf Values		**0.55147**	**0.65441**	**0.70588**	**0.78676**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							

Table 61: TLC Results for samples analyzed on October 20th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
68	Epson	**13.6**	**7.4**	**8.8**	**9.5**	**10.7**			
	Rf Values		**0.54412**	**0.64706**	**0.69853**	**0.78676**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
84	Epson	**13.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
85	Epson	**13.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
86	Epson	**13.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
90	Epson	**13.5**	**6.7**	**7**	**8.5**	**9.3**	**10.4**		
	Rf Values		**0.4963**	**0.51852**	**0.62963**	**0.68889**	**0.77037**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
91	Epson	**13.4**	**7.1**	**8.5**	**9.2**	**10.35**			
	Rf Values		**0.52985**	**0.63433**	**0.68657**	**0.77239**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
92	Epson	**13.5**	**7.2**	**8.5**	**9.35**	**10.4**			
	Rf Values		**0.53333**	**0.62963**	**0.69259**	**0.77037**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
93	Epson	**13.5**	**7.3**	**8.5**	**9.35**	**10.45**			
	Rf Values		**0.54074**	**0.62963**	**0.69259**	**0.77407**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
94	Epson	**13.5**	**7.5**	**8.6**	**9.3**	**10.45**			
	Rf Values		**0.55556**	**0.63704**	**0.68889**	**0.77407**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
95	Epson	**13.45**	**7.5**	**8.6**	**9.25**	**10.4**			Solvent front/ sample curved
	Rf Values		**0.55762**	**0.63941**	**0.68773**	**0.77323**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
120	Epson	**13.4**	**7.5**	**8.6**	**9.4**	**10.4**			Solvent front/ sample curved
	Rf Values		**0.5597**	**0.64179**	**0.70149**	**0.77612**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							

Table 61: TLC Results for samples analyzed on October 20th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
121	Epson	**13.4**	**7.5**	**8.7**	**9.55**	**10.5**			Solvent front/ sample curved
	Rf Values		**0.5597**	**0.64925**	**0.71269**	**0.78358**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line.							
122	Epson	**13.2**	**7.8**	**9.2**	**9.8**	**10.6**			Solvent front/ sample curved
	Rf Values		**0.59091**	**0.69697**	**0.74242**	**0.80303**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
123	Epson	**13.2**	**7.7**	**9**	**9.6**	**10.5**			
	Rf Values		**0.58333**	**0.68182**	**0.72727**	**0.79545**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
124	Epson	**13.1**	**7.7**	**9**	**9.5**	**10.6**			
	Rf Values		**0.58779**	**0.68702**	**0.72519**	**0.80916**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
125	Epson	**13**	**7.6**	**8.9**	**9.5**	**10.6**			
	Rf Values		**0.58462**	**0.68462**	**0.73077**	**0.81538**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
156	Epson	**12.8**	**9.6**						
	Rf Values		**0.75**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
157	Epson	**12.8**	**9.5**						
	Rf Values		**0.74219**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
158	Epson	**12.7**	**9.5**						
	Rf Values		**0.74803**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
198	Hewlett Packard	**12.7**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
199	Hewlett Packard	**12.7**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 61: TLC Results for samples analyzed on October 20th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
200	Hewlett Packard	**12.7**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
201	Hewlett Packard	**12.7**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
205	Hewlett Packard	**12.7**	**3.5**						
	Rf Values		**0.27559**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
217	Canon	**12.8**	**4.1**	**7.55**					
	Rf Values		**0.32031**	**0.58984**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
218	Canon	**12.8**	**4.1**	**7.6**					
	Rf Values		**0.32031**	**0.59375**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
219	Canon	**13.3**	**4.5**	**8.4**					Solvent front/ sample curved
	Rf Values		**0.33835**	**0.63158**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
220	Canon	**13.4**	**4.4**	**8.1**					
	Rf Values		**0.32836**	**0.60448**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
221	Canon	**13.5**	**4.4**	**8**					
	Rf Values		**0.32593**	**0.59259**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
222	Canon	**13.4**	**4.4**	**8**					
	Rf Values		**0.32836**	**0.59701**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
223	Canon	**13.2**	**4.4**	**8**	**9.4**				
	Rf Values		**0.33333**	**0.60606**	**0.71212**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 61: TLC Results for samples analyzed on October 20th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
224	Canon	**13.15**	**4.3**	**7.85**	**9.2**				
	Rf Values		**0.327**	**0.59696**	**0.69962**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
225	Canon	**13**	**4.3**	**7.8**	**9.2**				
	Rf Values		**0.33077**	**0.6**	**0.70769**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
226	Canon	**13**	**4.2**	**7.7**	**9.3**				
	Rf Values		**0.32308**	**0.59231**	**0.71538**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
227	Canon	**13**	**4.2**	**7.65**	**9.4**				
	Rf Values		**0.32308**	**0.58846**	**0.72308**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
228	Canon	**12.7**	**4.1**	**7.6**	**9.4**				
	Rf Values		**0.32283**	**0.59843**	**0.74016**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
244	Xerox	**12.7**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
248	Xerox	**12.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
252	Xerox	**12.9**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
256	Xerox	**13**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
260	Xerox	**13.3**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
264	Xerox	**13.4**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 61: TLC Results for samples analyzed on October 20th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
265	Xerox	**13.4**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
282	Canon	**13.4**	**4**	**7.7**					
	Rf Values		**0.29851**	**0.57463**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
283	Canon	**13.4**	**4**	**7.65**					
	Rf Values		**0.29851**	**0.5709**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
284	Canon	**13.1**	**3.95**	**7.6**					
	Rf Values		**0.30153**	**0.58015**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
285	Canon	**13.1**	**3.95**	**7.6**					
	Rf Values		**0.30153**	**0.58015**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
286	Canon	**13.1**	**3.9**	**7.5**					
	Rf Values		**0.29771**	**0.57252**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
287	Canon	**13**	**3.9**	**7.5**					
	Rf Values		**0.3**	**0.57692**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
306	Canon	**12.8**	**5.7**	**9**					
	Rf Values		**0.44531**	**0.70313**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
307	Canon	**12.8**	**5.7**	**9**					
	Rf Values		**0.44531**	**0.70313**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
308	Canon	**12.7**	**5.7**	**9**					
	Rf Values		**0.44882**	**0.70866**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
309	Canon	**12.8**	**5.7**	**9**					
	Rf Values		**0.44531**	**0.70313**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 61: TLC Results for samples analyzed on October 20th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
310	Canon	**13.1**	**9.6**						Solvent front/ sample curved
	Rf Values		**0.73282**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
311	Canon	**13**	**9.3**						
	Rf Values		**0.71538**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
312	Canon	**13**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
313	Canon	**12.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
314	Canon	**12.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
315	Canon	**12.9**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
316	Canon	**12.9**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
317	Canon	**12.9**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
318	Canon	**13**	**4**	**5.8**	**9.4**				
	Rf Values		**0.30769**	**0.44615**	**0.72308**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
319	Canon	**13**	**4**	**5.8**	**9.4**				
	Rf Values		**0.30769**	**0.44615**	**0.72308**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
320	Canon	**13**	**4**	**5.9**	**9.4**				
	Rf Values		**0.30769**	**0.45385**	**0.72308**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 61: TLC Results for samples analyzed on October 20th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
321	Canon	13	4	5.9	9.3				
	Rf Values		0.30769	0.45385	0.71538	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
322	Canon	12.9	4.1	6	9.3				
	Rf Values		0.31783	0.46512	0.72093	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
323	Canon	13	4.1	6	9.25				Solvent front/ sample curved
	Rf Values		0.31538	0.46154	0.71154	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
327	Canon	13.1	9.6						Solvent front/ sample curved
	Rf Values		0.73282	0	0	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
331	Canon	13.1	9.2						Solvent front/ sample curved
	Rf Values		0.70229	0	0	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
335	Canon	13.1	9.3						
	Rf Values		0.70992	0	0	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
339	Canon	13.2	9.3						
	Rf Values		0.70455	0	0	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
343	Canon	13.1	9.3						
	Rf Values		0.70992	0	0	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
347	Canon	13.2	9.2						
	Rf Values		0.69697	0	0	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
348	Canon	13.4	4.1	7.8	9.3				
	Rf Values		0.30597	0.58209	0.69403	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
349	Canon	13.5	4.1	7.8	9.4				
	Rf Values		0.3037	0.57778	0.6963	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 61: TLC Results for samples analyzed on October 20th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
350	Canon	**13.5**	**4.1**	**7.8**	**9.35**				
	Rf Values		**0.3037**	**0.57778**	**0.69259**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
351	Canon	**13.6**	**4.1**	**7.85**	**9.4**				
	Rf Values		**0.30147**	**0.57721**	**0.69118**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
352	Canon	**13.5**	**4.1**	**7.8**	**9.4**				
	Rf Values		**0.3037**	**0.57778**	**0.6963**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
353	Canon	**13.5**	**4.1**	**8**	**9.4**				Solvent front/ sample curved
	Rf Values		**0.3037**	**0.59259**	**0.6963**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
372	Canon	**13.5**	**4.2**	**8.2**	**9.5**				Solvent front/ sample curved
	Rf Values		**0.31111**	**0.60741**	**0.7037**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
373	Canon	**13.5**	**4.2**	**8.3**	**9.5**				Solvent front/ sample curved
	Rf Values		**0.31111**	**0.61481**	**0.7037**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
374	Canon	**13.2**	**4.4**	**8.1**	**9.6**				Solvent front/ sample curved
	Rf Values		**0.33333**	**0.61364**	**0.72727**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
375	Canon	**13.2**	**3.8**	**7.8**	**9.5**				Solvent front/ sample curved
	Rf Values		**0.28788**	**0.59091**	**0.7197**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
376	Canon	**13.1**	**3.7**	**7.7**	**9.4**				Solvent front/ sample curved
	Rf Values		**0.28244**	**0.58779**	**0.71756**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
377	Canon	**13.1**	**3.6**	**7.4**	**9.2**				
	Rf Values		**0.27481**	**0.56489**	**0.70229**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
378	Canon	**13.1**	**3.5**	**7.4**	**9.2**				
	Rf Values		**0.26718**	**0.56489**	**0.70229**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 61: TLC Results for samples analyzed on October 20th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
379	Canon	**13.2**	**3.5**	**7.4**	**9.2**				
	Rf Values		**0.26515**	**0.56061**	**0.69697**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
380	Canon	**13.4**	**3.5**	**7.4**	**9.2**				
	Rf Values		**0.26119**	**0.55224**	**0.68657**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
381	Canon	**13.3**	**3.5**	**7.4**	**9.3**				
	Rf Values		**0.26316**	**0.55639**	**0.69925**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
382	Canon	**13.3**	**3.5**	**7.4**	**9.2**				
	Rf Values		**0.26316**	**0.55639**	**0.69173**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
383	Canon	**13.4**	**3.5**	**7.4**	**9.3**				
	Rf Values		**0.26119**	**0.55224**	**0.69403**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
384	Canon	**13.5**	**3.6**	**7.5**	**9.4**				
	Rf Values		**0.26667**	**0.55556**	**0.6963**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
385	Canon	**13.3**	**3.5**	**7.5**	**9.2**				Solvent front/ sample curved
	Rf Values		**0.26316**	**0.56391**	**0.69173**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
386	Canon	**13.4**	**3.6**	**7.85**	**9.5**				Solvent front/ sample curved
	Rf Values		**0.26866**	**0.58582**	**0.70896**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
387	Canon	**13.5**	**3.8**	**8.2**	**9.9**				Solvent front/ sample curved
	Rf Values		**0.28148**	**0.60741**	**0.73333**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
388	Canon	**13.4**	**4.5**	**8.2**	**9.4**				
	Rf Values		**0.33582**	**0.61194**	**0.70149**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
389	Canon	**13.5**	**4.5**	**8.2**	**9.3**				
	Rf Values		**0.33333**	**0.60741**	**0.68889**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 61: TLC Results for samples analyzed on October 20th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
390	Canon	13.5	4.5	8.2	9.4				
	Rf Values		0.33333	0.60741	0.6963	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
391	Canon	13.5	4.5	8.2	9.5				
	Rf Values		0.33333	0.60741	0.7037	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
392	Canon	13.5	4.5	8.2	9.5				
	Rf Values		0.33333	0.60741	0.7037	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
393	Canon	13.5	4.5	8.2	9.5				
	Rf Values		0.33333	0.60741	0.7037	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
394	Canon	13.3	4.5	8.2	9.4				
	Rf Values		0.33835	0.61654	0.70677	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
395	Canon	13.2	4.5	8.2	9.5				
	Rf Values		0.34091	0.62121	0.7197	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
396	Canon	13	4.4	8	9.5				
	Rf Values		0.33846	0.61538	0.73077	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
397	Canon	13.2	4.5	8.2	9.6				
	Rf Values		0.34091	0.62121	0.72727	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
398	Canon	13.2	4.5	8.2	9.3				
	Rf Values		0.34091	0.62121	0.70455	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
399	Canon	13.2	4.4	8.1	9.4				
	Rf Values		0.33333	0.61364	0.71212	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
400	Canon	13.2	4.5	8.2	9.5				
	Rf Values		0.34091	0.62121	0.7197	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 61: TLC Results for samples analyzed on October 20th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
401	Canon	**14.7**	**9**						Solvent front/ sample curved
	Rf Values		**0.61224**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
402	Canon	**14.7**	**9.1**						Solvent front/ sample curved
	Rf Values		**0.61905**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
403	Canon	**14.8**	**9.3**						Solvent front/ sample curved
	Rf Values		**0.62838**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
404	Canon	**14.7**	**9.5**						Solvent front/ sample curved
	Rf Values		**0.64626**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
405	Canon	**14.6**	**9.5**						Solvent front/ sample curved
	Rf Values		**0.65068**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
406	Canon	**14.5**	**9.5**						Solvent front/ sample curved
	Rf Values		**0.65517**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
407	Canon	**14.4**	**9.5**						
	Rf Values		**0.65972**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
408	Canon	**14.4**	**9.4**						
	Rf Values		**0.65278**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
409	Canon	**14.4**	**9.4**						
	Rf Values		**0.65278**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
410	Canon	**14.3**	**9.4**						
	Rf Values		**0.65734**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
411	Canon	**14.2**	**9.5**						
	Rf Values		**0.66901**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 61: TLC Results for samples analyzed on October 20th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
412	Canon	**14.2**	**9.6**						
	Rf Values		**0.67606**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
413	Canon	**14.2**	**9.6**						
	Rf Values		**0.67606**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
414	Canon	**14.2**	**9.8**						
	Rf Values		**0.69014**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
415	Canon	**13.4**	**9.8**						
	Rf Values		**0.73134**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
416	Canon	**13.4**	**9.6**						
	Rf Values		**0.71642**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
417	Canon	**13.3**	**9.5**						
	Rf Values		**0.71429**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
418	Canon	**13.3**	**9.5**						
	Rf Values		**0.71429**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
419	Canon	**13.3**	**9.4**						
	Rf Values		**0.70677**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
492	Canon	**13.3**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
493	Canon	**13.4**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
494	Canon	**13.5**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							

Table 61: TLC Results for samples analyzed on October 20th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
495	Canon	**13.5**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
496	Canon	**13.5**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
497	Canon	**13.65**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
522	Canon	**13.6**	**4**	**7.8**					
	Rf Values		**0.29412**	**0.57353**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
523	Canon	**13.5**	**3.95**	**7.9**					
	Rf Values		**0.29259**	**0.58519**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
524	Canon	**13.5**	**3.95**	**8.1**					
	Rf Values		**0.29259**	**0.6**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
525	Canon	**12.8**	**4.3**	**8.1**					Solvent front/ sample curved
	Rf Values		**0.33594**	**0.63281**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
526	Canon	**12.75**	**4**	**7.7**					
	Rf Values		**0.31373**	**0.60392**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
527	Canon	**12.8**	**4.1**	**7.9**					
	Rf Values		**0.32031**	**0.61719**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
558	Epson	**12.8**	**7.5**	**8.45**	**9.1**	**10.1**			
	Rf Values		**0.58594**	**0.66016**	**0.71094**	**0.78906**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							
559	Epson	**12.8**	**7.5**	**8.5**	**9.1**	**10.2**			
	Rf Values		**0.58594**	**0.66406**	**0.71094**	**0.79688**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Pale blue fluorescent spot approx. 2cm from line.							

Table 61: TLC Results for samples analyzed on October 20th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
318a	Canon	**12.8**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
319a	Canon	**12.9**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
320a	Canon	**13**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
321a	Canon	**13.1**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
322a	Canon	**13.1**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
323a	Canon	**13.1**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
Blank 1	Staples Paper	**13**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
Blank 2	Staples Paper	**13**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							
Blank 3	Staples Paper	**13.1**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line.							
	Long Wave UV	Bright blue fluorescent spot approx. 2cm from line.							

Table 62: TLC Results for samples analyzed on October 22nd, 2008

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
28	Xerox	**13.3**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
29	Xerox	**13.4**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
30	Epson	**13.2**	**2.4**	**7.4**	**8**	**8.8**	**11.1**		
	Rf Values		**0.18182**	**0.56061**	**0.60606**	**0.66667**	**0.84091**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
31	Epson	**13.2**	**2.4**	**7.4**	**8**	**8.8**	**11.1**		
	Rf Values		**0.18182**	**0.56061**	**0.60606**	**0.66667**	**0.84091**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
32	Epson	**13.2**	**2.5**	**7.4**	**8**	**8.9**	**11.2**		
	Rf Values		**0.18939**	**0.56061**	**0.60606**	**0.67424**	**0.84848**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
33	Epson	**13.2**	**7.1**	**7.4**	**8.7**	**9.4**	**10.4**		
	Rf Values		**0.53788**	**0.56061**	**0.65909**	**0.71212**	**0.78788**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
34	Epson	**13.1**	**7.1**	**7.4**	**8.7**	**9.4**	**10.3**		
	Rf Values		**0.54198**	**0.56489**	**0.66412**	**0.71756**	**0.78626**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
35	Epson	**13**	**7**	**7.4**	**9.7**	**9.4**	**10.3**		
	Rf Values		**0.53846**	**0.56923**	**0.74615**	**0.72308**	**0.79231**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
60	Epson	**13**	**7**	**7.4**	**8.7**	**9.4**	**10.3**		
	Rf Values		**0.53846**	**0.56923**	**0.66923**	**0.72308**	**0.79231**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
61	Epson	**13.1**	**7**	**7.4**	**8.7**	**9.4**	**10.3**		
	Rf Values		**0.53435**	**0.56489**	**0.66412**	**0.71756**	**0.78626**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
62	Epson	**13.1**	**7**	**7.5**	**8.7**	**9.4**	**10.3**		
	Rf Values		**0.53435**	**0.57252**	**0.66412**	**0.71756**	**0.78626**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							

Table 62: TLC Results for samples analyzed on October 22nd, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
63	Epson	**13.2**	**7**	**7.5**	**8.7**	**9.4**	**10.3**		
	Rf Values		**0.5303**	**0.56818**	**0.65909**	**0.71212**	**0.7803**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
64	Epson	**13.4**	**7.2**	**7.6**	**8.7**	**9.4**	**10.3**		Solvent front/ sample curved
	Rf Values		**0.53731**	**0.56716**	**0.64925**	**0.70149**	**0.76866**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
65	Epson	**13.2**	**7.5**	**7.8**	**8.95**	**9.55**	**10.5**		Solvent front/ sample curved
	Rf Values		**0.56818**	**0.59091**	**0.67803**	**0.72348**	**0.79545**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
66	Epson	**13.2**	**7.9**	**9**	**9.6**	**10.7**			Solvent front/ sample curved
	Rf Values		**0.59848**	**0.68182**	**0.72727**	**0.81061**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
67	Epson	**13.2**	**7.5**	**8.7**	**9.4**	**10.4**			Solvent front/ sample curved
	Rf Values		**0.56818**	**0.65909**	**0.71212**	**0.78788**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
68	Epson	**13.1**	**7.2**	**8.5**	**9.3**	**10.4**			
	Rf Values		**0.54962**	**0.64885**	**0.70992**	**0.79389**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
84	Epson	**13.1**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
85	Epson	**13.1**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
86	Epson	**13**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
90	Epson	**13.2**	**6.4**	**6.7**	**8.3**	**9.2**	**10.4**		
	Rf Values		**0.48485**	**0.50758**	**0.62879**	**0.69697**	**0.78788**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
91	Epson	**13.3**	**6.4**	**6.6**	**8.2**	**9.2**	**10.3**		
	Rf Values		**0.4812**	**0.49624**	**0.61654**	**0.69173**	**0.77444**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							

Table 62: TLC Results for samples analyzed on October 22nd, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
92	Epson	13.3	6.4	6.65	8.3	9.15	10.3		
	Rf Values		0.4812	0.5	0.62406	0.68797	0.77444	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
93	Epson	13.35	6.8	8.3	9.2	10.3			
	Rf Values		0.50936	0.62172	0.68914	0.77154	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
94	Epson	13.4	6.7	8.3	9.15	10.2			Solvent front/ sample curved
	Rf Values		0.5	0.6194	0.68284	0.76119	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
95	Epson	13.4	7.2	8.4	9.1	10.2			Solvent front/ sample curved
	Rf Values		0.53731	0.62687	0.6791	0.76119	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
120	Epson	13.5	7.4	8.5	9.1	10.1			Solvent front/ sample curved
	Rf Values		0.54815	0.62963	0.67407	0.74815	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
121	Epson	13.5	7.8	8.8	9.4	10.4			Solvent front/ sample curved
	Rf Values		0.57778	0.65185	0.6963	0.77037	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
327	Canon	13.5	10						Solvent front/ sample curved
	Rf Values		0.74074	0	0	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
331	Canon	13.5	9.5						
	Rf Values		0.7037	0	0	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
335	Canon	13.5	9.5						
	Rf Values		0.7037	0	0	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
339	Canon	13.5	9.5						
	Rf Values		0.7037	0	0	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
343	Canon	13.5	9.5						
	Rf Values		0.7037	0	0	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							

Table 62: TLC Results for samples analyzed on October 22nd, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
347	Canon	**13.4**	**9.5**						
	Rf Values		**0.70896**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
348	Canon	**13.2**	**4.2**	**8**	**9.4**				
	Rf Values		**0.31818**	**0.60606**	**0.71212**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
349	Canon	**13.4**	**4.2**	**8**	**9.4**				
	Rf Values		**0.31343**	**0.59701**	**0.70149**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
350	Canon	**13.5**	**4.2**	**8**	**9.4**				
	Rf Values		**0.31111**	**0.59259**	**0.6963**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
351	Canon	**13.5**	**4.2**	**7.9**	**9.35**				
	Rf Values		**0.31111**	**0.58519**	**0.69259**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
352	Canon	**13.5**	**4.1**	**7.9**	**9.3**				
	Rf Values		**0.3037**	**0.58519**	**0.68889**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
353	Canon	**13.6**	**4**	**7.9**	**9.2**				
	Rf Values		**0.29412**	**0.58088**	**0.67647**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
372	Canon	**13.5**	**4**	**8**	**9.4**				
	Rf Values		**0.2963**	**0.59259**	**0.6963**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
373	Canon	**13.4**	**4**	**8.1**	**9.4**				
	Rf Values		**0.29851**	**0.60448**	**0.70149**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
374	Canon	**13.2**	**4.5**	**8.5**	**10**				Solvent front/ sample curved
	Rf Values		**0.34091**	**0.64394**	**0.75758**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
375	Canon	**13.2**	**4.4**	**8.2**	**9.6**				Solvent front/ sample curved
	Rf Values		**0.33333**	**0.62121**	**0.72727**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							

Table 62: TLC Results for samples analyzed on October 22nd, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
376	Canon	13.2	4.3	8.1	9.5				
	Rf Values		0.32576	0.61364	0.7197	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
377	Canon	13	4.3	8	9.5				
	Rf Values		0.33077	0.61538	0.73077	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
378	Canon	12.9	4.2	8	9.5				
	Rf Values		0.32558	0.62016	0.73643	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
379	Canon	12.9	4.2	8	9.5				
	Rf Values		0.32558	0.62016	0.73643	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
380	Canon	13	4.2	8	9.4				
	Rf Values		0.32308	0.61538	0.72308	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
381	Canon	13	4.2	7.9	9.4				
	Rf Values		0.32308	0.60769	0.72308	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
382	Canon	13.1	4.2	7.9	9.3				
	Rf Values		0.32061	0.60305	0.70992	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
383	Canon	13.2	4.2	8	9.4				
	Rf Values		0.31818	0.60606	0.71212	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
384	Canon	13.3	4.2	8	9.35				
	Rf Values		0.31579	0.6015	0.70301	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
385	Canon	13.4	4.15	8	9.3				
	Rf Values		0.3097	0.59701	0.69403	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
386	Canon	13.4	4.1	8	9.3				
	Rf Values		0.30597	0.59701	0.69403	0	0	0	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							

Table 62: TLC Results for samples analyzed on October 22nd, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
387	Canon	**13.3**	**4.1**	**8.2**	**9.3**				
	Rf Values		**0.30827**	**0.61654**	**0.69925**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
401	Canon	**12.85**	**4.3**	**8.1**	**9.6**				
	Rf Values		**0.33463**	**0.63035**	**0.74708**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
402	Canon	**12.8**	**9.2**						
	Rf Values		**0.71875**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
403	Canon	**12.8**	**9.2**						
	Rf Values		**0.71875**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
404	Canon	**12.6**	**9.1**						
	Rf Values		**0.72222**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
405	Canon	**12.5**	**9.1**						
	Rf Values		**0.728**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
406	Canon	**12.4**	**9.1**						
	Rf Values		**0.73387**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
407	Canon	**12.5**	**9.1**						
	Rf Values		**0.728**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
408	Canon	**12.7**	**9.1**						
	Rf Values		**0.71654**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
409	Canon	**12.7**	**9.1**						
	Rf Values		**0.71654**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
410	Canon	**12.7**	**9.1**						
	Rf Values		**0.71654**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							

Table 62: TLC Results for samples analyzed on October 22nd, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
411	Canon	**12.7**	**9.1**						
	Rf Values		**0.71654**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
412	Canon	**12.7**	**9.1**						
	Rf Values		**0.71654**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
413	Canon	**12.7**	**9.1**						
	Rf Values		**0.71654**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
414	Canon	**12.7**	**9.1**						
	Rf Values		**0.71654**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							

APPENDIX D:

High Performance Liquid Chromatography Data.

The following tables in Appendix D show the results of the HPLC analysis of the ink samples extracted from the paper, as well as the results of the HPLC analysis of the blank paper samples and the blank extraction solvent samples. The samples were run in duplicate and the results from each trial were included in the Appendix. The results using the 256 nm wavelength were discussed in the HPLC results section, but the HPLC of all five monitoring wavelengths were included in this Appendix.

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Table 63: HPLC Results of Dissertation Ink Samples, Trial 1

Sample		236 nm				
		Retention Time (min)				
	BLANK EtOH:dH2O (50:50)	1.828				
	Blank Paper #1	1.522				
	BLANK EtOH:dH2O (50:50)	1.510				
04	Okidata	1.050	1.551	12.612		
	BLANK EtOH:dH2O (50:50)	1.513				
05	Okidata	1.090	1.565	12.266		
09	Okidata	1.053	1.561	12.439		
13	Xerox	1.530				
	BLANK EtOH:dH2O (50:50)	1.512	3.752			
14	Xerox	1.535				
15	Xerox	1.528				
16	Xerox	1.532	3.757			
17	Kodak	1.528				
	BLANK EtOH:dH2O (50:50)	1.513				
22	Kodak	1.026	1.520			
	BLANK EtOH:dH2O (50:50)	1.517				
24	Xerox	1.533				
	BLANK EtOH:dH2O (50:50)	1.512				
25	Xerox	1.533				
26	Xerox	1.533				
27	Xerox	1.525				
28	Xerox	1.530				
29	Xerox	1.529				
	Blank Paper #1	1.520				
	BLANK EtOH:dH2O (50:50)	1.513	3.821			
30	Epson	1.063	1.558	6.952	10.973	12.091
	BLANK EtOH:dH2O (50:50)	1.515	3.677			
31	Epson	1.064	1.546	10.696	12.238	
32	Epson	1.071	1.544	10.696	12.226	
33	Epson	1.166	1.563	10.610		
	BLANK EtOH:dH2O (50:50)	0.090	1.517			
34	Epson	1.184	1.555	10.727		
35	Epson	0.128	1.170	1.561	10.581	
60	Epson	0.130	1.158	1.560	10.721	
	BLANK EtOH:dH2O (50:50)	0.163	1.518			
61	Epson	1.172	1.563	10.772		
62	Epson	1.559	10.800			
63	Epson	0.068	1.146	1.561	10.650	
	BLANK EtOH:dH2O (50:50)	0.124	1.523			
64	Epson	1.141	1.558	10.685		
65	Epson	1.190	1.571	10.705		

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		236 nm				
		Retention Time (min)				
66	Epson	0.113	1.560	10.798		
	BLANK EtOH:dH2O (50:50)	0.187	1.518			
67	Epson	1.156	1.557	10.768		
68	Epson	1.562	10.794			
	Blank Paper #1	0.160	1.528			
	BLANK EtOH:dH2O (50:50)	1.510				
84	Epson	1.530				
	BLANK EtOH:dH2O (50:50)	1.513				
85	Epson	1.525				
86	Epson	1.525				
90	Epson	1.146	1.553	10.664		
	BLANK EtOH:dH2O (50:50)	0.183	1.517			
91	Epson	1.551	10.733			
92	Epson	1.157	1.567	10.736		
93	Epson	1.149	1.554	10.753		
	BLANK EtOH:dH2O (50:50)	0.187	1.517			
94	Epson	1.146	1.597	10.604		
95	Epson	1.556	10.769			
120	Epson	1.161	1.559	10.719		
	BLANK EtOH:dH2O (50:50)	0.182	1.518			
121	Epson	1.141	1.555	10.686		
122	Epson	0.084	1.143	1.557	10.718	
123	Epson	1.179	1.562	10.735		
	BLANK EtOH:dH2O (50:50)	0.193	1.512			
124	Epson	1.156	1.558	10.688		
125	Epson	0.085	1.154	1.554	10.730	
	Blank Paper #1	0.075	1.533			
	BLANK EtOH:dH2O (50:50)	1.512				
156	Epson	1.131	1.526			
	BLANK EtOH:dH2O (50:50)	0.255	1.513			
157	Epson	1.139	1.536			
158	Epson	0.108	1.525			
198	Hewlett Packard	0.056	1.529	3.668		
	BLANK EtOH:dH2O (50:50)	1.512				
199	Hewlett Packard	1.524				
	BLANK EtOH:dH2O (50:50)	1.508				
200	Hewlett Packard	1.526				
	BLANK EtOH:dH2O (50:50)	1.509				
201	Hewlett Packard	1.074	1.528			
	BLANK EtOH:dH2O (50:50)	1.508				
205	Hewlett Packard	1.063	1.497	1.852		
	BLANK EtOH:dH2O (50:50)	1.512				
217	Canon	1.077	1.500	8.271		

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		236 nm				
		Retention Time (min)				
	BLANK EtOH:dH2O (50:50)	1.510				
218	Canon	1.081	1.509	8.295		
219	Canon	1.073	1.508	8.357		
220	Canon	1.065	1.504	8.522		
221	Canon	1.099	1.510	8.337		
222	Canon	1.067	1.510	8.578		
	Blank Paper #1	1.520				
	BLANK EtOH:dH2O (50:50)	1.512				
223	Canon	1.079	1.522			
	BLANK EtOH:dH2O (50:50)	0.347	1.512			
224	Canon	1.065	1.522			
225	Canon	0.152	1.065	1.519		
226	Canon	1.082	1.523			
227	Canon	0.168	1.062	1.519		
228	Canon	0.129	1.074	1.521		
244	Xerox	0.083	1.530			
	BLANK EtOH:dH2O (50:50)	1.508				
248	Xerox	1.534				
252	Xerox	1.525				
256	Xerox	1.530				
260	Xerox	1.529				
264	Xerox	1.526				
265	Xerox	1.521	3.634			
	Blank Paper #2	1.523				
	BLANK EtOH:dH2O (50:50)	1.514				
282	Canon	1.067	1.510	8.489		
	BLANK EtOH:dH2O (50:50)	1.512				
283	Canon	1.060	1.513			
284	Canon	1.065	1.518			
285	Canon	1.082	1.522	2.604	3.229	8.535
286	Canon	1.060	1.521			
287	Canon	1.063	1.523			
306	Canon	1.531				
	BLANK EtOH:dH2O (50:50)	0.353	1.512			
307	Canon	1.541				
308	Canon	0.275	1.532			
309	Canon	0.187	1.534			
310	Canon	0.275	1.536			
311	Canon	0.140	1.533			
	Blank Paper #2	0.210	1.528			
	BLANK EtOH:dH2O (50:50)	1.513	3.661			
312	Canon	1.536				
313	Canon	1.534				

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		236 nm				
		Retention Time (min)				
314	Canon	1.527				
315	Canon	1.530				
316	Canon	1.538				
317	Canon	1.535				
318	Canon	1.081	1.527	3.507		
	BLANK EtOH:dH2O (50:50)	0.323	1.517			
319	Canon	1.088	1.527			
320	Canon	0.144	1.111	1.536		
321	Canon	0.224	1.092	1.531	3.613	
322	Canon	0.158	1.100	1.534		
323	Canon	0.230	1.099	1.528		
	Blank Paper #2	0.233	1.528			
	BLANK EtOH:dH2O (50:50)	1.509				
327	Canon	1.545				
	BLANK EtOH:dH2O (50:50)	0.345	1.513			
331	Canon	1.541				
335	Canon	0.170	1.535			
339	Canon	0.125	1.537			
343	Canon	0.170	1.543			
347	Canon	0.273	1.535			
348	Canon	0.075	1.088	1.543	3.460	
	BLANK EtOH:dH2O (50:50)	0.186	1.521			
349	Canon	1.080	1.538			
350	Canon	1.082	1.531	3.479		
351	Canon	0.109	1.063	1.527		
352	Canon	0.102	1.073	1.533	3.601	
353	Canon	1.071	1.527			
	Blank Paper #2	0.081	1.528			
	BLANK EtOH:dH2O (50:50)	1.513				
372	Canon	1.065	1.531	3.597		
	BLANK EtOH:dH2O (50:50)	0.152	1.515			
373	Canon	1.090	1.538			
374	Canon	0.073	1.063	1.530		
375	Canon	0.102	1.063	1.529		
376	Canon	1.077	1.529	2.738		
377	Canon	0.061	1.066	1.528		
378	Canon	1.080	1.534	3.592		
379	Canon	0.104	1.061	1.530		
	Blank Paper #3	1.526				
	BLANK EtOH:dH2O (50:50)	1.519				
380	Canon	1.058	1.530			
381	Canon	0.086	1.058	1.528	3.543	
382	Canon	1.084	1.535	3.562		

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		236 nm				
		Retention Time (min)				
383	Canon	1.062	1.529	3.555		
384	Canon	1.064	1.531	3.599		
	BLANK EtOH:dH2O (50:50)	0.094	1.520			
385	Canon	1.061	1.528			
386	Canon	0.109	1.068	1.526		
387	Canon	0.041	1.063	1.522		
388	Canon	1.072	1.528			
389	Canon	0.099	1.057	1.523		
390	Canon	1.068	1.527			
391	Canon	1.079	1.531			
392	Canon	0.049	1.063	1.527		
393	Canon	1.070	1.524			
394	Canon	0.078	1.059	1.526		
	Blank Paper #3	0.086	1.527			
	BLANK EtOH:dH2O (50:50)	1.516				
395	Canon	1.063	1.532			
396	Canon	1.080	1.531			
397	Canon	1.068	1.524	3.635		
398	Canon	1.064	1.522			
399	Canon	0.136	1.046	1.518		
400	Canon	1.069	1.531	3.622		
401	Canon	0.088	1.059	1.524		
402	Canon	0.066	1.535			
	BLANK EtOH:dH2O (50:50)	0.208	1.514			
403	Canon	1.540				
404	Canon	1.536				
405	Canon	0.038	1.537	3.713		
406	Canon	1.538				
407	Canon	1.543				
408	Canon	1.544				
409	Canon	0.111	1.535			
	Blank Paper #3	0.081	1.529			
	BLANK EtOH:dH2O (50:50)	1.508				
410	Canon	1.537				
411	Canon	0.077	1.542			
412	Canon	1.544				
413	Canon	1.547				
414	Canon	0.063	1.541			
415	Canon	0.125	1.537			
416	Canon	1.542				
417	Canon	0.047	1.542			
418	Canon	1.543				
419	Canon	0.037	1.541	6.687		

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		236 nm				
		Retention Time (min)				
492	Canon	1.547	6.766			
	BLANK EtOH:dH2O (50:50)	1.517				
493	Canon	1.536	6.754			
494	Canon	1.546	6.761	7.266		
495	Canon	1.538	6.730	7.293		
496	Canon	1.540	6.740	7.289		
	Blank Paper #3	1.524				
	BLANK EtOH:dH2O (50:50)	1.520				
497	Canon	1.531	6.694	7.215		
522	Canon	1.061	1.519	2.678	6.735	
	BLANK EtOH:dH2O (50:50)	1.516				
523	Canon	1.079	1.506	7.900		
524	Canon	1.084	1.507	7.919		
525	Canon	1.065	1.514			
526	Canon	1.084	1.506	7.913		
527	Canon	1.074	1.524	3.582		
558	Epson	1.154	1.565	7.552	10.503	
	BLANK EtOH:dH2O (50:50)	1.524				
559	Epson	1.178	1.564	7.564	10.543	
318a	Canon	1.539				
	BLANK EtOH:dH2O (50:50)	1.525				
319a	Canon	1.529				
320a	Canon	1.530	3.590			
321a	Canon	1.540				
322a	Canon	1.531				
323a	Canon	1.534				

Sample		256 nm				
		Retention Time (min)				
	BLANK EtOH:dH2O (50:50)					
	Blank Paper #1	1.689				
	BLANK EtOH:dH2O (50:50)	1.677				
04	Okidata	1.045	1.449	1.569	12.611	
	BLANK EtOH:dH2O (50:50)	1.670				
05	Okidata	1.089	1.453	1.572	12.277	
09	Okidata	1.051	1.455	1.571	12.408	
13	Xerox	1.672				
	BLANK EtOH:dH2O (50:50)	1.672				
14	Xerox	1.083	1.689			
15	Xerox	1.682				
16	Xerox	1.689				
17	Kodak	1.062	1.685			

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		256 nm				
		Retention Time (min)				
	BLANK EtOH:dH2O (50:50)	1.676				
22	Kodak	1.022	1.698	1.855		
	BLANK EtOH:dH2O (50:50)	0.403	1.652			
24	Xerox	1.074	1.684			
	BLANK EtOH:dH2O (50:50)	1.674				
25	Xerox	1.064	1.684			
26	Xerox	1.686				
27	Xerox	1.051	1.679			
28	Xerox	1.069	1.679			
29	Xerox	1.071	1.681			
	Blank Paper #1	1.681				
	BLANK EtOH:dH2O (50:50)	1.675				
30	Epson	1.065	1.563	6.967	10.993	12.174
	BLANK EtOH:dH2O (50:50)	1.665				
31	Epson	1.064	1.554	10.721		
32	Epson	1.070	1.552	10.741		
33	Epson	1.124	1.567	10.619		
	BLANK EtOH:dH2O (50:50)	1.601				
34	Epson	1.116	1.561	10.738		
35	Epson	0.122	1.115	1.563	10.587	
60	Epson	1.114	1.566	10.728		
	BLANK EtOH:dH2O (50:50)	1.605				
61	Epson	1.124	1.568	10.779		
62	Epson	1.109	1.565	10.809		
63	Epson	1.112	1.565	10.655		
	BLANK EtOH:dH2O (50:50)	1.607				
64	Epson	1.098	1.561	10.688		
65	Epson	1.149	1.576	10.710		
66	Epson	1.112	1.565	10.809		
	BLANK EtOH:dH2O (50:50)	1.610				
67	Epson	1.104	1.561	10.774		
68	Epson	1.134	1.570	10.805		
	Blank Paper #1	1.626				
	BLANK EtOH:dH2O (50:50)	1.651				
84	Epson	1.069	1.668			
	BLANK EtOH:dH2O (50:50)	1.665				
85	Epson	1.056	1.675			
86	Epson	1.068	1.667			
90	Epson	1.106	1.557	10.670		
	BLANK EtOH:dH2O (50:50)	0.172	1.606			
91	Epson	1.102	1.556	10.742		
92	Epson	1.121	1.572	10.742		
93	Epson	1.112	1.560	10.761		
	BLANK EtOH:dH2O (50:50)	1.609				

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		256 nm				
		Retention Time (min)				
94	Epson	1.125	1.569	10.607		
95	Epson	1.114	1.564	10.776		
120	Epson	1.119	1.565	10.727		
	BLANK EtOH:dH2O (50:50)	1.609				
121	Epson	1.086	1.559	10.693		
122	Epson	1.100	1.562	10.722		
123	Epson	1.119	1.569	10.747		
	BLANK EtOH:dH2O (50:50)	1.603				
124	Epson	1.105	1.563	10.697		
125	Epson	1.100	1.559	10.734		
	Blank Paper #1	1.628				
	BLANK EtOH:dH2O (50:50)	1.653				
156	Epson	1.073	1.632			
	BLANK EtOH:dH2O (50:50)	0.278	1.635			
157	Epson	1.099	1.589			
158	Epson	0.119	1.074	1.622		
198	Hewlett Packard	1.659				
	BLANK EtOH:dH2O (50:50)	1.676				
199	Hewlett Packard	1.053	1.679			
	BLANK EtOH:dH2O (50:50)	1.678				
200	Hewlett Packard	1.055	1.685			
	BLANK EtOH:dH2O (50:50)	1.683				
201	Hewlett Packard	1.071	1.689			
	BLANK EtOH:dH2O (50:50)	1.681				
205	Hewlett Packard	1.061	1.847			
	BLANK EtOH:dH2O (50:50)	1.685				
217	Canon	1.076	1.492	1.808		
	BLANK EtOH:dH2O (50:50)	1.664				
218	Canon	1.080	1.499			
219	Canon	1.072	1.497			
220	Canon	1.064	1.492	1.811		
221	Canon	1.099	1.502	8.357		
222	Canon	1.066	1.497			
	Blank Paper #1	1.683				
	BLANK EtOH:dH2O (50:50)	1.689				
223	Canon	1.073	1.500			
	BLANK EtOH:dH2O (50:50)	0.398	1.626			
224	Canon	1.060	1.499			
225	Canon	0.182	1.061	1.497		
226	Canon	1.079	1.503			
227	Canon	0.194	1.056	1.497		
228	Canon	0.150	1.071	1.499		
244	Xerox	0.112	1.071	1.638		
	BLANK EtOH:dH2O (50:50)	1.667				

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		256 nm				
		Retention Time (min)				
248	Xerox	1.095	1.682			
252	Xerox	1.077	1.679			
256	Xerox	1.076	1.693			
260	Xerox	1.067	1.694			
264	Xerox	1.079	1.673			
265	Xerox	1.059	1.676			
	Blank Paper #2	1.054	1.699			
	BLANK EtOH:dH2O (50:50)	1.708				
282	Canon	1.066	1.496	1.825		
	BLANK EtOH:dH2O (50:50)	1.679				
283	Canon	1.058	1.491	1.817		
284	Canon	1.064	1.497			
285	Canon	1.081	1.498			
286	Canon	1.058	1.498			
287	Canon	1.062	1.499			
306	Canon	1.362	1.518			
	BLANK EtOH:dH2O (50:50)	0.403	1.621			
307	Canon	1.358				
308	Canon	0.330	1.343	1.605		
309	Canon	0.223	1.362	1.610		
310	Canon	0.309	1.341	1.604		
311	Canon	0.166	1.368	1.614		
	Blank Paper #2	0.253	1.053	1.640		
	BLANK EtOH:dH2O (50:50)	1.674				
312	Canon	1.070	1.681			
313	Canon	1.059	1.691			
314	Canon	1.067	1.690			
315	Canon	1.064	1.694			
316	Canon	1.081	1.696			
317	Canon	1.071	1.697			
318	Canon	1.077				
	BLANK EtOH:dH2O (50:50)	0.382	1.639			
319	Canon	1.081				
320	Canon	0.239	1.103			
321	Canon	0.341	1.089			
322	Canon	0.230	1.094	1.581		
323	Canon	0.298	1.094	1.584		
	Blank Paper #2	0.320	1.063	1.648		
	BLANK EtOH:dH2O (50:50)	1.676				
327	Canon	1.156	1.643			
	BLANK EtOH:dH2O (50:50)	0.439	1.639			
331	Canon	1.370	1.627			
335	Canon	0.256	1.126	1.631		
339	Canon	0.184	1.111	1.634		

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		256 nm				
		Retention Time (min)				
343	Canon	0.244	1.124	1.620		
347	Canon	0.325	1.159	1.619		
348	Canon	0.121	1.085	1.508		
	BLANK EtOH:dH2O (50:50)	0.231	1.635			
349	Canon	1.078	1.503			
350	Canon	1.078	1.506			
351	Canon	0.125	1.058	1.497		
352	Canon	0.117	1.070	1.497		
353	Canon	1.069	1.495			
	Blank Paper #2	1.065	1.650			
	BLANK EtOH:dH2O (50:50)	1.681				
372	Canon	1.061	1.497			
	BLANK EtOH:dH2O (50:50)	0.170	1.650			
373	Canon	1.087	1.504			
374	Canon	1.059	1.499			
375	Canon	0.117	1.060	1.499		
376	Canon	1.075	1.502			
377	Canon	1.062	1.503			
378	Canon	1.077	1.503			
379	Canon	0.112	1.059	1.496		
	Blank Paper #3	1.099	1.643			
	BLANK EtOH:dH2O (50:50)	1.688				
380	Canon	1.055	1.496			
381	Canon	1.054	1.500			
382	Canon	1.081	1.506			
383	Canon	1.059	1.502			
384	Canon	1.061	1.505			
	BLANK EtOH:dH2O (50:50)	1.657				
385	Canon	1.058	1.499			
386	Canon	0.124	1.065	1.497		
387	Canon	1.061	1.498			
388	Canon	1.069	1.500			
389	Canon	0.117	1.052	1.497		
390	Canon	1.058	1.509			
391	Canon	1.076	1.504			
392	Canon	0.083	1.058	1.501		
393	Canon	1.066	1.498			
394	Canon	1.053	1.500			
	Blank Paper #3	0.107	1.099	1.661		
	BLANK EtOH:dH2O (50:50)	1.692				
395	Canon	1.059	1.503			
396	Canon	1.078	1.505			
397	Canon	1.066	1.498			

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		256 nm				
		Retention Time (min)				
398	Canon	1.061	1.495			
399	Canon	0.154	1.042	1.487		
400	Canon	1.066	1.503			
401	Canon	0.109	1.055	1.495		
402	Canon	1.124	1.613			
	BLANK EtOH:dH2O (50:50)	0.231	1.649			
403	Canon	1.226	1.544			
404	Canon	1.159	1.620			
405	Canon	1.163	1.620			
406	Canon	1.307	1.613			
407	Canon	1.281	1.621			
408	Canon	1.301	1.606			
409	Canon	0.129	1.206	1.606		
	Blank Paper #3	0.098	1.093	1.657		
	BLANK EtOH:dH2O (50:50)	1.668				
410	Canon	1.127	1.664			
411	Canon	0.116	1.168	1.613		
412	Canon	1.148	1.638			
413	Canon	1.200	1.610			
414	Canon	0.100	1.104	1.624		
415	Canon	0.156	1.148	1.630		
416	Canon	1.164	1.645			
417	Canon	0.091	1.162	1.649		
418	Canon	1.160	1.645			
419	Canon	1.218	1.557			
492	Canon	1.103	1.665			
	BLANK EtOH:dH2O (50:50)	1.683				
493	Canon	1.701				
494	Canon	1.130	1.672			
495	Canon	1.110	1.703			
496	Canon	1.105	1.694	6.746		
	Blank Paper #3	1.083	1.697			
	BLANK EtOH:dH2O (50:50)	1.702				
497	Canon	1.088	1.678			
522	Canon	1.059	1.493			
	BLANK EtOH:dH2O (50:50)	1.691				
523	Canon	1.079	1.499	7.923		
524	Canon	1.083	1.500	7.938		
525	Canon	1.063	1.496			
526	Canon	1.084	1.500	7.921		
527	Canon	1.072	1.501			
558	Epson	1.122	1.569	7.585	10.506	
	BLANK EtOH:dH2O (50:50)	1.632				
559	Epson	1.148	1.568	7.612	10.546	

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		256 nm				
		Retention Time (min)				
318a	Canon	1.652				
	BLANK EtOH:dH2O (50:50)	1.693				
319a	Canon	1.693				
320a	Canon	1.697				
321a	Canon	1.713				
322a	Canon	1.699				
323a	Canon	1.704				

Sample		417 nm			
		Retention Time (min)			
	BLANK EtOH:dH2O (50:50)				
	Blank Paper #1				
	BLANK EtOH:dH2O (50:50)				
04	Okidata	1.051	1.457	1.573	12.678
	BLANK EtOH:dH2O (50:50)				
05	Okidata	1.095	1.466	1.577	12.191
09	Okidata	1.050	1.463	1.574	12.595
13	Xerox				
	BLANK EtOH:dH2O (50:50)				
14	Xerox				
15	Xerox				
16	Xerox				
17	Kodak				
	BLANK EtOH:dH2O (50:50)				
22	Kodak	1.020	1.856		
	BLANK EtOH:dH2O (50:50)				
24	Xerox				
	BLANK EtOH:dH2O (50:50)				
25	Xerox				
26	Xerox				
27	Xerox				
28	Xerox				
29	Xerox				
	Blank Paper #1				
	BLANK EtOH:dH2O (50:50)				
30	Epson	1.048	1.574	10.997	12.191
	BLANK EtOH:dH2O (50:50)				
31	Epson	1.046	1.566	10.733	12.320
32	Epson	1.050	1.565	10.739	12.354
33	Epson	1.568	10.612		
	BLANK EtOH:dH2O (50:50)	1.604			
34	Epson	1.561	10.732		

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		417 nm			
		Retention Time (min)			
35	Epson	1.563	10.582		
60	Epson	1.563	10.715		
	BLANK EtOH:dH2O (50:50)	1.611			
61	Epson	1.568	10.770		
62	Epson	1.563	10.797		
63	Epson	1.126	1.565	10.646	
	BLANK EtOH:dH2O (50:50)	1.611			
64	Epson	1.112	1.561	10.680	
65	Epson	1.575	10.702		
66	Epson	1.563	10.792		
	BLANK EtOH:dH2O (50:50)	0.139	1.617		
67	Epson	1.561	10.767		
68	Epson	1.568	10.790		
	Blank Paper #1	0.149	1.643		
	BLANK EtOH:dH2O (50:50)				
84	Epson				
	BLANK EtOH:dH2O (50:50)				
85	Epson				
86	Epson				
90	Epson	1.557	10.661		
	BLANK EtOH:dH2O (50:50)	0.141	1.613		
91	Epson	1.556	10.731		
92	Epson	1.571	10.733		
93	Epson	1.558	10.744		
	BLANK EtOH:dH2O (50:50)	0.147	1.617		
94	Epson	1.570	10.601		
95	Epson	1.561	10.758		
120	Epson	1.563	10.715		
	BLANK EtOH:dH2O (50:50)	0.149	1.618		
121	Epson	1.559	10.683		
122	Epson	1.560	10.708		
123	Epson	1.567	10.732		
	BLANK EtOH:dH2O (50:50)	0.153	1.612		
124	Epson	1.562	10.683		
125	Epson	1.558	10.715		
	Blank Paper #1	1.643			
	BLANK EtOH:dH2O (50:50)				
156	Epson	1.712			
	BLANK EtOH:dH2O (50:50)	0.283	1.660		
157	Epson				
158	Epson	0.118	1.666		
198	Hewlett Packard	1.689			
	BLANK EtOH:dH2O (50:50)				
199	Hewlett Packard				

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		417 nm			
		Retention Time (min)			
	BLANK EtOH:dH2O (50:50)				
200	Hewlett Packard				
	BLANK EtOH:dH2O (50:50)				
201	Hewlett Packard				
	BLANK EtOH:dH2O (50:50)				
205	Hewlett Packard	1.060	1.847		
	BLANK EtOH:dH2O (50:50)				
217	Canon	1.073	1.496	8.280	
	BLANK EtOH:dH2O (50:50)				
218	Canon	1.077	1.503		
219	Canon	1.068	1.501		
220	Canon	1.061	1.497		
221	Canon	1.096	1.507	8.360	
222	Canon	1.062	1.502		
	Blank Paper #1				
	BLANK EtOH:dH2O (50:50)				
223	Canon	1.068	1.507		
	BLANK EtOH:dH2O (50:50)	0.407	1.642		
224	Canon	1.058	1.505		
225	Canon	0.189	1.057	1.501	
226	Canon	1.072	1.507		
227	Canon	0.203	1.050	1.500	
228	Canon	0.155	1.065	1.502	
244	Xerox	0.118	1.670		
	BLANK EtOH:dH2O (50:50)				
248	Xerox				
252	Xerox				
256	Xerox				
260	Xerox				
264	Xerox				
265	Xerox				
	Blank Paper #2				
	BLANK EtOH:dH2O (50:50)				
282	Canon	1.063	1.501		
	BLANK EtOH:dH2O (50:50)				
283	Canon	1.054	1.496		
284	Canon	1.059	1.503		
285	Canon	1.077	1.504		
286	Canon	1.053	1.503		
287	Canon	1.057	1.505		
306	Canon	1.381	1.514		
	BLANK EtOH:dH2O (50:50)	0.421	1.638		
307	Canon	1.386			
308	Canon	0.335	1.353	1.605	

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		417 nm			
		Retention Time (min)			
309	Canon	0.230	1.376	1.615	
310	Canon	0.315	1.368	1.607	
311	Canon	0.168	1.386	1.618	
	Blank Paper #2	0.256	1.673		
	BLANK EtOH:dH2O (50:50)	1.703			
312	Canon				
313	Canon				
314	Canon				
315	Canon				
316	Canon				
317	Canon				
318	Canon	1.084			
	BLANK EtOH:dH2O (50:50)	1.673			
319	Canon	1.086			
320	Canon	1.104	1.698		
321	Canon	1.095	1.698		
322	Canon	0.263	1.099	1.691	
323	Canon	0.318	1.100	1.689	
	Blank Paper #2	1.683			
	BLANK EtOH:dH2O (50:50)				
327	Canon	1.387			
	BLANK EtOH:dH2O (50:50)	1.668			
331	Canon	1.392	1.656		
335	Canon	1.368	1.655		
339	Canon	0.216	1.377	1.662	
343	Canon	1.382	1.644		
347	Canon	0.336	1.363	1.636	
348	Canon	0.127	1.078	1.513	
	BLANK EtOH:dH2O (50:50)	0.245	1.653		
349	Canon	1.073	1.508		
350	Canon	1.070	1.508		
351	Canon	1.052	1.500		
352	Canon	1.066	1.501		
353	Canon	1.064	1.499		
	Blank Paper #2	1.678			
	BLANK EtOH:dH2O (50:50)				
372	Canon	1.054	1.502		
	BLANK EtOH:dH2O (50:50)	0.150	1.673		
373	Canon	1.081	1.510		
374	Canon	1.053	1.502		
375	Canon	1.054	1.502		
376	Canon	1.072	1.506		
377	Canon	1.054	1.505		
378	Canon	1.072	1.506		

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		417 nm			
		Retention Time (min)			
379	Canon	1.055	1.499		
	Blank Paper #3	1.668			
	BLANK EtOH:dH2O (50:50)				
380	Canon	1.050	1.499		
381	Canon	1.047	1.502		
382	Canon	1.077	1.510		
383	Canon	1.053	1.504		
384	Canon	1.053	1.507		
	BLANK EtOH:dH2O (50:50)	1.681			
385	Canon	1.051	1.502		
386	Canon	1.059	1.499		
387	Canon	1.056	1.501		
388	Canon	1.062	1.503		
389	Canon	1.047	1.498		
390	Canon	1.049	1.508		
391	Canon	1.069	1.507		
392	Canon	1.051	1.502		
393	Canon	1.058	1.501		
394	Canon	1.047	1.501		
	Blank Paper #3	1.694			
	BLANK EtOH:dH2O (50:50)				
395	Canon	1.053	1.506		
396	Canon	1.070	1.507		
397	Canon	1.061	1.500		
398	Canon	1.053	1.496		
399	Canon	1.038	1.488		
400	Canon	1.062	1.505		
401	Canon	1.052	1.497		
402	Canon	1.351	1.654		
	BLANK EtOH:dH2O (50:50)				
403	Canon	1.302	1.622		
404	Canon	1.346	1.661		
405	Canon	1.350	1.665		
406	Canon	1.353	1.667		
407	Canon	1.349	1.660		
408	Canon	1.354	1.659		
409	Canon	1.328	1.651		
	Blank Paper #3	1.697			
	BLANK EtOH:dH2O (50:50)				
410	Canon	1.353			
411	Canon	1.344	1.669		
412	Canon	1.364	1.688		
413	Canon	1.367	1.671		
414	Canon	1.357	1.673		

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		417 nm			
		Retention Time (min)			
415	Canon	1.336	1.672		
416	Canon	1.360	1.683		
417	Canon	1.358	1.689		
418	Canon	1.361	1.686		
419	Canon	1.317	1.639		
492	Canon	1.705			
	BLANK EtOH:dH2O (50:50)				
493	Canon				
494	Canon				
495	Canon				
496	Canon				
	Blank Paper #3				
	BLANK EtOH:dH2O (50:50)				
497	Canon				
522	Canon	1.055	1.496		
	BLANK EtOH:dH2O (50:50)				
523	Canon	1.076	1.502	7.931	
524	Canon	1.080	1.503	7.935	
525	Canon	1.059	1.499		
526	Canon	1.080	1.503	7.923	
527	Canon	1.068	1.504		
558	Epson	1.573	10.509		
	BLANK EtOH:dH2O (50:50)	1.641			
559	Epson	1.572	10.549		
318a	Canon	1.670			
	BLANK EtOH:dH2O (50:50)				
319a	Canon				
320a	Canon				
321a	Canon				
322a	Canon				
323a	Canon				

Sample		564 nm			
		Retention Time (min)			
	BLANK EtOH:dH2O (50:50)				
	Blank Paper #1				
	BLANK EtOH:dH2O (50:50)				
04	Okidata	1.043	1.575	12.330	
	BLANK EtOH:dH2O (50:50)				
05	Okidata	1.085	1.558	12.304	
09	Okidata	1.036	1.571	1.799	12.339
13	Xerox				

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		564 nm			
		Retention Time (min)			
	BLANK EtOH:dH2O (50:50)				
14	Xerox				
15	Xerox				
16	Xerox				
17	Kodak				
	BLANK EtOH:dH2O (50:50)				
22	Kodak	1.021	1.866		
	BLANK EtOH:dH2O (50:50)	0.429	1.604		
24	Xerox				
	BLANK EtOH:dH2O (50:50)				
25	Xerox				
26	Xerox				
27	Xerox				
28	Xerox				
29	Xerox				
	Blank Paper #1				
	BLANK EtOH:dH2O (50:50)				
30	Epson	1.038	1.487	1.809	
	BLANK EtOH:dH2O (50:50)				
31	Epson	1.033	1.485		
32	Epson	1.039	1.484		
33	Epson	1.597			
	BLANK EtOH:dH2O (50:50)	1.589			
34	Epson	1.599			
35	Epson	1.588	13.446		
60	Epson	1.597			
	BLANK EtOH:dH2O (50:50)	1.592			
61	Epson	1.599			
62	Epson	1.600			
63	Epson	1.589	13.189		
	BLANK EtOH:dH2O (50:50)	1.595			
64	Epson	1.573	12.856		
65	Epson	1.609			
66	Epson	1.601			
	BLANK EtOH:dH2O (50:50)	1.595			
67	Epson	1.590			
68	Epson	1.608			
	Blank Paper #1	1.605			
	BLANK EtOH:dH2O (50:50)	1.587			
84	Epson	1.606			
	BLANK EtOH:dH2O (50:50)	1.592			
85	Epson				
86	Epson				
90	Epson	1.590			

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		564 nm			
		Retention Time (min)			
	BLANK EtOH:dH2O (50:50)	0.153	1.591		
91	Epson	1.589			
92	Epson	1.603			
93	Epson	1.595			
	BLANK EtOH:dH2O (50:50)	1.593			
94	Epson	1.590	12.862		
95	Epson	1.601			
120	Epson	1.597			
	BLANK EtOH:dH2O (50:50)	1.594			
121	Epson	1.588			
122	Epson	1.595			
123	Epson	1.605			
	BLANK EtOH:dH2O (50:50)	1.587			
124	Epson	1.595			
125	Epson	1.595			
	Blank Paper #1	1.611			
	BLANK EtOH:dH2O (50:50)	1.590			
156	Epson	1.595			
	BLANK EtOH:dH2O (50:50)	0.280	1.598		
157	Epson	1.597			
158	Epson	1.603			
198	Hewlett Packard	1.612			
	BLANK EtOH:dH2O (50:50)	1.593			
199	Hewlett Packard	1.604			
	BLANK EtOH:dH2O (50:50)				
200	Hewlett Packard				
	BLANK EtOH:dH2O (50:50)				
201	Hewlett Packard				
	BLANK EtOH:dH2O (50:50)				
205	Hewlett Packard	1.064	1.854		
	BLANK EtOH:dH2O (50:50)				
217	Canon	1.073	1.495	8.283	
	BLANK EtOH:dH2O (50:50)	1.504			
218	Canon	1.077	1.502	8.323	
219	Canon	1.068	1.500	8.382	
220	Canon	1.061	1.496	8.563	
221	Canon	1.095	1.506	8.348	
222	Canon	1.062	1.501		
	Blank Paper #1	1.533			
	BLANK EtOH:dH2O (50:50)	1.530			
223	Canon	1.068	1.506		
	BLANK EtOH:dH2O (50:50)	0.401	1.587		
224	Canon	1.058	1.505		
225	Canon	0.182	1.057	1.503	

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		564 nm			
		Retention Time (min)			
226	Canon	1.073	1.508		
227	Canon	0.195	1.051	1.501	
228	Canon	0.153	1.066	1.503	
244	Xerox	0.113	1.605		
	BLANK EtOH:dH2O (50:50)	1.576			
248	Xerox				
252	Xerox				
256	Xerox				
260	Xerox				
264	Xerox				
265	Xerox				
	Blank Paper #2				
	BLANK EtOH:dH2O (50:50)				
282	Canon	1.064	1.500	8.554	
	BLANK EtOH:dH2O (50:50)	1.509			
283	Canon	1.055	1.495		
284	Canon	1.060	1.501		
285	Canon	1.078	1.502		
286	Canon	1.054	1.501		
287	Canon	1.058	1.503		
306	Canon	1.537			
	BLANK EtOH:dH2O (50:50)	0.406	1.592		
307	Canon	1.596			
308	Canon	0.333	1.602		
309	Canon	0.225	1.606		
310	Canon	0.310	1.605		
311	Canon	0.167	1.609		
	Blank Paper #2	0.257	1.610		
	BLANK EtOH:dH2O (50:50)	1.594			
312	Canon	1.604			
313	Canon				
314	Canon				
315	Canon				
316	Canon				
317	Canon				
318	Canon	1.072			
	BLANK EtOH:dH2O (50:50)	0.386	1.605		
319	Canon	1.077			
320	Canon	0.249	1.098	1.631	
321	Canon	0.352	1.083	1.636	
322	Canon	0.242	1.089	1.628	
323	Canon	0.306	1.090	1.626	
	Blank Paper #2	0.331	1.614		
	BLANK EtOH:dH2O (50:50)	1.594			

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		564 nm			
		Retention Time (min)			
327	Canon	1.600			
	BLANK EtOH:dH2O (50:50)	0.449	1.601		
331	Canon	1.594	1.625		
335	Canon	0.264	1.609		
339	Canon	0.188	1.610		
343	Canon	0.248	1.608		
347	Canon	0.330	1.604		
348	Canon	0.123	1.078	1.514	
	BLANK EtOH:dH2O (50:50)	0.234	1.599		
349	Canon	1.072	1.510		
350	Canon	1.070	1.508		
351	Canon	0.129	1.052	1.501	
352	Canon	0.116	1.064	1.502	
353	Canon	1.063	1.500		
	Blank Paper #2	1.608			
	BLANK EtOH:dH2O (50:50)	1.575			
372	Canon	1.055	1.502		
	BLANK EtOH:dH2O (50:50)	0.177	1.592		
373	Canon	1.081	1.510		
374	Canon	1.053	1.502		
375	Canon	0.118	1.054	1.502	
376	Canon	1.070	1.507		
377	Canon	1.054	1.505		
378	Canon	1.072	1.506		
379	Canon	0.112	1.054	1.500	
	Blank Paper #3	1.596			
	BLANK EtOH:dH2O (50:50)	1.590			
380	Canon	1.049	1.499		
381	Canon	1.046	1.502		
382	Canon	1.076	1.510		
383	Canon	1.052	1.504		
384	Canon	1.053	1.507		
	BLANK EtOH:dH2O (50:50)	1.591			
385	Canon	1.051	1.502		
386	Canon	0.125	1.059	1.499	
387	Canon	1.054	1.501		
388	Canon	1.061	1.503		
389	Canon	0.120	1.046	1.498	
390	Canon	1.049	1.505		
391	Canon	1.069	1.507		
392	Canon	1.050	1.502		
393	Canon	1.058	1.500		
394	Canon	1.046	1.500		
	Blank Paper #3	0.110	1.597		

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		564 nm			
		Retention Time (min)			
	BLANK EtOH:dH2O (50:50)	1.588			
395	Canon	1.051	1.506		
396	Canon	1.069	1.507		
397	Canon	1.059	1.501		
398	Canon	1.052	1.497		
399	Canon	0.158	1.035	1.489	
400	Canon	1.059	1.505		
401	Canon	0.106	1.049	1.498	
402	Canon	1.096	1.587		
	BLANK EtOH:dH2O (50:50)	0.234	1.590		
403	Canon	1.099	1.569		
404	Canon	1.604			
405	Canon	1.601			
406	Canon	1.601			
407	Canon	1.606			
408	Canon	1.123	1.603		
409	Canon	0.132	1.599		
	Blank Paper #3	0.099	1.615		
	BLANK EtOH:dH2O (50:50)	1.589			
410	Canon	1.583			
411	Canon	0.117	1.598		
412	Canon	1.614			
413	Canon	1.607			
414	Canon	1.091	1.606		
415	Canon	0.163	1.599		
416	Canon	1.609			
417	Canon	1.610			
418	Canon	1.610			
419	Canon	1.100	1.590		
492	Canon	1.622			
	BLANK EtOH:dH2O (50:50)	1.598			
493	Canon				
494	Canon				
495	Canon				
496	Canon				
	Blank Paper #3				
	BLANK EtOH:dH2O (50:50)				
497	Canon				
522	Canon	1.055	1.495		
	BLANK EtOH:dH2O (50:50)	1.495			
523	Canon	1.075	1.501	7.930	
524	Canon	1.080	1.502	7.938	
525	Canon	1.059	1.498	8.200	
526	Canon	1.080	1.502	7.915	

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		564 nm			
		Retention Time (min)			
527	Canon	1.067	1.503		
558	Epson	1.553	7.588		
	BLANK EtOH:dH2O (50:50)	1.604			
559	Epson	1.555	7.599		
318a	Canon	1.616			
	BLANK EtOH:dH2O (50:50)	1.601			
319a	Canon				
320a	Canon				
321a	Canon				
322a	Canon				
323a	Canon				

Sample		588 nm		
		Retention Time (min)		
	BLANK EtOH:dH2O (50:50)			
	Blank Paper #1			
	BLANK EtOH:dH2O (50:50)			
04	Okidata	1.043	1.554	12.335
	BLANK EtOH:dH2O (50:50)			
05	Okidata	1.084	12.303	
09	Okidata	1.035	1.826	12.340
13	Xerox			
	BLANK EtOH:dH2O (50:50)			
14	Xerox			
15	Xerox			
16	Xerox			
17	Kodak			
	BLANK EtOH:dH2O (50:50)			
22	Kodak	1.018	1.865	
	BLANK EtOH:dH2O (50:50)			
24	Xerox	0.438	1.618	
	BLANK EtOH:dH2O (50:50)			
25	Xerox			
26	Xerox			
27	Xerox			
28	Xerox			
29	Xerox			
	Blank Paper #1			
	BLANK EtOH:dH2O (50:50)			
30	Epson	1.036	1.828	
	BLANK EtOH:dH2O (50:50)			
31	Epson	1.031	1.557	1.815

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		588 nm		
		Retention Time (min)		
32	Epson	1.036	1.817	
33	Epson	1.603		
	BLANK EtOH:dH2O (50:50)	1.590		
34	Epson	1.605		
35	Epson	1.592	13.466	
60	Epson	1.598		
	BLANK EtOH:dH2O (50:50)	1.594		
61	Epson	1.604		
62	Epson	1.602		
63	Epson	1.592	13.196	
	BLANK EtOH:dH2O (50:50)	1.597		
64	Epson	1.574	12.829	
65	Epson	1.611		
66	Epson	1.603		
	BLANK EtOH:dH2O (50:50)	1.597		
67	Epson	1.594		
68	Epson	1.610		
	Blank Paper #1	1.609		
	BLANK EtOH:dH2O (50:50)	1.605		
84	Epson	1.630		
	BLANK EtOH:dH2O (50:50)	1.620		
85	Epson			
86	Epson			
90	Epson	1.595		
	BLANK EtOH:dH2O (50:50)	0.151	1.594	
91	Epson	1.594		
92	Epson	1.606		
93	Epson	1.598		
	BLANK EtOH:dH2O (50:50)	1.596		
94	Epson	1.595	12.857	
95	Epson	1.602		
120	Epson	1.600		
	BLANK EtOH:dH2O (50:50)	1.597		
121	Epson	1.591		
122	Epson	1.596		
123	Epson	1.608		
	BLANK EtOH:dH2O (50:50)	1.589		
124	Epson	1.598		
125	Epson	1.597		
	Blank Paper #1	1.614		
	BLANK EtOH:dH2O (50:50)	1.606		
156	Epson	1.617		
	BLANK EtOH:dH2O (50:50)	0.280	1.605	
157	Epson	1.620		

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		588 nm		
		Retention Time (min)		
158	Epson	1.610		
198	Hewlett Packard	1.622		
	BLANK EtOH:dH2O (50:50)	1.621		
199	Hewlett Packard			
	BLANK EtOH:dH2O (50:50)			
200	Hewlett Packard			
	BLANK EtOH:dH2O (50:50)			
201	Hewlett Packard			
	BLANK EtOH:dH2O (50:50)			
205	Hewlett Packard	1.065	1.852	
	BLANK EtOH:dH2O (50:50)			
217	Canon	1.072	1.495	8.286
	BLANK EtOH:dH2O (50:50)	1.509		
218	Canon	1.076	1.502	8.321
219	Canon	1.068	1.500	8.378
220	Canon	1.060	1.496	8.565
221	Canon	1.096	1.506	8.349
222	Canon	1.061	1.501	
	Blank Paper #1	1.542		
	BLANK EtOH:dH2O (50:50)	1.552		
223	Canon	1.067	1.506	
	BLANK EtOH:dH2O (50:50)	0.401	1.593	
224	Canon	1.057	1.505	
225	Canon	0.183	1.056	1.502
226	Canon	1.072	1.508	
227	Canon	0.196	1.049	1.501
228	Canon	0.154	1.065	1.503
244	Xerox	0.113	1.612	
	BLANK EtOH:dH2O (50:50)	1.600		
248	Xerox			
252	Xerox			
256	Xerox			
260	Xerox			
264	Xerox			
265	Xerox			
	Blank Paper #2			
	BLANK EtOH:dH2O (50:50)			
282	Canon	1.061	1.500	8.549
	BLANK EtOH:dH2O (50:50)	1.514		
283	Canon	1.053	1.495	
284	Canon	1.059	1.501	
285	Canon	1.076	1.502	
286	Canon	1.052	1.501	
287	Canon	1.056	1.503	

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		588 nm		
		Retention Time (min)		
306	Canon	1.544		
	BLANK EtOH:dH2O (50:50)	0.408	1.597	
307	Canon	1.621		
308	Canon	0.334	1.607	
309	Canon	0.226	1.611	
310	Canon	0.311	1.610	
311	Canon	0.168	1.614	
	Blank Paper #2	0.258	1.616	
	BLANK EtOH:dH2O (50:50)	1.616		
312	Canon			
313	Canon			
314	Canon			
315	Canon			
316	Canon			
317	Canon			
318	Canon	1.072	1.644	
	BLANK EtOH:dH2O (50:50)	0.387	1.611	
319	Canon	1.077	1.631	
320	Canon	0.251	1.098	1.625
321	Canon	0.355	1.083	1.619
322	Canon	0.243	1.089	1.619
323	Canon	0.306	1.090	1.618
	Blank Paper #2	0.331	1.621	
	BLANK EtOH:dH2O (50:50)	1.624		
327	Canon			
	BLANK EtOH:dH2O (50:50)	0.450	1.608	
331	Canon			
335	Canon	0.265	1.617	
339	Canon	0.190	1.619	
343	Canon	0.250	1.618	
347	Canon	0.330	1.610	
348	Canon	0.125	1.078	1.514
	BLANK EtOH:dH2O (50:50)	0.235	1.605	
349	Canon	1.071	1.510	
350	Canon	1.070	1.509	
351	Canon	0.129	1.051	1.501
352	Canon	0.117	1.064	1.502
353	Canon	1.062	1.500	
	Blank Paper #2	1.615		
	BLANK EtOH:dH2O (50:50)	1.604		
372	Canon	1.053	1.502	
	BLANK EtOH:dH2O (50:50)	0.177	1.603	
373	Canon	1.081	1.510	
374	Canon	1.052	1.502	

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		588 nm		
		Retention Time (min)		
375	Canon	0.118	1.053	1.502
376	Canon	1.069	1.506	
377	Canon	1.053	1.505	
378	Canon	1.071	1.506	
379	Canon	0.112	1.053	1.500
	Blank Paper #3	1.606		
	BLANK EtOH:dH2O (50:50)	1.618		
380	Canon	1.048	1.499	
381	Canon	1.046	1.502	
382	Canon	1.076	1.510	
383	Canon	1.051	1.504	
384	Canon	1.052	1.507	
	BLANK EtOH:dH2O (50:50)	1.604		
385	Canon	1.050	1.502	
386	Canon	0.125	1.058	1.499
387	Canon	1.054	1.501	
388	Canon	1.061	1.503	
389	Canon	0.120	1.045	1.498
390	Canon	1.048	1.506	
391	Canon	1.069	1.507	
392	Canon	1.049	1.502	
393	Canon	1.057	1.500	
394	Canon	1.045	1.500	
	Blank Paper #3	1.611		
	BLANK EtOH:dH2O (50:50)	1.619		
395	Canon	1.051	1.506	
396	Canon	1.069	1.507	
397	Canon	1.058	1.501	
398	Canon	1.052	1.497	
399	Canon	0.159	1.035	1.489
400	Canon	1.058	1.505	
401	Canon	0.108	1.049	1.498
402	Canon	1.079	1.602	
	BLANK EtOH:dH2O (50:50)	0.235	1.603	
403	Canon	1.064	1.592	
404	Canon	1.068	1.615	
405	Canon	1.049	1.614	
406	Canon	1.063	1.615	
407	Canon	1.621		
408	Canon	1.077	1.616	
409	Canon	0.133	1.612	
	Blank Paper #3	0.098	1.625	
	BLANK EtOH:dH2O (50:50)	1.615		
410	Canon			

Table 63: HPLC Results of Dissertation Ink Samples, Trial 1 cont.

Sample		588 nm		
		Retention Time (min)		
411	Canon	0.119	1.062	1.616
412	Canon	1.628		
413	Canon	1.078	1.623	
414	Canon	1.069	1.621	
415	Canon	0.163	1.032	1.614
416	Canon	1.625		
417	Canon	1.626		
418	Canon	1.625		
419	Canon	1.083	1.605	
492	Canon	1.634		
	BLANK EtOH:dH2O (50:50)	1.630		
493	Canon			
494	Canon			
495	Canon			
496	Canon			
	Blank Paper #3			
	BLANK EtOH:dH2O (50:50)			
497	Canon			
522	Canon	1.054	1.495	
	BLANK EtOH:dH2O (50:50)	1.499		
523	Canon	1.075	1.501	7.929
524	Canon	1.079	1.502	7.940
525	Canon	1.058	1.498	8.198
526	Canon	1.080	1.502	7.915
527	Canon	1.067	1.503	
558	Epson	1.554	7.585	
	BLANK EtOH:dH2O (50:50)	1.609		
559	Epson	1.556	7.599	
318a	Canon	1.621		
	BLANK EtOH:dH2O (50:50)	1.628		
319a	Canon			
320a	Canon			
321a	Canon			
322a	Canon			
323a	Canon			

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2

Sample		236 nm				
		Retention Time (min)				
	BLANK EtOH:dH2O (50:50)	1.804	3.852			
	Blank Paper #1	1.523				
	BLANK EtOH:dH2O (50:50)	1.517				
04	Okidata	1.079	1.542	11.722		
05	Okidata	1.082	1.548	11.696		
09	Okidata	1.076	1.547	3.593	10.719	11.802
13	Xerox	1.530				
14	Xerox	1.527				
15	Xerox	1.524				
16	Xerox	1.534	3.633			
17	Kodak	1.524				
22	Kodak	1.046	1.525	3.599		
24	Xerox	1.530	3.720			
25	Xerox	1.530				
26	Xerox	1.528	3.722			
27	Xerox	1.529				
28	Xerox	1.528				
29	Xerox	1.532				
30	Epson	1.073	1.549	6.799	10.572	11.947
31	Epson	1.094	1.538	10.724	12.534	
32	Epson	1.097	1.536	10.771	12.627	
33	Epson	1.193	1.562	7.832	10.594	
34	Epson	1.214	1.558	10.678		
35	Epson	1.225	1.564	7.877	10.549	
	Blank Paper #1	0.237	1.534			
	BLANK EtOH:dH2O (50:50)	1.520	3.686			
60	Epson	1.552	3.632	7.877	10.629	
61	Epson	1.559	3.687	7.871	10.629	
62	Epson	1.551	3.686	10.678		
63	Epson	1.168	1.561	7.929	10.628	
64	Epson	1.176	1.563	7.942	10.642	
65	Epson	1.224	1.562	3.652	7.949	10.654
66	Epson	1.557	10.710			
67	Epson	1.558	7.946	10.707		
68	Epson	1.557	10.735			
84	Epson	1.535				
85	Epson	1.534				
86	Epson	1.534				
90	Epson	1.189	1.562	7.940	10.639	
91	Epson	1.214	1.558	10.686		
92	Epson	1.202	1.559	8.055	10.709	
93	Epson	1.209	1.554	8.022	10.751	
94	Epson	1.162	1.568	8.037	10.672	
95	Epson	1.557	10.765			

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2 cont.

Sample		236 nm				
		Retention Time (min)				
120	Epson	1.195	1.562	3.634	10.754	
121	Epson	1.178	1.556	8.010	10.738	
122	Epson	1.190	1.554	10.794		
	Blank Paper #1	1.536				
	BLANK EtOH:dH2O (50:50)	1.516				
123	Epson	1.558	10.708			
124	Epson	1.554	10.717			
125	Epson	1.218	1.558	8.021	10.744	
156	Epson	1.127	1.532			
157	Epson	1.141	1.537	3.685		
158	Epson	0.121	1.534			
198	Hewlett Packard	1.533				
199	Hewlett Packard	1.532				
200	Hewlett Packard	1.532				
201	Hewlett Packard	1.081	1.532			
205	Hewlett Packard	1.084	1.517			
217	Canon	1.100	1.506	8.623		
218	Canon	1.101	1.511	8.637		
219	Canon	1.108	1.523	2.621	8.662	
220	Canon	1.084	1.505	8.703		
221	Canon	1.110	1.510	8.489		
222	Canon	1.094	1.515	2.666	8.762	
223	Canon	1.112	1.531			
224	Canon	1.101	1.529	3.672		
	Blank Paper #1	1.530				
	BLANK EtOH:dH2O (50:50)	1.518				
225	Canon	1.095	1.525	3.626		
226	Canon	1.108	1.529	3.655		
227	Canon	1.107	1.529	3.651		
228	Canon	1.112	1.532	3.680		
244	Xerox	1.531				
248	Xerox	1.537	3.653			
252	Xerox	1.527				
256	Xerox	1.533				
260	Xerox	1.533				
264	Xerox	1.533				
265	Xerox	1.532				
282	Canon	1.086	1.505	8.416		
283	Canon	1.093	1.519	2.723	8.507	
284	Canon	1.097	1.523	2.696	8.502	
285	Canon	1.107	1.526	2.666	8.436	
286	Canon	1.091	1.523	3.509		
287	Canon	1.088	1.521	2.686		
	BLANK EtOH:dH2O (50:50)	1.523	3.699			

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2 cont.

Sample		236 nm				
		Retention Time (min)				
	Blank Paper2 EXT	1.527				
	BLANK EtOH:dH2O (50:50)	1.520				
306	Canon	1.537				
307	Canon	0.127	1.538			
308	Canon	0.108	1.540	3.647	4.037	
309	Canon	0.060	1.545			
310	Canon	1.545				
311	Canon	1.537				
312	Canon	1.537				
313	Canon	1.540				
314	Canon	1.534				
315	Canon	1.536				
316	Canon	1.538				
317	Canon	1.541				
318	Canon	1.140	1.538			
319	Canon	1.144	1.537			
320	Canon	1.156	1.538	3.660		
321	Canon	1.142	1.538	3.631		
322	Canon	1.147	1.541			
323	Canon	1.154	1.535			
327	Canon	1.543				
331	Canon	1.545				
	Blank Paper #2	1.530	3.709			
	BLANK EtOH:dH2O (50:50)	1.522				
335	Canon	1.538	3.655			
339	Canon	1.649				
343	Canon	1.548				
347	Canon	1.540				
348	Canon	1.106	1.544	3.563		
349	Canon	1.098	1.537			
350	Canon	1.098	1.530			
351	Canon	1.106	1.536	3.648		
352	Canon	1.104	1.541	3.641		
353	Canon	1.111	1.538	3.647		
372	Canon	1.094	1.532	3.657		
373	Canon	1.110	1.541	3.669		
374	Canon	1.104	1.538	3.653		
375	Canon	1.103	1.538			
376	Canon	1.107	1.534	3.663		
377	Canon	1.118	1.543			
378	Canon	1.202	1.637	3.980		
379	Canon	1.059	1.487	3.806		
	BLANK EtOH:dH2O (50:50)	1.542				
380	Canon	1.165	1.559	3.846		

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2 cont.

Sample		236 nm				
		Retention Time (min)				
381	Canon	0.079	1.176	1.554	3.872	
382	Canon	0.089	1.246	1.553	3.852	
383	Canon	1.191	1.561			
384	Canon	1.199	1.557			
385	Canon	0.108	1.191	1.551	3.882	
386	Canon	0.071	1.217	1.555	3.932	
387	Canon	0.231	1.233	1.537	3.830	
388	Canon	0.111	1.181	1.551	3.861	
389	Canon	0.126	1.241	1.548	3.876	
390	Canon	0.075	1.258	1.552	3.892	
391	Canon	1.203	1.555	3.891		
392	Canon	1.199	1.552	3.954		
393	Canon	1.165	1.548			
394	Canon	1.200	1.553			
395	Canon	0.066	1.204	1.551		
396	Canon	1.166	1.551	3.868		
397	Canon	1.162	1.253	1.531	3.808	
398	Canon	0.149	1.152	1.546		
399	Canon	1.136	1.545			
	Blank Paper #3	1.547				
	BLANK EtOH:dH2O (50:50)	1.542	3.927			
400	Canon	1.230	1.551			
401	Canon	1.195	1.550			
402	Canon	1.558				
403	Canon	1.588				
404	Canon	1.563				
405	Canon	1.561				
406	Canon	0.049	1.562			
407	Canon	1.558				
408	Canon	1.550				
409	Canon	1.557	3.922			
410	Canon	1.562	3.956			
411	Canon	1.564				
412	Canon	1.559				
413	Canon	1.556	3.848			
414	Canon	1.554				
415	Canon	1.559	3.876			
416	Canon	1.562				
417	Canon	1.562				
418	Canon	1.561	3.909			
419	Canon	1.560				
	Blank Paper #3	1.552				
	BLANK EtOH:dH2O (50:50)	1.542	3.861			
492	Canon	1.561	7.100			

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2 cont.

Sample		236 nm				
		Retention Time (min)				
493	Canon	1.558	3.851	7.232		
494	Canon	1.568	3.832	7.285		
495	Canon	1.556	3.849	7.300		
496	Canon	1.558	7.361			
497	Canon	1.557	7.354			
522	Canon	1.121	1.540	3.890		
523	Canon	1.114	1.507	8.401		
524	Canon	1.133	1.513	8.320		
525	Canon	1.109	1.530	3.748		
526	Canon	1.123	1.517	8.195		
527	Canon	1.139	1.546	3.785		
558	Epson	1.216	1.575	3.852	10.571	
559	Epson	1.211	1.583	10.580		
318a	Canon	1.556	3.838			
319a	Canon	1.549	3.824			
320a	Canon	1.553	3.885			
321a	Canon	1.558	3.904			
322a	Canon	1.554	3.919			
323a	Canon	1.555				
	BLANK EtOH:dH2O (50:50)	1.542				
	BLANK EtOH:dH2O (50:50)	1.542				
	BLANK EtOH:dH2O (50:50)	1.541				
	BLANK EtOH:dH2O (50:50)	1.543	3.859			
	BLANK EtOH:dH2O (50:50)	1.544	3.860			
	BLANK EtOH:dH2O (50:50)	1.546	3.921			
	BLANK EtOH:dH2O (50:50)	1.544				

Sample		256 nm				
		Retention Time (min)				
	BLANK EtOH:dH2O (50:50)					
	Blank Paper #1	1.704				
	BLANK EtOH:dH2O (50:50)	1.714				
04	Okidata	1.074	1.451	1.558	11.733	
05	Okidata	1.080	1.454	1.557	11.705	
09	Okidata	1.074	1.458	1.561	11.802	
13	Xerox	1.076	1.689			
14	Xerox	1.068	1.696			
15	Xerox	1.049	1.698			
16	Xerox	1.074	1.708			
17	Kodak	1.054	1.696			
22	Kodak	1.044				
24	Xerox	1.075	1.690			

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2 cont.

Sample		256 nm				
		Retention Time (min)				
25	Xerox	1.058	1.702			
26	Xerox	1.056	1.701			
27	Xerox	1.060	1.704			
28	Xerox	1.065	1.703			
29	Xerox	1.080	1.709			
30	Epson	1.075	1.552	6.817	10.561	11.974
31	Epson	1.092	1.545	6.913	10.715	
32	Epson	1.094	1.543	10.759		
33	Epson	1.135	1.565	10.594		
34	Epson	1.129	1.563	10.679		
35	Epson	1.125	1.565	7.922	10.548	
	Blank Paper #1	0.257	1.612			
	BLANK EtOH:dH2O (50:50)	1.659				
60	Epson	1.107	1.554	7.922	10.630	
61	Epson	1.119	1.563	10.631		
62	Epson	1.102	1.555	10.682		
63	Epson	1.121	1.563	7.961	10.629	
64	Epson	1.113	1.566	10.643		
65	Epson	1.137	1.565	7.984	10.654	
66	Epson	1.125	1.561	10.714		
67	Epson	1.120	1.561	10.711		
68	Epson	1.132	1.563	10.741		
84	Epson	1.076	1.638			
85	Epson	1.086	1.677			
86	Epson	1.089	1.673			
90	Epson	1.132	1.566	10.642		
91	Epson	1.125	1.562	10.692		
92	Epson	1.119	1.562	10.707		
93	Epson	1.126	1.558	10.750		
94	Epson	1.134	1.570	8.108	10.672	
95	Epson	1.134	1.562	10.772		
120	Epson	1.138	1.566	10.757		
121	Epson	1.092	1.559	10.738		
122	Epson	1.103	1.557	10.796		
	Blank Paper #1	1.639				
	BLANK EtOH:dH2O (50:50)	1.657				
123	Epson	1.120	1.562	10.715		
124	Epson	1.107	1.557	10.718		
125	Epson	1.125	1.562	10.744		
156	Epson	1.071	1.618			
157	Epson	1.091	1.600			
158	Epson	0.186	1.078	1.635		
198	Hewlett Packard	1.072	1.670			
199	Hewlett Packard	1.060	1.683			

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2 cont.

Sample		256 nm				
		Retention Time (min)				
200	Hewlett Packard	1.060	1.685			
201	Hewlett Packard	1.071	1.693			
205	Hewlett Packard	1.083				
217	Canon	1.099	1.498	8.647		
218	Canon	1.100	1.501	8.675		
219	Canon	1.107	1.512	8.693		
220	Canon	1.083	1.495			
221	Canon	1.109	1.503	8.511		
222	Canon	1.092	1.502			
223	Canon	1.107	1.512			
224	Canon	1.095	1.510			
	Blank Paper #1	1.681				
	BLANK EtOH:dH2O (50:50)	1.683				
225	Canon	1.090	1.503			
226	Canon	1.102	1.509			
227	Canon	1.101	1.509			
228	Canon	1.108	1.511			
244	Xerox	1.075	1.675			
248	Xerox	1.087	1.677			
252	Xerox	1.075	1.673			
256	Xerox	1.084	1.694			
260	Xerox	1.074	1.694			
264	Xerox	1.080	1.680			
265	Xerox	1.064	1.685			
282	Canon	1.085	1.491			
283	Canon	1.091	1.498			
284	Canon	1.096	1.502			
285	Canon	1.106	1.502			
286	Canon	1.089	1.498			
287	Canon	1.087	1.496			
	BLANK EtOH:dH2O (50:50)	1.688				
	Blank Paper2 EXT	1.071	1.684			
	BLANK EtOH:dH2O (50:50)	1.699				
306	Canon	1.362	1.527	1.642		
307	Canon	0.223	1.331	1.610		
308	Canon	0.165	1.059	1.363	1.625	
309	Canon	0.120	1.084	1.374	1.633	
310	Canon	1.084	1.376	1.608		
311	Canon	1.375	1.630			
312	Canon	1.065	1.653			
313	Canon	1.073	1.682			
314	Canon	1.074	1.688			
315	Canon	1.078	1.690			
316	Canon	1.081	1.688			

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2 cont.

Sample		256 nm				
		Retention Time (min)				
317	Canon	1.083	1.696			
318	Canon	1.137				
319	Canon	1.139				
320	Canon	1.151				
321	Canon	1.139				
322	Canon	1.144				
323	Canon	1.150				
327	Canon	1.122	1.637			
331	Canon	1.378	1.637			
	Blank Paper #2	1.066	1.673			
	BLANK EtOH:dH2O (50:50)	1.687				
335	Canon	1.113	1.673			
339	Canon	1.127				
343	Canon	1.136	1.639			
347	Canon	1.345	1.636			
348	Canon	1.103	1.501	1.823		
349	Canon	1.096	1.496			
350	Canon	1.093	1.496			
351	Canon	1.101	1.502			
352	Canon	1.101	1.500			
353	Canon	1.109	1.503			
372	Canon	1.088	1.494			
373	Canon	1.107	1.501			
374	Canon	1.099	1.504			
375	Canon	1.099	1.504			
376	Canon	1.105	1.503			
377	Canon	1.113	1.515			
378	Canon	1.199	1.599			
379	Canon	1.056	1.448			
	Blank Paper #3					
	BLANK EtOH:dH2O (50:50)	1.725				
380	Canon	1.147				
381	Canon	0.216	1.144	1.489		
382	Canon	0.190	1.230			
383	Canon	1.169	1.499			
384	Canon	1.165	1.501			
385	Canon	0.212	1.148	1.487		
386	Canon	0.155	1.193			
387	Canon	0.317	1.153			
388	Canon	0.205	1.152			
389	Canon	0.240	1.217			
390	Canon	0.171	1.214			
391	Canon	1.176				
392	Canon	0.174	1.156			

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2 cont.

Sample		256 nm				
		Retention Time (min)				
393	Canon	0.155	1.145			
394	Canon	1.155				
395	Canon	0.154	1.161			
396	Canon	0.137	1.151			
397	Canon	1.148	1.238			
398	Canon	0.231	1.135	1.489		
399	Canon	1.120	1.495			
	Blank Paper #3	1.143	1.646			
	BLANK EtOH:dH2O (50:50)	1.706				
400	Canon	1.218				
401	Canon	1.164				
402	Canon	1.353	1.628			
403	Canon	1.392	1.570			
404	Canon	1.377	1.637			
405	Canon	1.364	1.640			
406	Canon	1.379	1.632			
407	Canon	1.343	1.630			
408	Canon	1.332	1.607			
409	Canon	1.343	1.594			
410	Canon	1.353	1.675			
411	Canon	1.354	1.619			
412	Canon	1.309	1.657			
413	Canon	1.334	1.610			
414	Canon	1.277	1.642			
415	Canon	1.353	1.651			
416	Canon	1.334	1.671			
417	Canon	1.331	1.671			
418	Canon	1.311	1.679			
419	Canon	1.362	1.559			
	Blank Paper #3	1.144	1.651			
	BLANK EtOH:dH2O (50:50)	1.719				
492	Canon	1.114	1.716			
493	Canon	1.730				
494	Canon	1.172	1.699	7.314		
495	Canon	1.730	7.296			
496	Canon	1.126	1.719	7.377		
497	Canon	1.126	1.708	7.390		
522	Canon	1.118	1.484			
523	Canon	1.113	1.494			
524	Canon	1.132	1.499			
525	Canon	1.106	1.495			
526	Canon	1.122	1.503	8.292		
527	Canon	1.134	1.507			
558	Epson	1.144	1.613	10.574		

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2 cont.

Sample		256 nm				
		Retention Time (min)				
559	Epson	1.162	1.617	10.581		
318a	Canon	1.686				
319a	Canon	1.706				
320a	Canon	1.720				
321a	Canon	1.732				
322a	Canon	1.724				
323a	Canon	1.726				
	BLANK EtOH:dH2O (50:50)	1.735				
	BLANK EtOH:dH2O (50:50)	1.736				
	BLANK EtOH:dH2O (50:50)	1.736				
	BLANK EtOH:dH2O (50:50)	1.737				
	BLANK EtOH:dH2O (50:50)	1.737				
	BLANK EtOH:dH2O (50:50)	1.743				
	BLANK EtOH:dH2O (50:50)	1.735				

Sample		417 nm			
		Retention Time (min)			
	BLANK EtOH:dH2O (50:50)				
	Blank Paper #1				
	BLANK EtOH:dH2O (50:50)				
04	Okidata	1.087	1.454	1.552	
05	Okidata	1.088	1.460	1.557	11.679
09	Okidata	1.077	1.462	1.560	12.100
13	Xerox				
14	Xerox				
15	Xerox				
16	Xerox				
17	Kodak				
22	Kodak	1.043	1.824		
24	Xerox				
25	Xerox				
26	Xerox				
27	Xerox				
28	Xerox				
29	Xerox				
30	Epson	1.067	1.563	10.555	11.980
31	Epson	1.088	1.562	10.701	12.591
32	Epson	1.090	1.559	10.741	12.698
33	Epson	1.567	10.599		
34	Epson	1.564	10.680		
35	Epson	1.568	10.554		
	Blank Paper #1	0.264	1.615		

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2 cont.

Sample		417 nm			
		Retention Time (min)			
	BLANK EtOH:dH2O (50:50)	1.682			
60	Epson	1.557	10.636		
61	Epson	1.565	10.636		
62	Epson	1.557	10.682		
63	Epson	1.566	10.632		
64	Epson	1.568	10.646		
65	Epson	1.597	10.658		
66	Epson	1.563	10.715		
67	Epson	1.563	10.715		
68	Epson	1.564	10.743		
84	Epson	1.658			
85	Epson				
86	Epson				
90	Epson	1.568	10.645		
91	Epson	1.564	10.696		
92	Epson	1.564	10.711		
93	Epson	1.560	10.752		
94	Epson	1.573	10.674		
95	Epson	1.563	10.774		
120	Epson	1.568	10.760		
121	Epson	1.561	10.742		
122	Epson	1.559	10.802		
	Blank Paper #1	1.654			
	BLANK EtOH:dH2O (50:50)	1.678			
123	Epson	1.564	10.718		
124	Epson	1.559	10.721		
125	Epson	1.564	10.746		
156	Epson	1.646			
157	Epson	1.676			
158	Epson	1.681			
198	Hewlett Packard	1.707			
199	Hewlett Packard				
200	Hewlett Packard				
201	Hewlett Packard				
205	Hewlett Packard	1.084			
217	Canon	1.095	1.502	8.637	
218	Canon	1.094	1.505	8.655	
219	Canon	1.101	1.516	8.677	
220	Canon	1.078	1.498	8.717	
221	Canon	1.104	1.507	8.523	
222	Canon	1.087	1.505		
223	Canon	1.099	1.517		
224	Canon	1.092	1.513		
	Blank Paper #1				

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2 cont.

Sample		417 nm			
		Retention Time (min)			
	BLANK EtOH:dH2O (50:50)				
225	Canon	1.085	1.506		
226	Canon	1.094	1.512		
227	Canon	1.093	1.513		
228	Canon	1.099	1.515		
244	Xerox	1.711			
248	Xerox				
252	Xerox				
256	Xerox				
260	Xerox				
264	Xerox				
265	Xerox				
282	Canon	1.080	1.494		
283	Canon	1.086	1.502		
284	Canon	1.090	1.506		
285	Canon	1.101	1.506		
286	Canon	1.083	1.502		
287	Canon	1.082	1.499		
	BLANK EtOH:dH2O (50:50)				
	Blank Paper2 EXT				
	BLANK EtOH:dH2O (50:50)				
306	Canon	1.376	1.652		
307	Canon	1.356	1.614		
308	Canon	1.370	1.628		
309	Canon	1.386	1.643		
310	Canon	1.391	1.617		
311	Canon	1.386	1.643		
312	Canon	1.691			
313	Canon				
314	Canon				
315	Canon				
316	Canon				
317	Canon				
318	Canon	1.142	1.697		
319	Canon	1.143	1.696		
320	Canon	1.154	1.699		
321	Canon	1.144	1.693		
322	Canon	1.148	1.696		
323	Canon	1.154	1.691		
327	Canon	1.375	1.683		
331	Canon	1.392	1.665		
	Blank Paper #2				
	BLANK EtOH:dH2O (50:50)				
335	Canon	1.371			

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2 cont.

Sample		417 nm			
		Retention Time (min)			
339	Canon				
343	Canon	1.387	1.682		
347	Canon	1.372	1.665		
348	Canon	1.095	1.506		
349	Canon	1.090	1.501		
350	Canon	1.084	1.499		
351	Canon	1.091	1.505		
352	Canon	1.093	1.505		
353	Canon	1.099	1.507		
372	Canon	1.080	1.496		
373	Canon	1.100	1.507		
374	Canon	1.090	1.508		
375	Canon	1.090	1.510		
376	Canon	1.098	1.508		
377	Canon	1.101	1.518		
378	Canon	1.191	1.606		
379	Canon	1.049	1.454		
	Blank Paper #3				
	BLANK EtOH:dH2O (50:50)				
380	Canon	1.134	1.513		
381	Canon	1.127	1.527		
382	Canon	1.234	1.507		
383	Canon	1.150	1.532		
384	Canon	1.143	1.533		
385	Canon	1.131	1.521		
386	Canon	1.173	1.523		
387	Canon	1.235	1.505		
388	Canon	1.135	1.518		
389	Canon	1.212	1.518		
390	Canon	1.147	1.540		
391	Canon	1.152	1.520		
392	Canon	1.135	1.526		
393	Canon	1.129	1.525		
394	Canon	1.133	1.535		
395	Canon	1.136	1.526		
396	Canon	1.137	1.529		
397	Canon	1.142	1.256	1.504	
398	Canon	1.121	1.520		
399	Canon	1.108	1.521		
	Blank Paper #3				
	BLANK EtOH:dH2O (50:50)				
400	Canon	1.211	1.506		
401	Canon	1.145	1.517		
402	Canon	1.401	1.667		

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2 cont.

Sample		417 nm			
		Retention Time (min)			
403	Canon	1.421			
404	Canon	1.417	1.679		
405	Canon	1.404	1.681		
406	Canon	1.417	1.673		
407	Canon	1.390	1.662		
408	Canon	1.376	1.656		
409	Canon	1.396			
410	Canon	1.394	1.700		
411	Canon	1.404	1.679		
412	Canon				
413	Canon	1.390	1.670		
414	Canon	1.369	1.692		
415	Canon	1.390	1.689		
416	Canon	1.388	1.702		
417	Canon	1.383			
418	Canon	1.376	1.712		
419	Canon	1.400			
	Blank Paper #3				
	BLANK EtOH:dH2O (50:50)				
492	Canon				
493	Canon				
494	Canon				
495	Canon				
496	Canon				
497	Canon				
522	Canon	1.111	1.506		
523	Canon	1.108	1.506		
524	Canon	1.126	1.513		
525	Canon	1.101	1.512		
526	Canon	1.117	1.517	8.270	
527	Canon	1.125	1.530		
558	Epson	1.615	10.579		
559	Epson	1.618	10.582		
318a	Canon	1.702			
319a	Canon				
320a	Canon				
321a	Canon				
322a	Canon				
323a	Canon				
	BLANK EtOH:dH2O (50:50)				
	BLANK EtOH:dH2O (50:50)				
	BLANK EtOH:dH2O (50:50)				
	BLANK EtOH:dH2O (50:50)				
	BLANK EtOH:dH2O (50:50)				

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2 cont.

Sample		417 nm			
		Retention Time (min)			
	BLANK EtOH:dH2O (50:50)				
	BLANK EtOH:dH2O (50:50)				

Sample		564 nm		
		Retention Time (min)		
	BLANK EtOH:dH2O (50:50)			
	Blank Paper #1			
	BLANK EtOH:dH2O (50:50)			
04	Okidata	1.089	1.569	11.698
05	Okidata	1.088	1.578	11.712
09	Okidata	1.076	1.578	11.753
13	Xerox			
14	Xerox			
15	Xerox			
16	Xerox			
17	Kodak			
22	Kodak	1.044	1.870	
24	Xerox	1.614		
25	Xerox			
26	Xerox			
27	Xerox			
28	Xerox			
29	Xerox			
30	Epson	1.060	1.485	6.813
31	Epson	1.083	1.490	
32	Epson	1.085	1.488	
33	Epson	1.559	7.862	
34	Epson	1.559		
35	Epson	1.558	7.881	9.877
	Blank Paper #1	1.603		
	BLANK EtOH:dH2O (50:50)	1.598		
60	Epson	1.548	7.889	
61	Epson	1.557	7.904	
62	Epson	1.550	7.922	
63	Epson	1.557	7.927	
64	Epson	1.559	7.946	
65	Epson	1.559	7.951	
66	Epson	1.555	7.973	
67	Epson	1.555	7.966	
68	Epson	1.559		
84	Epson	1.612		
85	Epson	1.608		

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2 cont.

Sample		564 nm		
		Retention Time (min)		
86	Epson	1.608		
90	Epson	1.559	7.976	
91	Epson	1.558		
92	Epson	1.556	8.017	
93	Epson	1.554	8.047	
94	Epson	1.561	8.072	
95	Epson	1.559		
120	Epson	1.559	8.034	
121	Epson	1.552	8.020	
122	Epson	1.552	8.013	
	Blank Paper #1	1.615		
	BLANK EtOH:dH2O (50:50)	1.590		
123	Epson	1.557	8.035	
124	Epson	1.551	8.025	
125	Epson	1.558	8.096	
156	Epson	1.609		
157	Epson	1.607		
158	Epson	0.200	1.610	
198	Hewlett Packard	1.616		
199	Hewlett Packard	1.609		
200	Hewlett Packard	1.609		
201	Hewlett Packard	1.611		
205	Hewlett Packard	1.084	1.854	
217	Canon	1.094	1.501	8.647
218	Canon	1.094	1.504	8.667
219	Canon	1.100	1.515	8.686
220	Canon	1.078	1.497	8.723
221	Canon	1.104	1.506	8.508
222	Canon	1.086	1.504	8.784
223	Canon	1.099	1.515	
224	Canon	1.092	1.512	
	Blank Paper #1	1.592		
	BLANK EtOH:dH2O (50:50)	1.571		
225	Canon	1.085	1.507	
226	Canon	1.095	1.512	
227	Canon	1.093	1.512	
228	Canon	1.100	1.515	
244	Xerox	1.585		
248	Xerox	1.613		
252	Xerox			
256	Xerox			
260	Xerox			
264	Xerox			
265	Xerox			

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2 cont.

Sample		564 nm		
		Retention Time (min)		
282	Canon	1.081	1.494	8.449
283	Canon	1.087	1.501	
284	Canon	1.091	1.504	
285	Canon	1.101	1.505	8.472
286	Canon	1.084	1.500	
287	Canon	1.082	1.498	
	BLANK EtOH:dH2O (50:50)	1.513		
	Blank Paper2 EXT			
	BLANK EtOH:dH2O (50:50)			
306	Canon			
307	Canon	0.252	1.609	
308	Canon	0.174	1.613	
309	Canon	0.134	1.618	
310	Canon	1.615		
311	Canon	1.613		
312	Canon	1.608		
313	Canon	1.614		
314	Canon			
315	Canon			
316	Canon			
317	Canon			
318	Canon	1.133	1.637	
319	Canon	1.137	1.631	
320	Canon	1.150	1.625	
321	Canon	1.135	1.633	
322	Canon	1.141	1.632	
323	Canon	1.148	1.627	
327	Canon	1.610		
331	Canon	1.610		
	Blank Paper #2	1.615		
	BLANK EtOH:dH2O (50:50)			
335	Canon			
339	Canon			
343	Canon	1.607		
347	Canon	1.604		
348	Canon	1.095	1.507	
349	Canon	1.089	1.502	
350	Canon	1.084	1.500	
351	Canon	1.091	1.505	
352	Canon	1.093	1.506	
353	Canon	1.099	1.508	
372	Canon	1.080	1.497	
373	Canon	1.100	1.508	
374	Canon	1.091	1.508	

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2 cont.

Sample		564 nm		
		Retention Time (min)		
375	Canon	1.090	1.509	
376	Canon	1.098	1.509	
377	Canon	1.101	1.518	
378	Canon	1.192	1.606	
379	Canon	1.049	1.455	
	Blank Paper #3			
	BLANK EtOH:dH2O (50:50)			
380	Canon	1.133	1.514	
381	Canon	0.235	1.127	1.525
382	Canon	0.199	1.183	1.509
383	Canon	1.147	1.532	
384	Canon	1.142	1.531	
385	Canon	0.220	1.128	1.522
386	Canon	0.173	1.164	1.523
387	Canon	0.324	1.129	1.508
388	Canon	0.211	1.134	1.519
389	Canon	0.248	1.160	1.518
390	Canon	0.190	1.151	1.530
391	Canon	1.155	1.522	
392	Canon	0.197	1.134	1.524
393	Canon	1.128	1.524	
394	Canon	1.133	1.532	
395	Canon	0.170	1.135	1.525
396	Canon	0.170	1.136	1.528
397	Canon	1.132	1.507	
398	Canon	0.241	1.120	1.522
399	Canon	1.107	1.523	
	Blank Paper #3	1.646		
	BLANK EtOH:dH2O (50:50)	1.589		
400	Canon	1.206	1.509	
401	Canon	1.142	1.519	
402	Canon	1.610		
403	Canon	1.613		
404	Canon	1.638		
405	Canon	1.632		
406	Canon	1.634		
407	Canon	1.631		
408	Canon	1.609		
409	Canon	1.631		
410	Canon	1.645		
411	Canon	1.629		
412	Canon	1.645		
413	Canon	1.622		
414	Canon	1.630		

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2 cont.

Sample		564 nm		
		Retention Time (min)		
415	Canon	1.624		
416	Canon	1.638		
417	Canon	1.641		
418	Canon	1.643		
419	Canon	1.608		
	Blank Paper #3			
	BLANK EtOH:dH2O (50:50)			
492	Canon			
493	Canon			
494	Canon			
495	Canon			
496	Canon			
497	Canon			
522	Canon	1.111	1.504	
523	Canon	1.107	1.505	8.439
524	Canon	1.126	1.512	8.364
525	Canon	1.100	1.510	
526	Canon	1.116	1.515	8.251
527	Canon	1.124	1.526	
558	Epson	1.592		
559	Epson	1.619	10.564	
318a	Canon	1.648		
319a	Canon	1.638		
320a	Canon			
321a	Canon			
322a	Canon			
323a	Canon			
	BLANK EtOH:dH2O (50:50)			
	BLANK EtOH:dH2O (50:50)			
	BLANK EtOH:dH2O (50:50)			
	BLANK EtOH:dH2O (50:50)			
	BLANK EtOH:dH2O (50:50)			
	BLANK EtOH:dH2O (50:50)			
	BLANK EtOH:dH2O (50:50)			

Sample		588 nm		
		Retention Time (min)		
	BLANK EtOH:dH2O (50:50)			
	Blank Paper #1			
	BLANK EtOH:dH2O (50:50)			
04	Okidata	1.096	1.568	11.698
05	Okidata	1.092	1.561	11.711

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2 cont.

Sample		588 nm		
		Retention Time (min)		
09	Okidata	1.080	1.569	11.753
13	Xerox	1.200		
14	Xerox			
15	Xerox			
16	Xerox			
17	Kodak			
22	Kodak	1.041	1.866	
24	Xerox	1.077	1.646	
25	Xerox			
26	Xerox			
27	Xerox			
28	Xerox			
29	Xerox			
30	Epson	1.059		
31	Epson	1.082		
32	Epson	1.084		
33	Epson	1.560	7.872	
34	Epson	1.560		
35	Epson	1.559	7.879	9.877
	Blank Paper #1	1.604		
	BLANK EtOH:dH2O (50:50)	1.610		
60	Epson	1.548	7.881	
61	Epson	1.558	7.902	
62	Epson	1.550	7.922	
63	Epson	1.557	7.927	
64	Epson	1.559	7.946	
65	Epson	1.559	7.954	
66	Epson	1.555	7.977	
67	Epson	1.556	7.966	
68	Epson	1.560		
84	Epson	1.618		
85	Epson	1.629		
86	Epson	1.635		
90	Epson	1.560	7.965	
91	Epson	1.558		
92	Epson	1.557	8.014	
93	Epson	1.554	8.044	
94	Epson	1.562	8.068	
95	Epson	1.559		
120	Epson	1.560	8.040	
121	Epson	1.553	8.027	
122	Epson	1.552	8.006	
	Blank Paper #1	1.620		
	BLANK EtOH:dH2O (50:50)	1.607		

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2 cont.

Sample		588 nm		
		Retention Time (min)		
123	Epson	1.557	8.029	
124	Epson	1.552	8.028	
125	Epson	1.558	8.089	
156	Epson	1.614		
157	Epson	1.619		
158	Epson	0.202	1.620	
198	Hewlett Packard	1.629		
199	Hewlett Packard	1.637		
200	Hewlett Packard	1.643		
201	Hewlett Packard			
205	Hewlett Packard	1.083	1.850	
217	Canon	1.094	1.501	8.645
218	Canon	1.094	1.504	8.666
219	Canon	1.100	1.515	8.686
220	Canon	1.078	1.497	8.722
221	Canon	1.104	1.506	8.508
222	Canon	1.086	1.504	8.785
223	Canon	1.099	1.515	
224	Canon	1.091	1.513	
	Blank Paper #1	1.620		
	BLANK EtOH:dH2O (50:50)	1.604		
225	Canon	1.085	1.507	
226	Canon	1.094	1.512	
227	Canon	1.093	1.512	
228	Canon	1.099	1.515	
244	Xerox	1.613		
248	Xerox			
252	Xerox			
256	Xerox			
260	Xerox			
264	Xerox			
265	Xerox			
282	Canon	1.080	1.494	8.450
283	Canon	1.085	1.501	
284	Canon	1.090	1.504	
285	Canon	1.100	1.505	8.475
286	Canon	1.083	1.500	
287	Canon	1.081	1.498	
	BLANK EtOH:dH2O (50:50)	1.518		
	Blank Paper2 EXT			
	BLANK EtOH:dH2O (50:50)			
306	Canon			
307	Canon	0.256	1.622	
308	Canon	0.177	1.624	

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2 cont.

Sample		588 nm		
		Retention Time (min)		
309	Canon	0.135	1.629	
310	Canon	1.628		
311	Canon	1.625		
312	Canon	1.622		
313	Canon	1.644		
314	Canon			
315	Canon			
316	Canon			
317	Canon			
318	Canon	1.133	1.613	
319	Canon	1.137	1.626	
320	Canon	1.150	1.624	
321	Canon	1.135	1.618	
322	Canon	1.141	1.622	
323	Canon	1.148	1.619	
327	Canon	1.631		
331	Canon	1.631		
	Blank Paper #2	1.636		
	BLANK EtOH:dH2O (50:50)			
335	Canon			
339	Canon			
343	Canon	1.642		
347	Canon	1.627		
348	Canon	1.094	1.507	
349	Canon	1.089	1.502	
350	Canon	1.084	1.500	
351	Canon	1.091	1.505	
352	Canon	1.093	1.506	
353	Canon	1.098	1.508	
372	Canon	1.080	1.497	
373	Canon	1.100	1.507	
374	Canon	1.090	1.508	
375	Canon	1.090	1.509	
376	Canon	1.098	1.509	
377	Canon	1.101	1.518	
378	Canon	1.191	1.606	
379	Canon	1.048	1.455	
	Blank Paper #3			
	BLANK EtOH:dH2O (50:50)			
380	Canon	1.133	1.511	
381	Canon	0.242	1.127	1.524
382	Canon	0.203	1.187	1.506
383	Canon	1.147	1.530	
384	Canon	1.142	1.529	

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2 cont.

Sample		588 nm		
		Retention Time (min)		
385	Canon	0.226	1.128	1.520
386	Canon	0.179	1.164	1.521
387	Canon	0.328	1.128	1.506
388	Canon	0.214	1.134	1.518
389	Canon	0.254	1.168	1.516
390	Canon	0.194	1.155	1.529
391	Canon	1.156	1.520	
392	Canon	0.200	1.134	1.523
393	Canon	1.129	1.523	
394	Canon	1.133	1.531	
395	Canon	0.176	1.136	1.524
396	Canon	0.178	1.136	1.527
397	Canon	0.321	1.132	1.505
398	Canon	0.244	1.121	1.521
399	Canon	1.107	1.521	
	Blank Paper #3	1.664		
	BLANK EtOH:dH2O (50:50)	1.624		
400	Canon	1.207	1.505	
401	Canon	1.143	1.517	
402	Canon	1.631		
403	Canon	1.244	1.632	
404	Canon	1.656		
405	Canon	1.651		
406	Canon	1.654		
407	Canon	1.652		
408	Canon	1.631		
409	Canon	1.653		
410	Canon	1.664		
411	Canon	1.656		
412	Canon	1.666		
413	Canon	1.648		
414	Canon	1.655		
415	Canon	1.652		
416	Canon	1.664		
417	Canon	1.667		
418	Canon	1.670		
419	Canon	1.195	1.635	
	Blank Paper #3			
	BLANK EtOH:dH2O (50:50)			
492	Canon			
493	Canon			
494	Canon			
495	Canon			
496	Canon			

Table 64: HPLC Results of Dissertation Ink Samples, Trial 2 cont.

Sample		588 nm		
		Retention Time (min)		
497	Canon			
522	Canon	1.111	1.502	
523	Canon	1.107	1.504	8.438
524	Canon	1.125	1.511	8.363
525	Canon	1.100	1.509	
526	Canon	1.116	1.514	8.254
527	Canon	1.124	1.525	
558	Epson	1.594		
559	Epson	1.622	10.564	
318a	Canon	1.655		
319a	Canon	1.665		
320a	Canon			
321a	Canon			
322a	Canon			
323a	Canon			
	BLANK EtOH:dH2O (50:50)			
	BLANK EtOH:dH2O (50:50)			
	BLANK EtOH:dH2O (50:50)			
	BLANK EtOH:dH2O (50:50)			
	BLANK EtOH:dH2O (50:50)			
	BLANK EtOH:dH2O (50:50)			
	BLANK EtOH:dH2O (50:50)			

APPENDIX E:

Pyrolysis Gas Chromatography-Mass Spectrometry Data.

Pyrolysis Data: Neat Ink Samples

CANON

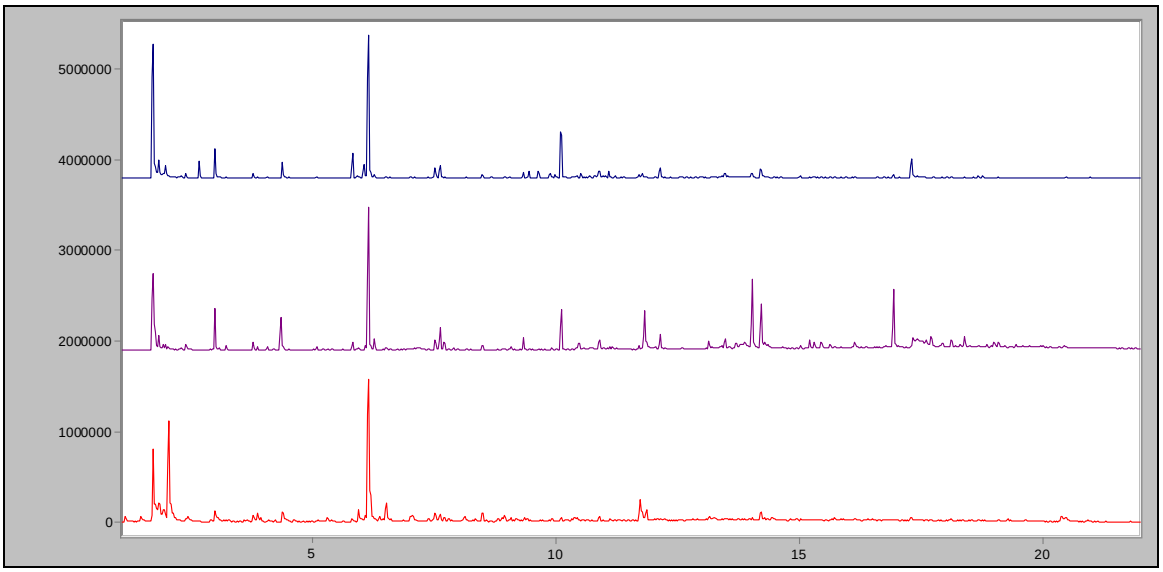

Figure 220: From top to bottom: Canon 217 Run 1, Canon 223 Run 1 and Canon 282 Run 1 neat ink sample pyrograms.

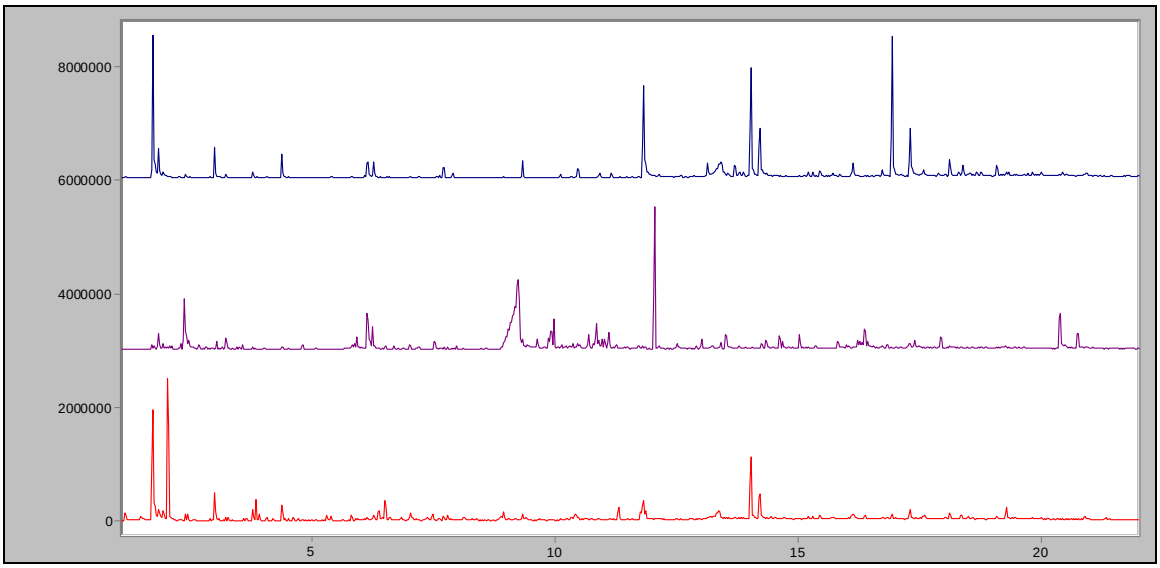

Figure 221: From top to bottom: Canon 306 Run 1, Canon 312 Run 1 and Canon 318 Run 1 neat ink sample pyrograms.

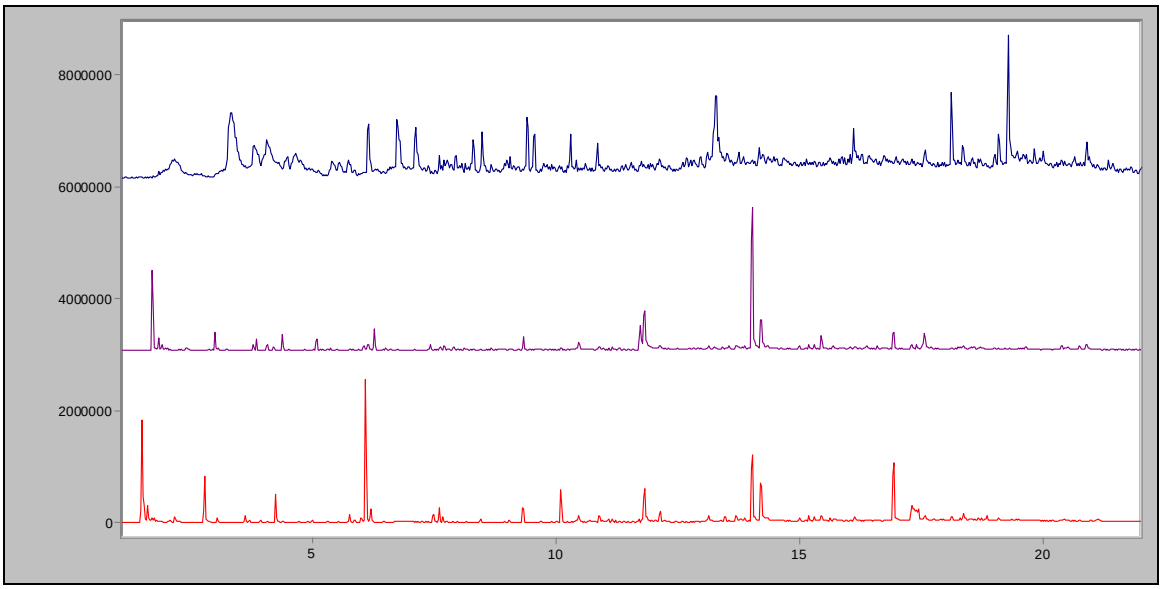

Figure 222: From top to bottom: Canon 318a Run 1, Canon 327 Run 1 and Canon 348 Run 1 neat ink sample pyrograms.

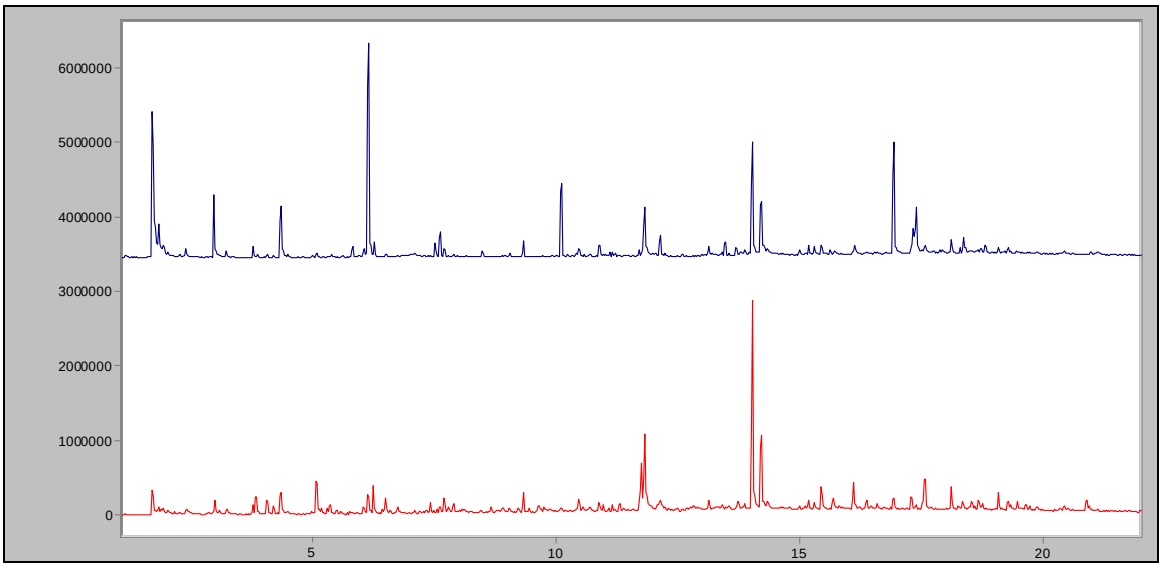

Figure 223: From top to bottom: Canon 384 Run 1 and Canon 402 Run 1 neat ink sample pyrograms.

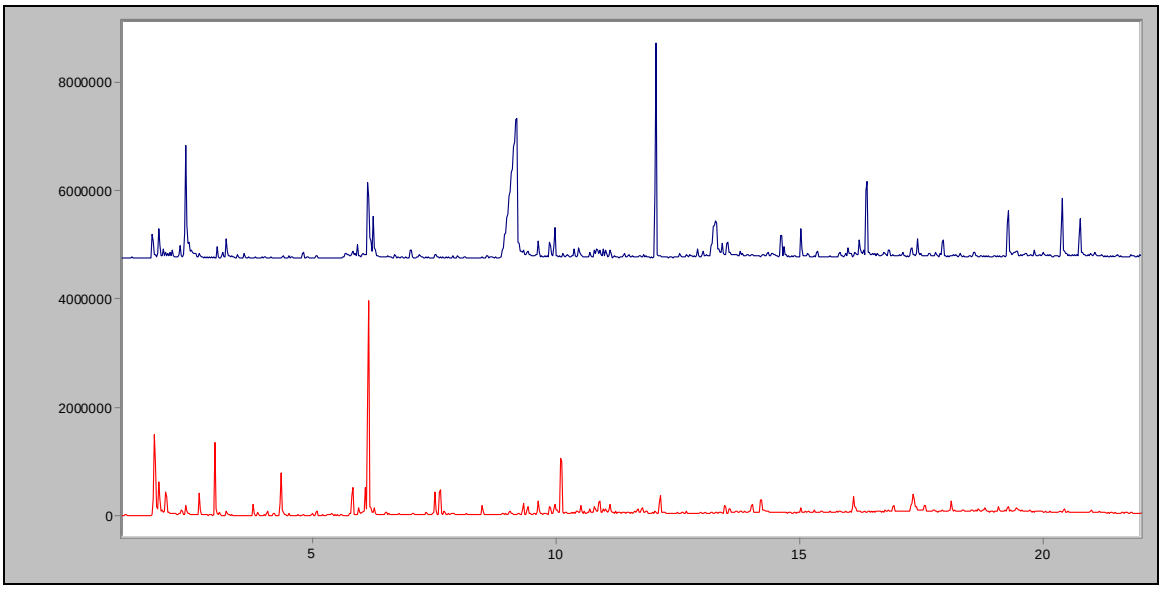

Figure 224: From top to bottom: Canon 492 Run 1 and Canon 522 Run 1 neat ink sample pyrograms.

EPSON

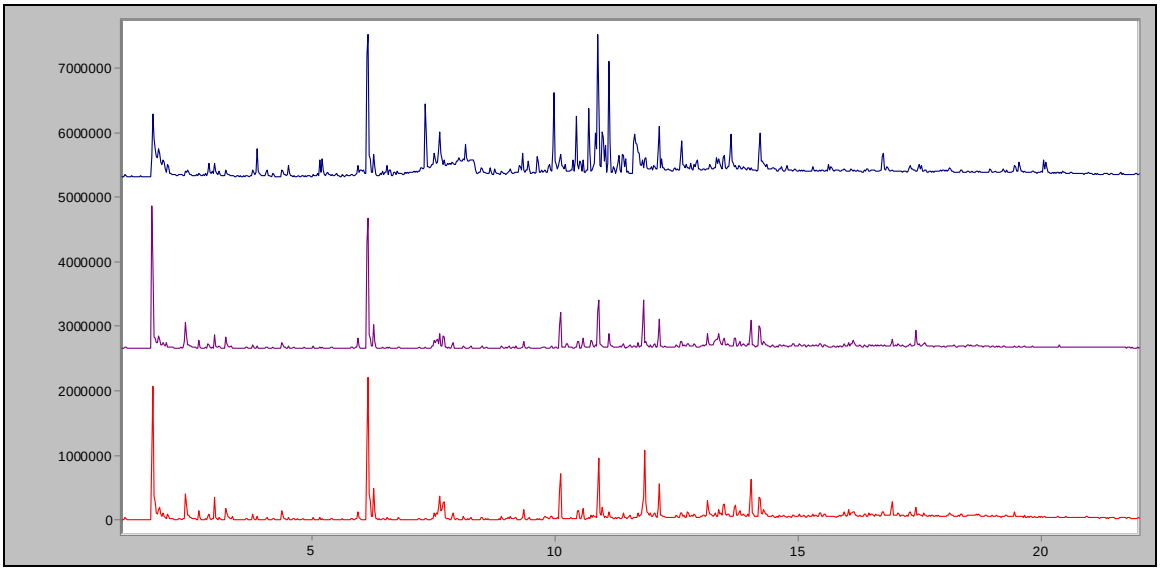

Figure 225: From top to bottom: Epson 30 Run 1, Epson 33 Run 1 and Epson 60 Run 1 neat ink sample pyrograms.

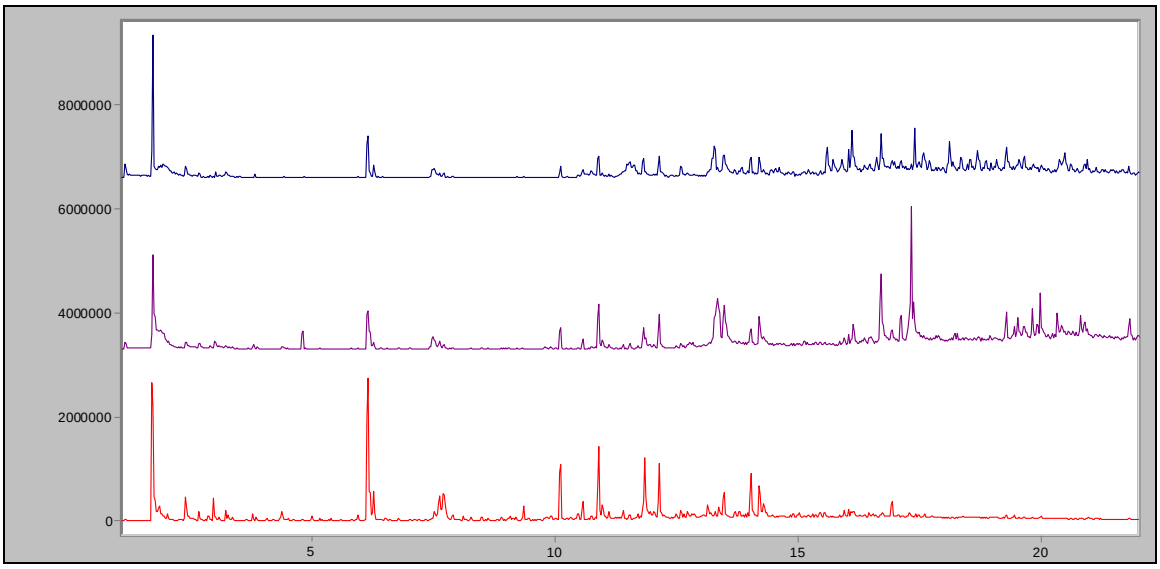

Figure 226: From top to bottom: Epson 63 Run 1, Epson 63 Run 2 and Epson 63 Run 3 neat ink sample pyrograms.

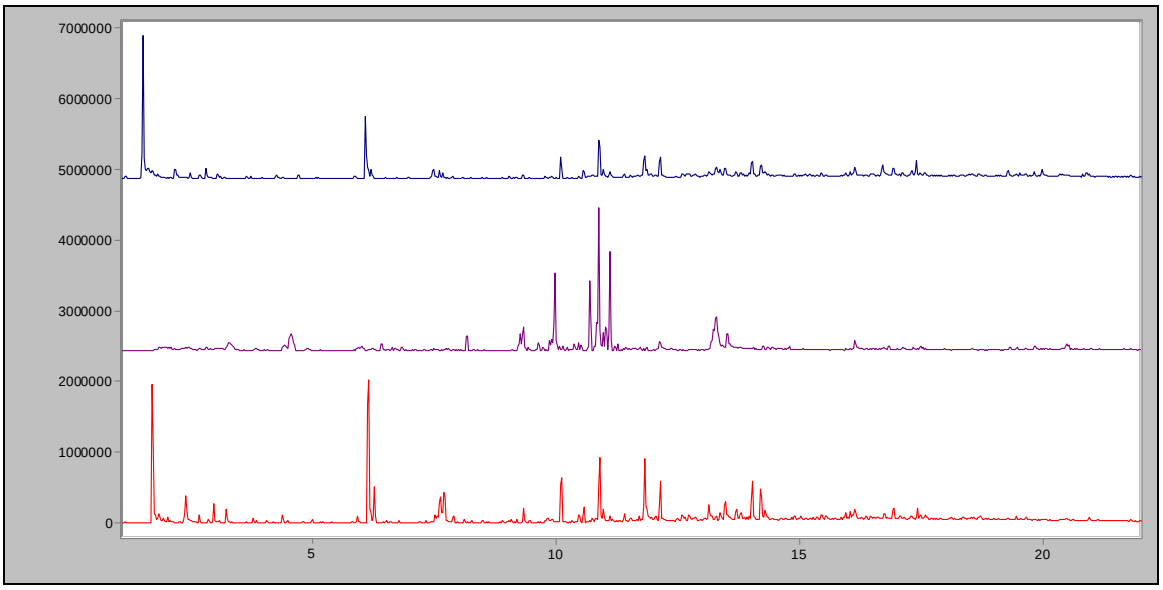

Figure 227: From top to bottom: Epson 66 Run 1, Epson 84 Run 1 and Epson 90 Run 1 neat ink sample pyrograms.

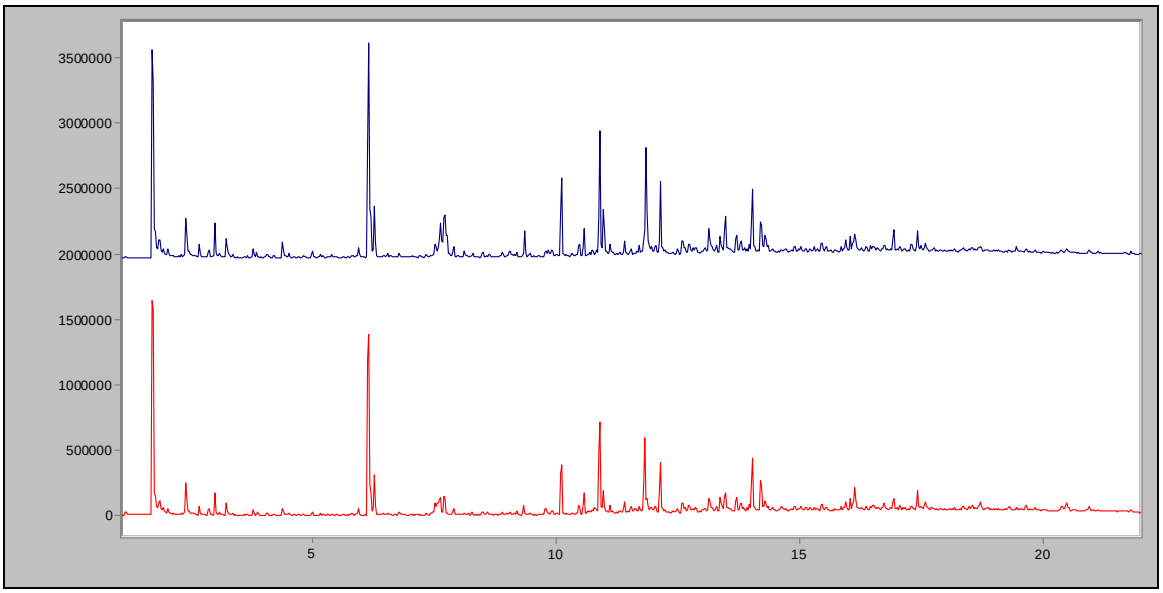

Figure 228: From top to bottom: Epson 93 Run 1 and Epson 120 Run 1 neat ink sample pyrograms.

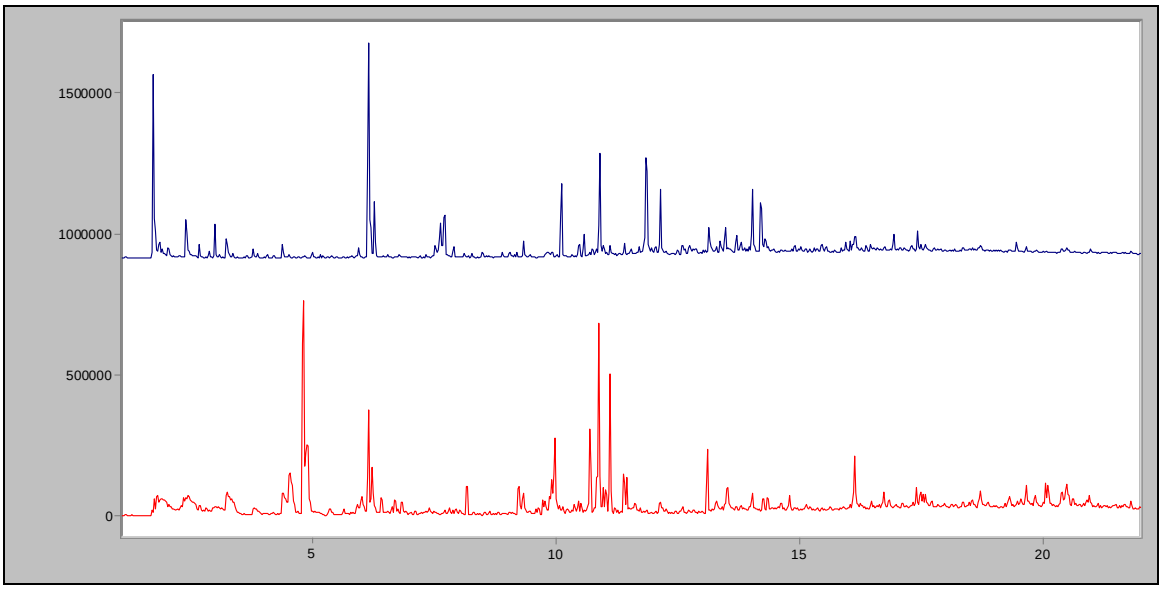

Figure 229: From top to bottom: Epson 123 Run 1 and Epson 156 Run 1 neat ink sample pyrograms.

HEWLETT PACKARD

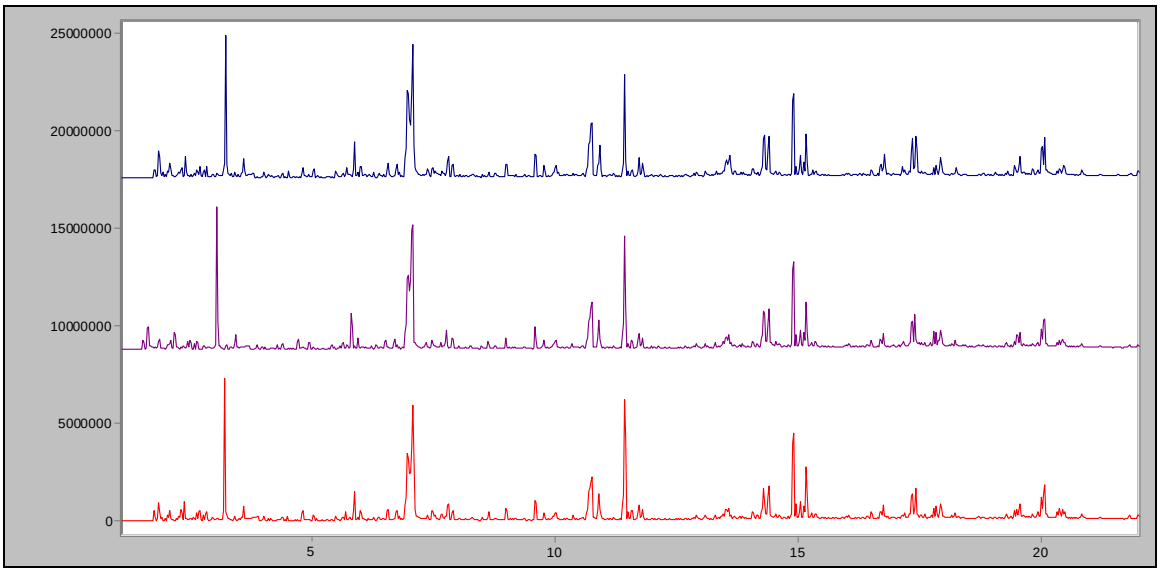

Figure 230: From top to bottom: HP 198 Run 1, HP 199 Run 1 and HP 200 Run 1 neat ink sample pyrograms.

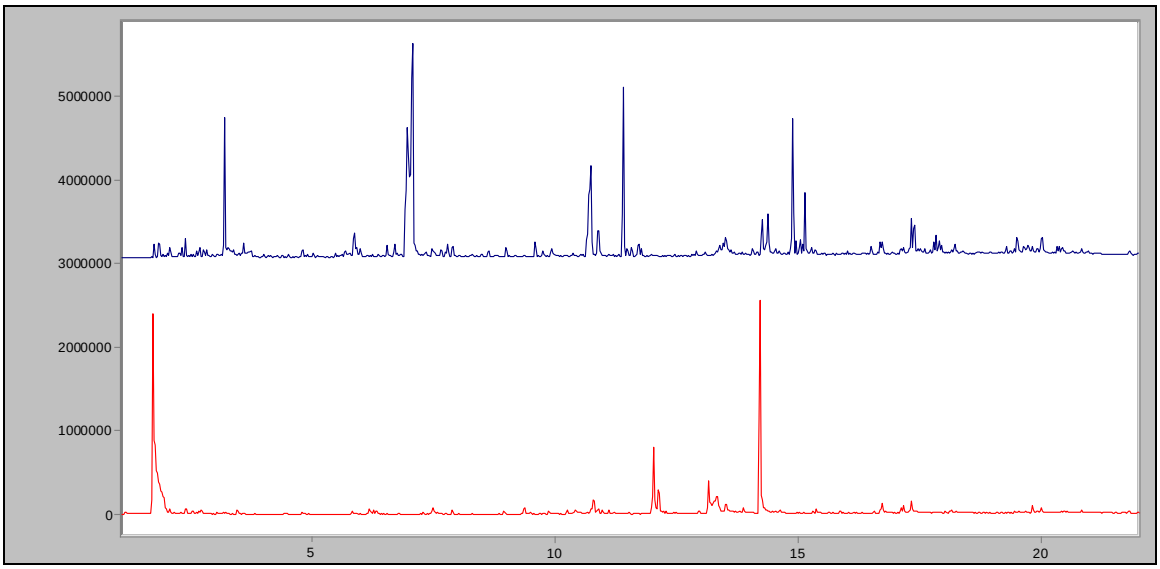

Figure 231: From top to bottom: HP 201 Run 1 and HP 205 Run 1 neat ink sample pyrograms.

KODAK

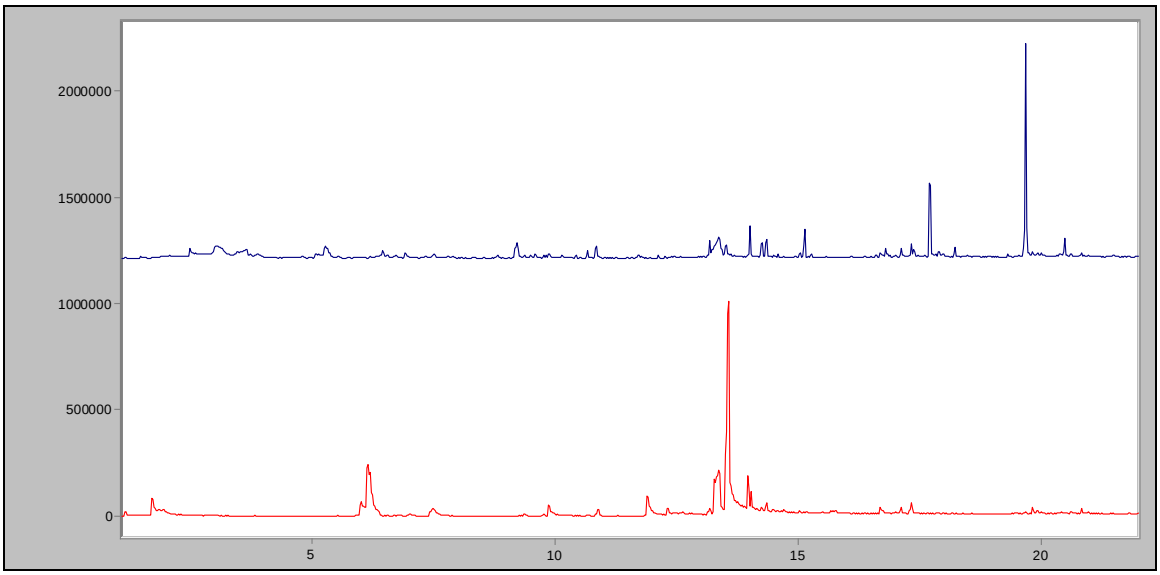

Figure 232: From top to bottom: Kodak 17 Run 1 and Kodak 22 Run 1 neat ink sample pyrograms.

OKIDATA

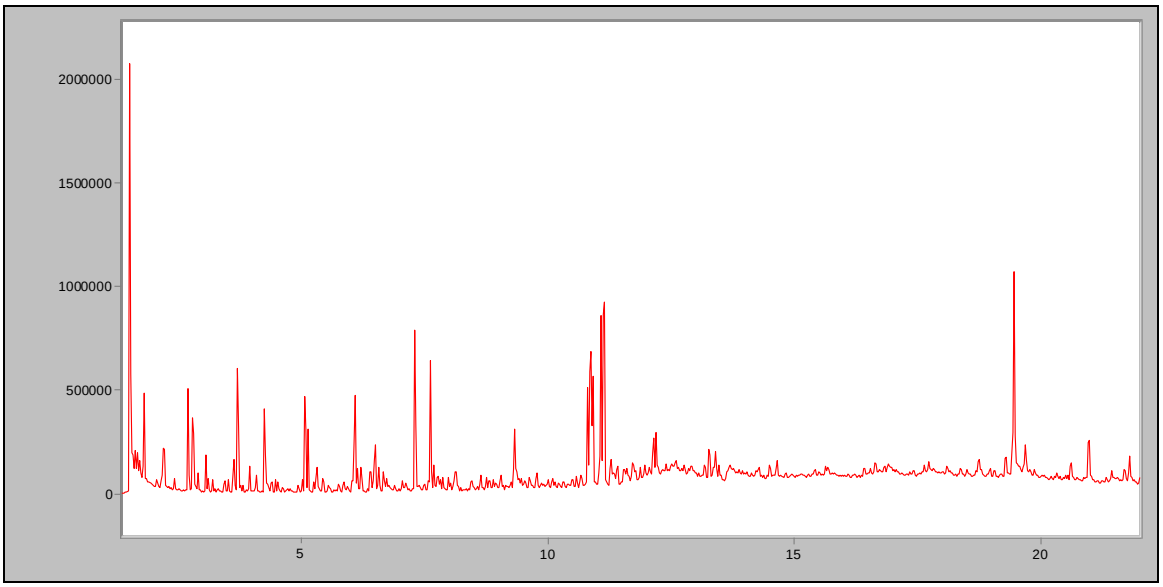

Figure 233: Okidata 04 Run 1 neat ink sample pyrograms.

XEROX

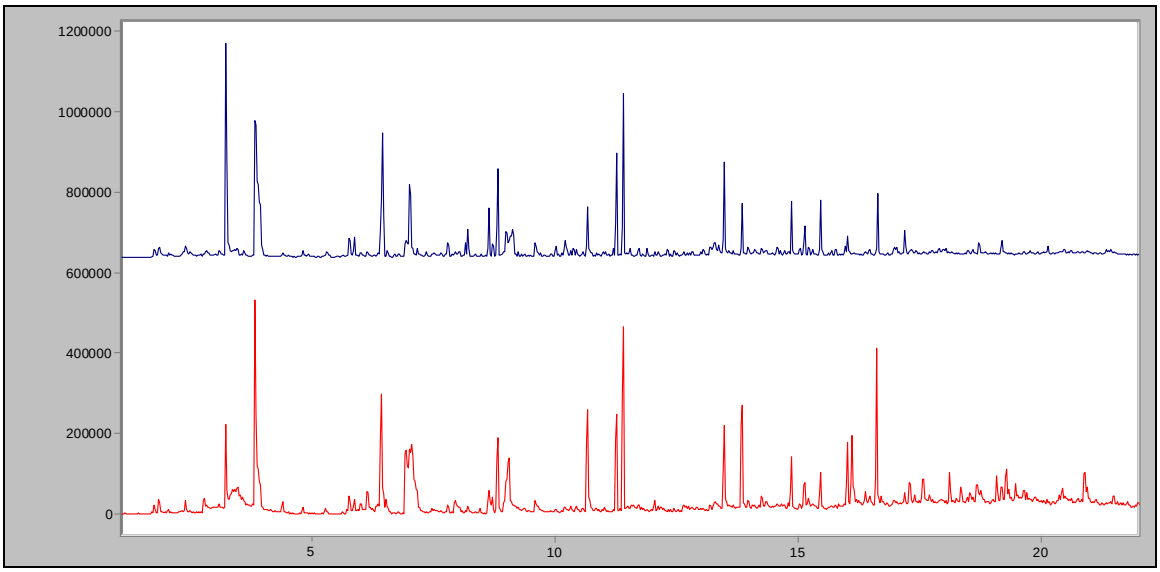

Figure 234: From top to bottom: Xerox 13 Run 1 and Xerox 244 Run 1 neat ink sample pyrograms.

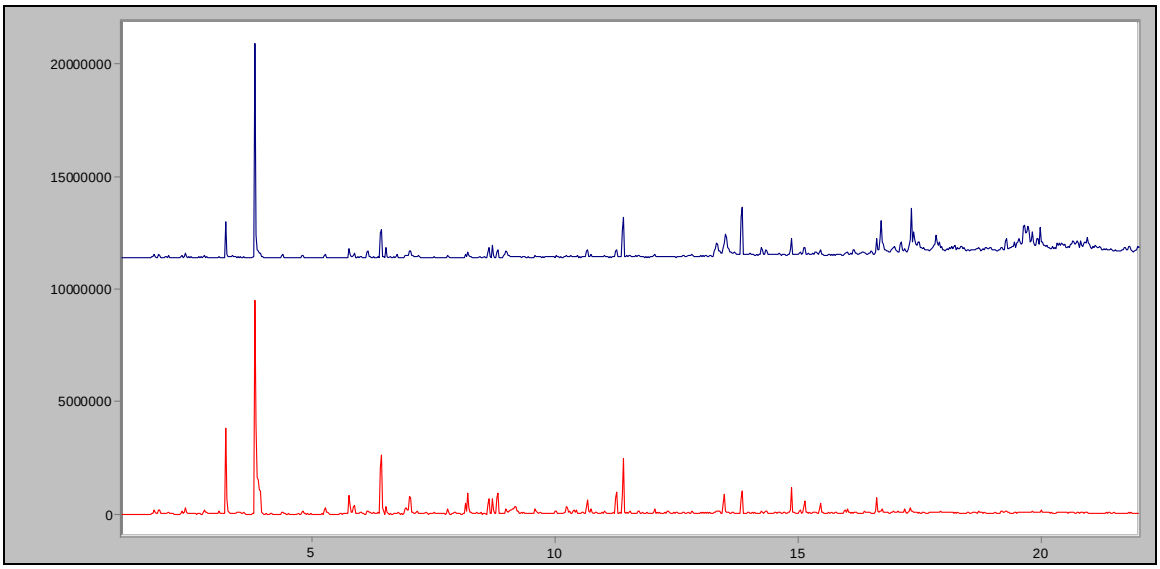

Figure 235: From top to bottom: Xerox 24 Run 1 and Xerox 24 Run 2 neat ink sample pyrograms.

Pyrolysis Data: By Manufacturer

CANON

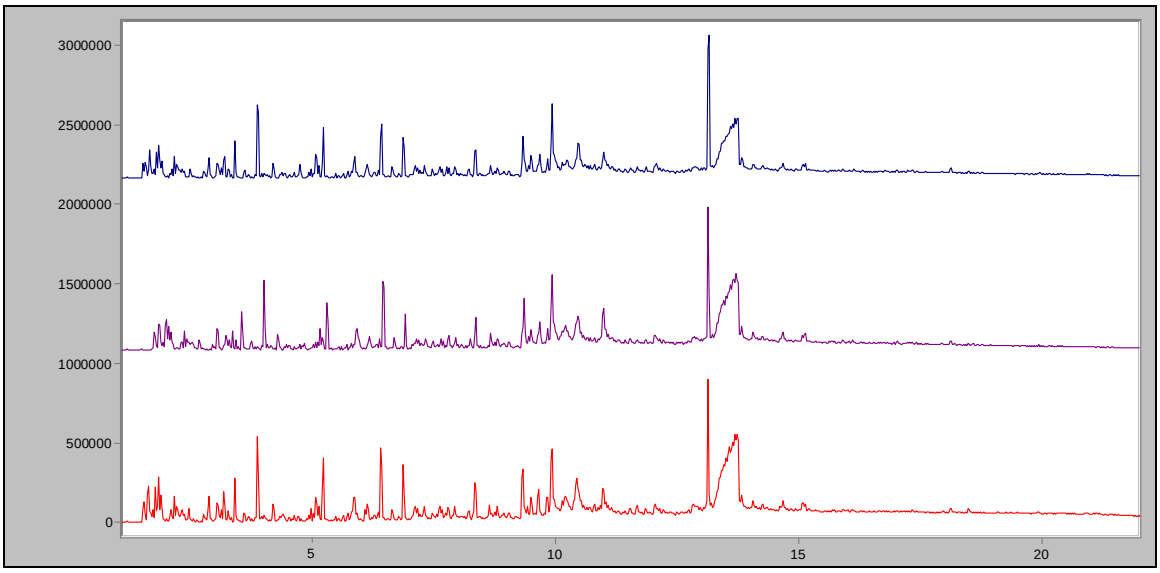

Figure 236: From top to bottom: Canon 217 Run 1, Canon 217 Run 2 and Canon 217 Run 3 ink on paper sample pyrograms.

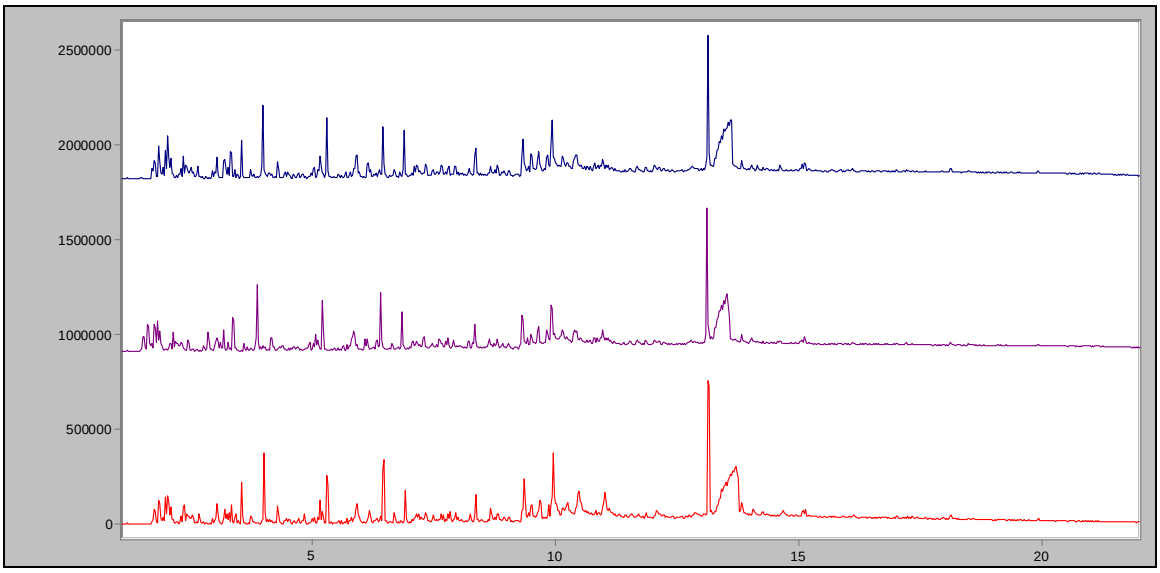

Figure 237: From top to bottom: Canon 217 Run 4, Canon 217 Run 5 and Canon 218 Run 1 ink on paper sample pyrograms.

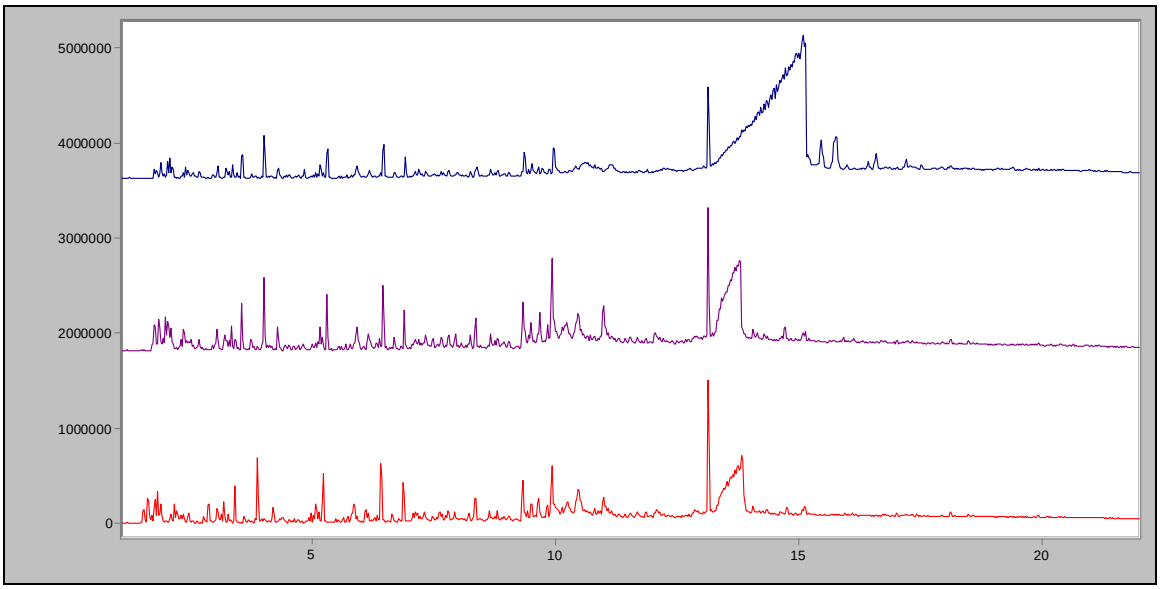

Figure 238: From top to bottom: Canon 218 Run 2, Canon 218 Run 3 and Canon 218 Run 4 ink on paper sample pyrograms.

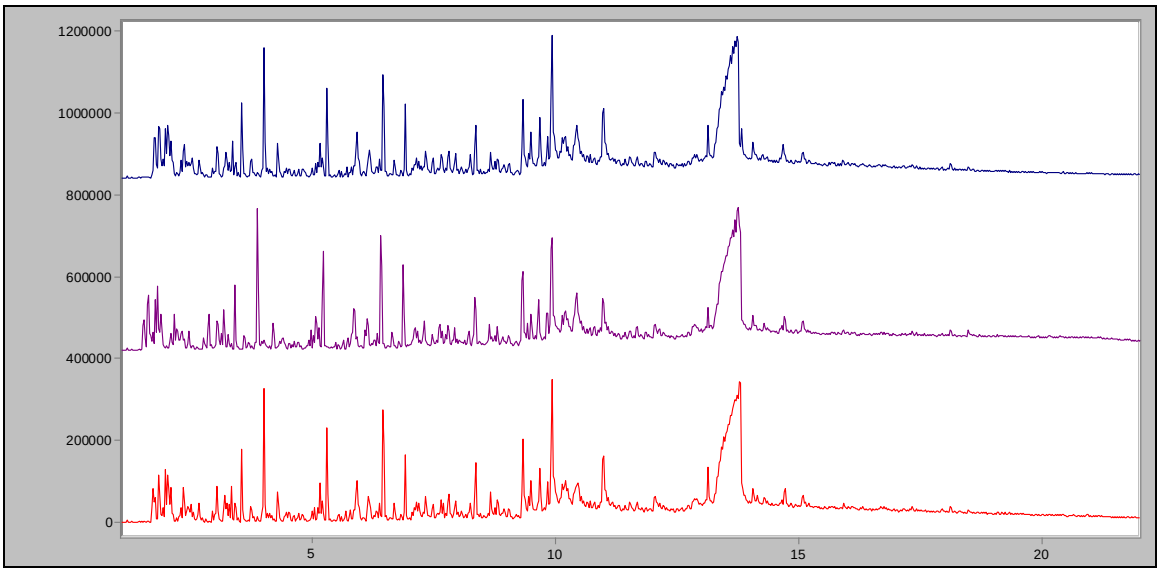

Figure 239: From top to bottom: Canon 219 Run 1, Canon 219 Run 2 and Canon 220 Run 1 ink on paper sample pyrograms.

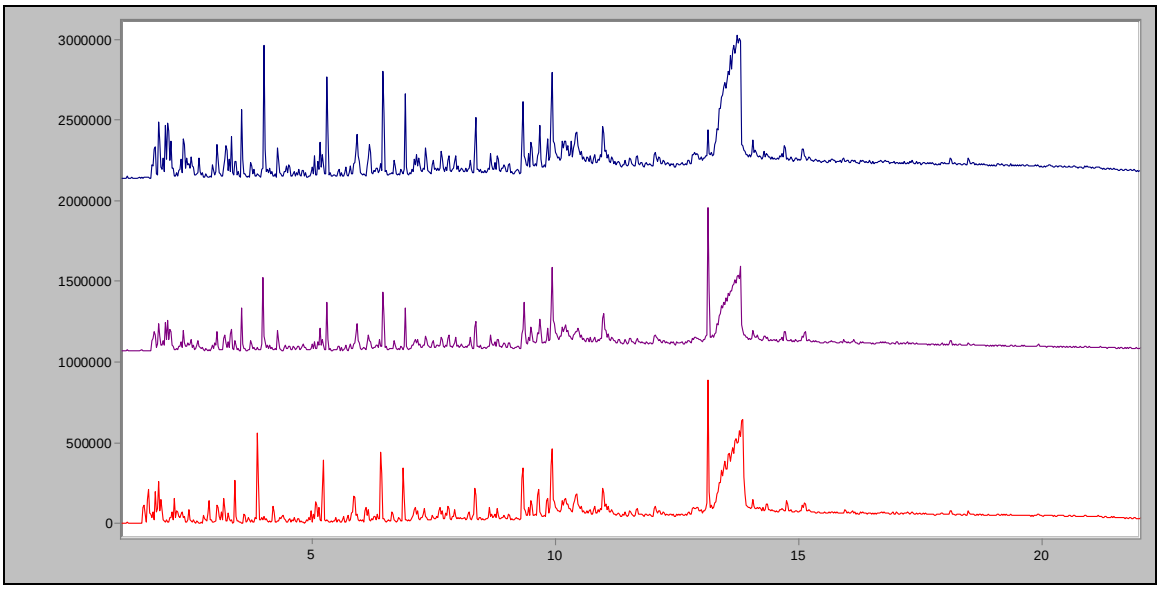

Figure 240: From top to bottom: Canon 220 Run 2, Canon 221 Run 1 and Canon 221 Run 2 ink on paper sample pyrograms.

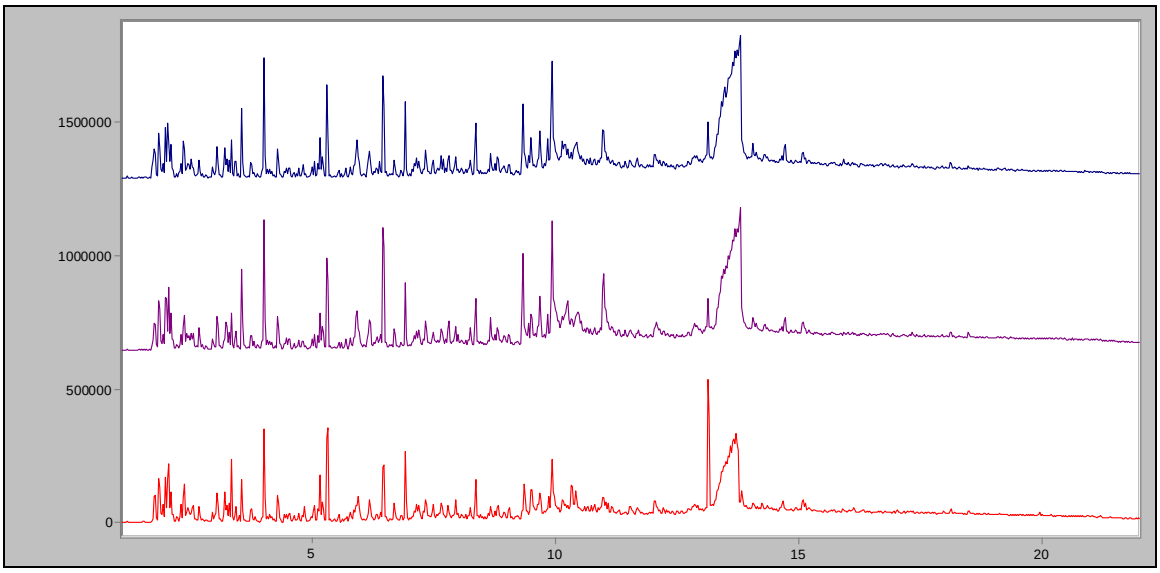

Figure 241: From top to bottom: Canon 222 Run 1, Canon 222 Run 2 and Canon 223 Run 1 ink on paper sample pyrograms.

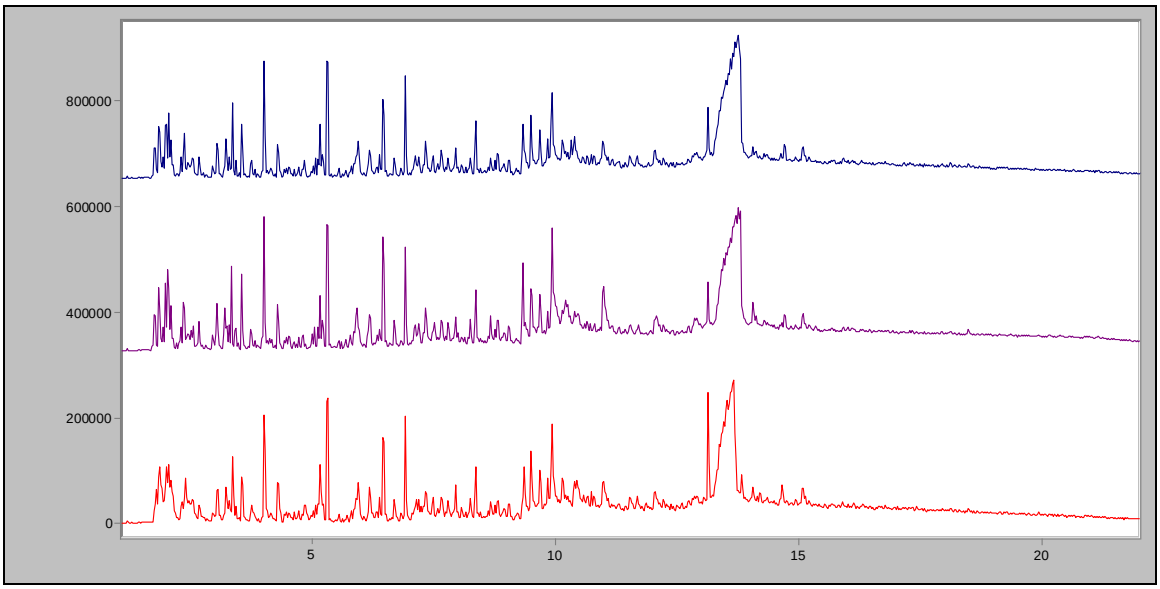

Figure 242: From top to bottom: Canon 223 Run 2, Canon 223 Run 3 and Canon 224 Run 1 ink on paper sample pyrograms.

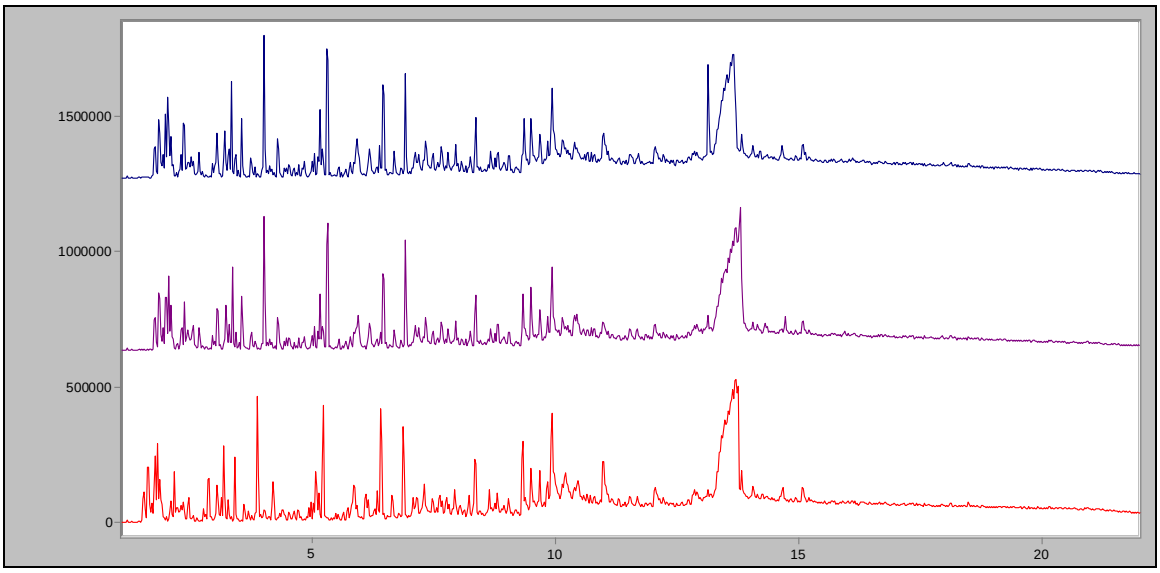

Figure 243: From top to bottom: Canon 224 Run 2, Canon 224 Run 3 and Canon 224 Run 4 ink on paper sample pyrograms.

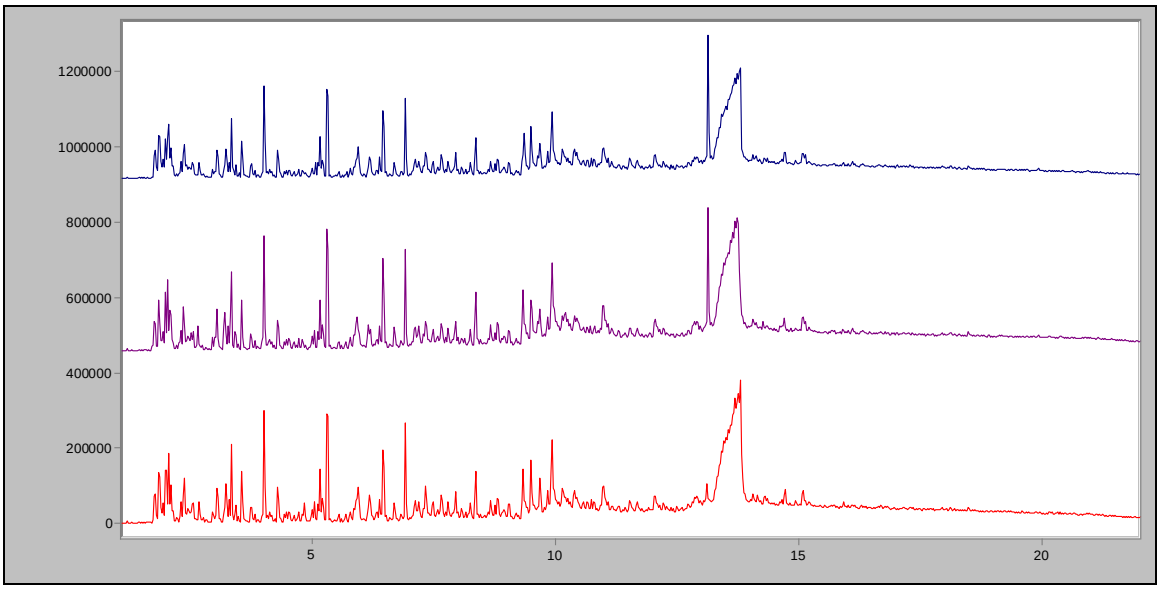

Figure 244: From top to bottom: Canon 225 Run 1, Canon 225 Run 2 and Canon 226 Run 1 ink on paper sample pyrograms.

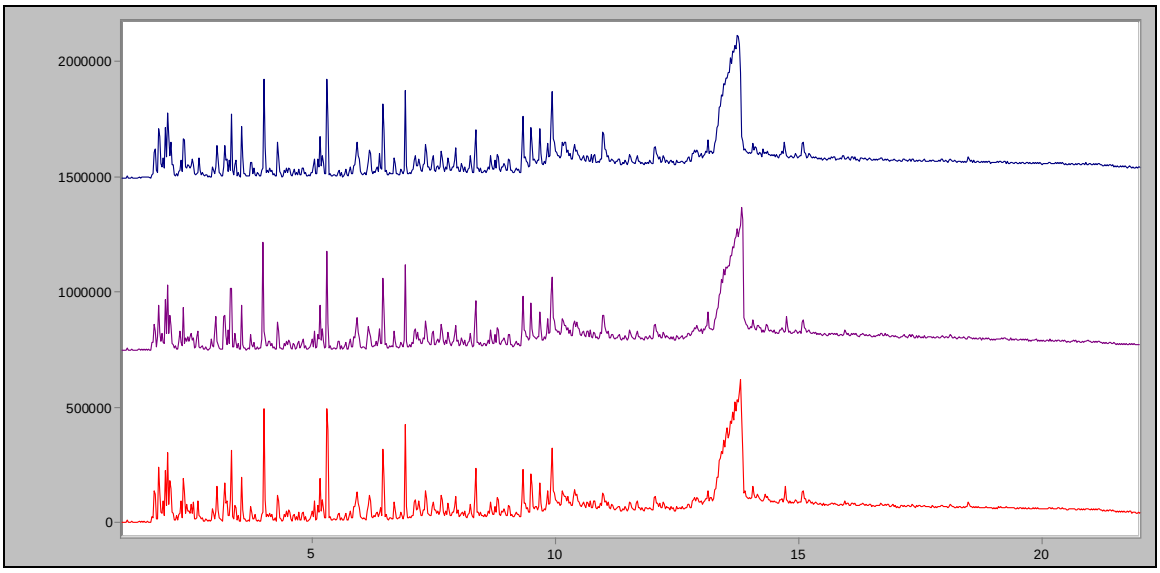

Figure 245: From top to bottom: Canon 226 Run 2, Canon 227 Run 1 and Canon 227 Run 2 ink on paper sample pyrograms.

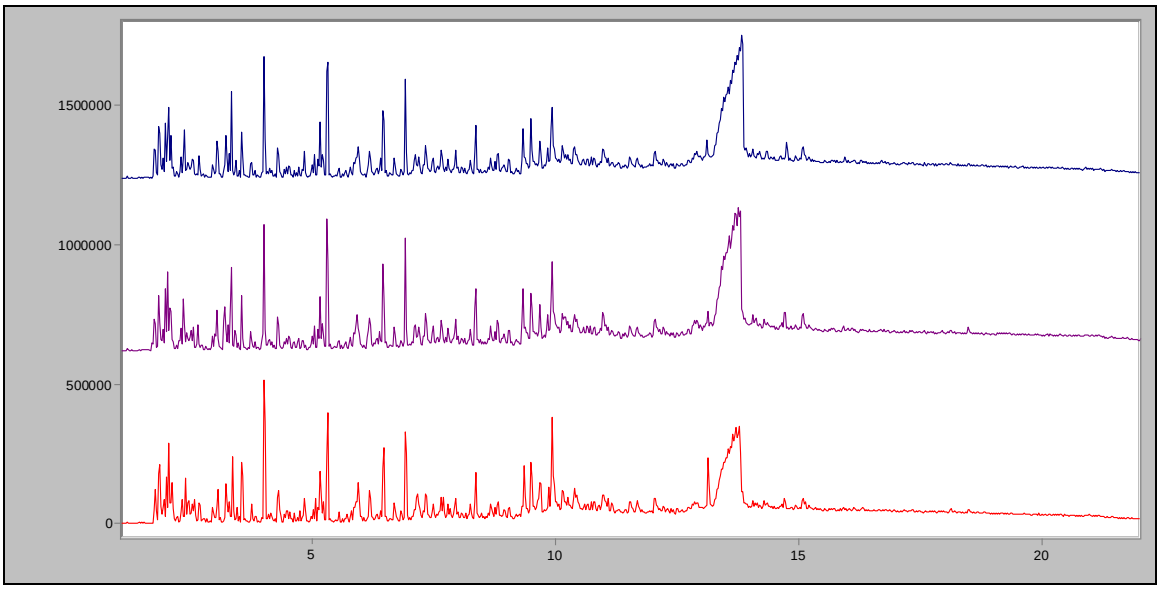

Figure 246: From top to bottom: Canon 228 Run 1, Canon 228 Run 2 and Canon 282 Run 1 ink on paper sample pyrograms.

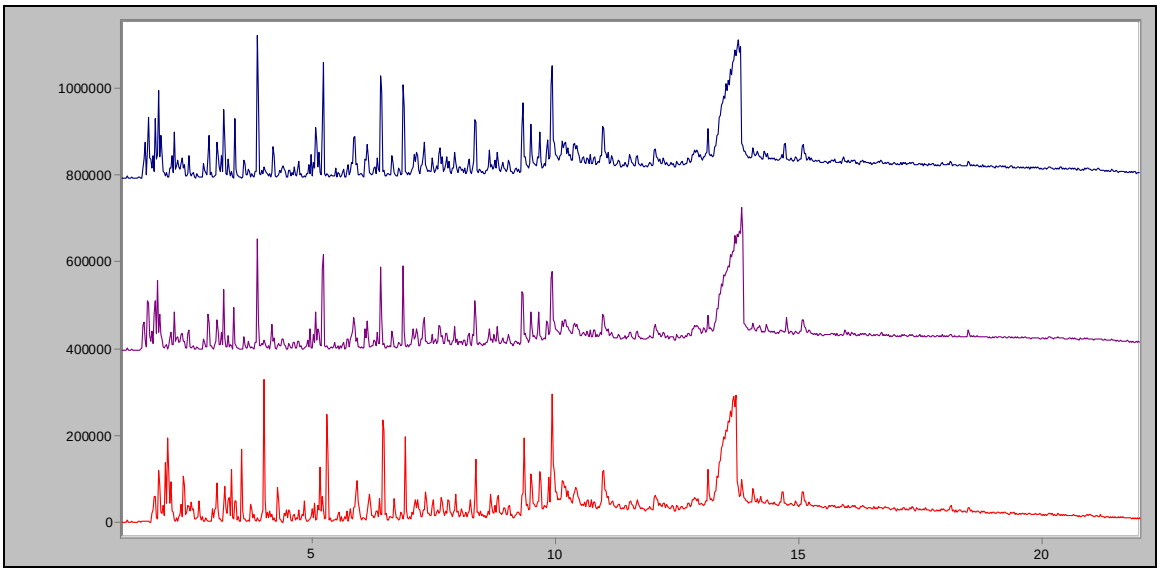

Figure 247: From top to bottom: Canon 282 Run 2, Canon 282 Run 3 and Canon 283 Run 1 ink on paper sample pyrograms.

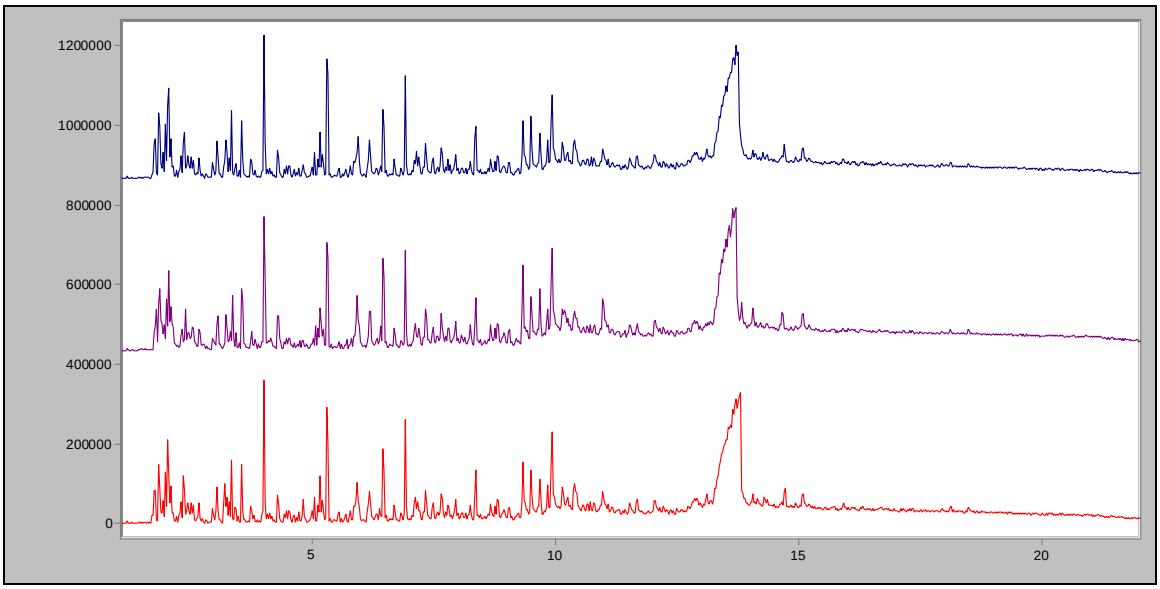

Figure 248: From top to bottom: Canon 283 Run 2, Canon 283 Run 3 and Canon 284 Run 1 ink on paper sample pyrograms.

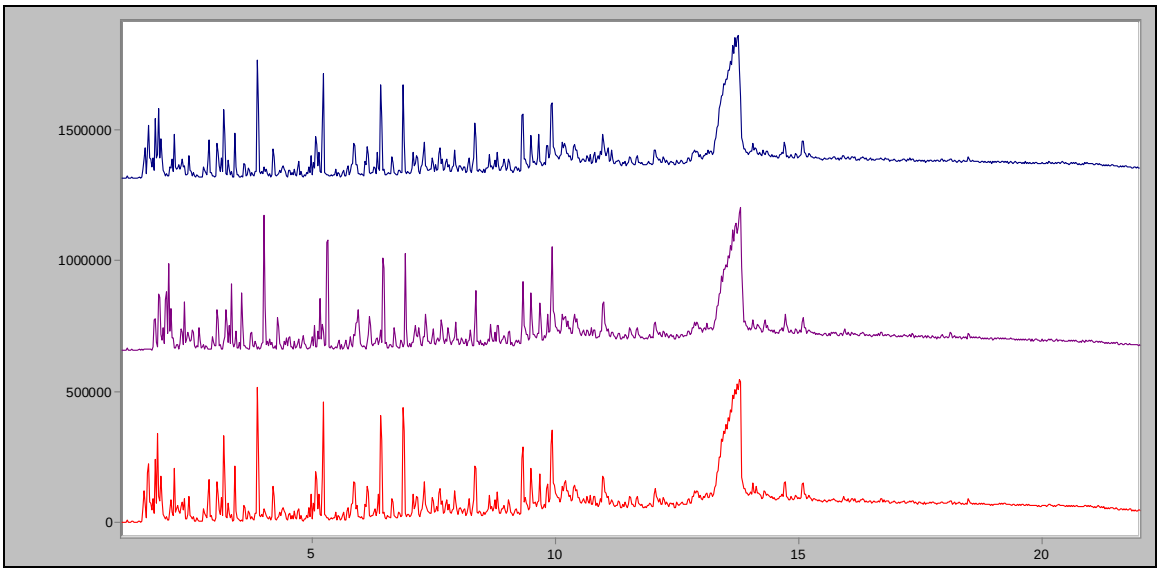

Figure 249: From top to bottom: Canon 284 Run 2, Canon 285 Run 1 and Canon 285 Run 2 ink on paper sample pyrograms.

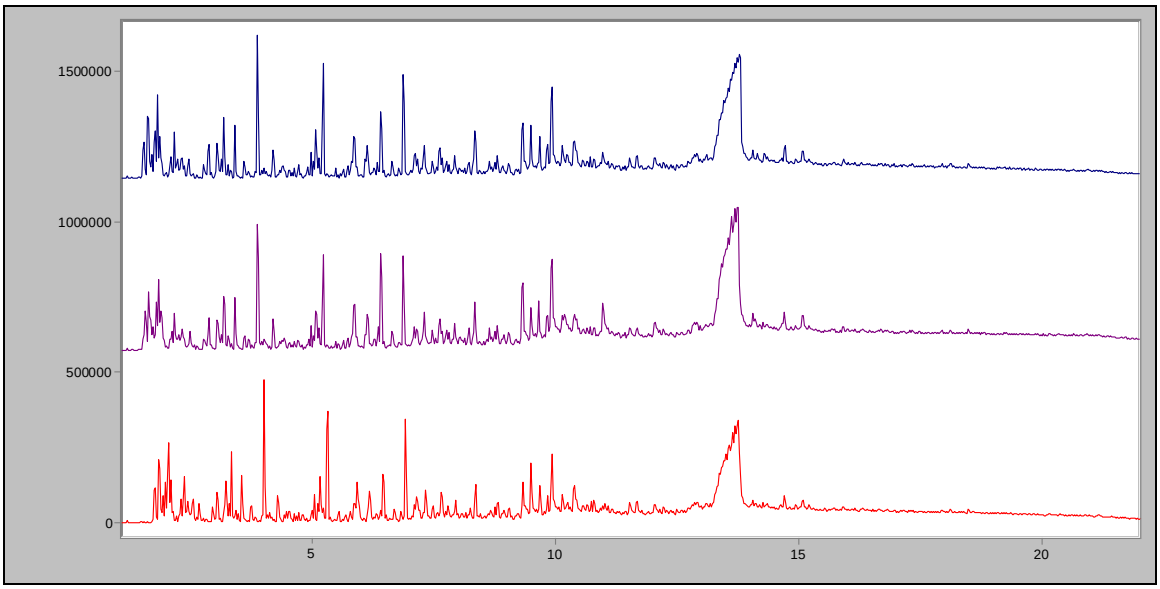

Figure 250: From top to bottom: Canon 286 Run 1, Canon 286 Run 2 and Canon 287 Run 1 ink on paper sample pyrograms.

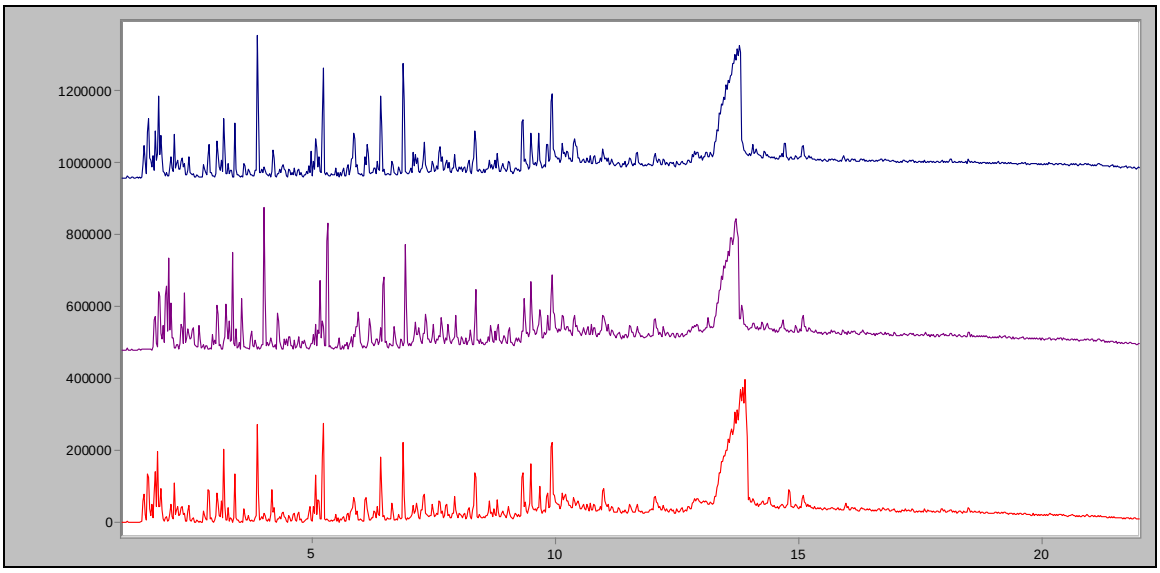

Figure 251: From top to bottom: Canon 287 Run 2, Canon 306 Run 1 and Canon 306 Run 2 ink on paper sample pyrograms.

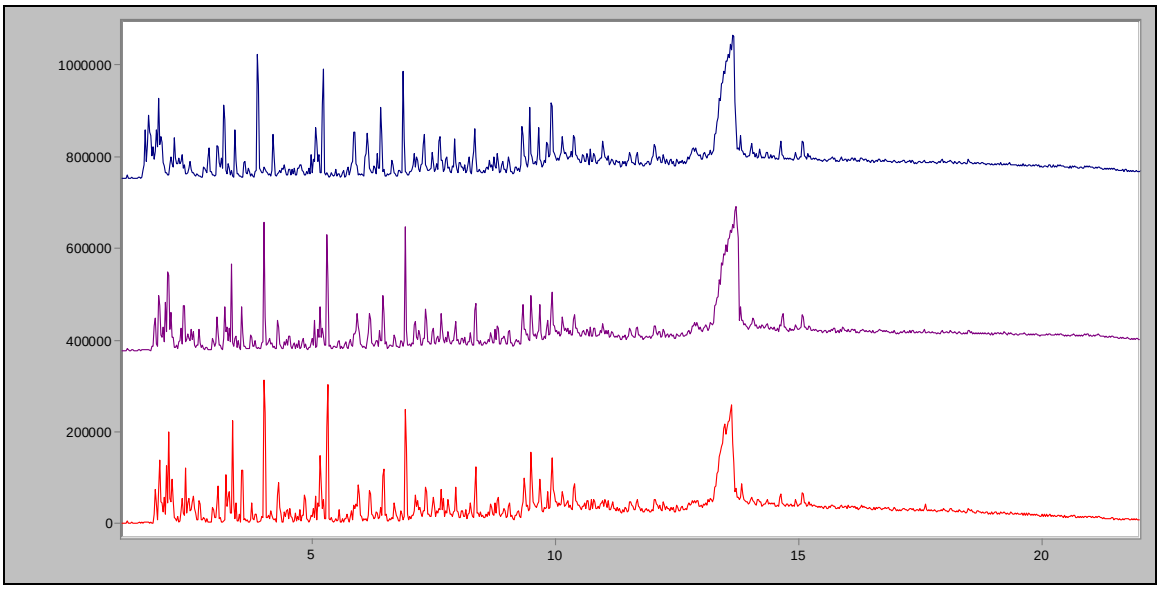

Figure 252: From top to bottom: Canon 306 Run 3, Canon 306 Run 4 and Canon 307 Run 1 ink on paper sample pyrograms.

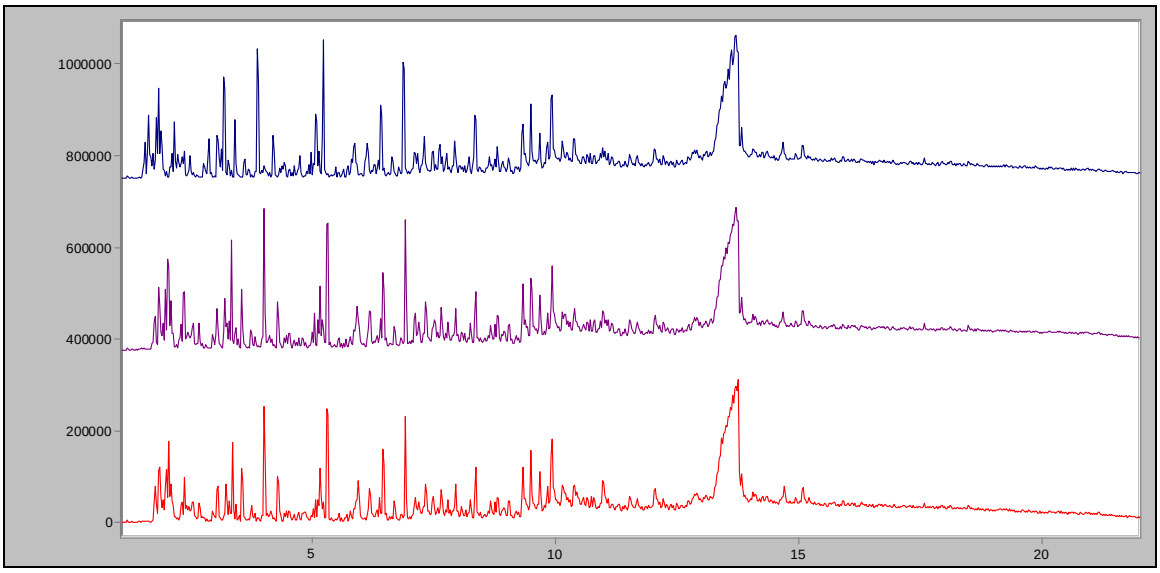

Figure 253: From top to bottom: Canon 307 Run 2, Canon 307 Run 3 and Canon 308 Run 1 ink on paper sample pyrograms.

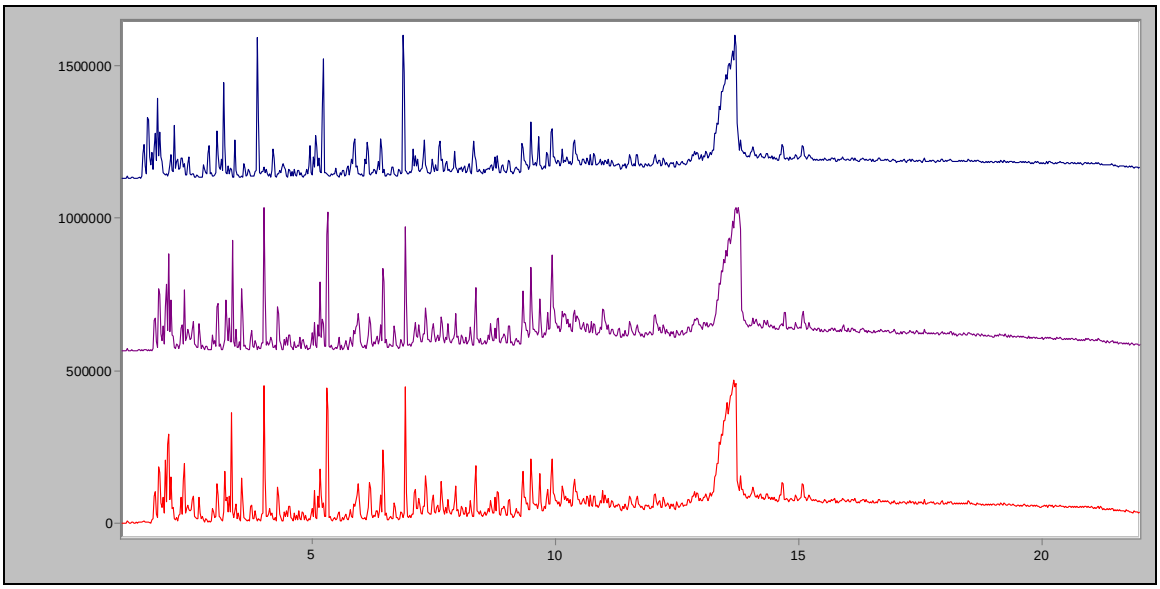

Figure 254: From top to bottom: Canon 308 Run 2, Canon 309 Run 1 and Canon 309 Run 2 ink on paper sample pyrograms.

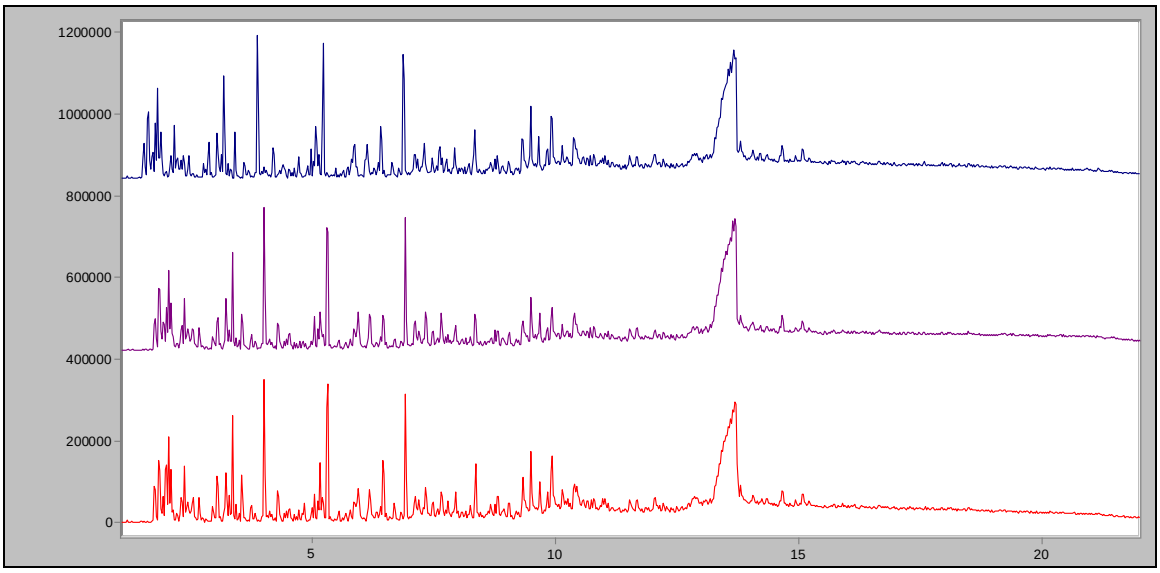

Figure 255: From top to bottom: Canon 310 Run 1, Canon 310 Run 2 and Canon 311 Run 1 ink on paper sample pyrograms.

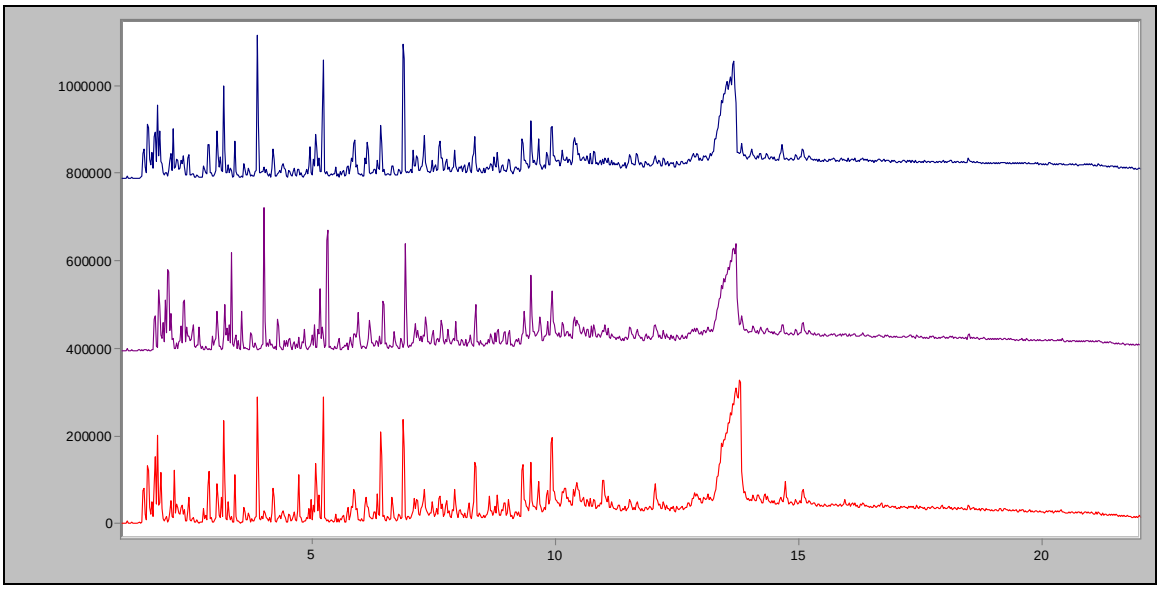

Figure 256: From top to bottom: Canon 311 Run 2, Canon 312 Run 1 and Canon 312 Run 2 ink on paper sample pyrograms.

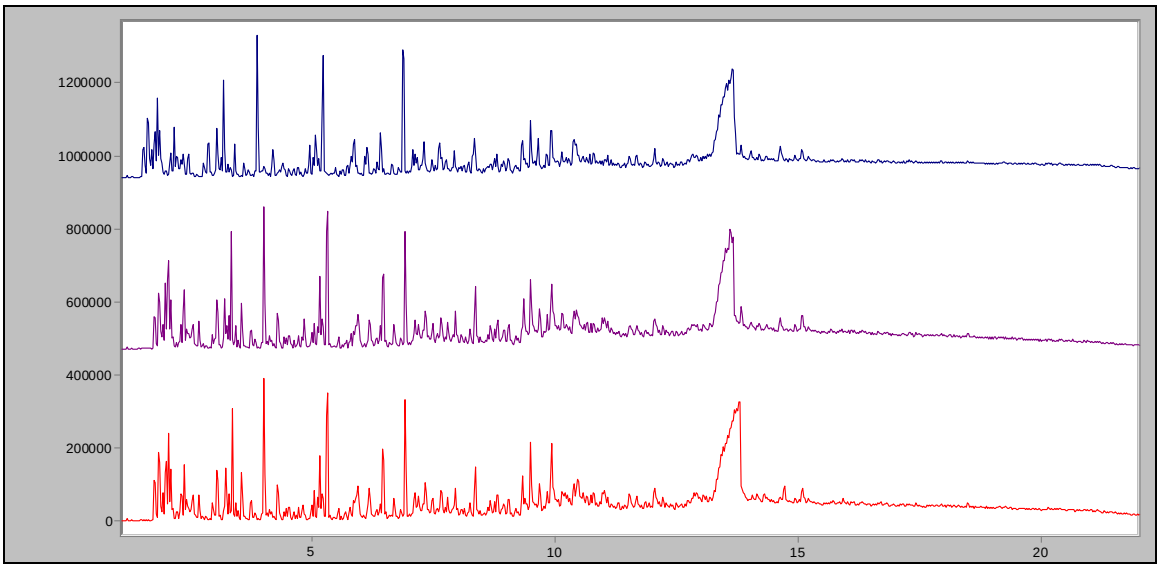

Figure 257: From top to bottom: Canon 312 Run 3, Canon 313 Run 1 and Canon 313 Run 2 ink on paper sample pyrograms.

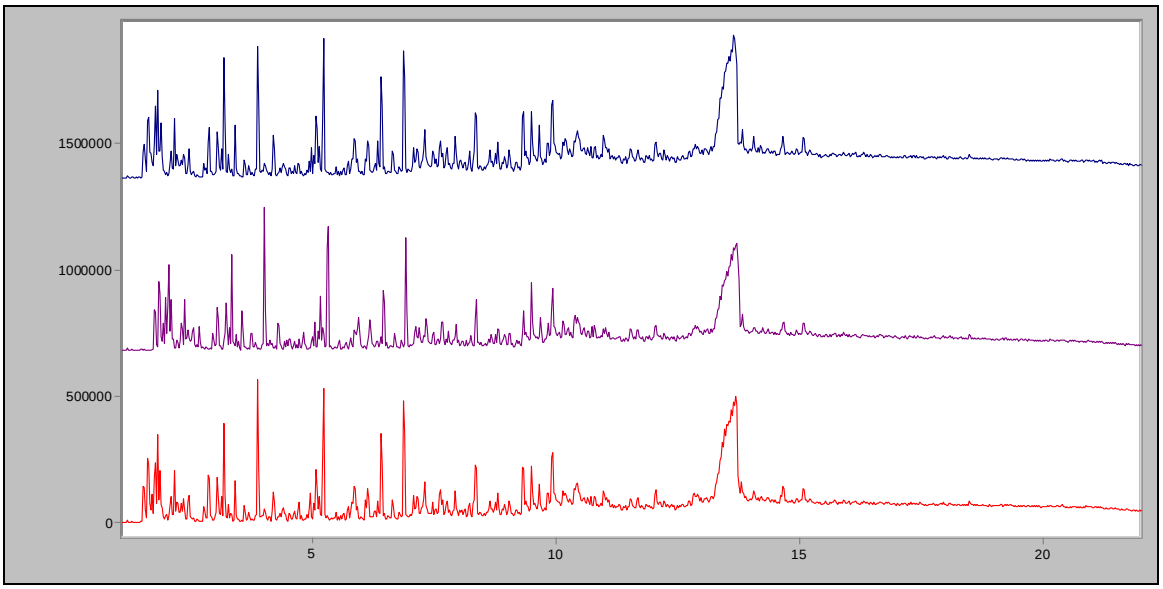

Figure 258: From top to bottom: Canon 313 Run 3, Canon 314 Run 1 and Canon 314 Run 2 ink on paper sample pyrograms.

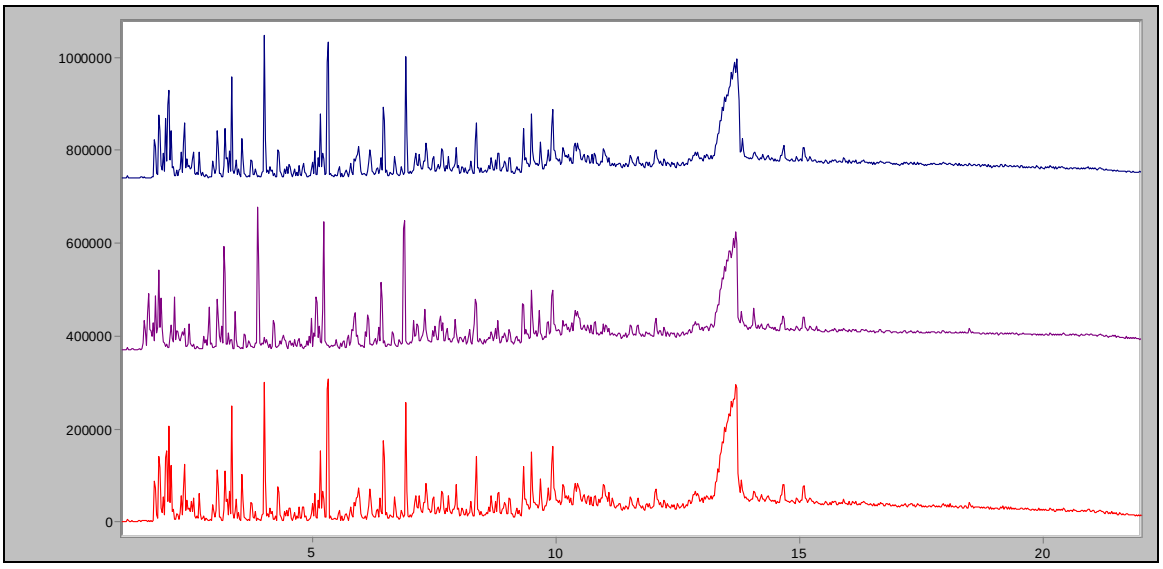

Figure 259: From top to bottom: Canon 315 Run 1, Canon 315 Run 2 and Canon 316 Run 1 ink on paper sample pyrograms.

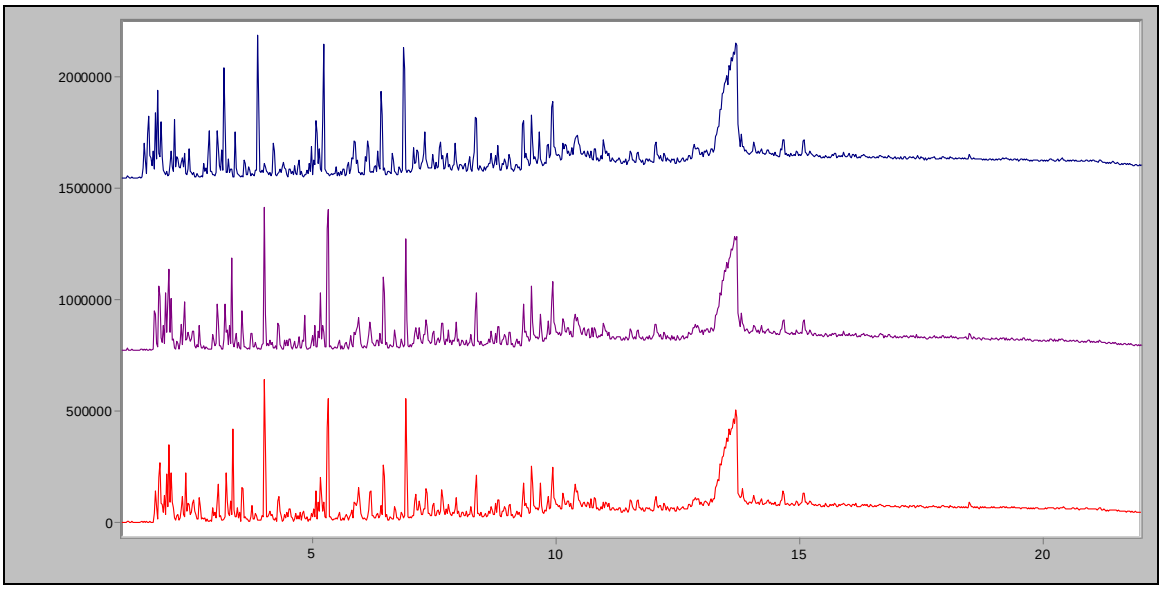

Figure 260: From top to bottom: Canon 316 Run 2, Canon 317 Run 1 and Canon 317 Run 2 ink on paper sample pyrograms.

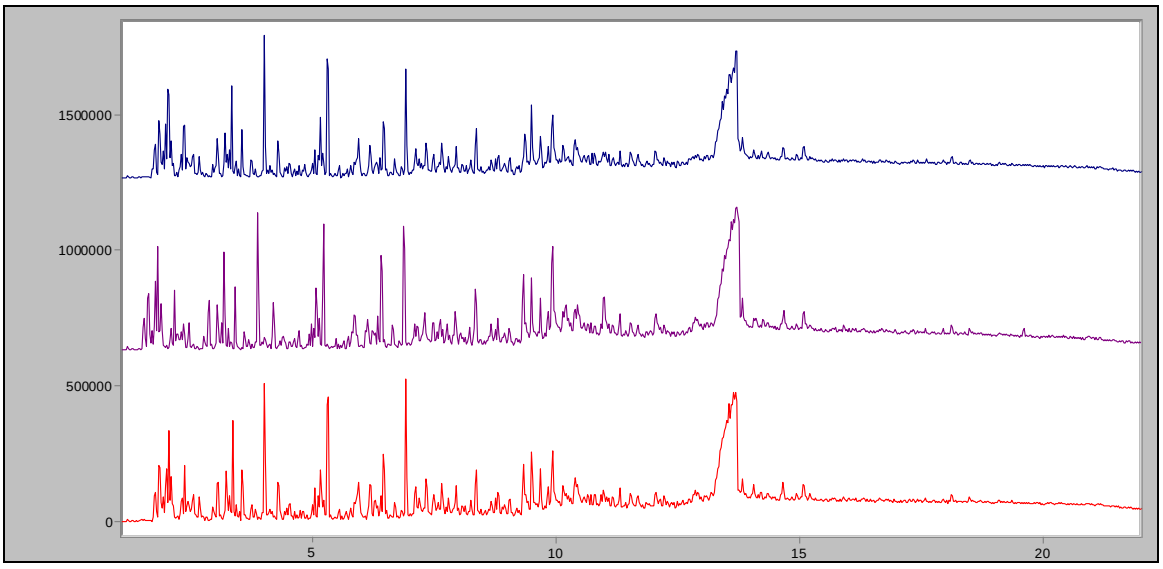

Figure 261: From top to bottom: Canon 318 Run 1, Canon 318 Run 2 and Canon 318 Run 3 ink on paper sample pyrograms.

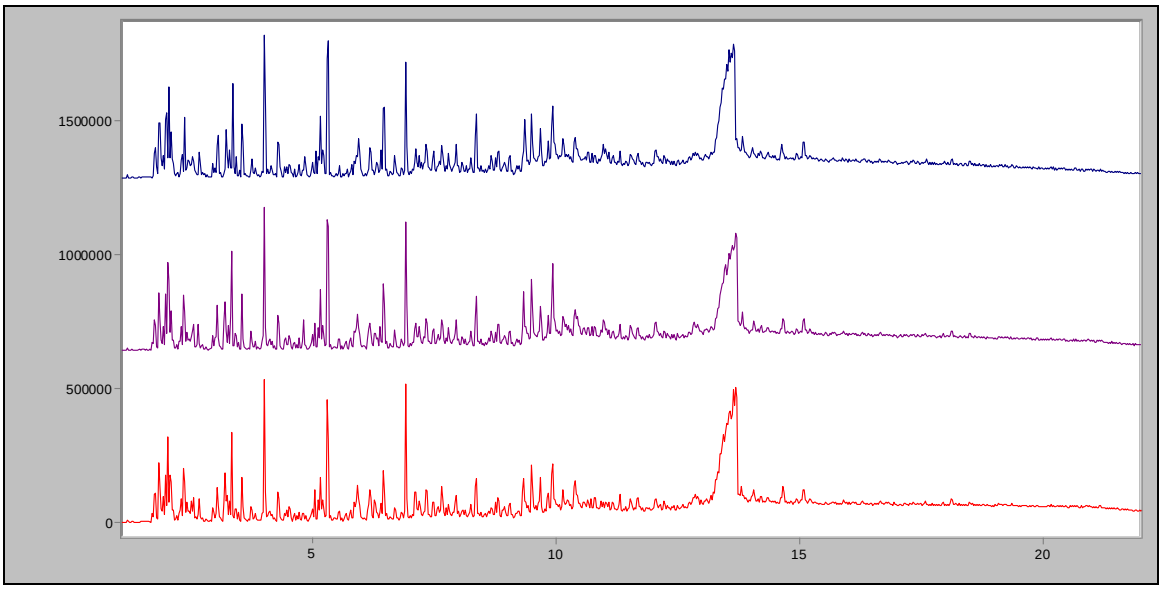

Figure 262: From top to bottom: Canon 319 Run 1, Canon 319 Run 2 and Canon 319 Run 3 ink on paper sample pyrograms.

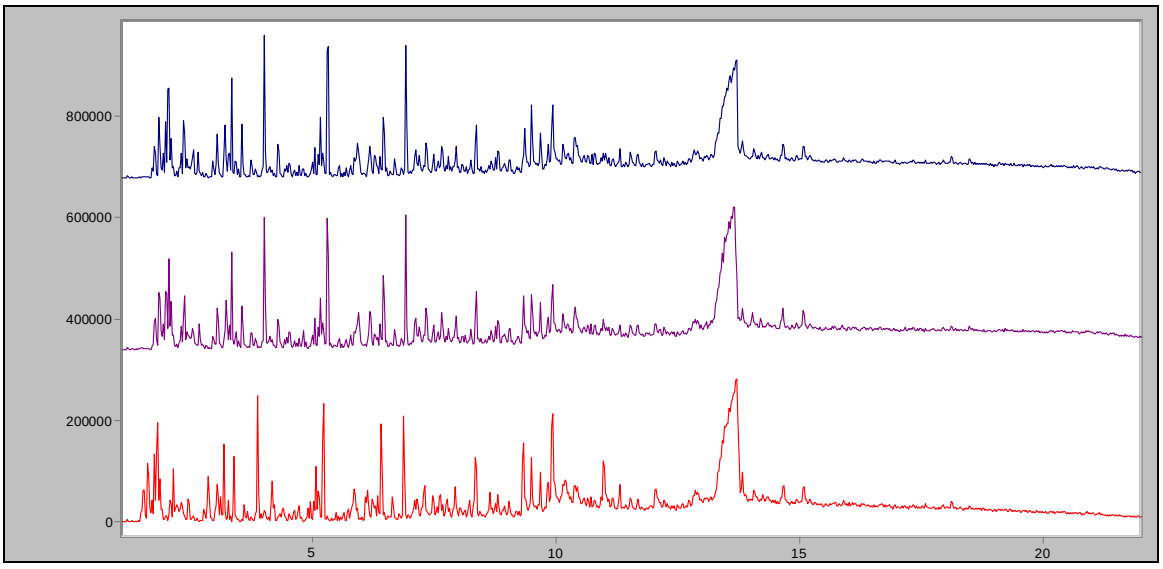

Figure 263: From top to bottom: Canon 320 Run 1, Canon 320 Run 2 and Canon 321 Run 1 ink on paper sample pyrograms.

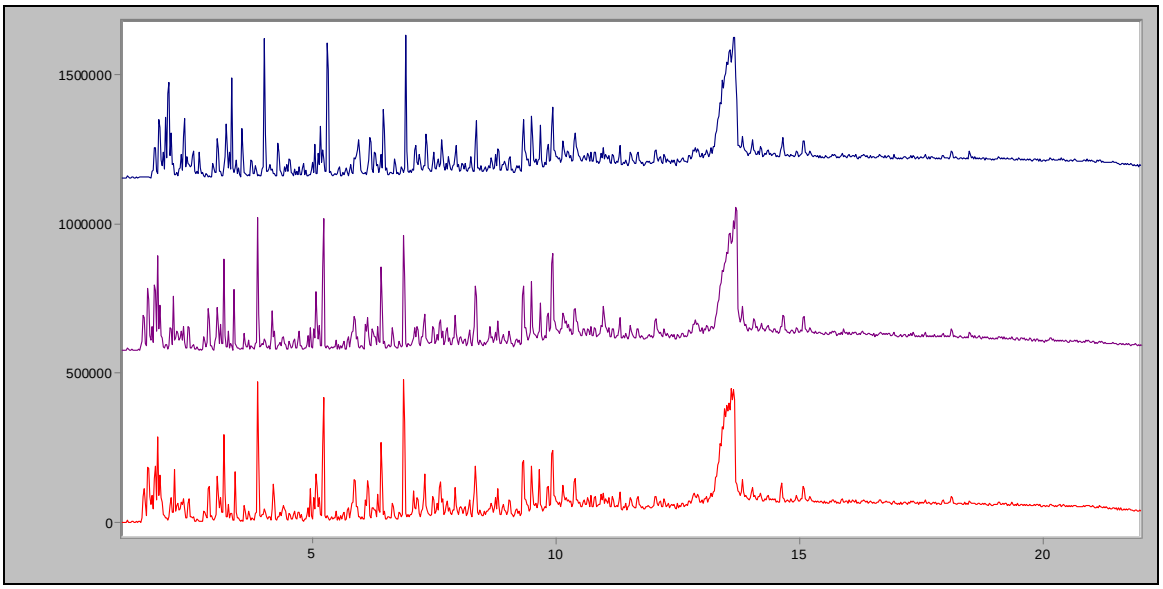

Figure 264: From top to bottom: Canon 321 Run 2, Canon 322 Run 1 and Canon 322 Run 2 ink on paper sample pyrograms.

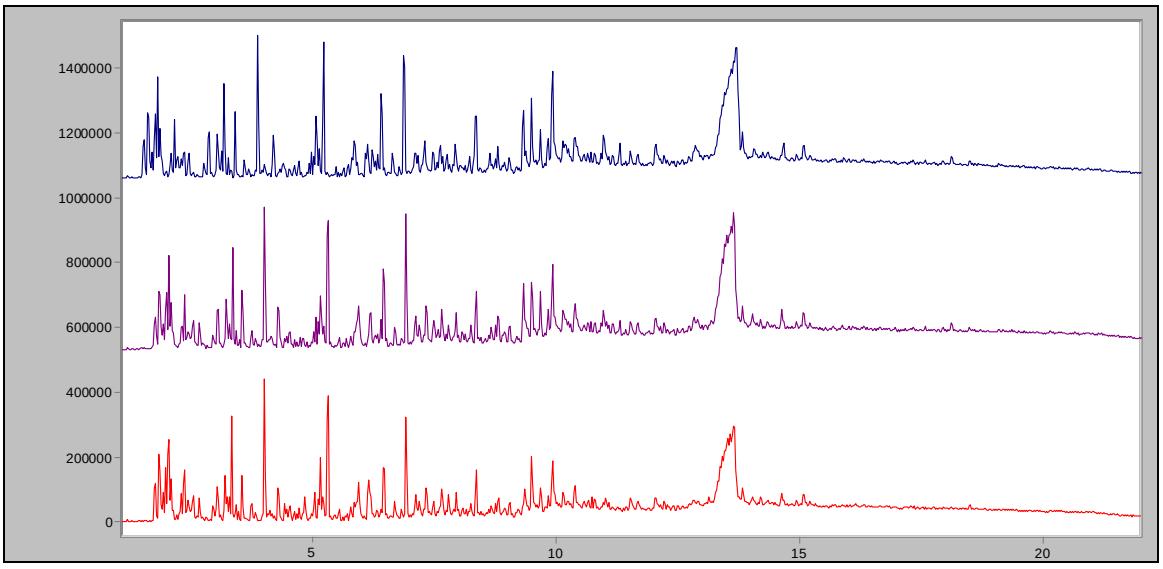

Figure 265: From top to bottom: Canon 323 Run 1, Canon 323 Run 2 and Canon 318a Run 1 ink on paper sample pyrograms.

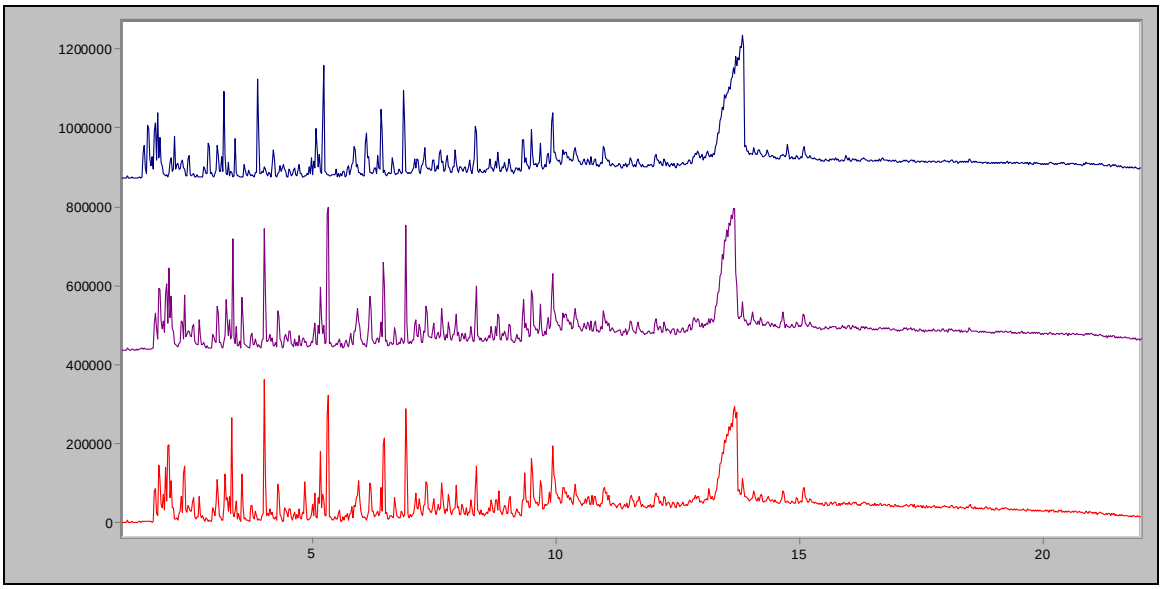

Figure 266: From top to bottom: Canon 318a Run 2, Canon 318a Run 3 and Canon 319a Run 1 ink on paper sample pyrograms.

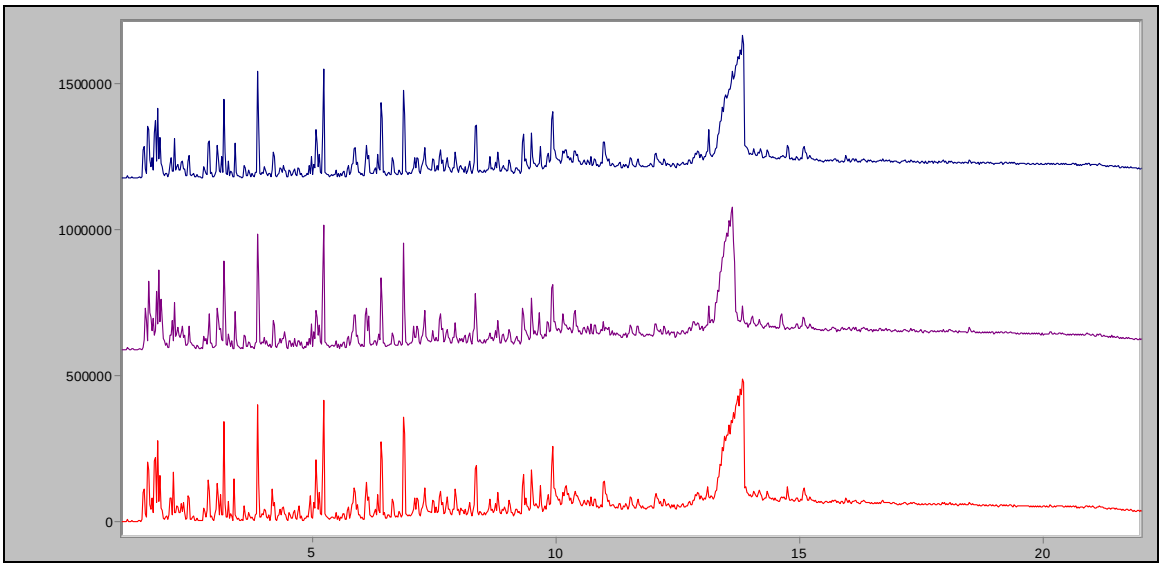

Figure 267: From top to bottom: Canon 319a Run 2, Canon 319a Run 3 and Canon 320a Run 1 ink on paper sample pyrograms.

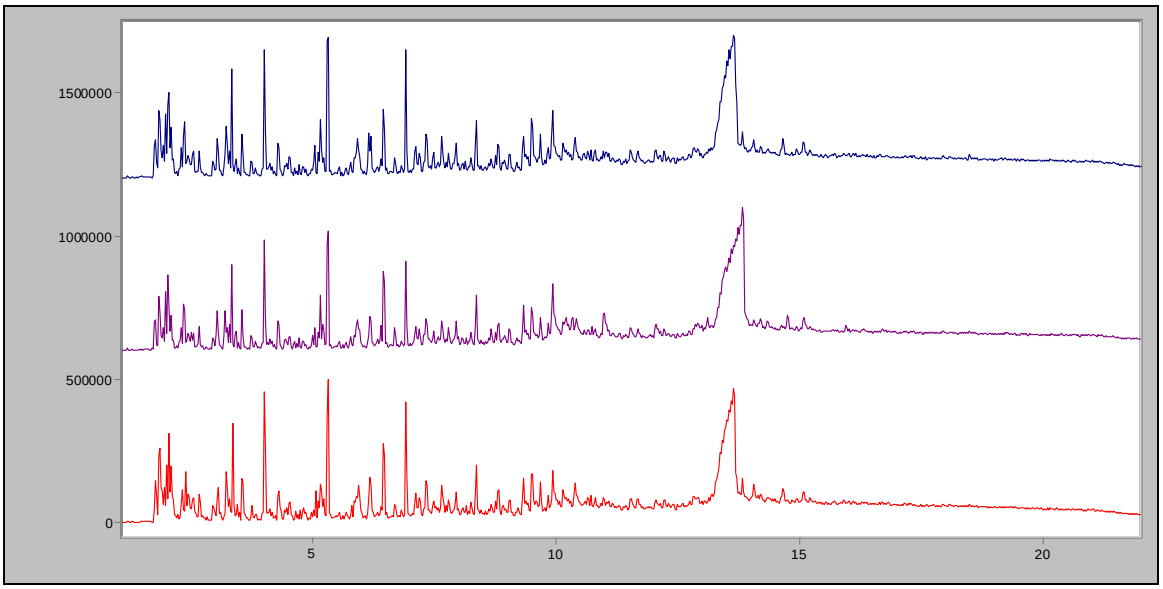

Figure 268: From top to bottom: Canon 320a Run 2, Canon 321a Run 1 and Canon 321a Run 2 ink on paper sample pyrograms.

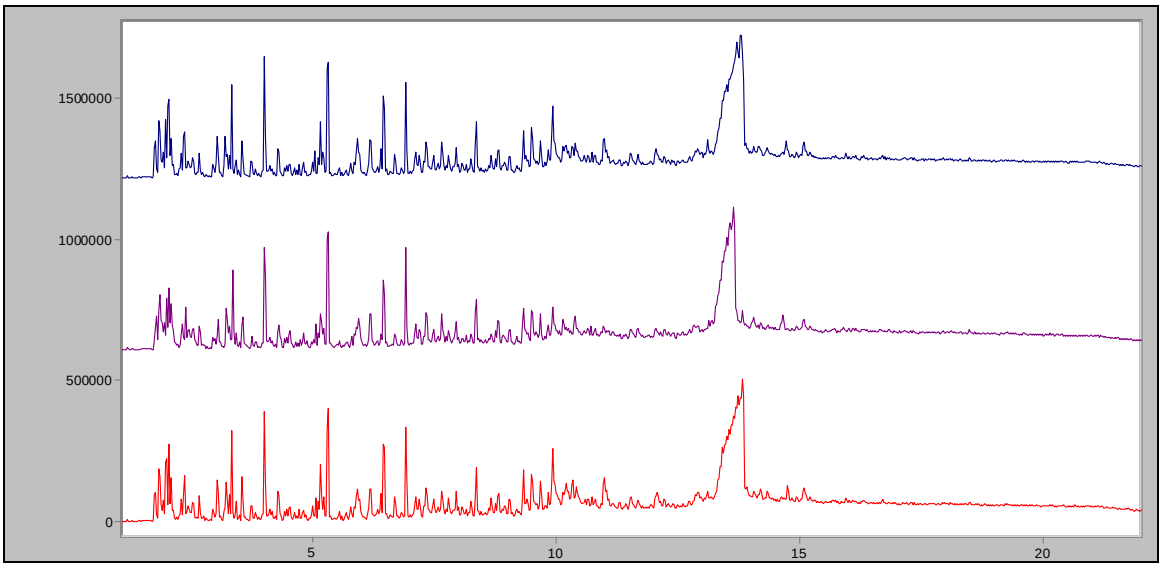

Figure 269: From top to bottom: Canon 322a Run 1, Canon 322a Run 2 and Canon 323a Run 1 ink on paper sample pyrograms.

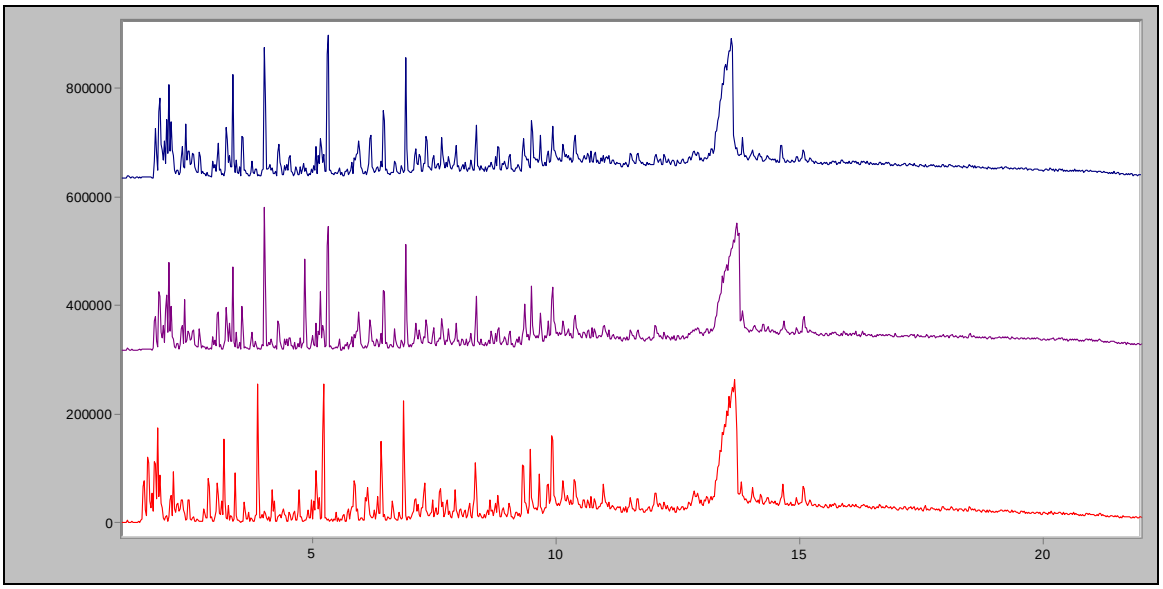

Figure 270: From top to bottom: Canon 323a Run 2, Canon 327 Run 1 and Canon 327 Run 2 ink on paper sample pyrograms.

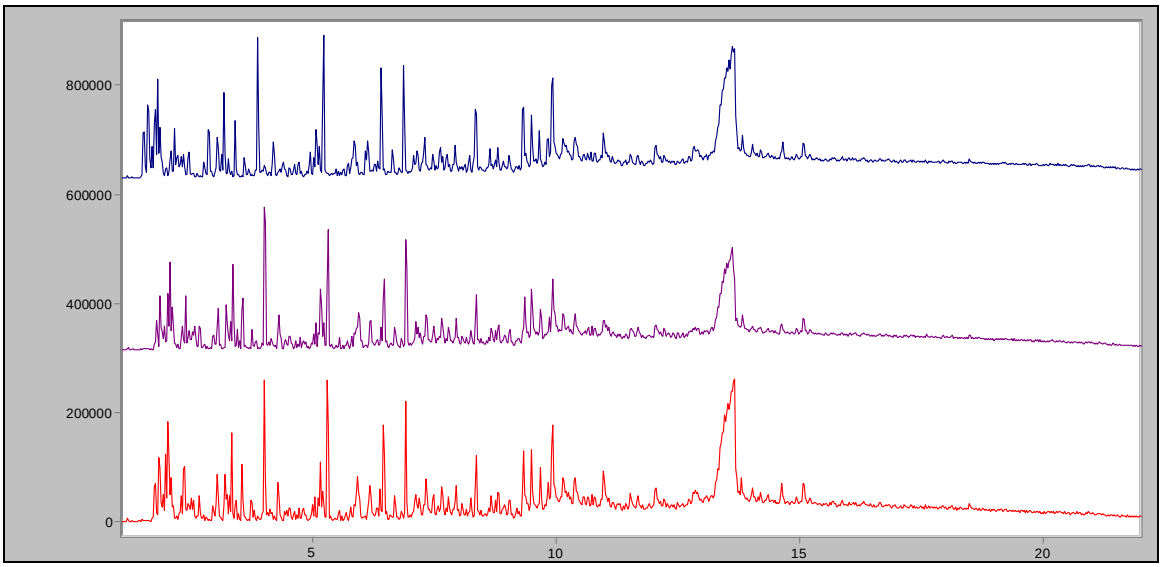

Figure 271: From top to bottom: Canon 327 Run 3, Canon 331 Run 1 and Canon 331 Run 2 ink on paper sample pyrograms.

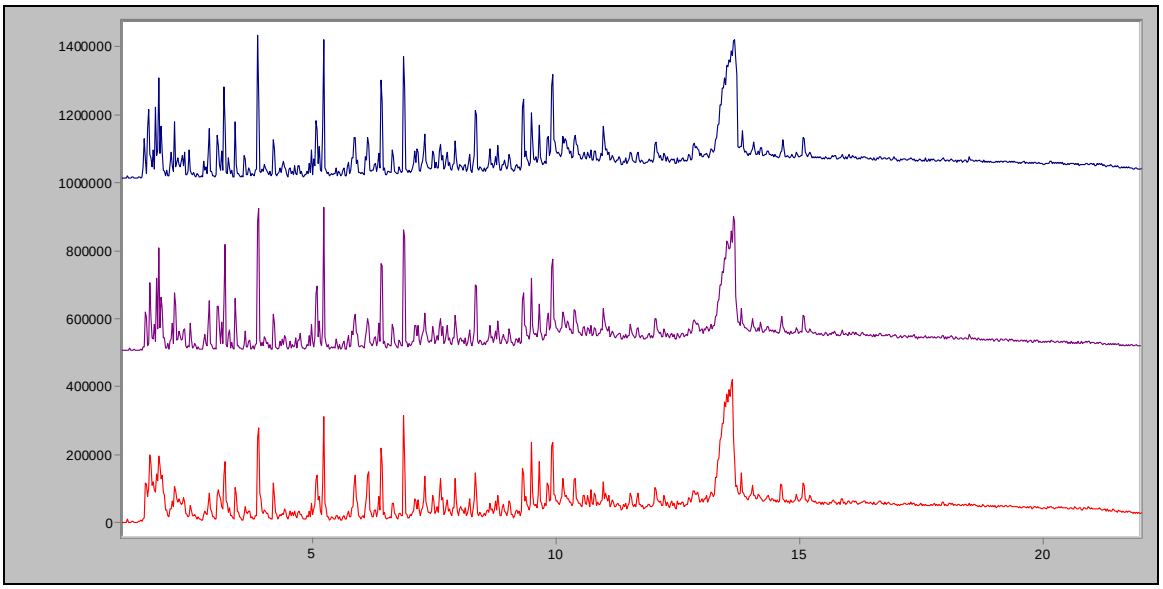

Figure 272: From top to bottom: Canon 331 Run 3, Canon 335 Run 1 and Canon 335 Run 2 ink on paper sample pyrograms.

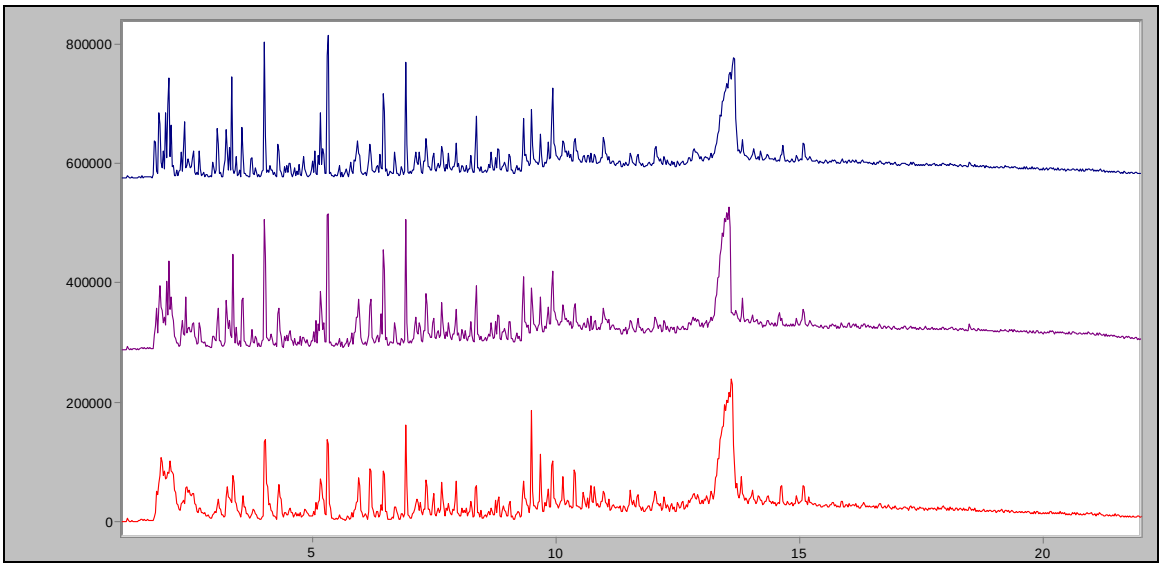

Figure 273: From top to bottom: Canon 339 Run 1, Canon 339 Run 2 and Canon 343 Run 1 ink on paper sample pyrograms.

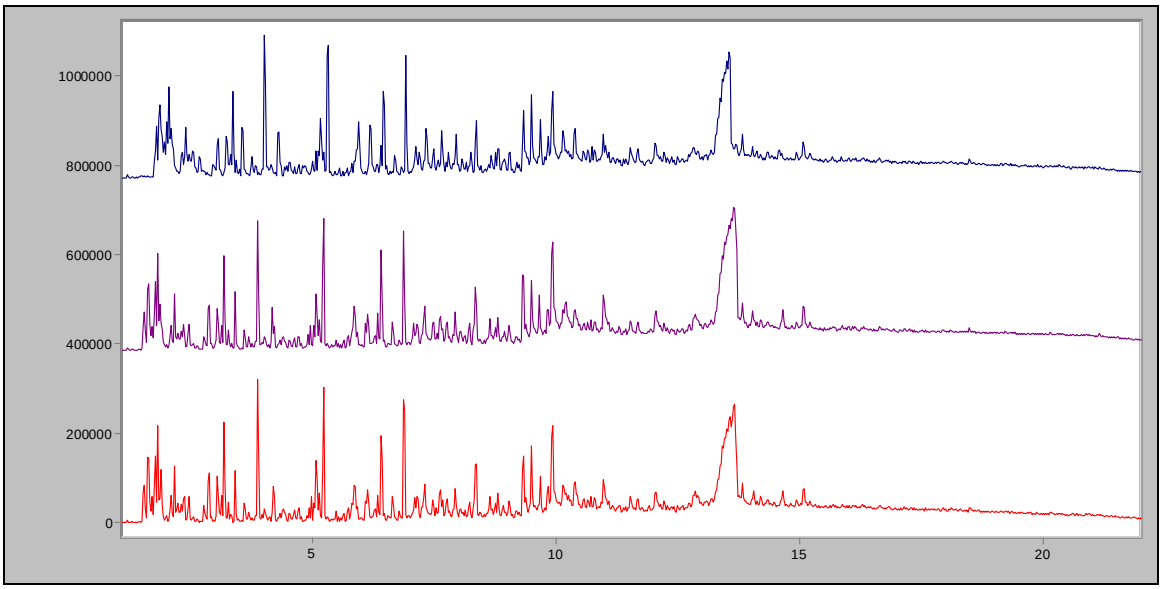

Figure 274: From top to bottom: Canon 343 Run 3, Canon 343 Run 4 and Canon 347 Run 1 ink on paper sample pyrograms.

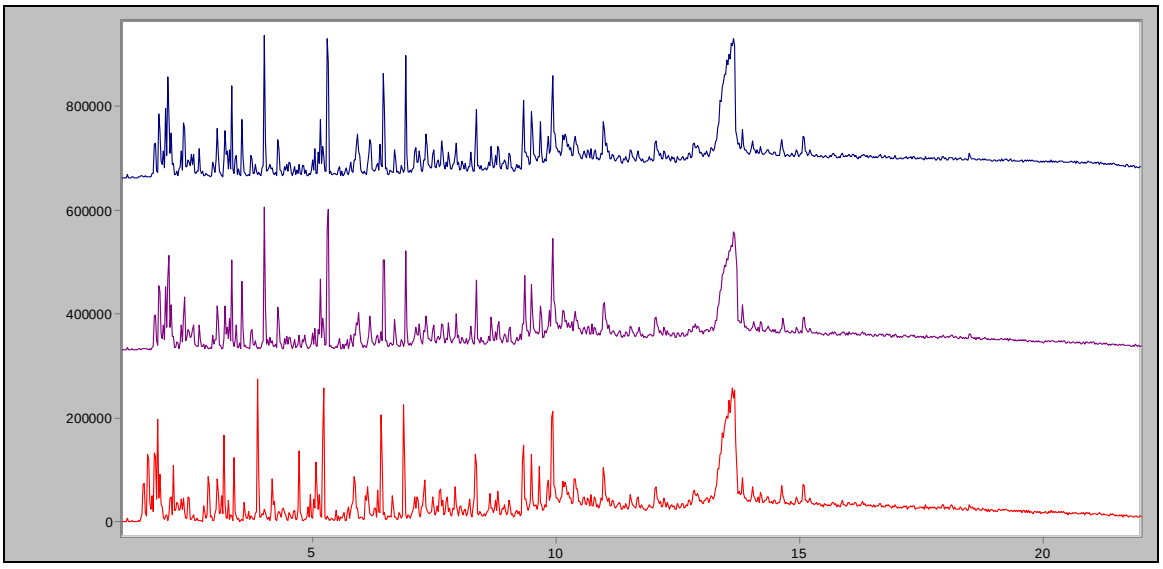

Figure 275: From top to bottom: Canon 347 Run 2, Canon 348 Run 1 and Canon 348 Run 2 ink on paper sample pyrograms.

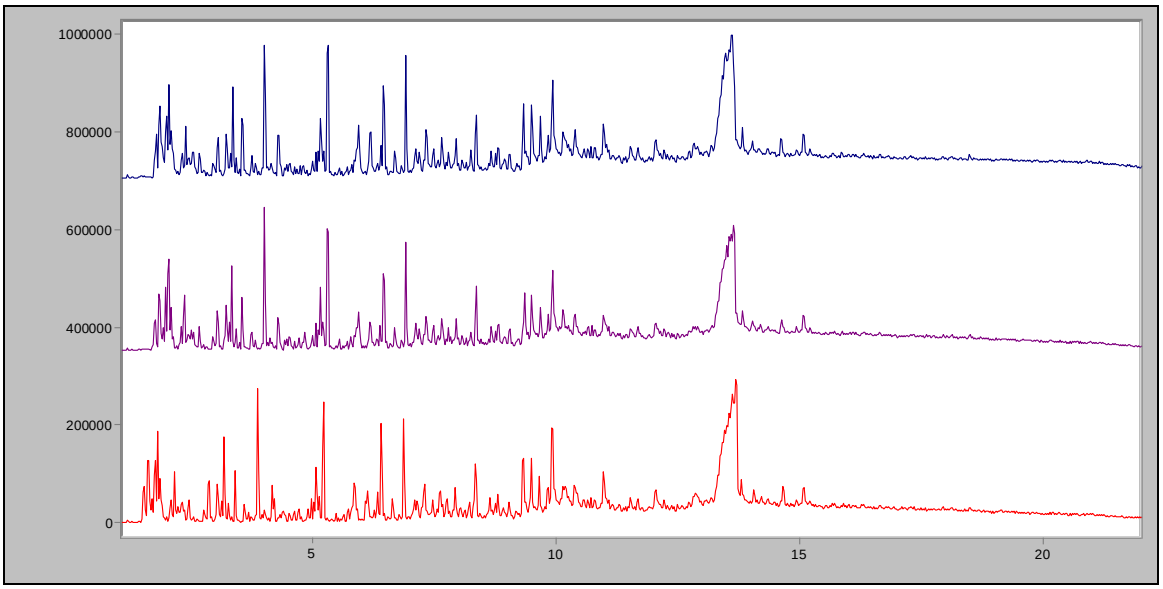

Figure 276: From top to bottom: Canon 348 Run 3, Canon 349 Run 1 and Canon 349 Run 2 ink on paper sample pyrograms.

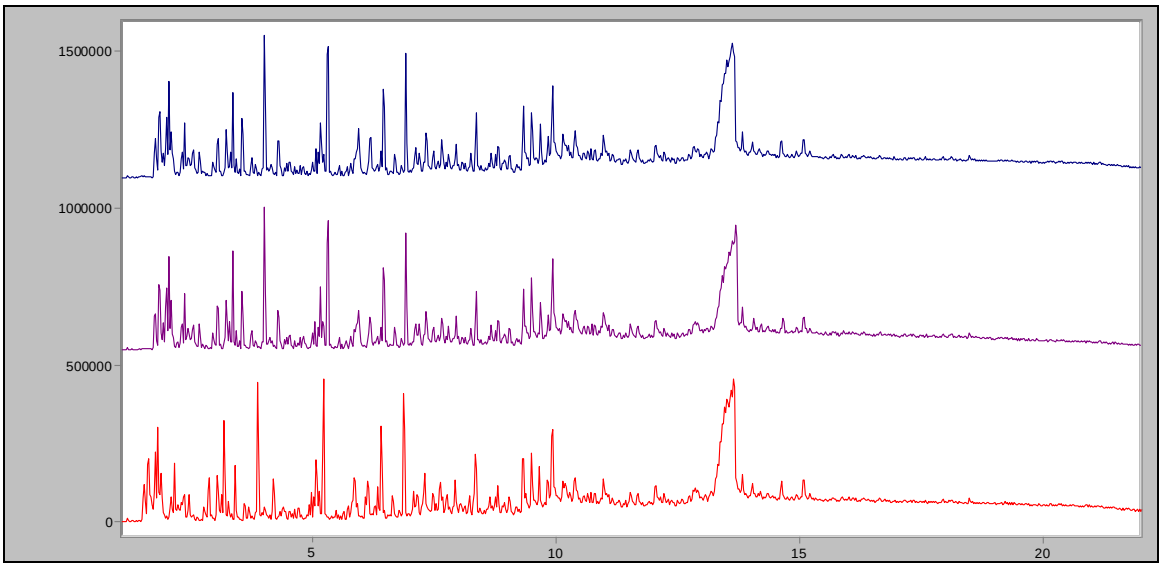

Figure 277: From top to bottom: Canon 349 Run 3, Canon 350 Run 1 and Canon 350 Run 2 ink on paper sample pyrograms.

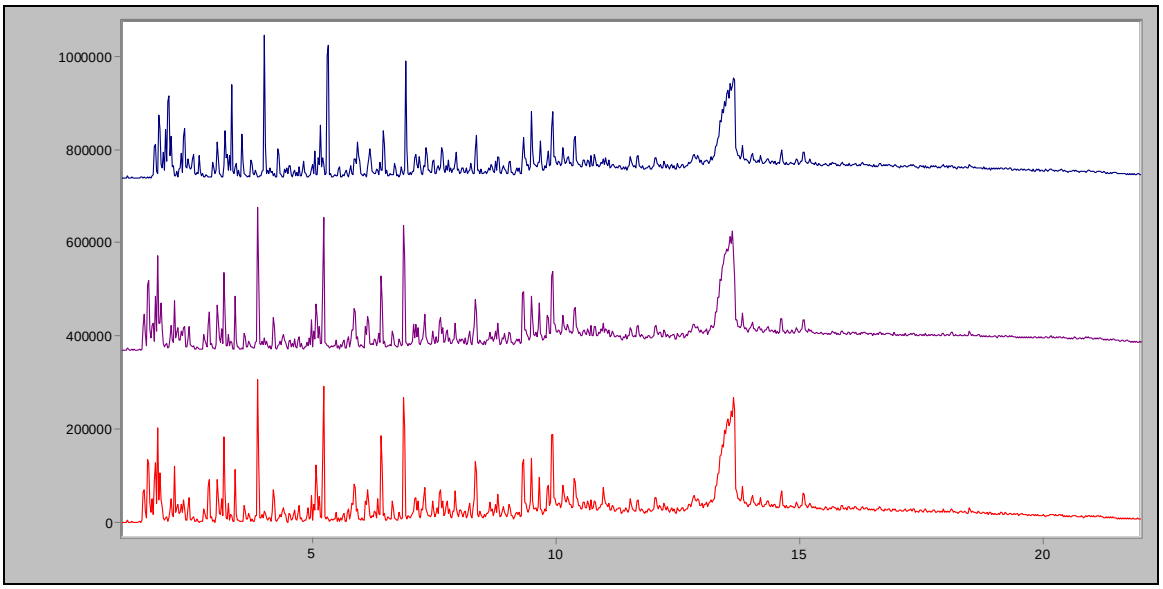

Figure 278: From top to bottom: Canon 351 Run 1, Canon 351 Run 2 and Canon 352 Run 1 ink on paper sample pyrograms.

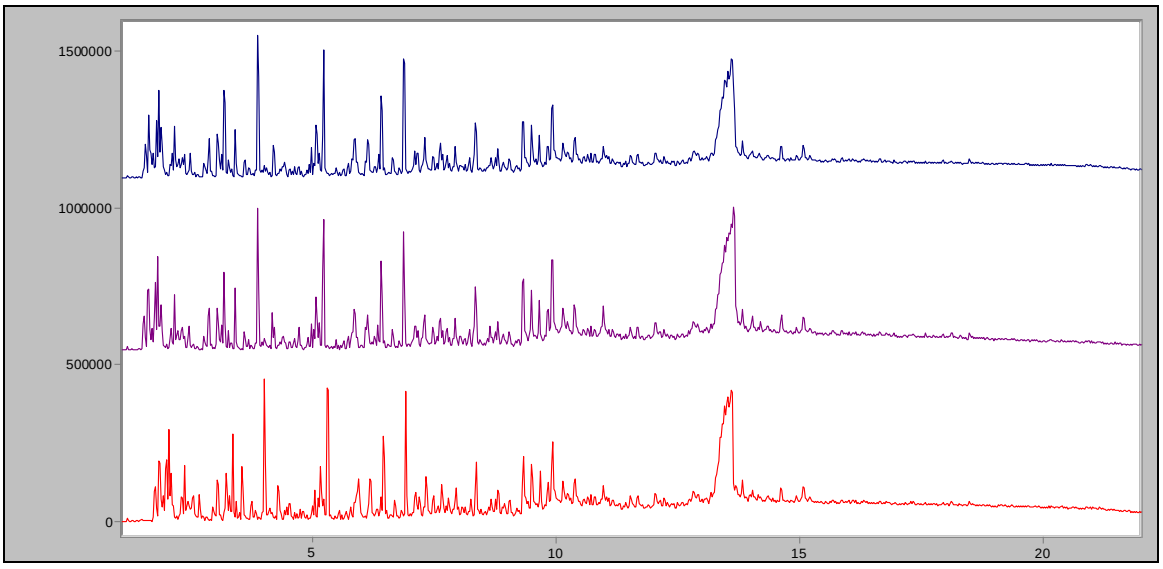

Figure 279: From top to bottom: Canon 352 Run 2, Canon 353 Run 1 and Canon 353 Run 2 ink on paper sample pyrograms.

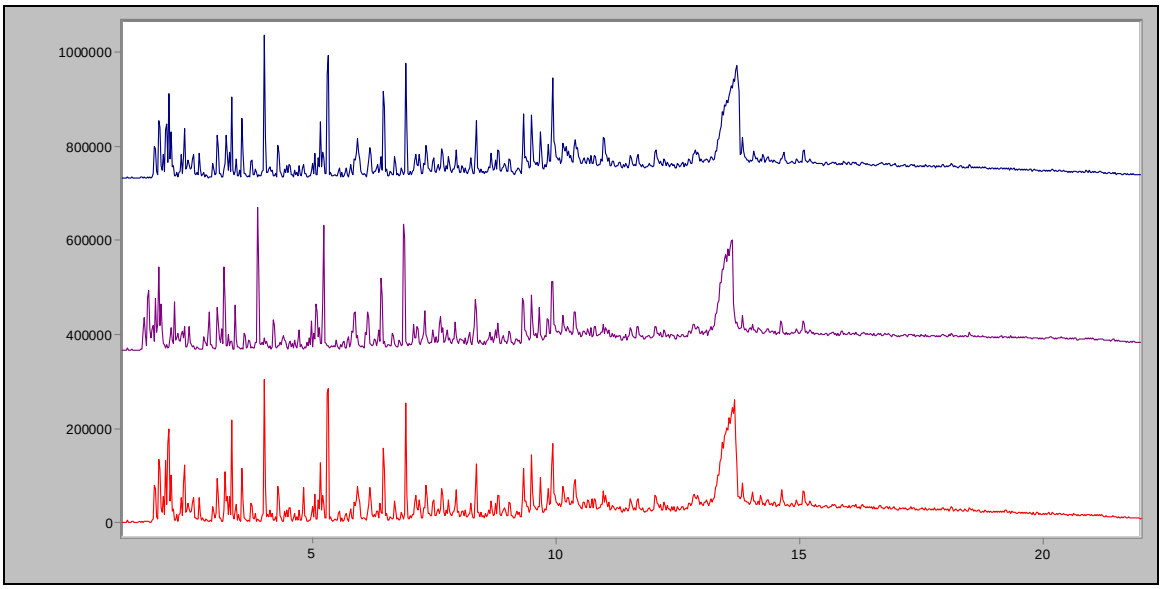

Figure 280: From top to bottom: Canon 372 Run 1, Canon 372 Run 2 and Canon 373 Run 1 ink on paper sample pyrograms.

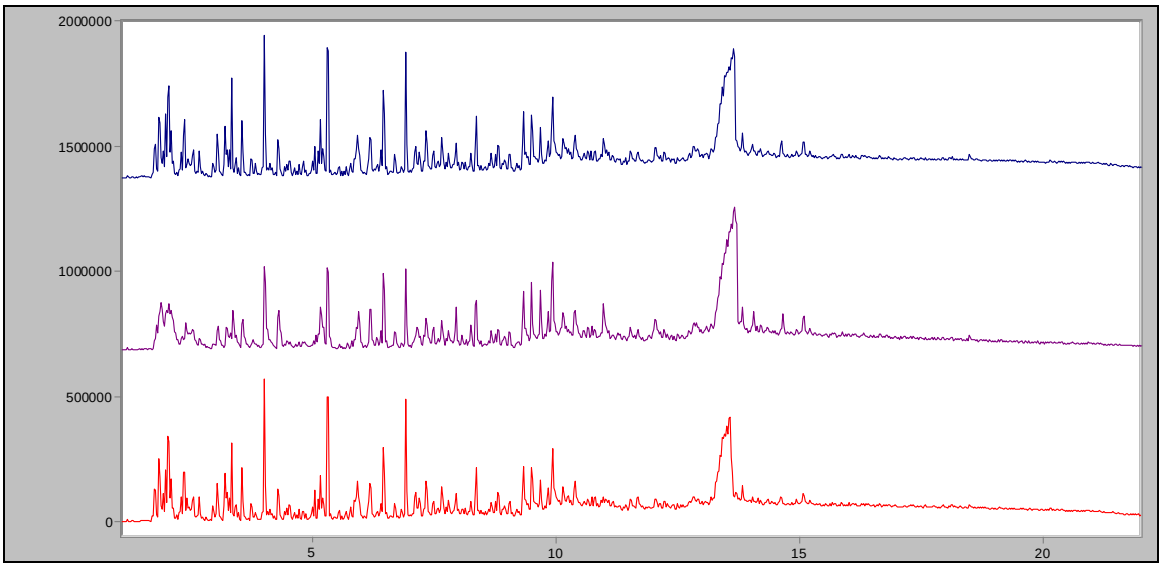

Figure 281: From top to bottom: Canon 373 Run 2, Canon 374 Run 1 and Canon 374 Run 2 ink on paper sample pyrograms.

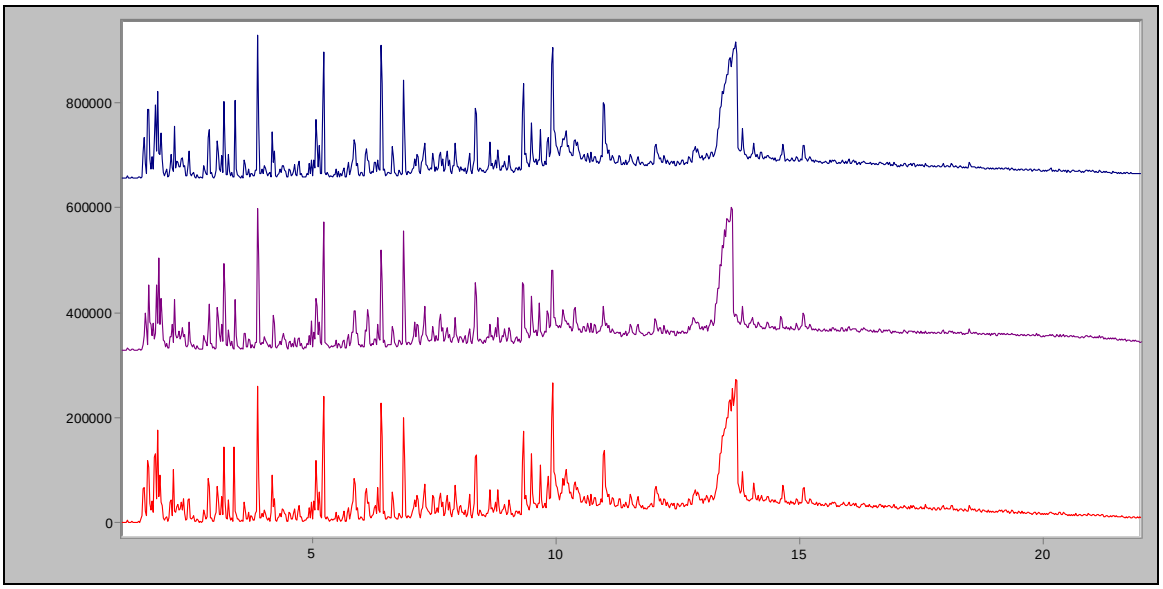

Figure 282: From top to bottom: Canon 375 Run 1, Canon 375 Run 2 and Canon 376 Run 1 ink on paper sample pyrograms.

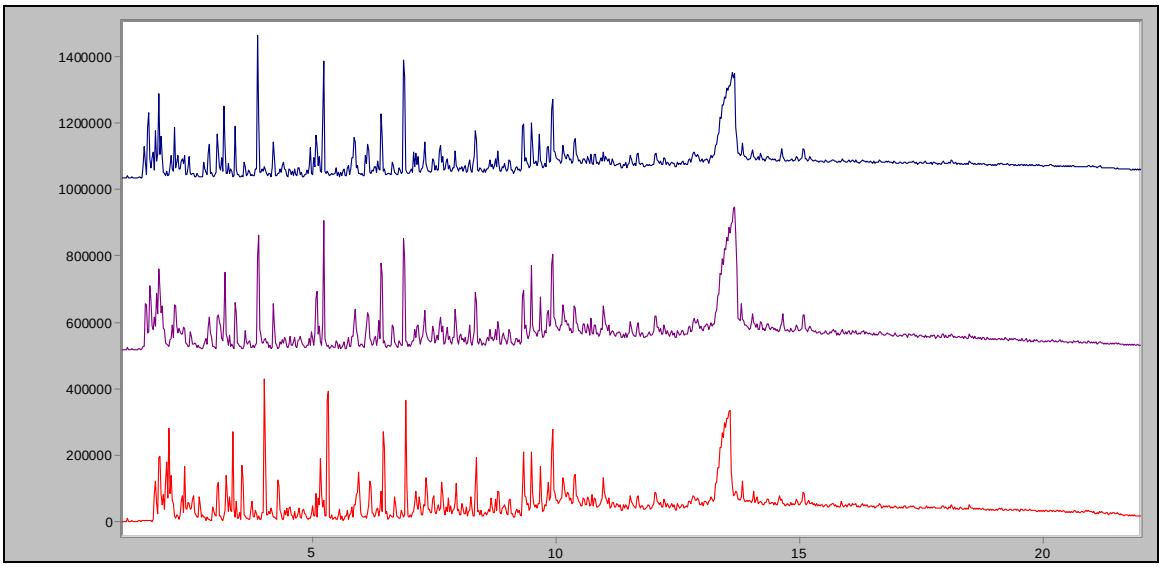

Figure 283: From top to bottom: Canon 376 Run 2, Canon 377 Run 1 and Canon 377 Run 2 ink on paper sample pyrograms.

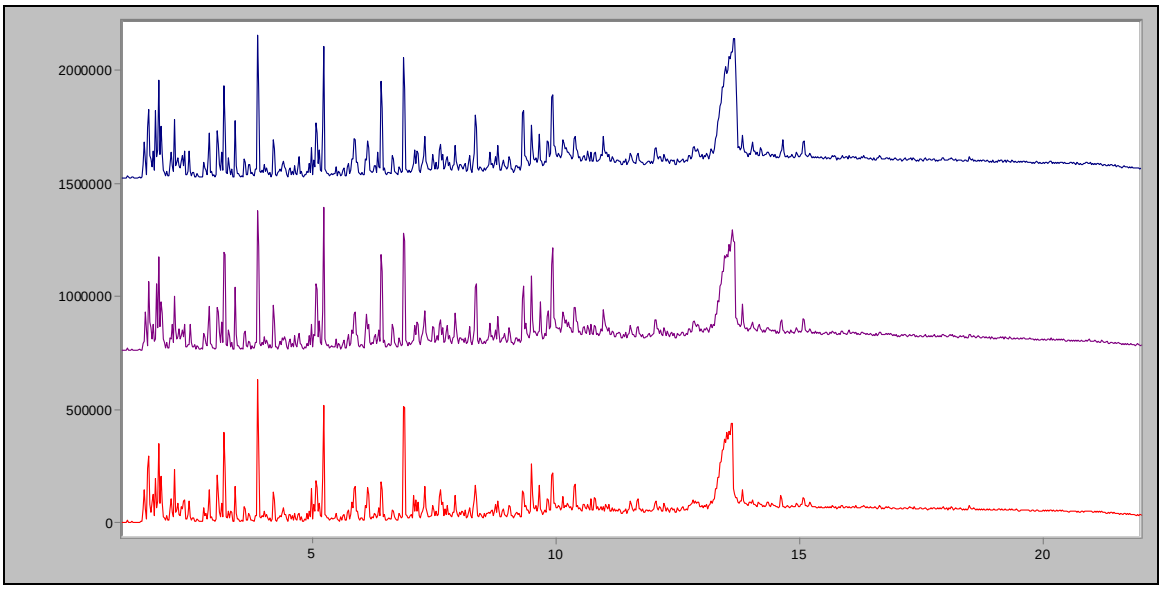

Figure 284: From top to bottom: Canon 377 Run 3, Canon 378 Run 1 and Canon 378 Run 2 ink on paper sample pyrograms.

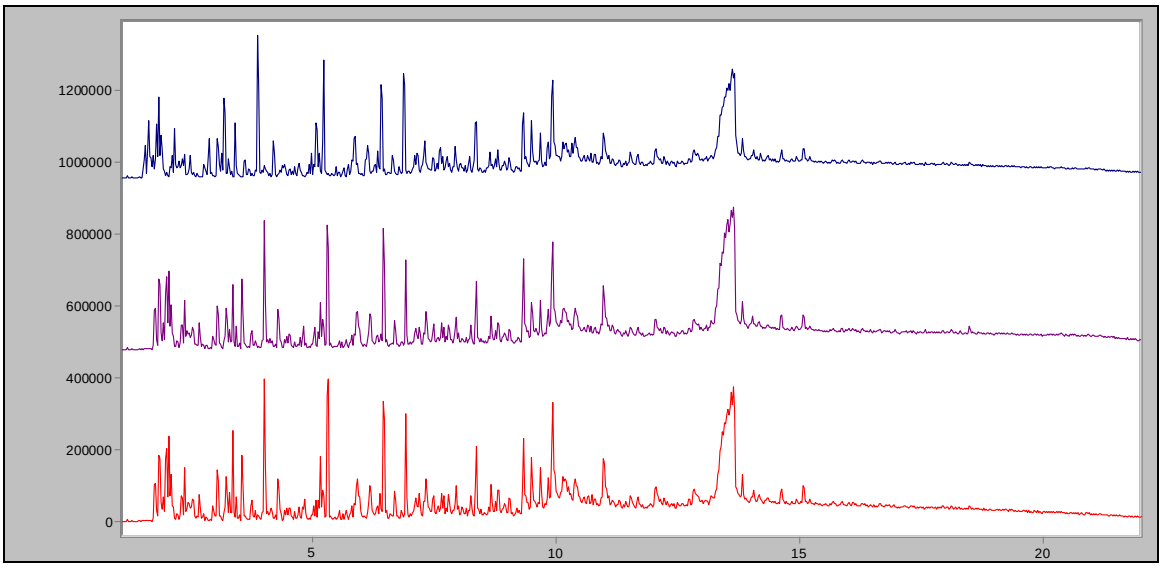

Figure 285: From top to bottom: Canon 379 Run 1, Canon 379 Run 2 and Canon 380 Run 1 ink on paper sample pyrograms.

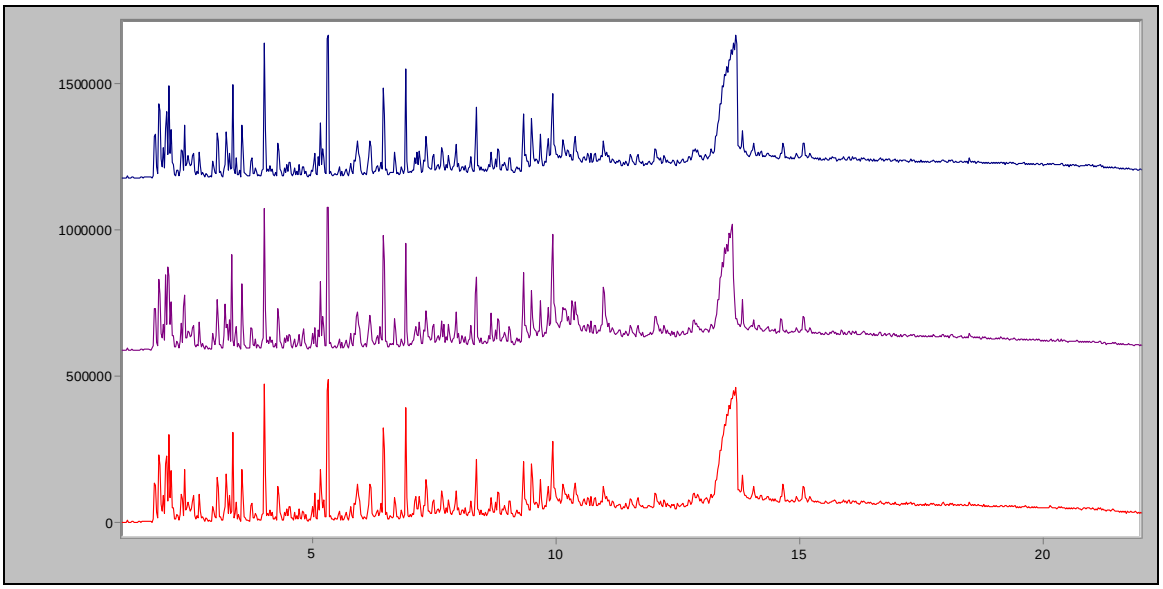

Figure 286: From top to bottom: Canon 380 Run 2, Canon 381 Run 1 and Canon 381 Run 2 ink on paper sample pyrograms.

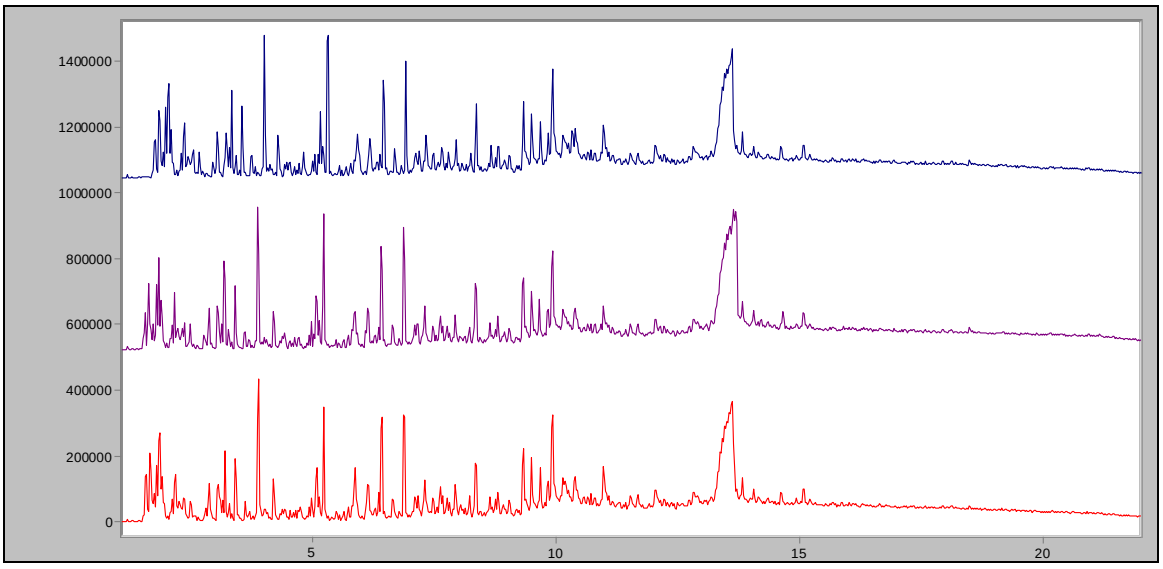

Figure 287: From top to bottom: Canon 382 Run 1, Canon 382 Run 2 and Canon 383 Run 1 ink on paper sample pyrograms.

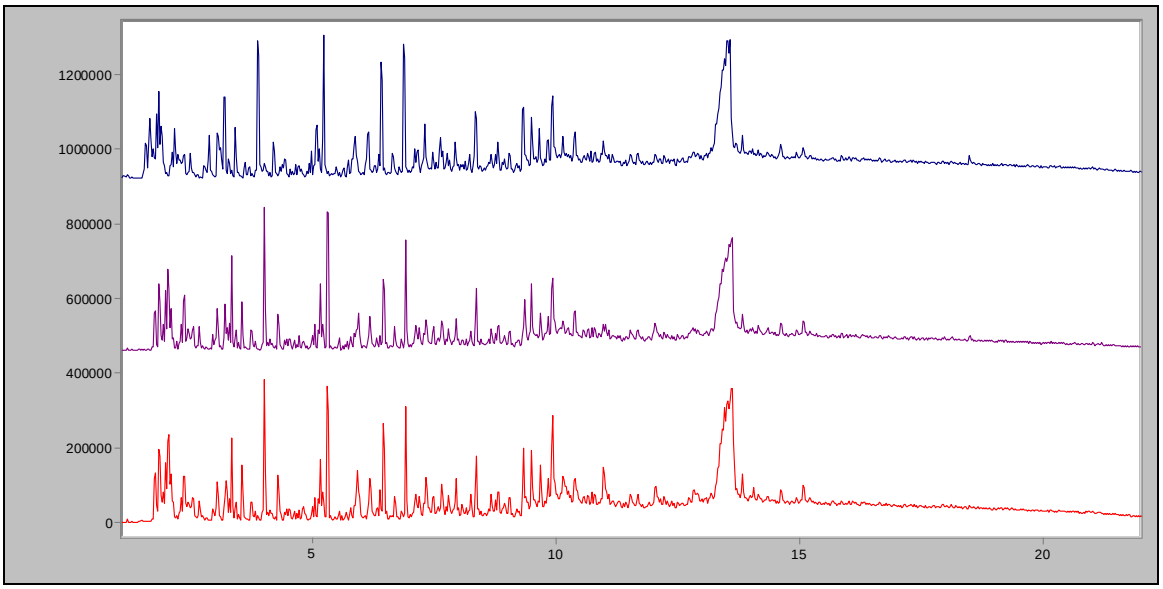

Figure 288: From top to bottom: Canon 383 Run 2, Canon 384 Run 1 and Canon 384 Run 2 ink on paper sample pyrograms.

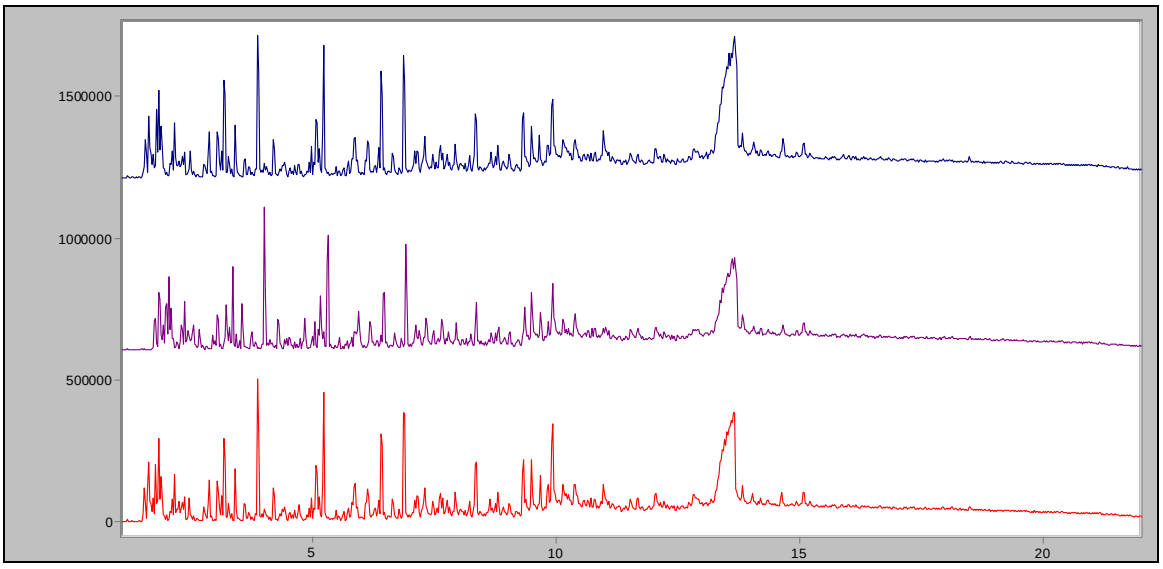

Figure 289: From top to bottom: Canon 384 Run 3, Canon 385 Run 1 and Canon 385 Run 2 ink on paper sample pyrograms.

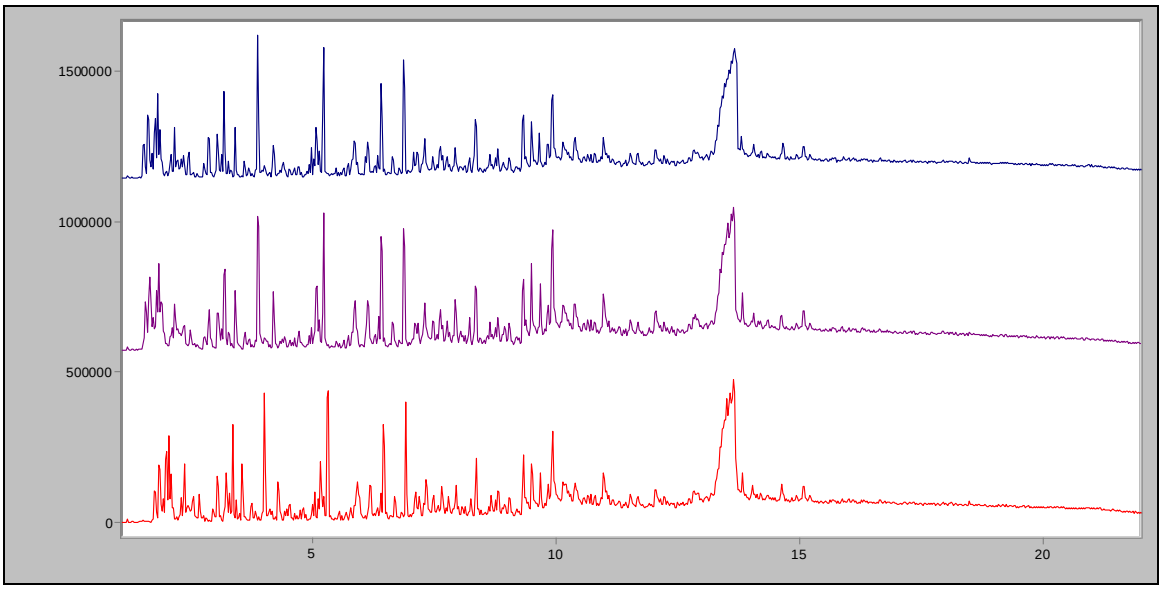

Figure 290: From top to bottom: Canon 385 Run 3, Canon 386 Run 1 and Canon 386 Run 2 ink on paper sample pyrograms.

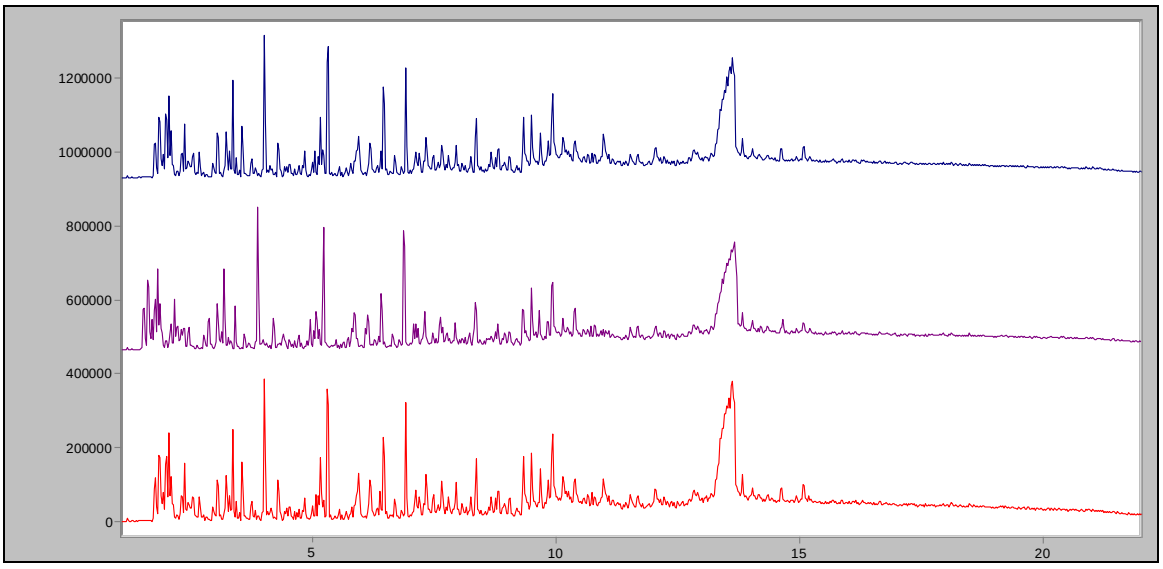

Figure 291: From top to bottom: Canon 387 Run 1, Canon 387 Run 2 and Canon 388 Run 1 ink on paper sample pyrograms.

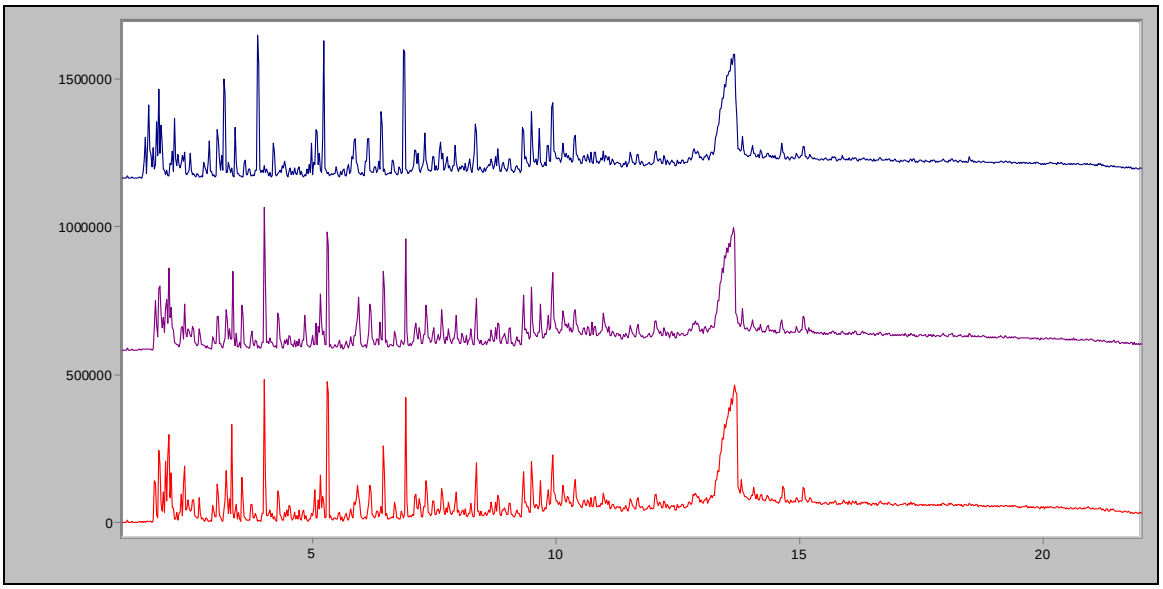

Figure 292: From top to bottom: Canon 388 Run 2, Canon 389 Run 1 and Canon 389 Run 2 ink on paper sample pyrograms.

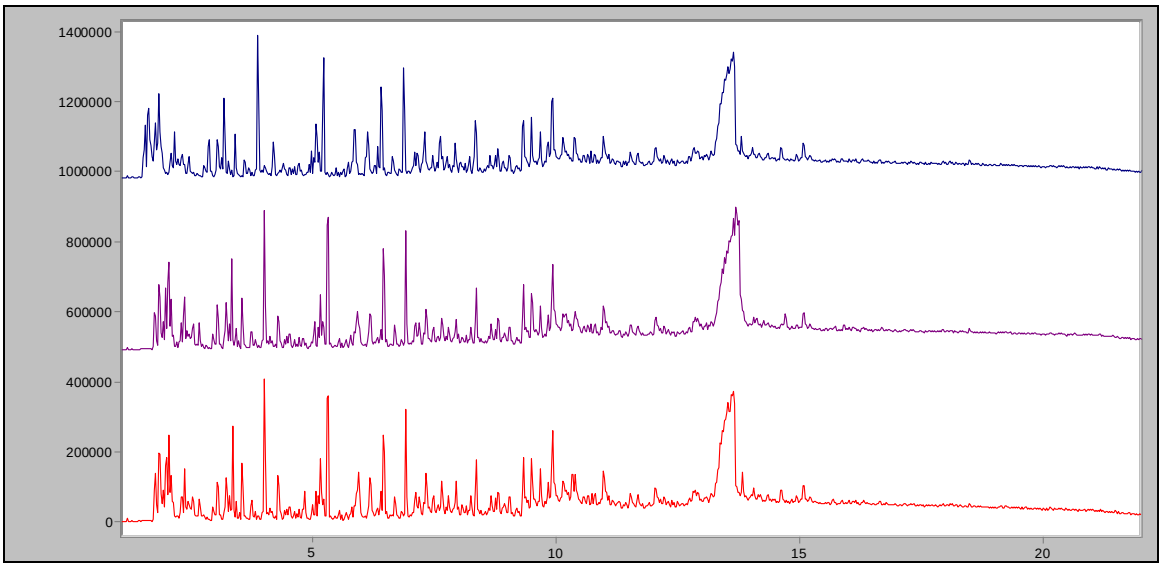

Figure 293: From top to bottom: Canon 390 Run 1, Canon 390 Run 2 and Canon 391 Run 1 ink on paper sample pyrograms.

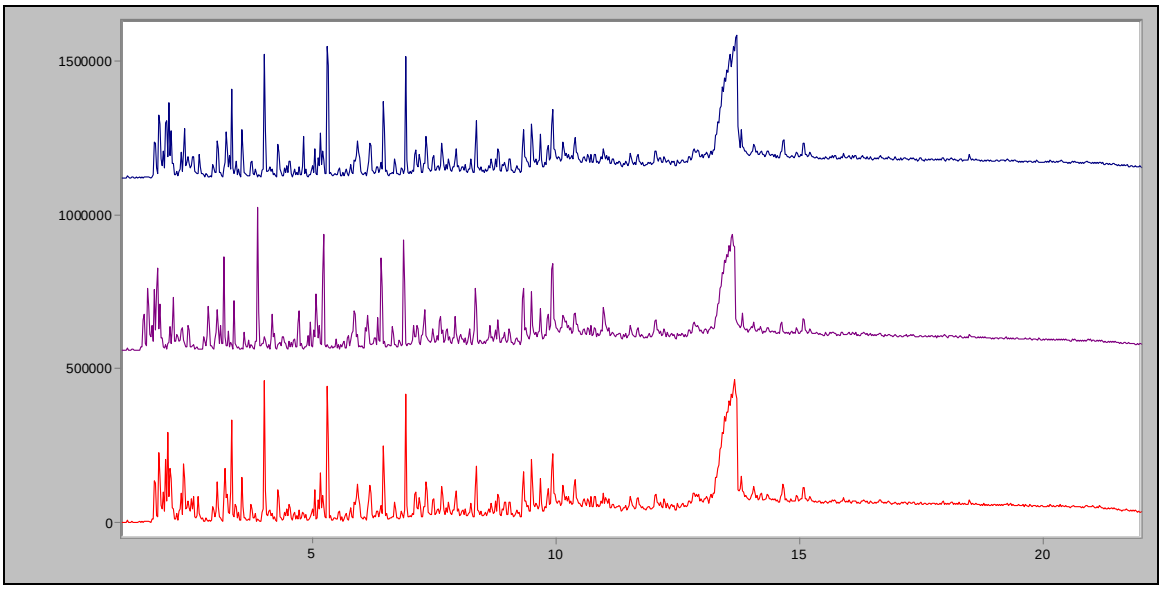

Figure 294: From top to bottom: Canon 391 Run 2, Canon 392 Run 1 and Canon 392 Run 2 ink on paper sample pyrograms.

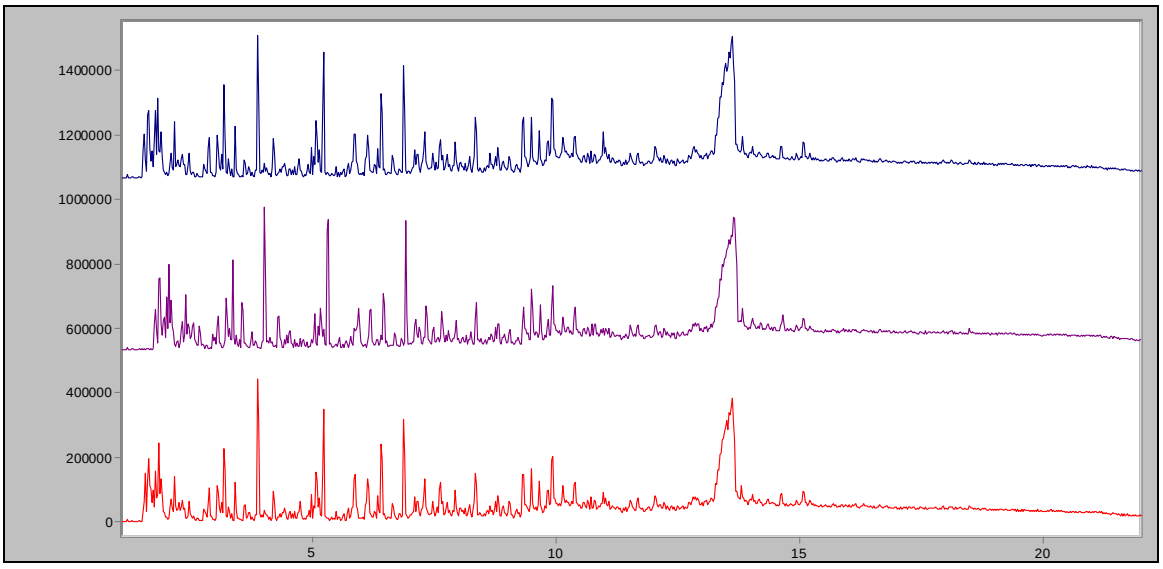

Figure 295: From top to bottom: Canon 393 Run 1, Canon 393 Run 2 and Canon 394 Run 1 ink on paper sample pyrograms.

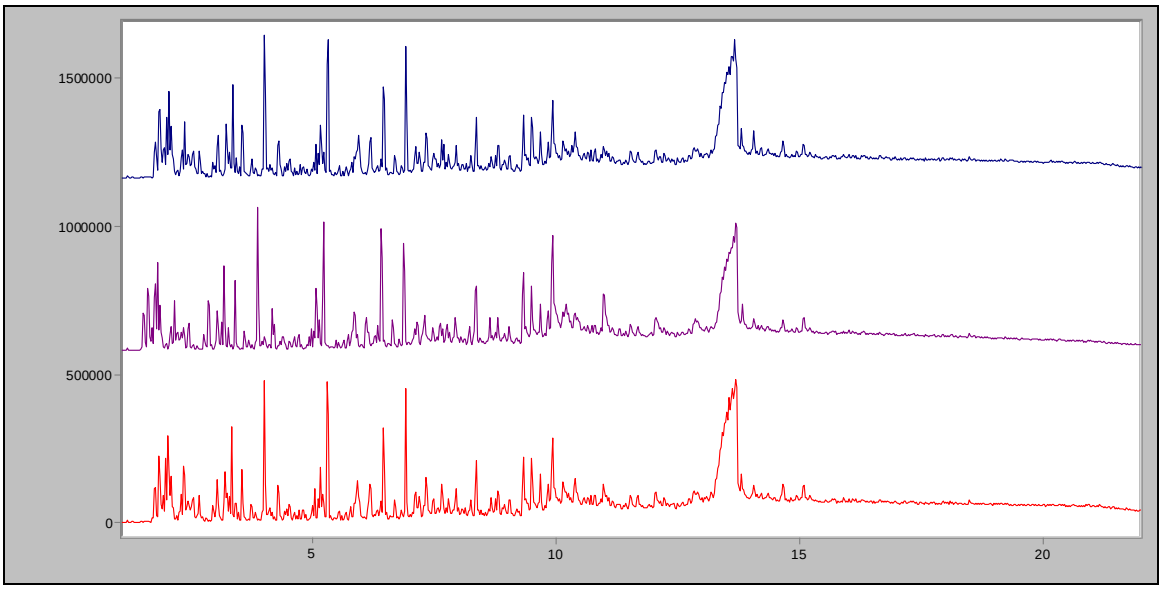

Figure 296: From top to bottom: Canon 394 Run 2, Canon 395 Run 1 and Canon 395 Run 2 ink on paper sample pyrograms.

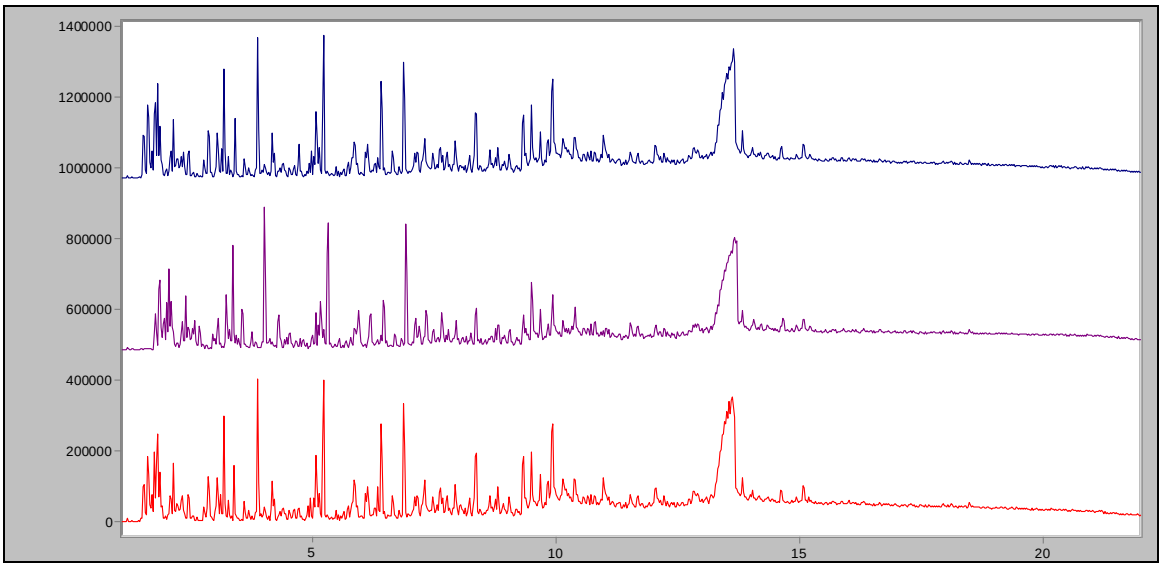

Figure 297: From top to bottom: Canon 396 Run 1, Canon 396 Run 2 and Canon 397 Run 1 ink on paper sample pyrograms.

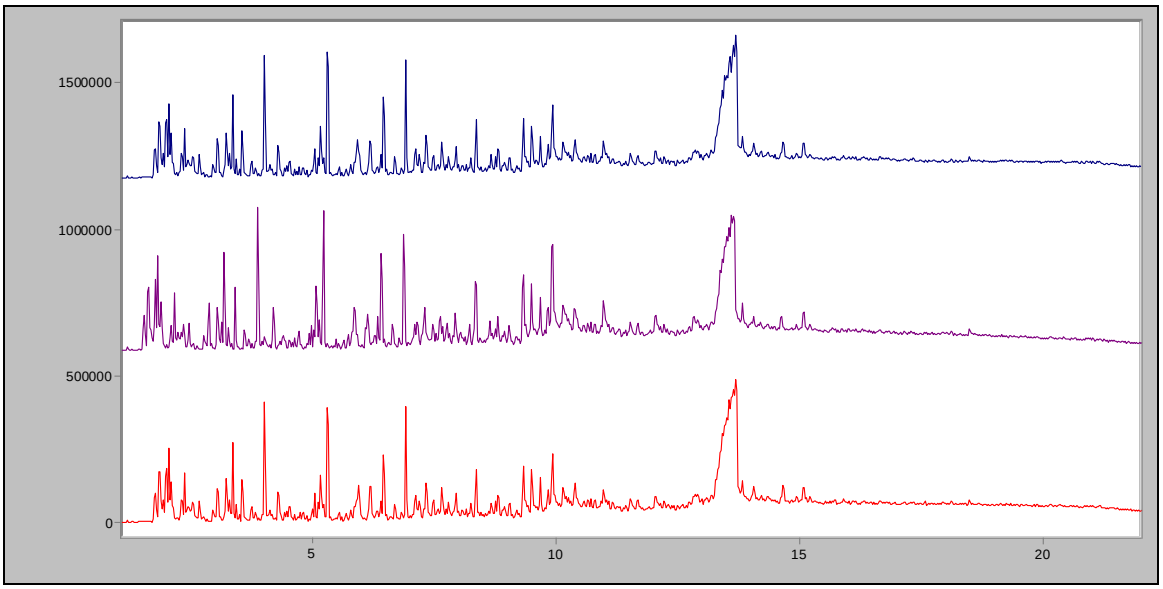

Figure 298: From top to bottom: Canon 397 Run 2, Canon 398 Run 1 and Canon 398 Run 2 ink on paper sample pyrograms.

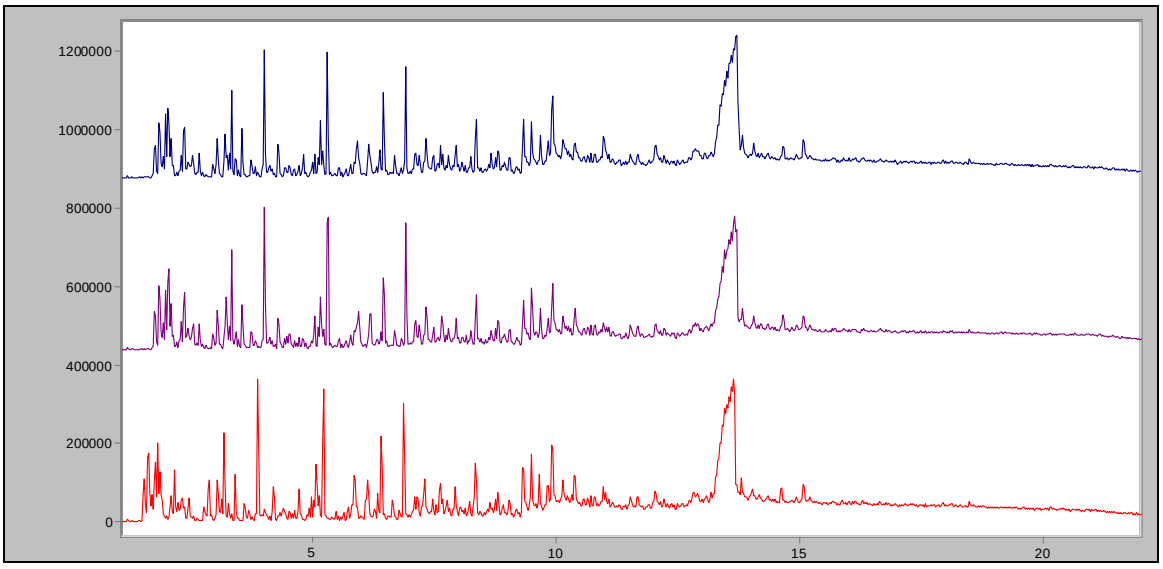

Figure 299: From top to bottom: Canon 399 Run 1, Canon 399 Run 2 and Canon 400 Run 1 ink on paper sample pyrograms.

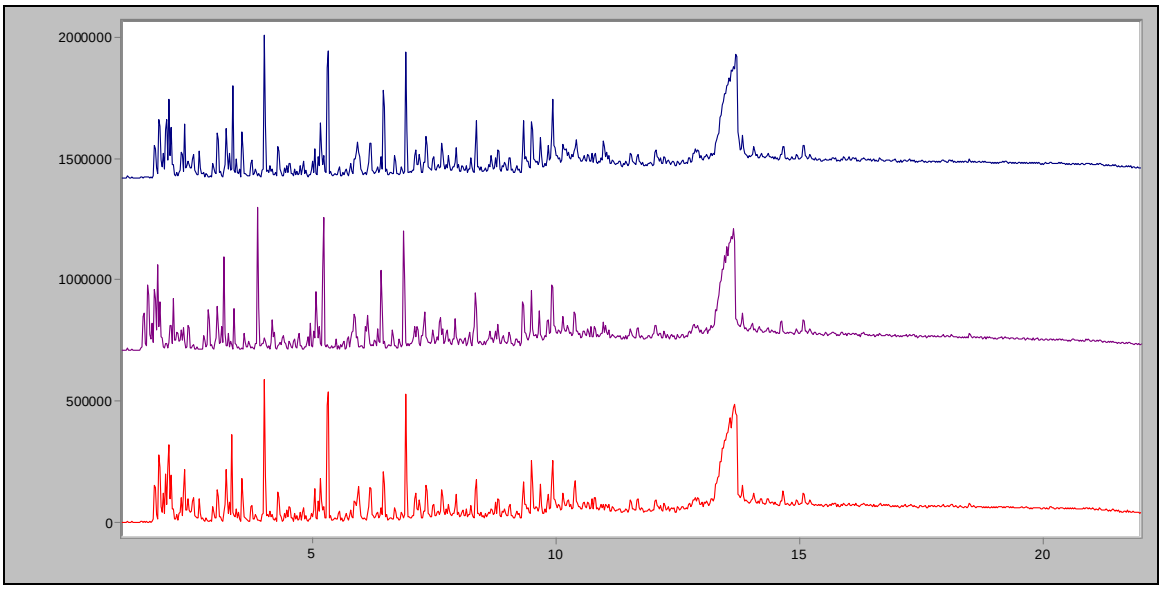

Figure 300: From top to bottom: Canon 400 Run 2, Canon 401 Run 1 and Canon 401 Run 2 ink on paper sample pyrograms.

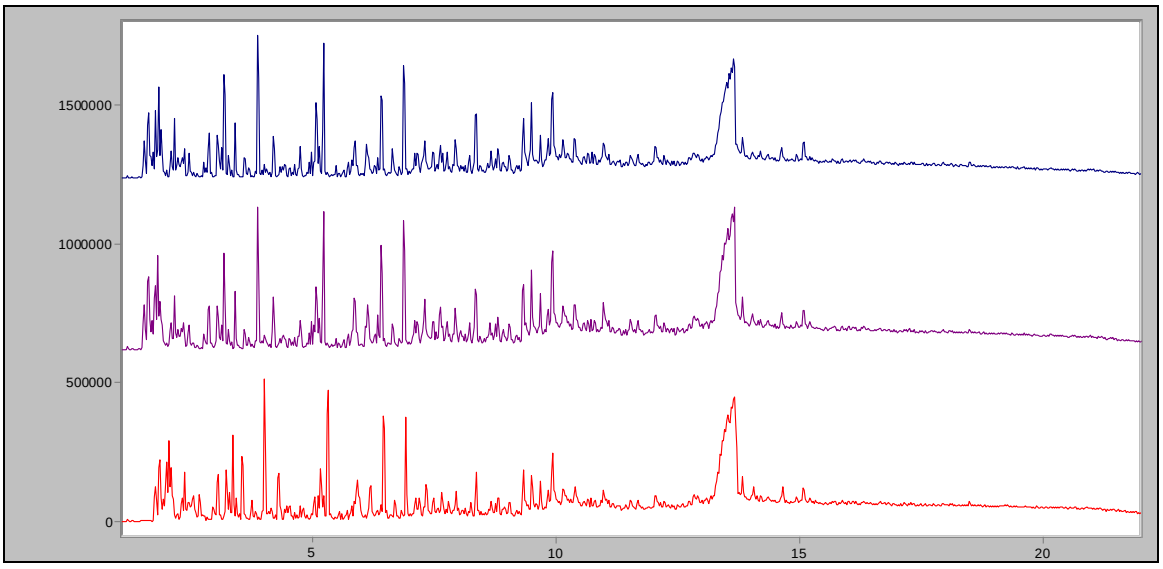

Figure 301: From top to bottom: Canon 402 Run 1, Canon 402 Run 2 and Canon 402 Run 3 ink on paper sample pyrograms.

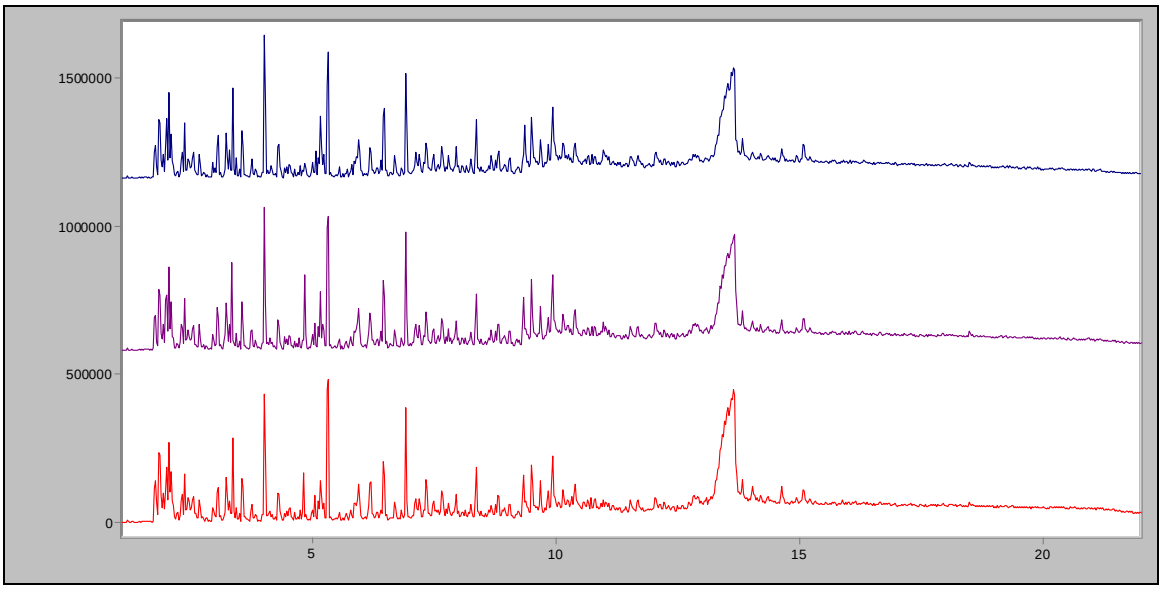

Figure 302: From top to bottom: Canon 403 Run 1, Canon 403 Run 2 and Canon 403 Run 3 ink on paper sample pyrograms.

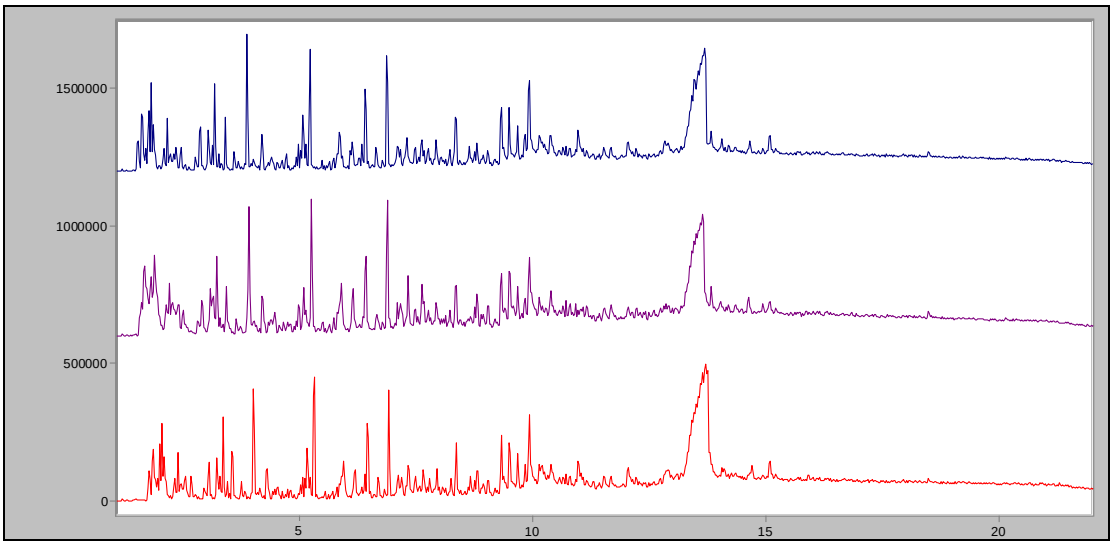

Figure 303: From top to bottom: Canon 404 Run 1, Canon 404 Run 2 and Canon 404 Run 3 ink on paper sample pyrograms.

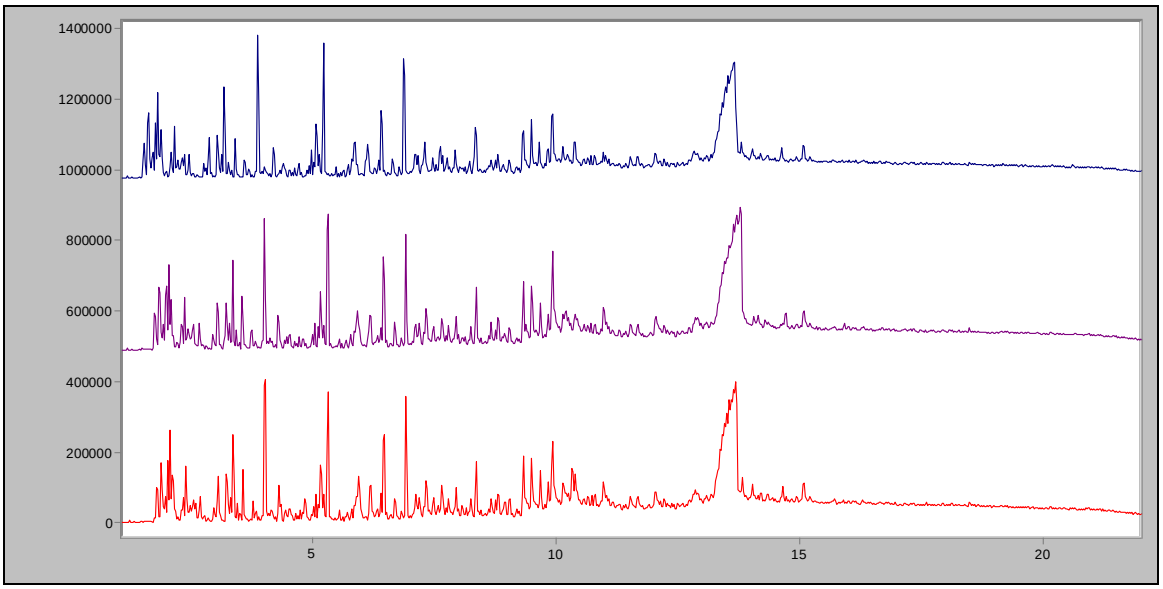

Figure 304: From top to bottom: Canon 405 Run 1, Canon 405 Run 2 and Canon 406 Run 1 ink on paper sample pyrograms.

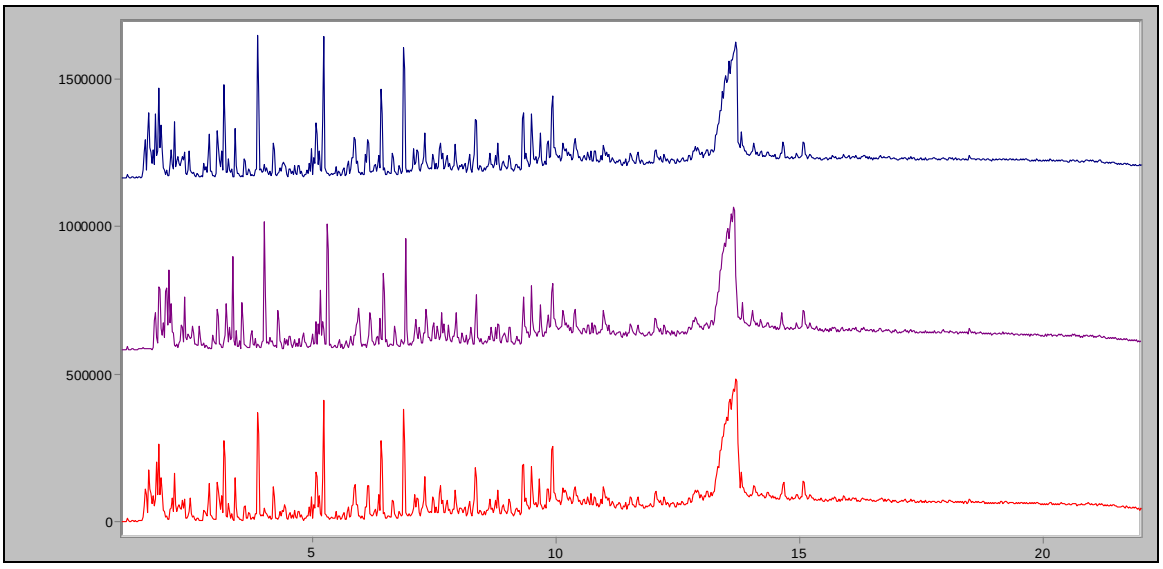

Figure 305: From top to bottom: Canon 406 Run 2, Canon 407 Run 1 and Canon 407 Run 2 ink on paper sample pyrograms.

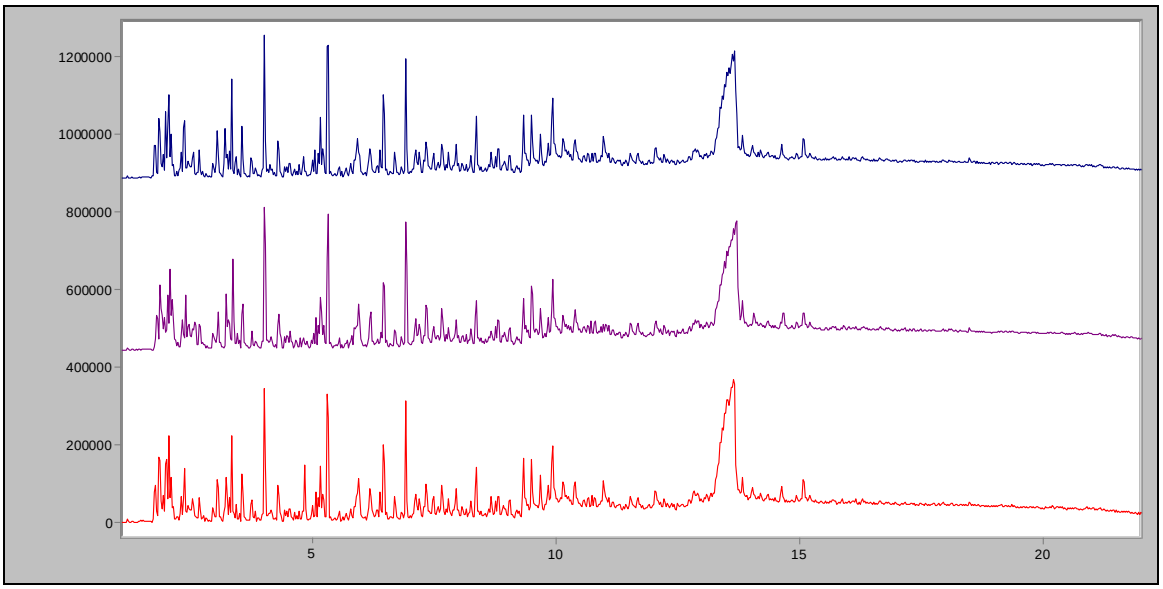

Figure 306: From top to bottom: Canon 408 Run 1, Canon 408 Run 2 and Canon 409 Run 1 ink on paper sample pyrograms.

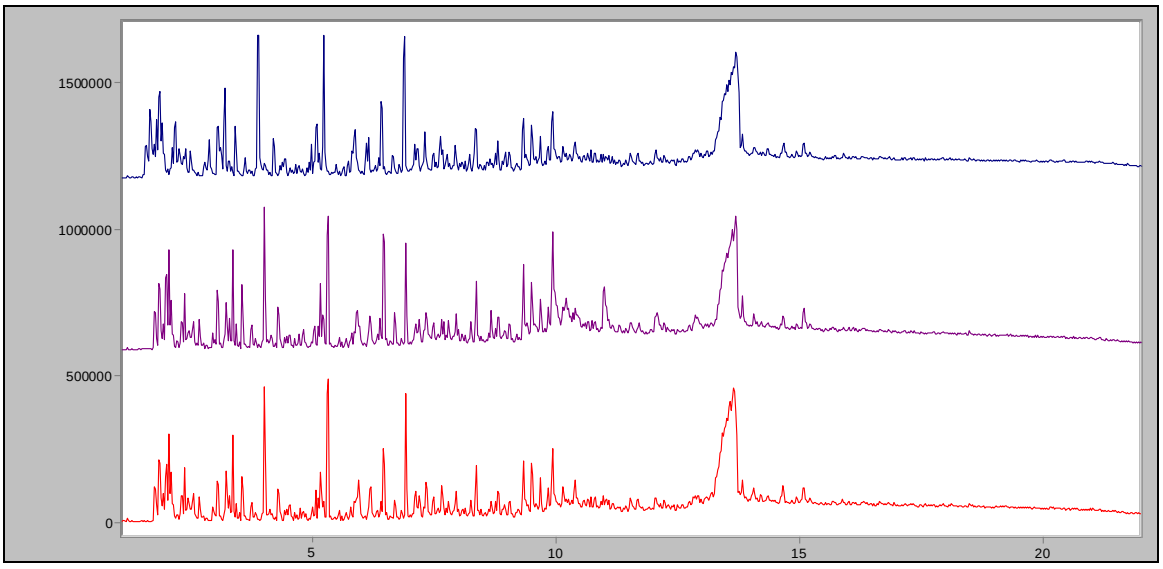

Figure 307: From top to bottom: Canon 409 Run 2, Canon 410 Run 1 and Canon 410 Run 2 ink on paper sample pyrograms.

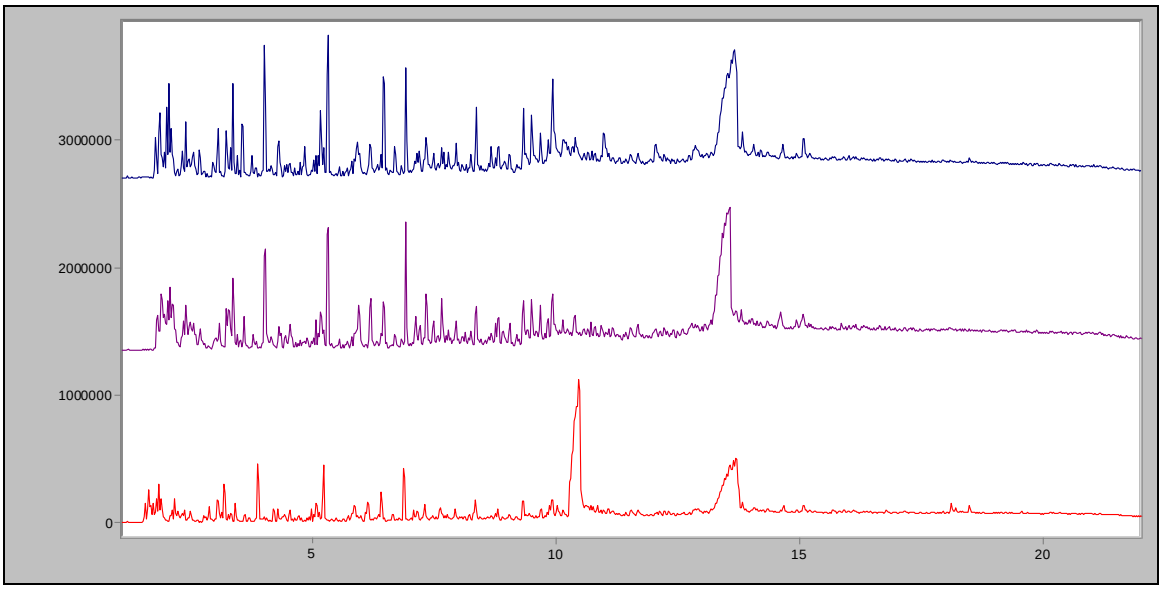

Figure 308: From top to bottom: Canon 411 Run 1, Canon 411 Run 2 and Canon 411 Run 3 ink on paper sample pyrograms.

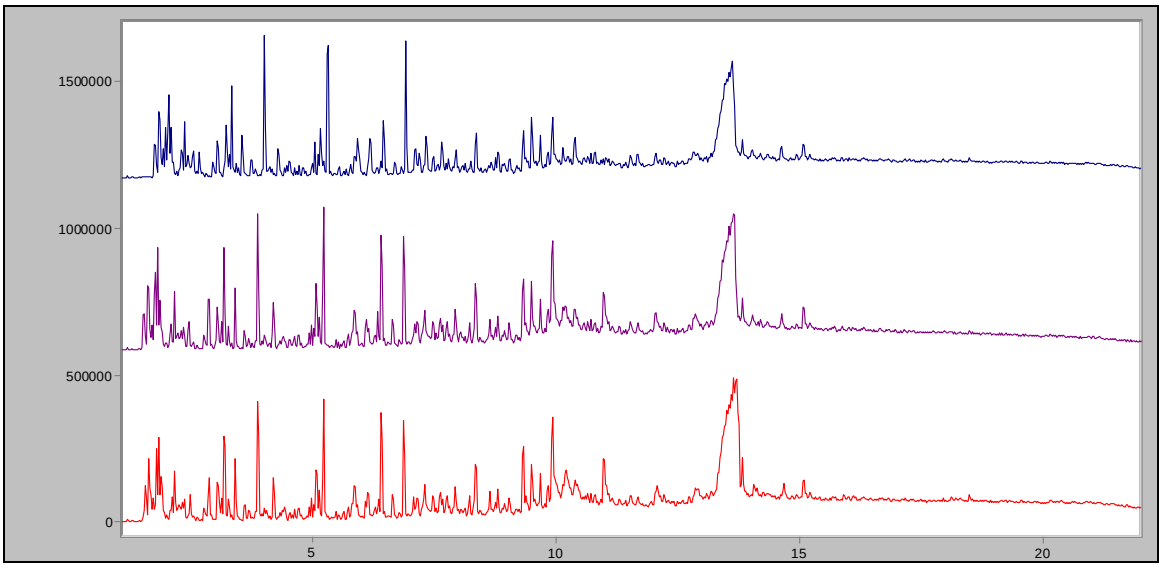

Figure 309: From top to bottom: Canon 411 Run 4, Canon 412 Run 1 and Canon 412 Run 2 ink on paper sample pyrograms.

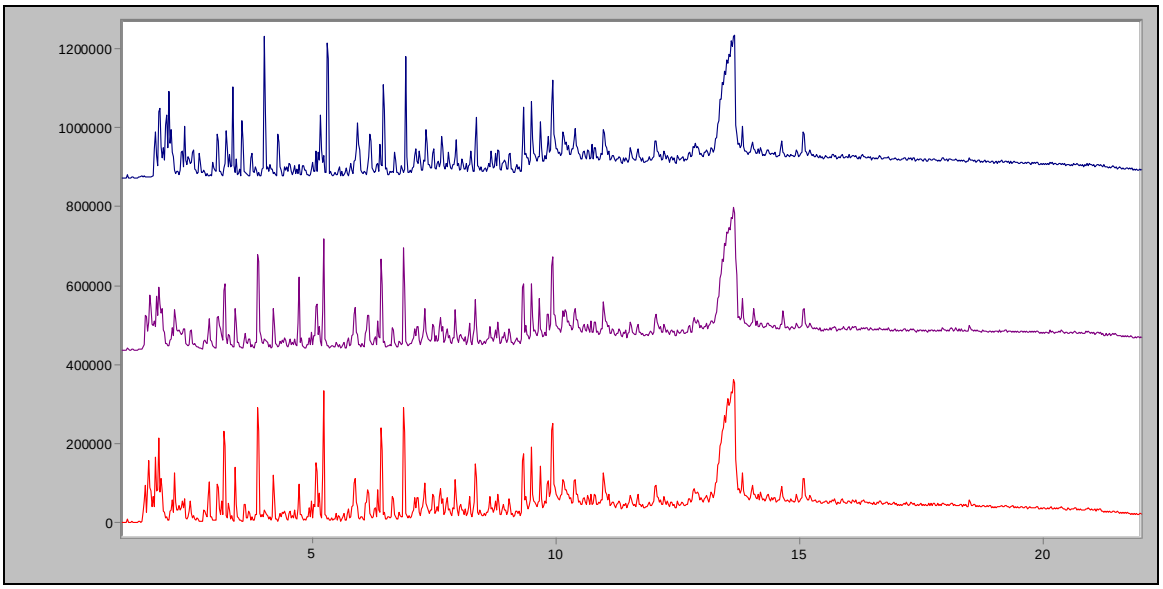

Figure 310: From top to bottom: Canon 413 Run 1, Canon 413 Run 2 and Canon 414 Run 1 ink on paper sample pyrograms.

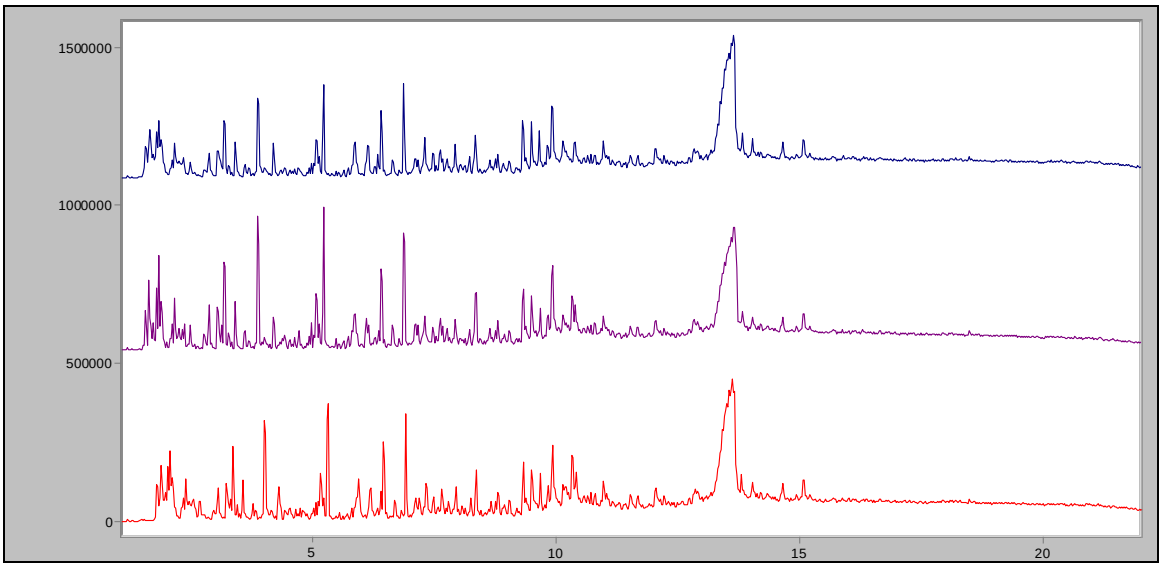

Figure 311: From top to bottom: Canon 414 Run 2, Canon 415 Run 1 and Canon 415 Run 2 ink on paper sample pyrograms.

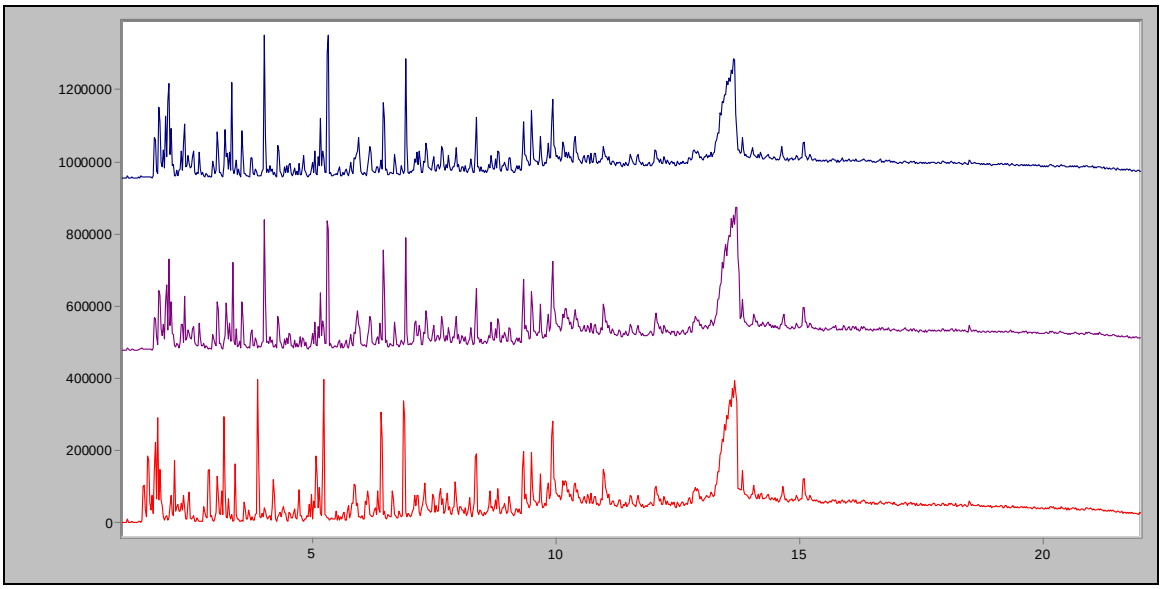

Figure 312: From top to bottom: Canon 416 Run 1, Canon 416 Run 2 and Canon 417 Run 1 ink on paper sample pyrograms.

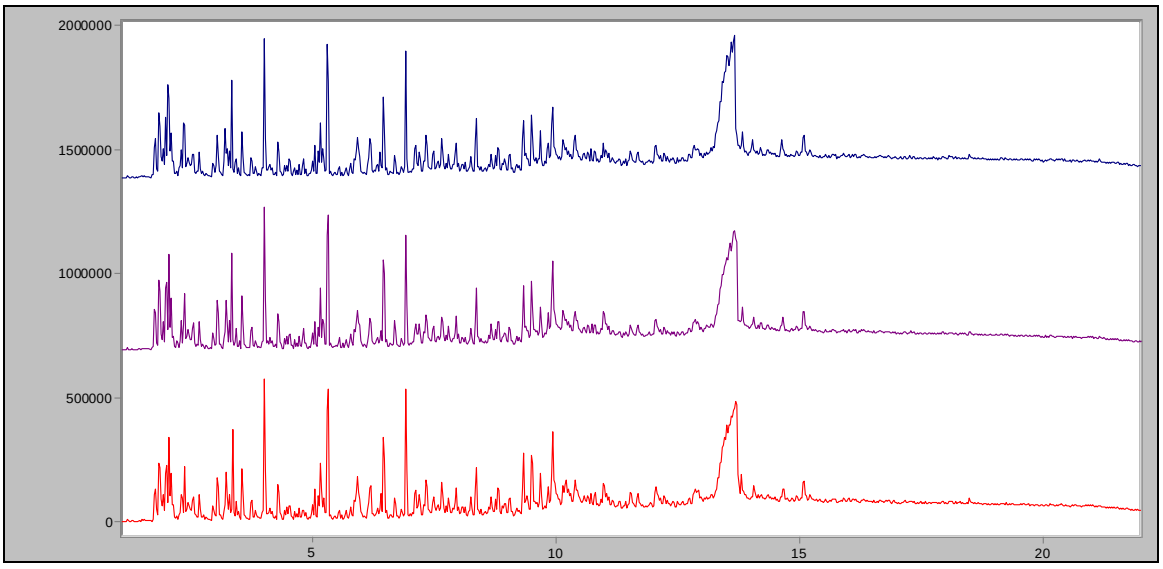

Figure 313: From top to bottom: Canon 417 Run 2, Canon 418 Run 1 and Canon 418 Run 2 ink on paper sample pyrograms.

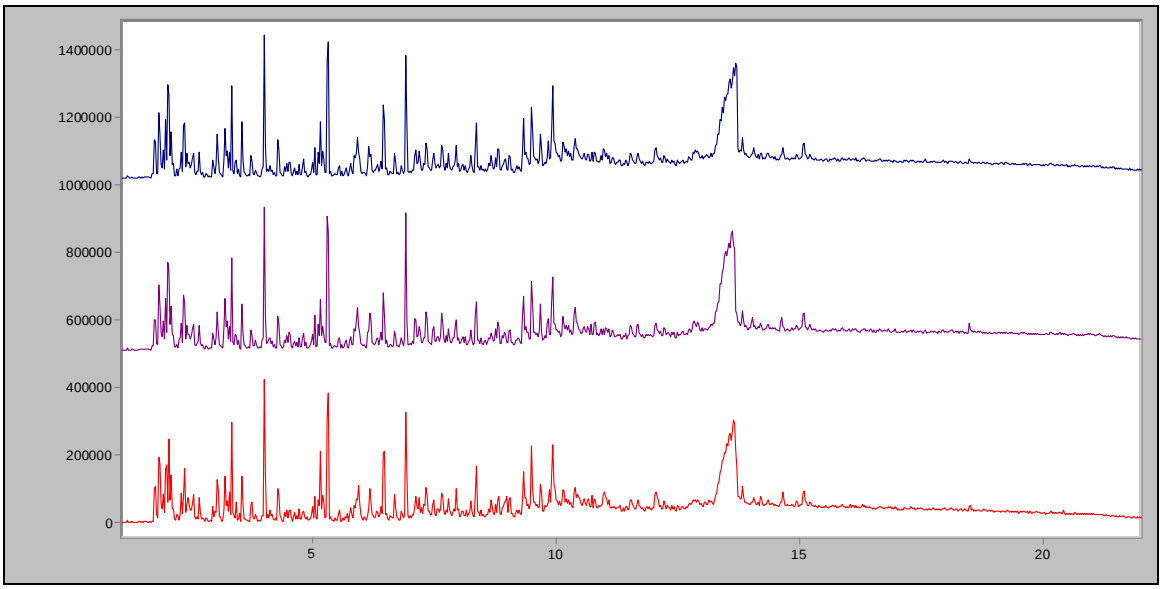

Figure 314: From top to bottom: Canon 419 Run 1, Canon 419 Run 2 and Canon 492 Run 1 ink on paper sample pyrograms.

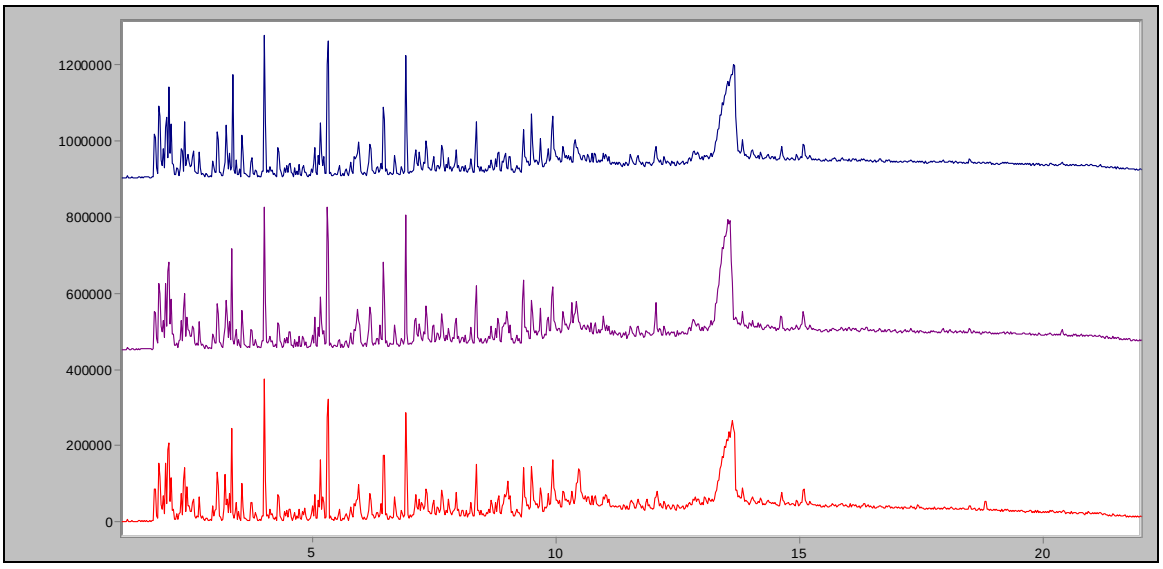

Figure 315: From top to bottom: Canon 492 Run 2, Canon 492 Run 3 and Canon 493 Run 1 ink on paper sample pyrograms.

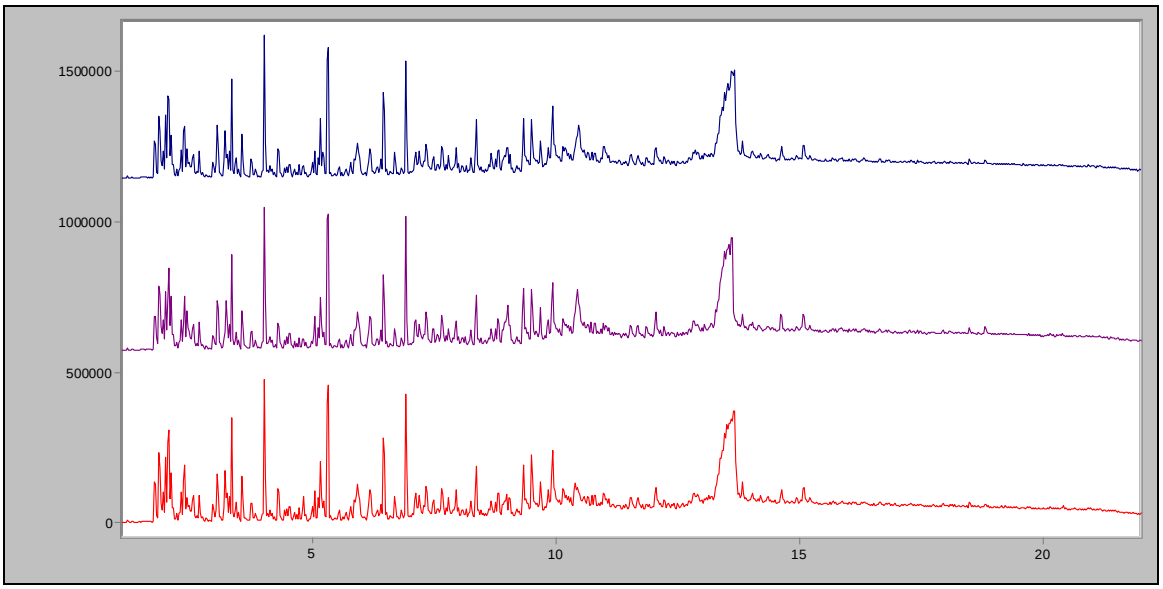

Figure 316: From top to bottom: Canon 493 Run 2, Canon 493 Run 3 and Canon 494 Run 1 ink on paper sample pyrograms.

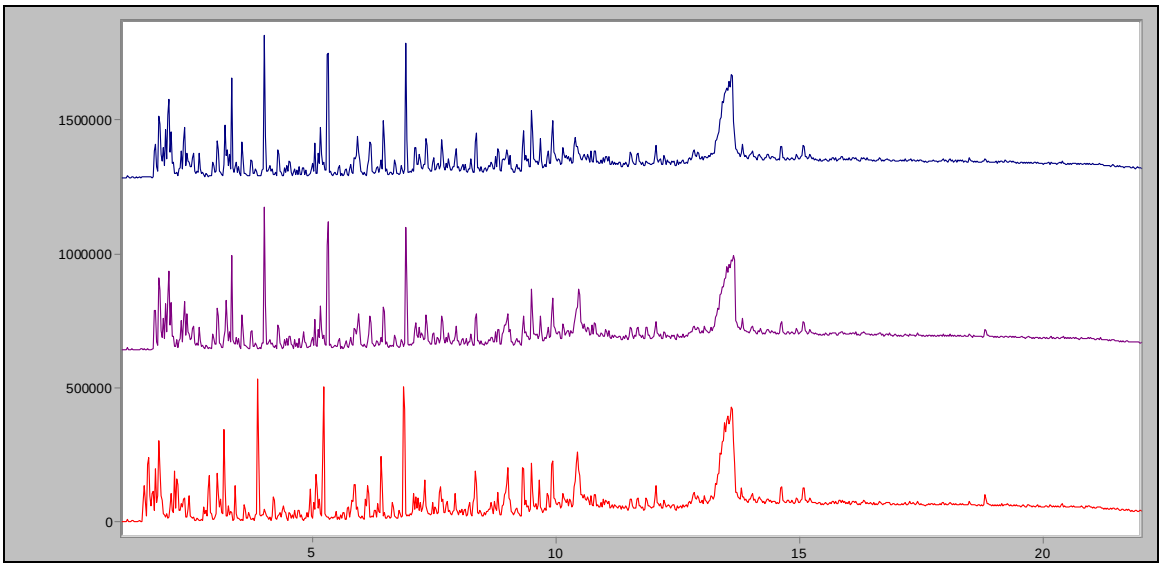

Figure 317: From top to bottom: Canon 494 Run 2, Canon 495 Run 1 and Canon 495 Run 2 ink on paper sample pyrograms.

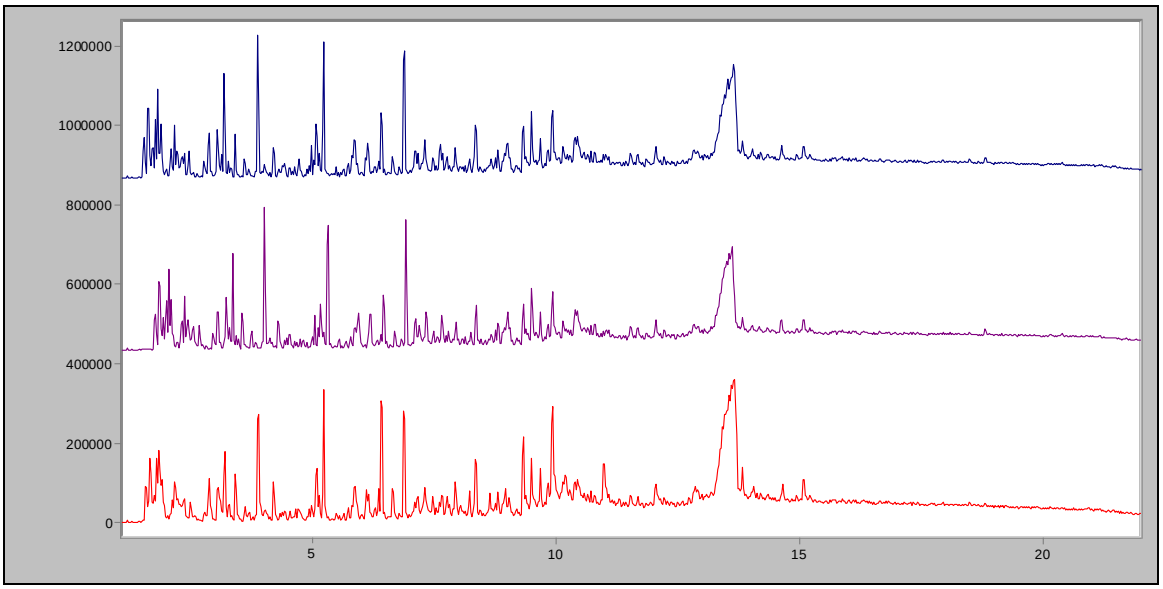

Figure 318: From top to bottom: Canon 496 Run 1, Canon 496 Run 2 and Canon 497 Run 1 ink on paper sample pyrograms.

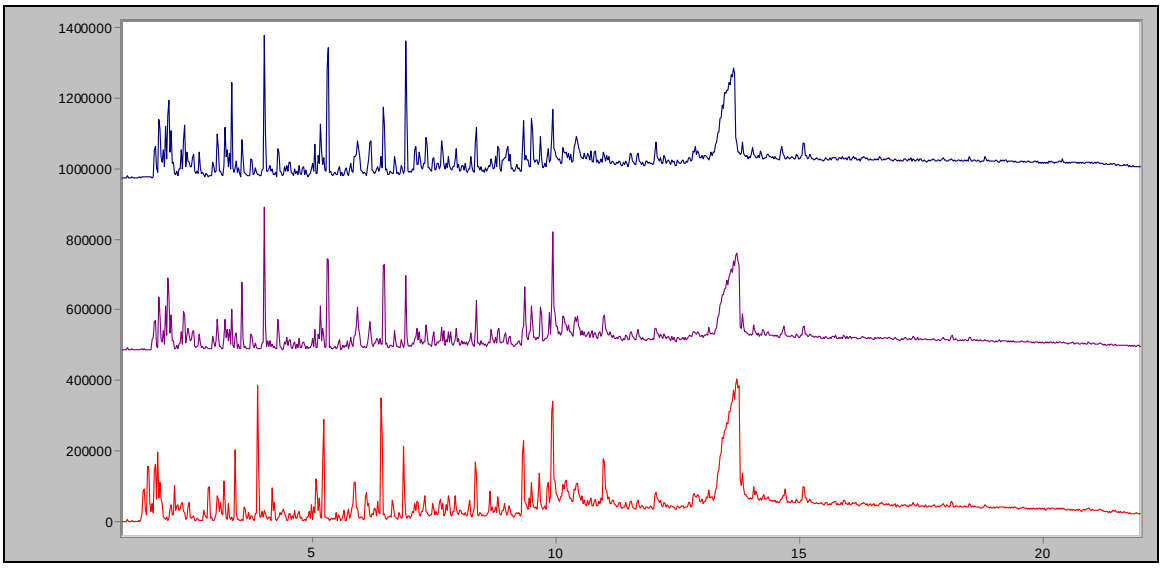

Figure 319: From top to bottom: Canon 497 Run 2, Canon 522 Run 1 and Canon 522 Run 2 ink on paper sample pyrograms.

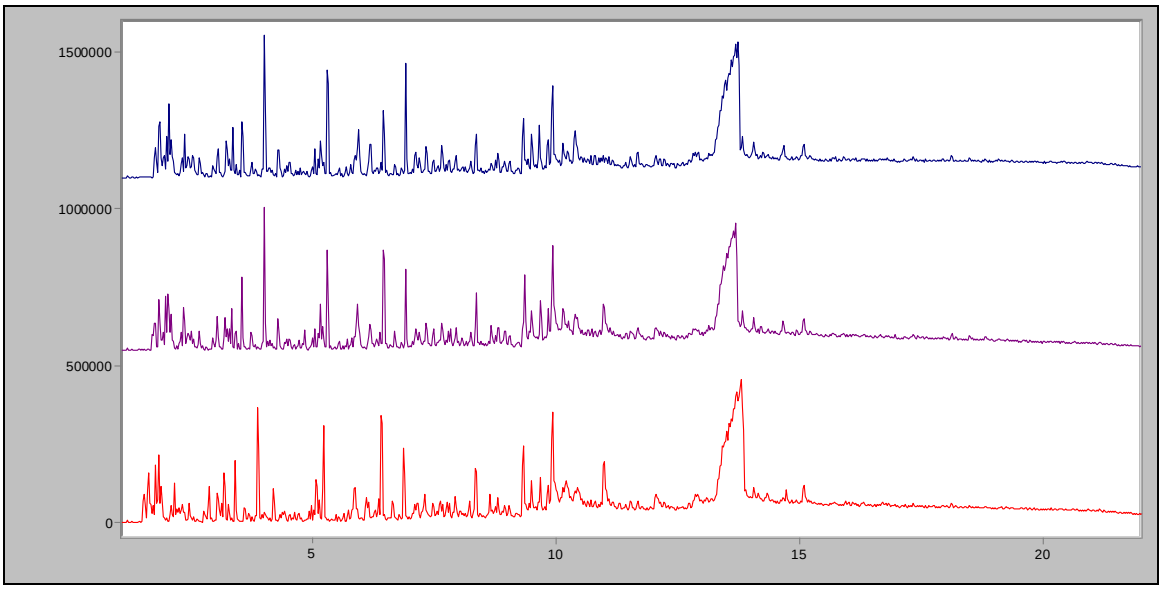

Figure 320: From top to bottom: Canon 522 Run 3, Canon 523 Run 1 and Canon 523 Run 2 ink on paper sample pyrograms.

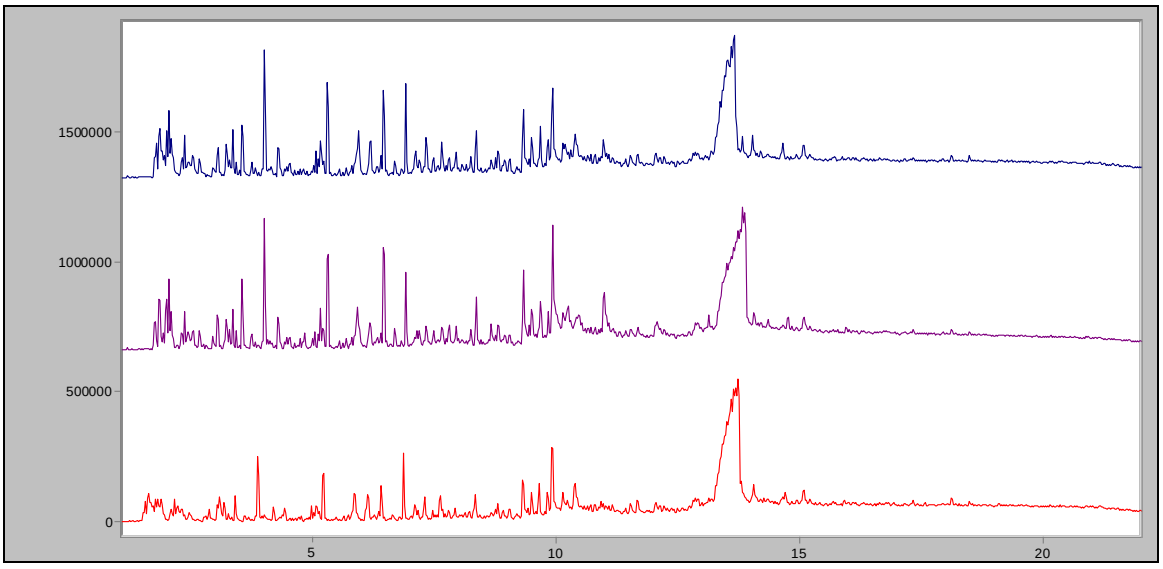

Figure 321: From top to bottom: Canon 523 Run 3, Canon 524 Run 1 and Canon 524 Run 2 ink on paper sample pyrograms.

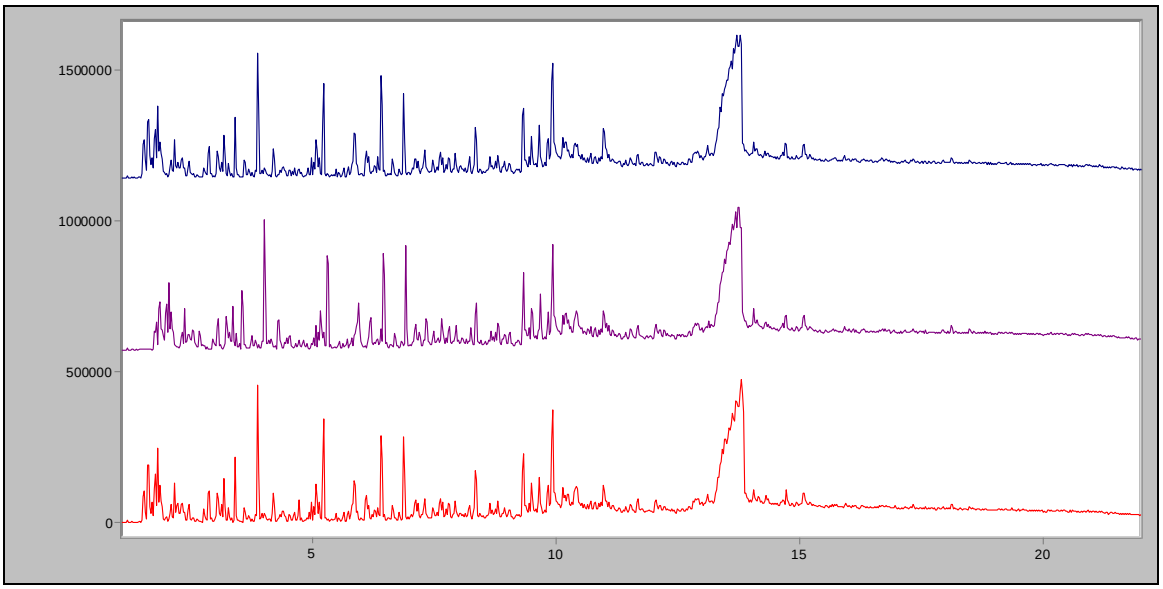

Figure 322: From top to bottom: Canon 525 Run 1, Canon 525 Run 2 and Canon 526 Run 1 ink on paper sample pyrograms.

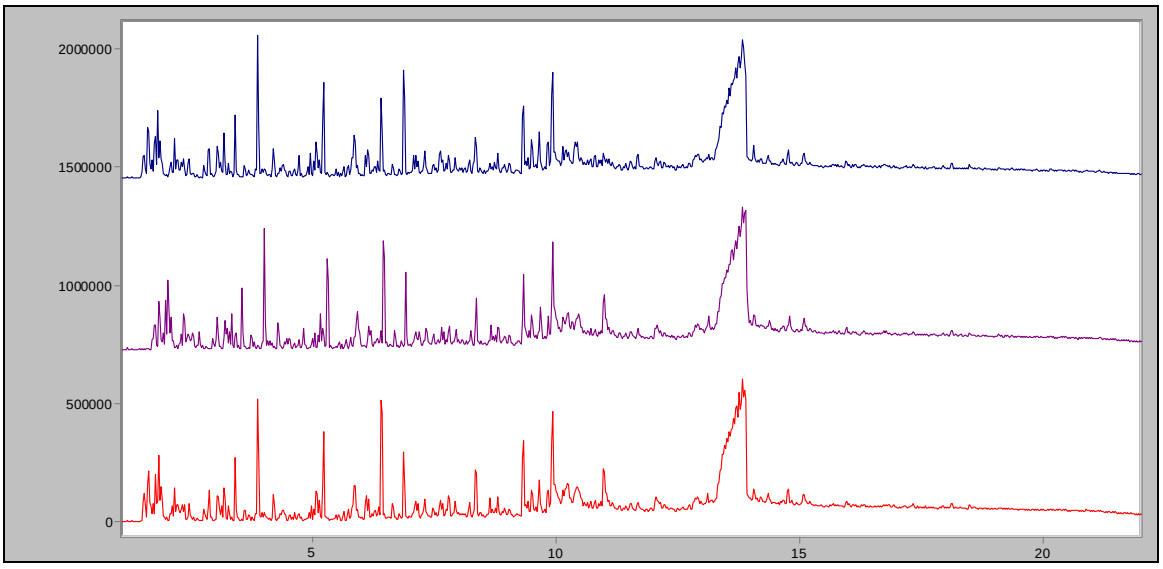

Figure 323: From top to bottom: Canon 526 Run 2, Canon 527 Run 1 and Canon 527 Run 2 ink on paper sample pyrograms.

EPSON

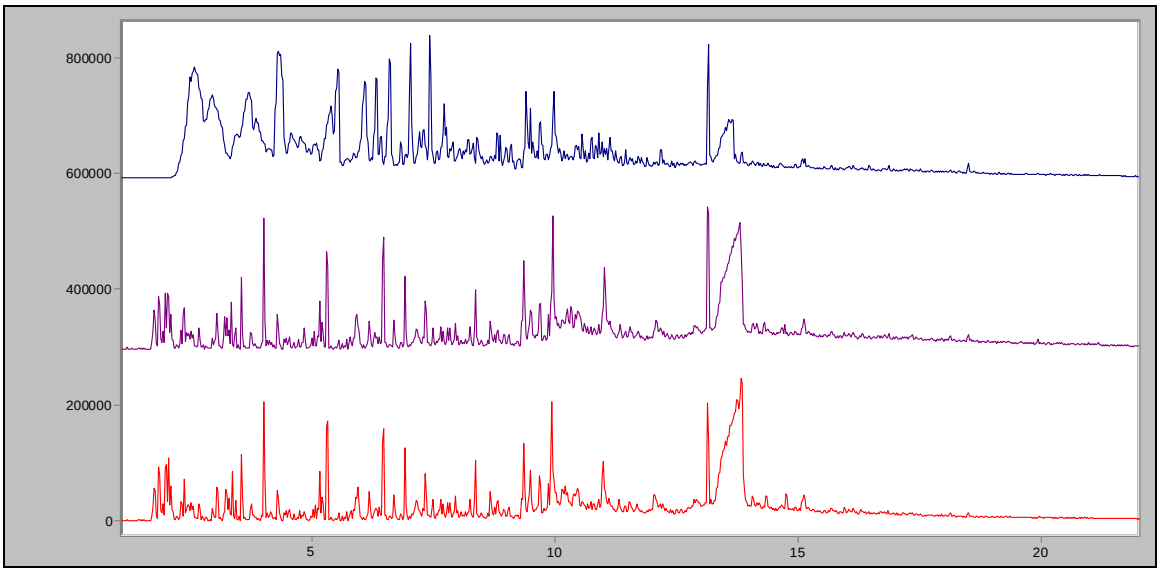

Figure 324: From top to bottom: Epson 30 Run 1, Epson 30 Run 2 and Epson 30 Run 3 ink on paper sample pyrograms.

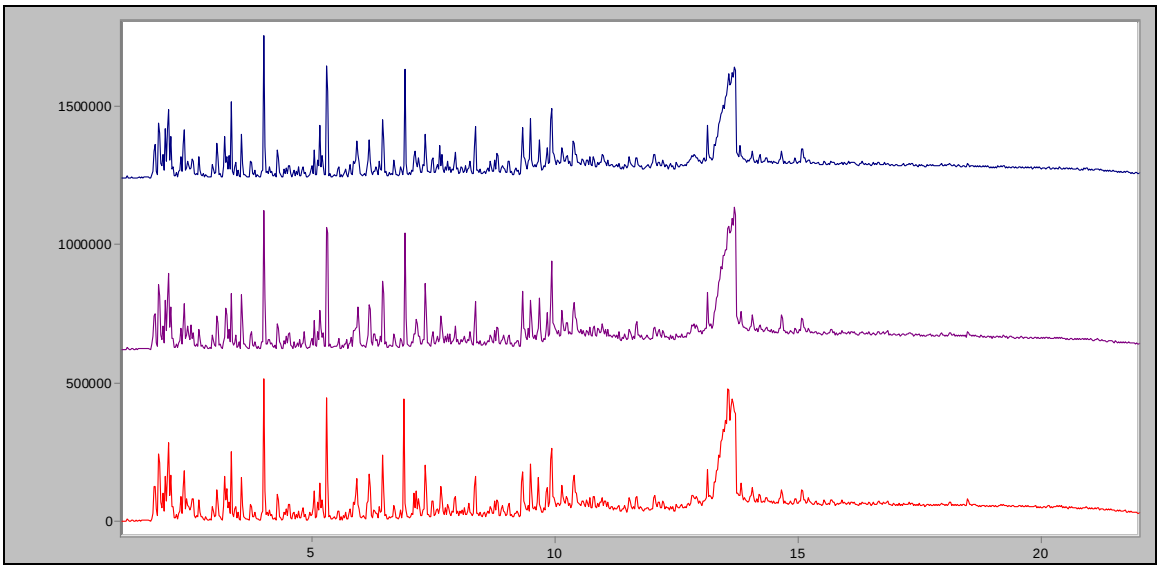

Figure 325: From top to bottom: Epson 30 Run 4, Epson 30 Run 5 and Epson 30 Run 6 ink on paper sample pyrograms.

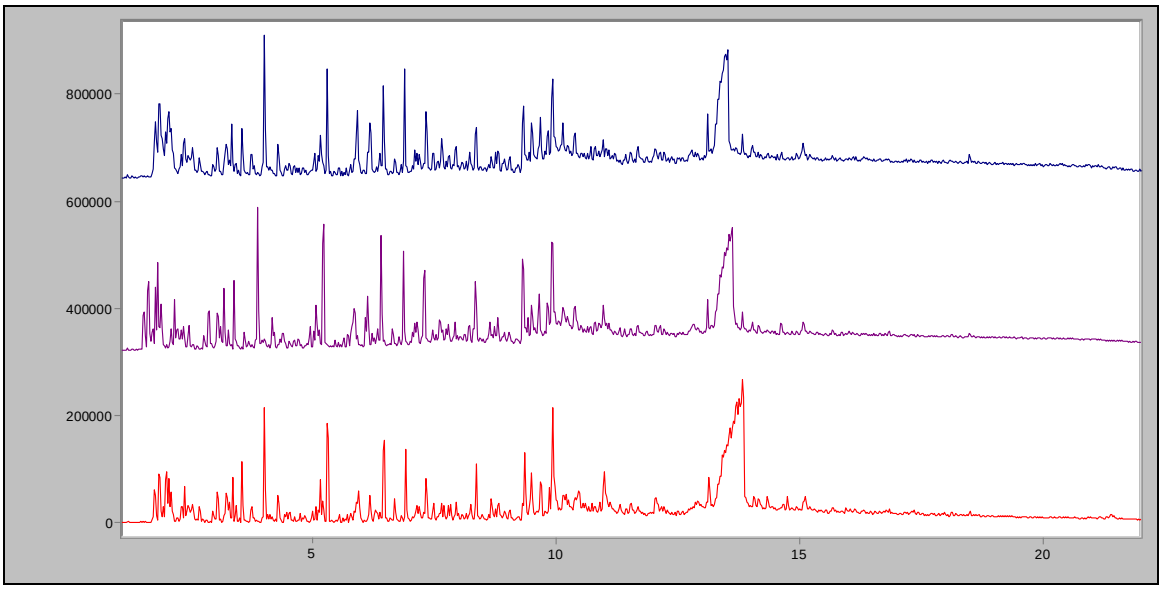

Figure 326: From top to bottom: Epson 30 Run 7, Epson 30 Run 8 and Epson 31 Run 1 ink on paper sample pyrograms.

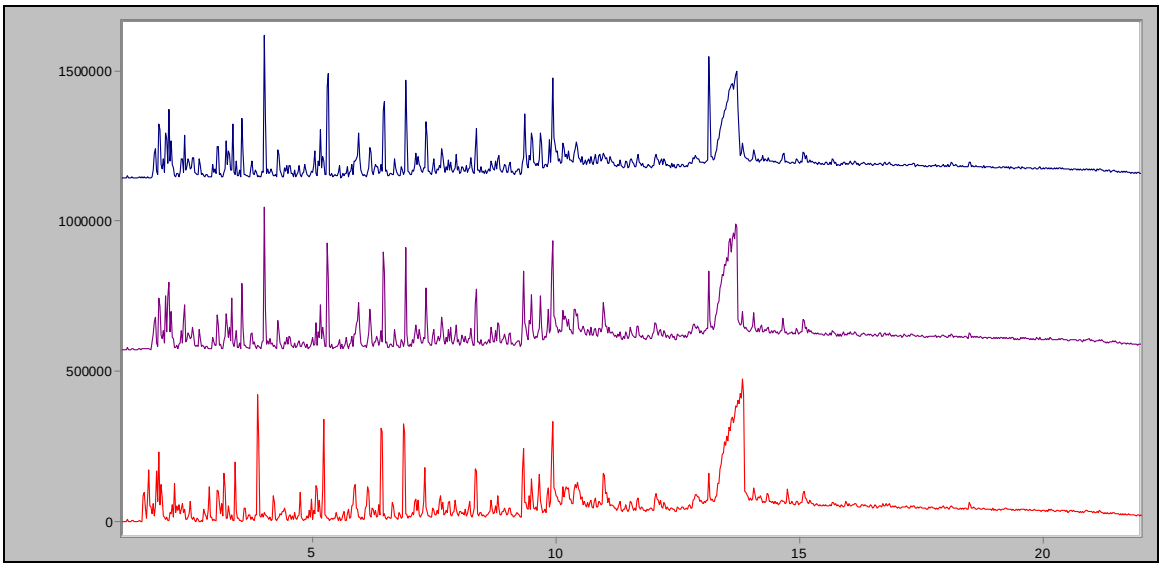

Figure 327: From top to bottom: Epson 31 Run 2, Epson 31 Run 3 and Epson 31 Run 4 ink on paper sample pyrograms.

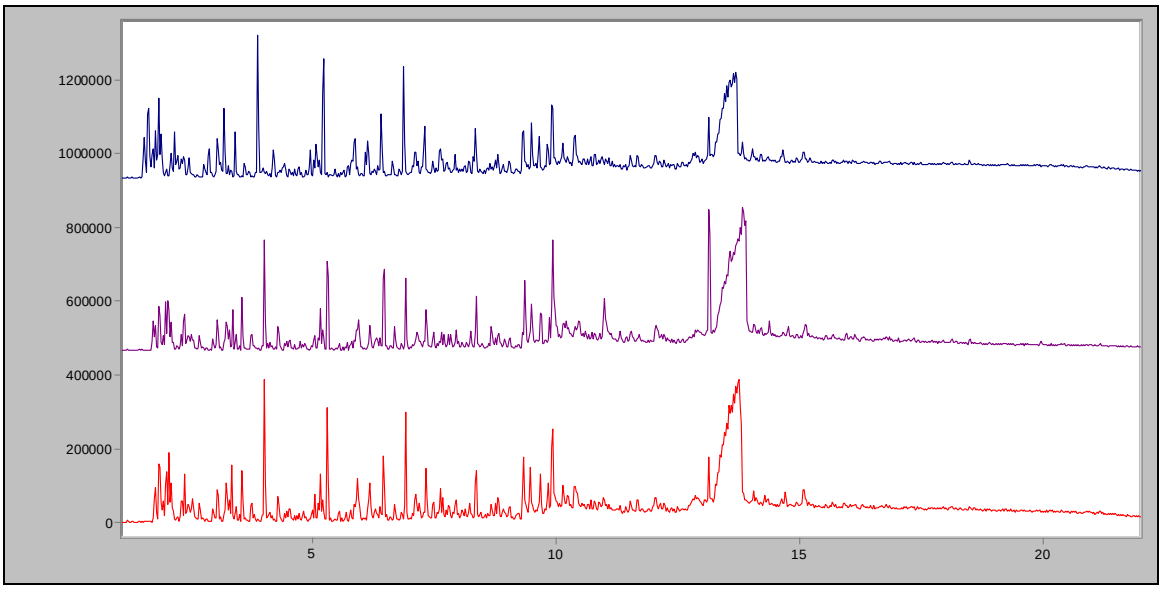

Figure 328: From top to bottom: Epson 31 Run 5, Epson 32 Run 1 and Epson 32 Run 2 ink on paper sample pyrograms.

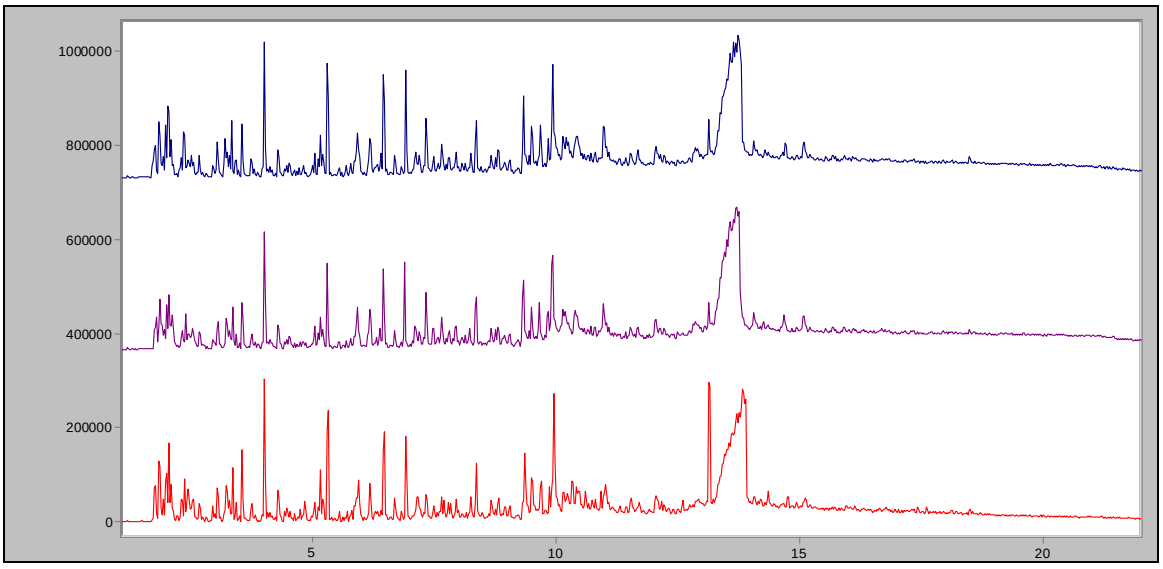

Figure 329: From top to bottom: Epson 32 Run 3, Epson 32 Run 4 and Epson 33 Run 1 ink on paper sample pyrograms.

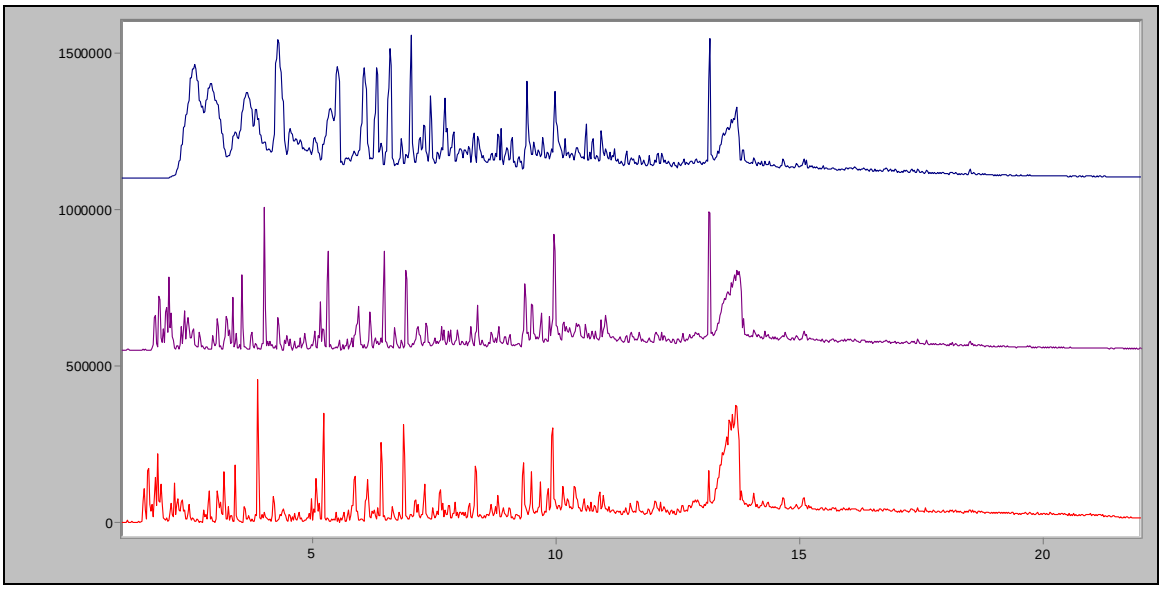

Figure 330: From top to bottom: Epson 33 Run 2, Epson 33 Run 3 and Epson 33 Run 4 ink on paper sample pyrograms.

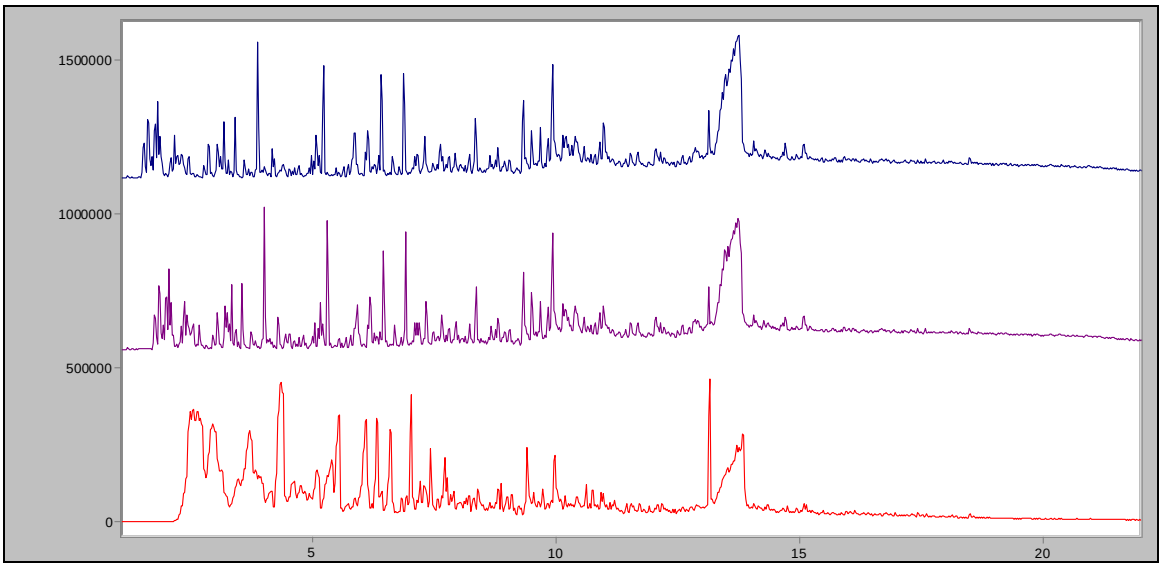

Figure 331: From top to bottom: Epson 33 Run 5, Epson 33 Run 6 and Epson 34 Run 1 ink on paper sample pyrograms.

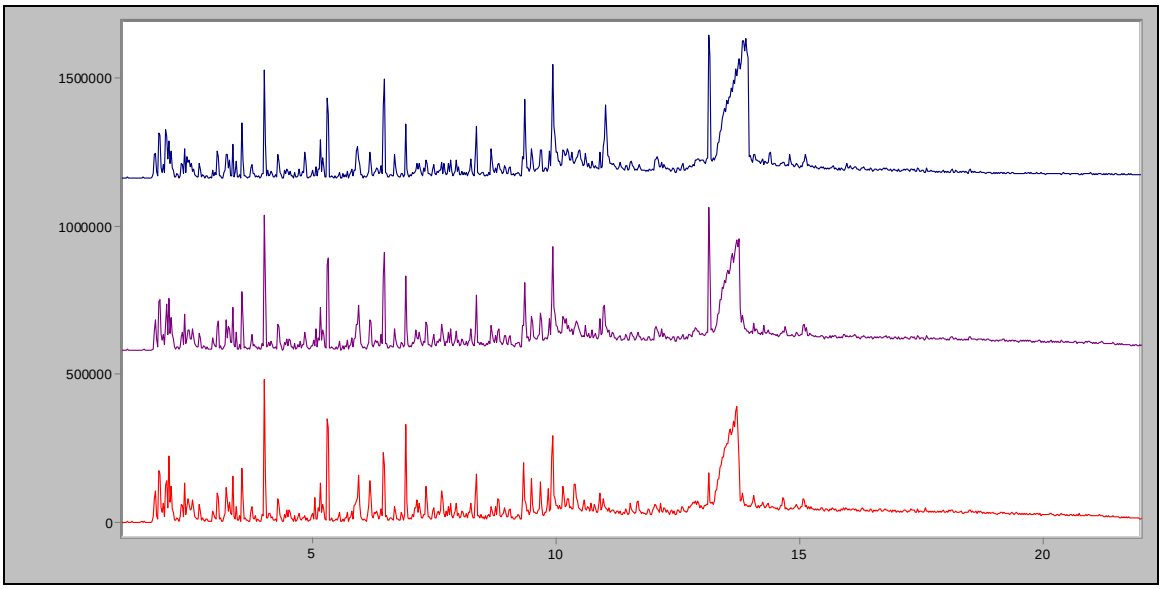

Figure 332: From top to bottom: Epson 34 Run 2, Epson 34 Run 3 and Epson 34 Run 4 ink on paper sample pyrograms.

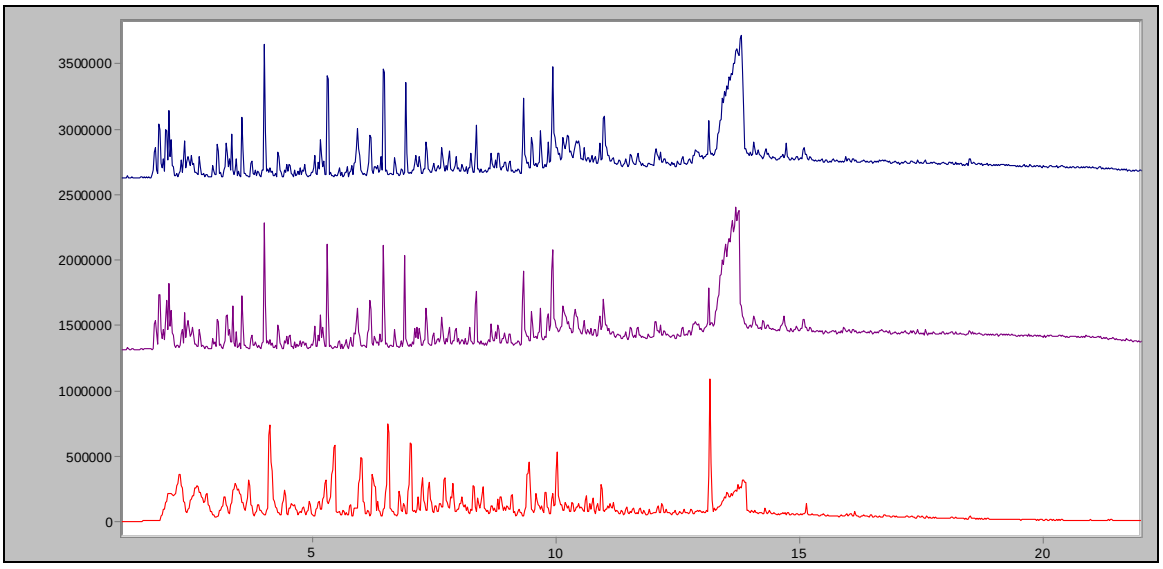

Figure 333: From top to bottom: Epson 34 Run 5, Epson 34 Run 6 and Epson 35 Run 1 ink on paper sample pyrograms.

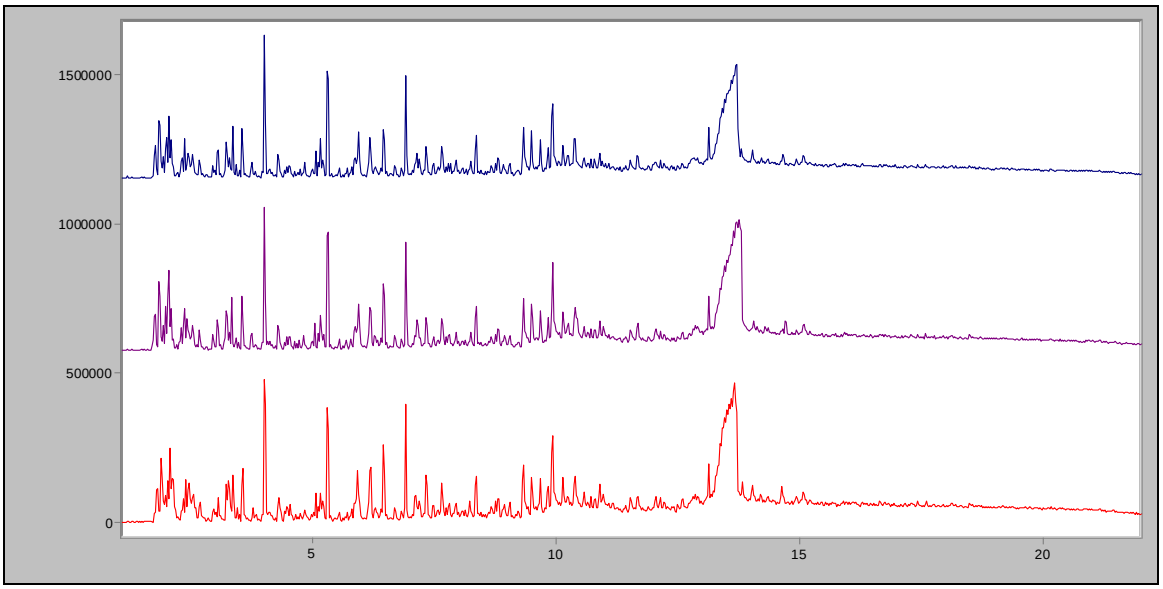

Figure 334: From top to bottom: Epson 35 Run 2, Epson 35 Run 3 and Epson 35 Run 4 ink on paper sample pyrograms.

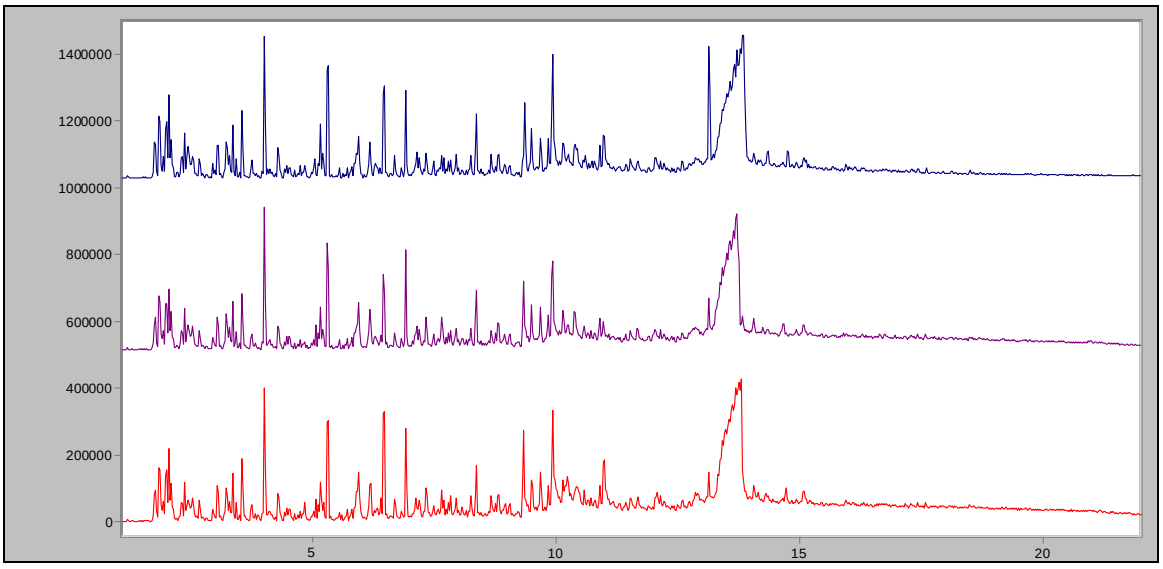

Figure 335: From top to bottom: Epson 60 Run 1, Epson 60 Run 2 and Epson 60 Run 3 ink on paper sample pyrograms.

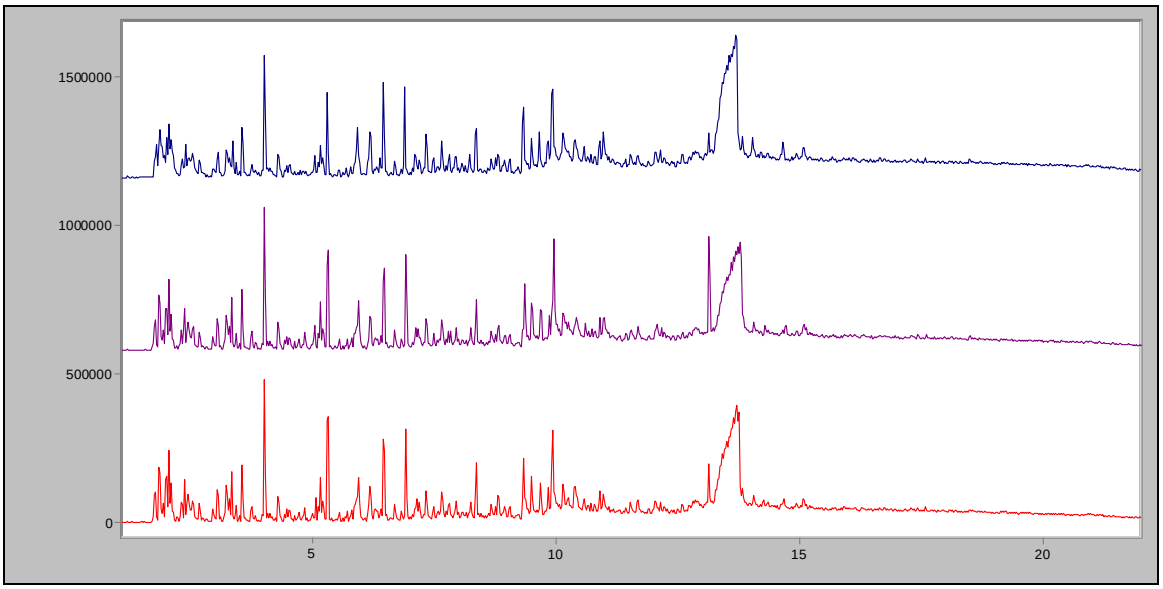

Figure 336: From top to bottom: Epson 60 Run 4, Epson 61 Run 1 and Epson 61 Run 2 ink on paper sample pyrograms.

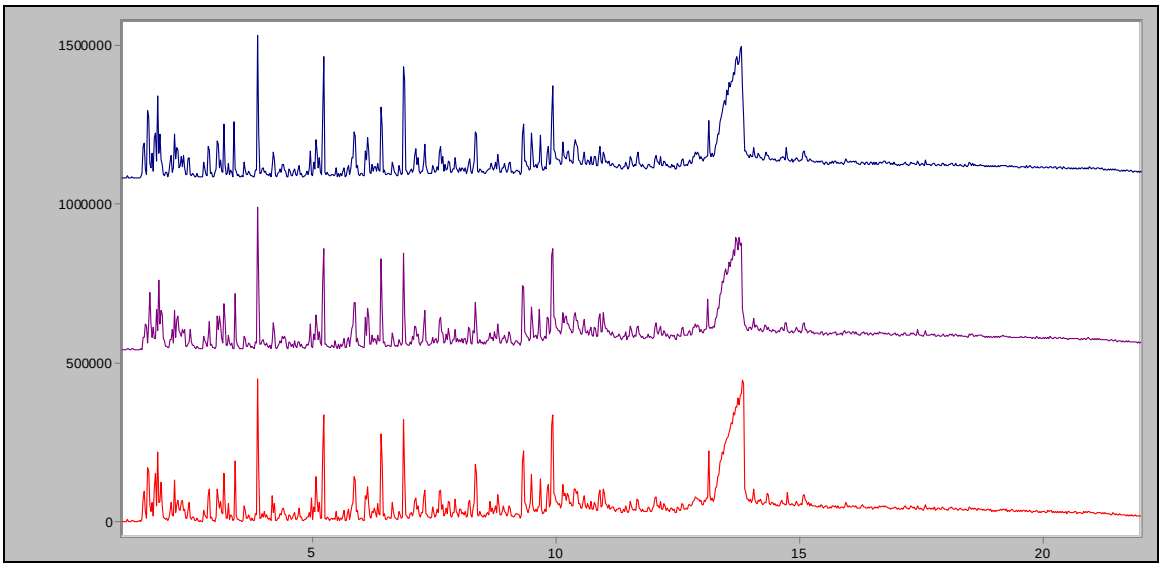

Figure 337: From top to bottom: Epson 61 Run 3, Epson 61 Run 4 and Epson 62 Run 1 ink on paper sample pyrograms.

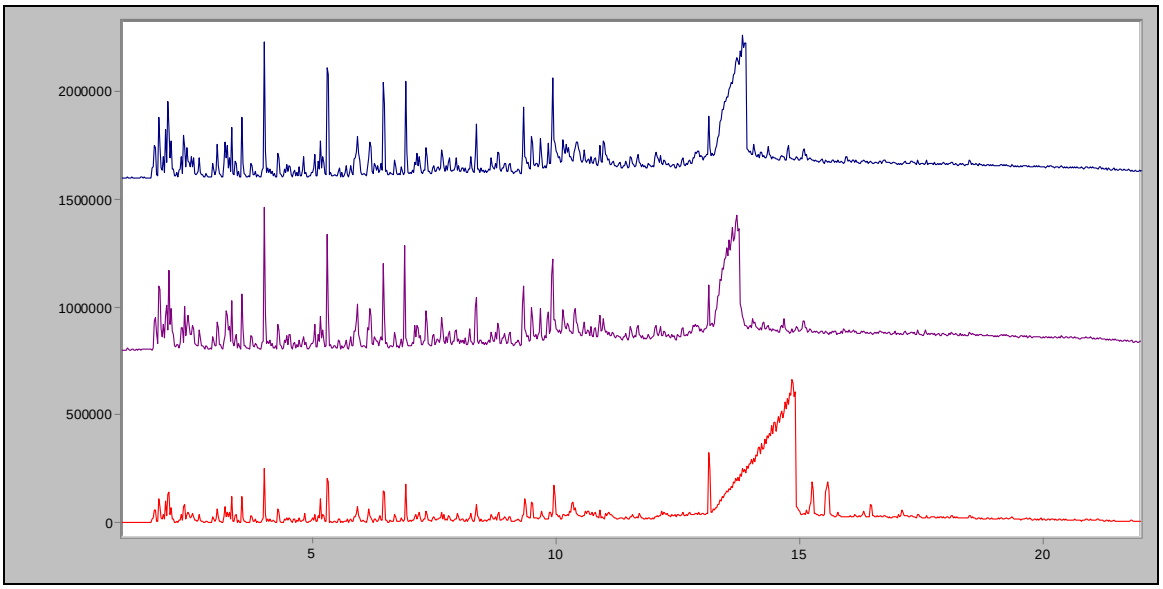

Figure 338: From top to bottom: Epson 62 Run 2, Epson 62 Run 3 and Epson 63 Run 1 ink on paper sample pyrograms.

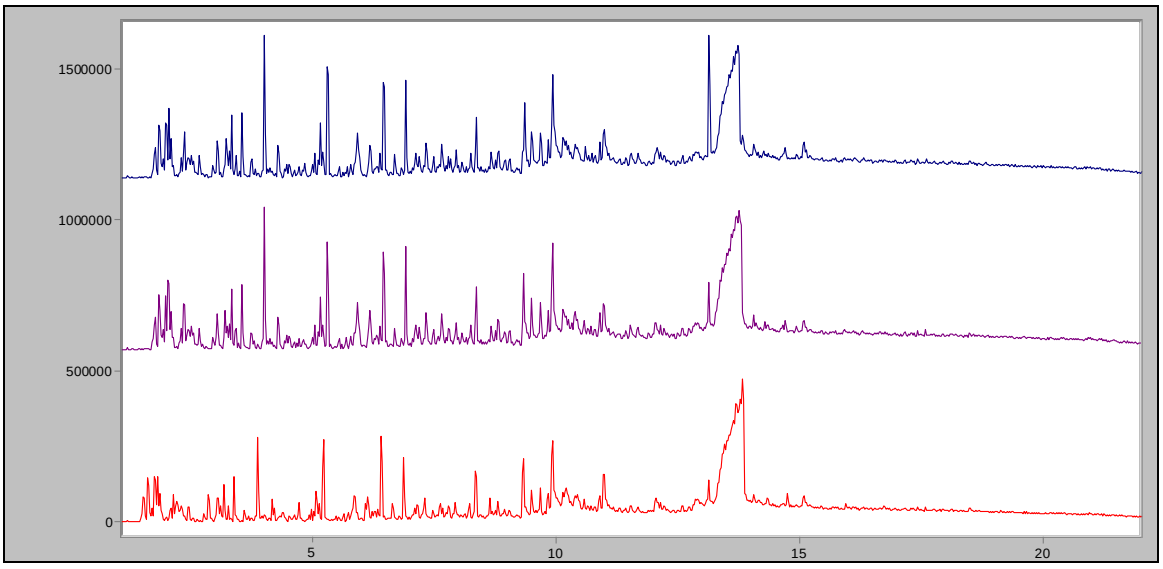

Figure 339: From top to bottom: Epson 63 Run 2, Epson 63 Run 3 and Epson 63 Run 4 ink on paper sample pyrograms.

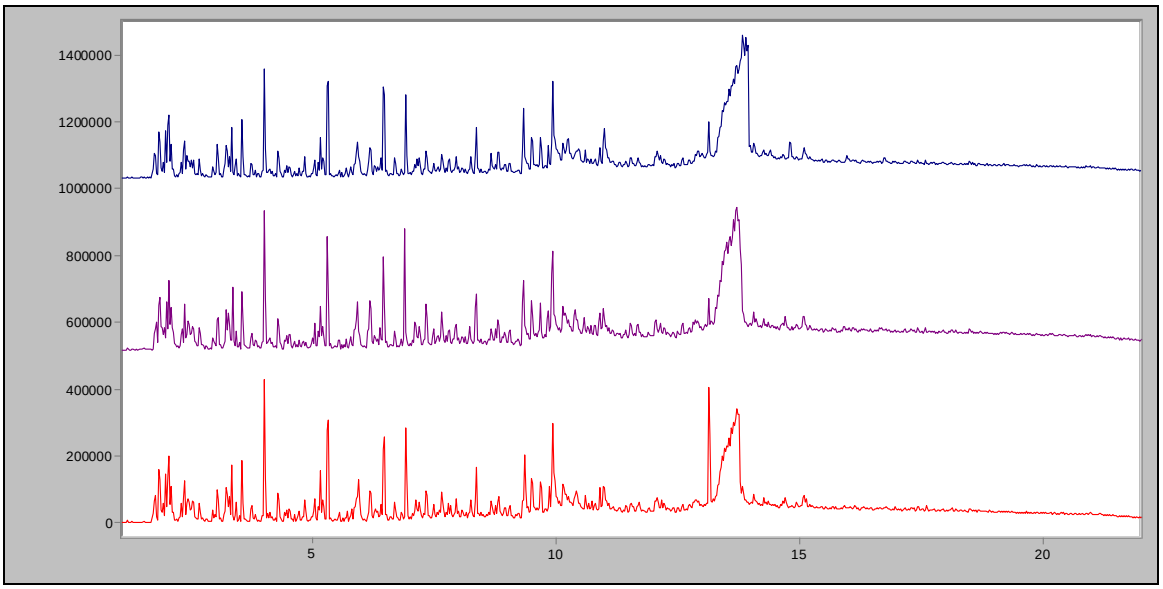

Figure 340: From top to bottom: Epson 63 Run 5, Epson 63 Run 6 and Epson 64 Run 1 ink on paper sample pyrograms.

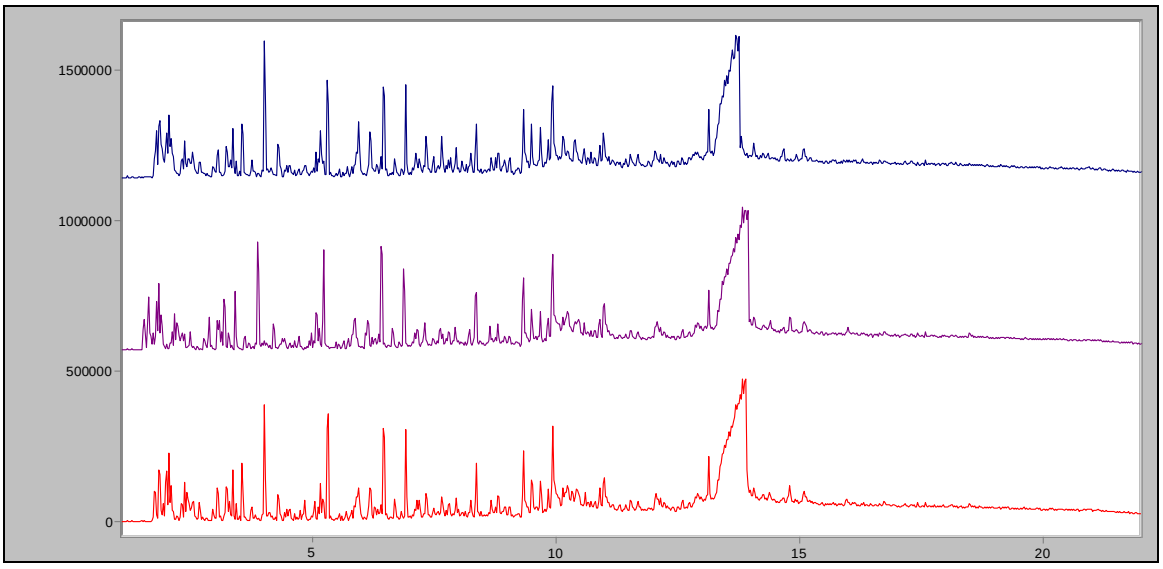

Figure 341: From top to bottom: Epson 64 Run 2, Epson 64 Run 3 and Epson 64 Run 4 ink on paper sample pyrograms.

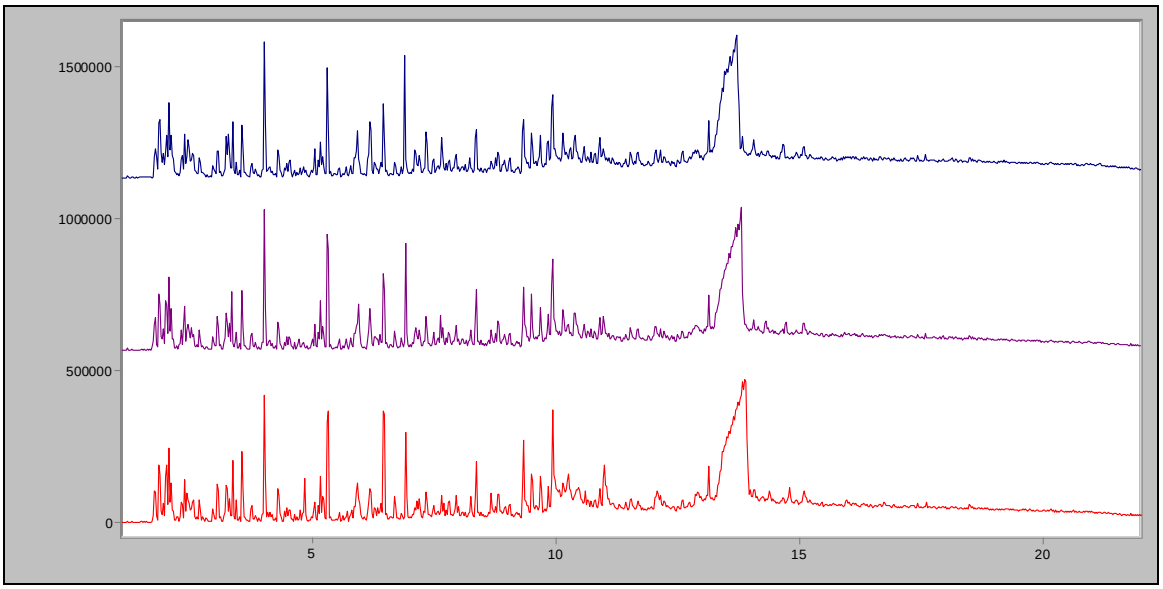

Figure 342: From top to bottom: Epson 64 Run 5, Epson 65 Run 1 and Epson 65 Run 2 ink on paper sample pyrograms.

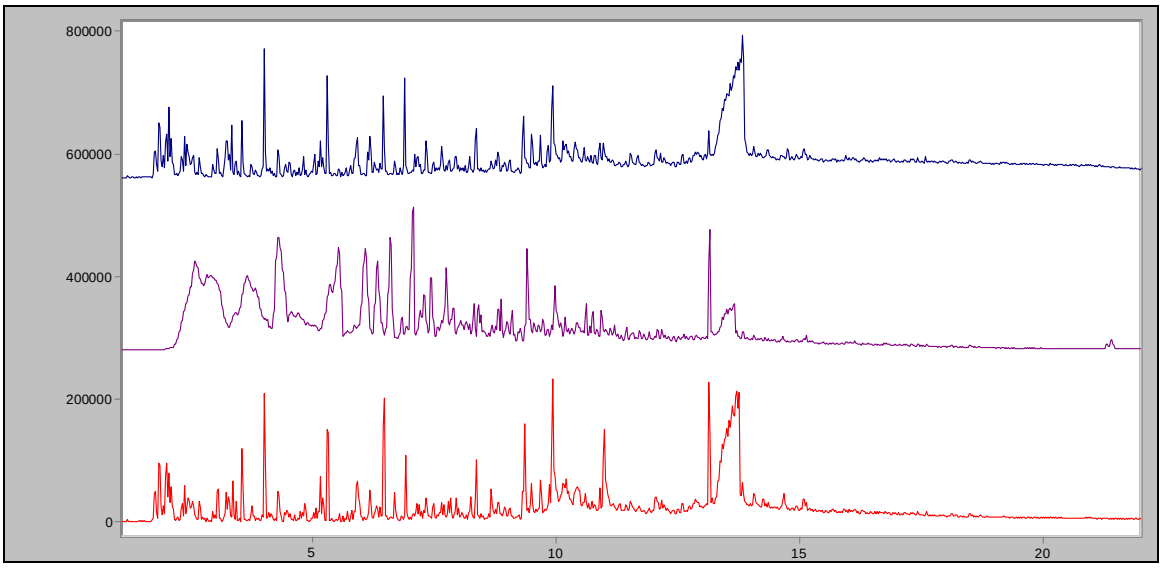

Figure 343: From top to bottom: Epson 65 Run 3, Epson 66 Run 1 and Epson 66 Run 2 ink on paper sample pyrograms.

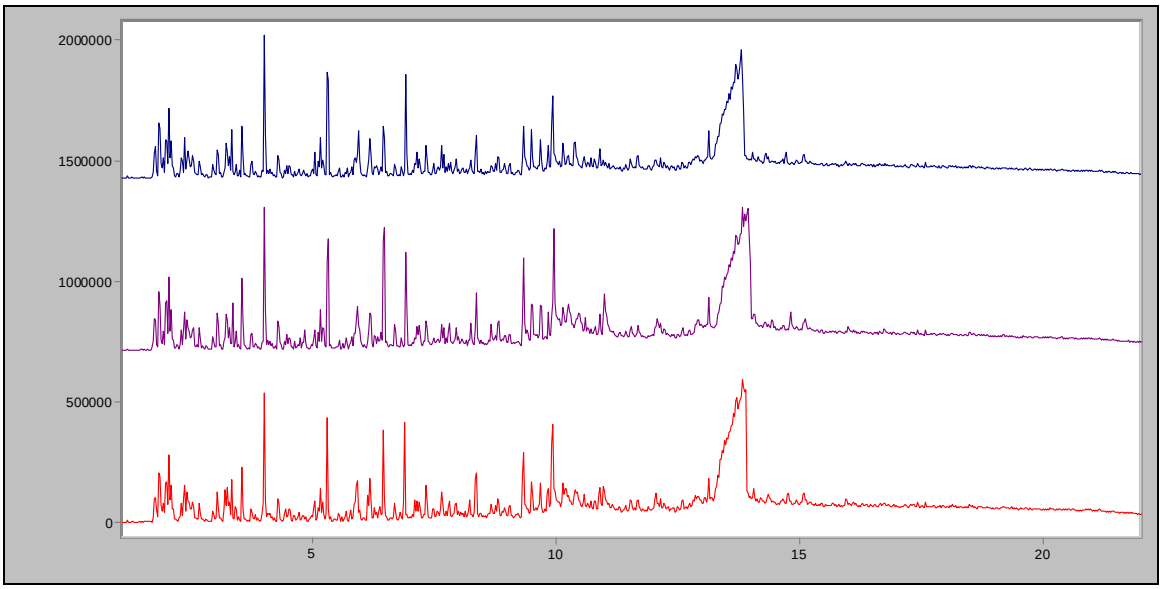

Figure 344: From top to bottom: Epson 66 Run 3, Epson 66 Run 4 and Epson 66 Run 5 ink on paper sample pyrograms.

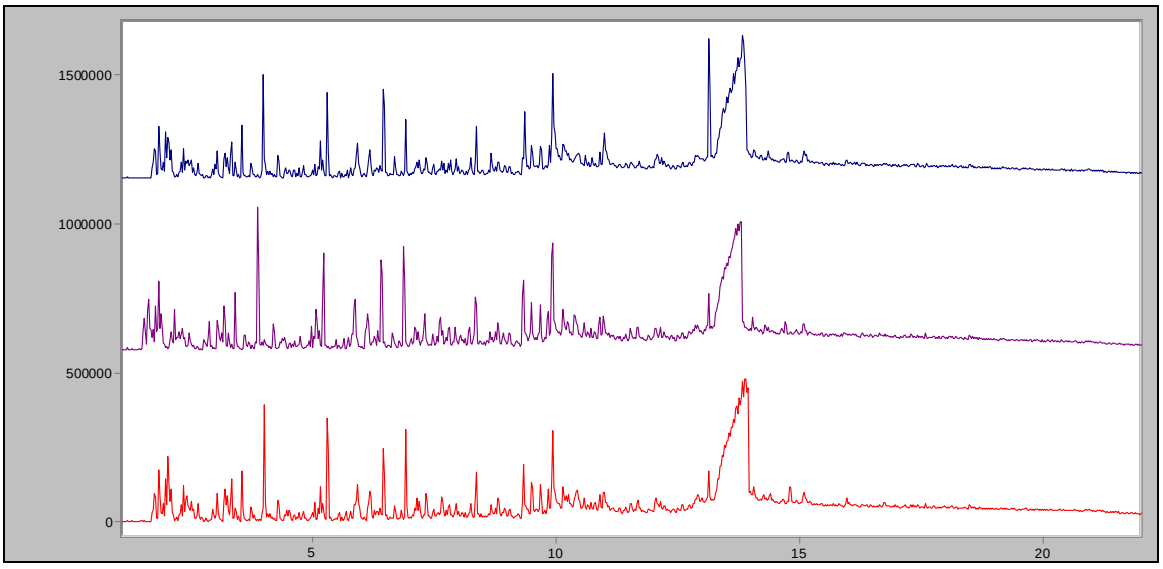

Figure 345: From top to bottom: Epson 67 Run 1, Epson 67 Run 2 and Epson 67 Run 3 ink on paper sample pyrograms.

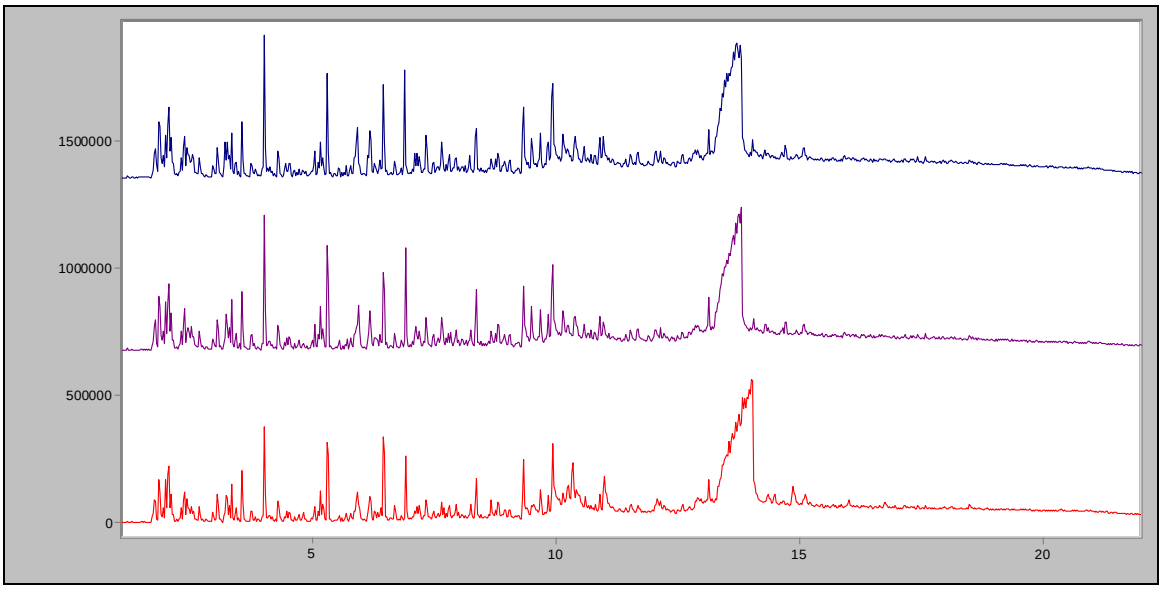

Figure 346: From top to bottom: Epson 67 Run 4, Epson 68 Run 1 and Epson 68 Run 2 ink on paper sample pyrograms.

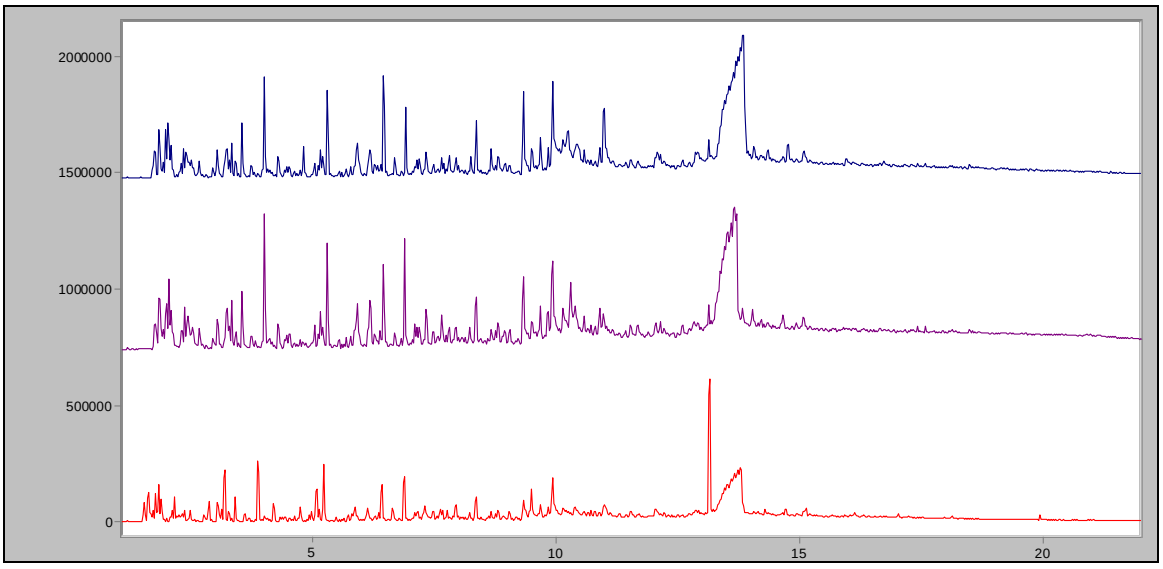

Figure 347: From top to bottom: Epson 68 Run 3, Epson 68 Run 4 and Epson 84 Run 1 ink on paper sample pyrograms.

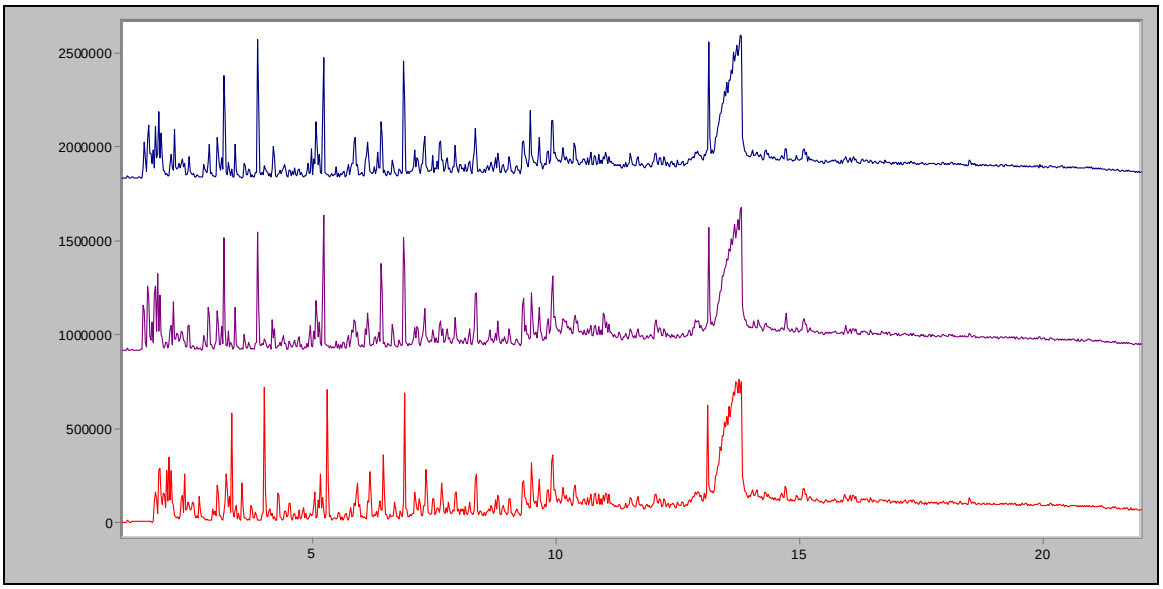

Figure 348: From top to bottom: Epson 84 Run 2, Epson 84 Run 3 and Epson 84 Run 4 ink on paper sample pyrograms.

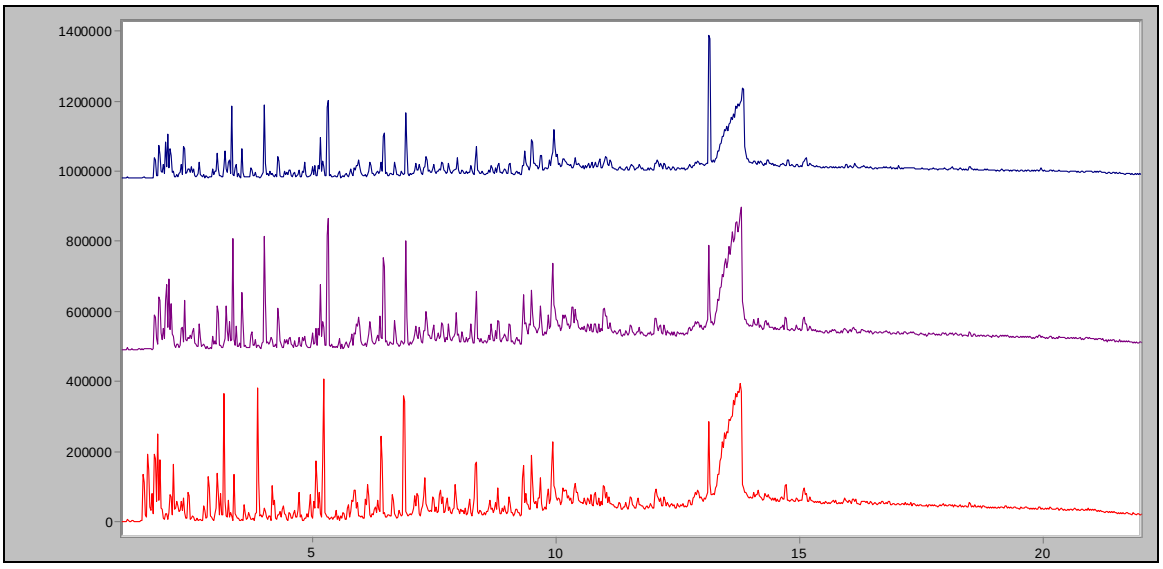

Figure 349: From top to bottom: Epson 85 Run 1, Epson 85 Run 2 and Epson 85 Run 3 ink on paper sample pyrograms.

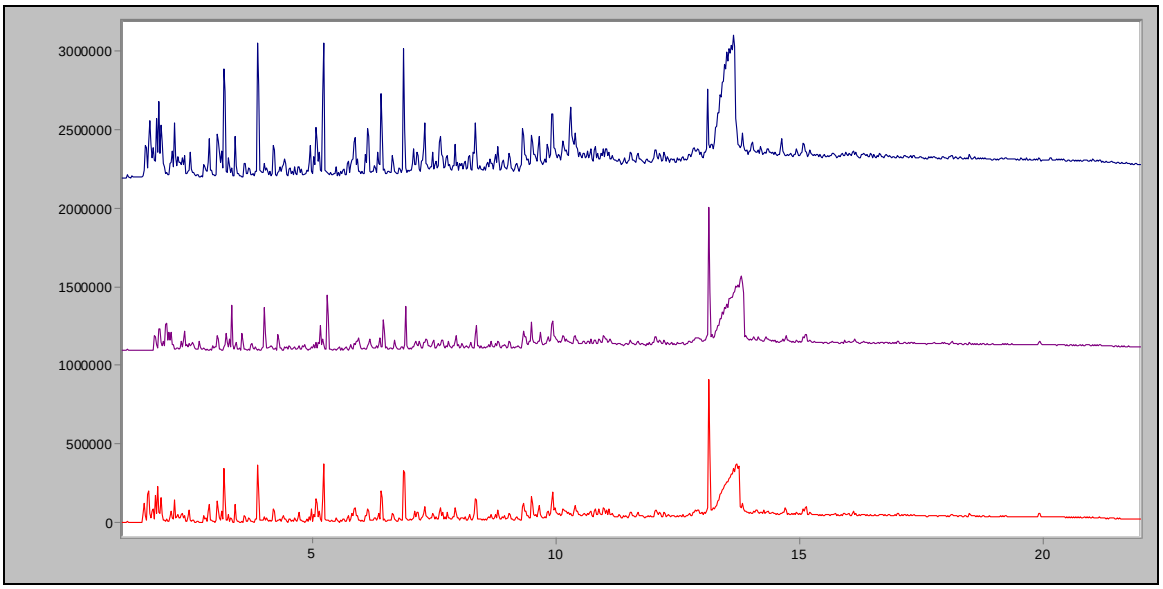

Figure 350: From top to bottom: Epson 85 Run 4, Epson 86 Run 1 and Epson 86 Run 2 ink on paper sample pyrograms.

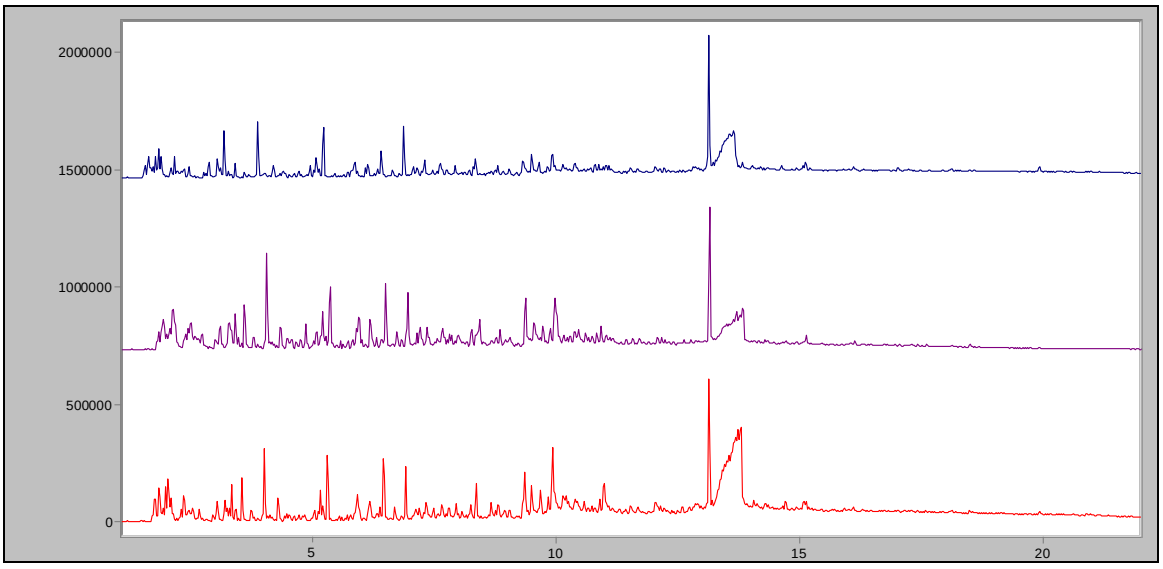

Figure 351: From top to bottom: Epson 86 Run 3, Epson 90 Run 1 and Epson 90 Run 2 ink on paper sample pyrograms.

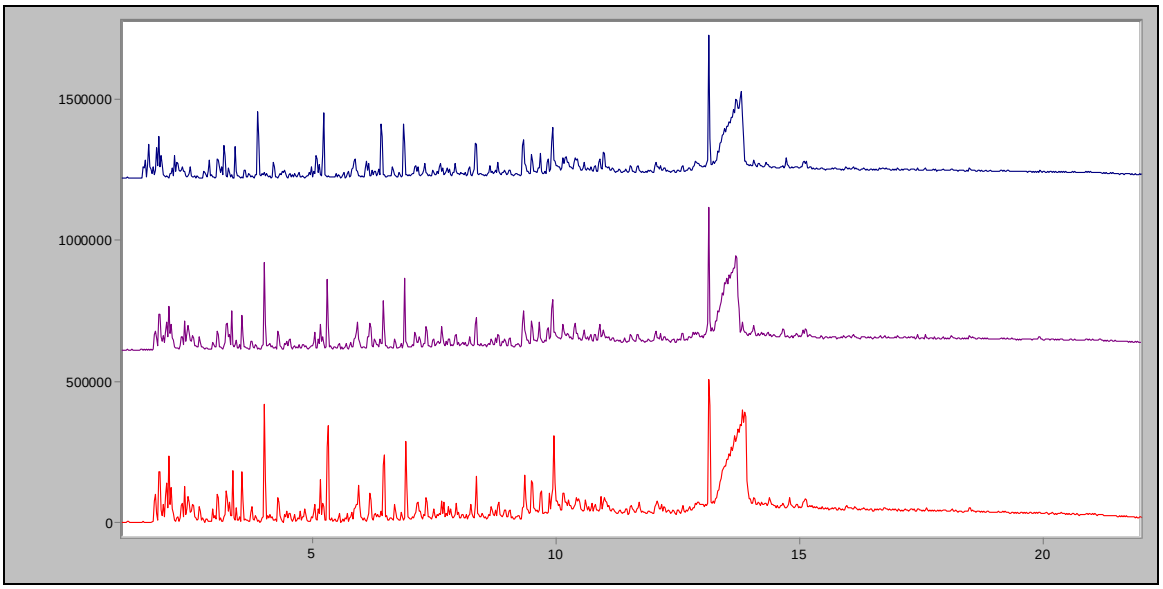

Figure 352: From top to bottom: Epson 90 Run 3, Epson 90 Run 4 and Epson 91 Run 1 ink on paper sample pyrograms.

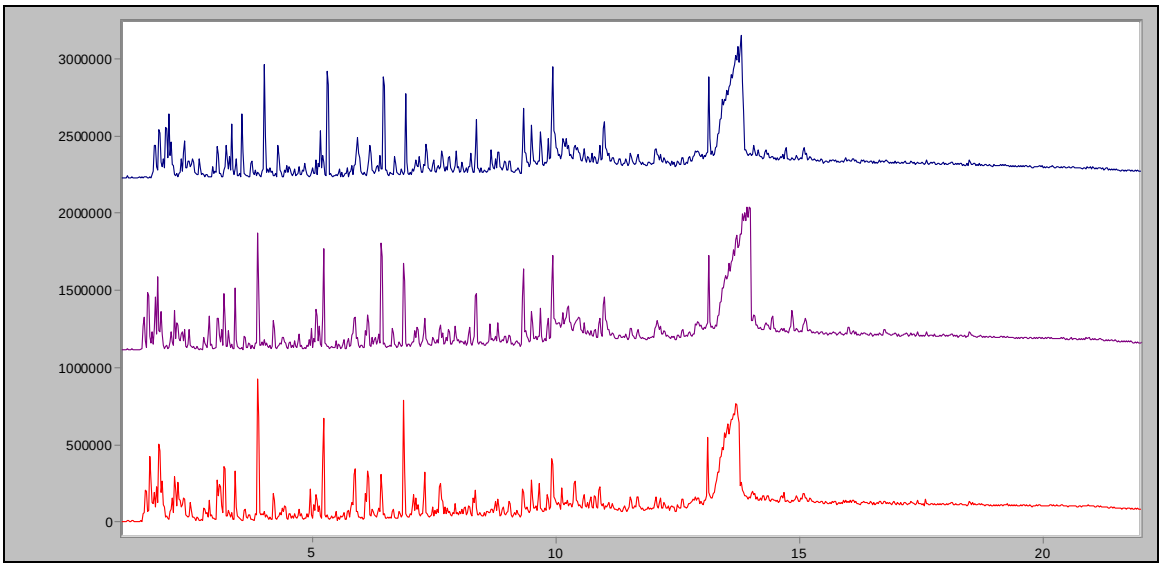

Figure 353: From top to bottom: Epson 91 Run 2, Epson 91 Run 3 and Epson 91 Run 4 ink on paper sample pyrograms.

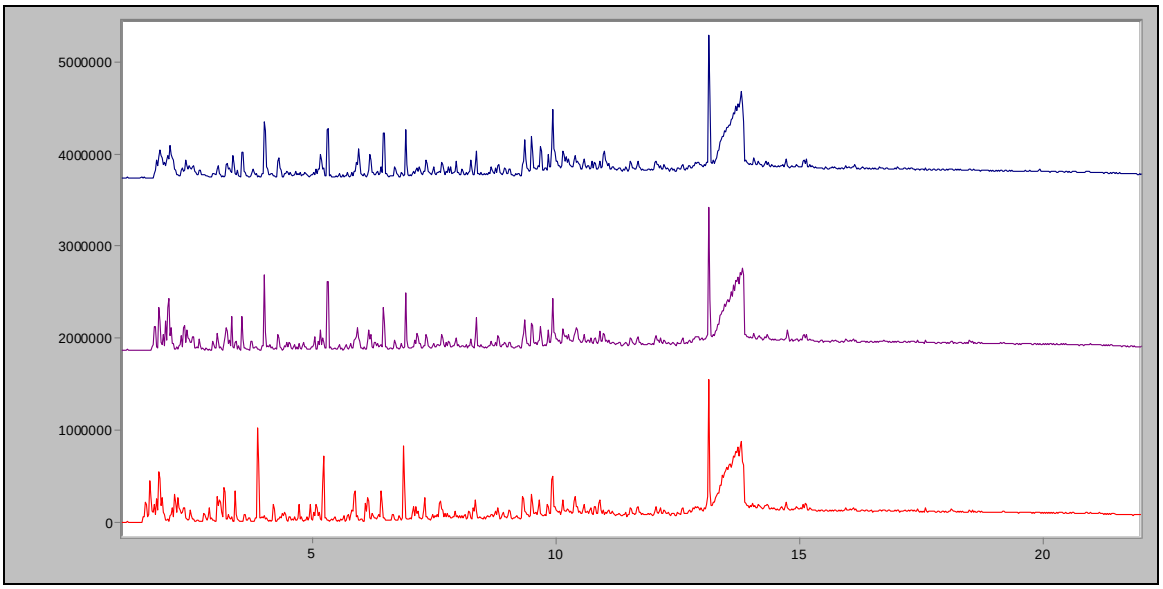

Figure 354: From top to bottom: Epson 92 Run 1, Epson 92 Run 2 and Epson 92 Run 3 ink on paper sample pyrograms.

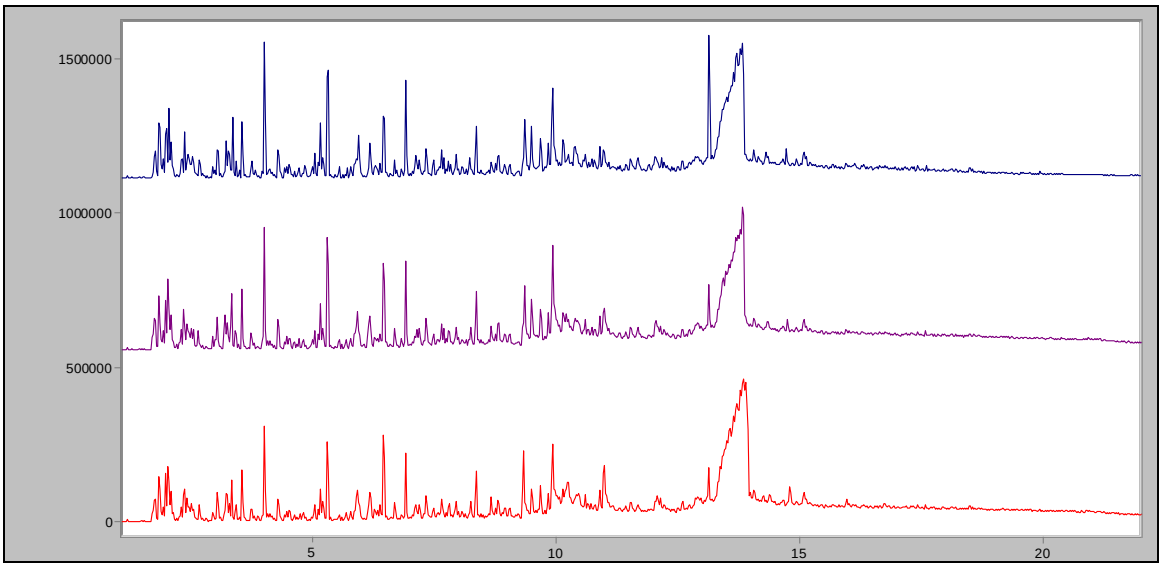

Figure 355: From top to bottom: Epson 93 Run 1, Epson 93 Run 2 and Epson 93 Run 3 ink on paper sample pyrograms.

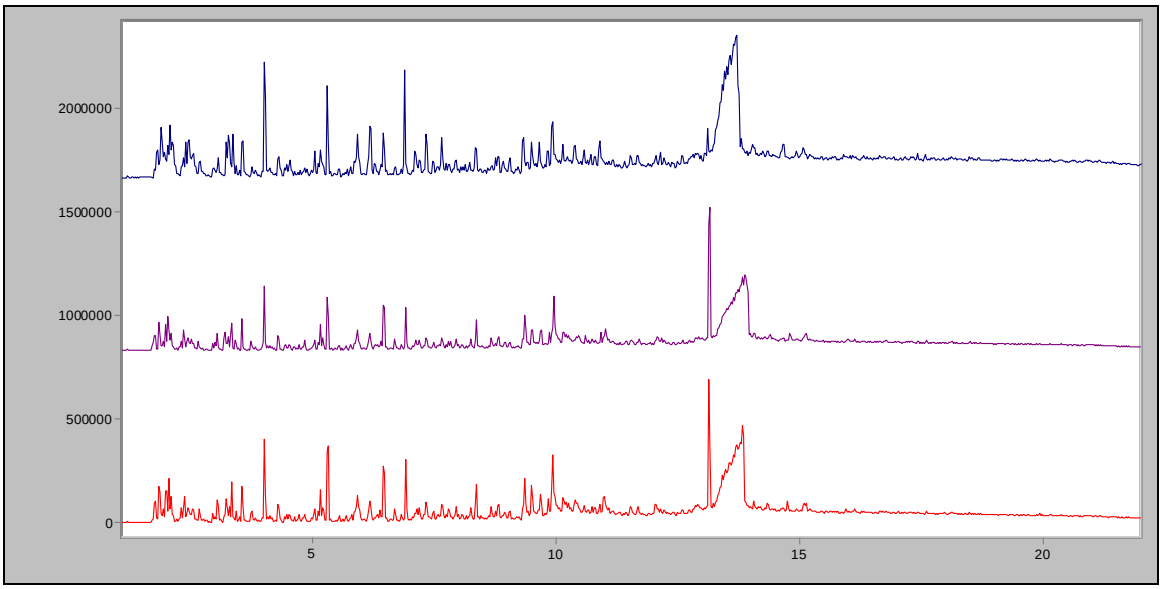

Figure 356: From top to bottom: Epson 93 Run 4, Epson 94 Run 1 and Epson 94 Run 2 ink on paper sample pyrograms.

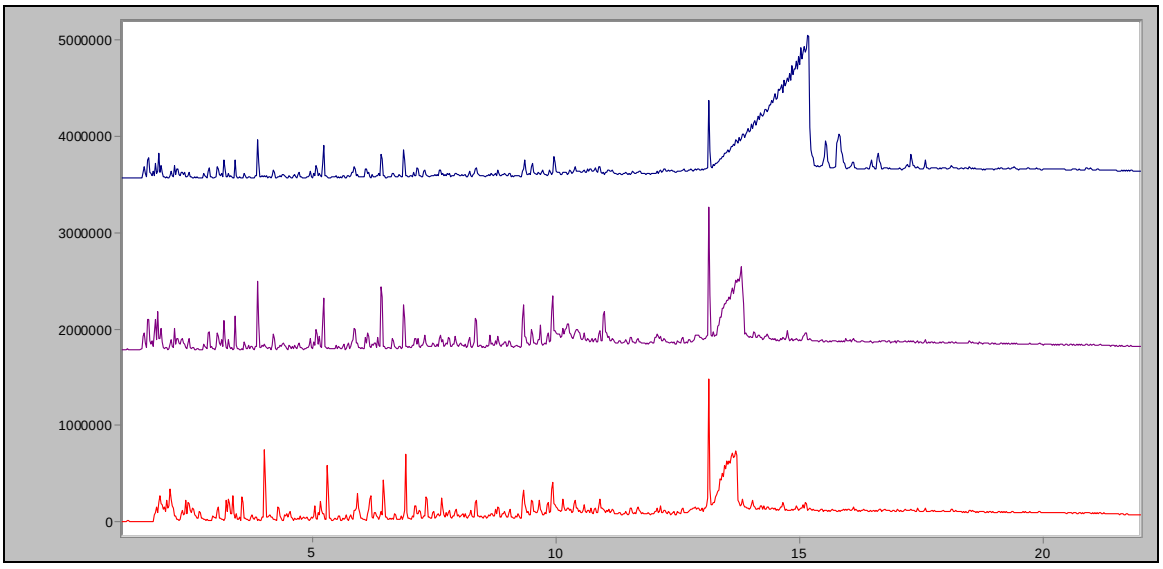

Figure 357: From top to bottom: Epson 94 Run 3, Epson 94 Run 4 and Epson 94 Run 5 ink on paper sample pyrograms.

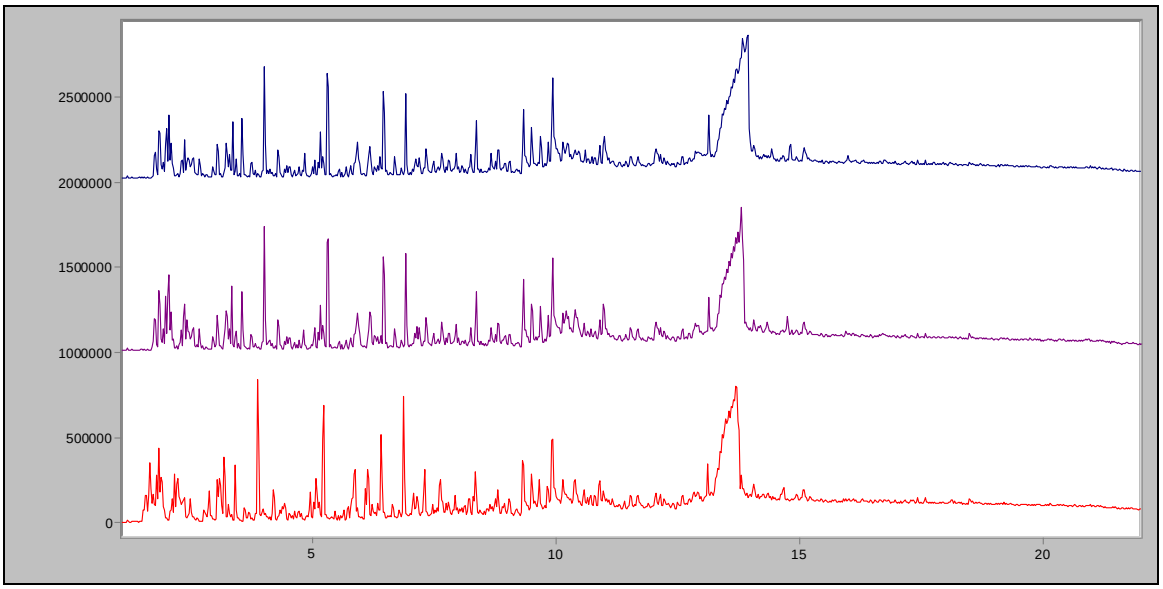

Figure 358: From top to bottom: Epson 95 Run 1, Epson 95 Run 2 and Epson 95 Run 3 ink on paper sample pyrograms.

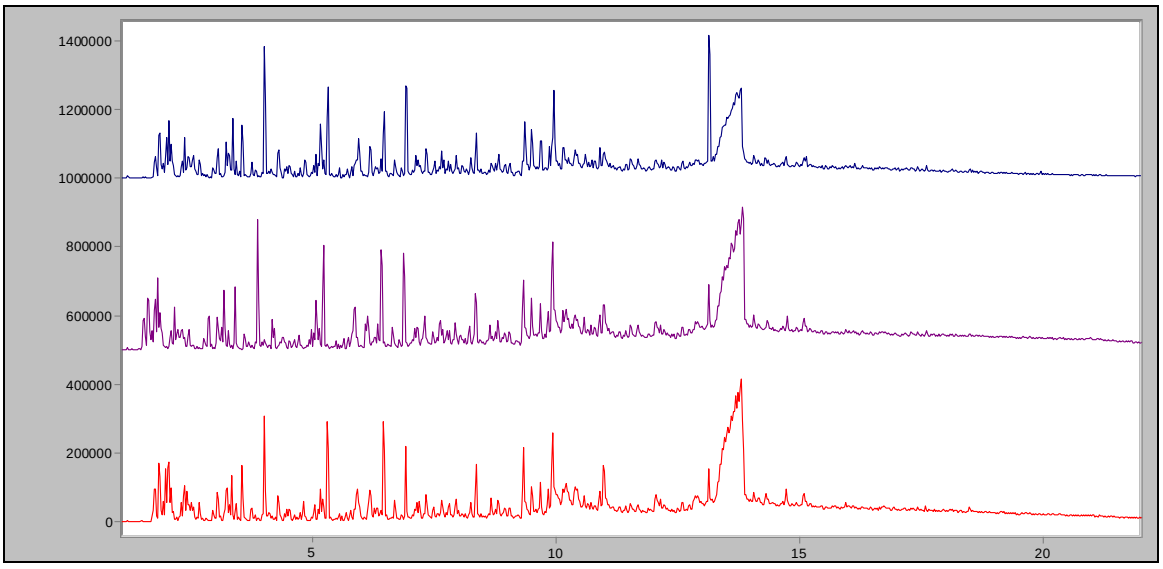

Figure 359: From top to bottom: Epson 120 Run 1, Epson 120 Run 2 and Epson 120 Run 3 ink on paper sample pyrograms.

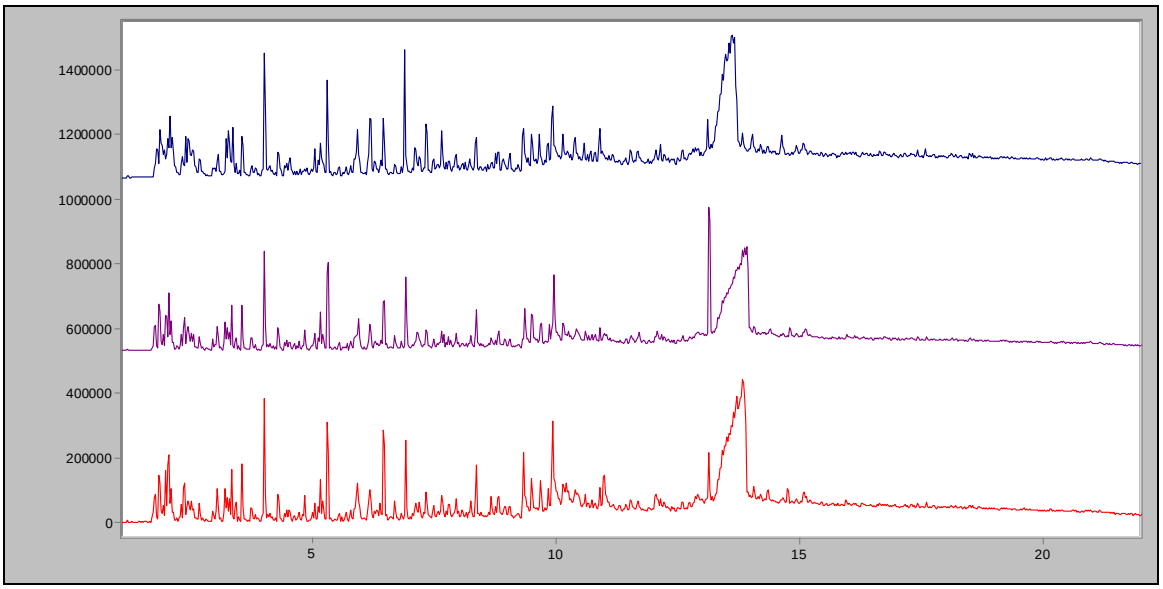

Figure 360: From top to bottom: Epson 120 Run 4, Epson 121 Run 1 and Epson 121 Run 2 ink on paper sample pyrograms.

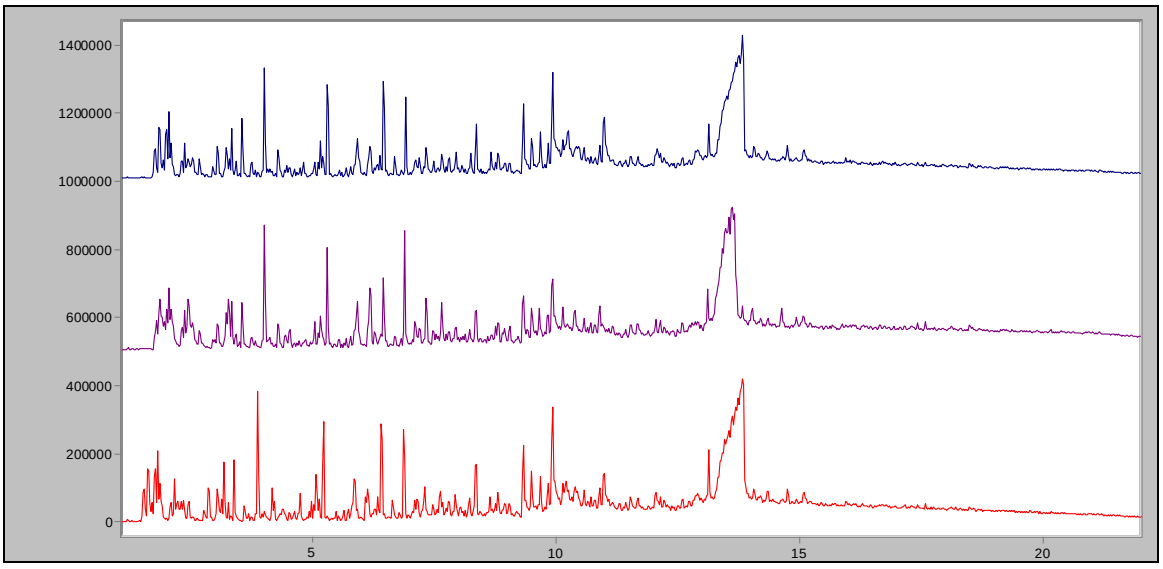

Figure 361: From top to bottom: Epson 121 Run 3, Epson 121 Run 4 and Epson 122 Run 1 ink on paper sample pyrograms.

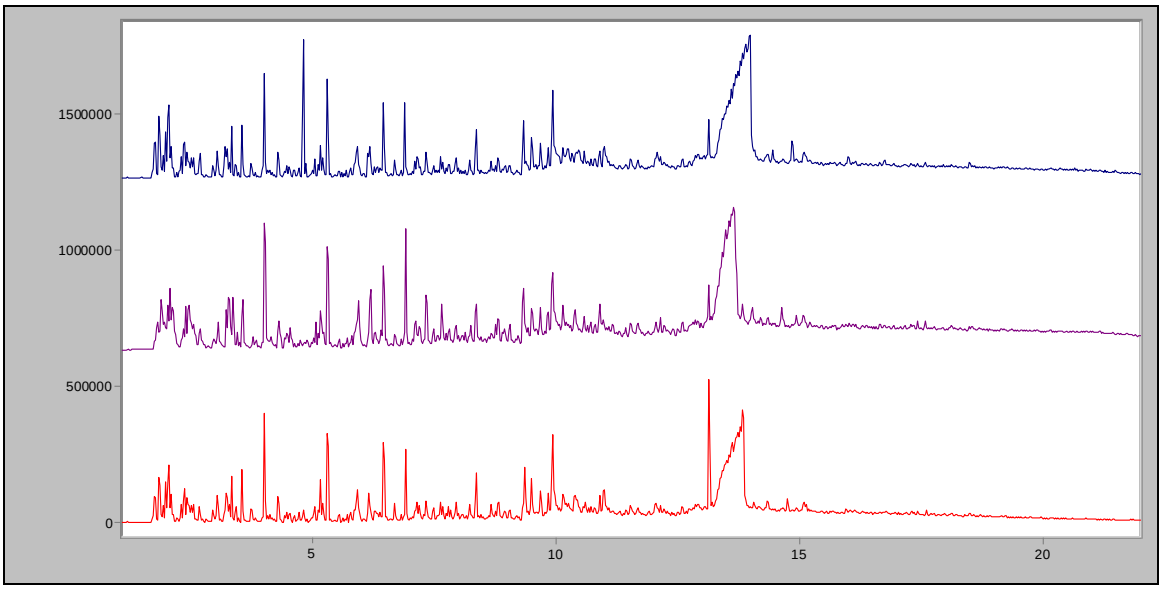

Figure 362: From top to bottom: Epson 122 Run 2, Epson 122 Run 3 and Epson 123 Run 1 ink on paper sample pyrograms.

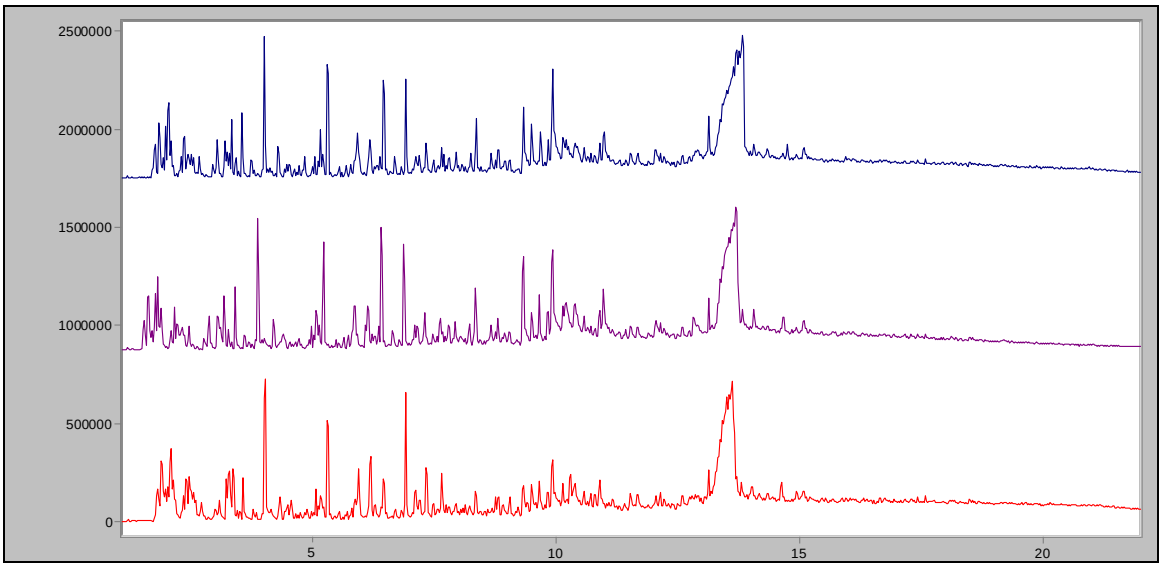

Figure 363: From top to bottom: Epson 123 Run 2, Epson 123 Run 3 and Epson 123 Run 4 ink on paper sample pyrograms.

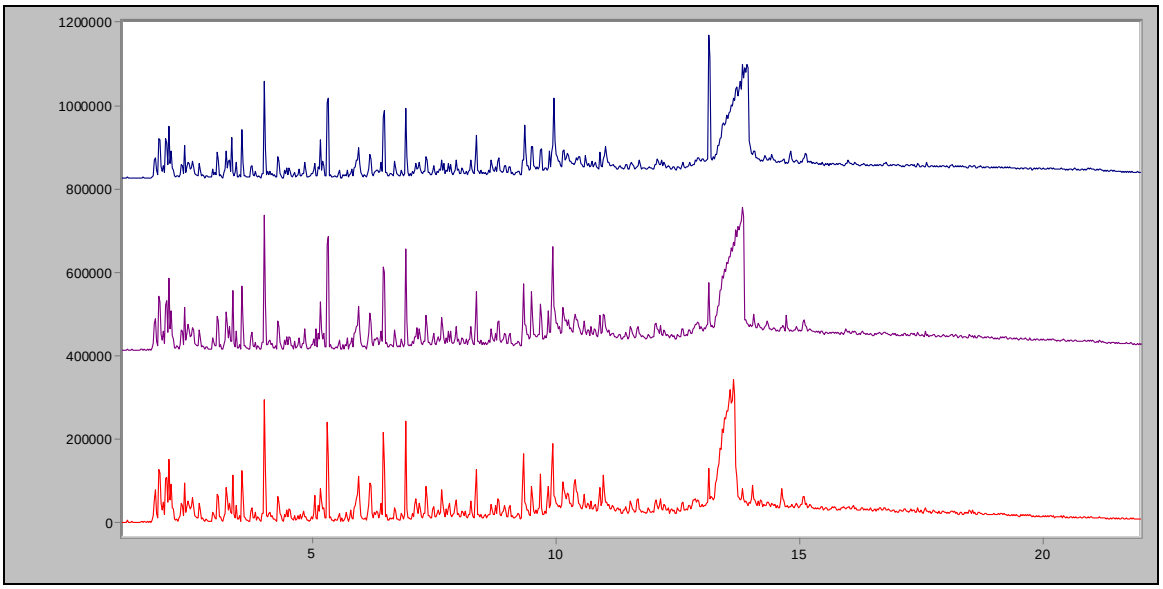

Figure 364: From top to bottom: Epson 124 Run 1, Epson 124 Run 2 and Epson 124 Run 3 ink on paper sample pyrograms.

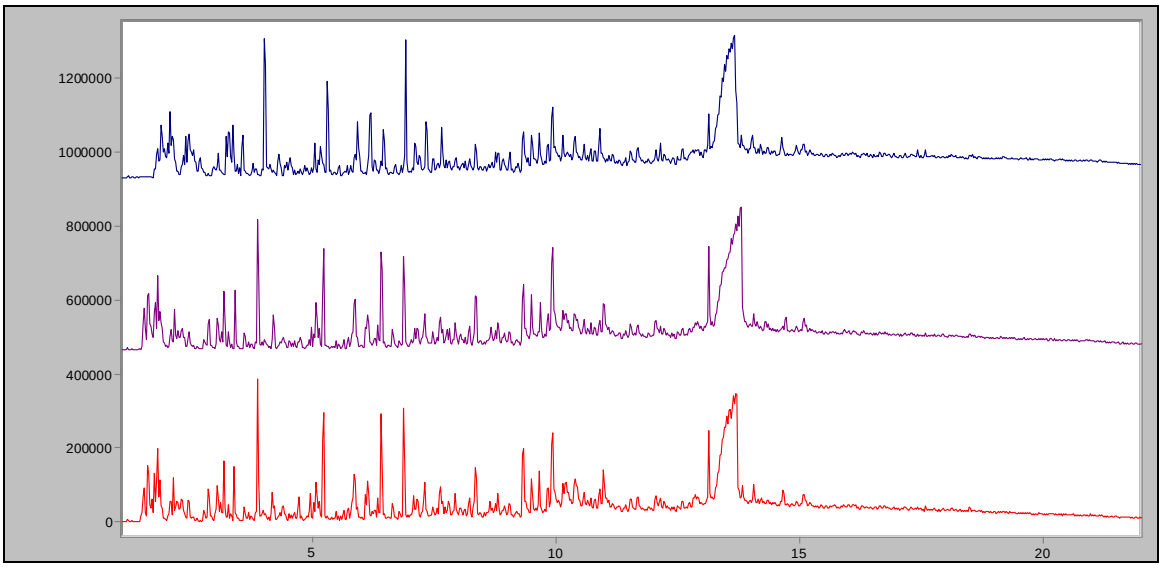

Figure 365: From top to bottom: Epson 124 Run 4, Epson 125 Run 1 and Epson 125 Run 2 ink on paper sample pyrograms.

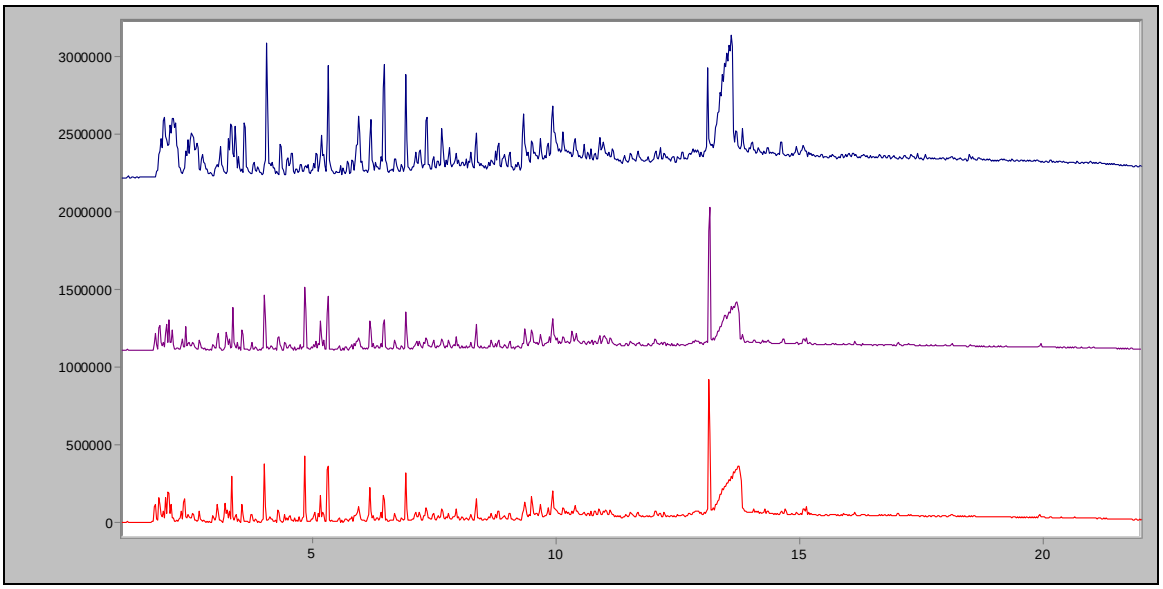

Figure 366: From top to bottom: Epson 125 Run 3, Epson 156 Run 1 and Epson 156 Run 2 ink on paper sample pyrograms.

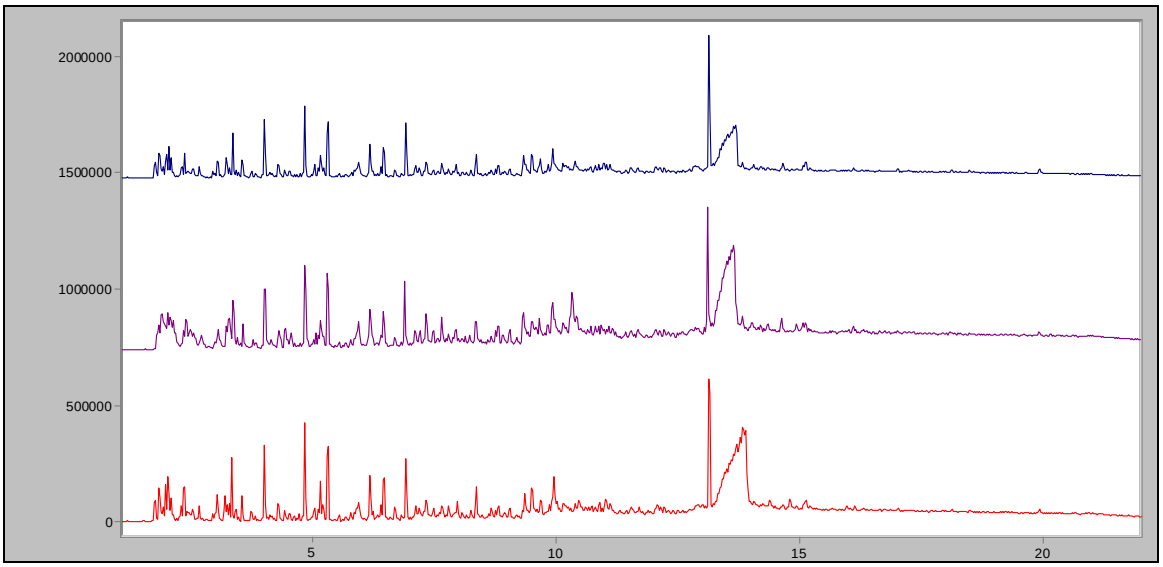

Figure 367: From top to bottom: Epson 156 Run 3, Epson 156 Run 4 and Epson 157 Run 1 ink on paper sample pyrograms.

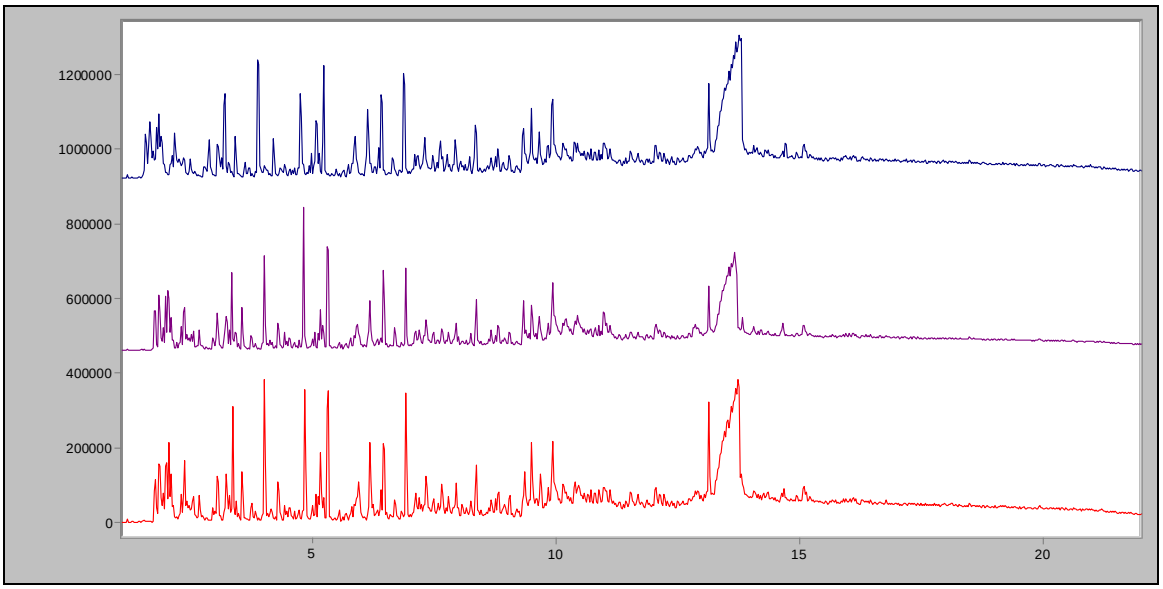

Figure 368: From top to bottom: Epson 157 Run 2, Epson 157 Run 3 and Epson 158 Run 1 ink on paper sample pyrograms.

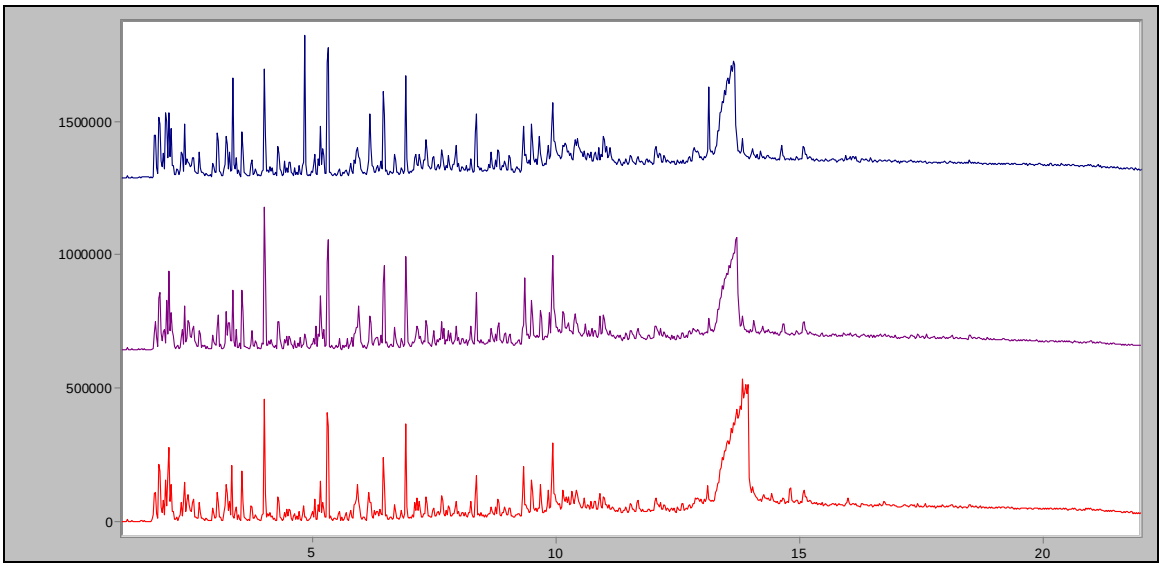

Figure 369: From top to bottom: Epson 158 Run 2, Epson 558 Run 1 and Epson 558 Run 2 ink on paper sample pyrograms.

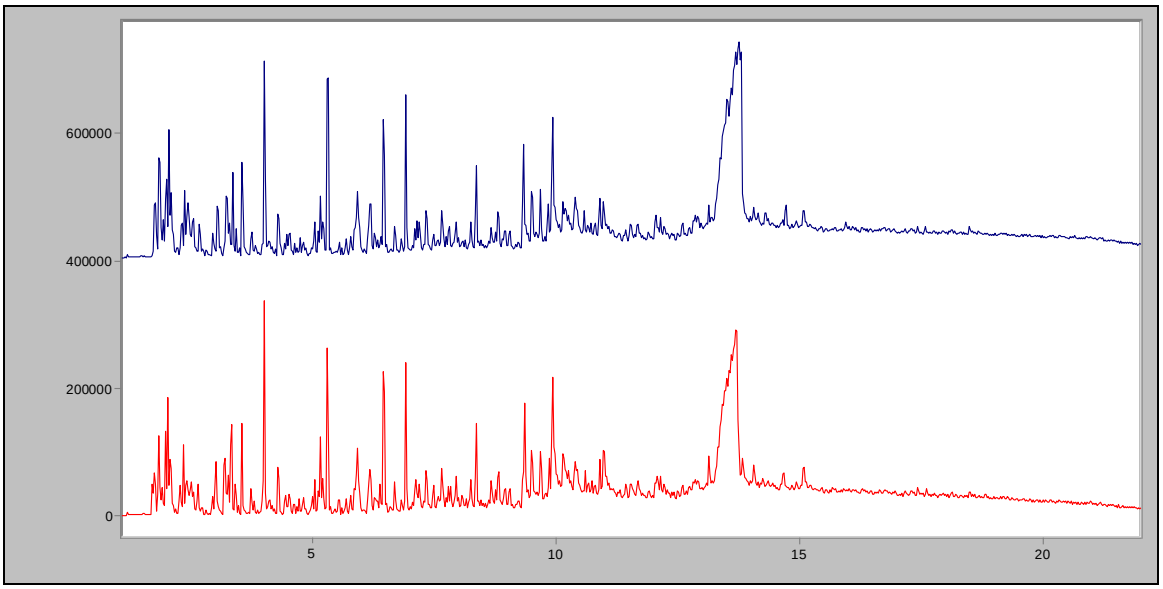

Figure 370: From top to bottom: Epson 558 Run 3 and Epson 559 Run 1 ink on paper sample pyrograms.

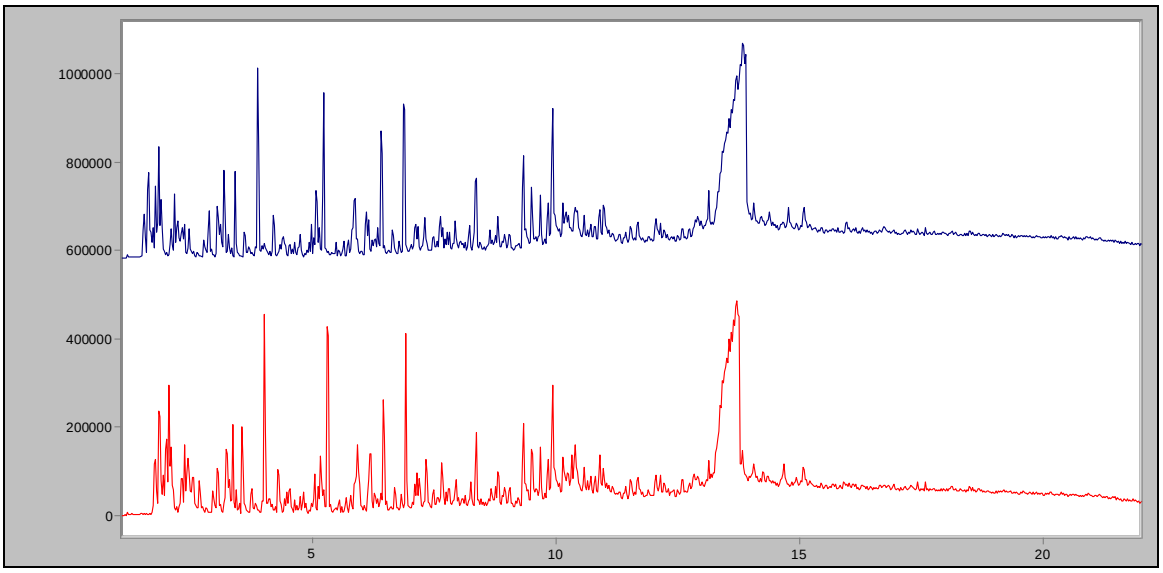

Figure 371: From top to bottom: Epson 559 Run 2 and Epson 559 Run 3 ink on paper sample pyrograms.

HEWLETT PACKARD

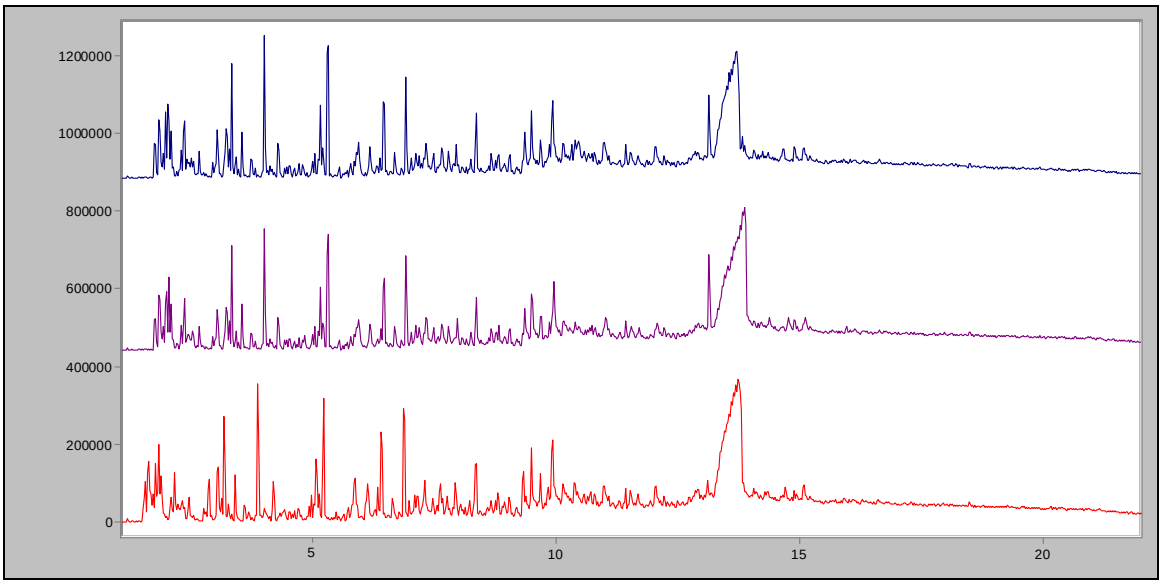

Figure 372: From top to bottom: HP 198 Run 1, HP 198 Run 2 and HP 198 Run 3 ink on paper sample pyrograms.

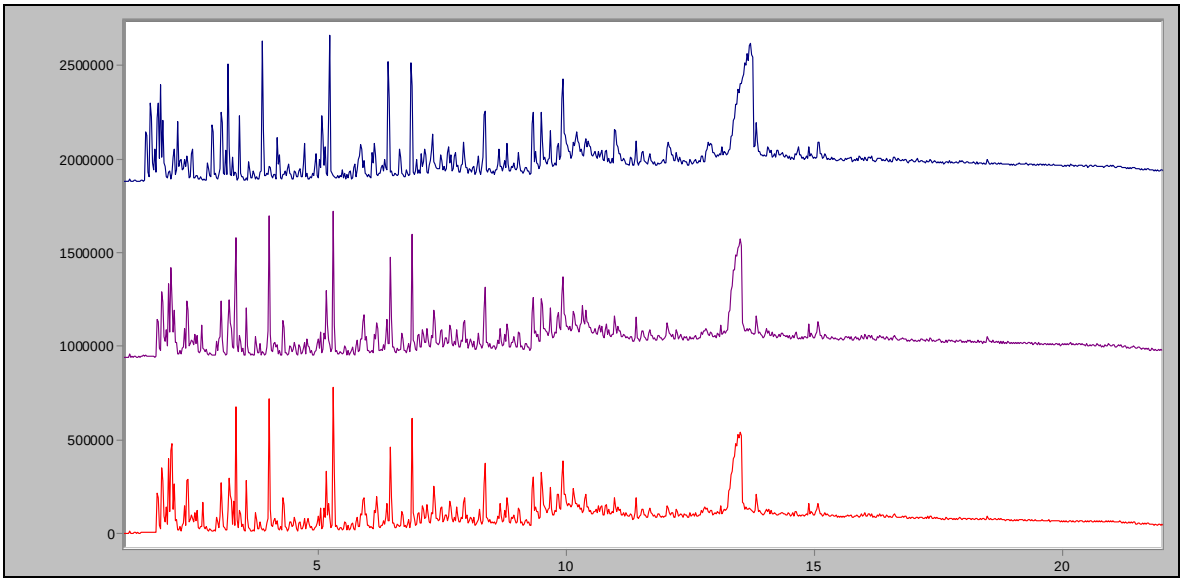

Figure 373: From top to bottom: HP 198 Run 4, HP 198 Run 5 and HP 198 Run 6 ink on paper sample pyrograms.

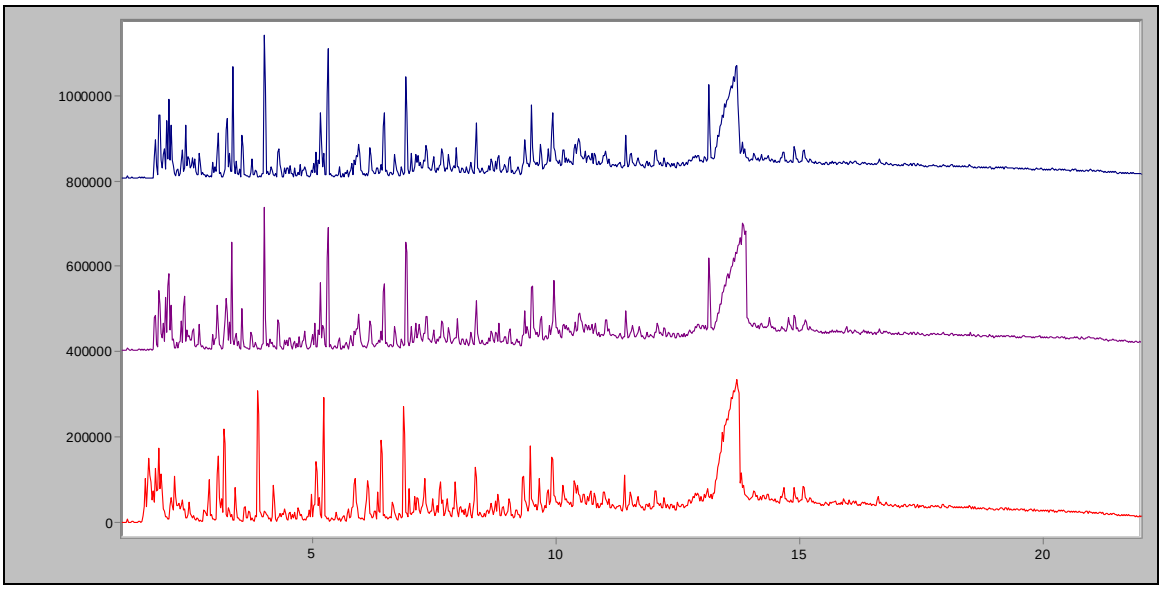

Figure 374: From top to bottom: HP 199 Run 1, HP 199 Run 2 and HP 199 Run 3 ink on paper sample pyrograms.

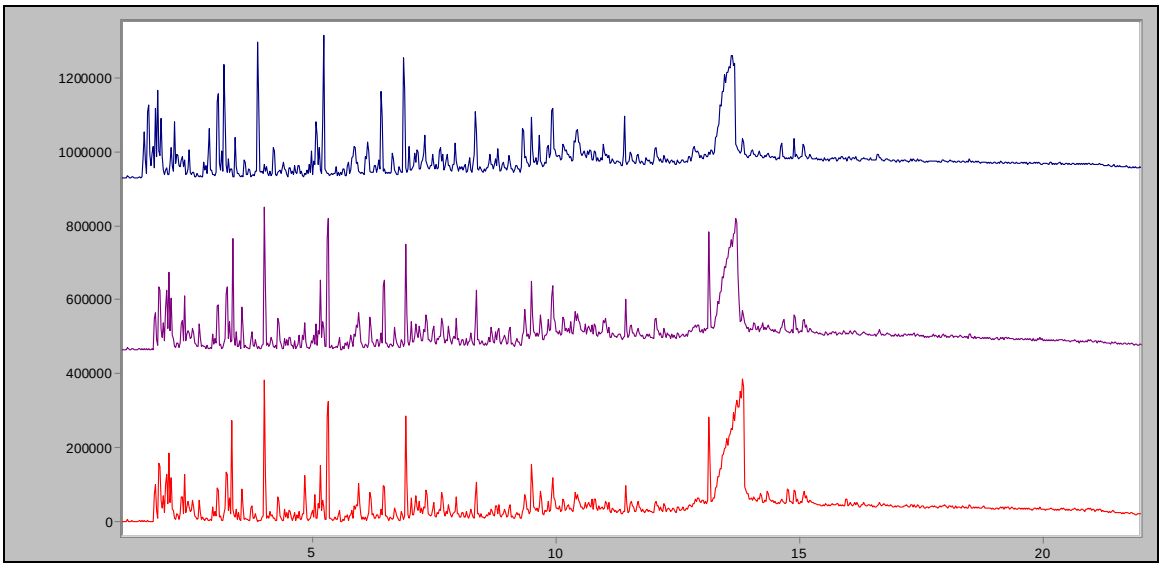

Figure 375: From top to bottom: HP 199 Run 4, HP 200 Run 1 and HP 200 Run 2 ink on paper sample pyrograms.

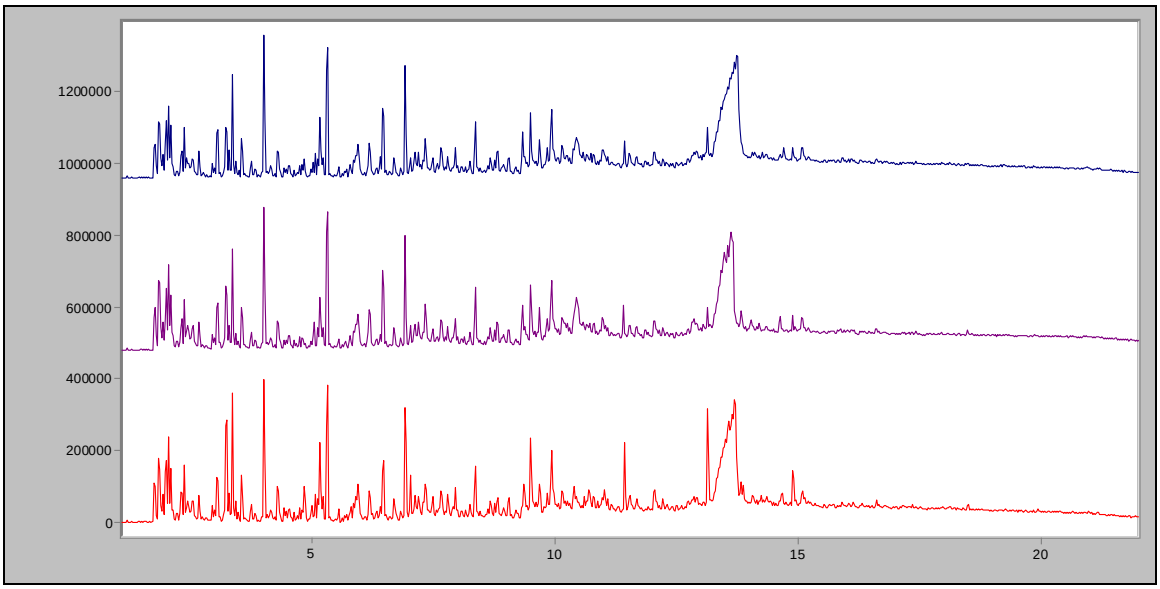

Figure 376: From top to bottom: HP 200 Run 3, HP 200 Run 4 and HP 201 Run 1 ink on paper sample pyrograms.

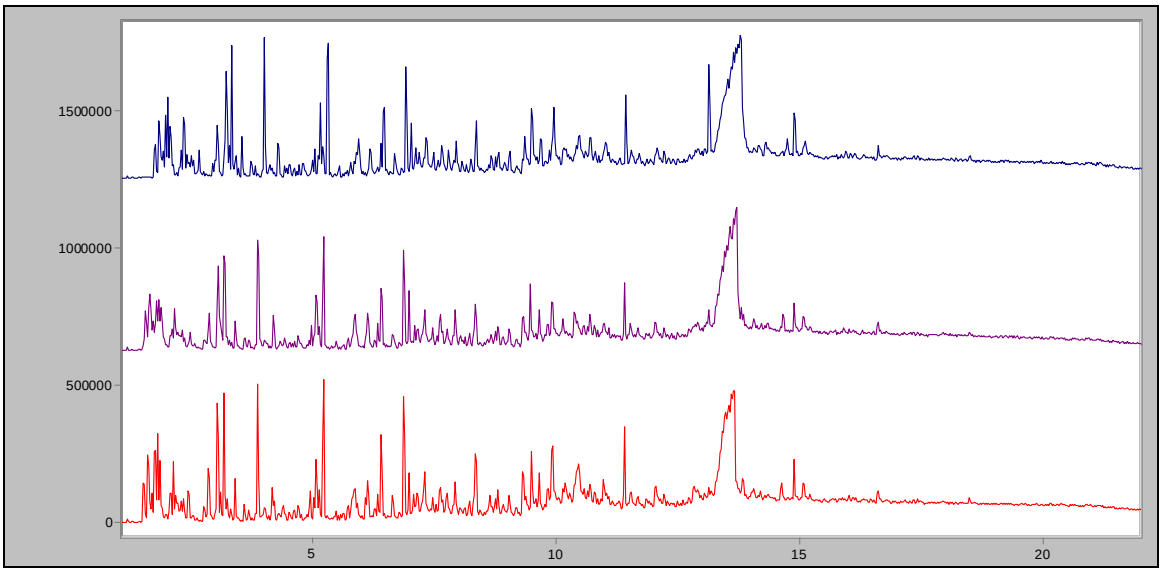

Figure 377: From top to bottom: HP 201 Run 2, HP 201 Run 3 and HP 201 Run 4 ink on paper sample pyrograms.

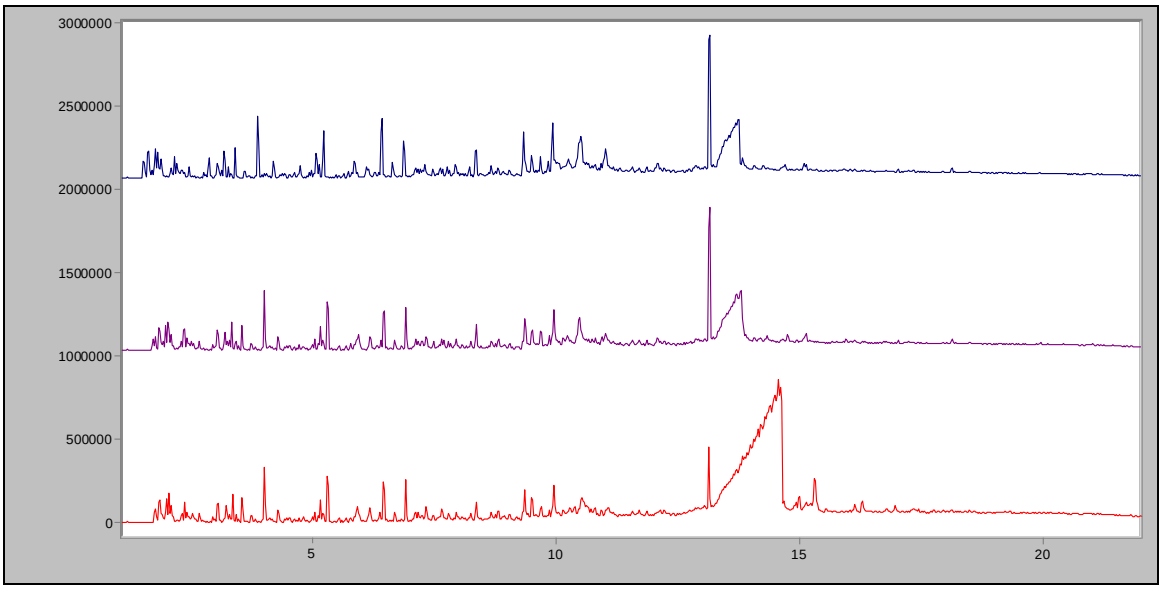

Figure 378: From top to bottom: HP 205 Run 1, HP 205 Run 2 and HP 205 Run 3 ink on paper sample pyrograms.

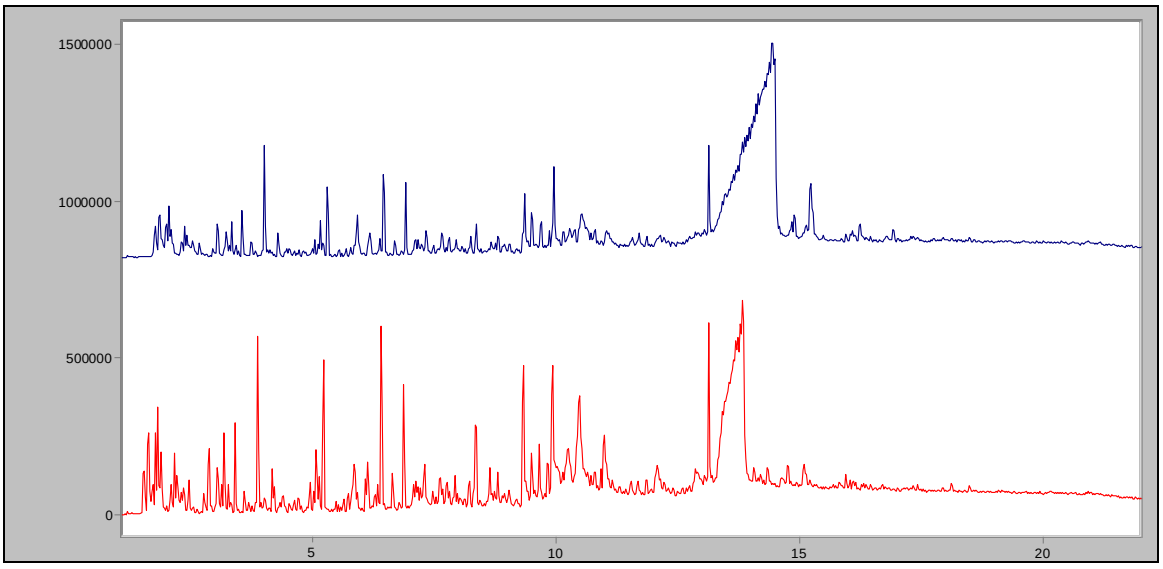

Figure 379: From top to bottom: HP 205 Run 4 and HP 205 Run 5 ink on paper sample pyrograms.

KODAK

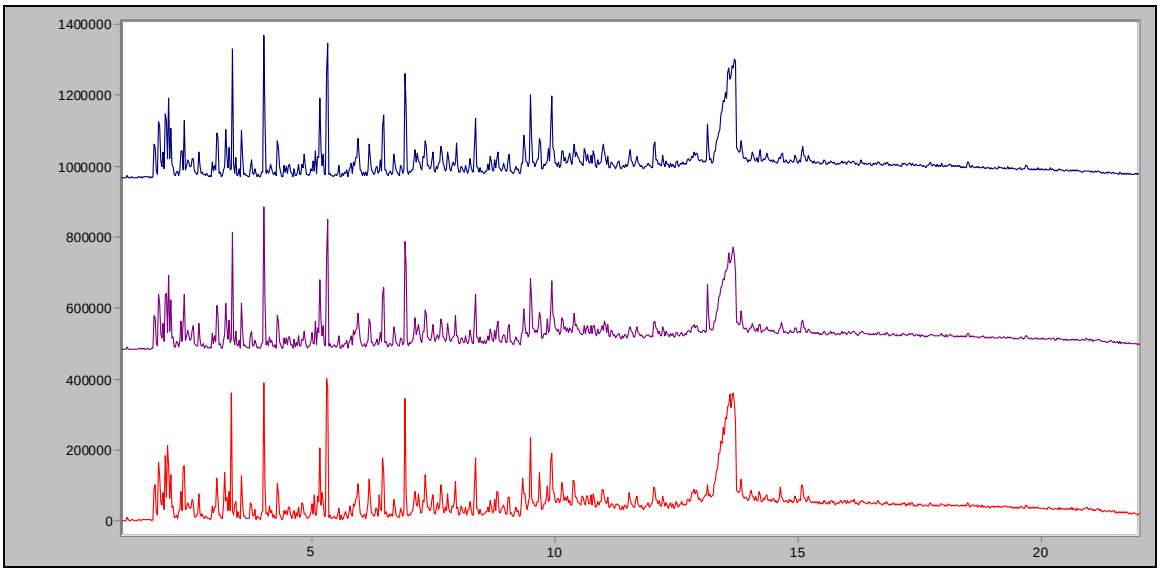

Figure 380: From top to bottom: Kodak 17 Run 1, Kodak 17 Run 2 and Kodak 17 Run 3 ink on paper sample pyrograms.

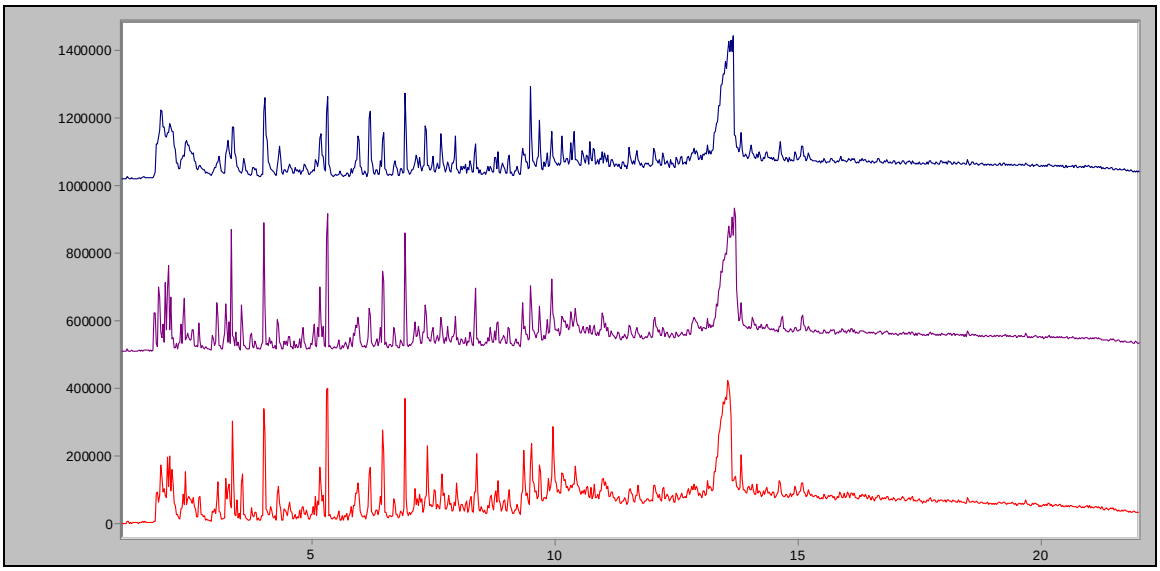

Figure 381: From top to bottom: Kodak 17 Run 4, Kodak 17 Run 5 and Kodak 17 Run 6 ink on paper sample pyrograms.

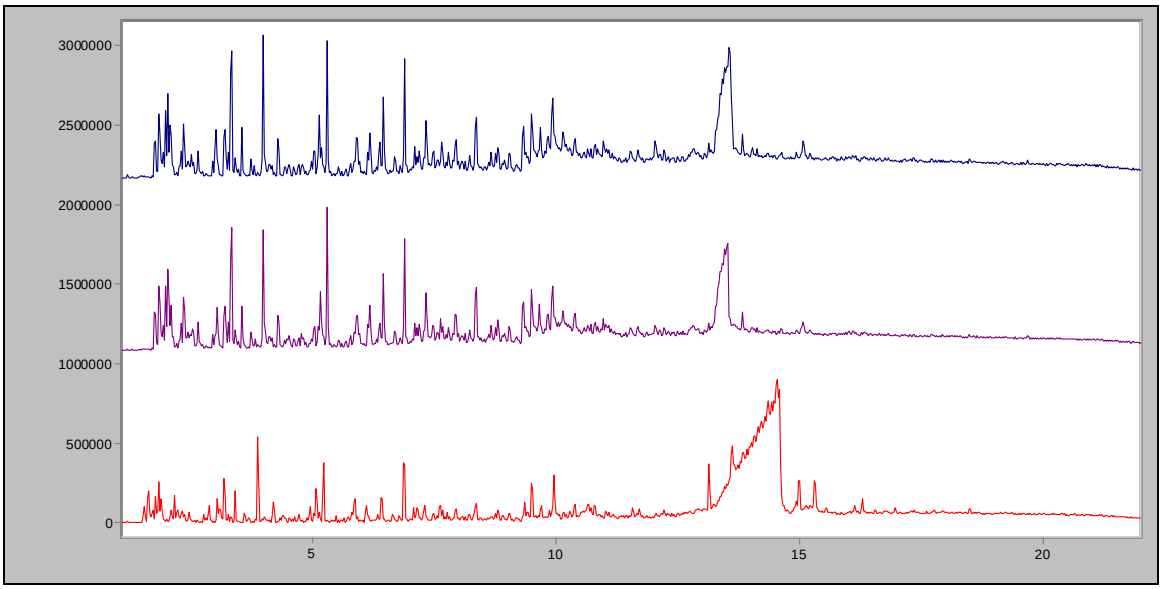

Figure 382: From top to bottom: Kodak 17 Run 7, Kodak 17 Run 8 and Kodak 22 Run 1 ink on paper sample pyrograms.

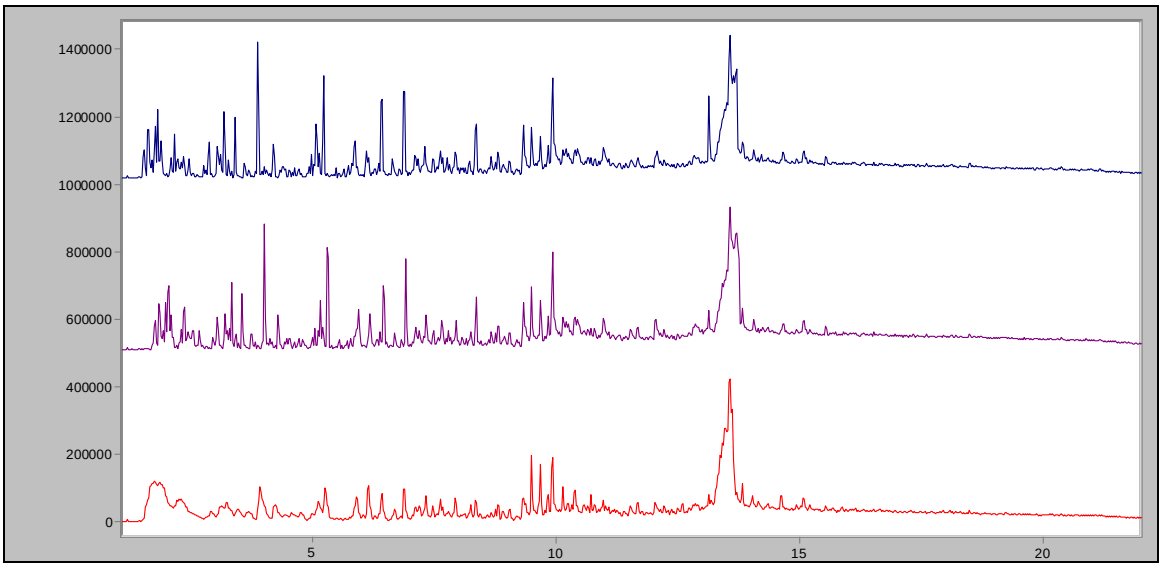

Figure 383: From top to bottom: Kodak 22 Run 2, Kodak 22 Run 3 and Kodak 22 Run 4 ink on paper sample pyrograms.

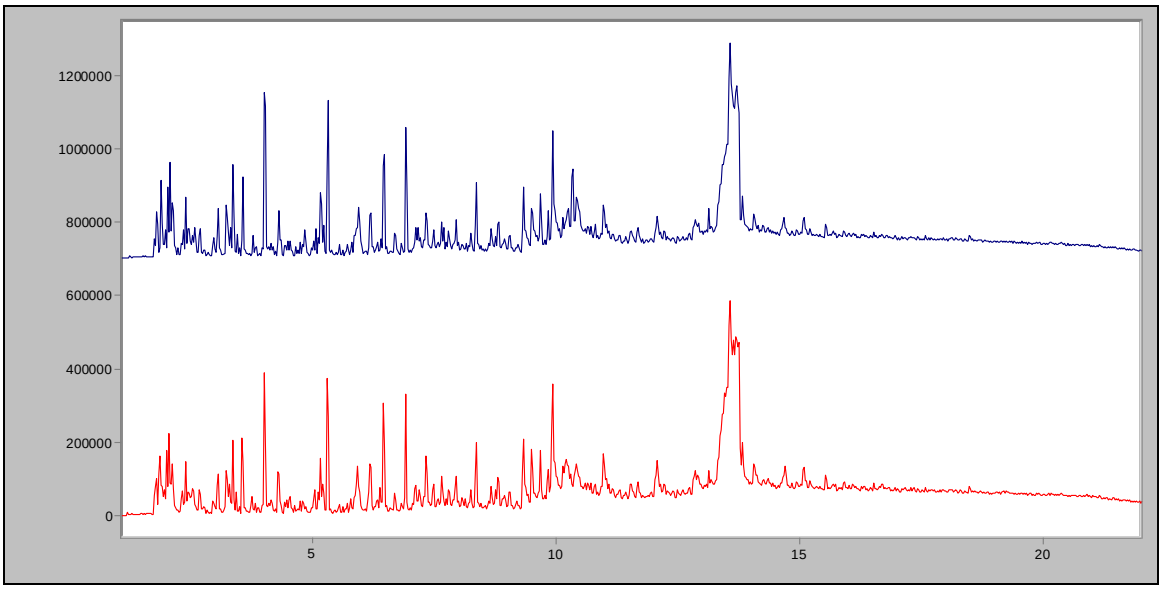

Figure 384: From top to bottom: Kodak 22 Run 5 and Kodak 22 Run 6 ink on paper sample pyrograms.

OKIDATA

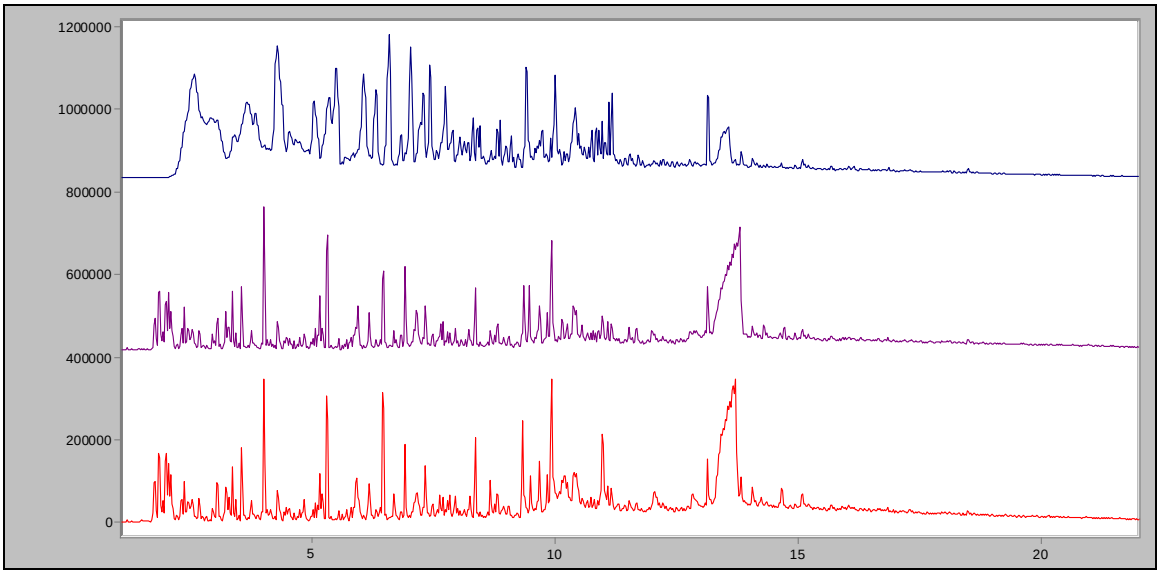

Figure 385: From top to bottom: Okidata 04 Run 1, Okidata 04 Run 2 and Okidata 04 Run 3 ink on paper sample pyrograms.

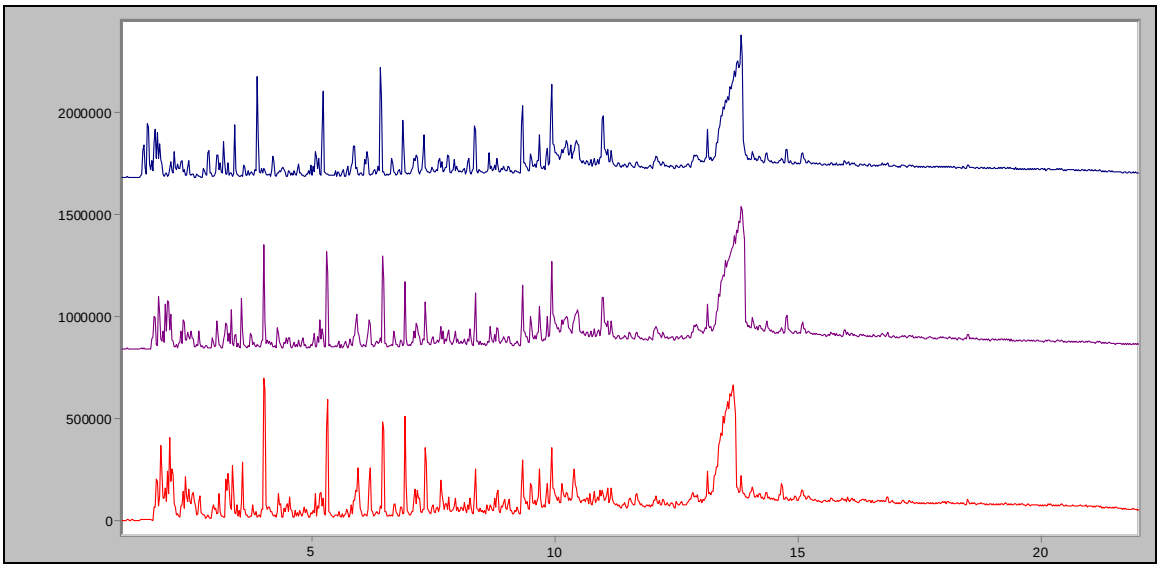

Figure 386: From top to bottom: Okidata 04 Run 4, Okidata 04 Run 5 and Okidata 04 Run 6 ink on paper sample pyrograms.

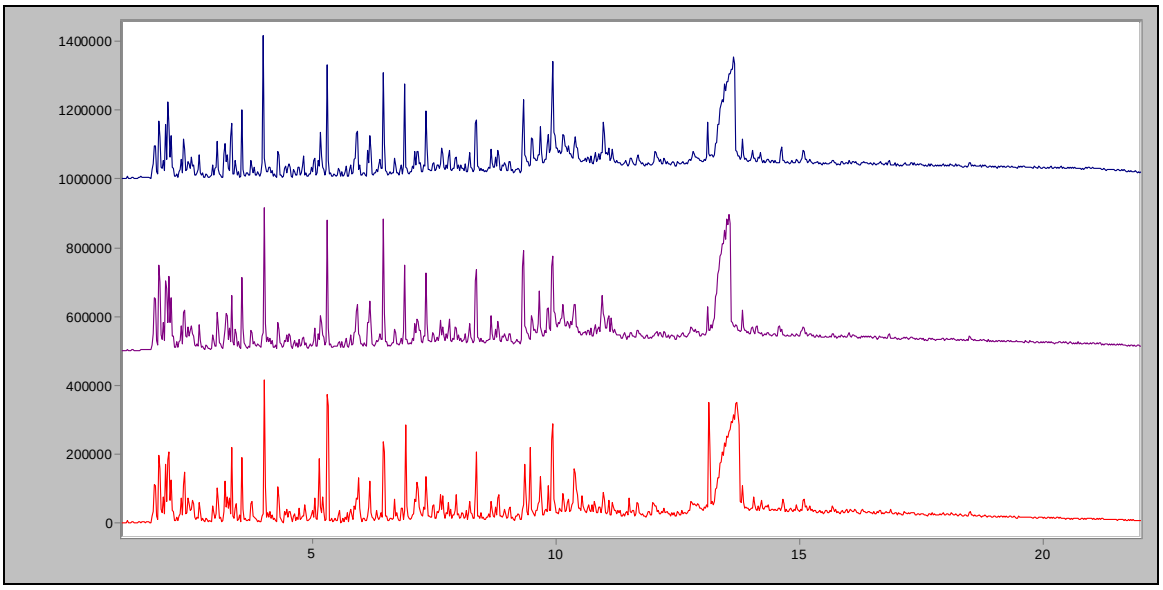

Figure 387: From top to bottom: Okidata 04 Run 7, Okidata 04 Run 8 and Okidata 05 Run 1 ink on paper sample pyrograms.

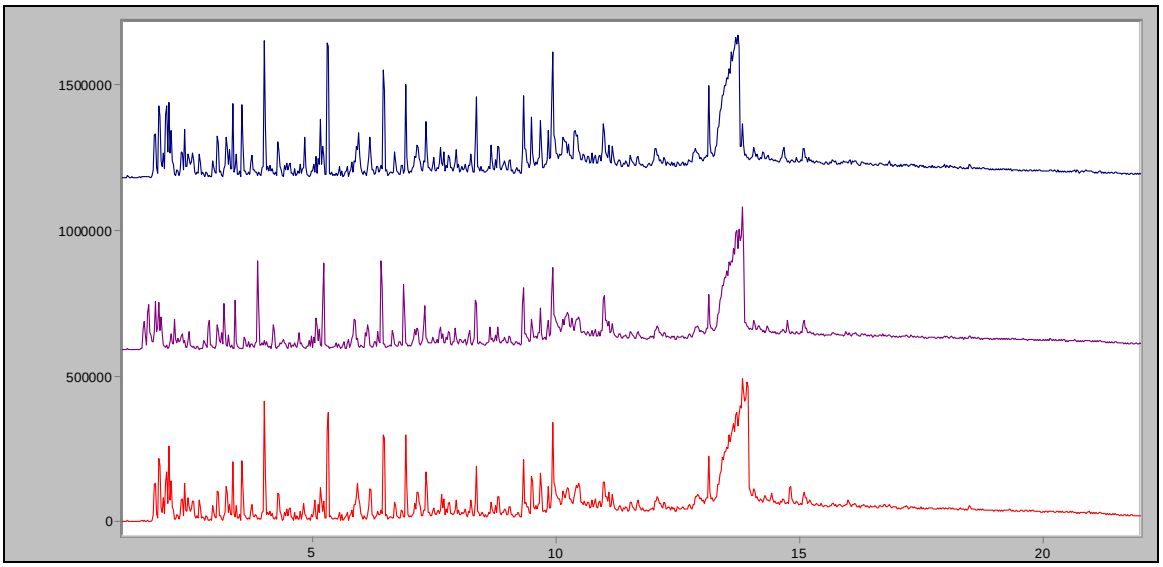

Figure 388: From top to bottom: Okidata 05 Run 2, Okidata 05 Run 3 and Okidata 05 Run 4 ink on paper sample pyrograms.

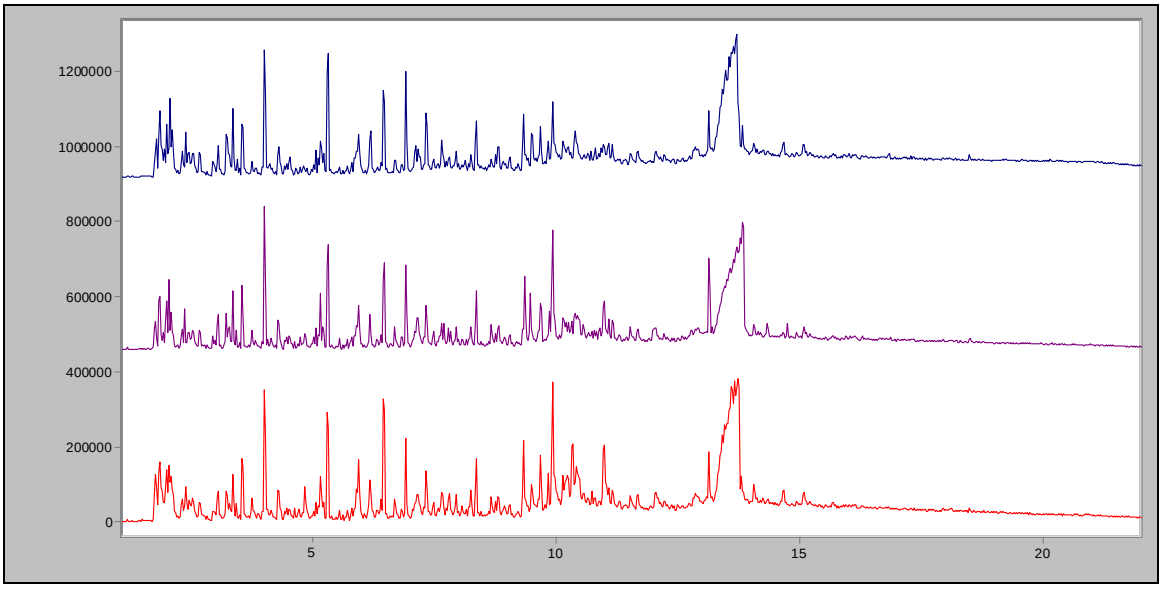

Figure 389: From top to bottom: Okidata 05 Run 5, Okidata 09 Run 1 and Okidata 09 Run 2 ink on paper sample pyrograms.

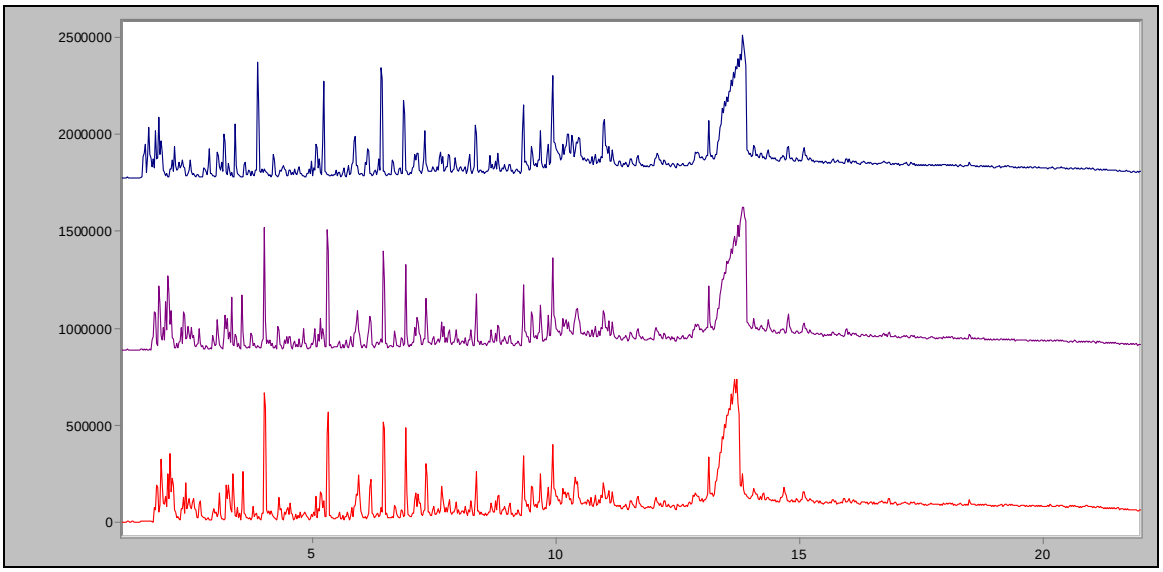

Figure 390: From top to bottom: Okidata 09 Run 3, Okidata 09 Run 4 and Okidata 09 Run 5 ink on paper sample pyrograms.

XEROX

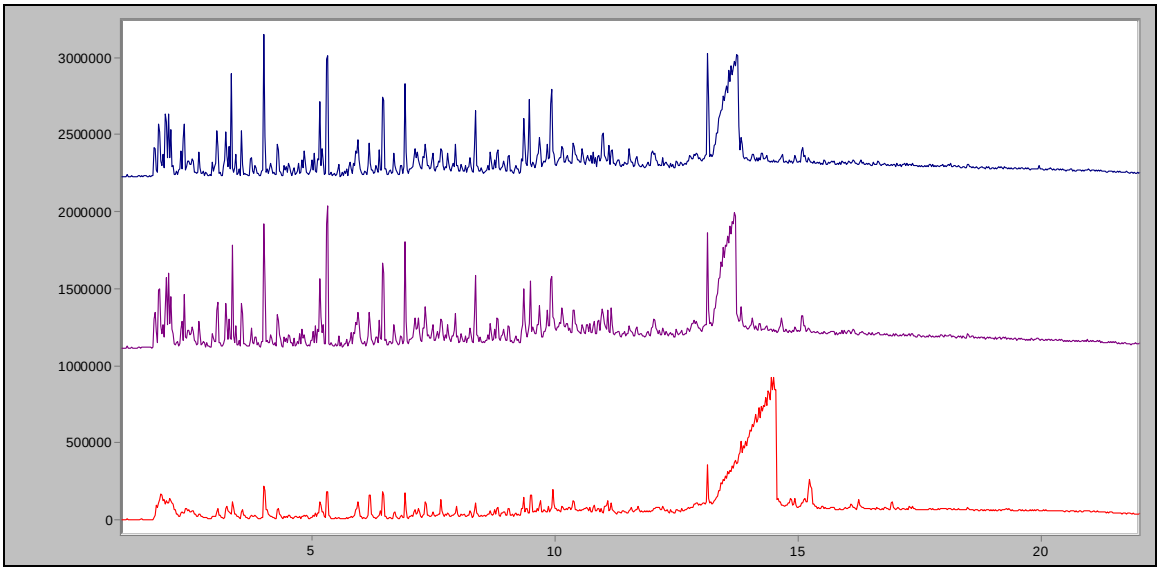

Figure 391: From top to bottom: Xerox 13 Run 1, Xerox 13 Run 2 and Xerox 13 Run 3 ink on paper sample pyrograms.

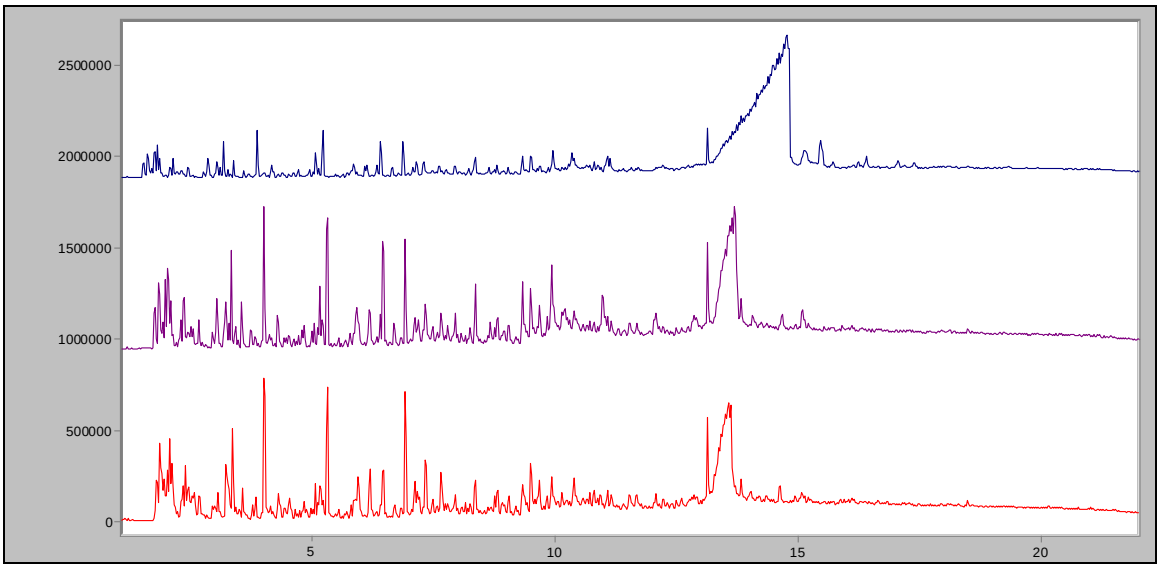

Figure 392: From top to bottom: Xerox 13 Run 4, Xerox 13 Run 5 and Xerox 13 Run 6 ink on paper sample pyrograms.

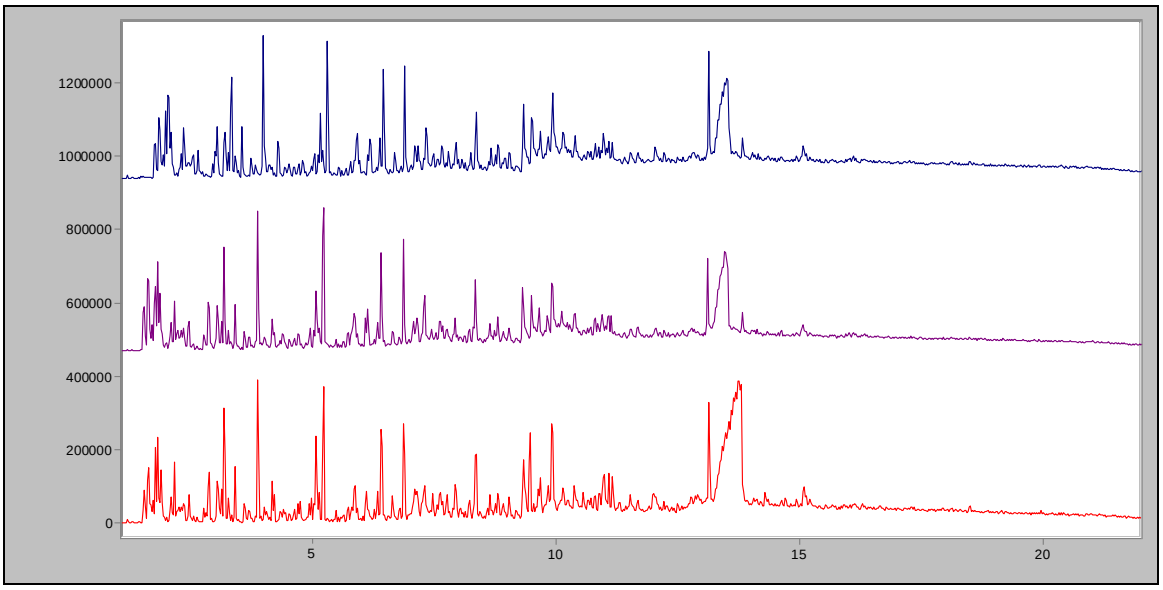

Figure 393: From top to bottom: Xerox 13 Run 7, Xerox 13 Run 8 and Xerox 14 Run 1 ink on paper sample pyrograms.

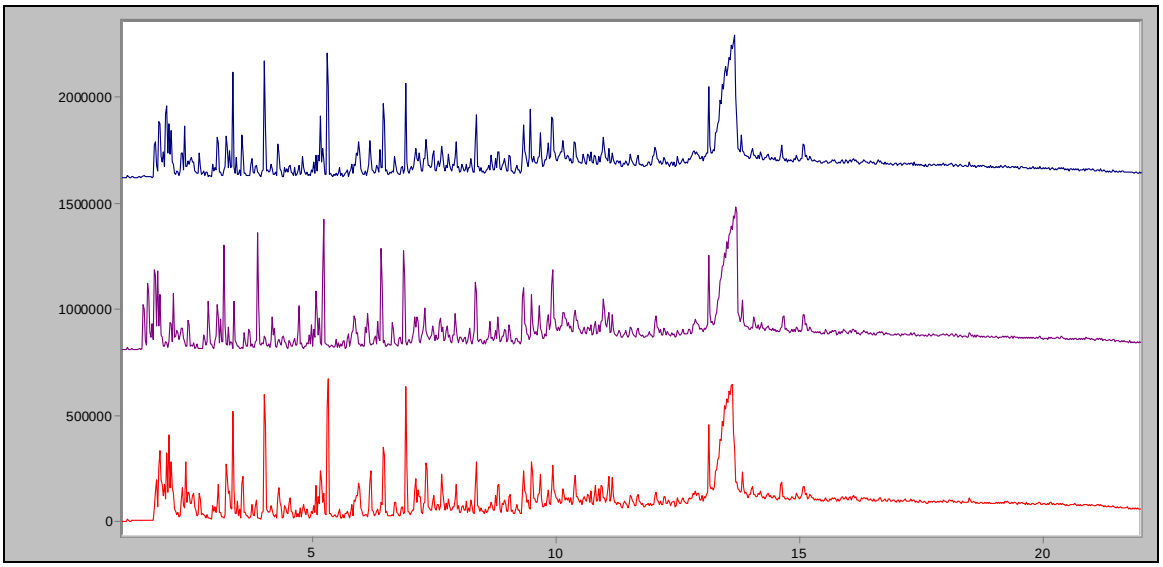

Figure 394: From top to bottom: Xerox 14 Run 2, Xerox 14 Run 3 and Xerox 14 Run 4 ink on paper sample pyrograms.

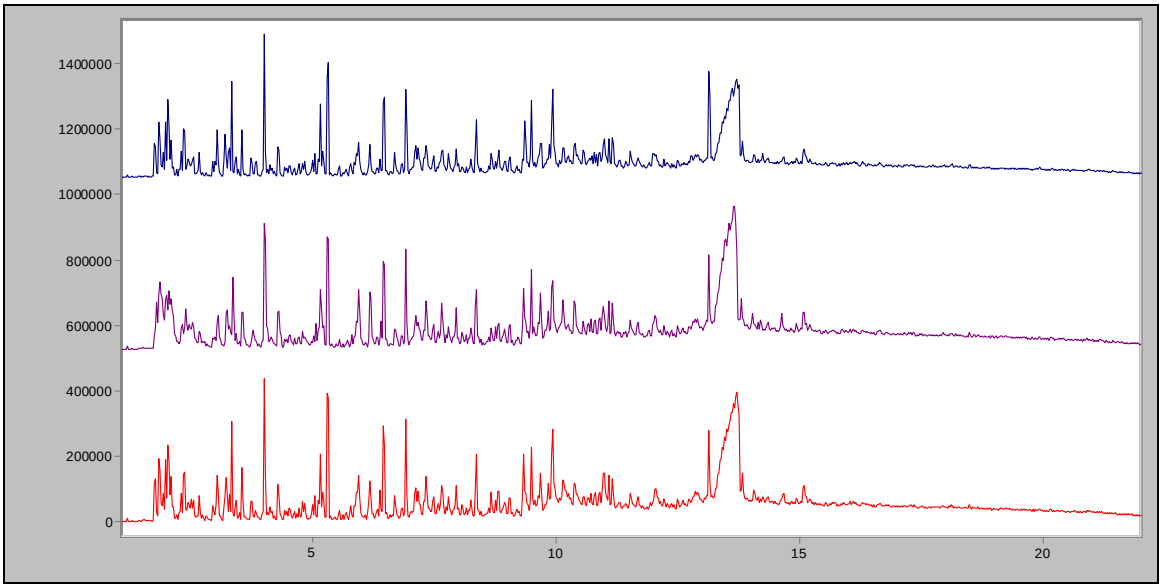

Figure 395: From top to bottom: Xerox 15 Run 1, Xerox 15 Run 2 and Xerox 15 Run 3 ink on paper sample pyrograms.

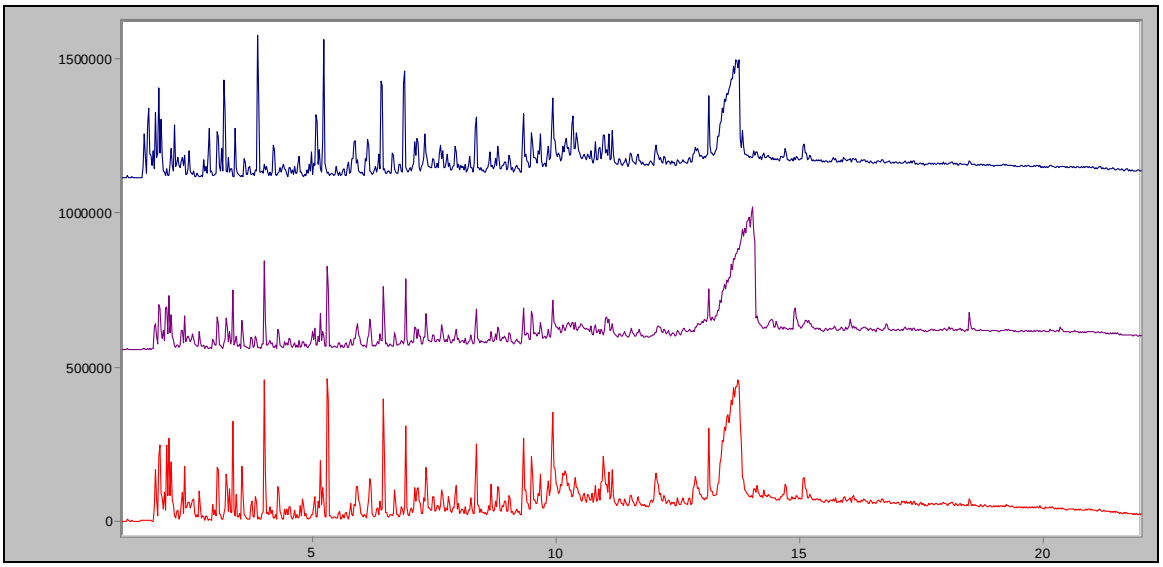

Figure 396: From top to bottom: Xerox 15 Run 4, Xerox 15 Run 5 and Xerox 15 Run 6 ink on paper sample pyrograms.

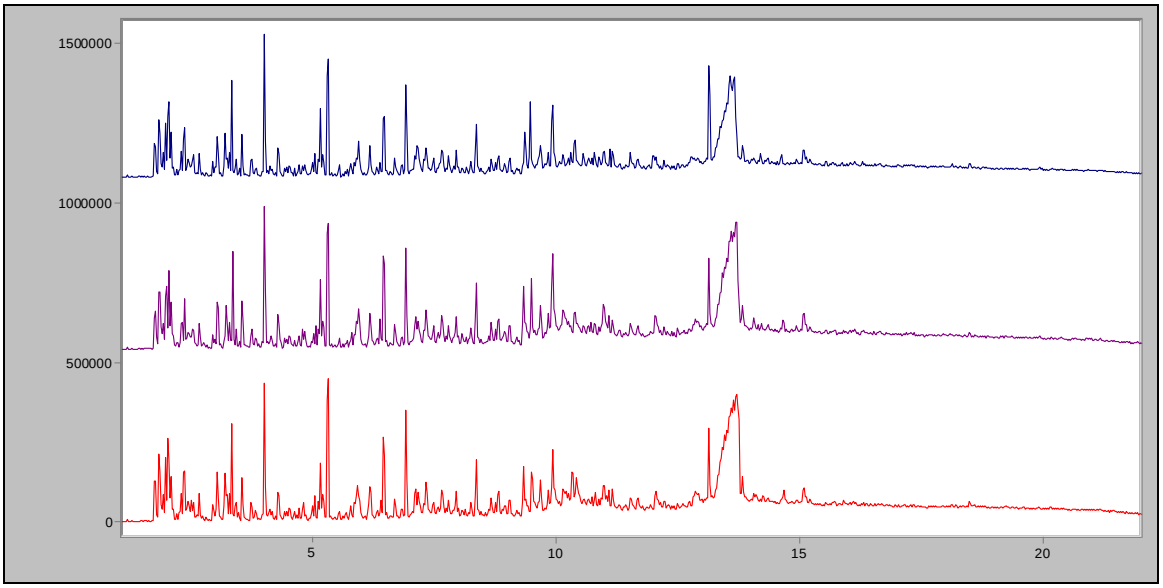

Figure 397: From top to bottom: Xerox 16 Run 1, Xerox 16 Run 2 and Xerox 16 Run 3 ink on paper sample pyrograms.

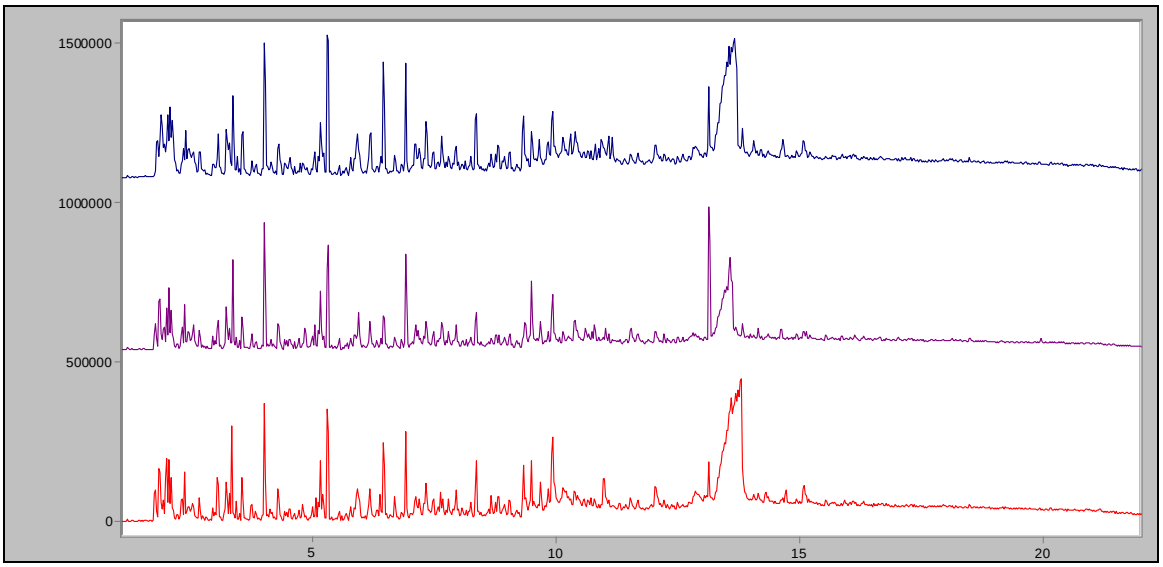

Figure 398: From top to bottom: Xerox 16 Run 4, Xerox 24 Run 1 and Xerox 24 Run 2 ink on paper sample pyrograms.

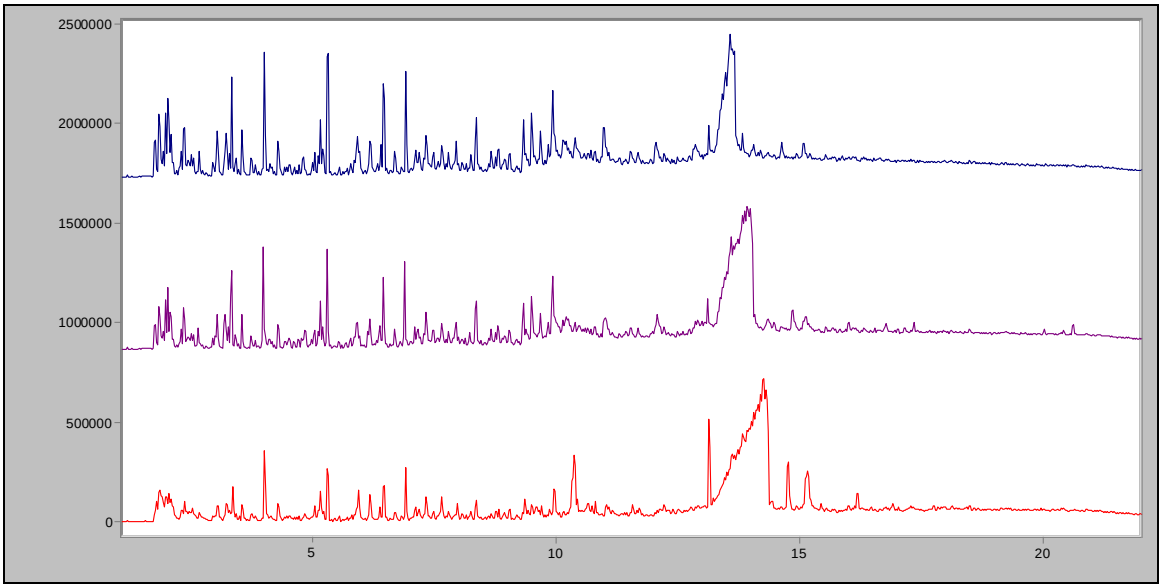

Figure 399: From top to bottom: Xerox 24 Run 3, Xerox 24 Run 4 and Xerox 25 Run 1 ink on paper sample pyrograms.

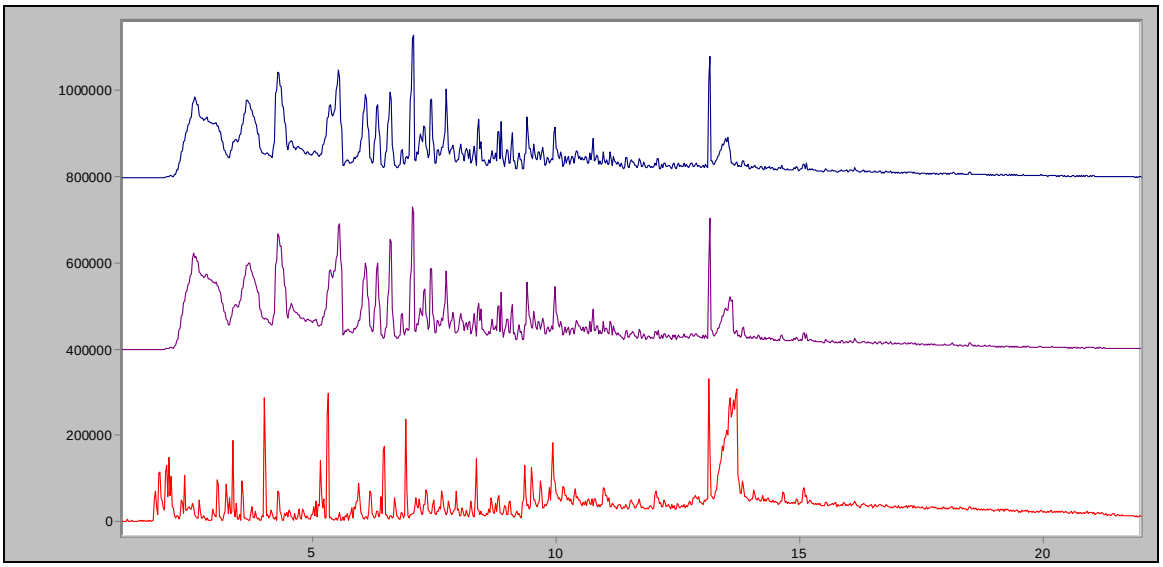

Figure 400: From top to bottom: Xerox 25 Run 2, Xerox 25 Run 3 and Xerox 25 Run 4 ink on paper sample pyrograms.

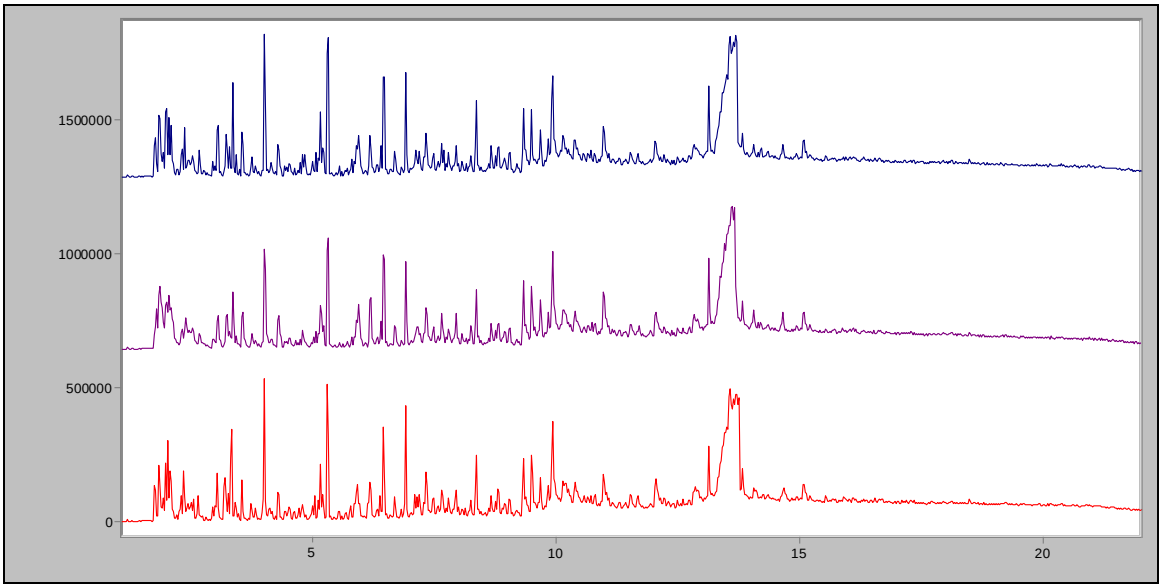

Figure 401: From top to bottom: Xerox 25 Run 5, Xerox 25 Run 6 and Xerox 25 Run 7 ink on paper sample pyrograms.

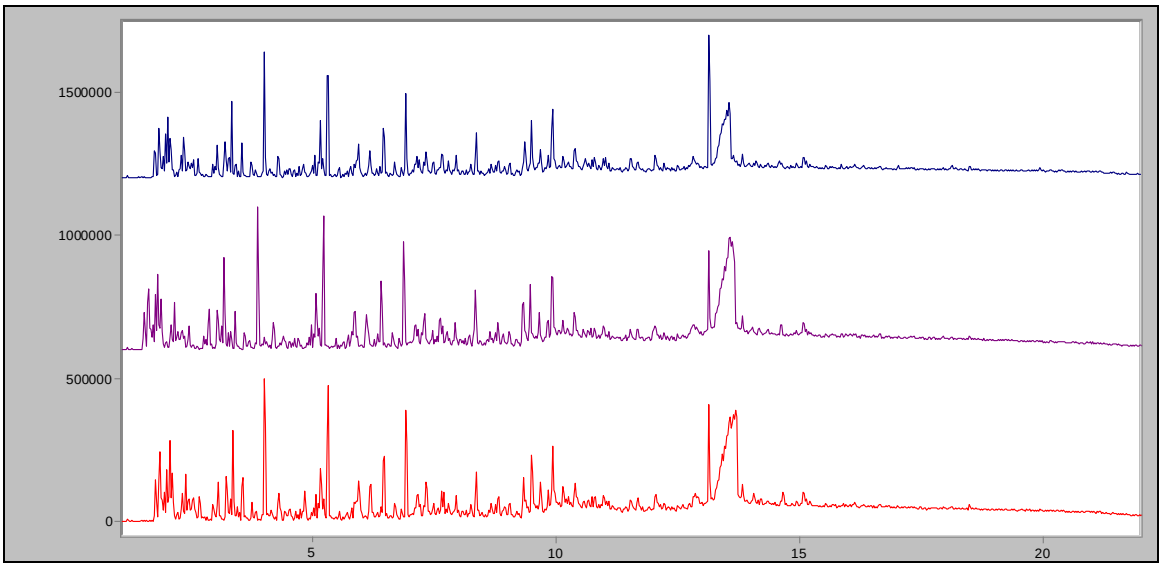

Figure 402: From top to bottom: Xerox 26 Run 1, Xerox 26 Run 2 and Xerox 26 Run 3 ink on paper sample pyrograms.

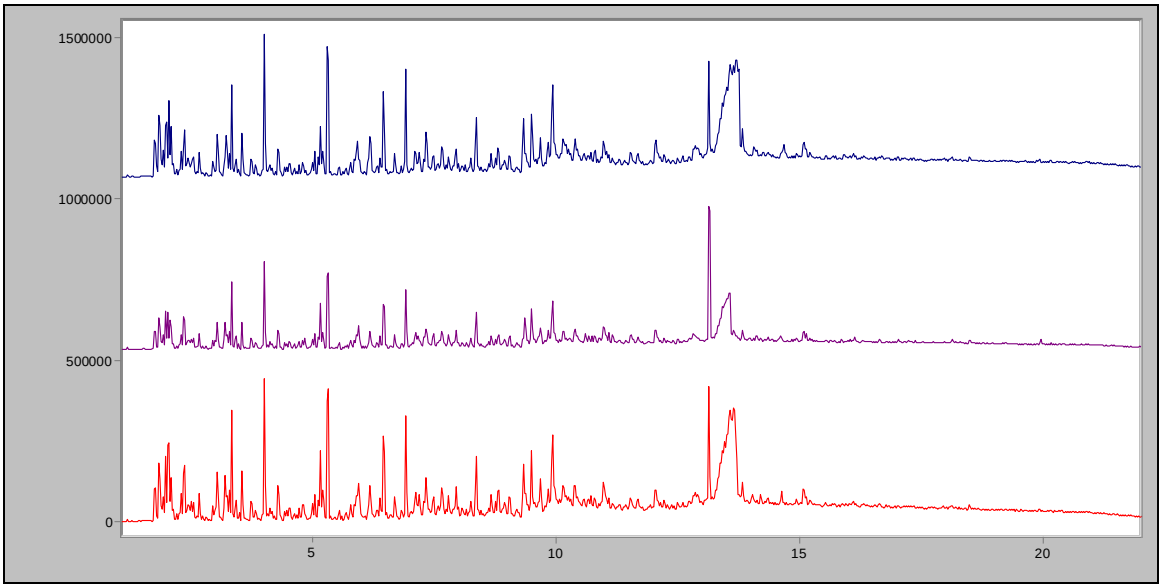

Figure 403: From top to bottom: Xerox 26 Run 4, Xerox 27 Run 1 and Xerox 27 Run 2 ink on paper sample pyrograms.

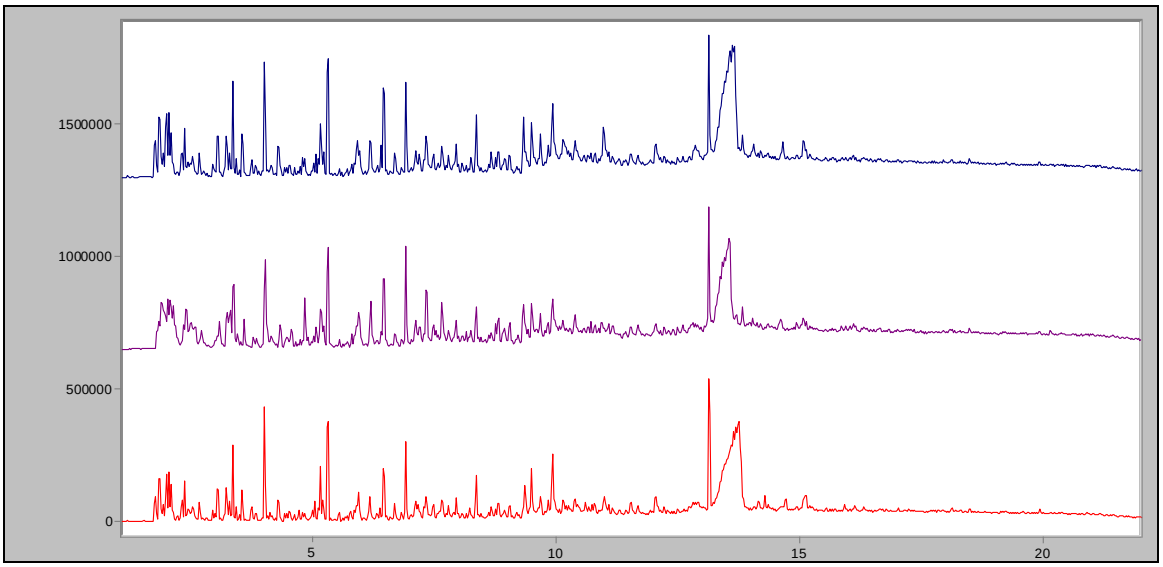

Figure 404: From top to bottom: Xerox 27 Run 3, Xerox 27 Run 4 and Xerox 28 Run 1 ink on paper sample pyrograms.

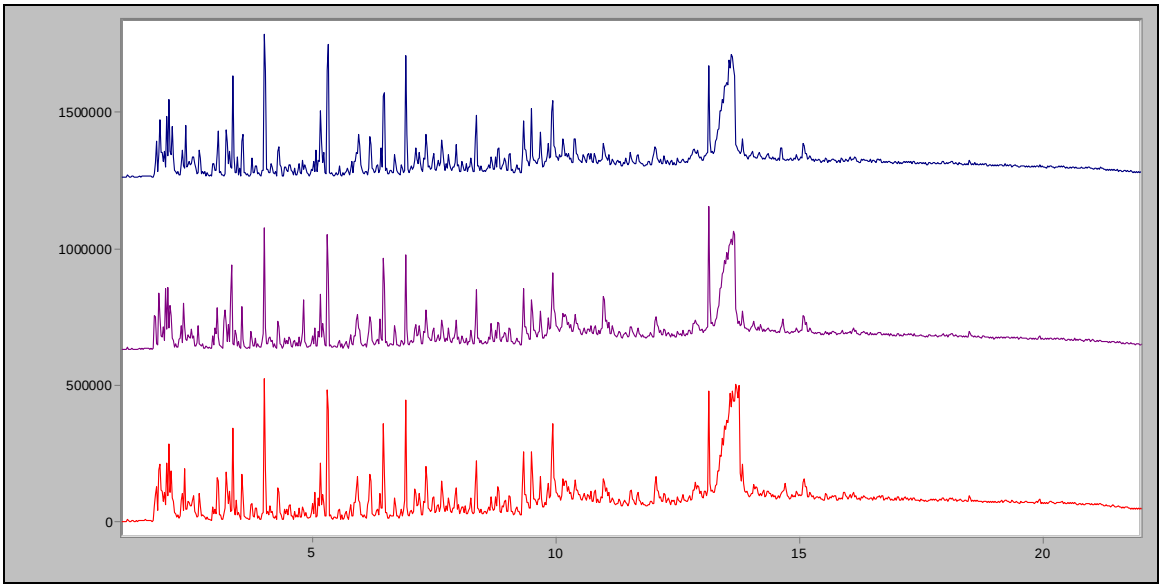

Figure 405: From top to bottom: Xerox 28 Run 2, Xerox 28 Run 3 and Xerox 28 Run 4 ink on paper sample pyrograms.

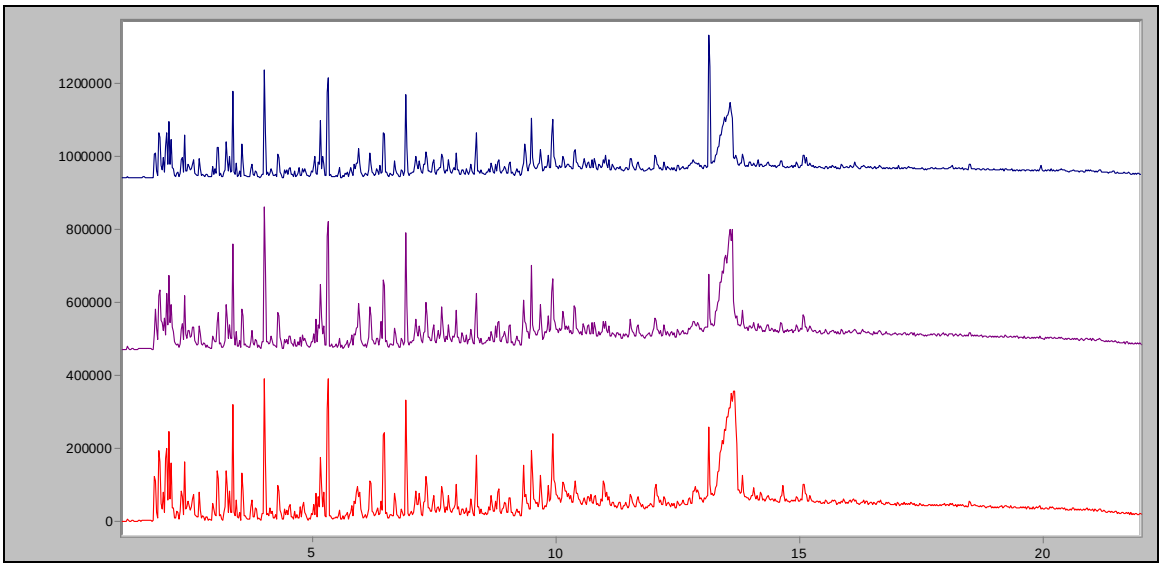

Figure 406: From top to bottom: Xerox 29 Run 1, Xerox 29 Run 2 and Xerox 29 Run 3 ink on paper sample pyrograms.

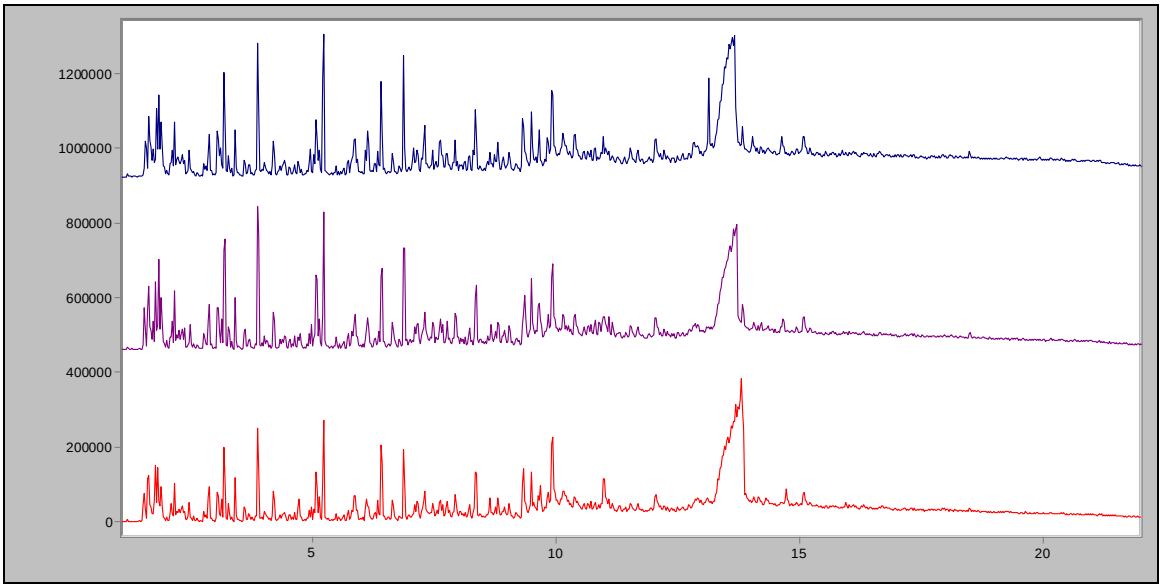

Figure 407: From top to bottom: Xerox 29 Run 4, Xerox 244 Run 1 and Xerox 244 Run 2 ink on paper sample pyrograms.

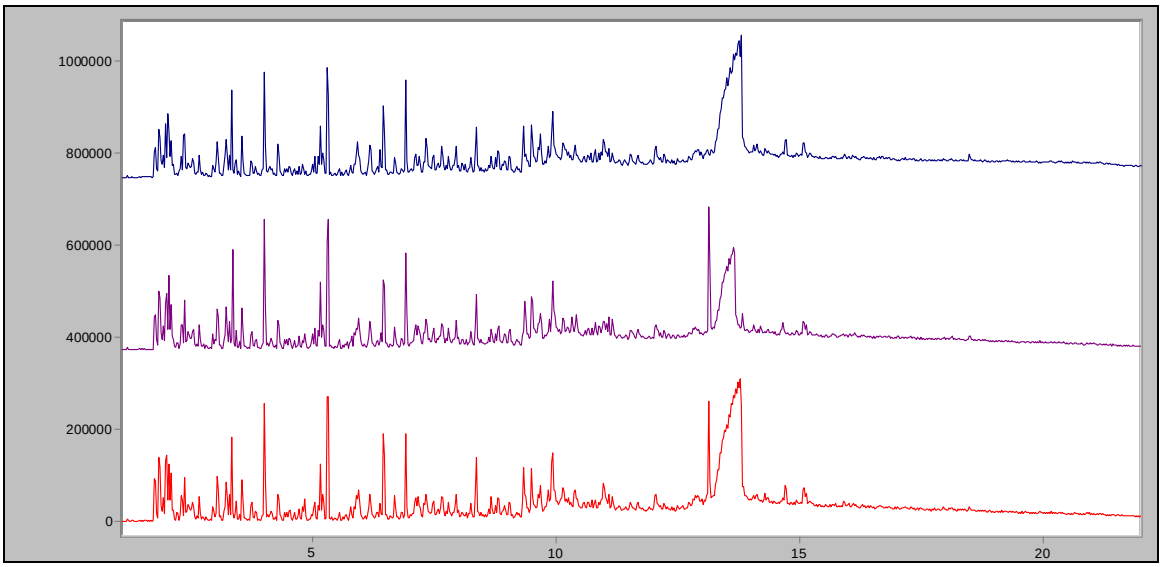

Figure 408: From top to bottom: Xerox 244 Run 3, Xerox 248 Run 1 and Xerox 248 Run 2 ink on paper sample pyrograms.

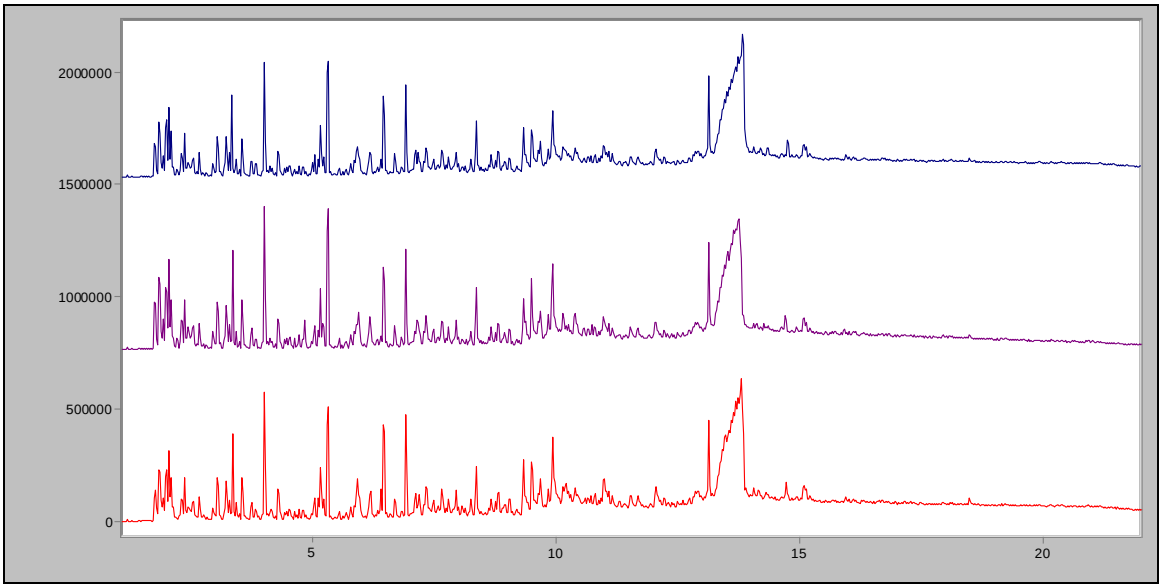

Figure 409: From top to bottom: Xerox 248 Run 3, Xerox 252 Run 1 and Xerox 252 Run 2 ink on paper sample pyrograms.

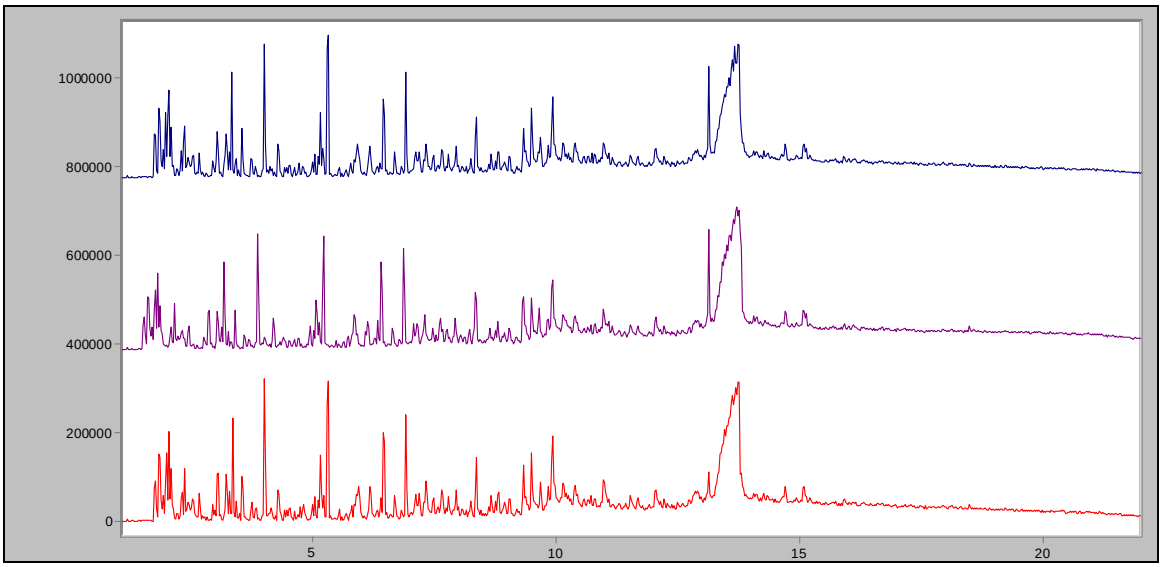

Figure 410: From top to bottom: Xerox 256 Run 1, Xerox 256 Run 2 and Xerox 260 Run 1 ink on paper sample pyrograms.

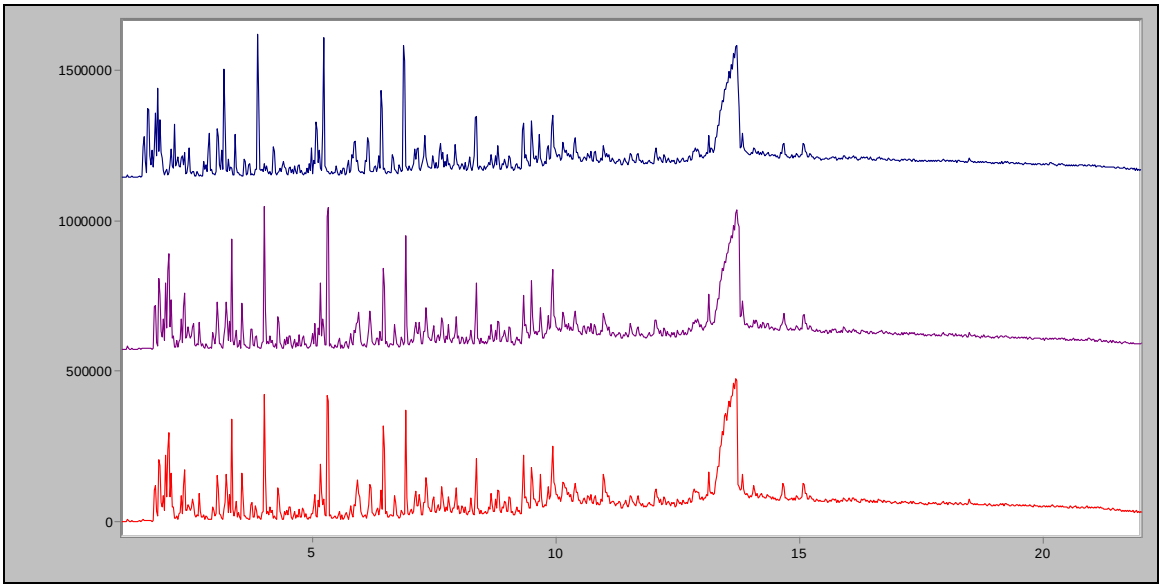

Figure 411: From top to bottom: Xerox 260 Run 2, Xerox 264 Run 1 and Xerox 264 Run 2 ink on paper sample pyrograms.

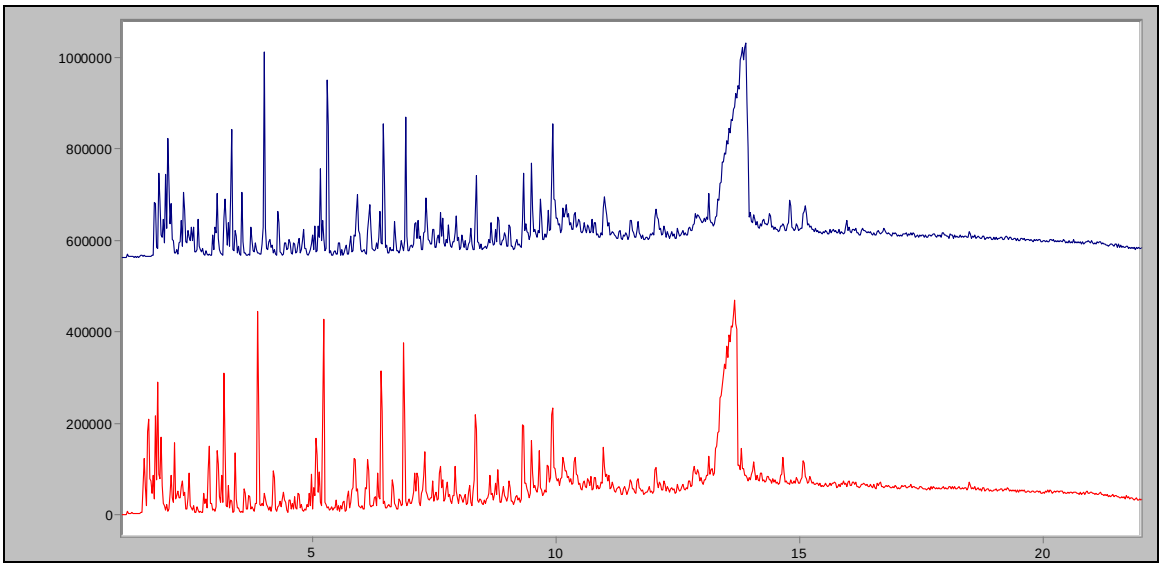

Figure 412: From top to bottom: Xerox 265 Run 1 and Xerox 265 Run 2 ink on paper sample pyrograms.

Pyrolysis Data: Blank Paper Pyrograms

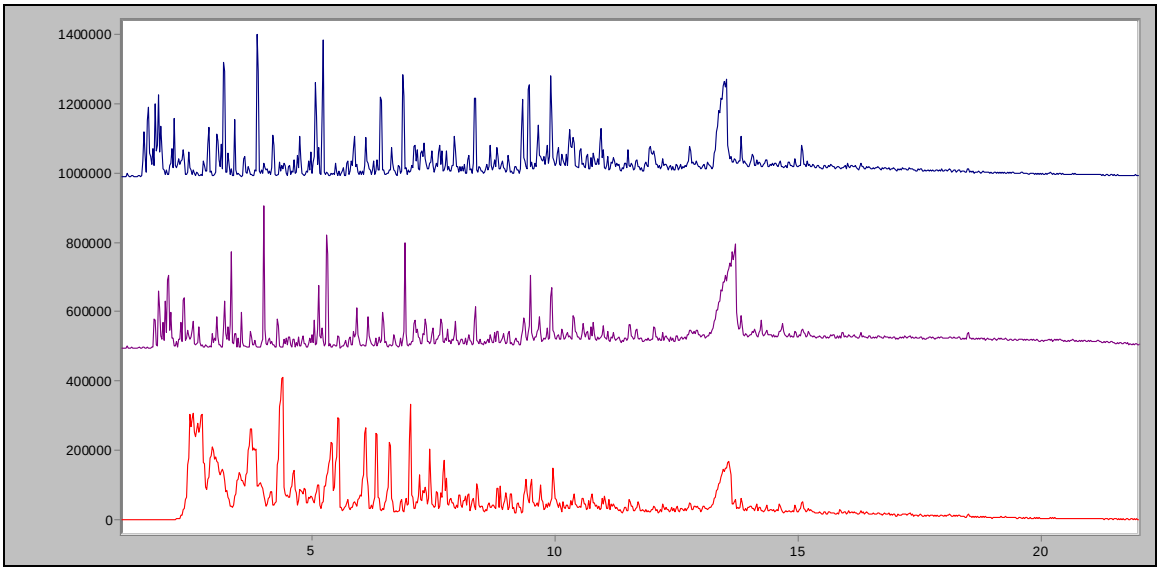

Figure 413: From top to bottom: Blank Paper 1 Run 1, Blank Paper 1 Run 2 and Blank Paper 1 Run 3 pyrograms.

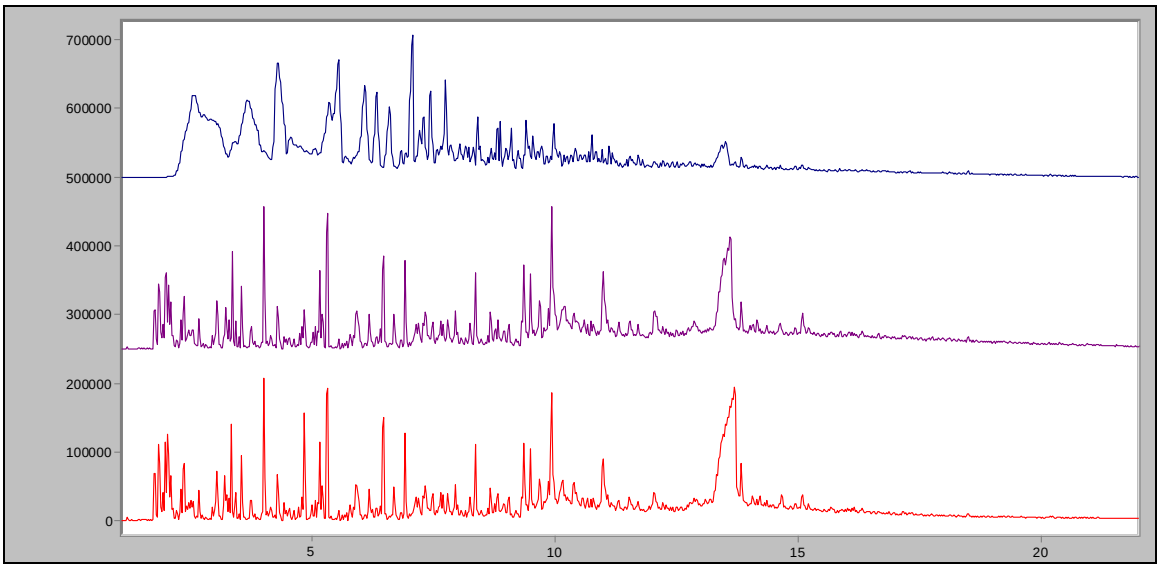

Figure 414: From top to bottom: Blank Paper 1 Run 4, Blank Paper 1 Run 5 and Blank Paper 1 Run 6 pyrograms.

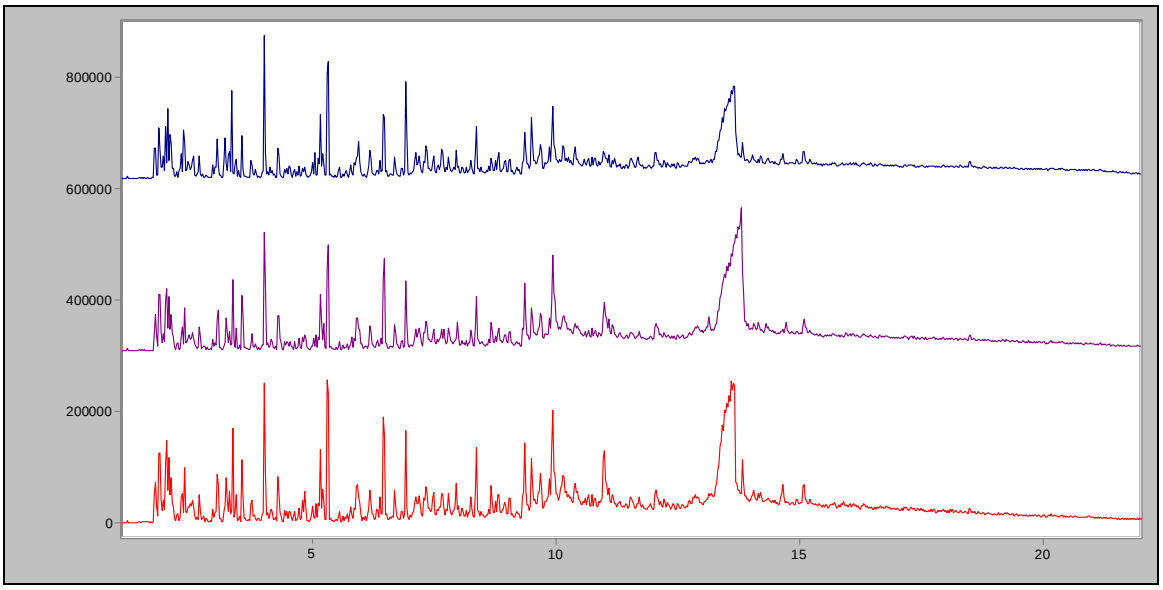

Figure 415: From top to bottom: Blank Paper 1 Run 7, Blank Paper 1 Run 8 and Blank Paper 1 Run 9 pyrograms.

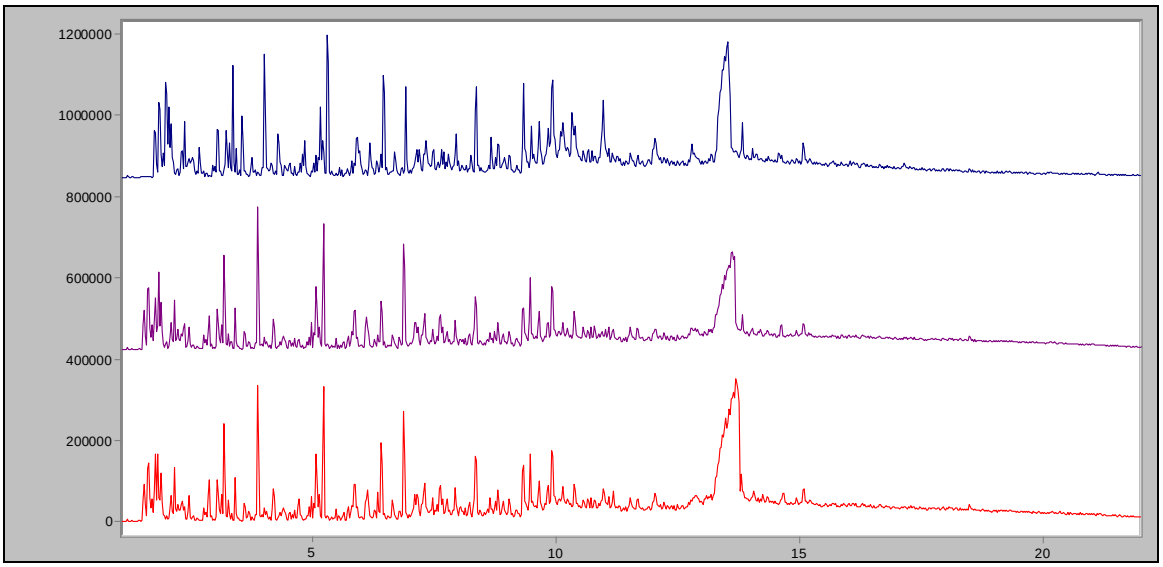

Figure 416: From top to bottom: Blank Paper 1 Run 10, Blank Paper 1 Run 11 and Blank Paper 1 Run 12 pyrograms.

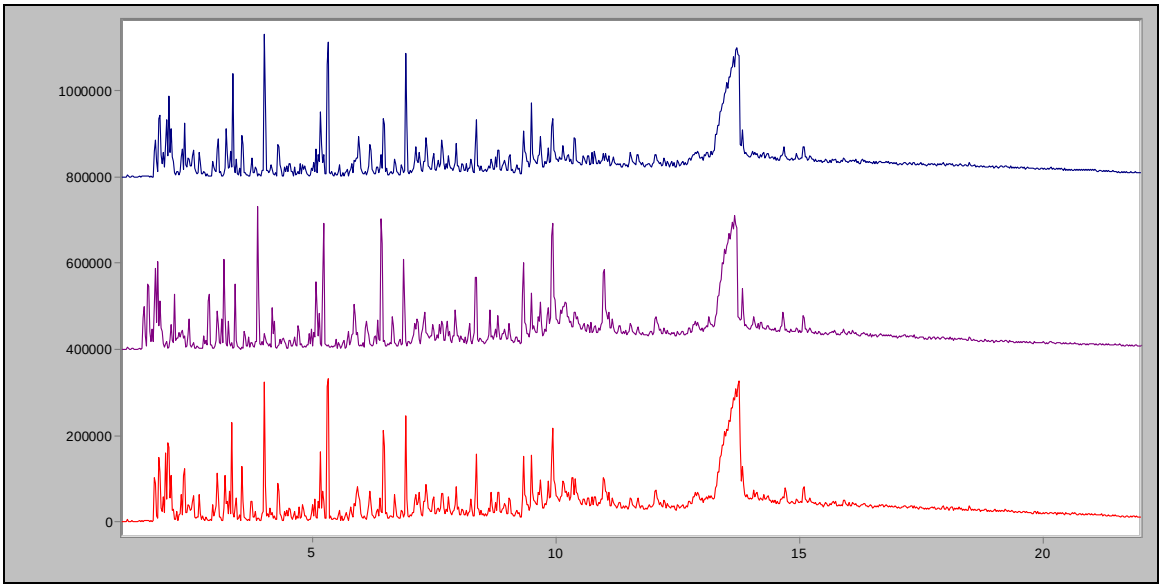

Figure 417: From top to bottom: Blank Paper 1 Run 13, Blank Paper 1 Run 14 and Blank Paper 1 Run 15 pyrograms.

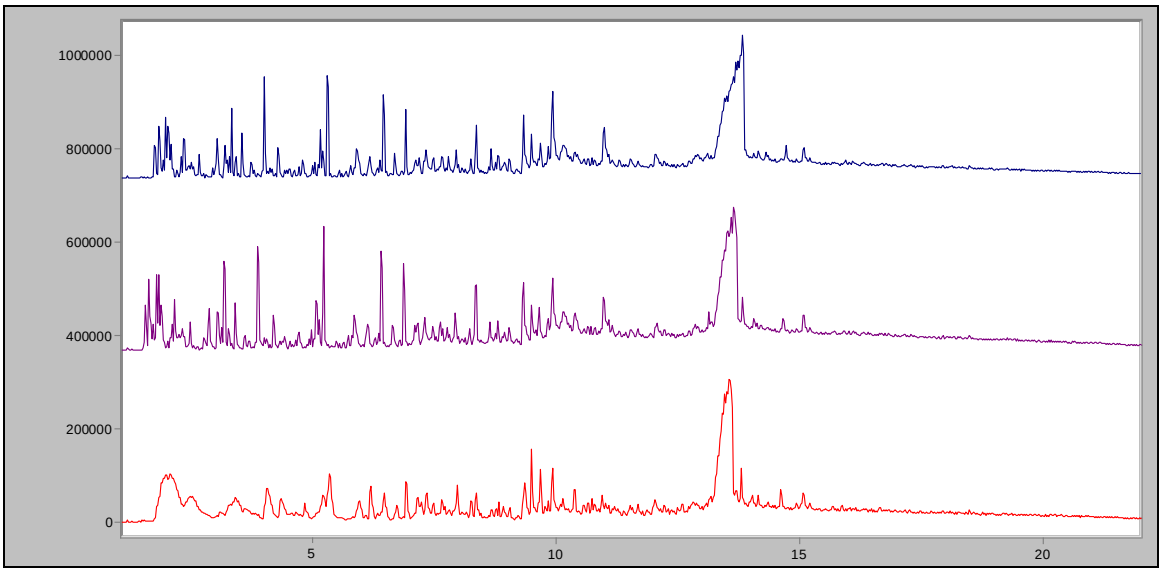

Figure 418: From top to bottom: Blank Paper 1 Run 16, Blank Paper 1 Run 17 and Blank Paper 1 Run 18 pyrograms.

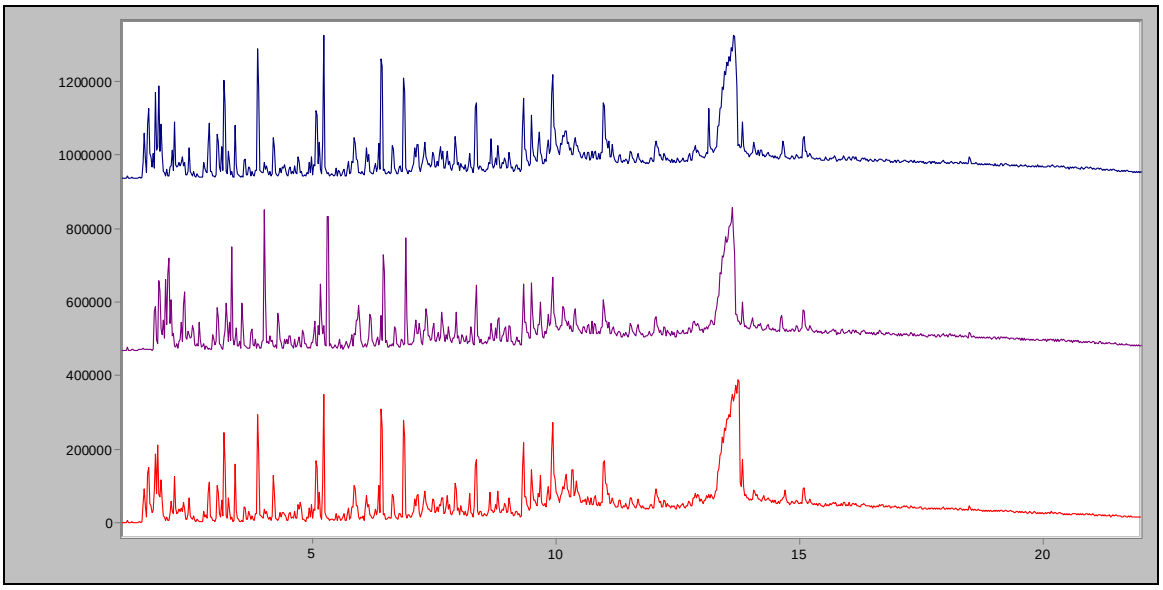

Figure 419: From top to bottom: Blank Paper 1 Run 19, Blank Paper 1 Run 20 and Blank Paper 1 Run 21 pyrograms.

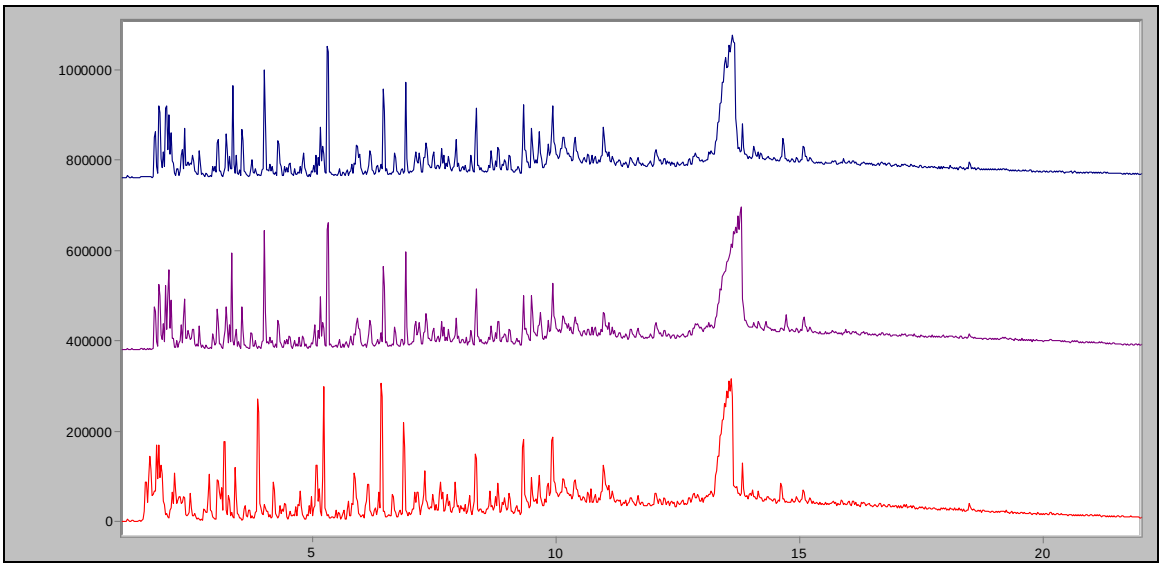

Figure 420: From top to bottom: Blank Paper 1 Run 22, Blank Paper 1 Run 23 and Blank Paper 1 Run 24 pyrograms.

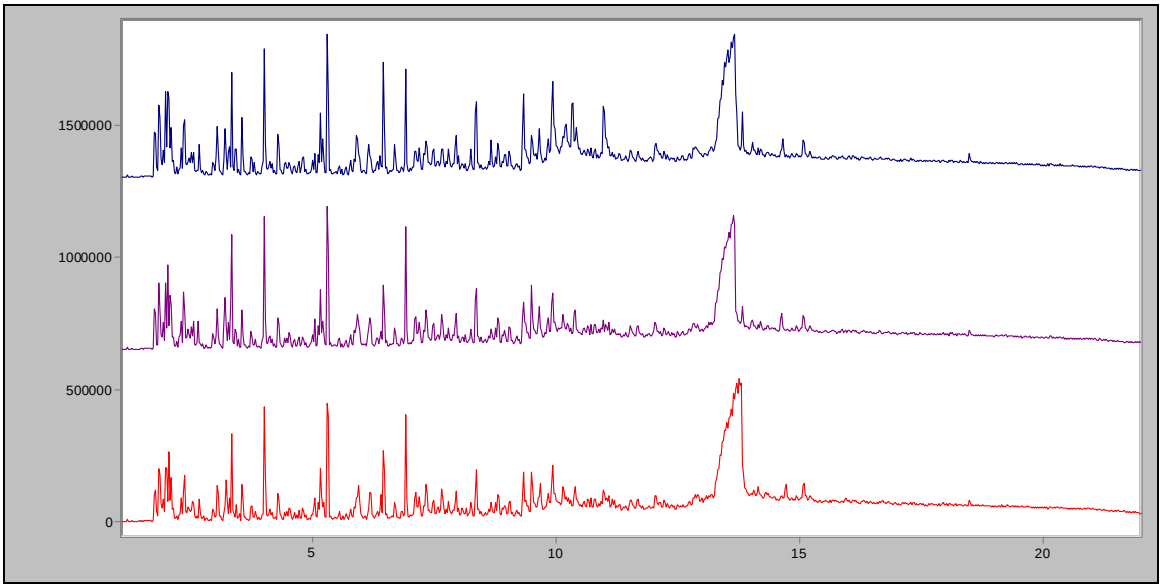

Figure 421: From top to bottom: Blank Paper 1 Run 25, Blank Paper 1 Run 26 and Blank Paper 1 Run 27 pyrograms.

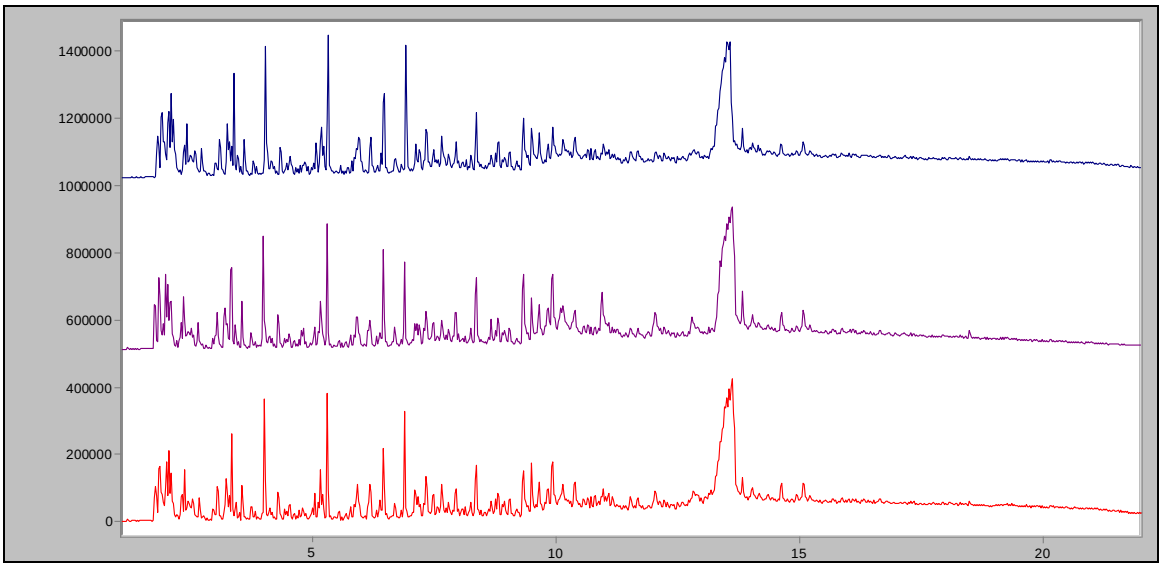

Figure 422: From top to bottom: Blank Paper 1 Run 28, Blank Paper 1 Run 29 and Blank Paper 1 Run 30 pyrograms.

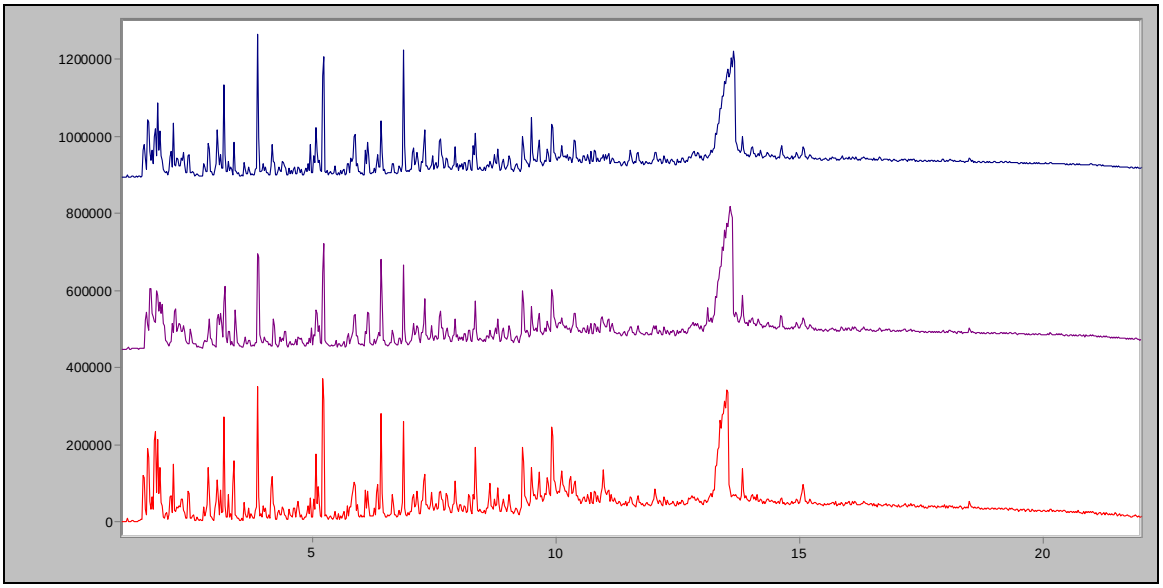

Figure 423: From top to bottom: Blank Paper 1 Run 31, Blank Paper 1 Run 32 and Blank Paper 1 Run 33 pyrograms.

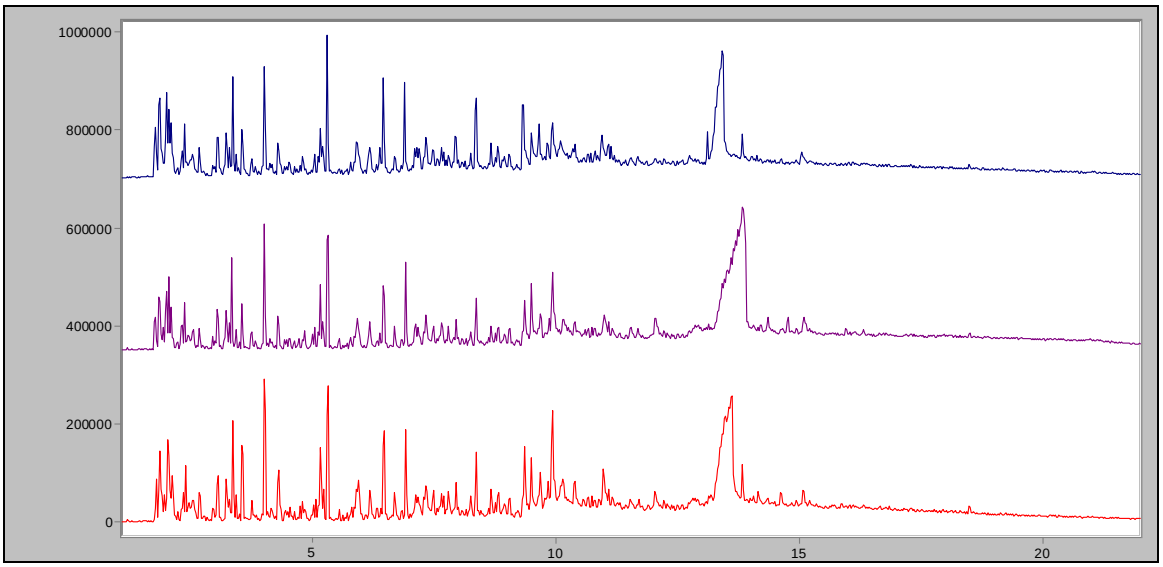

Figure 424: From top to bottom: Blank Paper 1 Run 34, Blank Paper 2 Run 1 and Blank Paper 2 Run 2 pyrograms.

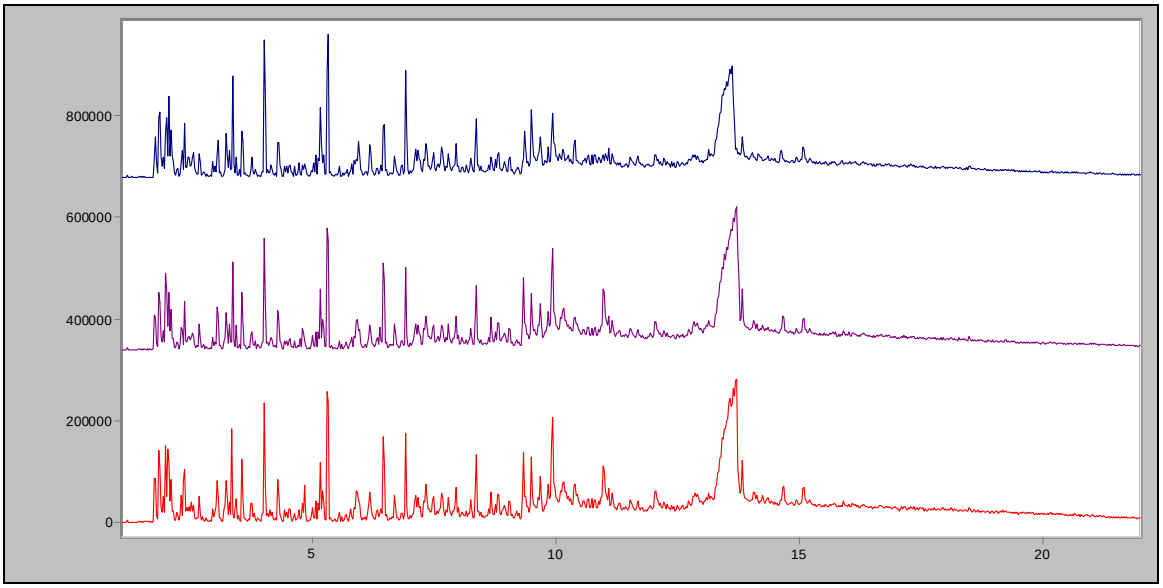

Figure 425: From top to bottom: Blank Paper 2 Run 3, Blank Paper 2 Run 4 and Blank Paper 2 Run 5 pyrograms.

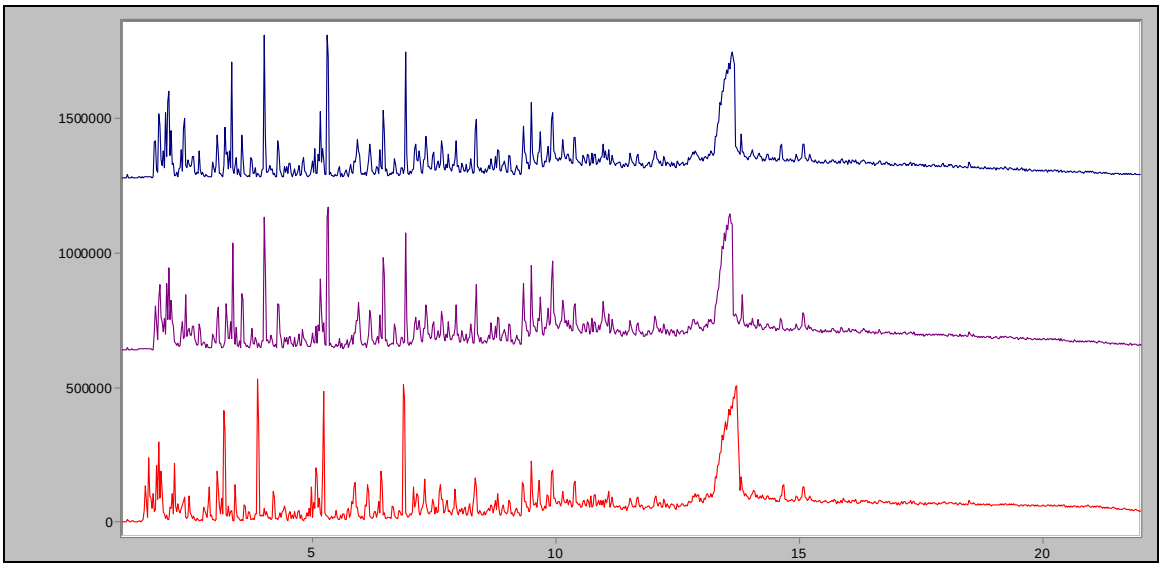

Figure 426: From top to bottom: Blank Paper 2 Run 6, Blank Paper 2 Run 7 and Blank Paper 2 Run 8 pyrograms.

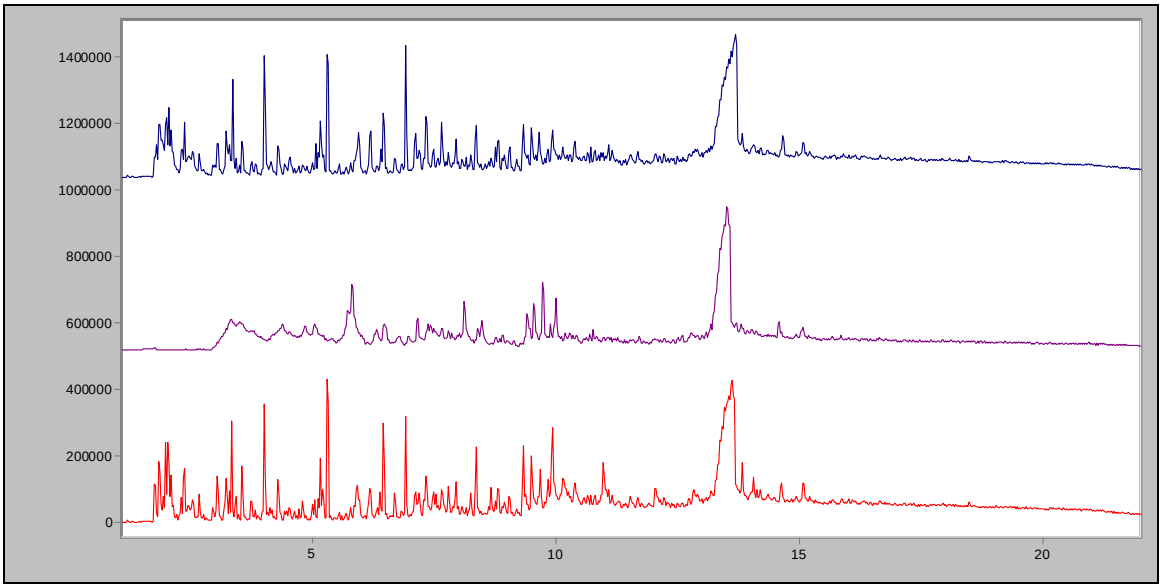

Figure 427: From top to bottom: Blank Paper 2 Run 9, Blank Paper 2 Run 10 and Blank Paper 2 Run 11 pyrograms.

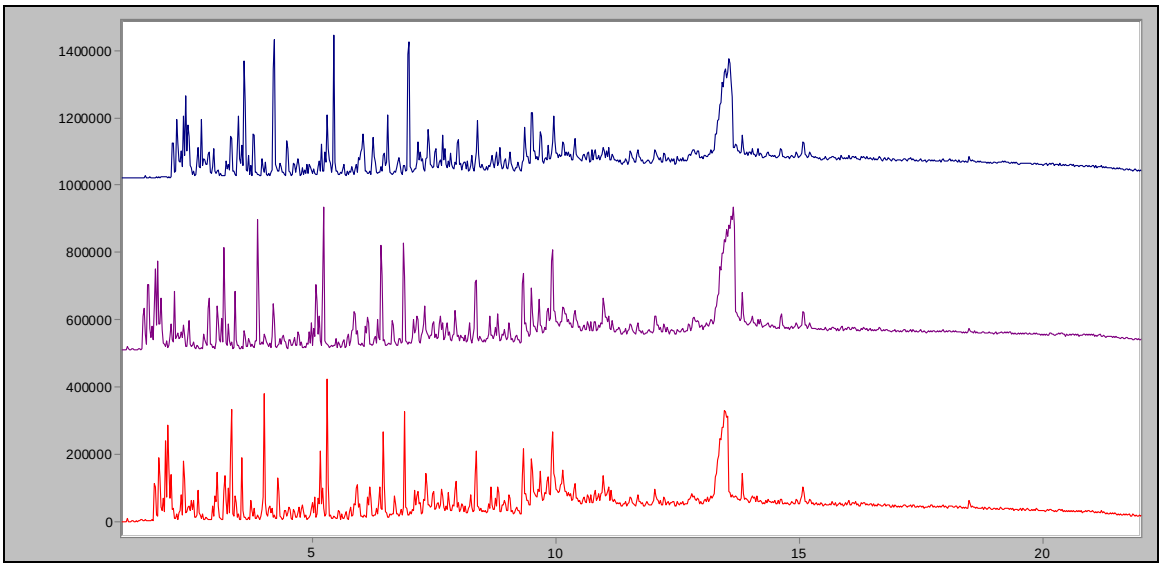

Figure 428: From top to bottom: Blank Paper 2 Run 12, Blank Paper 2 Run 13 and Blank Paper 2 Run 14 pyrograms.

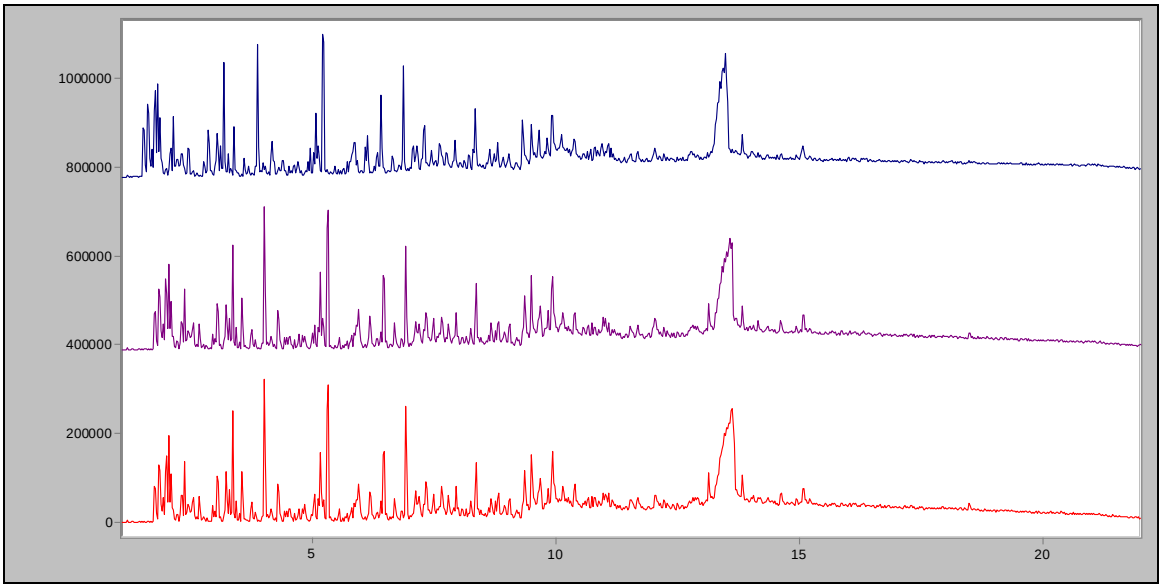

Figure 429: From top to bottom: Blank Paper 2 Run 15, Blank Paper 3 Run 1 and Blank Paper 3 Run 2 pyrograms.

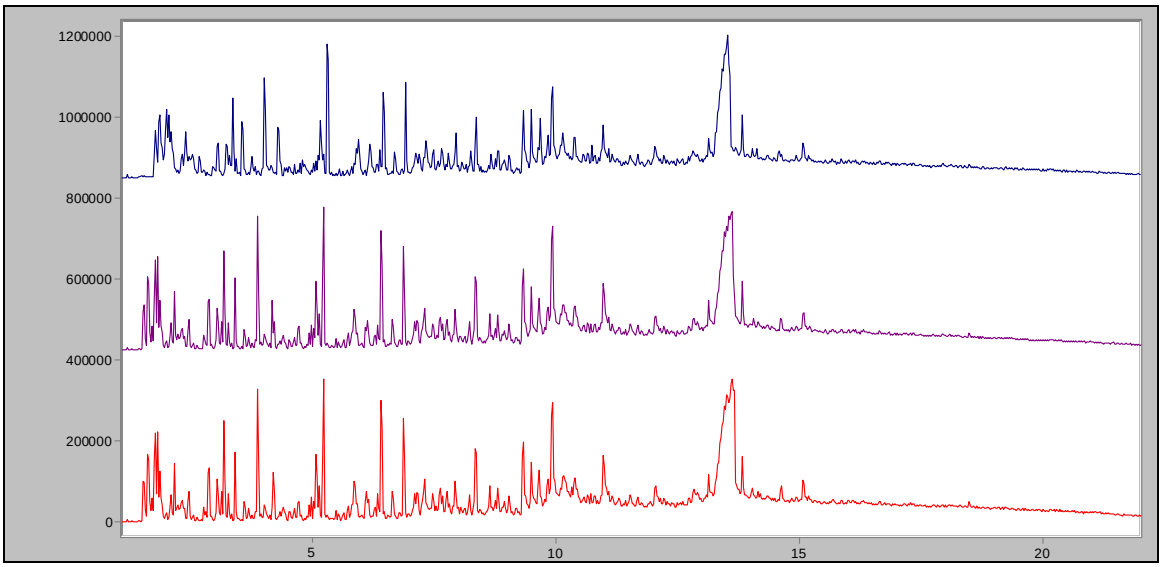

Figure 430: From top to bottom: Blank Paper 3 Run 3, Blank Paper 3 Run 4 and Blank Paper 3 Run 5 pyrograms.

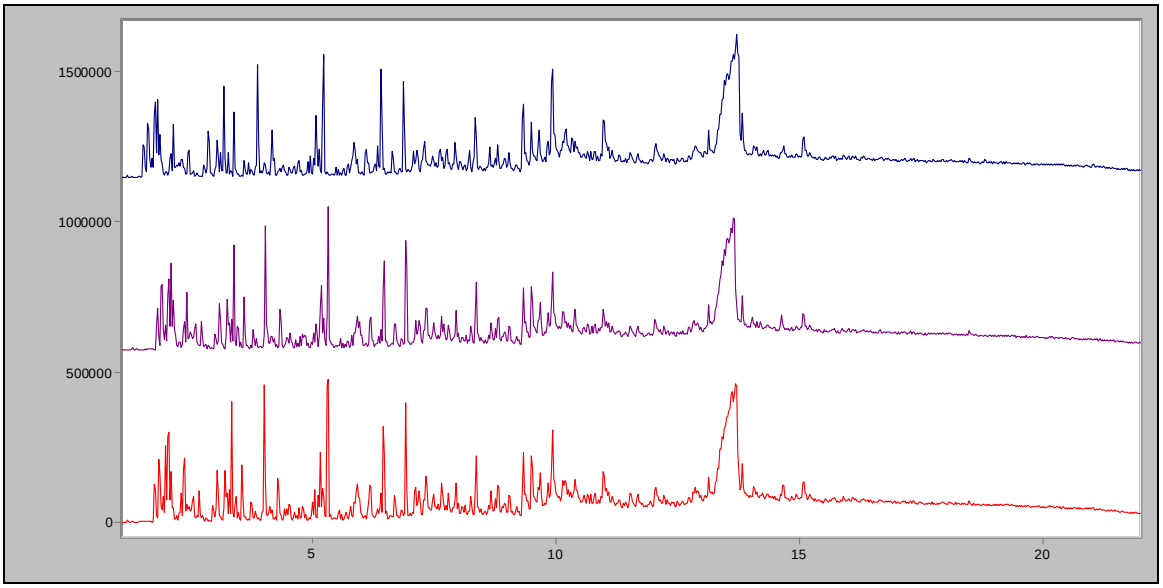

Figure 431: From top to bottom: Blank Paper 3 Run 6, Blank Paper 3 Run 7 and Blank Paper 3 Run 8 pyrograms.

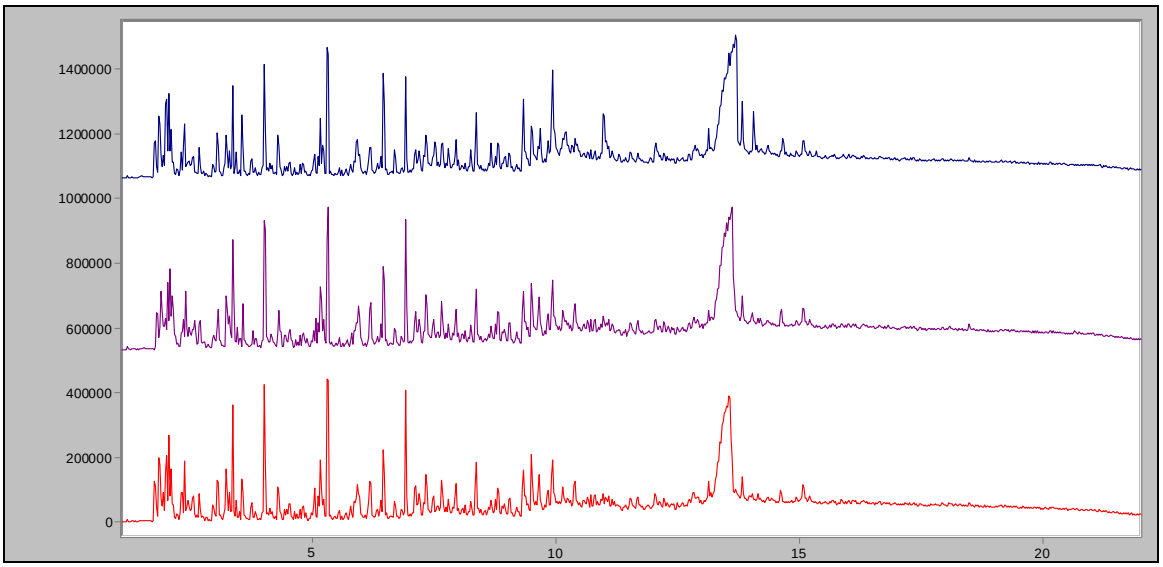

Figure 432: From top to bottom: Blank Paper 3 Run 9, Blank Paper 3 Run 10 and Blank Paper 3 Run 11 pyrograms.

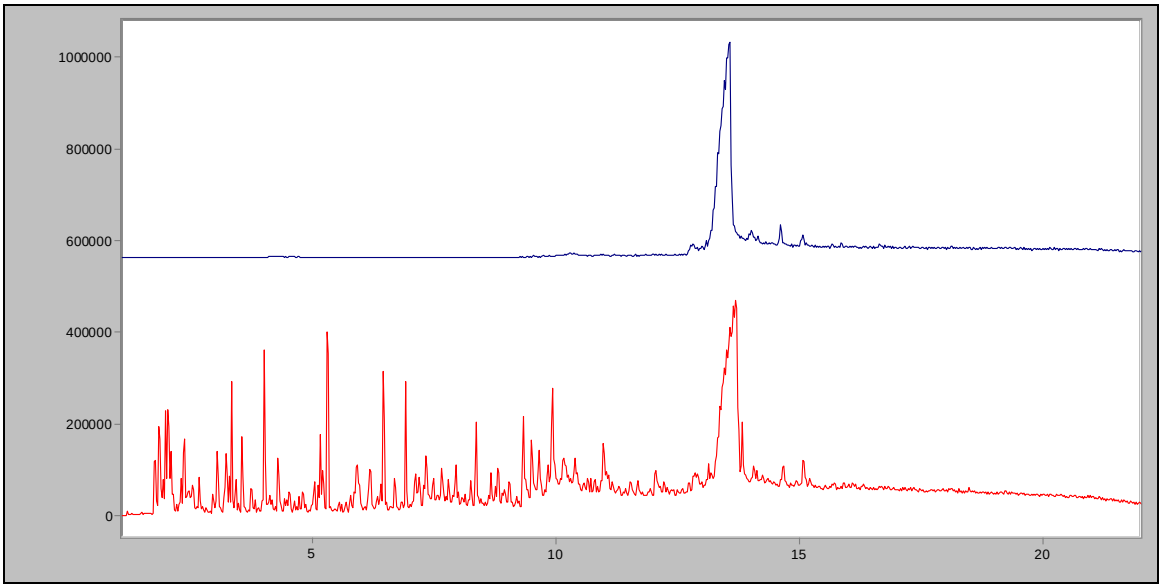

Figure 433: From top to bottom: Blank Paper 3 Run 12 and Blank Paper 3 Run 13 pyrograms.

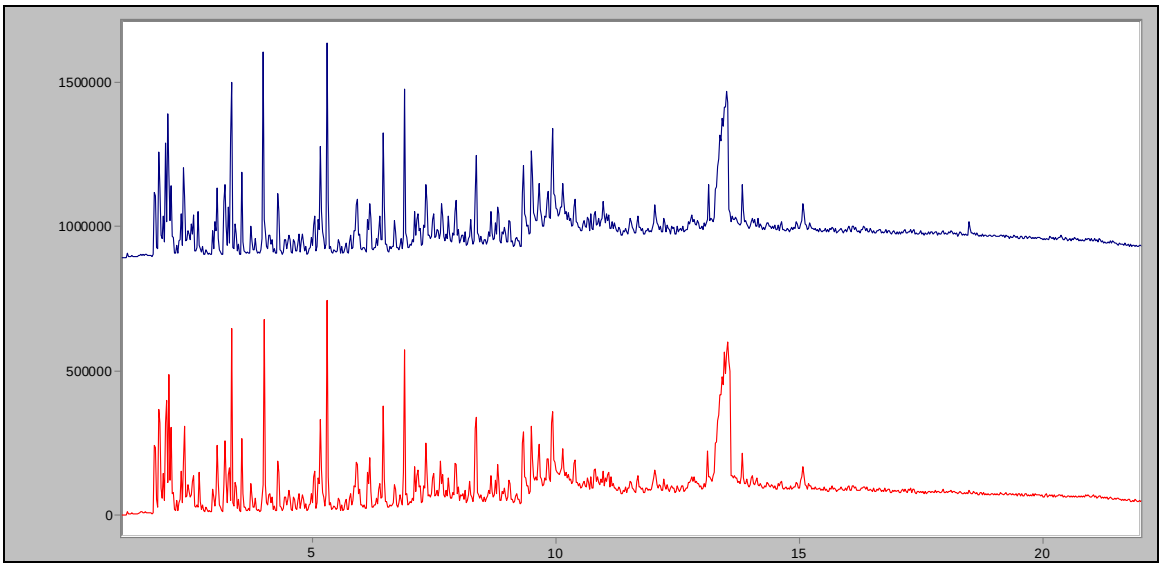

Figure 434: From top to bottom: Blank Paper 3 Run 14 and Blank Paper 3 Run 15 pyrograms.

THE CHARACTERIZATION OF BLACK INKJET COMPUTER PRINTER INKS USING PYROLYSIS GAS CHROMATOGRAPHY-MASS SPECTROMETRY (Py-GC-MS), HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC), THIN LAYER CHROMATOGRAPHY (TLC) AND ATTENUATED TOTAL REFLECTION FOURIER TRANSFORM INFRARED SPECTROSCOPY (ATR FT-IR)

by

Michelle Margaret Boileau

VOLUME THREE

A dissertation submitted to the Graduate Faculty in Criminal Justice in partial fulfillment of the requirements for the degree of Doctor of Philosophy,

The City University of New York.

2012

APPENDIX F:

Attenuated Total Reflection Fourier Transform Infrared Spectroscopy Data.

ATR Data – Neat Ink Samples

OKIDATA

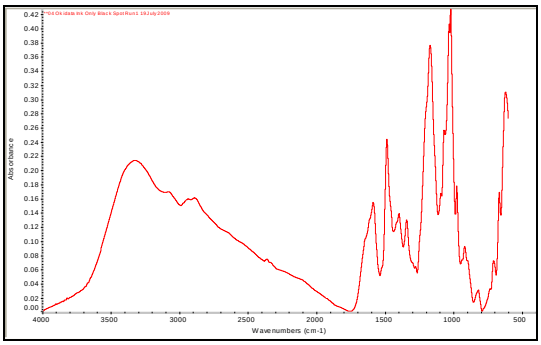

Figure 435: ATR spectrum of Okidata 04 neat ink black spot run 1

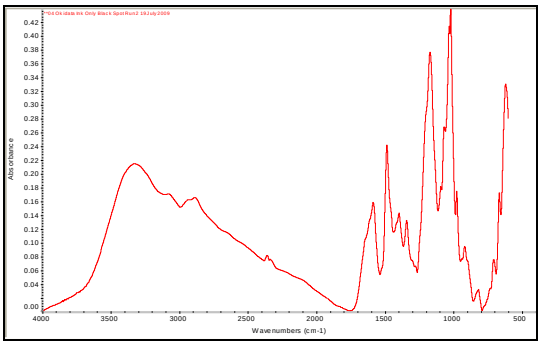

Figure 436: ATR spectrum of Okidata 04 neat ink black spot run 2

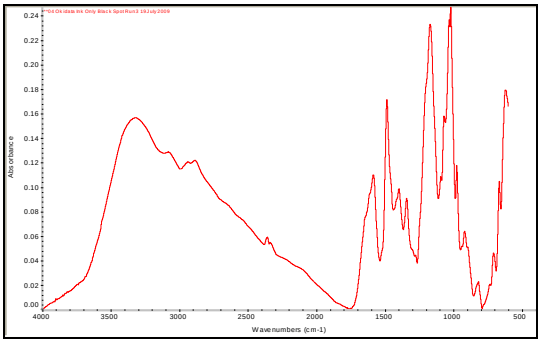

Figure 437: ATR spectrum of Okidata 04 neat ink black spot run 3

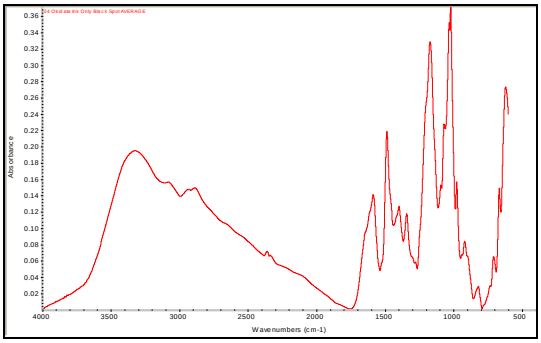

Figure 438: ATR spectrum of Okidata 04 neat ink black spot AVERAGE

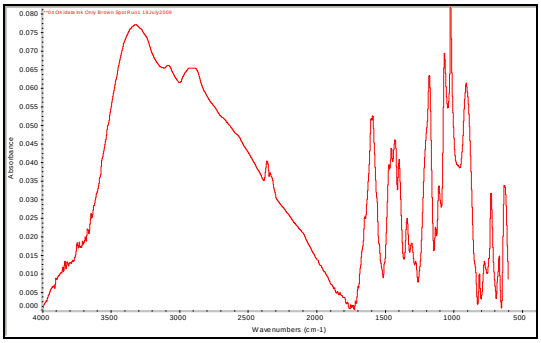

Figure 439: ATR spectrum of Okidata 04 neat ink brown spot run 1

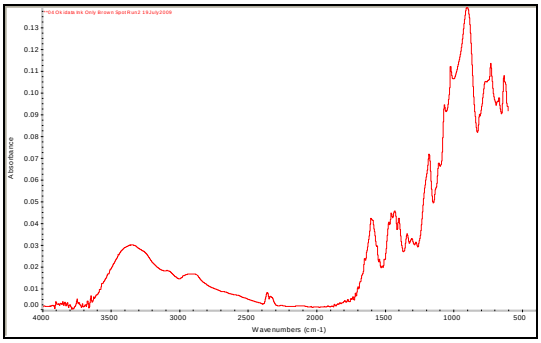

Figure 440: ATR spectrum of Okidata 04 neat ink brown spot run 2

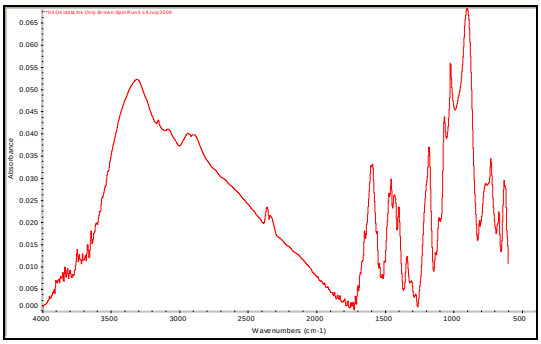

Figure 441: ATR spectrum of Okidata 04 neat ink brown spot run 3

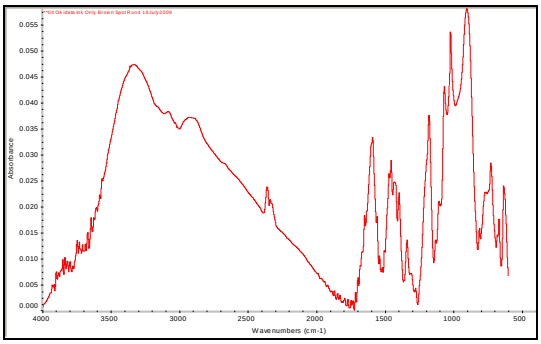

Figure 442: ATR spectrum of Okidata 04 neat ink brown spot run 4

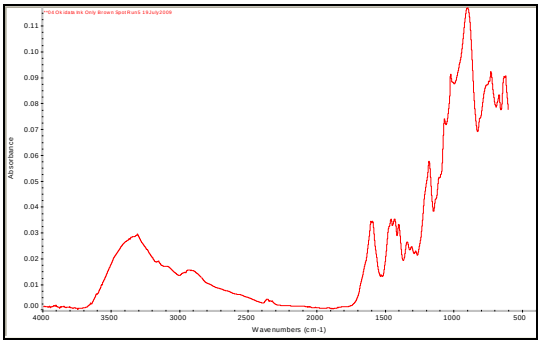

Figure 443: ATR spectrum of Okidata 04 neat ink brown spot run 5

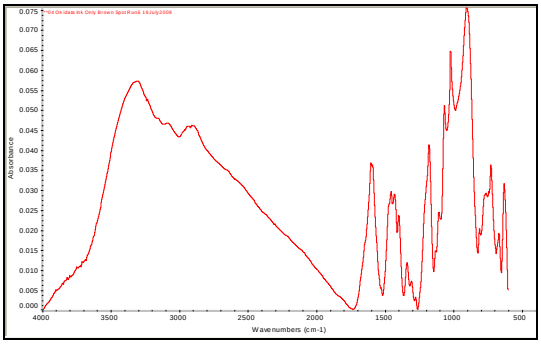

Figure 444: ATR spectrum of Okidata 04 neat ink brown spot run 6

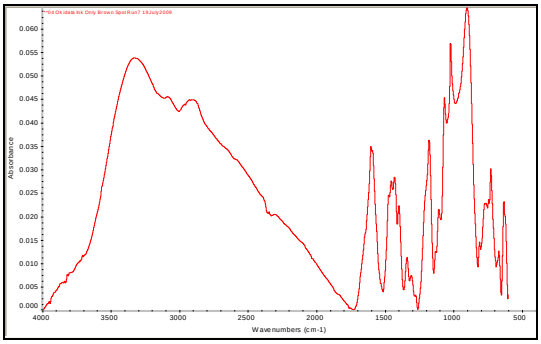

Figure 445: ATR spectrum of Okidata 04 neat ink brown spot run 7

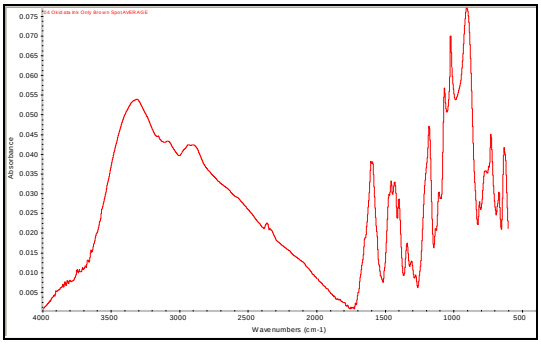

Figure 446: ATR spectrum of Okidata 04 neat ink brown spot AVERAGE

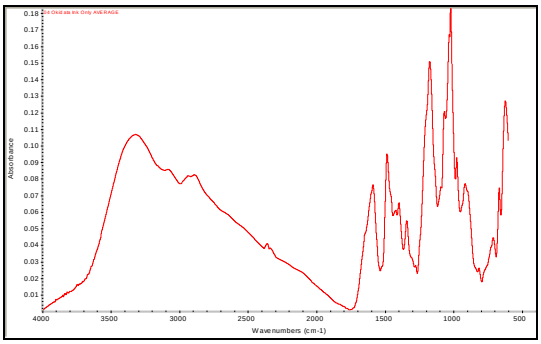

Figure 447: ATR spectrum of Okidata 04 neat ink AVERAGE

XEROX

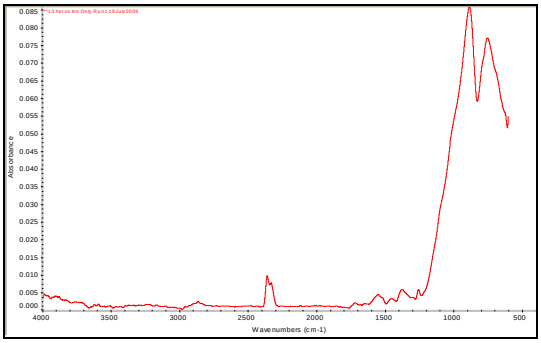

Figure 448: ATR spectrum of Xerox 13 neat ink run 1

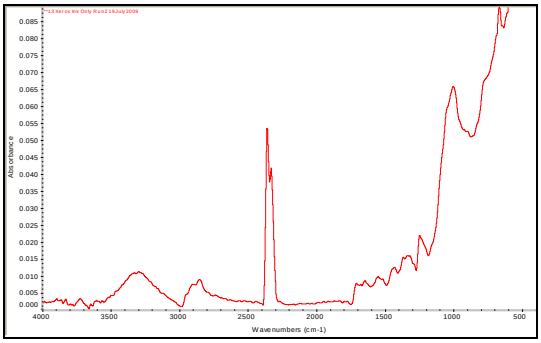

Figure 449: ATR spectrum of Xerox 13 neat ink run 2

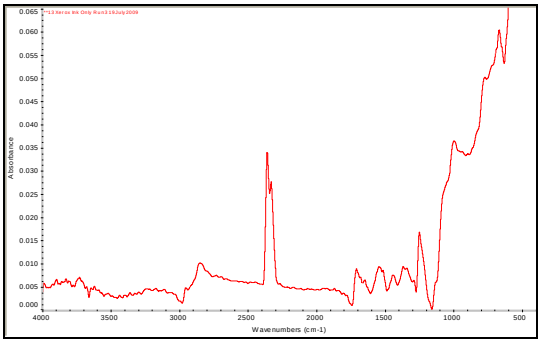

Figure 450: ATR spectrum of Xerox 13 neat ink run 3

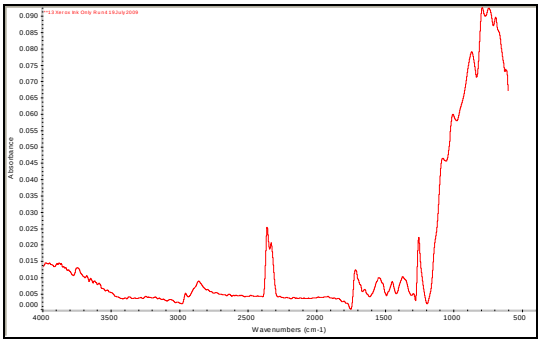

Figure 451: ATR spectrum of Xerox 13 neat ink run 4

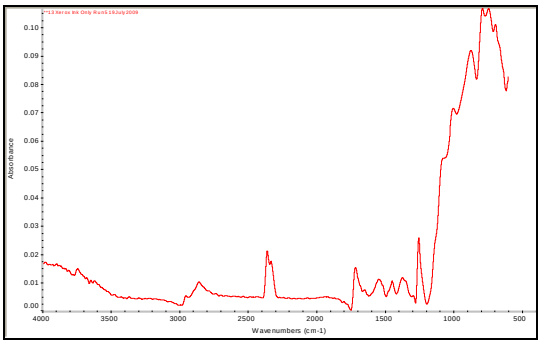

Figure 452: ATR spectrum of Xerox 13 neat ink run 5

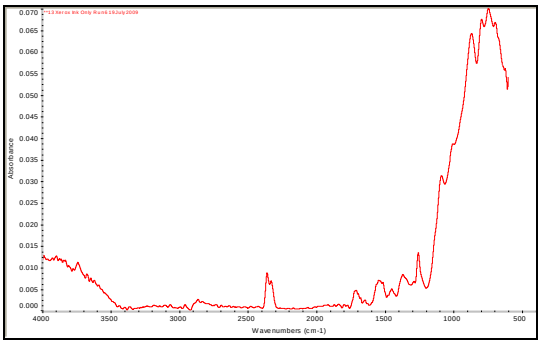

Figure 453: ATR spectrum of Xerox 13 neat ink run 6

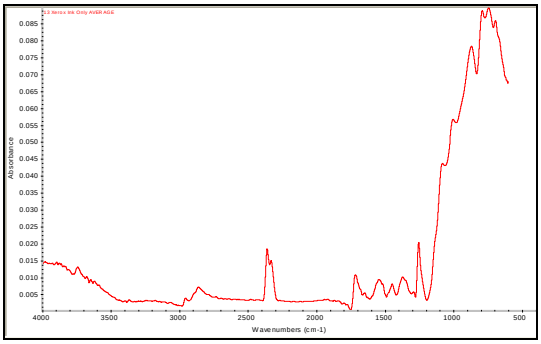

Figure 454: ATR spectrum of Xerox 13 neat ink AVERAGE

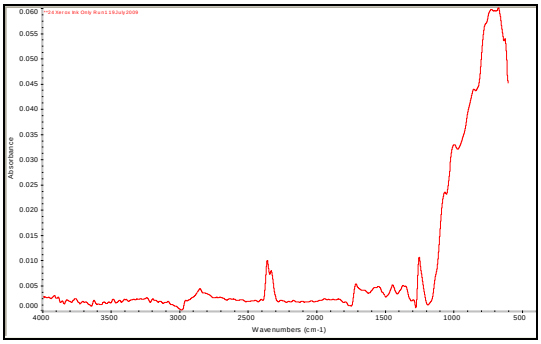

Figure 455: ATR spectrum of Xerox 24 neat ink run 1

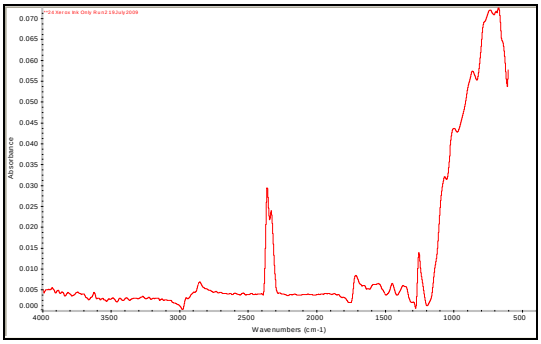

Figure 456: ATR spectrum of Xerox 24 neat ink run 2

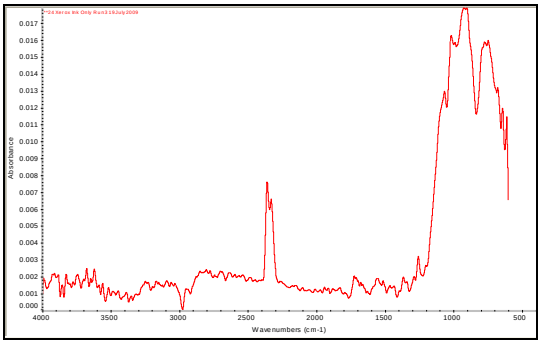

Figure 457: ATR spectrum of Xerox 24 neat ink run 3

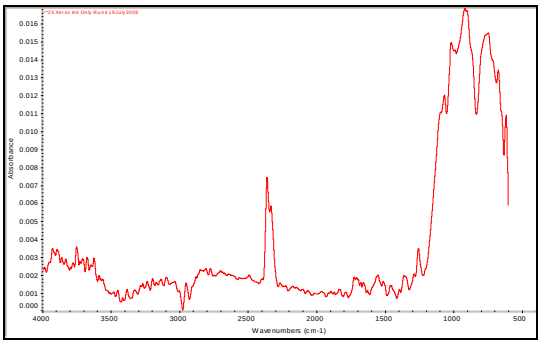

Figure 458: ATR spectrum of Xerox 24 neat ink run 4

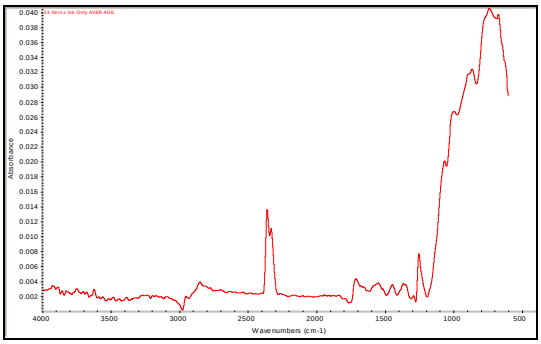

Figure 459: ATR spectrum of Xerox 24 neat ink AVERAGE

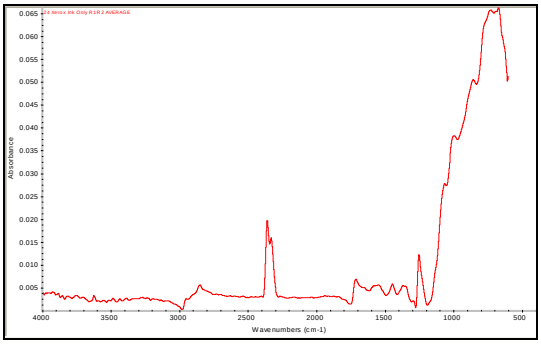

Figure 460: ATR spectrum of Xerox 24 neat ink runs 1 and 2 AVERAGE

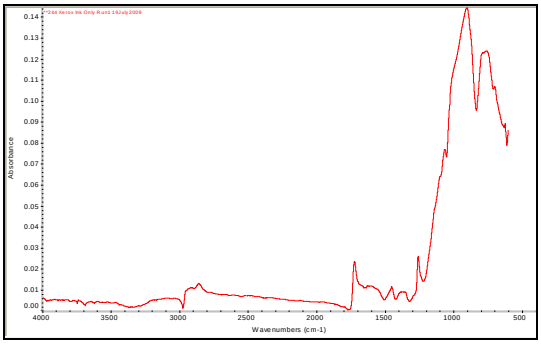

Figure 461: ATR spectrum of Xerox 244 neat ink run 1

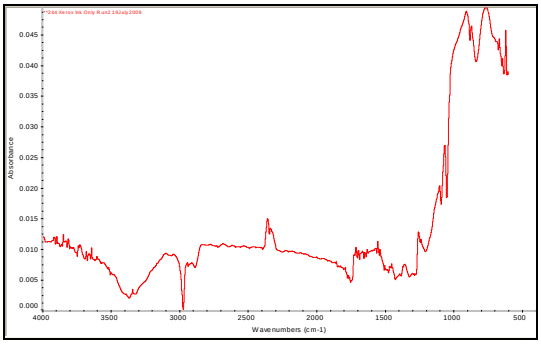

Figure 462: ATR spectrum of Xerox 244 neat ink run 2

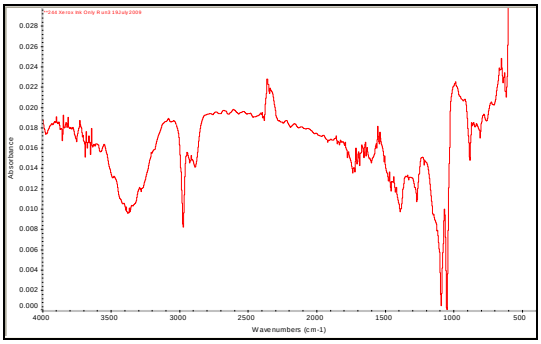

Figure 463: ATR spectrum of Xerox 244 neat ink run 3

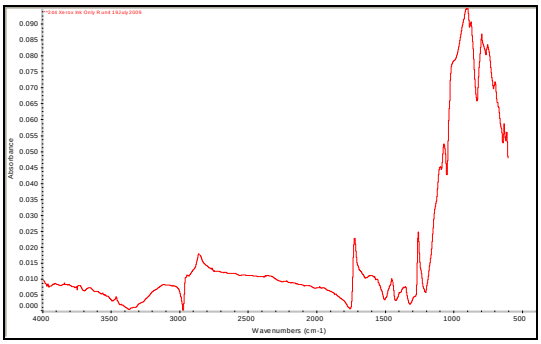

Figure 464: ATR spectrum of Xerox 244 neat ink run 4

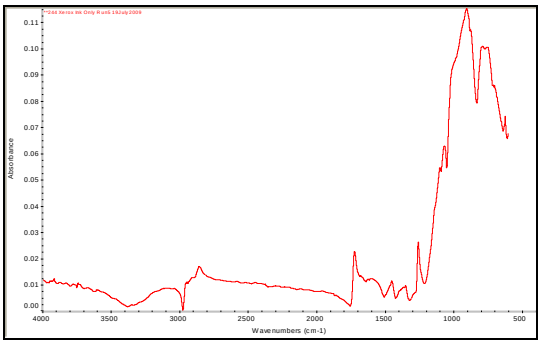

Figure 465: ATR spectrum of Xerox 244 neat ink run 5

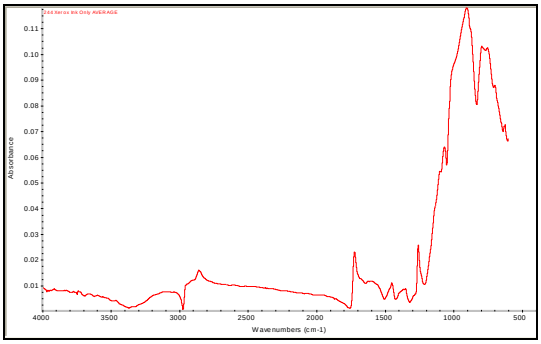

Figure 466: ATR spectrum of Xerox 244 neat ink AVERAGE

KODAK

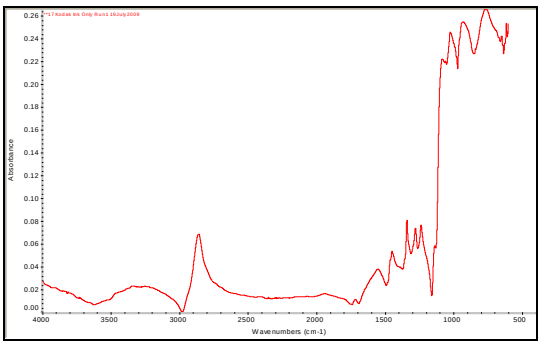

Figure 467: ATR spectrum of Kodak 17 neat ink run 1

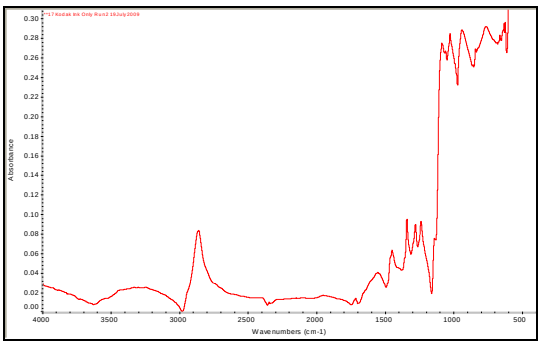

Figure 468: ATR spectrum of Kodak 17 neat ink run 2

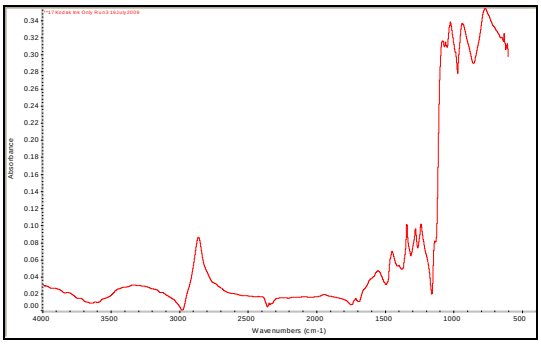

Figure 469: ATR spectrum of Kodak 17 neat ink run 3

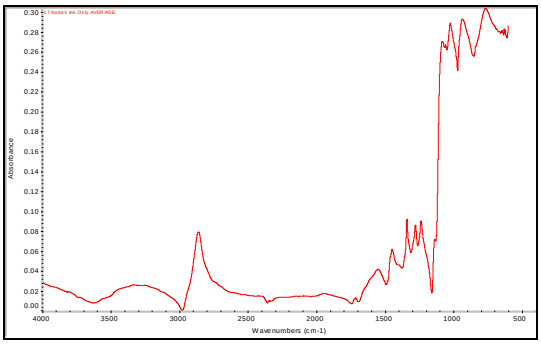

Figure 470: ATR spectrum of Kodak 17 neat ink AVERAGE

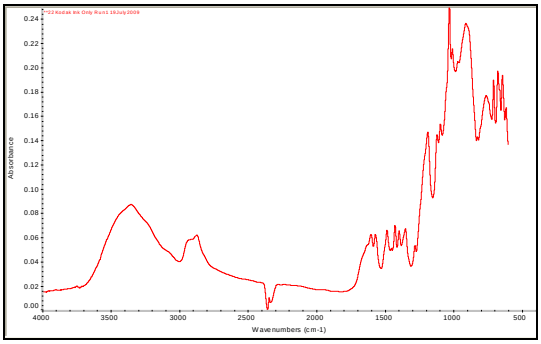

Figure 471: ATR spectrum of Kodak 22 neat ink run 1

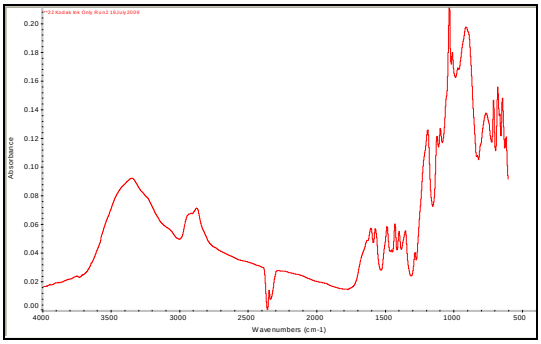

Figure 472: ATR spectrum of Kodak 22 neat ink run 2

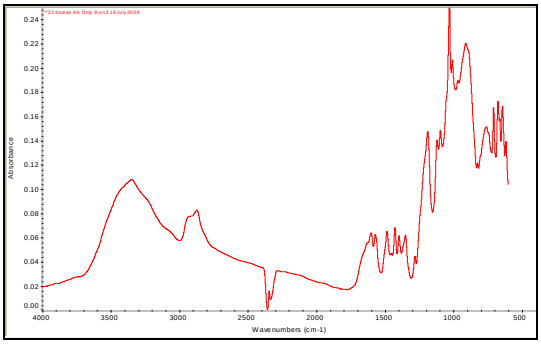

Figure 473: ATR spectrum of Kodak 22 neat ink run 3

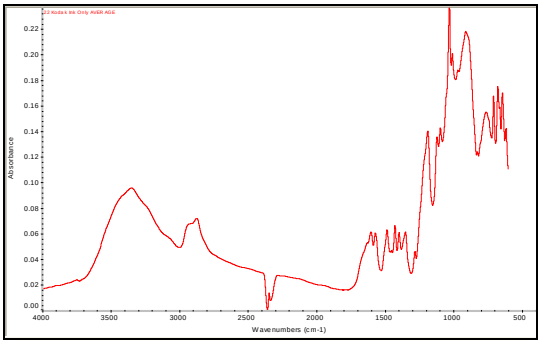

Figure 474: ATR spectrum of Kodak 22 neat ink AVERAGE

EPSON

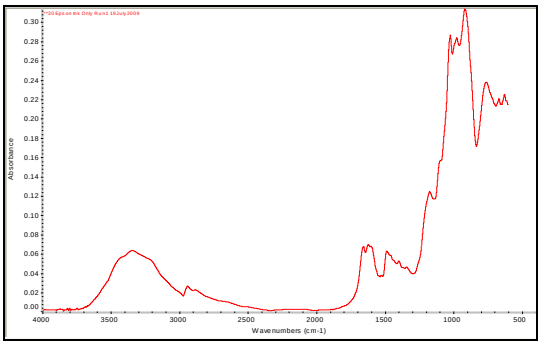

Figure 475: ATR spectrum of Epson 30 neat ink run 1

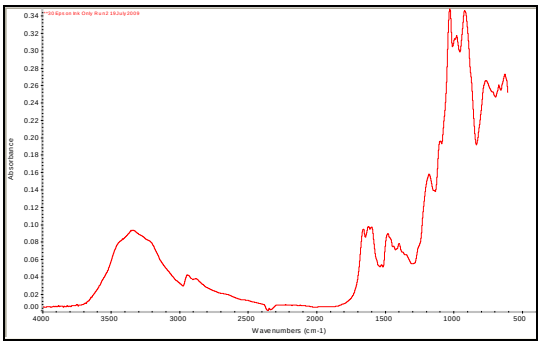

Figure 476: ATR spectrum of Epson 30 neat ink run 2

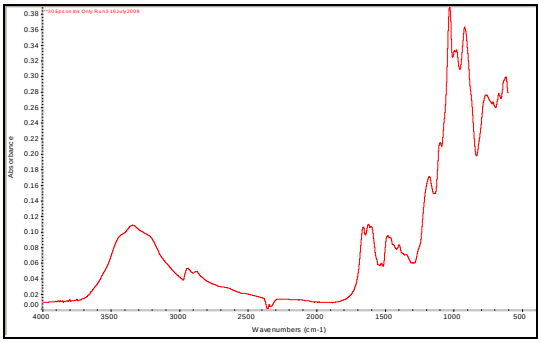

Figure 477: ATR spectrum of Epson 30 neat ink run 3

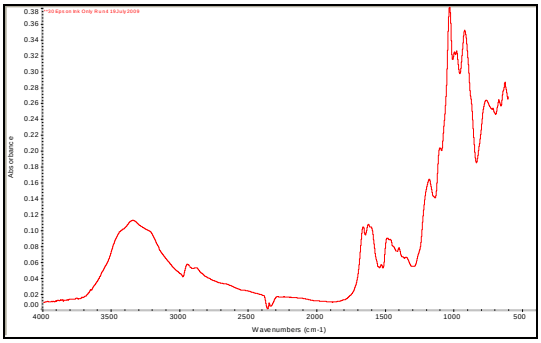

Figure 478: ATR spectrum of Epson 30 neat ink run 4

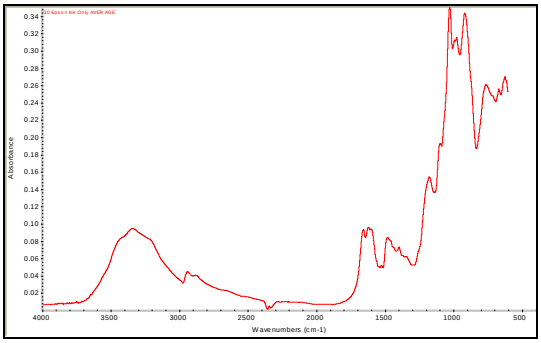

Figure 479: ATR spectrum of Epson 30 neat ink AVERAGE

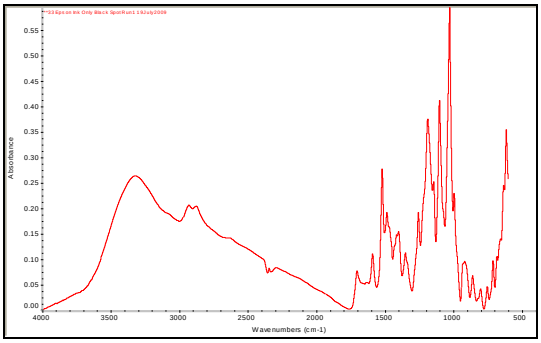

Figure 480: ATR spectrum of Epson 33 neat ink black spot run 1

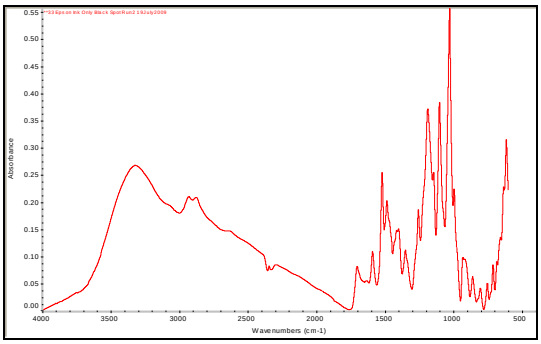

Figure 481: ATR spectrum of Epson 33 neat ink black spot run 2

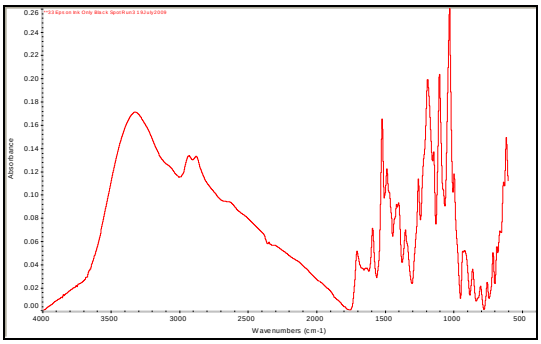

Figure 482: ATR spectrum of Epson 33 neat ink black spot run 3

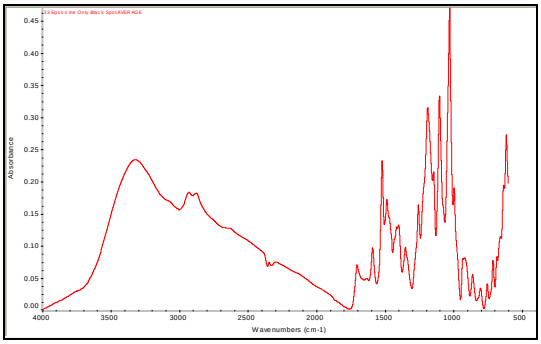

Figure 483: ATR spectrum of Epson 33 neat ink black spot AVERAGE

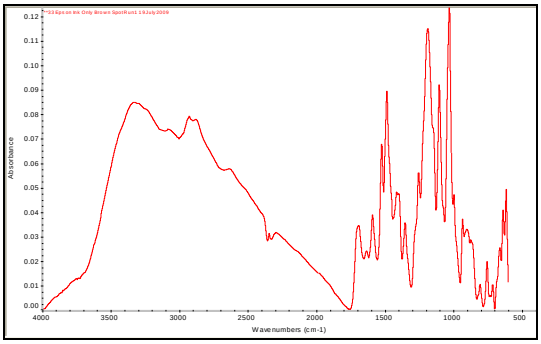

Figure 484: ATR spectrum of Epson 33 neat ink brown spot run 1

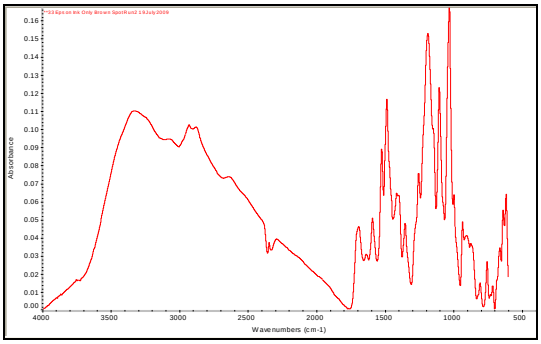

Figure 485: ATR spectrum of Epson 33 neat ink brown spot run 2

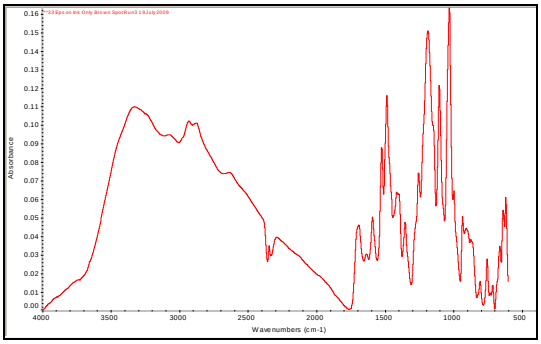

Figure 486: ATR spectrum of Epson 33 neat ink brown spot run 3

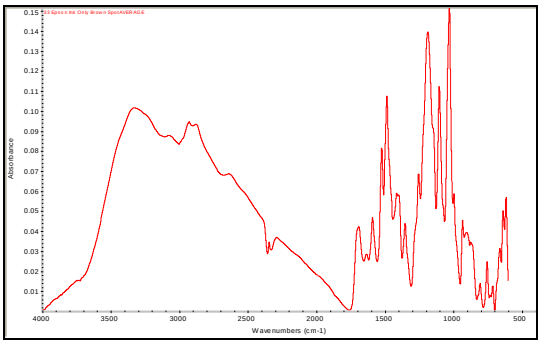

Figure 487: ATR spectrum of Epson 33 neat ink brown spot AVERAGE

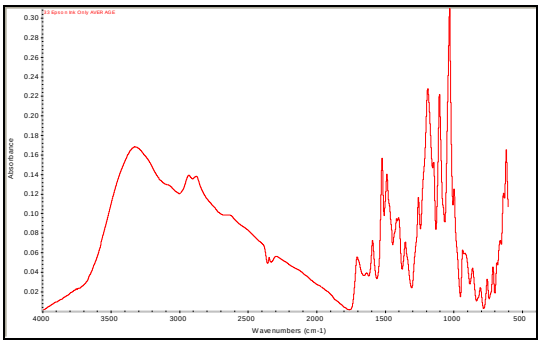

Figure 488: ATR spectrum of Epson 33 neat ink AVERAGE

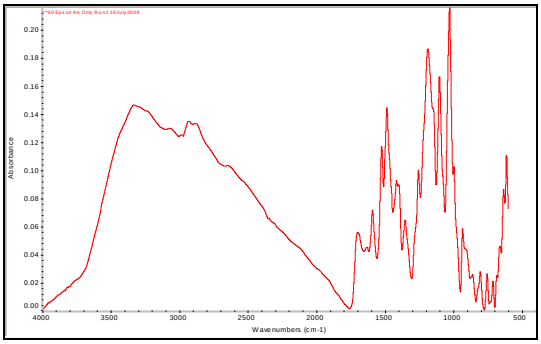

Figure 489: ATR spectrum of Epson 60 neat ink run 1

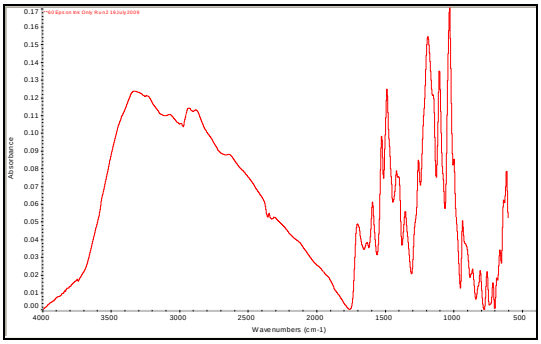

Figure 490: ATR spectrum of Epson 60 neat ink run 2

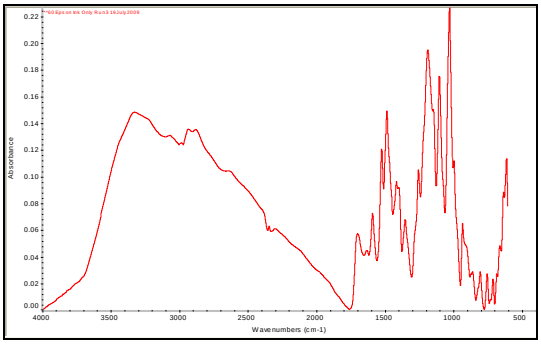

Figure 491: ATR spectrum of Epson 60 neat ink run 3

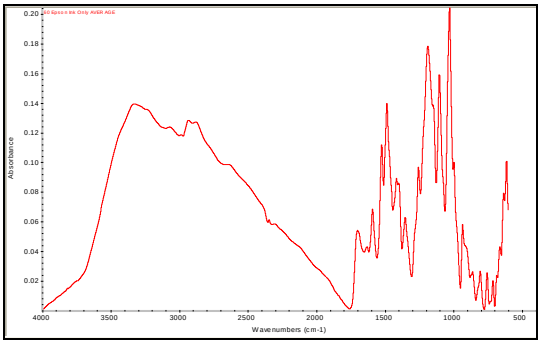

Figure 492: ATR spectrum of Epson 60 neat ink AVERAGE

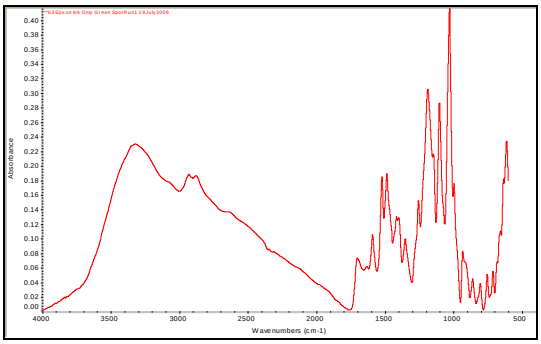

Figure 493: ATR spectrum of Epson 63 neat ink green spot run 1

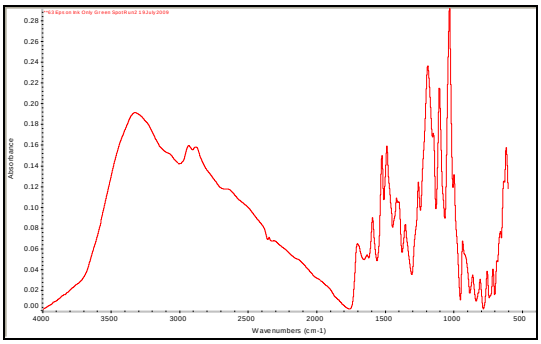

Figure 494: ATR spectrum of Epson 63 neat ink green spot run 2

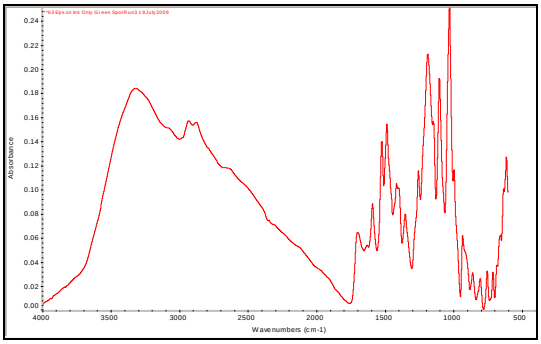

Figure 495: ATR spectrum of Epson 63 neat ink green spot run 3

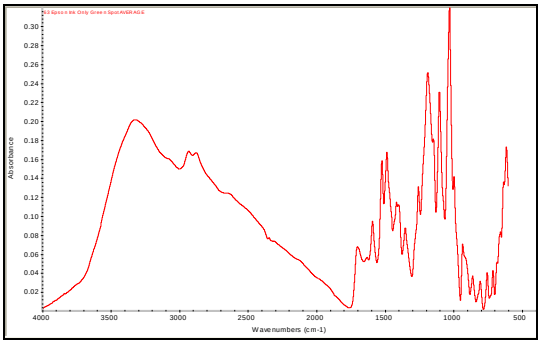

Figure 496: ATR spectrum of Epson 63 neat ink green spot AVERAGE

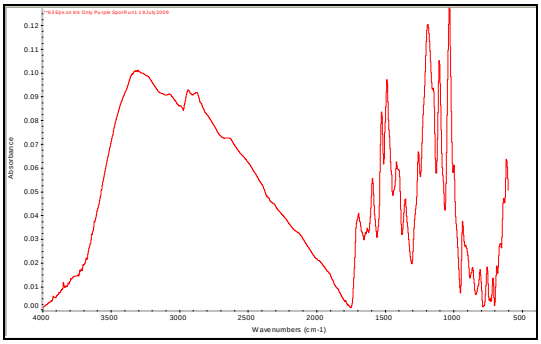

Figure 497: ATR spectrum of Epson 63 neat ink purple spot run 1

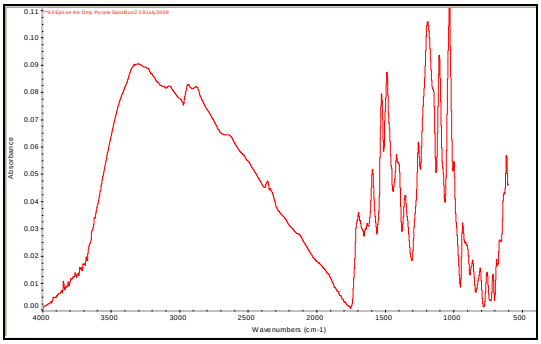

Figure 498: ATR spectrum of Epson 63 neat ink purple spot run 2

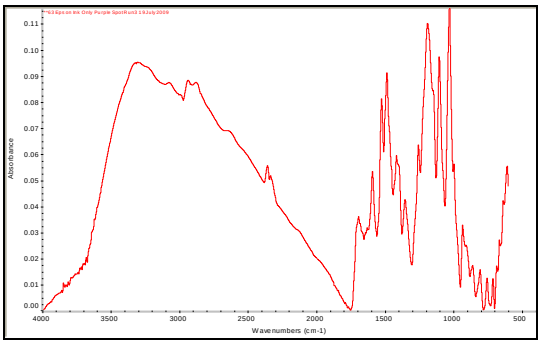

Figure 499: ATR spectrum of Epson 63 neat ink purple spot run 3

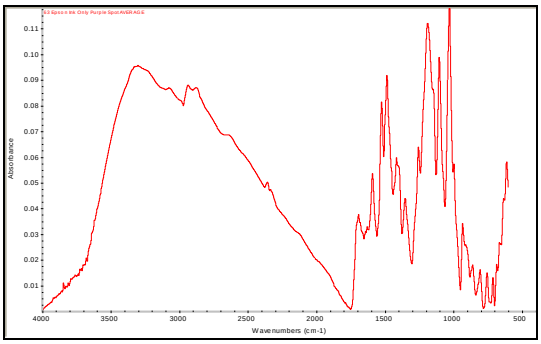

Figure 500: ATR spectrum of Epson 63 neat ink purple spot AVERAGE

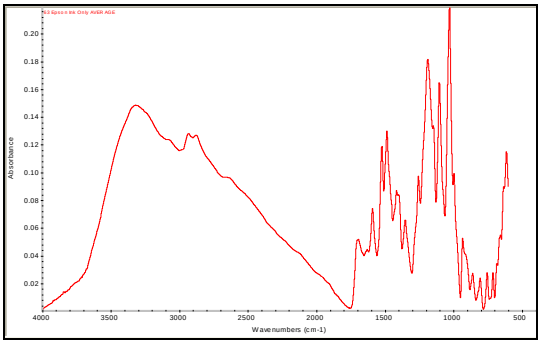

Figure 501: ATR spectrum of Epson 63 neat ink AVERAGE

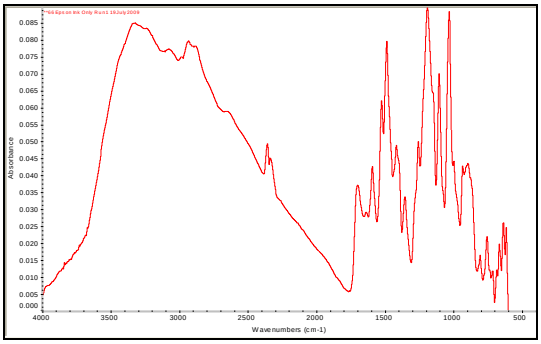

Figure 502: ATR spectrum of Epson 66 neat ink run 1

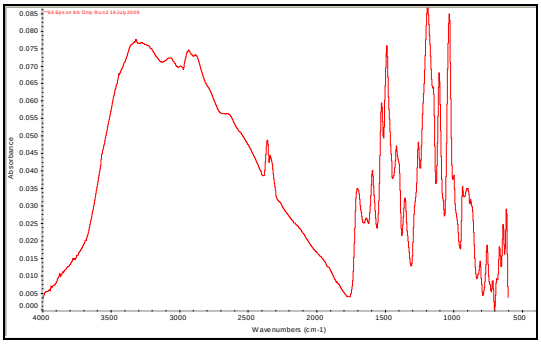

Figure 503: ATR spectrum of Epson 66 neat ink run 2

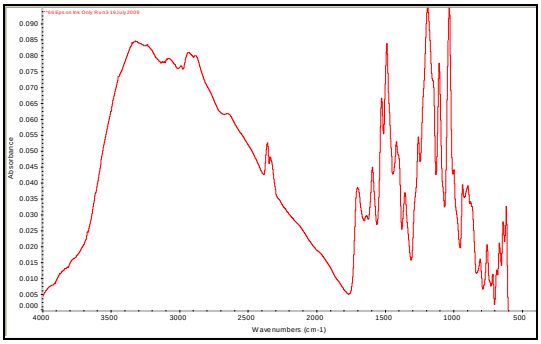

Figure 504: ATR spectrum of Epson 66 neat ink run 3

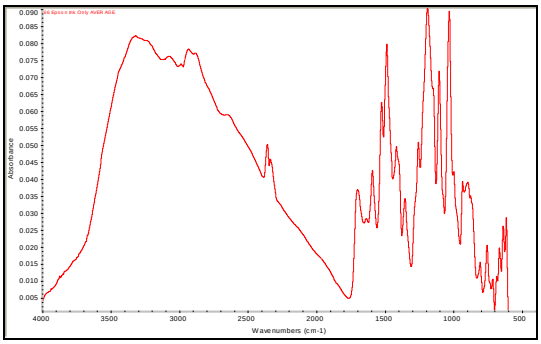

Figure 505: ATR spectrum of Epson 66 neat ink AVERAGE

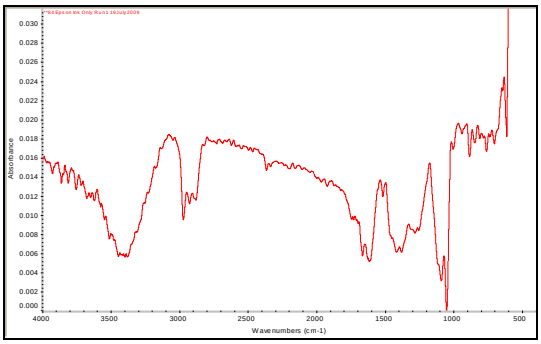

Figure 506: ATR spectrum of Epson 84 neat ink run 1

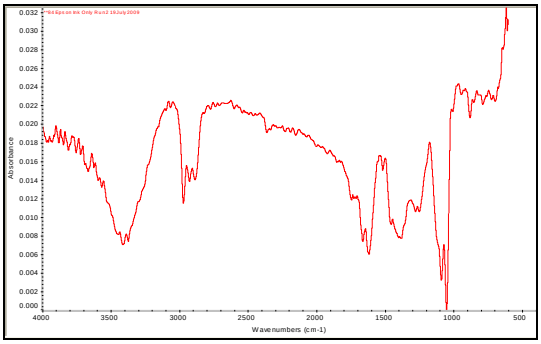

Figure 507: ATR spectrum of Epson 84 neat ink run 2

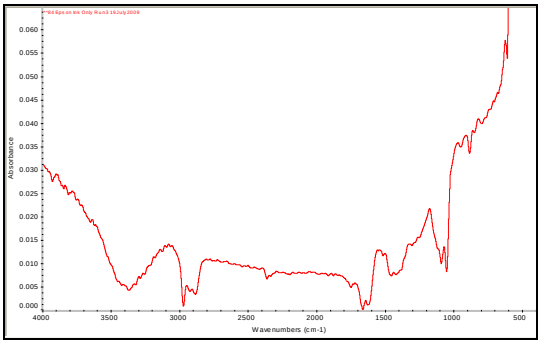

Figure 508: ATR spectrum of Epson 84 neat ink run 3

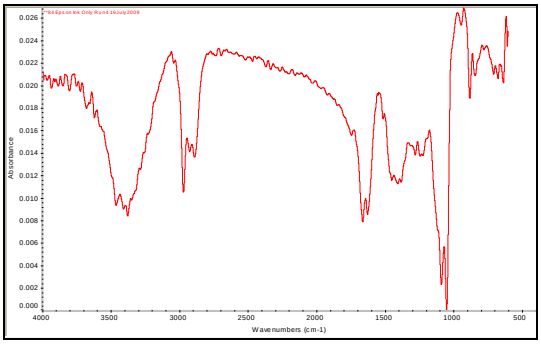

Figure 509: ATR spectrum of Epson 84 neat ink run 4

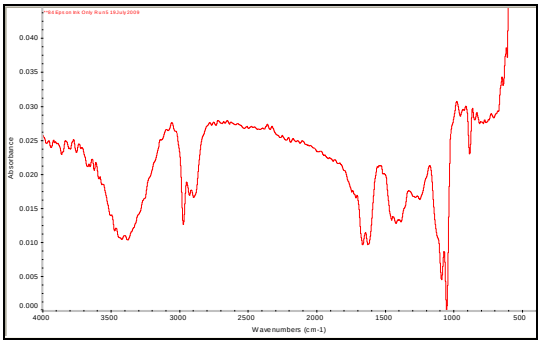

Figure 510: ATR spectrum of Epson 84 neat ink run 5

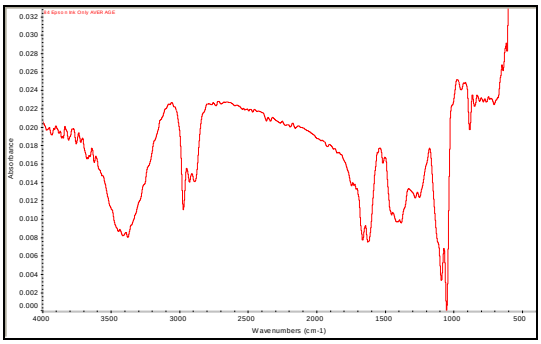

Figure 511: ATR spectrum of Epson 84 neat ink AVERAGE

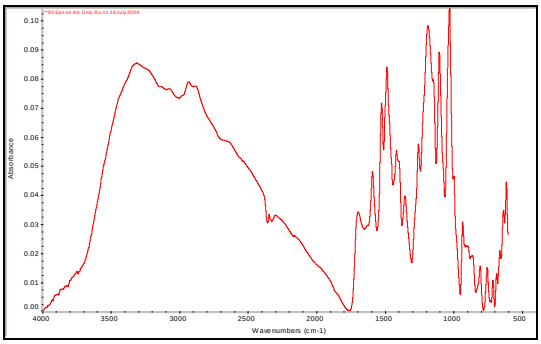

Figure 512: ATR spectrum of Epson 90 neat ink run 1

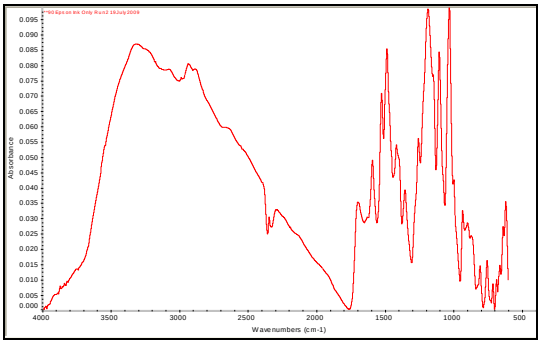

Figure 513: ATR spectrum of Epson 90 neat ink run 2

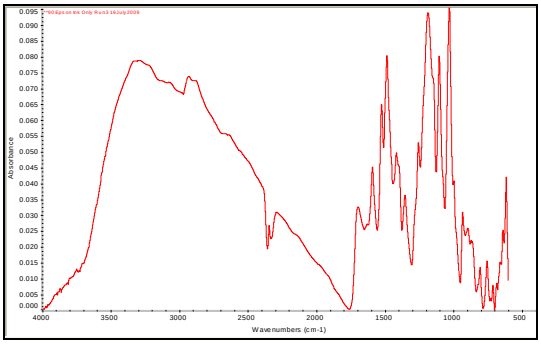

Figure 514: ATR spectrum of Epson 90 neat ink run 3

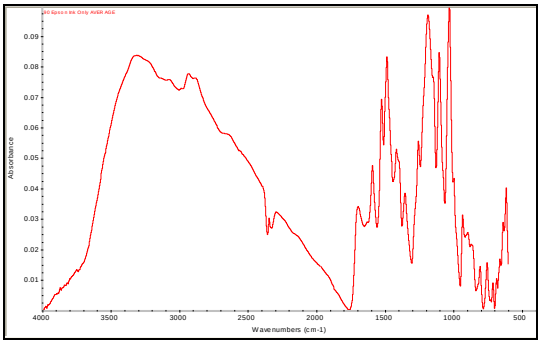

Figure 515: ATR spectrum of Epson 90 neat ink AVERAGE

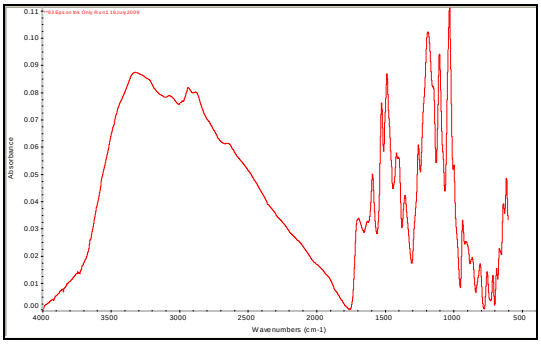

Figure 516: ATR spectrum of Epson 93 neat ink run 1

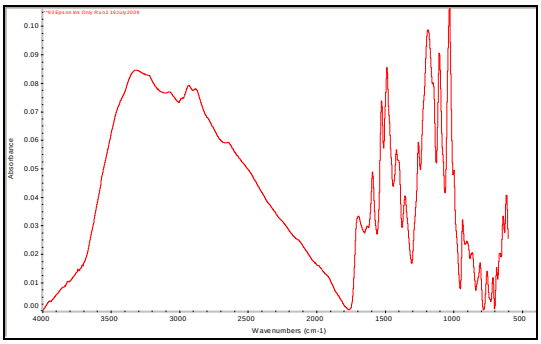

Figure 517: ATR spectrum of Epson 93 neat ink run 2

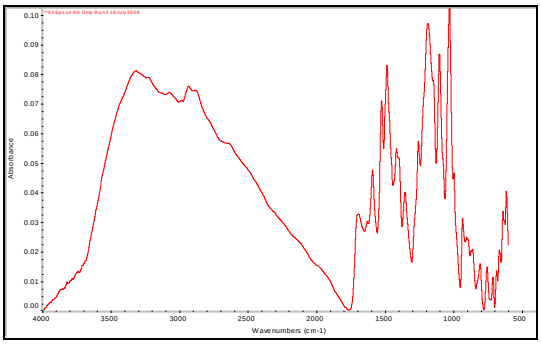

Figure 518: ATR spectrum of Epson 93 neat ink run 3

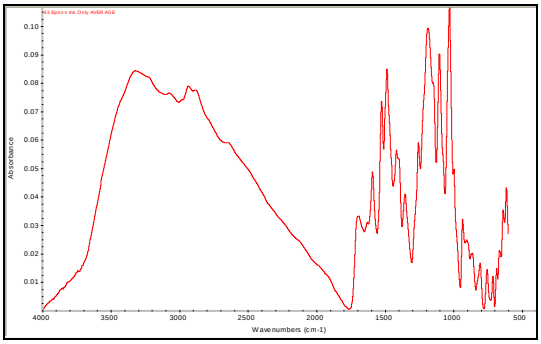

Figure 519: ATR spectrum of Epson 93 neat ink AVERAGE

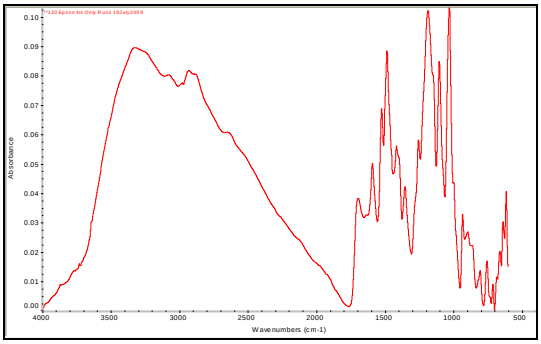

Figure 520: ATR spectrum of Epson 120 neat ink run 1

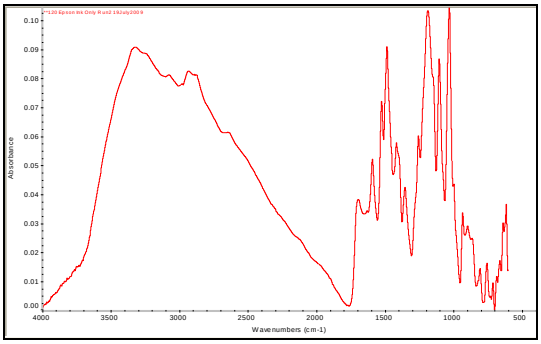

Figure 521: ATR spectrum of Epson 120 neat ink run 2

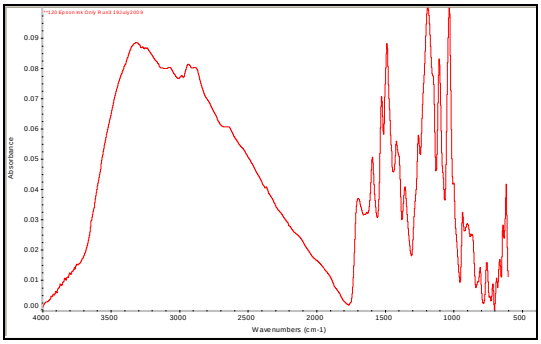

Figure 522: ATR spectrum of Epson 120 neat ink run 3

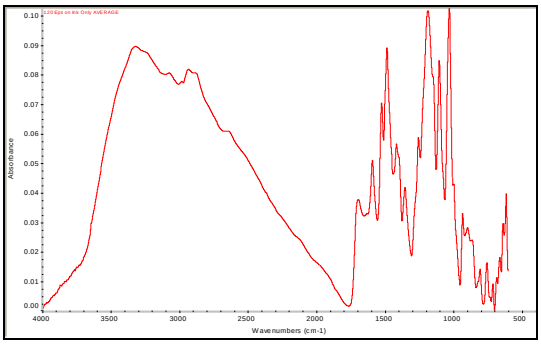

Figure 523: ATR spectrum of Epson 120 neat ink AVERAGE

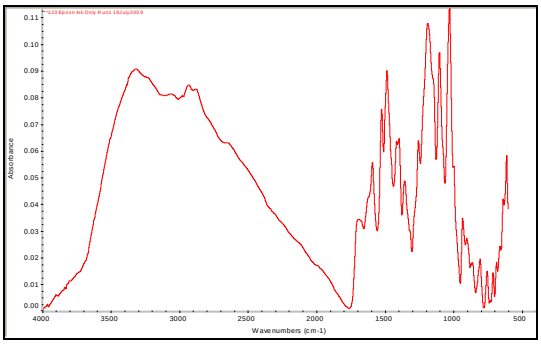

Figure 524: ATR spectrum of Epson 123 neat ink run 1

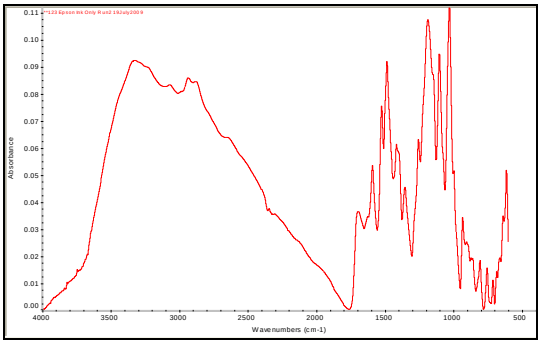

Figure 525: ATR spectrum of Epson 123 neat ink run 2

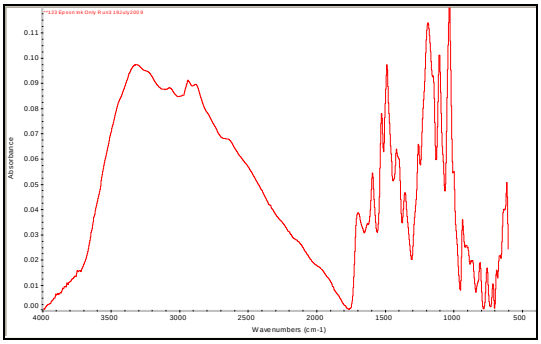

Figure 526: ATR spectrum of Epson 123 neat ink run 3

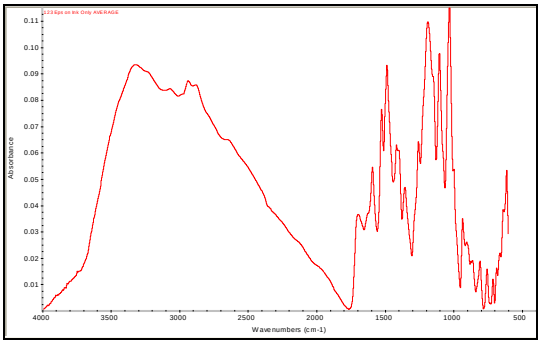

Figure 527: ATR spectrum of Epson 123 neat ink AVERAGE

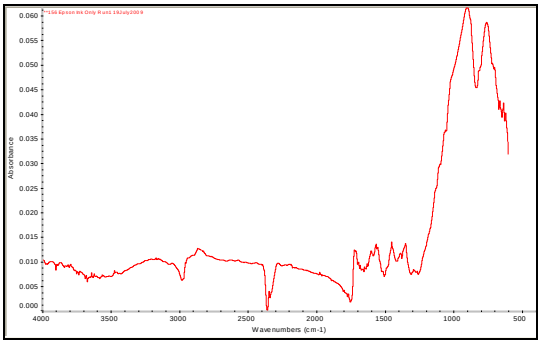

Figure 528: ATR spectrum of Epson 156 neat ink run 1

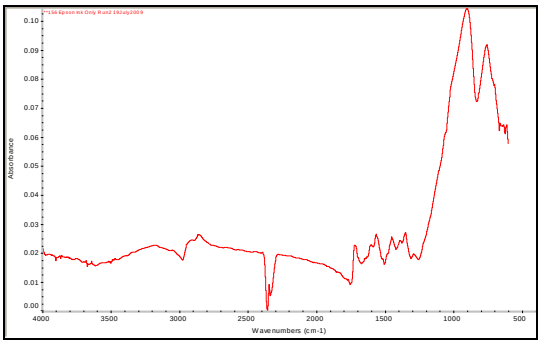

Figure 529: ATR spectrum of Epson 156 neat ink run 2

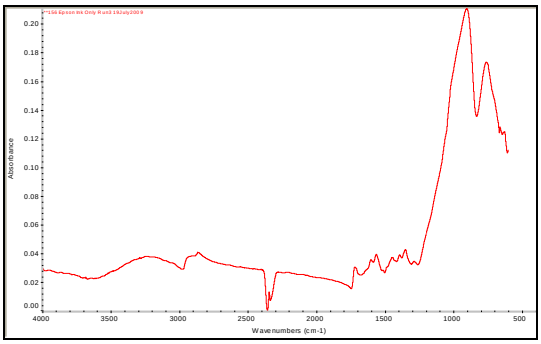

Figure 530: ATR spectrum of Epson 156 neat ink run 3

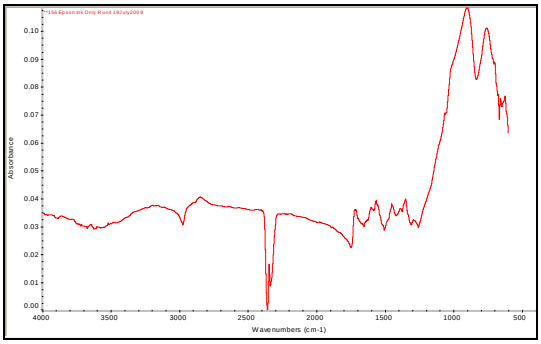

Figure 531: ATR spectrum of Epson 156 neat ink run 4

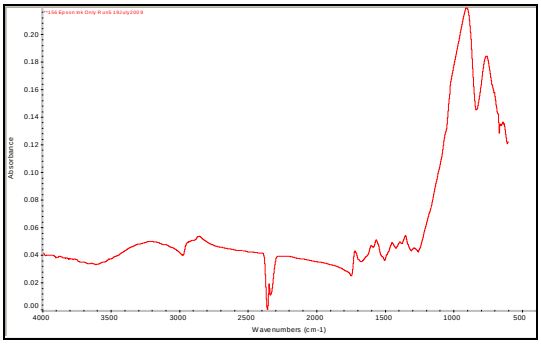

Figure 532: ATR spectrum of Epson 156 neat ink run 5

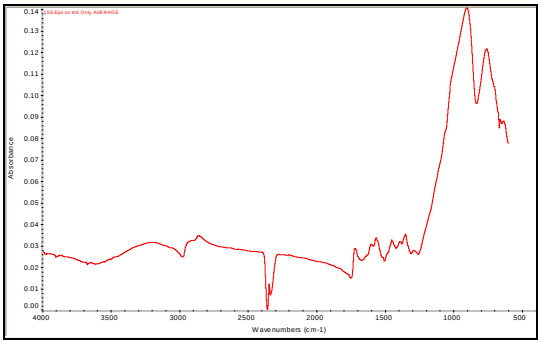

Figure 533: ATR spectrum of Epson 156 neat ink AVERAGE

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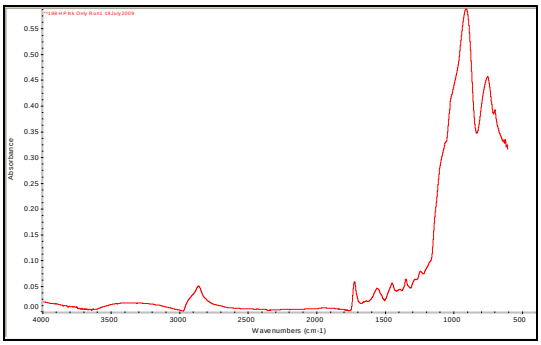

Figure 534: ATR spectrum of HP 198 neat ink run 1

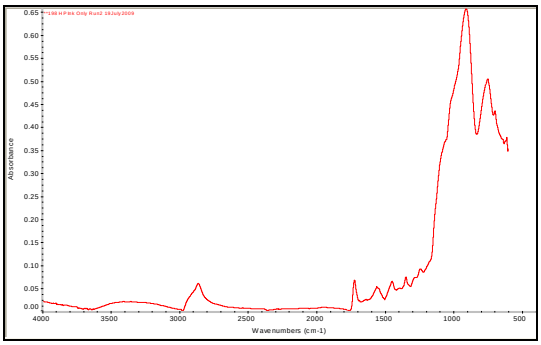

Figure 535: ATR spectrum of HP 198 neat ink run 2

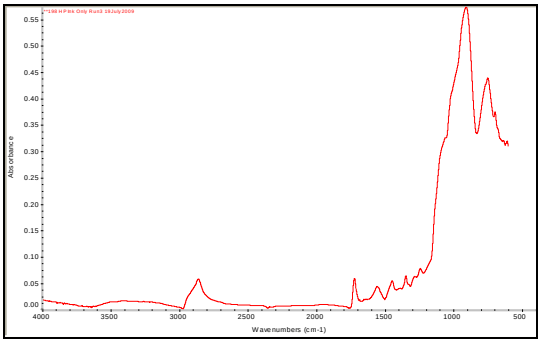

Figure 536: ATR spectrum of HP 198 neat ink run 3

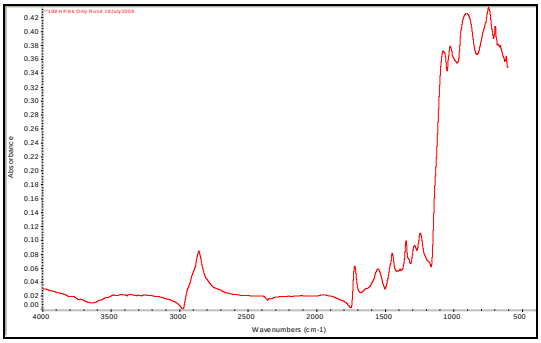

Figure 537: ATR spectrum of HP 198 neat ink run 4

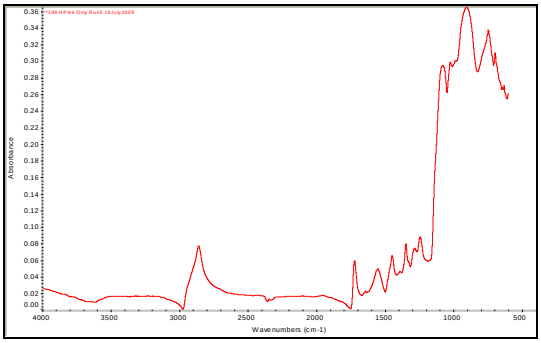

Figure 538: ATR spectrum of HP 198 neat ink run 5

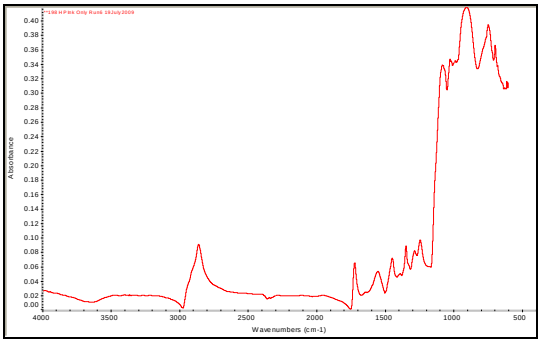

Figure 539: ATR spectrum of HP 198 neat ink run 6

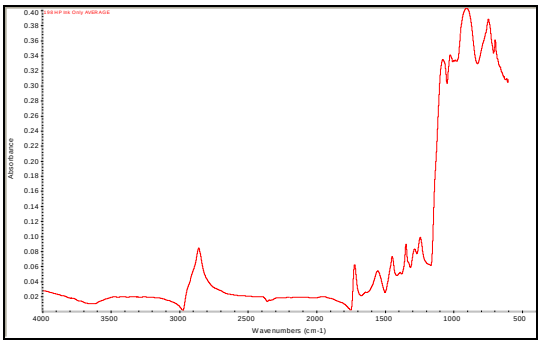

Figure 540: ATR spectrum of HP 198 neat ink AVERAGE

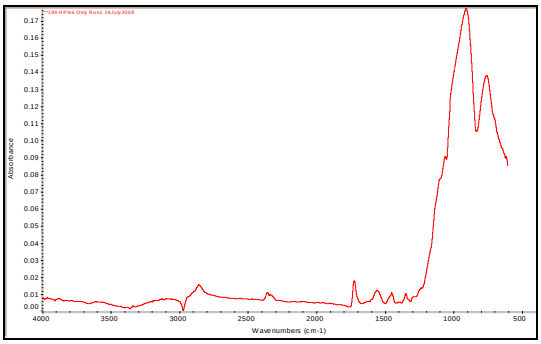

Figure 541: ATR spectrum of HP 199 neat ink run 1

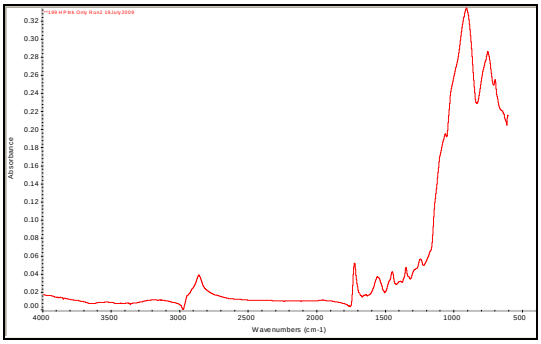

Figure 542: ATR spectrum of HP 199 neat ink run 2

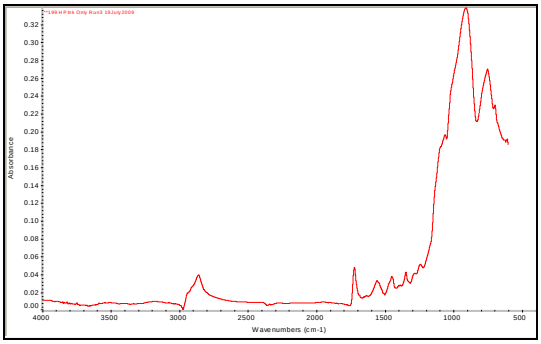

Figure 543: ATR spectrum of HP 199 neat ink run 3

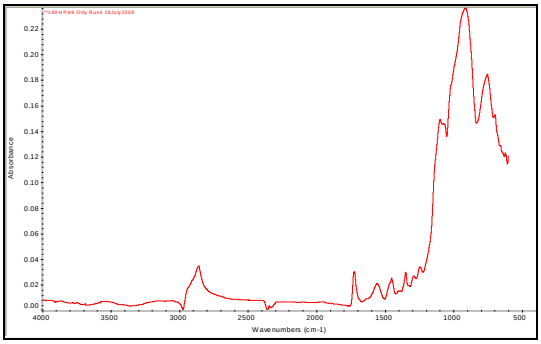

Figure 544: ATR spectrum of HP 199 neat ink run 4

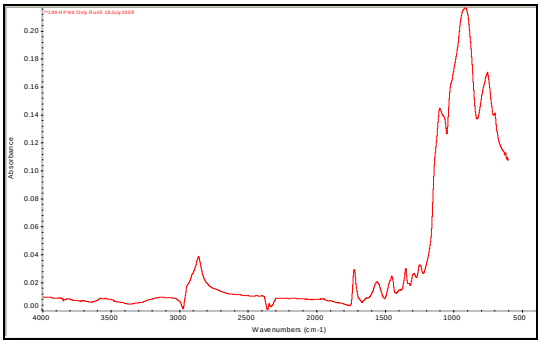

Figure 545: ATR spectrum of HP 199 neat ink run 5

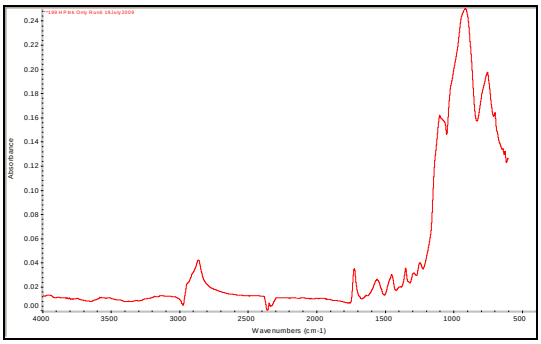

Figure 546: ATR spectrum of HP 199 neat ink run 6

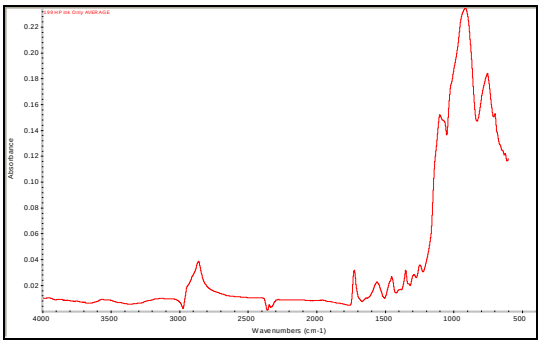

Figure 547: ATR spectrum of HP 199 neat ink AVERAGE

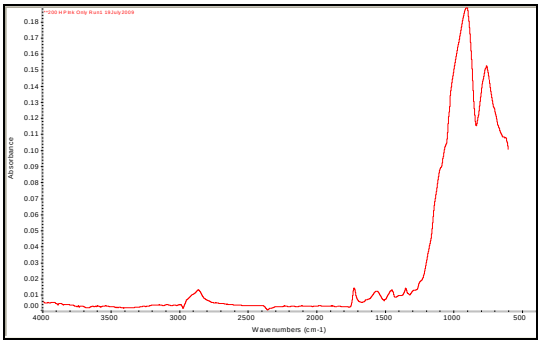

Figure 548: ATR spectrum of HP 200 neat ink run 1

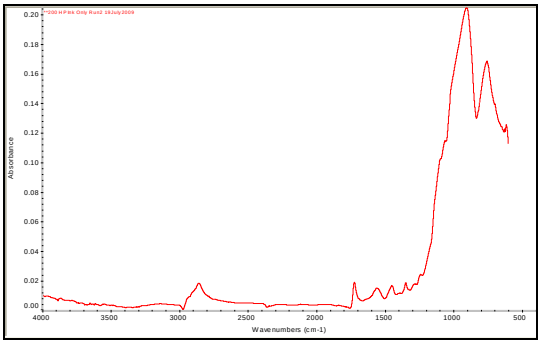

Figure 549: ATR spectrum of HP 200 neat ink run 2

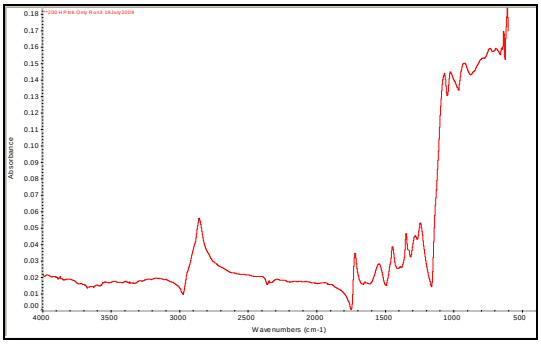

Figure 550: ATR spectrum of HP 200 neat ink run 3

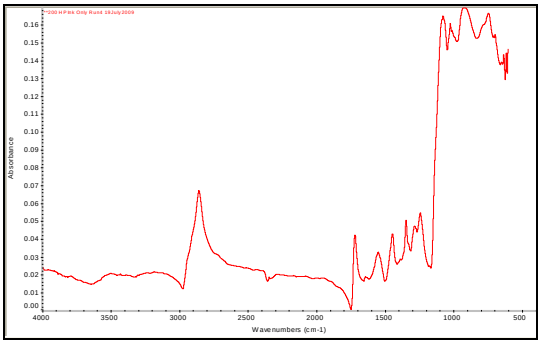

Figure 551: ATR spectrum of HP 200 neat ink run 4

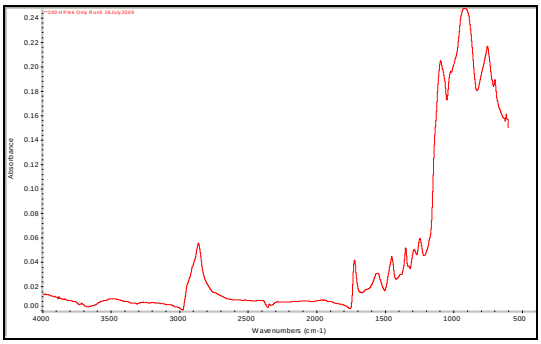

Figure 552: ATR spectrum of HP 200 neat ink run 5

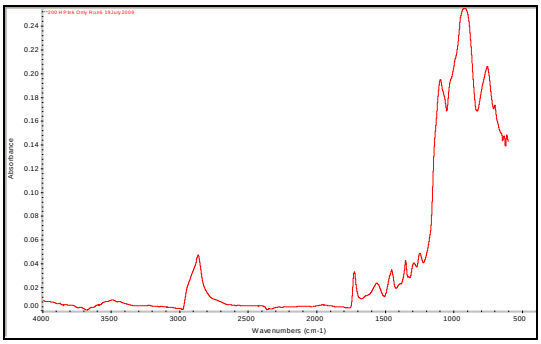

Figure 553: ATR spectrum of HP 200 neat ink run 6

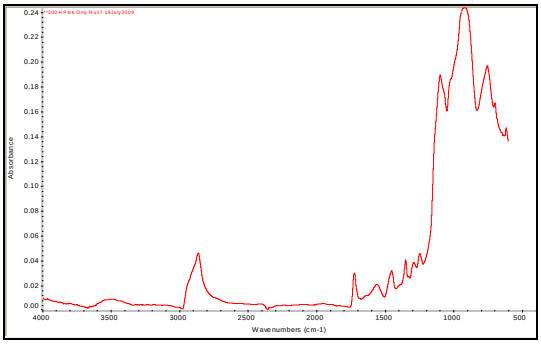

Figure 554: ATR spectrum of HP 200 neat ink run 7

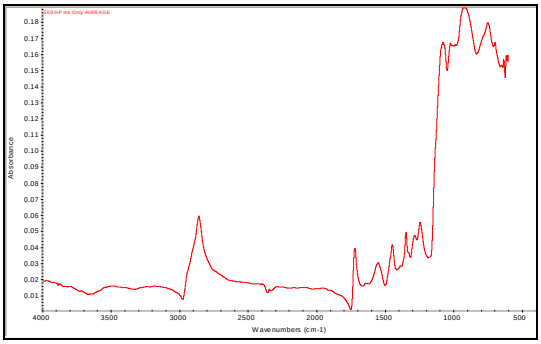

Figure 555: ATR spectrum of HP 200 neat ink AVERAGE

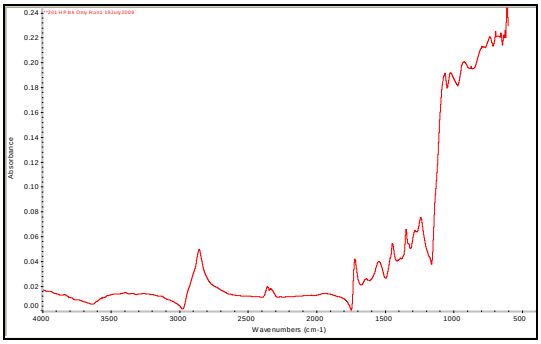

Figure 556: ATR spectrum of HP 201 neat ink run 1

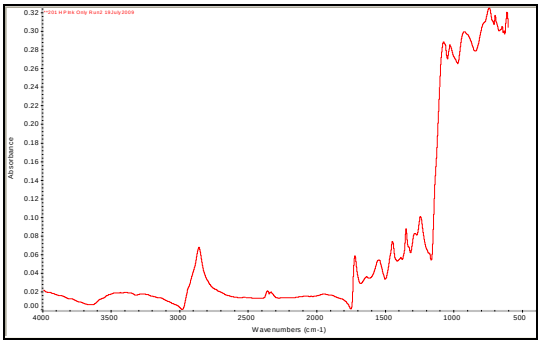

Figure 557: ATR spectrum of HP 201 neat ink run 2

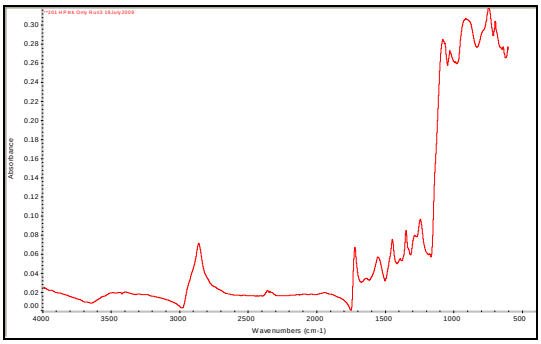

Figure 558: ATR spectrum of HP 201 neat ink run 3

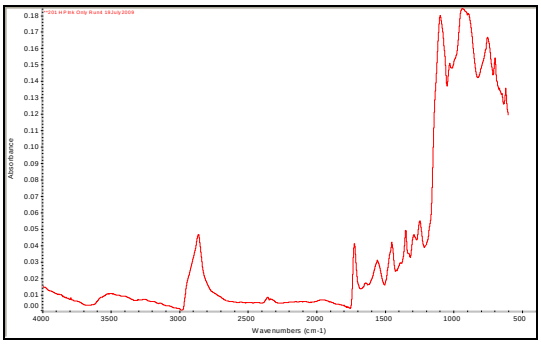

Figure 559: ATR spectrum of HP 201 neat ink run 4

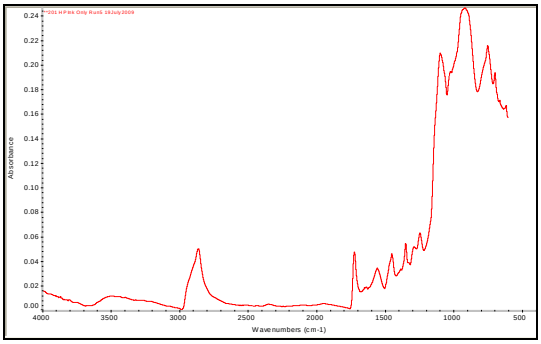

Figure 560: ATR spectrum of HP 201 neat ink run 5

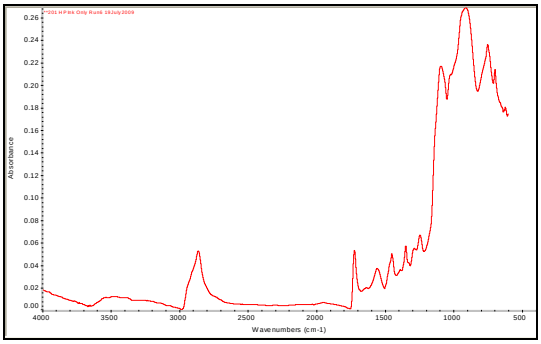

Figure 561: ATR spectrum of HP 201 neat ink run 6

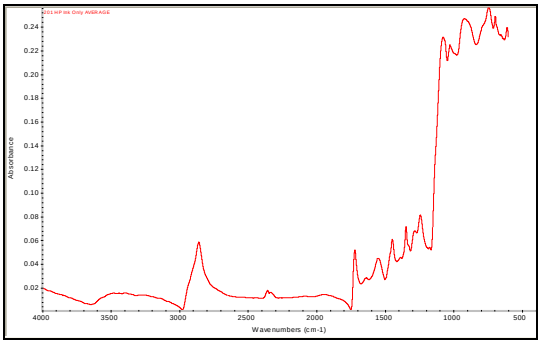

Figure 562: ATR spectrum of HP 201 neat ink AVERAGE

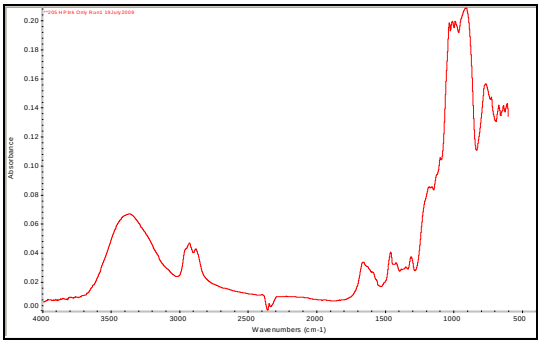

Figure 563: ATR spectrum of HP 205 neat ink run 1

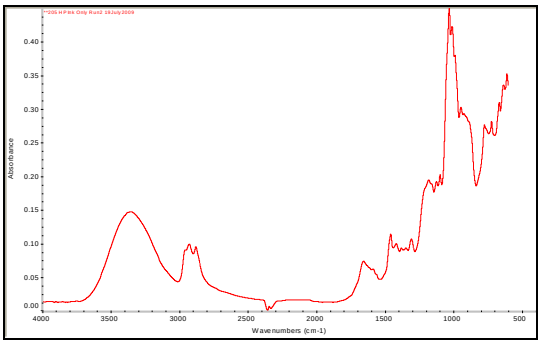

Figure 564: ATR spectrum of HP 205 neat ink run 2

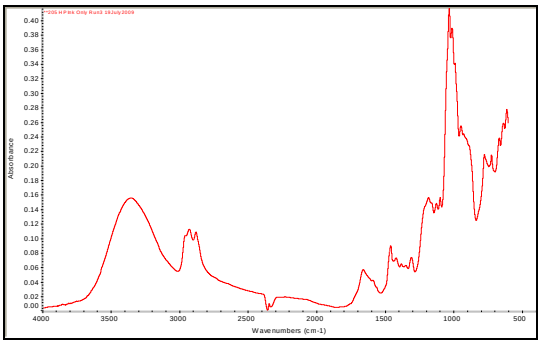

Figure 565: ATR spectrum of HP 205 neat ink run 3

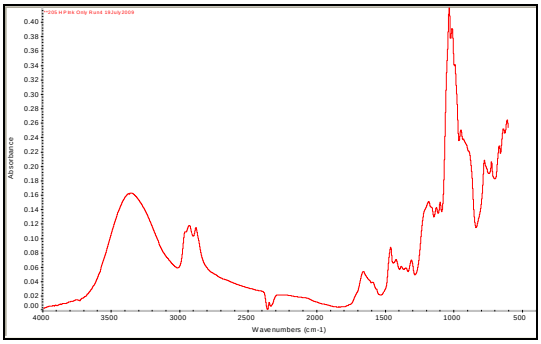

Figure 566: ATR spectrum of HP 205 neat ink run 4

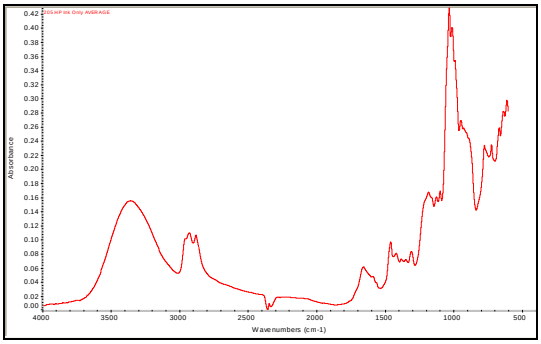

Figure 567: ATR spectrum of HP 205 neat ink AVERAGE

CANON

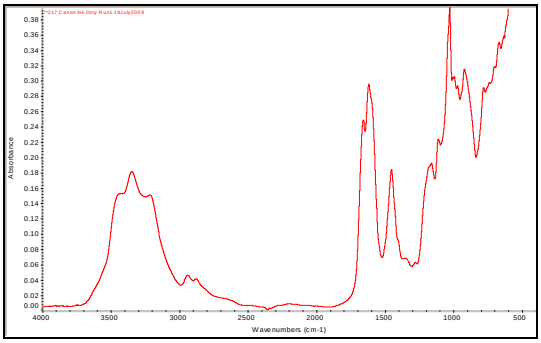

Figure 568: ATR spectrum of Canon 217 neat ink run 1

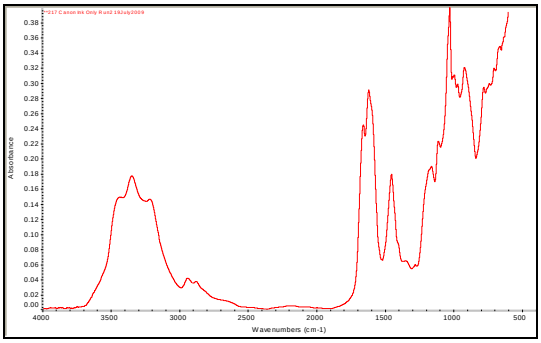

Figure 569: ATR spectrum of Canon 217 neat ink run 2

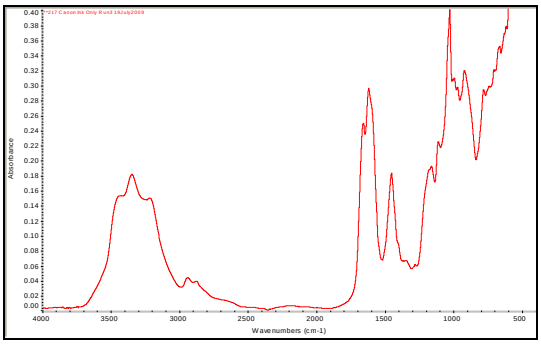

Figure 570: ATR spectrum of Canon 217 neat ink run 3

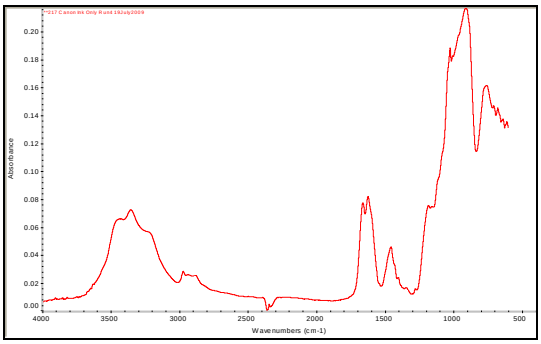

Figure 571: ATR spectrum of Canon 217 neat ink run 4

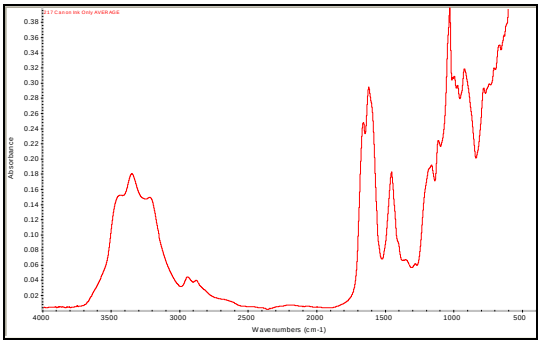

Figure 572: ATR spectrum of Canon 217 neat ink AVERAGE

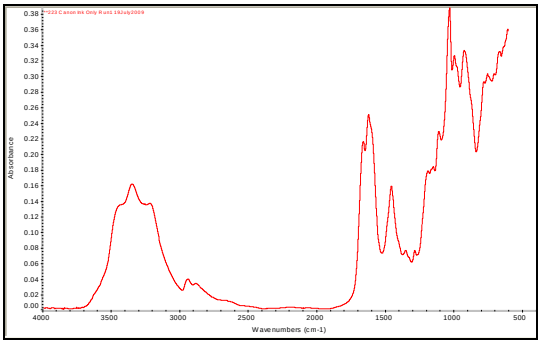

Figure 573: ATR spectrum of Canon 223 neat ink run 1

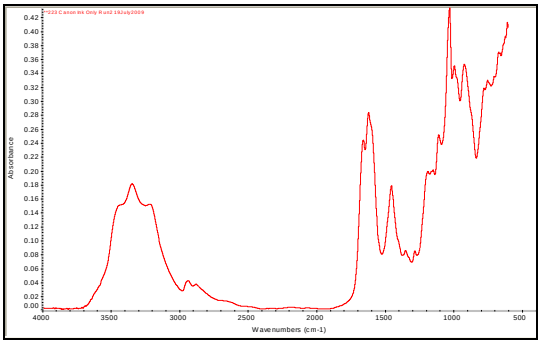

Figure 574: ATR spectrum of Canon 223 neat ink run 2

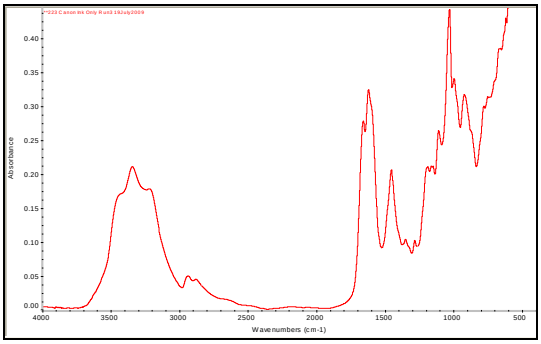

Figure 575: ATR spectrum of Canon 223 neat ink run 3

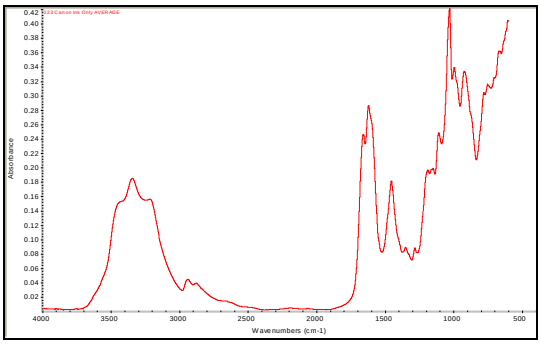

Figure 576: ATR spectrum of Canon 223 neat ink AVERAGE

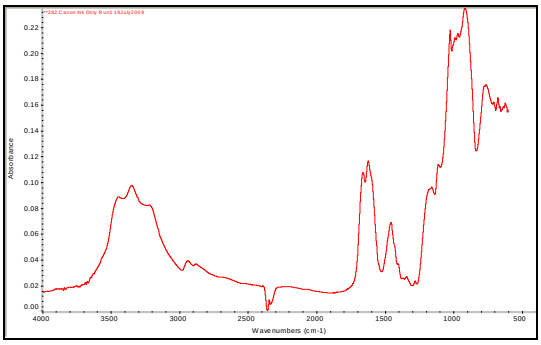

Figure 577: ATR spectrum of Canon 282 neat ink run 1

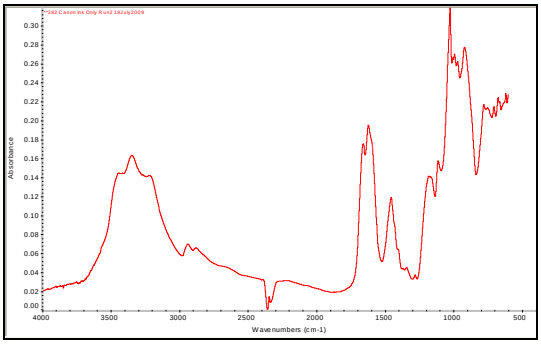

Figure 578: ATR spectrum of Canon 282 neat ink run 2

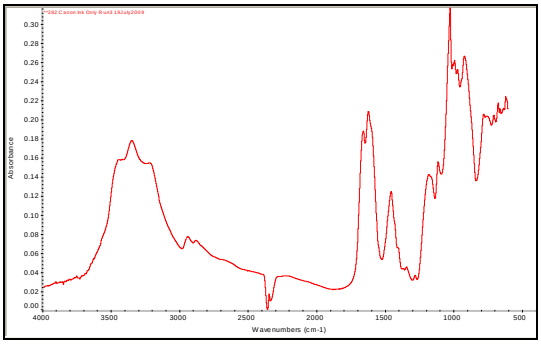

Figure 579: ATR spectrum of Canon 282 neat ink run 3

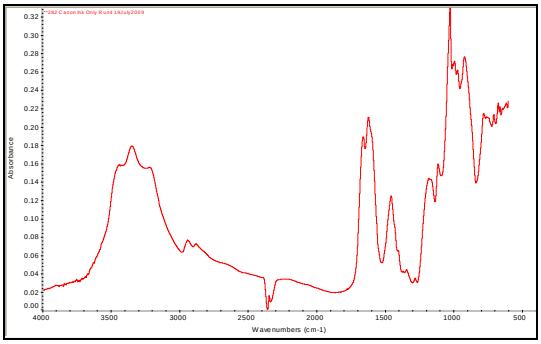

Figure 580: ATR spectrum of Canon 282 neat ink run 4

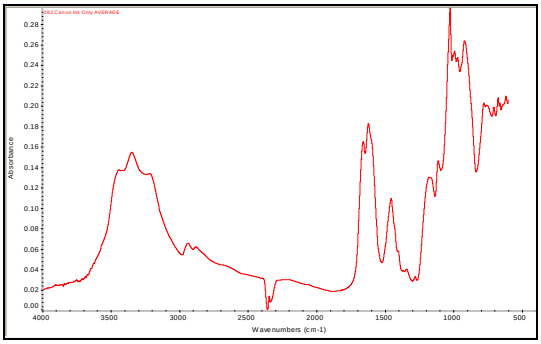

Figure 581: ATR spectrum of Canon 282 neat ink AVERAGE

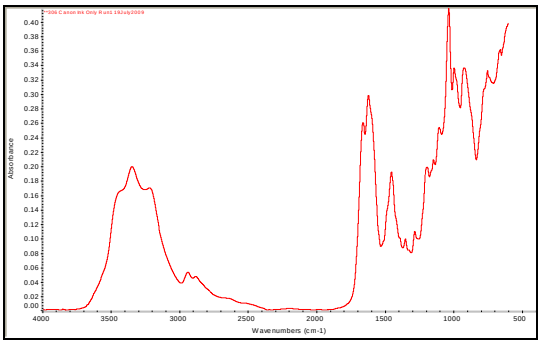

Figure 582: ATR spectrum of Canon 306 neat ink run 1

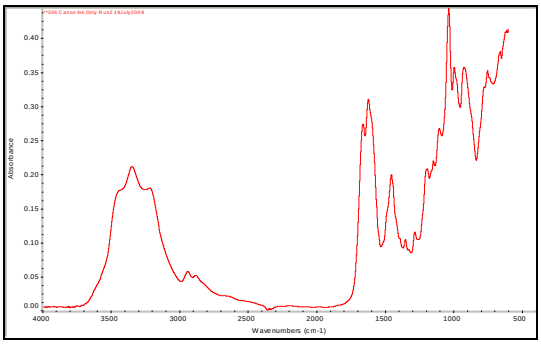

Figure 583: ATR spectrum of Canon 306 neat ink run 2

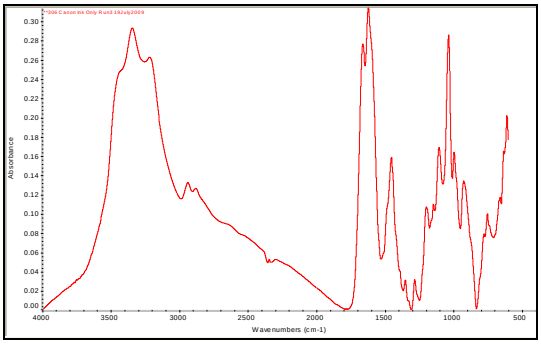

Figure 584: ATR spectrum of Canon 306 neat ink run 3

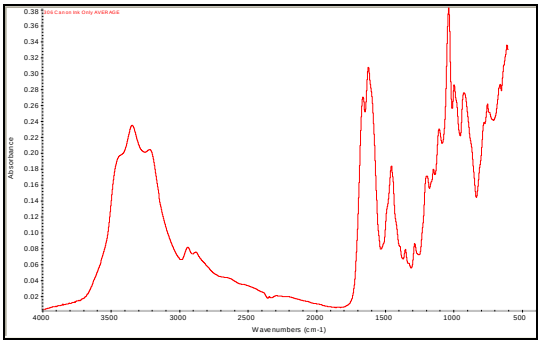

Figure 585: ATR spectrum of Canon 306 neat ink AVERAGE

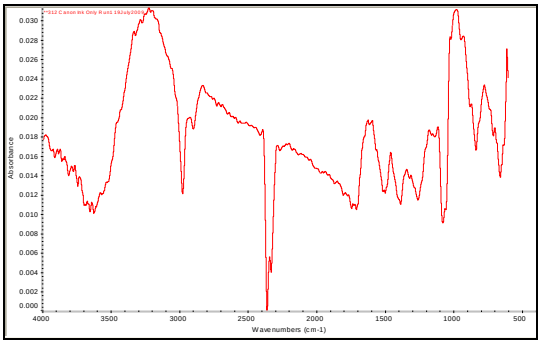

Figure 586: ATR spectrum of Canon 312 neat ink run 1

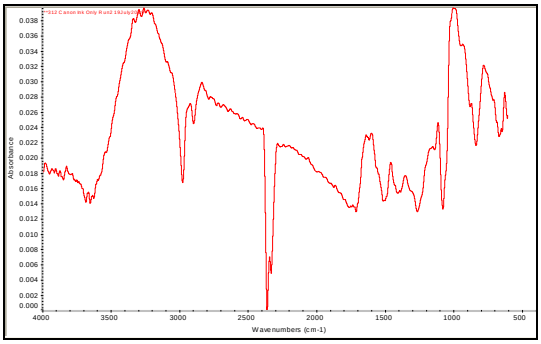

Figure 587: ATR spectrum of Canon 312 neat ink run 2

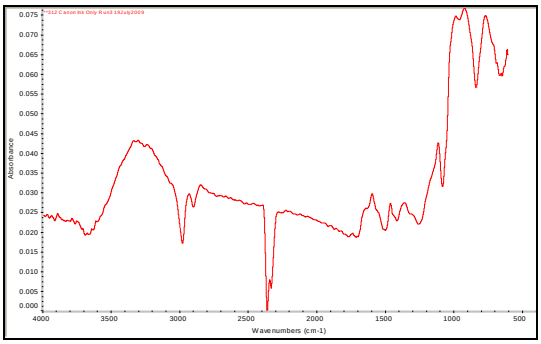

Figure 588: ATR spectrum of Canon 312 neat ink run 3

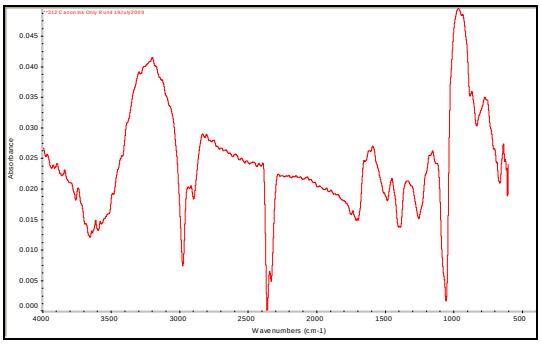

Figure 589: ATR spectrum of Canon 312 neat ink run 4

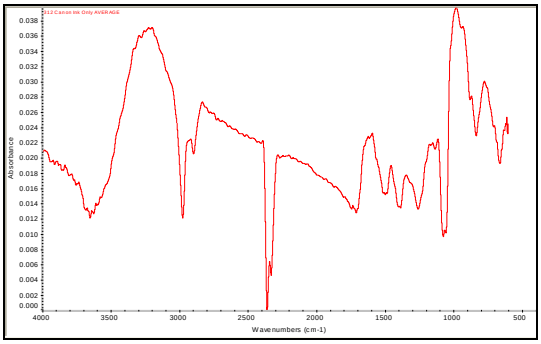

Figure 590: ATR spectrum of Canon 312 neat ink AVERAGE

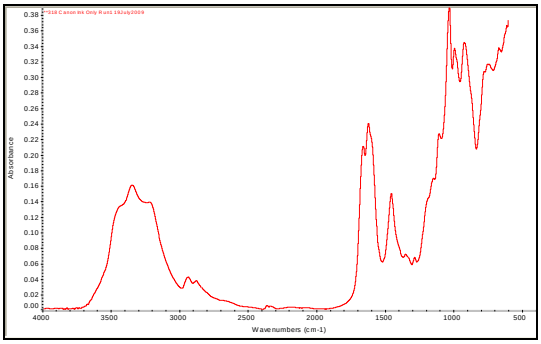

Figure 591: ATR spectrum of Canon 318 neat ink run 1

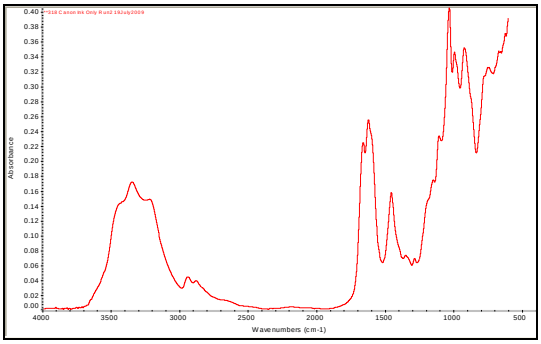

Figure 592: ATR spectrum of Canon 318 neat ink run 2

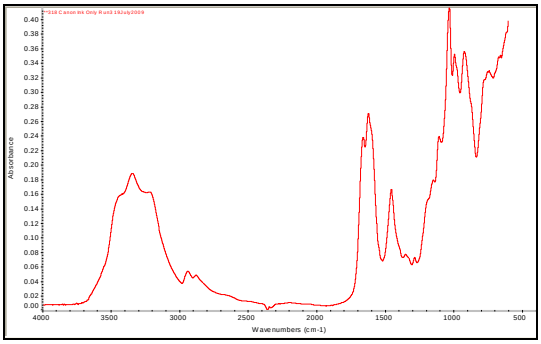

Figure 593: ATR spectrum of Canon 318 neat ink run 3

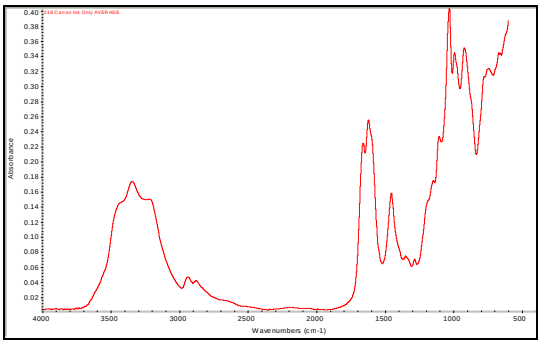

Figure 594: ATR spectrum of Canon 318 neat ink AVERAGE

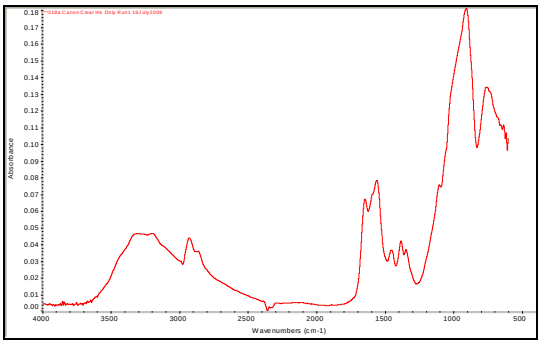

Figure 595: ATR spectrum of Canon 318a neat ink run 1

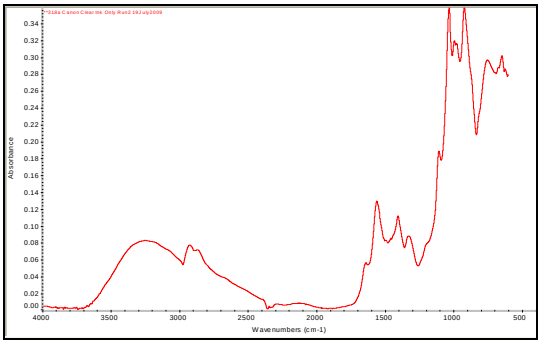

Figure 596: ATR spectrum of Canon 318a neat ink run 2

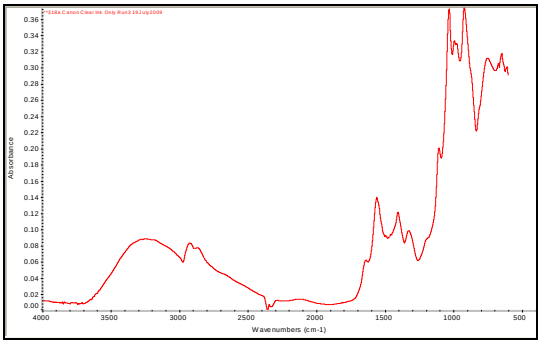

Figure 597: ATR spectrum of Canon 318a neat ink run 3

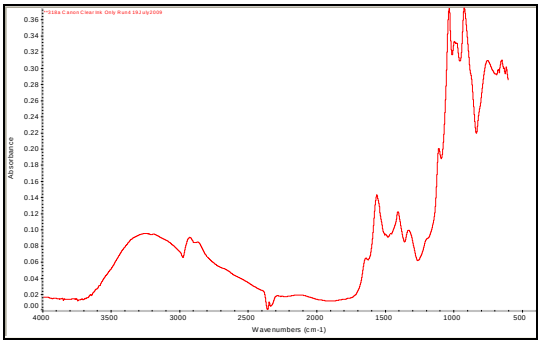

Figure 598: ATR spectrum of Canon 318a neat ink run 4

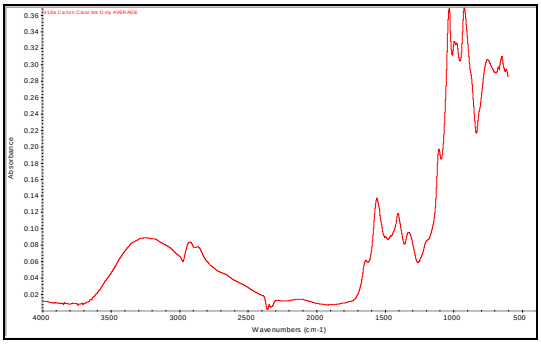

Figure 599: ATR spectrum of Canon 318a neat ink AVERAGE

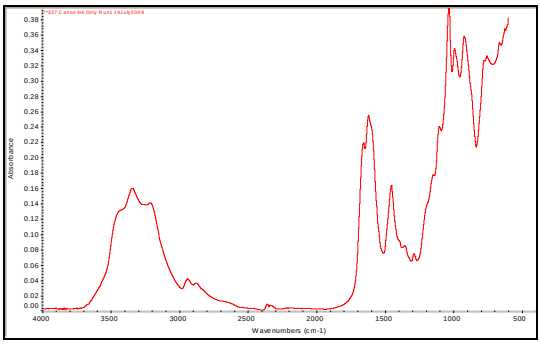

Figure 600: ATR spectrum of Canon 327 neat ink run 1

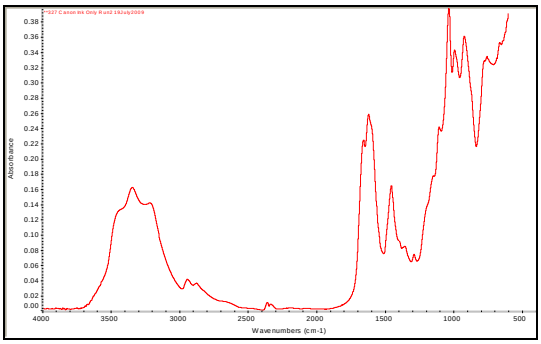

Figure 601: ATR spectrum of Canon 327 neat ink run 2

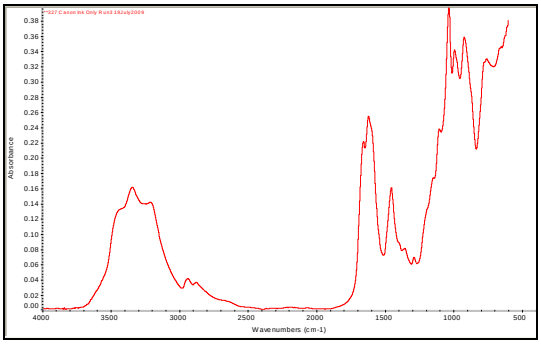

Figure 602: ATR spectrum of Canon 327 neat ink run 3

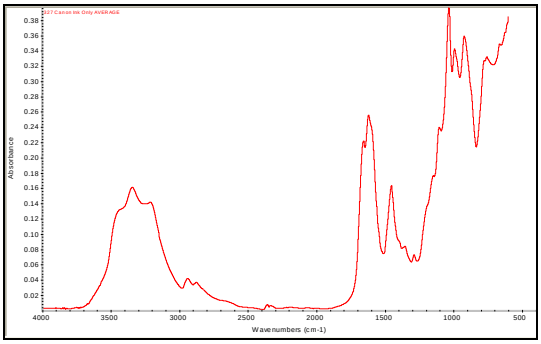

Figure 603: ATR spectrum of Canon 327 neat ink AVERAGE

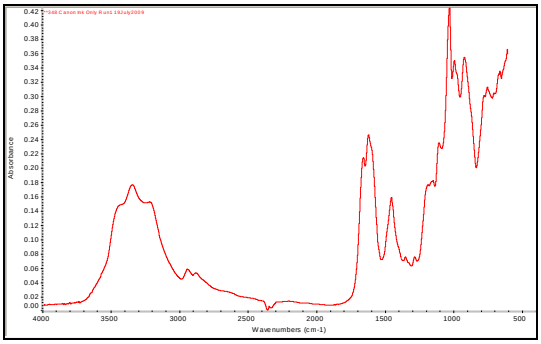

Figure 604: ATR spectrum of Canon 348 neat ink run 1

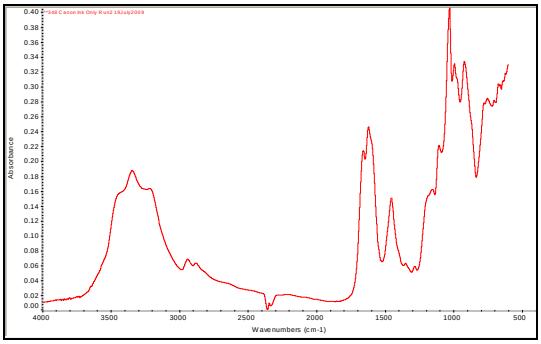

Figure 605: ATR spectrum of Canon 348 neat ink run 2

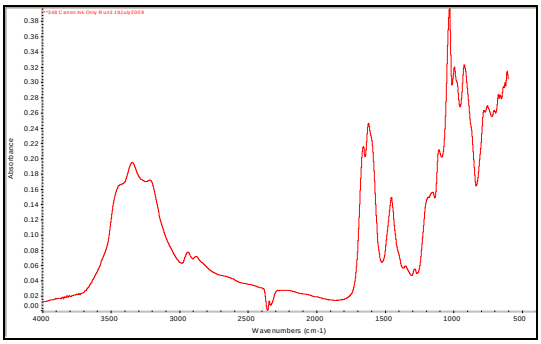

Figure 606: ATR spectrum of Canon 348 neat ink run 3

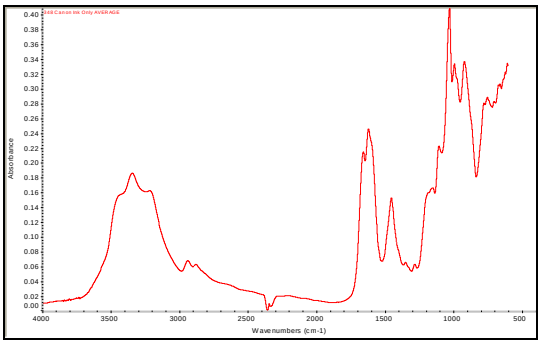

Figure 607: ATR spectrum of Canon 348 neat ink AVERAGE

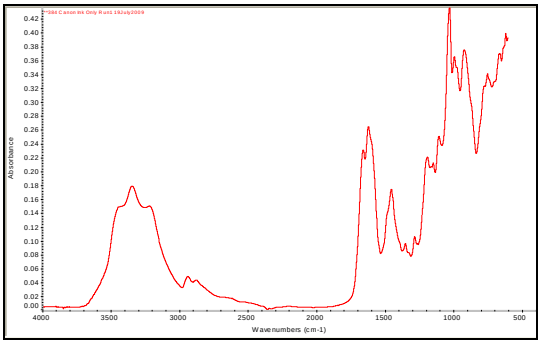

Figure 608: ATR spectrum of Canon 384 neat ink run 1

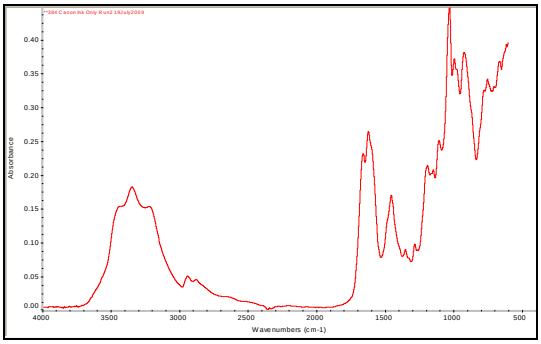

Figure 609: ATR spectrum of Canon 384 neat ink run 2

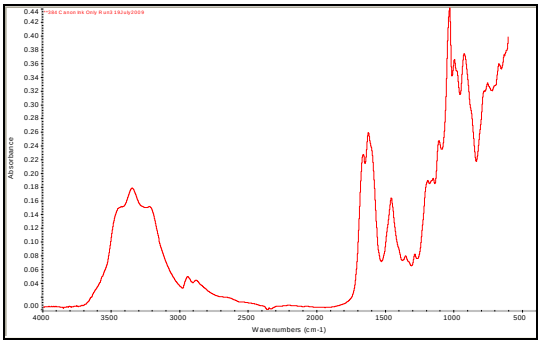

Figure 610: ATR spectrum of Canon 384 neat ink run 3

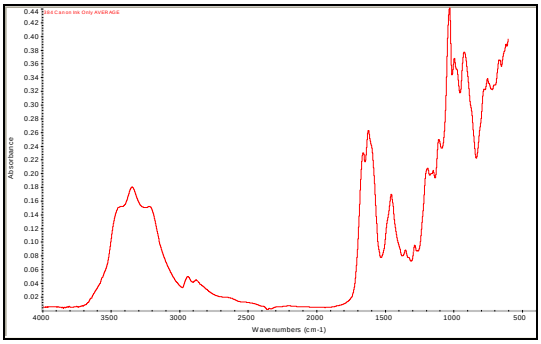

Figure 611: ATR spectrum of Canon 384 neat ink AVERAGE

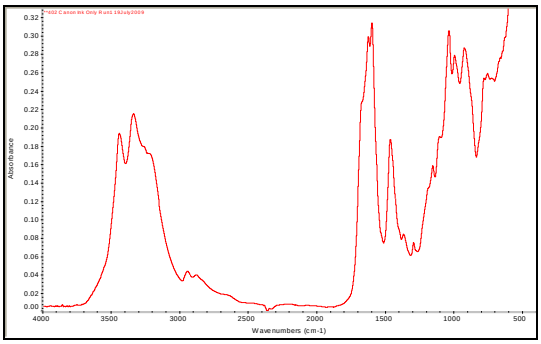

Figure 612: ATR spectrum of Canon 402 neat ink run 1

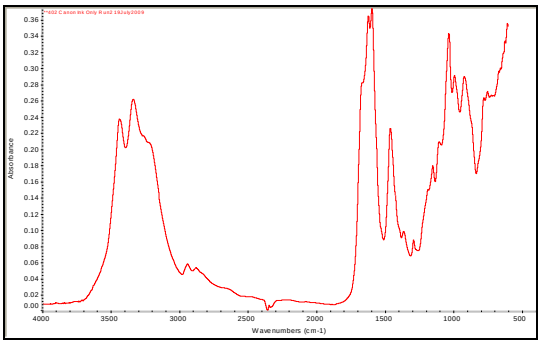

Figure 613: ATR spectrum of Canon 402 neat ink run 2

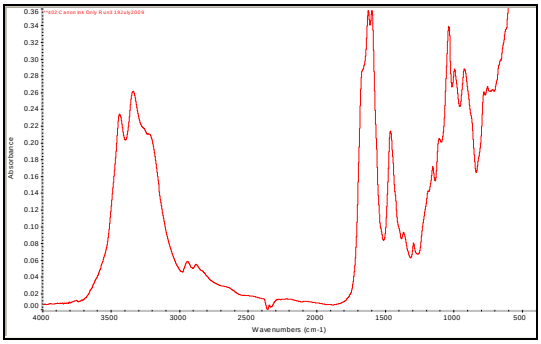

Figure 614: ATR spectrum of Canon 402 neat ink run 3

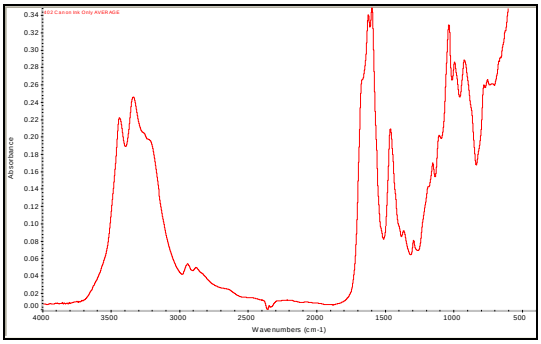

Figure 615: ATR spectrum of Canon 402 neat ink AVERAGE

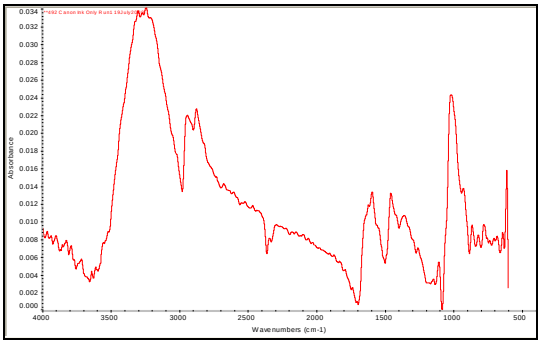

Figure 616: ATR spectrum of Canon 492 neat ink run 1

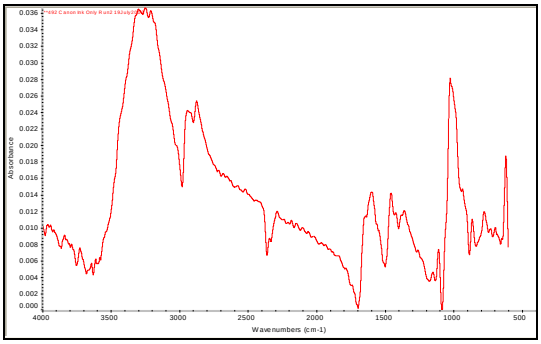

Figure 617: ATR spectrum of Canon 492 neat ink run 2

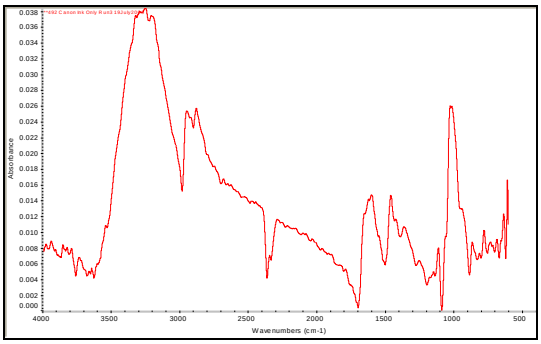

Figure 618: ATR spectrum of Canon 492 neat ink run 3

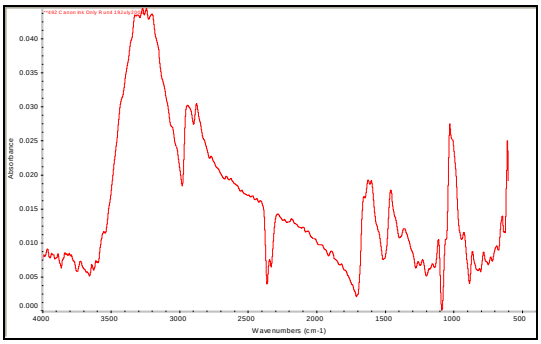

Figure 619: ATR spectrum of Canon 492 neat ink run 4

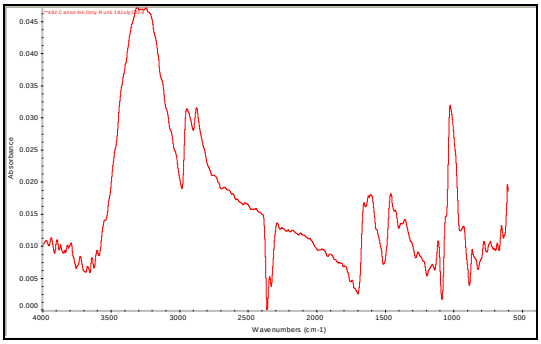

Figure 620: ATR spectrum of Canon 492 neat ink run 5

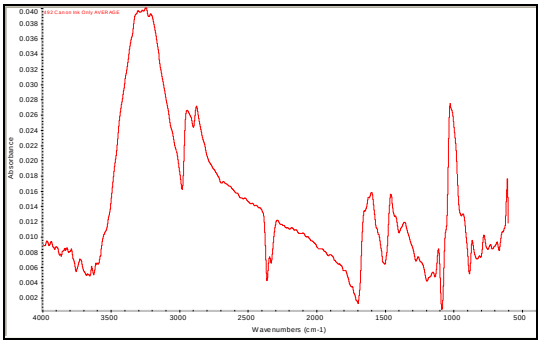

Figure 621: ATR spectrum of Canon 492 neat ink AVERAGE

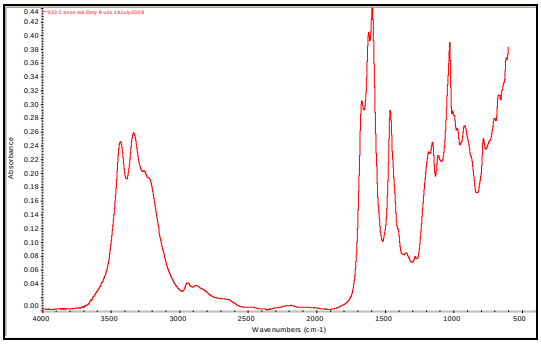

Figure 622: ATR spectrum of Canon 522 neat ink run 1

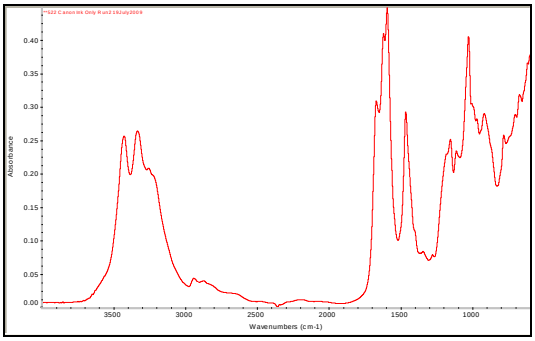

Figure 623: ATR spectrum of Canon 522 neat ink run 2

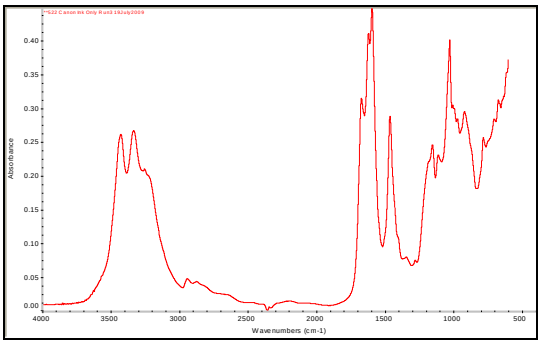

Figure 624: ATR spectrum of Canon 522 neat ink run 3

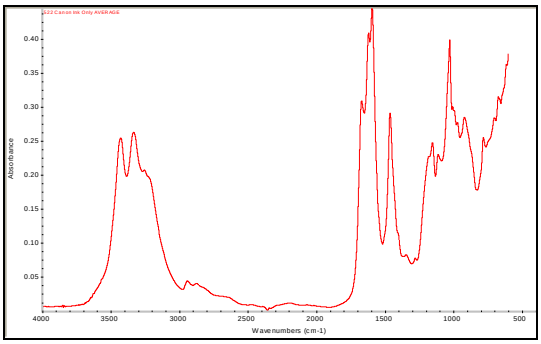

Figure 625: ATR spectrum of Canon 522 neat ink AVERAGE

ATR Data – Blank Microscope Slide Sample

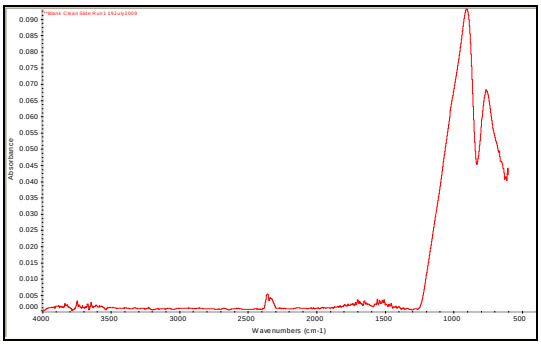

Figure 626: ATR spectrum of blank clean microscope slide run 1

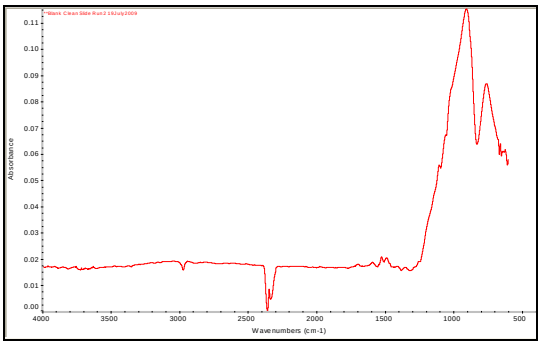

Figure 627: ATR spectrum of blank clean microscope slide run 2

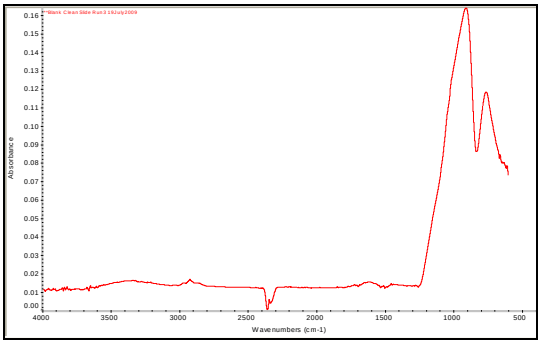

Figure 628: ATR spectrum of blank clean microscope slide run 3

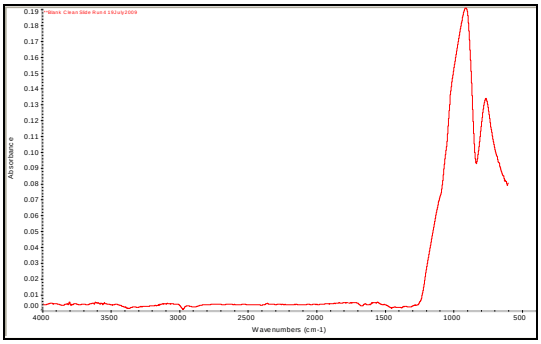

Figure 629: ATR spectrum of blank clean microscope slide run 4

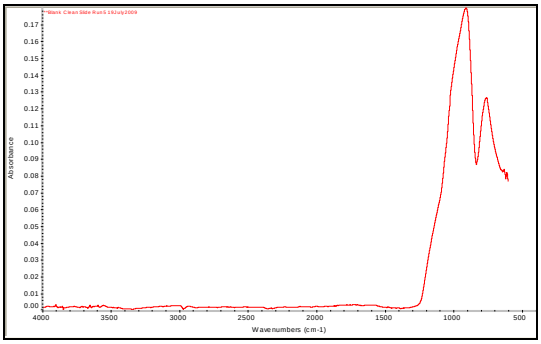

Figure 630: ATR spectrum of blank clean microscope slide run 5

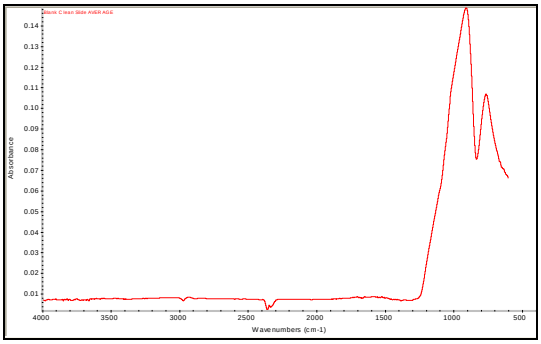

Figure 631: ATR spectrum of blank clean microscope slide AVERAGE

ATR Data – Neat Ink Samples with Blank Slide Subtracted

OKIDATA

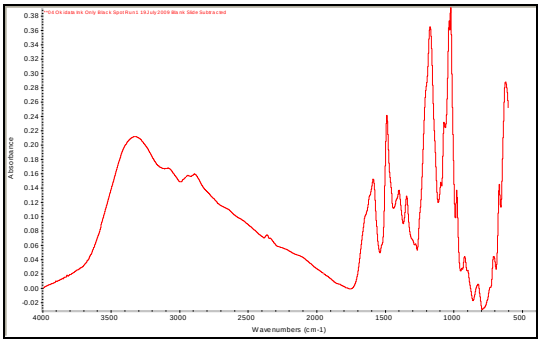

Figure 632: ATR spectrum of Okidata 04 neat ink black spot run 1 slide subtracted

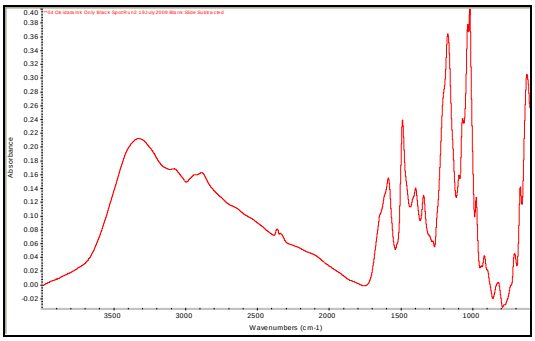

Figure 633: ATR spectrum of Okidata 04 neat ink black spot run 2 slide subtracted

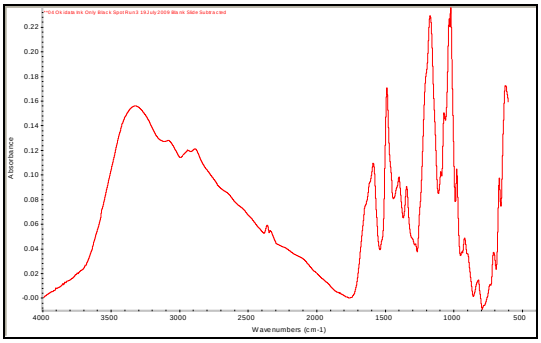

Figure 634: ATR spectrum of Okidata 04 neat ink black spot run 3 slide subtracted

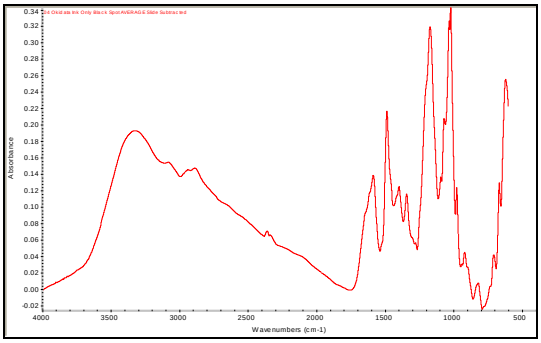

Figure 635: ATR spectrum of Okidata 04 neat ink black spot slide subtracted Average

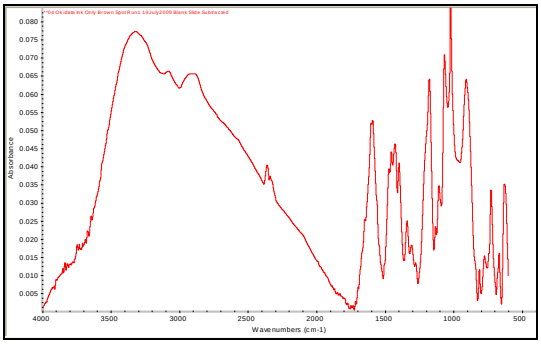

Figure 636: ATR spectrum of Okidata 04 neat ink brown spot run 1 slide subtracted

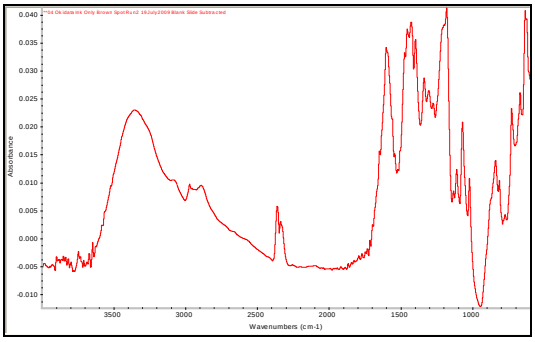

Figure 637: ATR spectrum of Okidata 04 neat ink brown spot run 2 slide subtracted

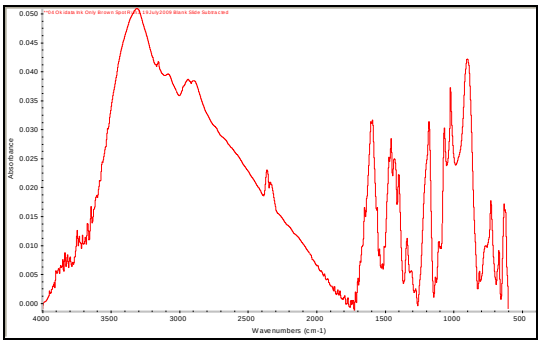

Figure 638: ATR spectrum of Okidata 04 neat ink brown spot run 3 slide subtracted

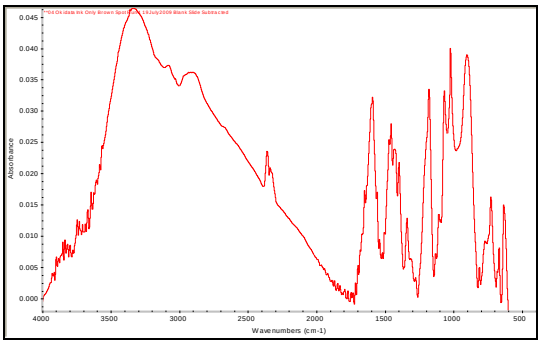

Figure 639: ATR spectrum of Okidata 04 neat ink brown spot run 4 slide subtracted

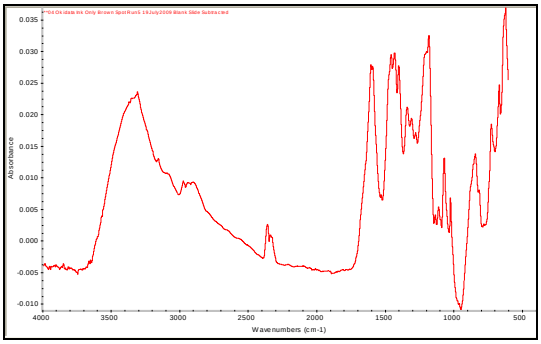

Figure 640: ATR spectrum of Okidata 04 neat ink brown spot run 5 slide subtracted

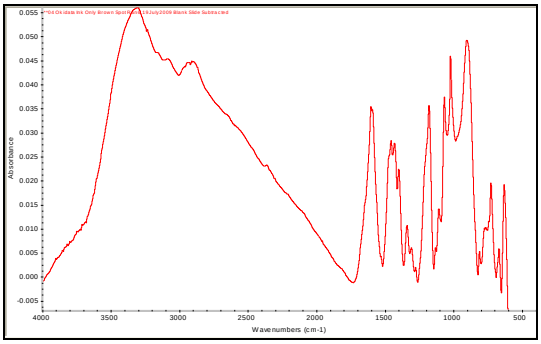

Figure 641: ATR spectrum of Okidata 04 neat ink brown spot run 6 slide subtracted

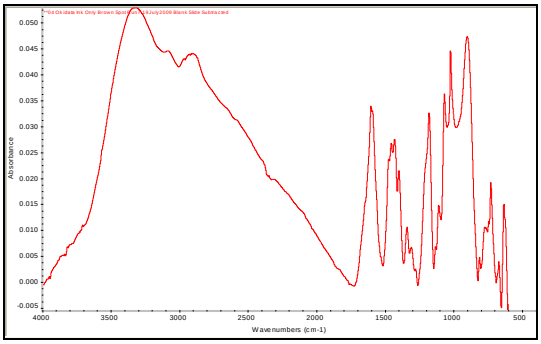

Figure 642: ATR spectrum of Okidata 04 neat ink brown spot run 7 slide subtracted

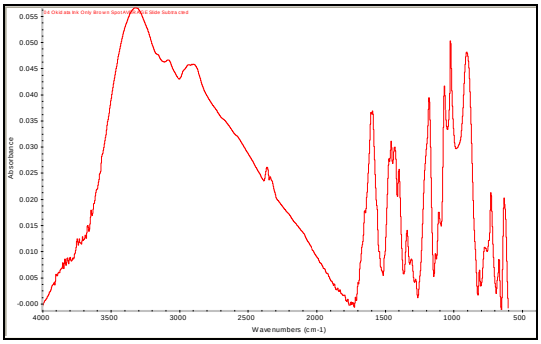

Figure 643: ATR spectrum of Okidata 04 neat ink brown spot slide subtracted Average

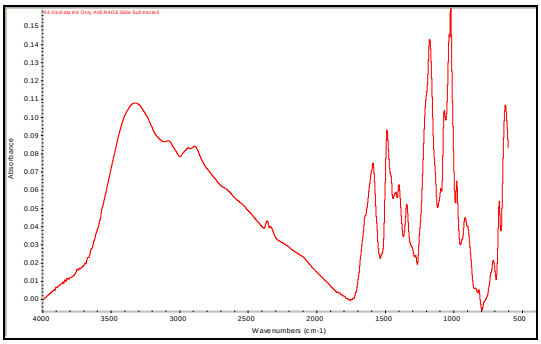

Figure 644: ATR spectrum of Okidata 04 neat ink slide subtracted AVERAGE

XEROX

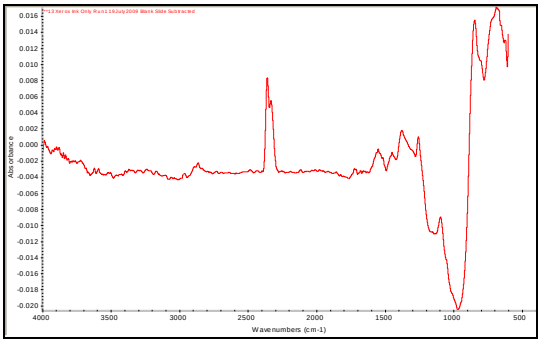

Figure 645: ATR spectrum of Xerox 13 neat ink run 1 slide subtracted

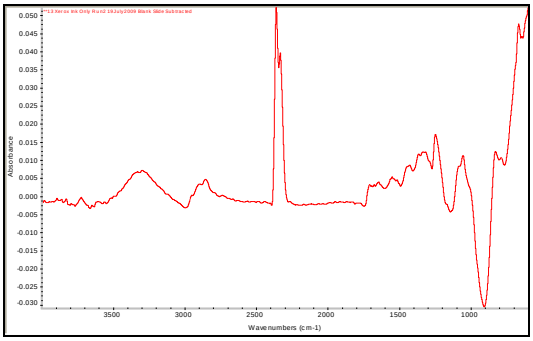

Figure 646: ATR spectrum of Xerox 13 neat ink run 2 slide subtracted

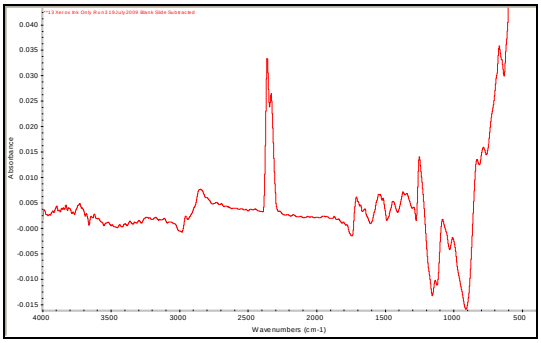

Figure 647: ATR spectrum of Xerox 13 neat ink run 3 slide subtracted

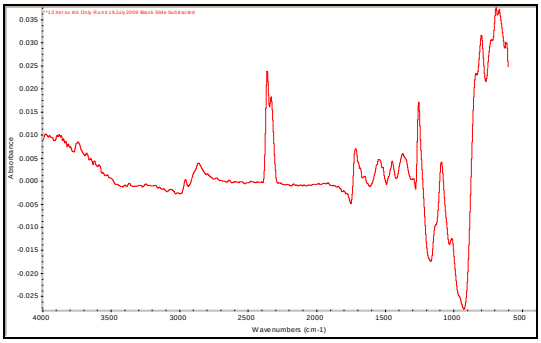

Figure 648: ATR spectrum of Xerox 13 neat ink run 4 slide subtracted

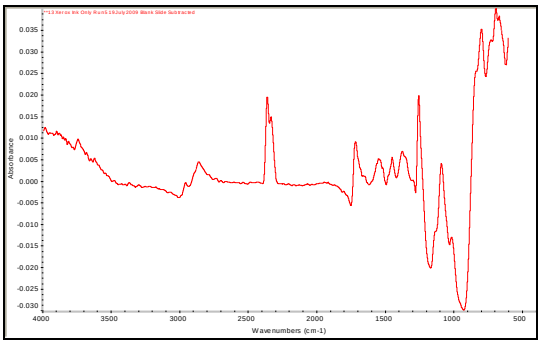

Figure 649: ATR spectrum of Xerox 13 neat ink run 5 slide subtracted

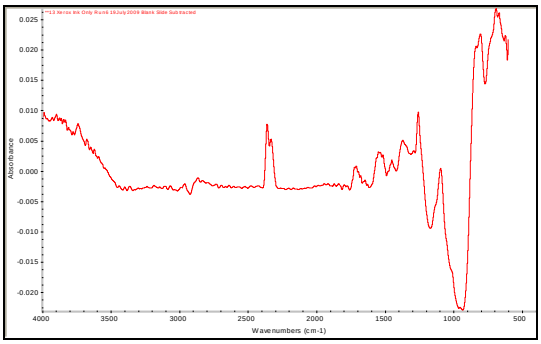

Figure 650: ATR spectrum of Xerox 13 neat ink run 6 slide subtracted

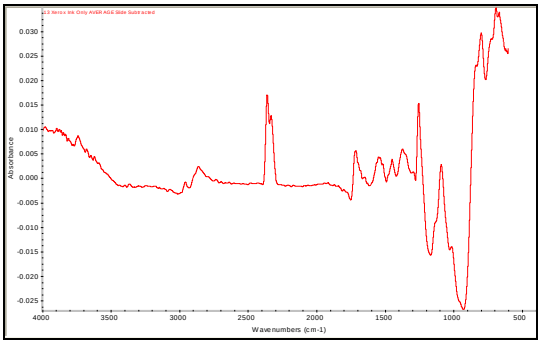

Figure 651: ATR spectrum of Xerox 13 neat ink slide subtracted AVERAGE

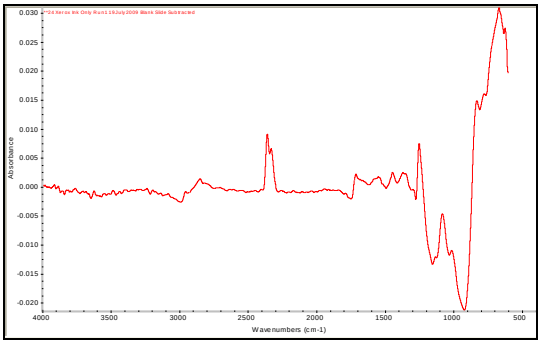

Figure 652: ATR spectrum of Xerox 24 neat ink run 1 slide subtracted

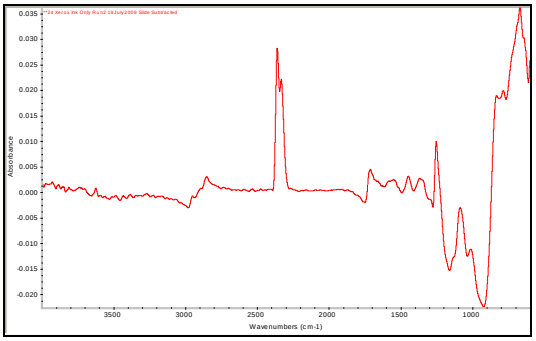

Figure 653: ATR spectrum of Xerox 24 neat ink run 2 slide subtracted

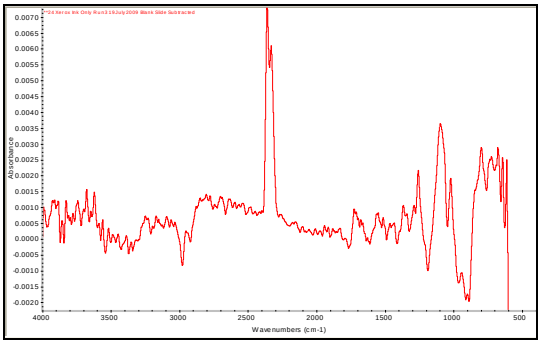

Figure 654: ATR spectrum of Xerox 24 neat ink run 3 slide subtracted

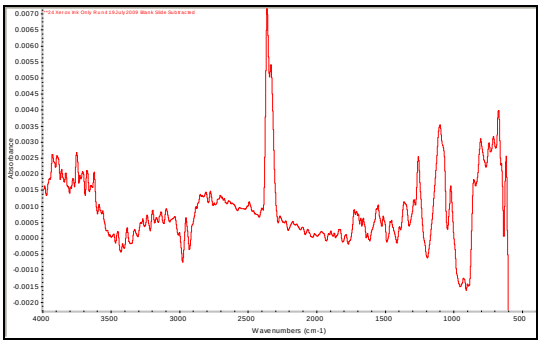

Figure 655: ATR spectrum of Xerox 24 neat ink run 4 slide subtracted

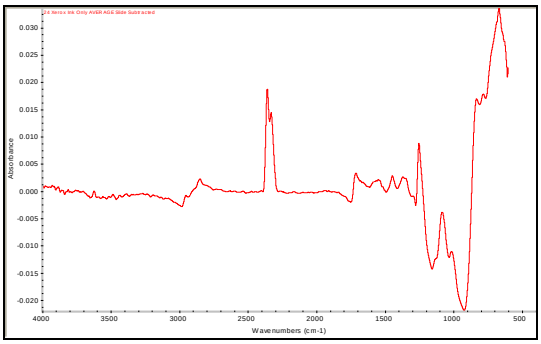

Figure 656: ATR spectrum of Xerox 24 neat ink slide subtracted AVERAGE

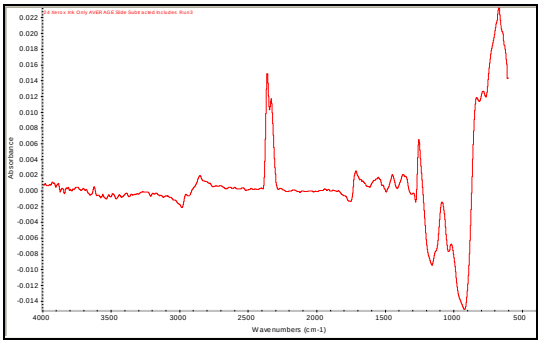

Figure 657: ATR spectrum of Xerox 24 neat ink runs 1 and 2 slide subtracted AVERAGE

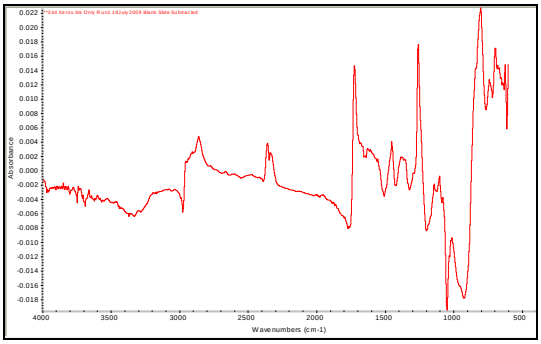

Figure 658: ATR spectrum of Xerox 244 neat ink run 1 slide subtracted

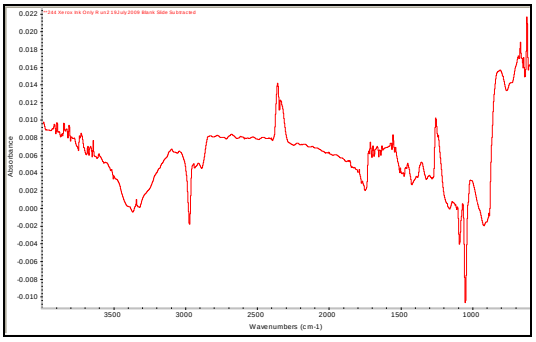

Figure 659: ATR spectrum of Xerox 244 neat ink run 2 slide subtracted

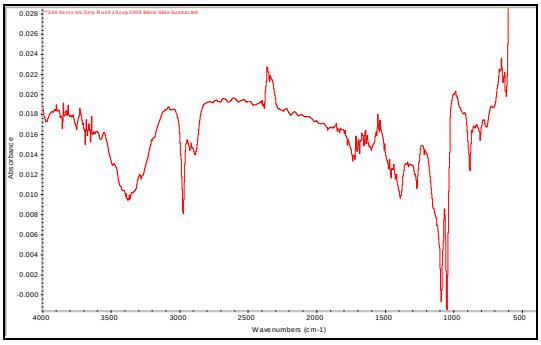

Figure 660: ATR spectrum of Xerox 244 neat ink run 3 slide subtracted

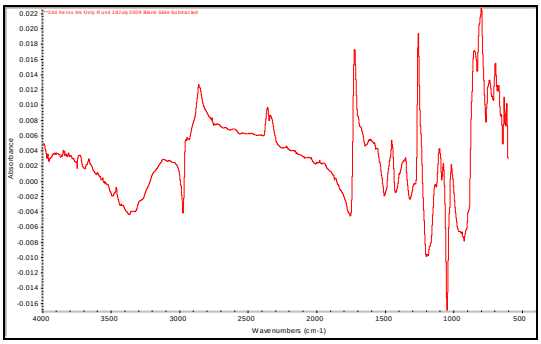

Figure 661: ATR spectrum of Xerox 244 neat ink run 4 slide subtracted

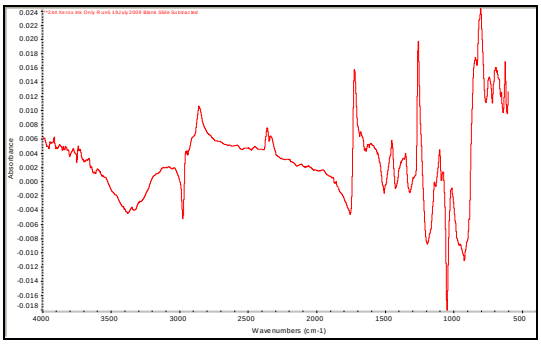

Figure 662: ATR spectrum of Xerox 244 neat ink run 5 slide subtracted

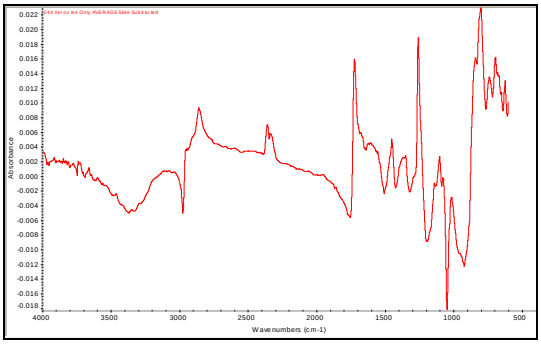

Figure 663: ATR spectrum of Xerox 244 neat ink slide subtracted AVERAGE

KODAK

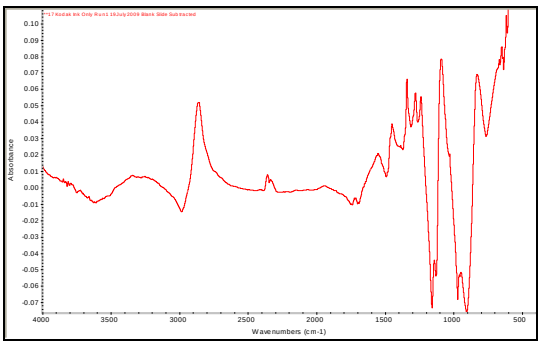

Figure 664: ATR spectrum of Kodak 17 neat ink run 1 slide subtracted

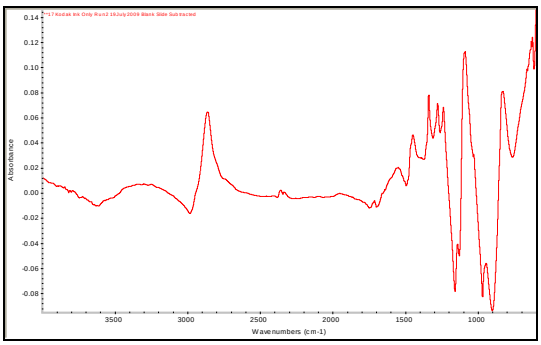

Figure 665: ATR spectrum of Kodak 17 neat ink run 2 slide subtracted

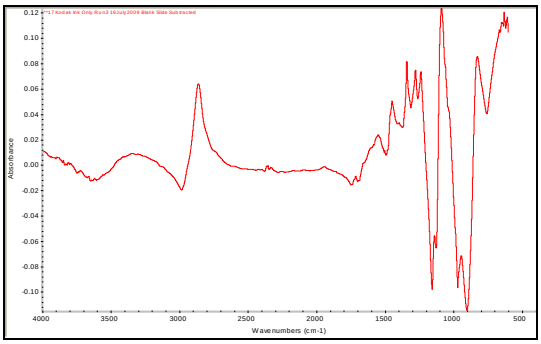

Figure 666: ATR spectrum of Kodak 17 neat ink run 3 slide subtracted

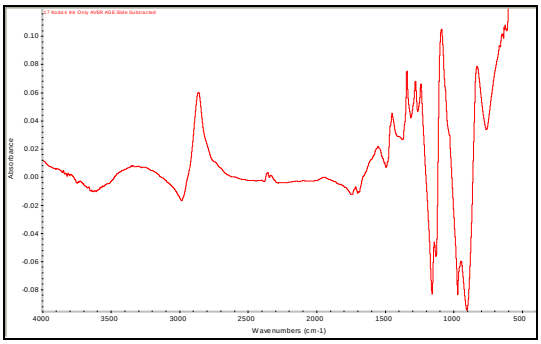

Figure 667: ATR spectrum of Kodak 17 neat ink slide subtracted AVERAGE

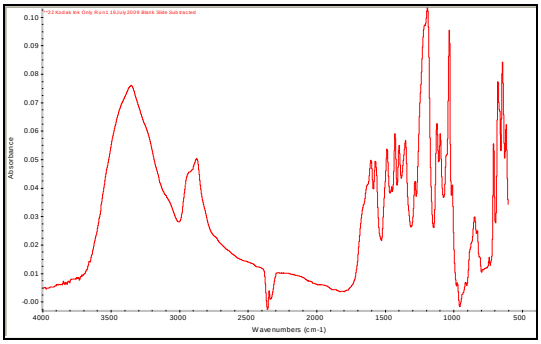

Figure 668: ATR spectrum of Kodak 22 neat ink run 1 slide subtracted

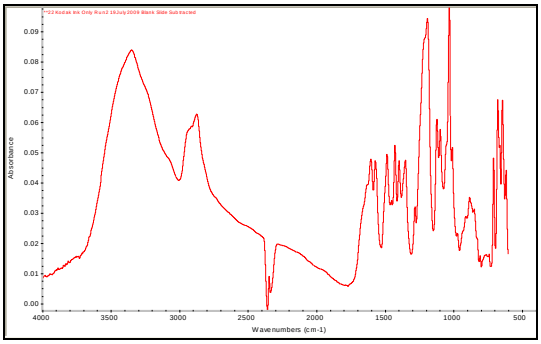

Figure 669: ATR spectrum of Kodak 22 neat ink run 2 slide subtracted

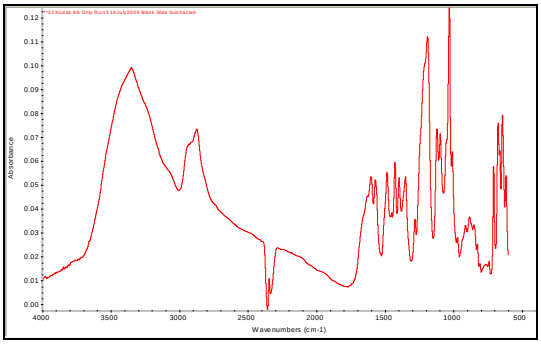

Figure 670: ATR spectrum of Kodak 22 neat ink run 3 slide subtracted

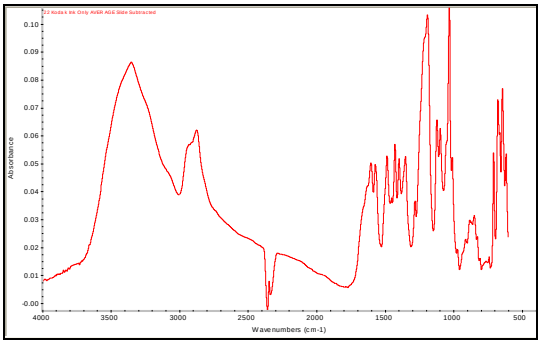

Figure 671: ATR spectrum of Kodak 22 neat ink slide subtracted AVERAGE

EPSON

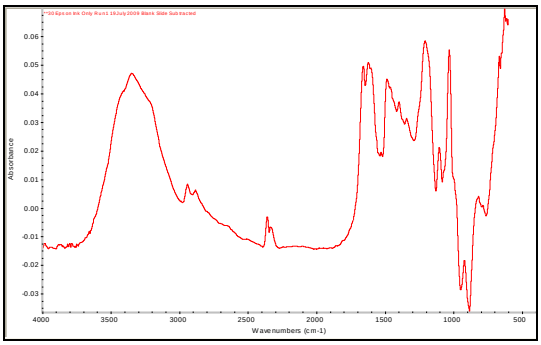

Figure 672: ATR spectrum of Epson 30 neat ink run 1 slide subtracted

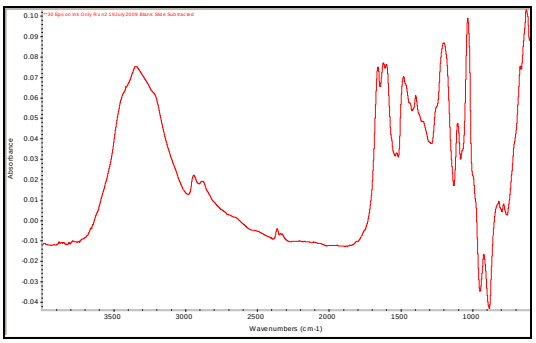

Figure 673: ATR spectrum of Epson 30 neat ink run 2 slide subtracted

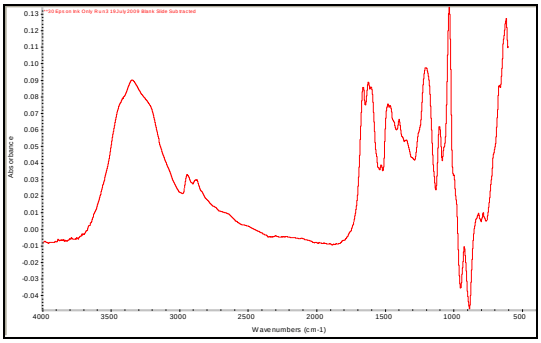

Figure 674: ATR spectrum of Epson 30 neat ink run 3 slide subtracted

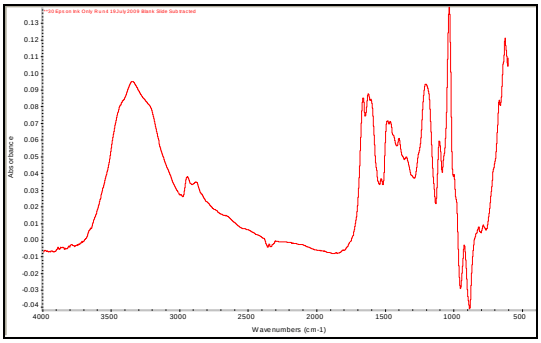

Figure 675: ATR spectrum of Epson 30 neat ink run 4 slide subtracted

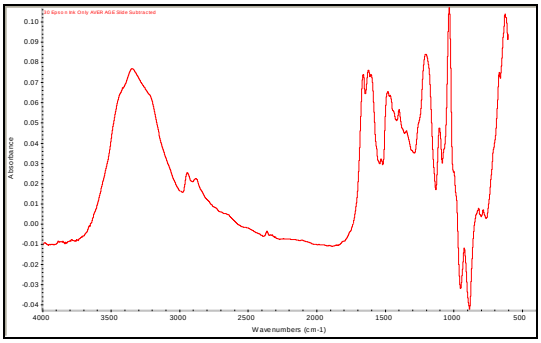

Figure 676: ATR spectrum of Epson 30 neat ink slide subtracted AVERAGE

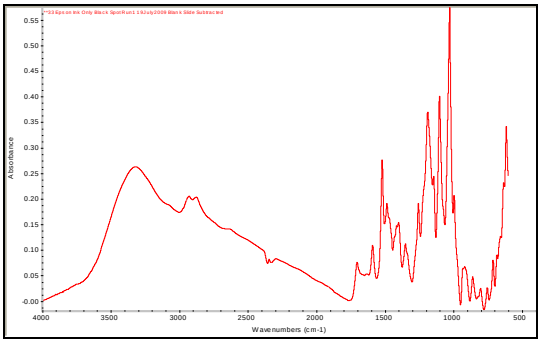

Figure 677: ATR spectrum of Epson 33 neat ink black spot run 1 slide subtracted

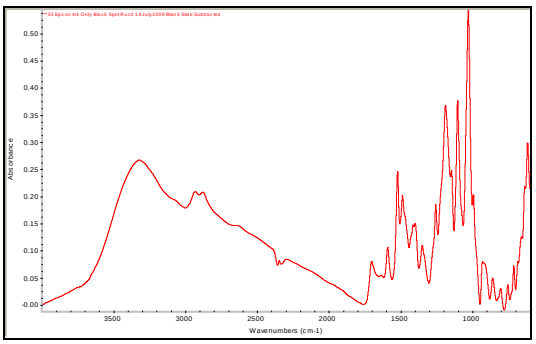

Figure 678: ATR spectrum of Epson 33 neat ink black spot run 2 slide subtracted

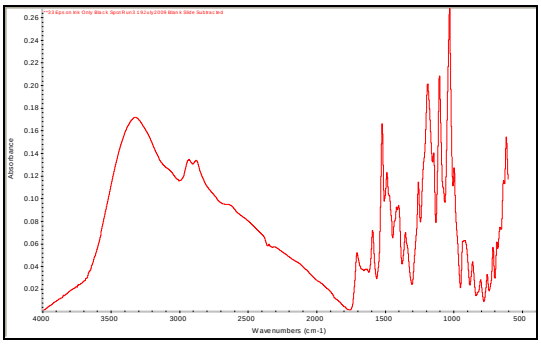

Figure 679: ATR spectrum of Epson 33 neat ink black spot run 3 slide subtracted

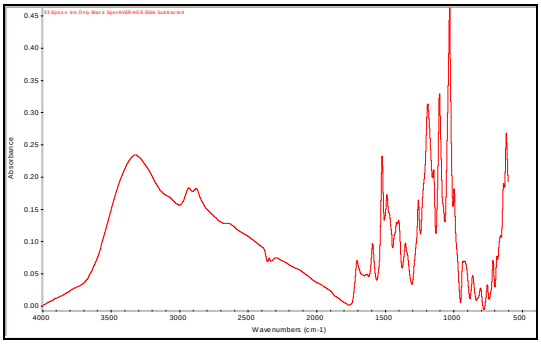

Figure 680: ATR spectrum of Epson 33 neat ink black spot slide subtracted Average

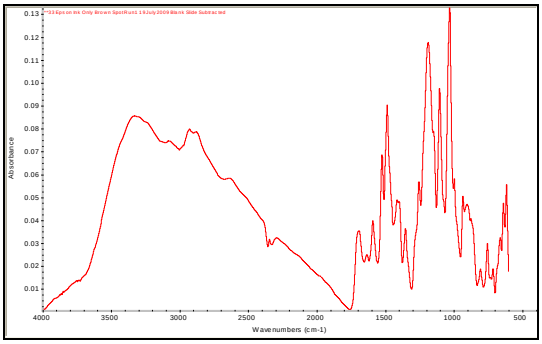

Figure 681: ATR spectrum of Epson 33 neat ink brown spot run 1 slide subtracted

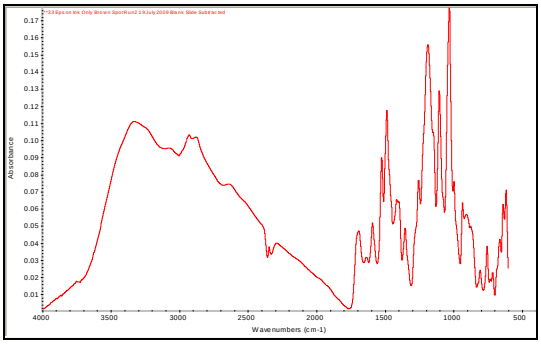

Figure 682: ATR spectrum of Epson 33 neat ink brown spot run 2 slide subtracted

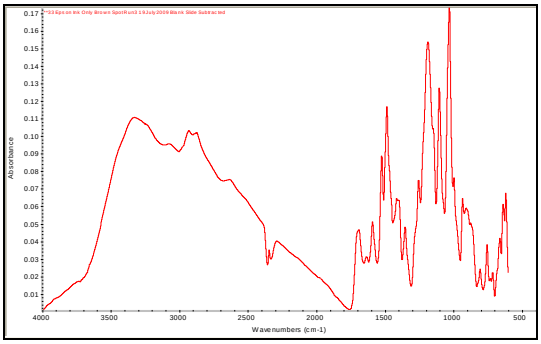

Figure 683: ATR spectrum of Epson 33 neat ink brown spot run 3 slide subtracted

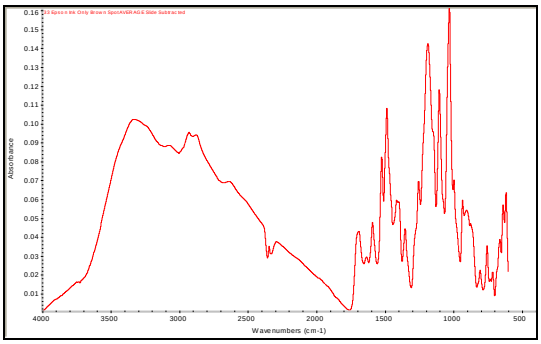

Figure 684: ATR spectrum of Epson 33 neat ink brown spot slide subtracted Average

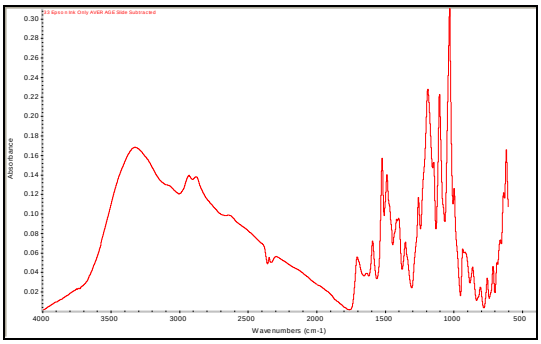

Figure 685: ATR spectrum of Epson 33 neat ink slide subtracted AVERAGE

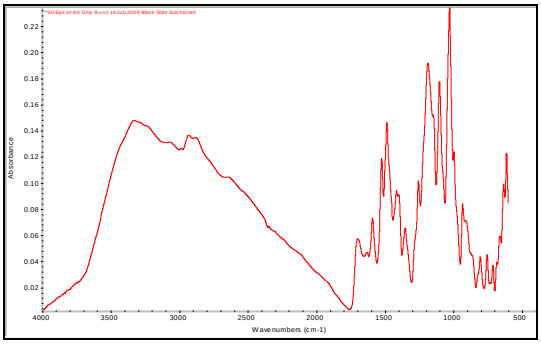

Figure 686: ATR spectrum of Epson 60 neat ink run 1 slide subtracted

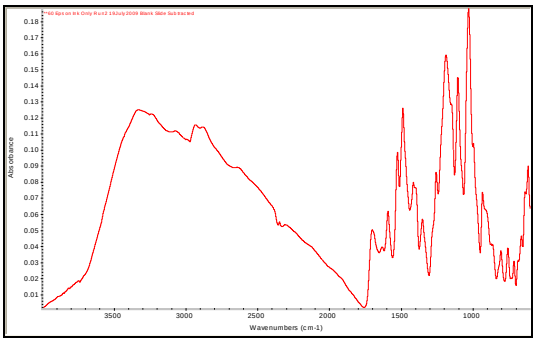

Figure 687: ATR spectrum of Epson 60 neat ink run 2 slide subtracted

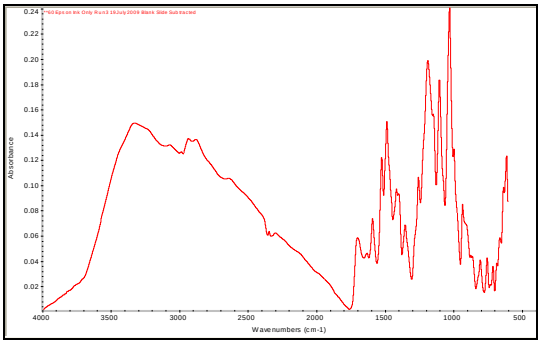

Figure 688: ATR spectrum of Epson 60 neat ink run 3 slide subtracted

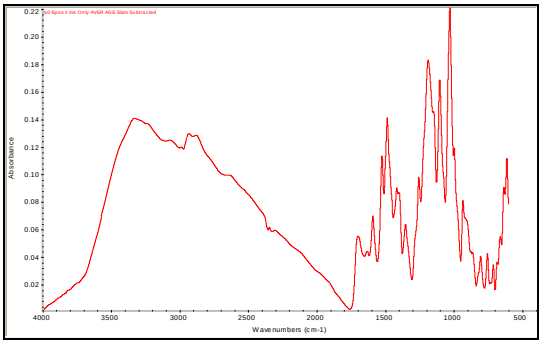

Figure 689: ATR spectrum of Epson 60 neat ink slide subtracted AVERAGE

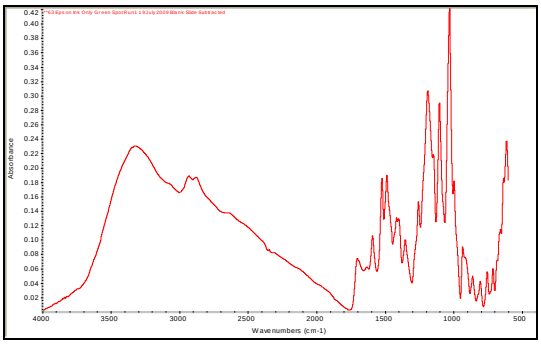

Figure 690: ATR spectrum of Epson 63 neat ink green spot run 1 slide subtracted

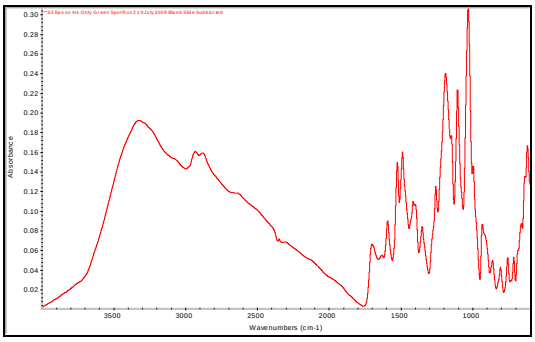

Figure 691: ATR spectrum of Epson 63 neat ink green spot run 2 slide subtracted

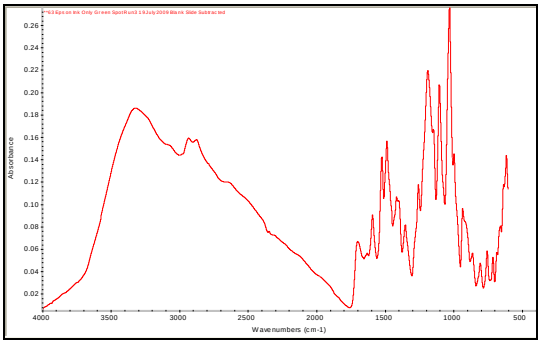

Figure 692: ATR spectrum of Epson 63 neat ink green spot run 3 slide subtracted

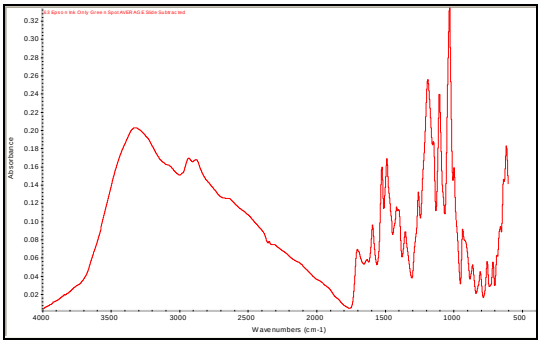

Figure 693: ATR spectrum of Epson 63 neat ink green spot slide subtracted Average

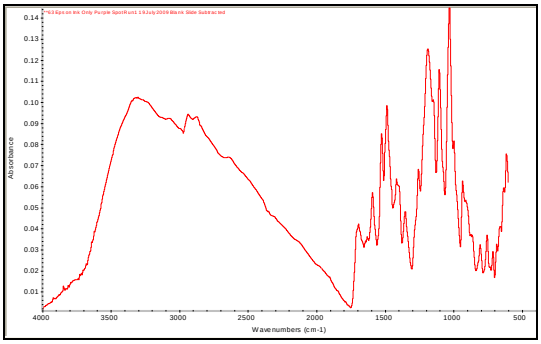

Figure 694: ATR spectrum of Epson 63 neat ink purple spot run 1 slide subtracted

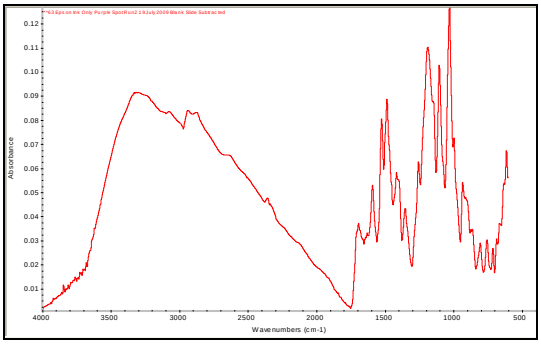

Figure 695: ATR spectrum of Epson 63 neat ink purple spot run 2 slide subtracted

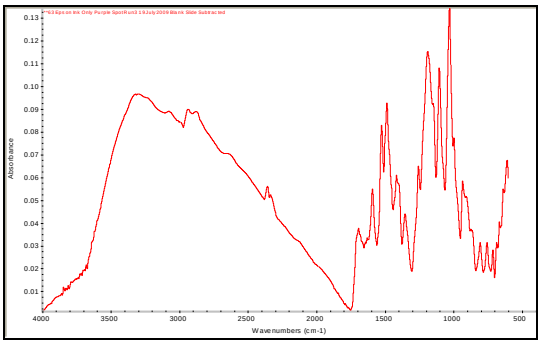

Figure 696: ATR spectrum of Epson 63 neat ink purple spot run 3 slide subtracted

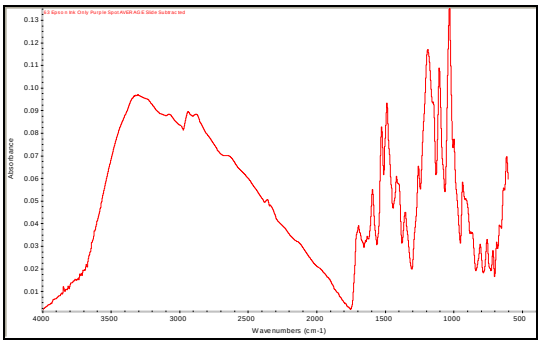

Figure 697: ATR spectrum of Epson 63 neat ink purple spot slide subtracted Average

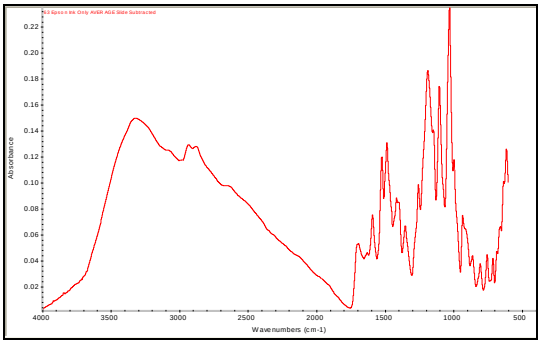

Figure 698: ATR spectrum of Epson 63 neat ink slide subtracted AVERAGE

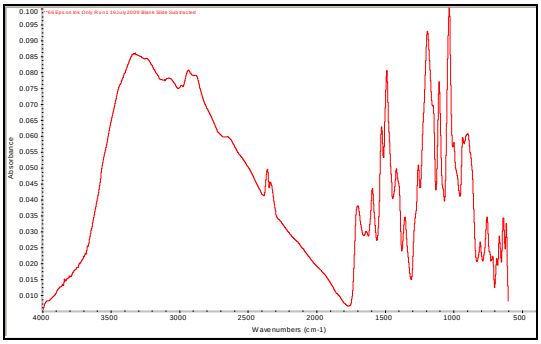

Figure 699: ATR spectrum of Epson 66 neat ink run 1 slide subtracted

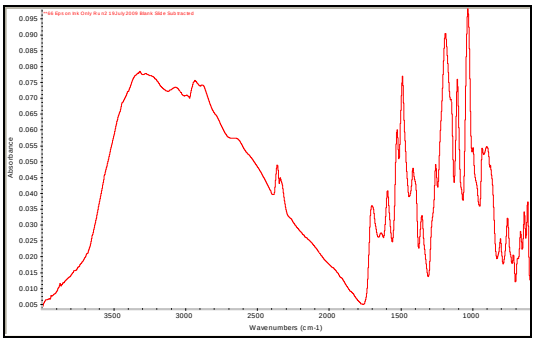

Figure 700: ATR spectrum of Epson 66 neat ink run 2 slide subtracted

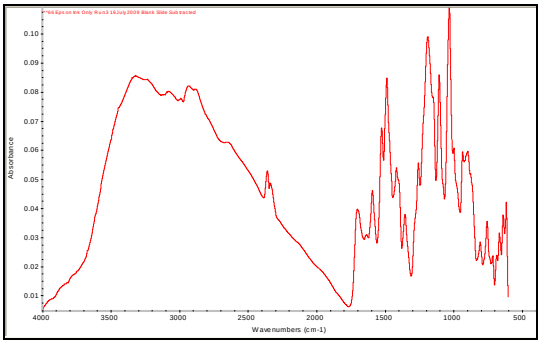

Figure 701: ATR spectrum of Epson 66 neat ink run 3 slide subtracted

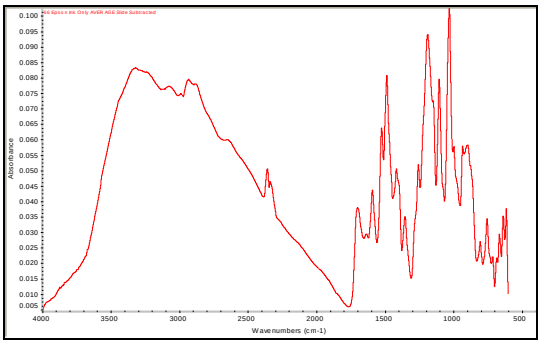

Figure 702: ATR spectrum of Epson 66 neat ink slide subtracted AVERAGE

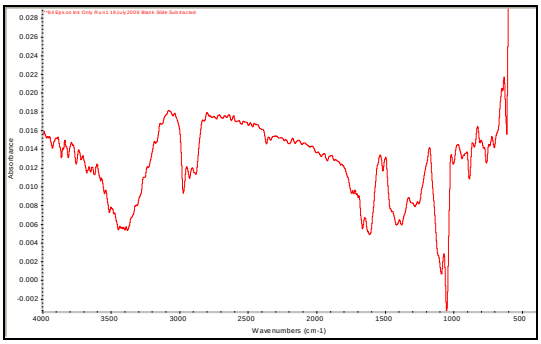

Figure 703: ATR spectrum of Epson 84 neat ink run 1 slide subtracted

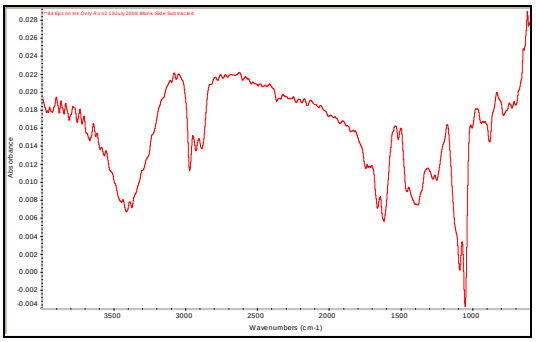

Figure 704: ATR spectrum of Epson 84 neat ink run 2 slide subtracted

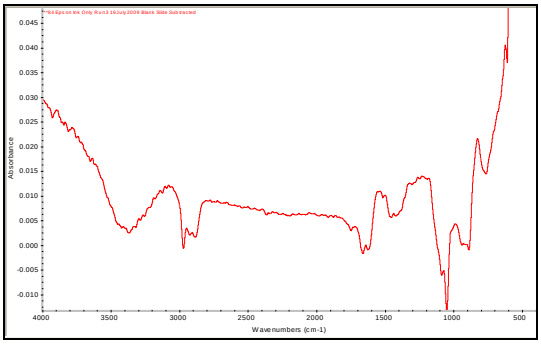

Figure 705: ATR spectrum of Epson 84 neat ink run 3 slide subtracted

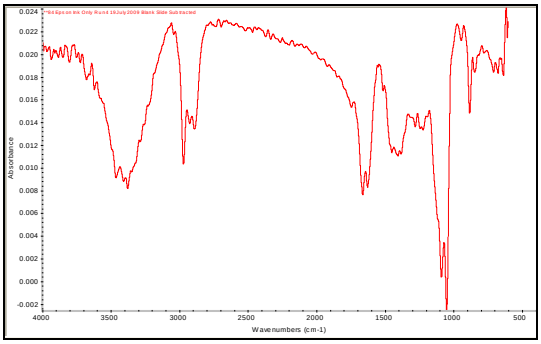

Figure 706: ATR spectrum of Epson 84 neat ink run 4 slide subtracted

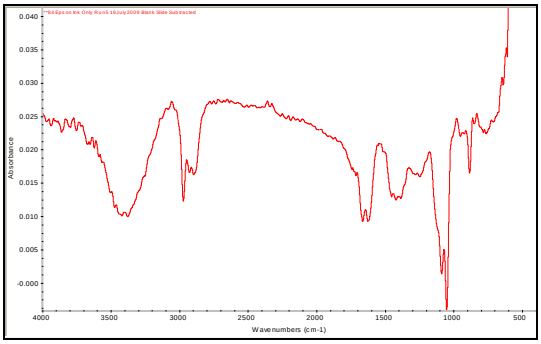

Figure 707: ATR spectrum of Epson 84 neat ink run 5 slide subtracted

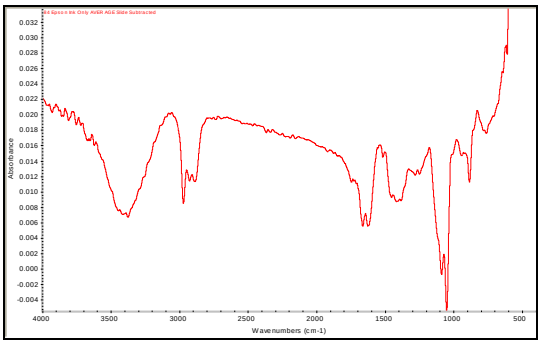

Figure 708: ATR spectrum of Epson 84 neat ink slide subtracted AVERAGE

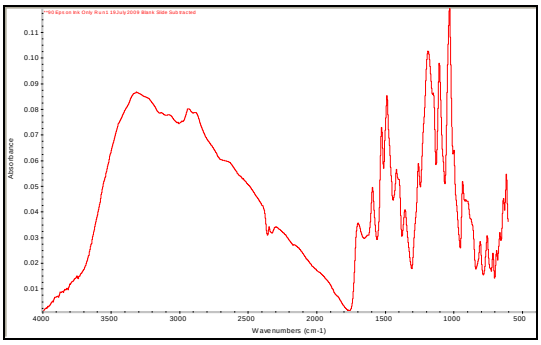

Figure 709: ATR spectrum of Epson 90 neat ink run 1 slide subtracted

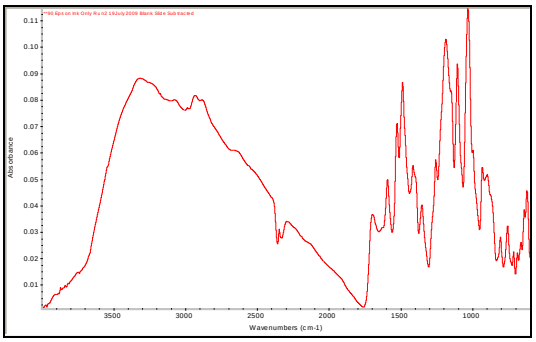

Figure 710: ATR spectrum of Epson 90 neat ink run 2 slide subtracted

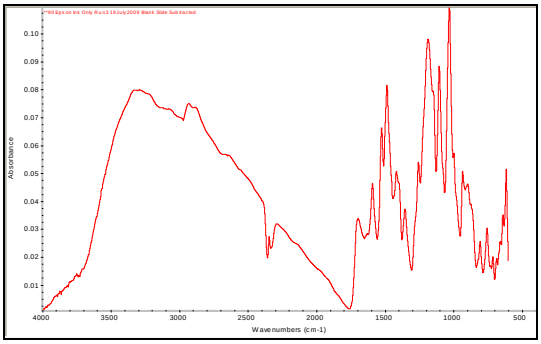

Figure 711: ATR spectrum of Epson 90 neat ink run 3 slide subtracted

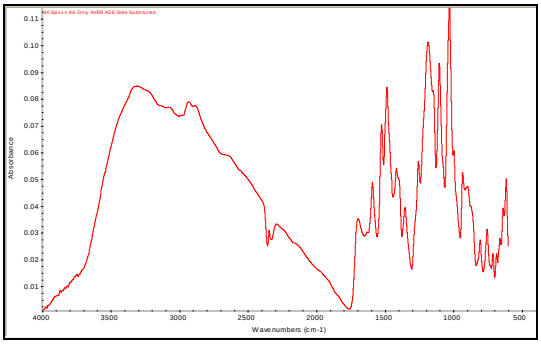

Figure 712: ATR spectrum of Epson 90 neat ink slide subtracted AVERAGE

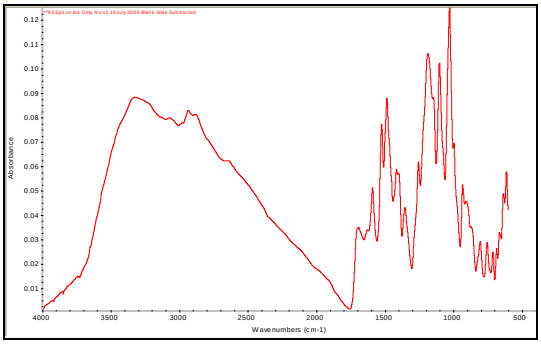

Figure 713: ATR spectrum of Epson 93 neat ink run 1 slide subtracted

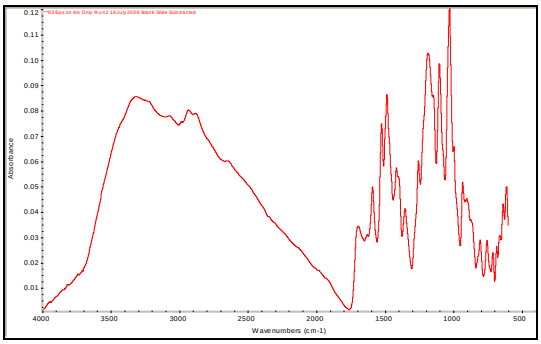

Figure 714: ATR spectrum of Epson 93 neat ink run 2 slide subtracted

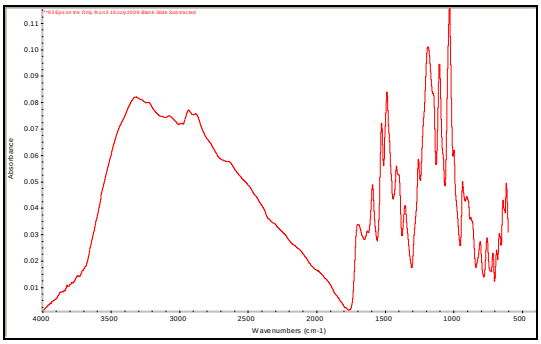

Figure 715: ATR spectrum of Epson 93 neat ink run 3 slide subtracted

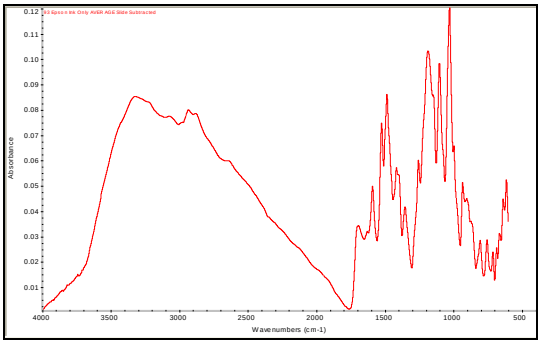

Figure 716: ATR spectrum of Epson 93 neat ink slide subtracted AVERAGE

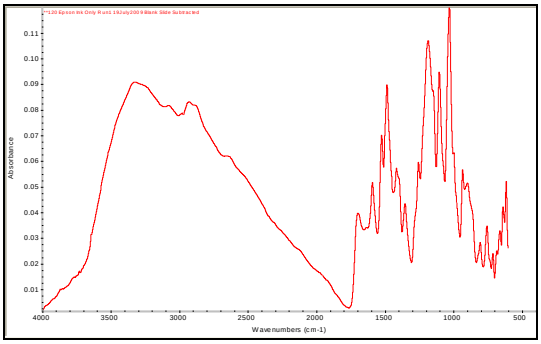

Figure 717: ATR spectrum of Epson 120 neat ink run 1 slide subtracted

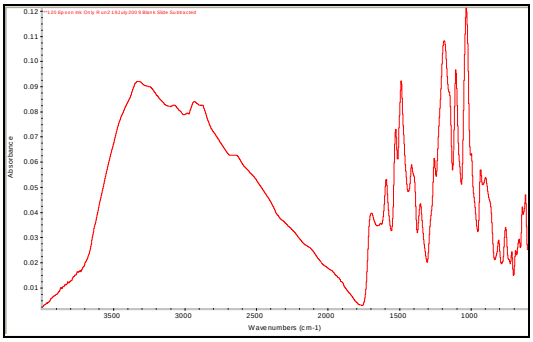

Figure 718: ATR spectrum of Epson 120 neat ink run 2 slide subtracted

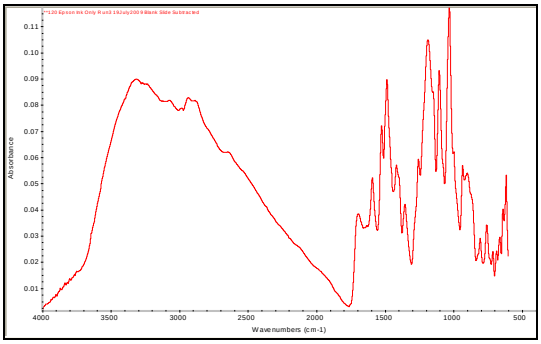

Figure 719: ATR spectrum of Epson 120 neat ink run 3 slide subtracted

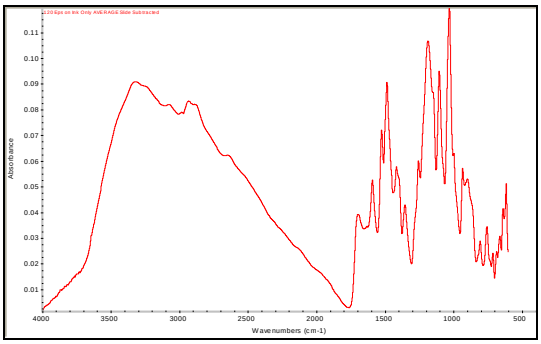

Figure 720: ATR spectrum of Epson 120 neat ink slide subtracted AVERAGE

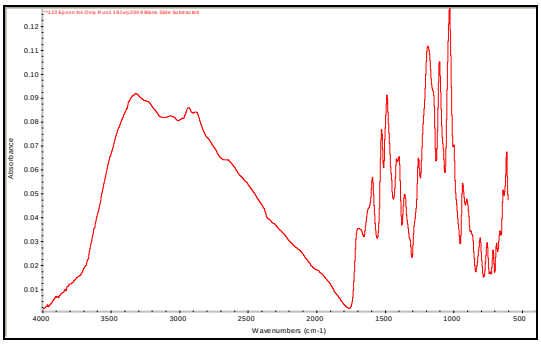

Figure 721: ATR spectrum of Epson 123 neat ink run 1 slide subtracted

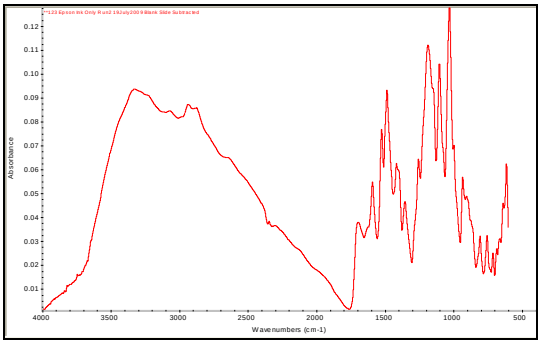

Figure 722: ATR spectrum of Epson 123 neat ink run 2 slide subtracted

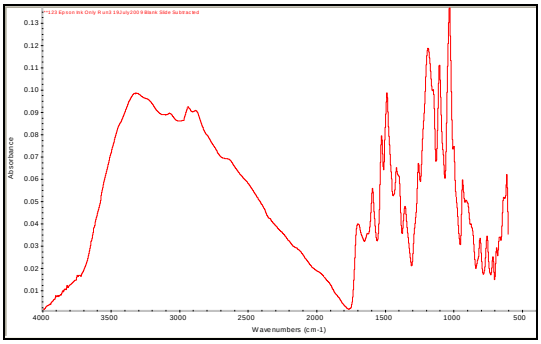

Figure 723: ATR spectrum of Epson 123 neat ink run 3 slide subtracted

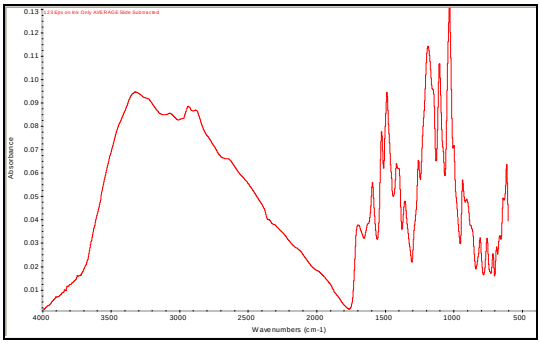

Figure 724: ATR spectrum of Epson 123 neat ink slide subtracted AVERAGE

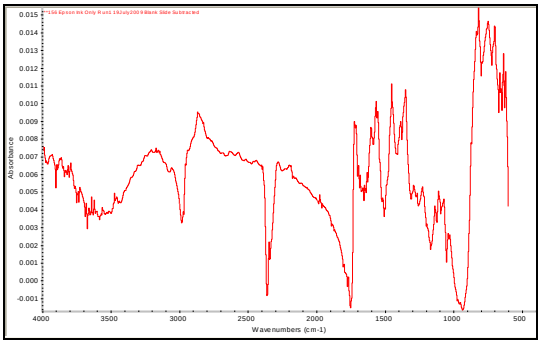

Figure 725: ATR spectrum of Epson 156 neat ink run 1 slide subtracted

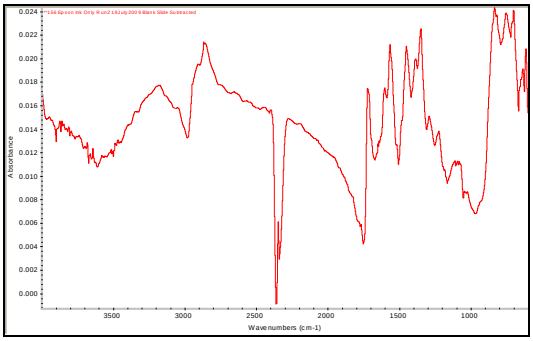

Figure 726: ATR spectrum of Epson 156 neat ink run 2 slide subtracted

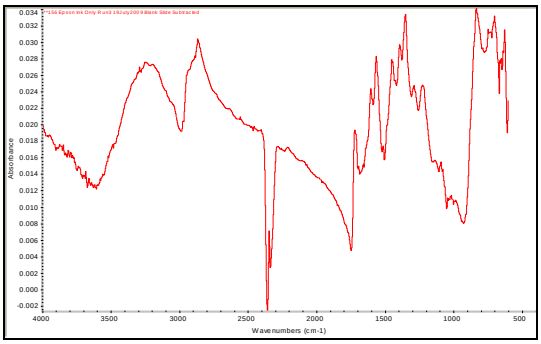

Figure 727: ATR spectrum of Epson 156 neat ink run 3 slide subtracted

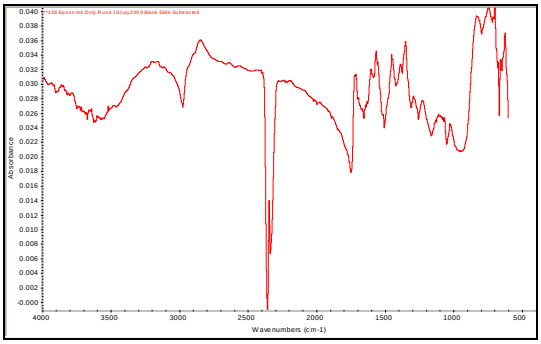

Figure 728: ATR spectrum of Epson 156 neat ink run 4 slide subtracted

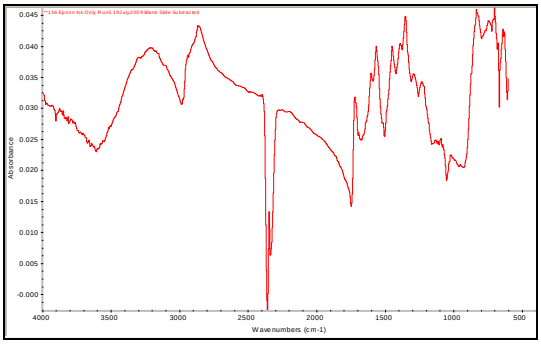

Figure 729: ATR spectrum of Epson 156 neat ink run 5 slide subtracted

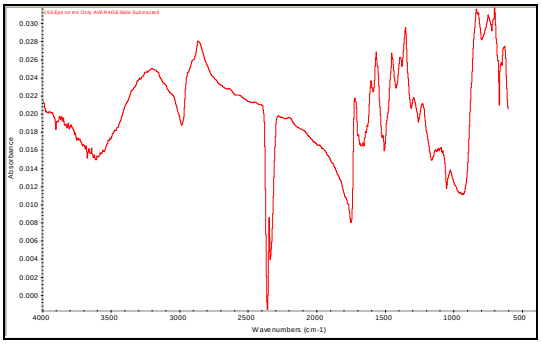

Figure 730: ATR spectrum of Epson 156 neat ink slide subtracted AVERAGE

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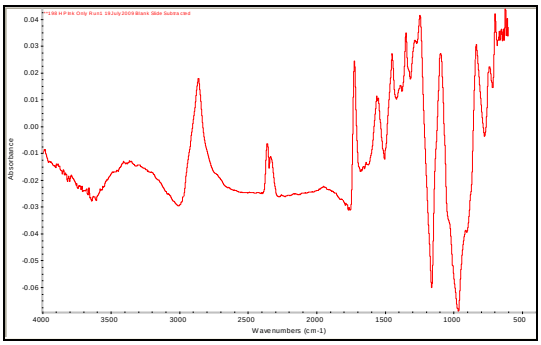

Figure 731: ATR spectrum of HP 198 neat ink run 1 slide subtracted

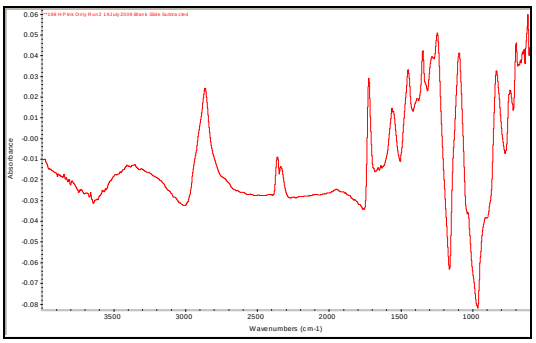

Figure 732: ATR spectrum of HP 198 neat ink run 2 slide subtracted

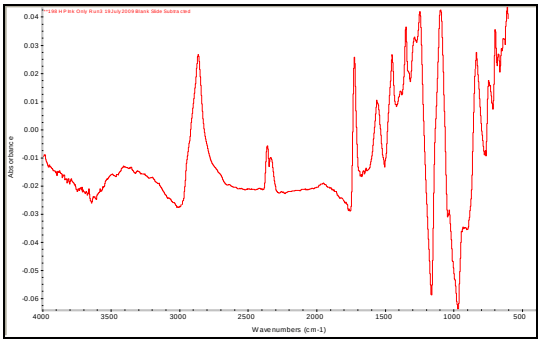

Figure 733: ATR spectrum of HP 198 neat ink run 3 slide subtracted

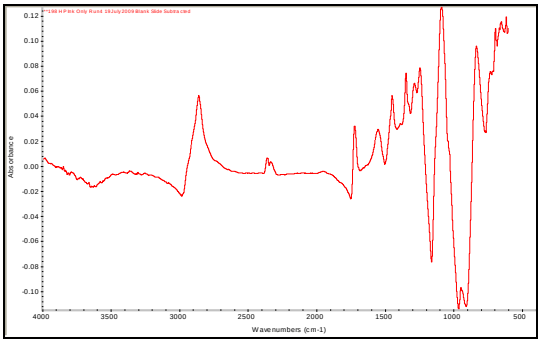

Figure 734: ATR spectrum of HP 198 neat ink run 4 slide subtracted

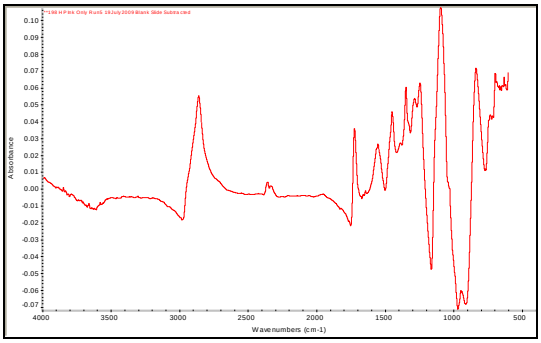

Figure 735: ATR spectrum of HP 198 neat ink run 5 slide subtracted

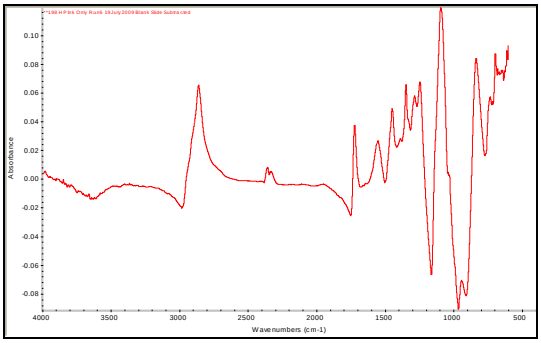

Figure 736: ATR spectrum of HP 198 neat ink run 6 slide subtracted

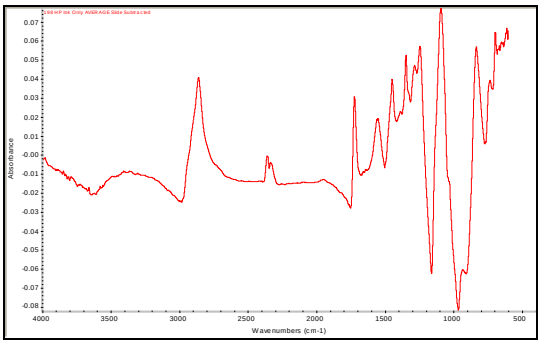

Figure 737: ATR spectrum of HP 198 neat ink slide subtracted AVERAGE

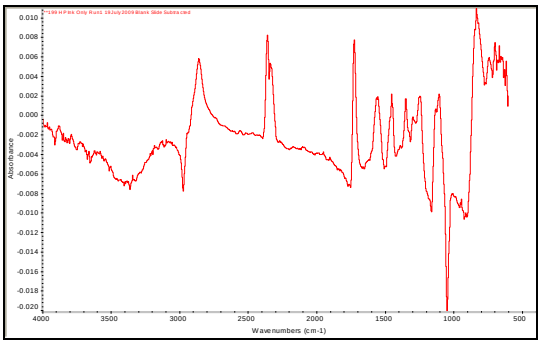

Figure 738: ATR spectrum of HP 199 neat ink run 1 slide subtracted

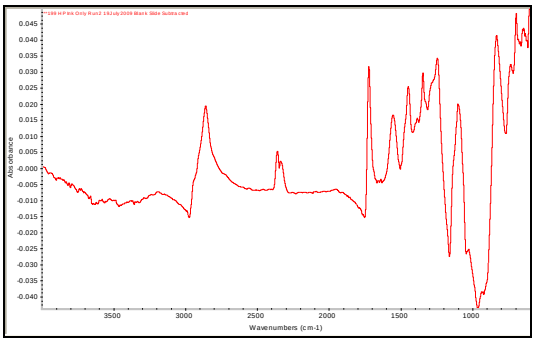

Figure 739: ATR spectrum of HP 199 neat ink run 2 slide subtracted

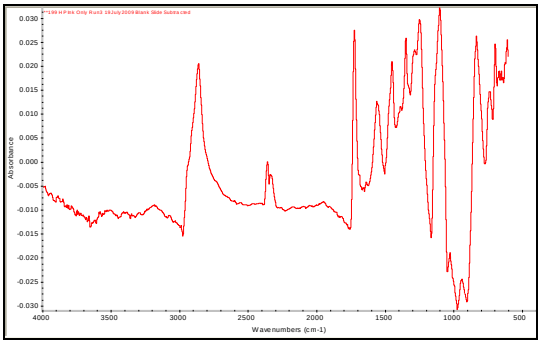

Figure 740: ATR spectrum of HP 199 neat ink run 3 slide subtracted

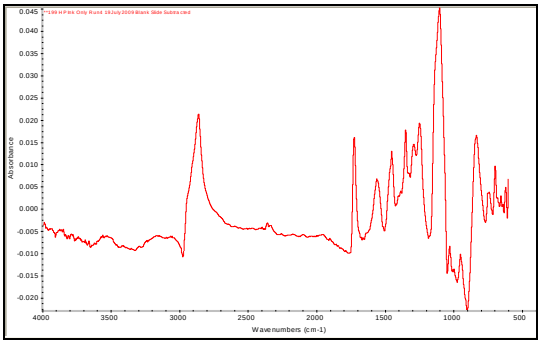

Figure 741: ATR spectrum of HP 199 neat ink run 4 slide subtracted

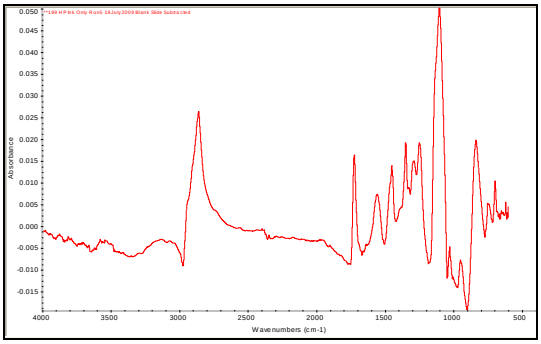

Figure 742: ATR spectrum of HP 199 neat ink run 5 slide subtracted

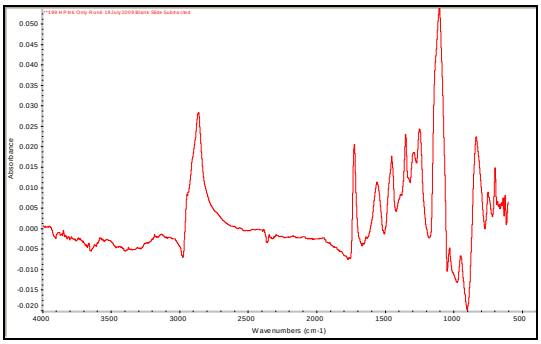

Figure 743: ATR spectrum of HP 199 neat ink run 6 slide subtracted

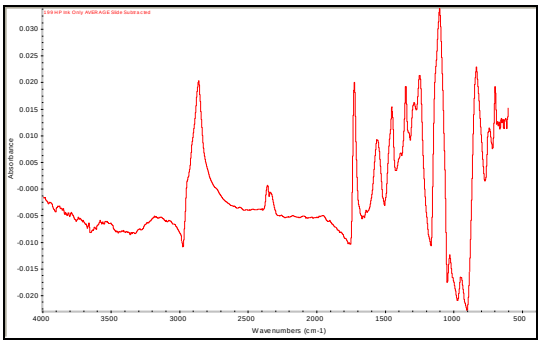

Figure 744: ATR spectrum of HP 199 neat ink slide subtracted AVERAGE

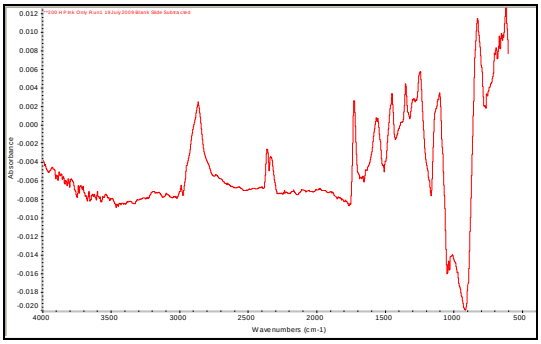

Figure 745: ATR spectrum of HP 200 neat ink run 1 slide subtracted

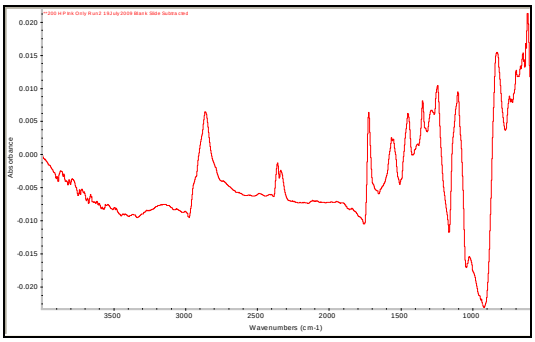

Figure 746: ATR spectrum of HP 200 neat ink run 2 slide subtracted

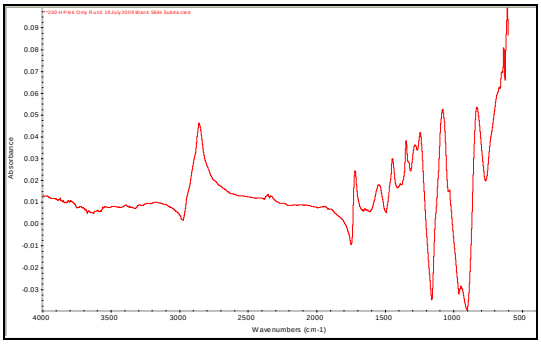

Figure 747: ATR spectrum of HP 200 neat ink run 3 slide subtracted

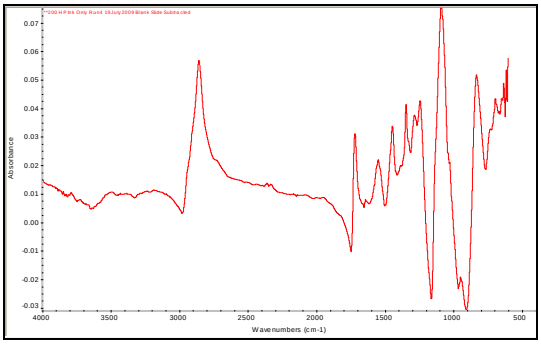

Figure 748: ATR spectrum of HP 200 neat ink run 4 slide subtracted

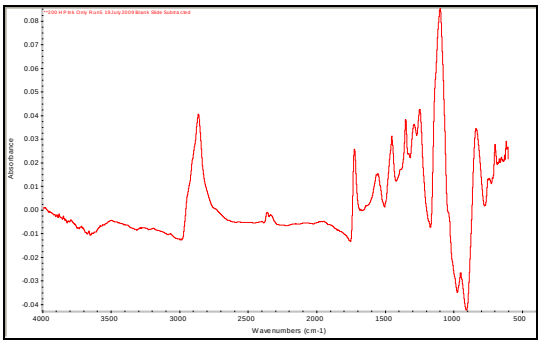

Figure 749: ATR spectrum of HP 200 neat ink run 5 slide subtracted

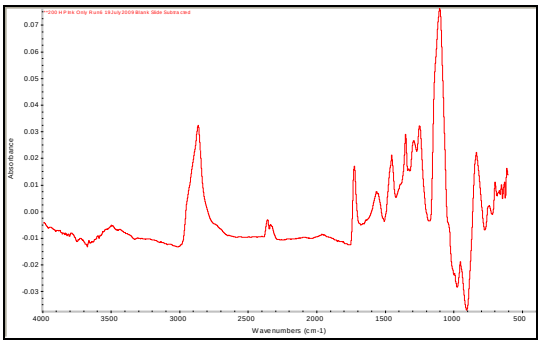

Figure 750: ATR spectrum of HP 200 neat ink run 6 slide subtracted

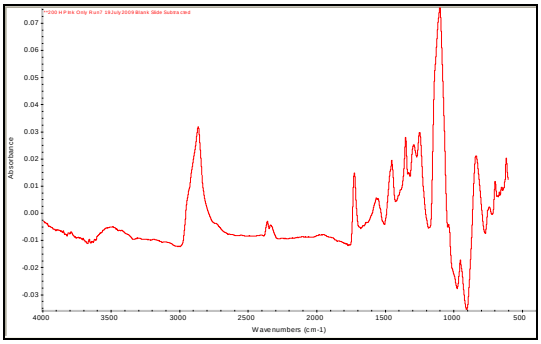

Figure 751: ATR spectrum of HP 200 neat ink run 7 slide subtracted

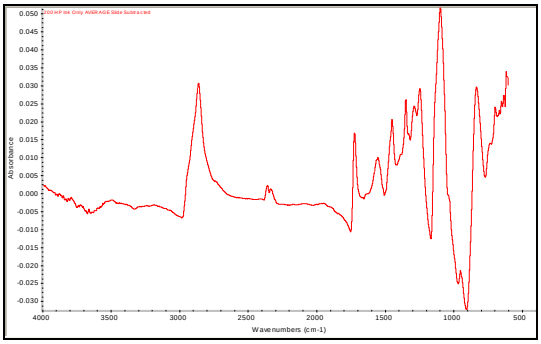

Figure 752: ATR spectrum of HP 200 neat ink slide subtracted AVERAGE

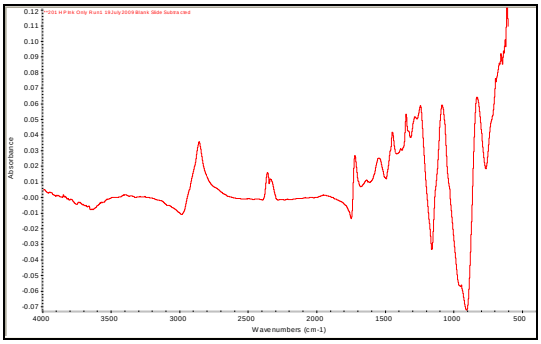

Figure 753: ATR spectrum of HP 201 neat ink run 1 slide subtracted

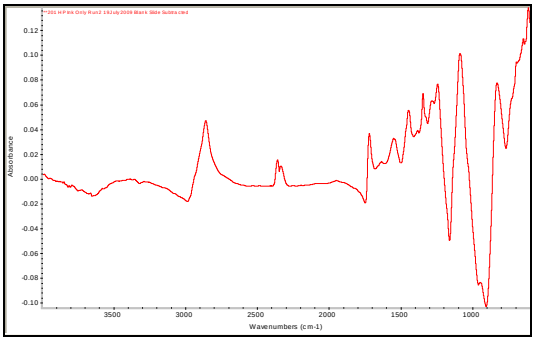

Figure 754: ATR spectrum of HP 201 neat ink run 2 slide subtracted

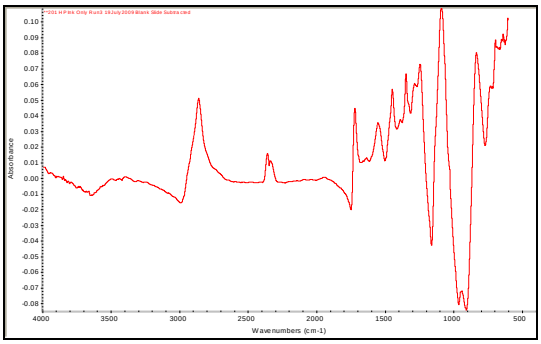

Figure 755: ATR spectrum of HP 201 neat ink run 3 slide subtracted

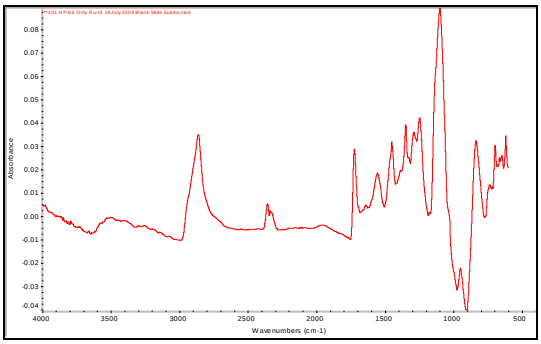

Figure 756: ATR spectrum of HP 201 neat ink run 4 slide subtracted

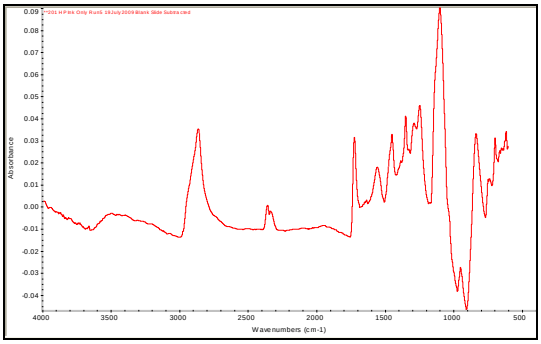

Figure 757: ATR spectrum of HP 201 neat ink run 5 slide subtracted

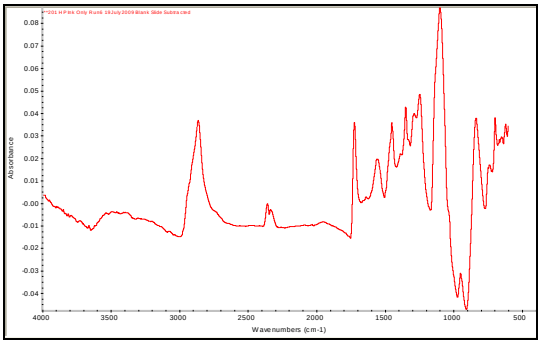

Figure 758: ATR spectrum of HP 201 neat ink run 6 slide subtracted

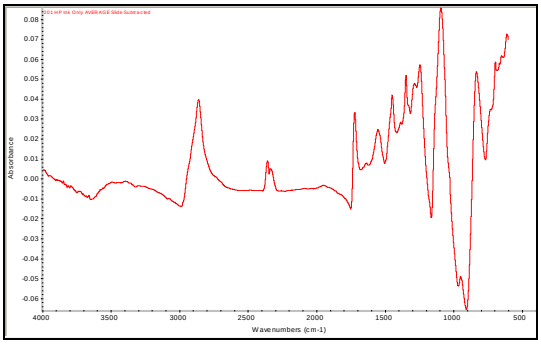

Figure 759: ATR spectrum of HP 201 neat ink slide subtracted AVERAGE

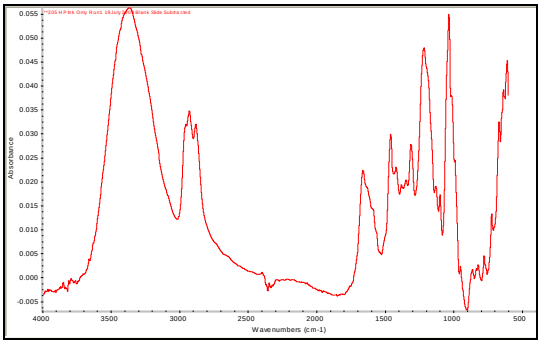

Figure 760: ATR spectrum of HP 205 neat ink run 1 slide subtracted

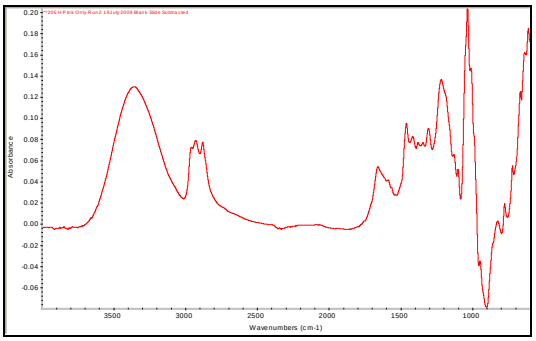

Figure 761: ATR spectrum of HP 205 neat ink run 2 slide subtracted

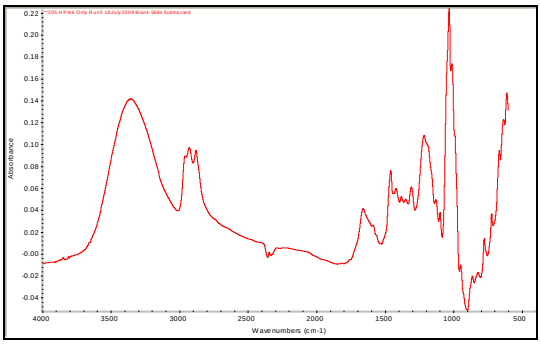

Figure 762: ATR spectrum of HP 205 neat ink run 3 slide subtracted

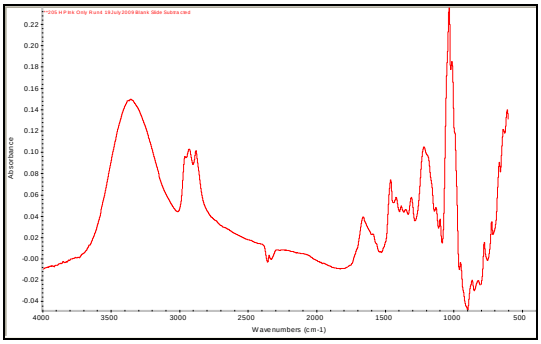

Figure 763: ATR spectrum of HP 205 neat ink run 4 slide subtracted

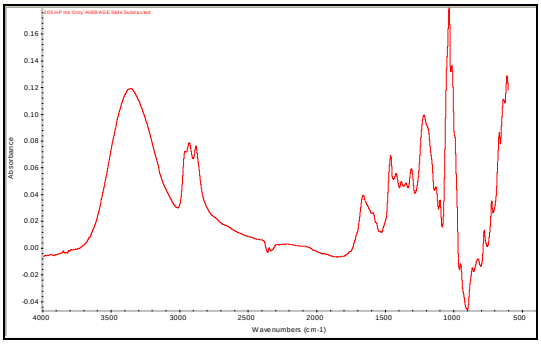

Figure 764: ATR spectrum of HP 205 neat ink slide subtracted AVERAGE

CANON

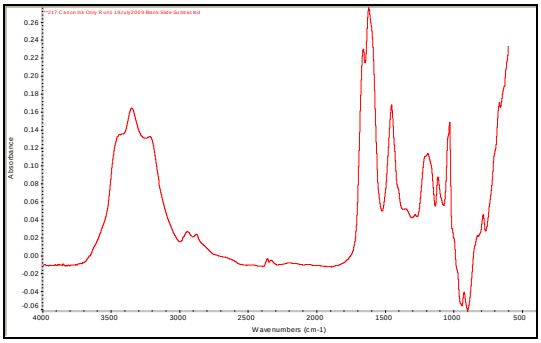

Figure 765: ATR spectrum of Canon 217 neat ink run 1 slide subtracted

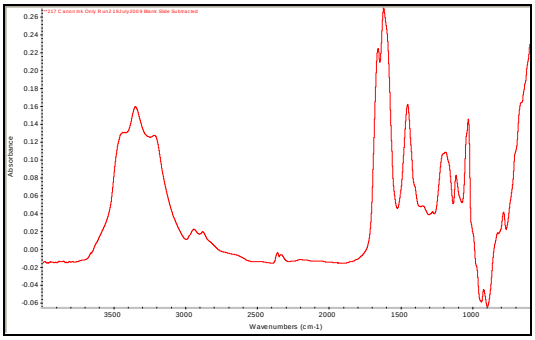

Figure 766: ATR spectrum of Canon 217 neat ink run 2 slide subtracted

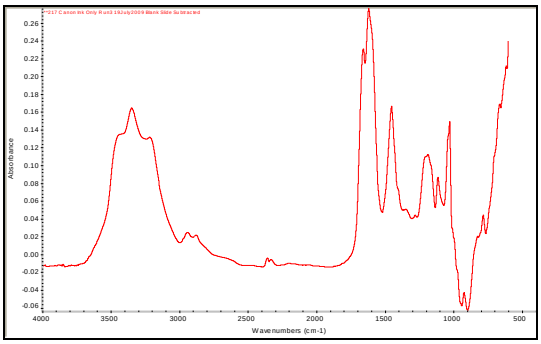

Figure 767: ATR spectrum of Canon 217 neat ink run 3 slide subtracted

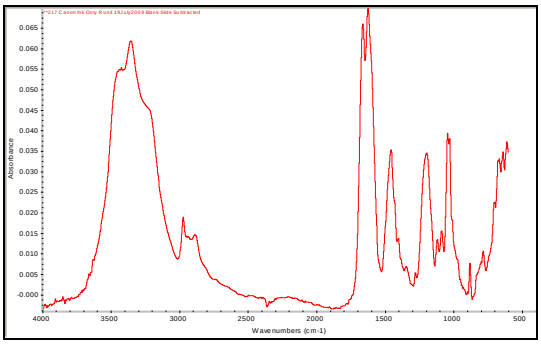

Figure 768: ATR spectrum of Canon 217 neat ink run 4 slide subtracted

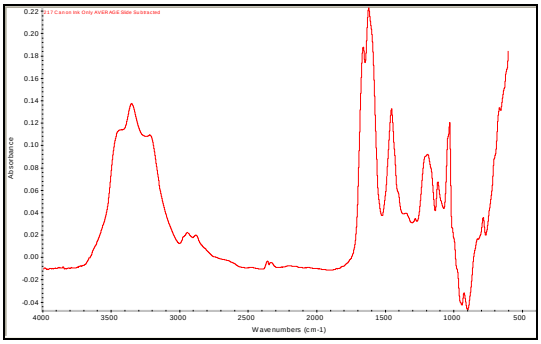

Figure 769: ATR spectrum of Canon 217 neat ink slide subtracted AVERAGE

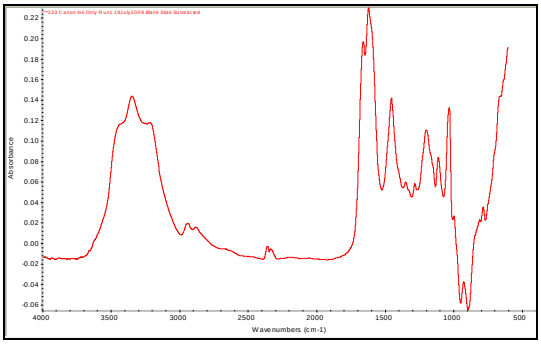

Figure 770: ATR spectrum of Canon 223 neat ink run 1 slide subtracted

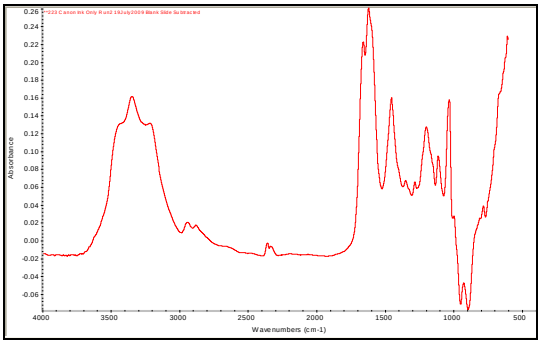

Figure 771: ATR spectrum of Canon 223 neat ink run 2 slide subtracted

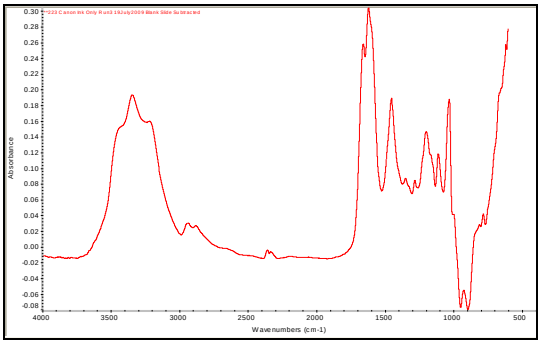

Figure 772: ATR spectrum of Canon 223 neat ink run 3 slide subtracted

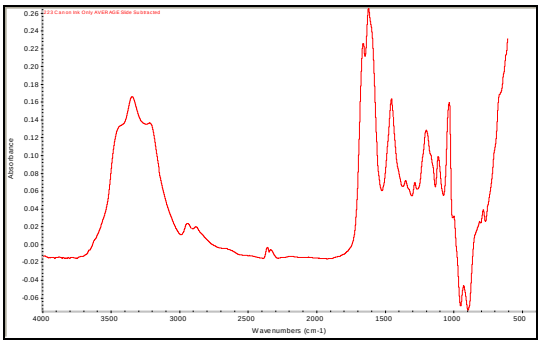

Figure 773: ATR spectrum of Canon 223 neat ink slide subtracted AVERAGE

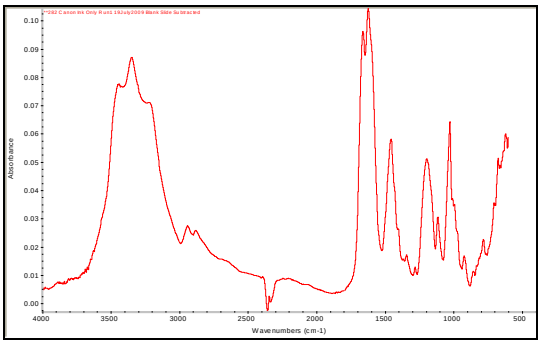

Figure 774: ATR spectrum of Canon 282 neat ink run 1 slide subtracted

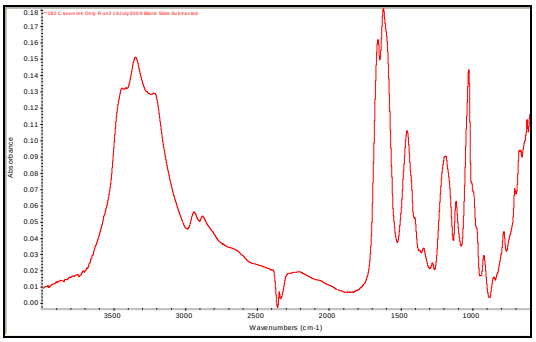

Figure 775: ATR spectrum of Canon 282 neat ink run 2 slide subtracted

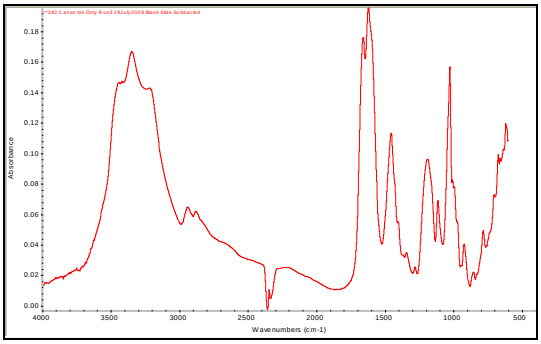

Figure 776: ATR spectrum of Canon 282 neat ink run 3 slide subtracted

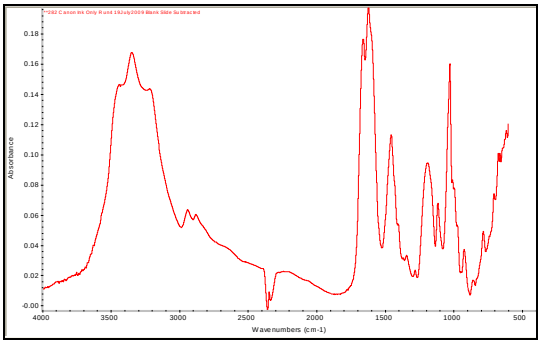

Figure 777: ATR spectrum of Canon 282 neat ink run 4 slide subtracted

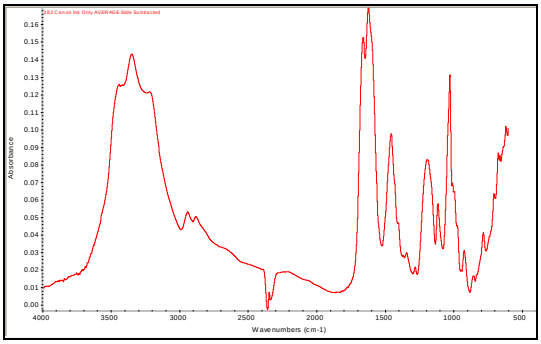

Figure 778: ATR spectrum of Canon 282 neat ink slide subtracted AVERAGE

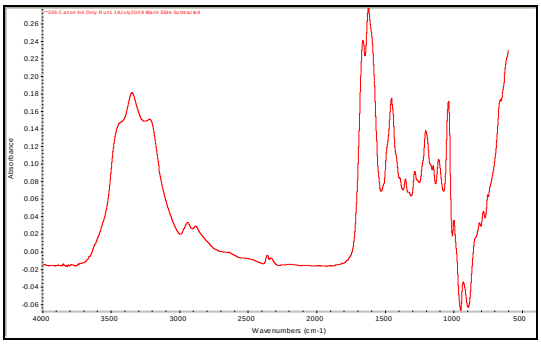

Figure 779: ATR spectrum of Canon 306 neat ink run 1 slide subtracted

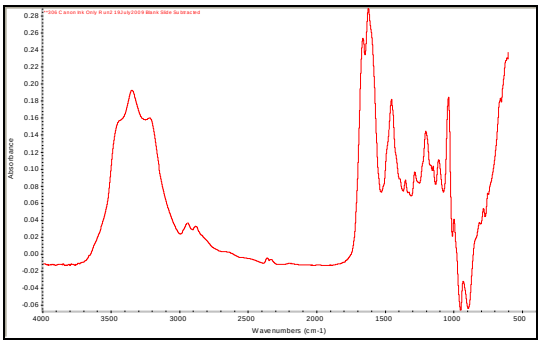

Figure 780: ATR spectrum of Canon 306 neat ink run 2 slide subtracted

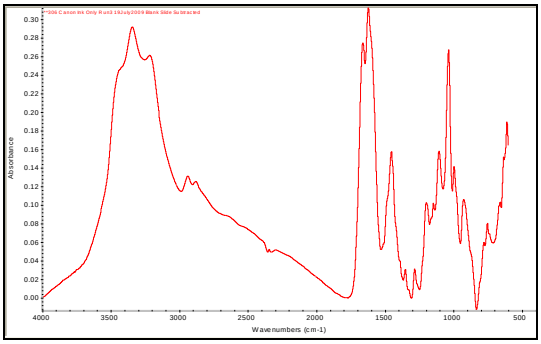

Figure 781: ATR spectrum of Canon 306 neat ink run 3 slide subtracted

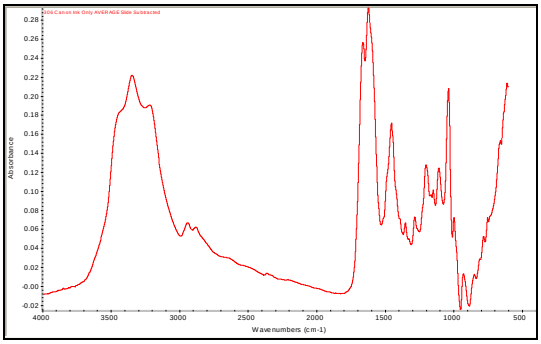

Figure 782: ATR spectrum of Canon 306 neat ink slide subtracted AVERAGE

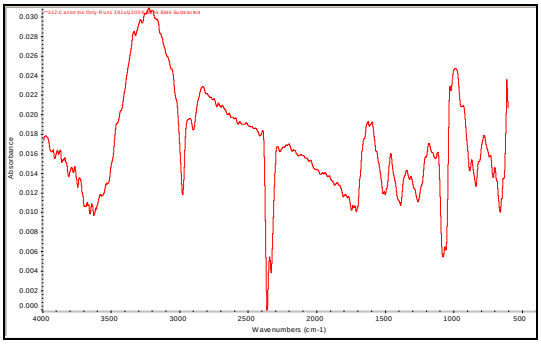

Figure 783: ATR spectrum of Canon 312 neat ink run 1 slide subtracted

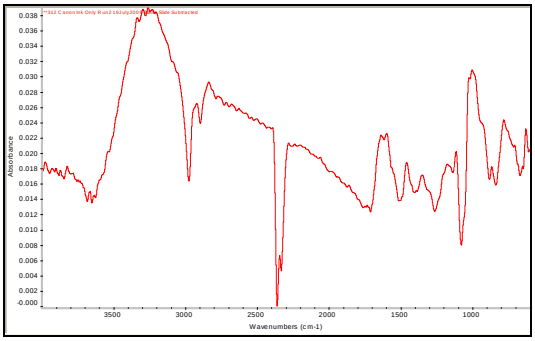

Figure 784: ATR spectrum of Canon 312 neat ink run 2 slide subtracted

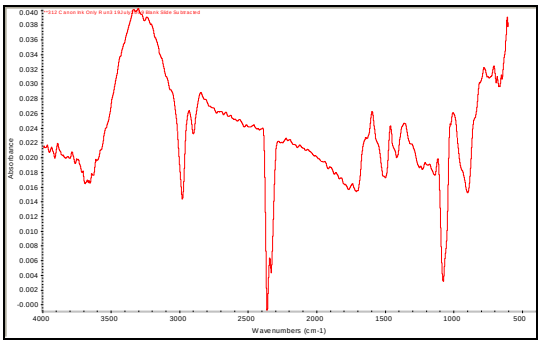

Figure 785: ATR spectrum of Canon 312 neat ink run 3 slide subtracted

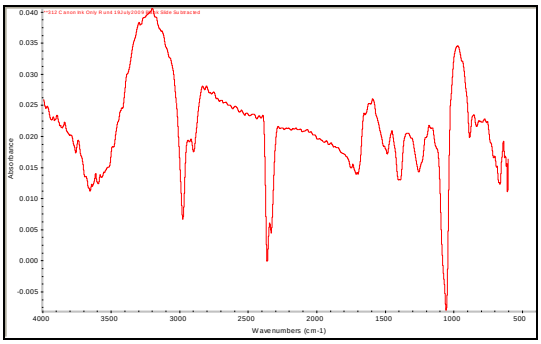

Figure 786: ATR spectrum of Canon 312 neat ink run 4 slide subtracted

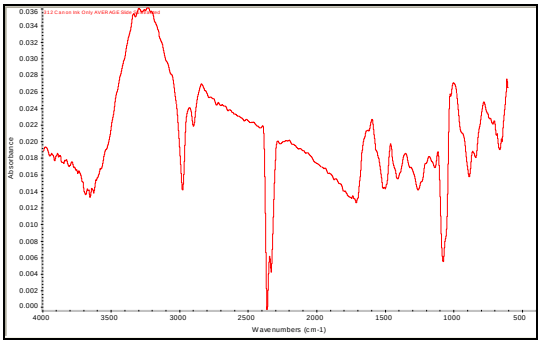

Figure 787: ATR spectrum of Canon 312 neat ink slide subtracted AVERAGE

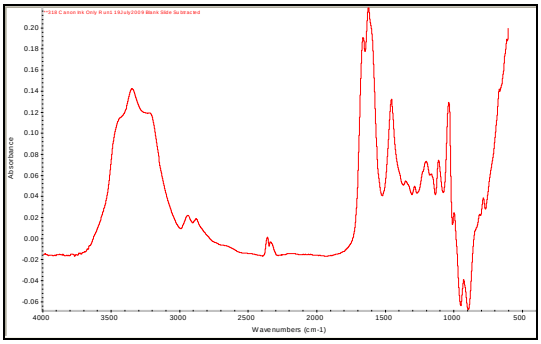

Figure 788: ATR spectrum of Canon 318 neat ink run 1 slide subtracted

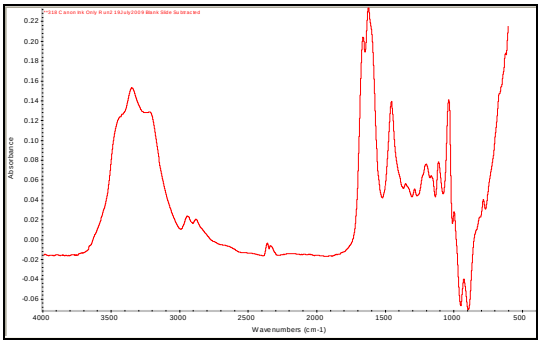

Figure 789: ATR spectrum of Canon 318 neat ink run 2 slide subtracted

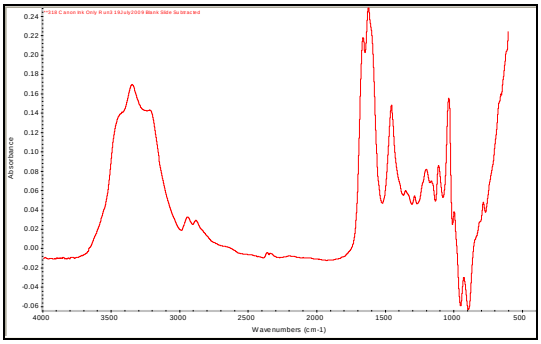

Figure 790: ATR spectrum of Canon 318 neat ink run 3 slide subtracted

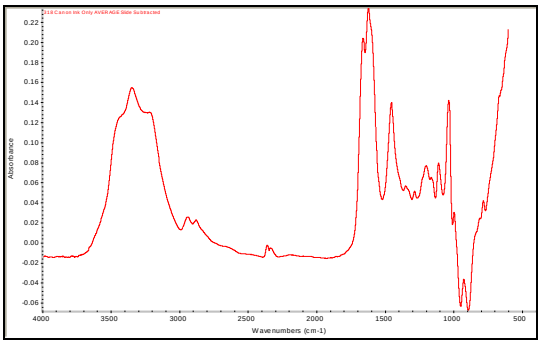

Figure 791: ATR spectrum of Canon 318 neat ink slide subtracted AVERAGE

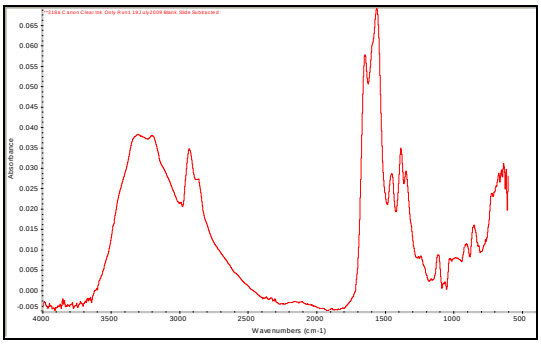

Figure 792: ATR spectrum of Canon 318a neat ink run 1 slide subtracted

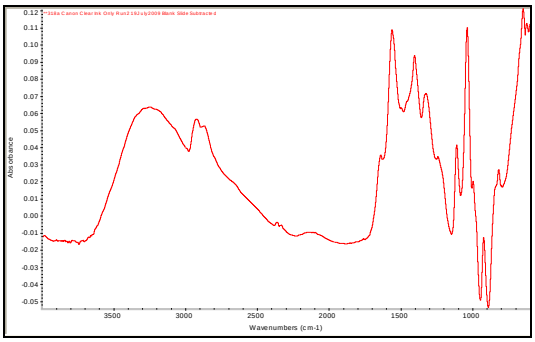

Figure 793: ATR spectrum of Canon 318a neat ink run 2 slide subtracted

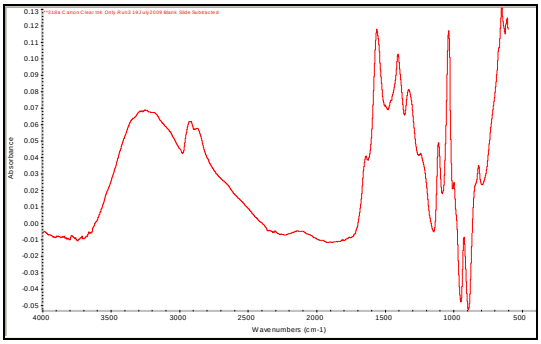

Figure 794: ATR spectrum of Canon 318a neat ink run 3 slide subtracted

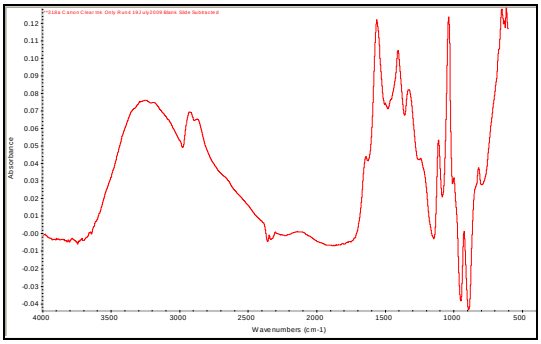

Figure 795: ATR spectrum of Canon 318a neat ink run 4 slide subtracted

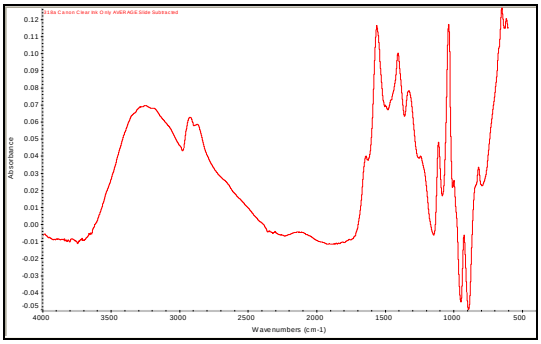

Figure 796: ATR spectrum of Canon 318a neat ink slide subtracted AVERAGE

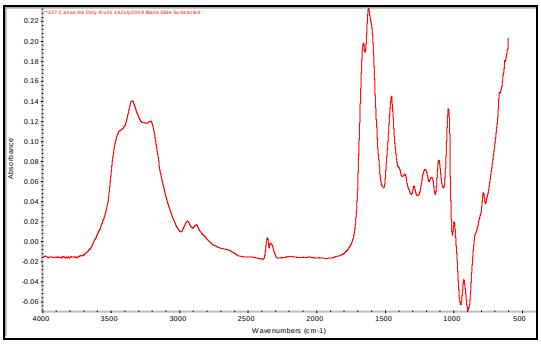

Figure 797: ATR spectrum of Canon 327 neat ink run 1 slide subtracted

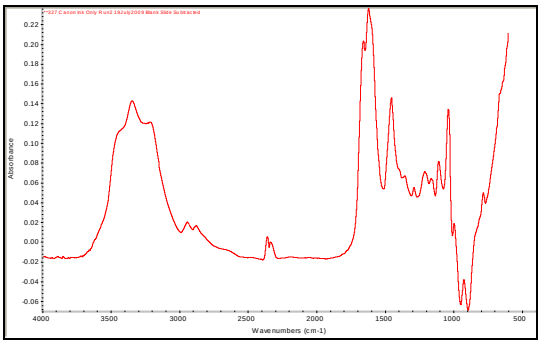

Figure 798: ATR spectrum of Canon 327 neat ink run 2 slide subtracted

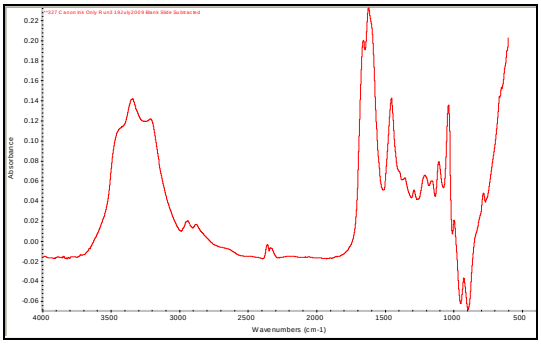

Figure 799: ATR spectrum of Canon 327 neat ink run 3 slide subtracted

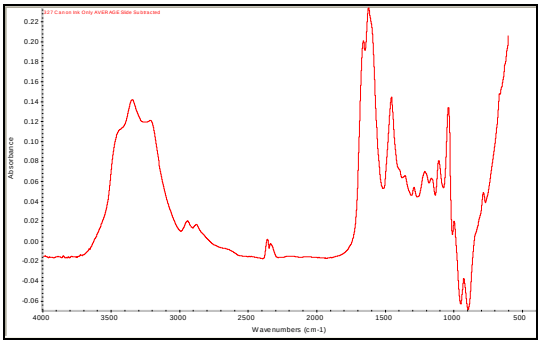

Figure 800: ATR spectrum of Canon 327 neat ink slide subtracted AVERAGE

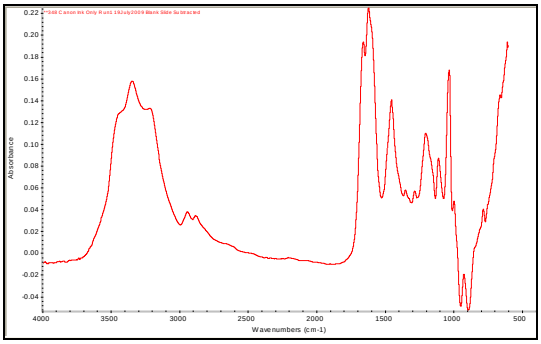

Figure 801: ATR spectrum of Canon 348 neat ink run 1 slide subtracted

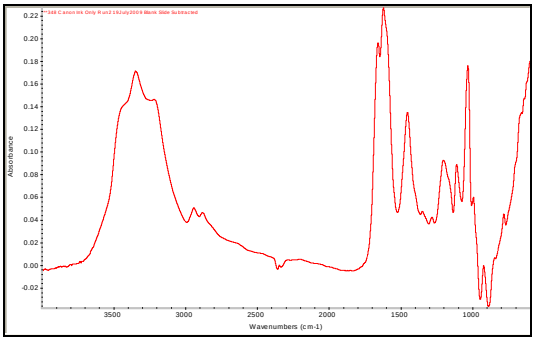

Figure 802: ATR spectrum of Canon 348 neat ink run 2 slide subtracted

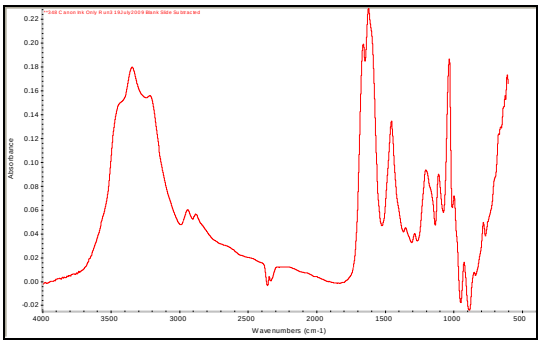

Figure 803: ATR spectrum of Canon 348 neat ink run 3 slide subtracted

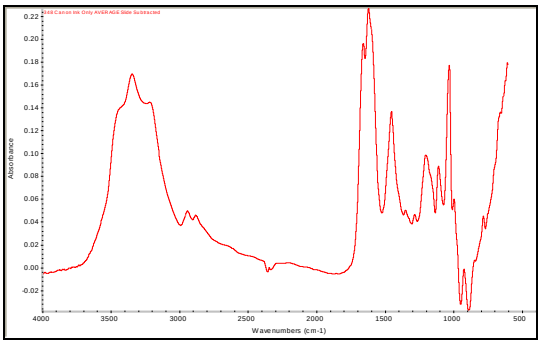

Figure 804: ATR spectrum of Canon 348 neat ink slide subtracted AVERAGE

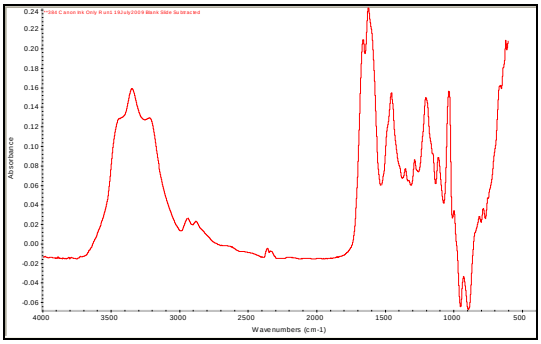

Figure 805: ATR spectrum of Canon 384 neat ink run 1 slide subtracted

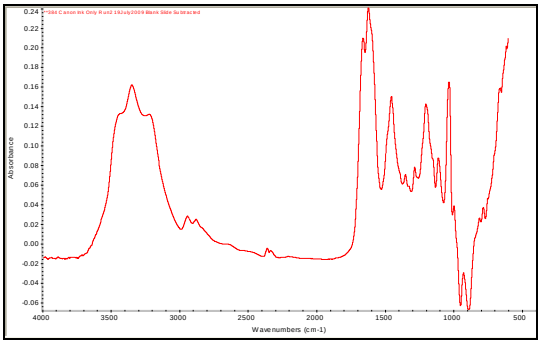

Figure 806: ATR spectrum of Canon 384 neat ink run 2 slide subtracted

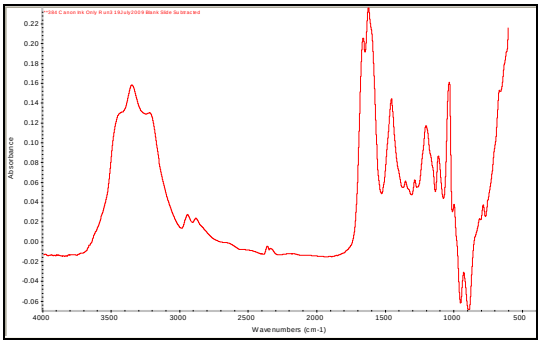

Figure 807: ATR spectrum of Canon 384 neat ink run 3 slide subtracted

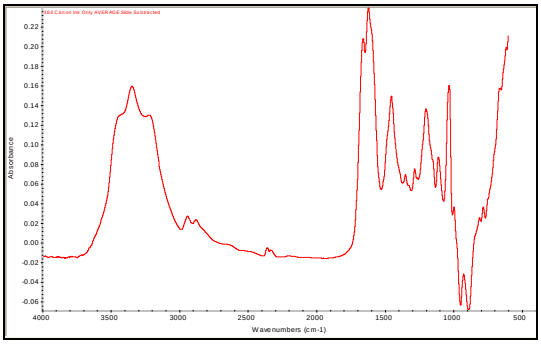

Figure 808: ATR spectrum of Canon 384 neat ink slide subtracted AVERAGE

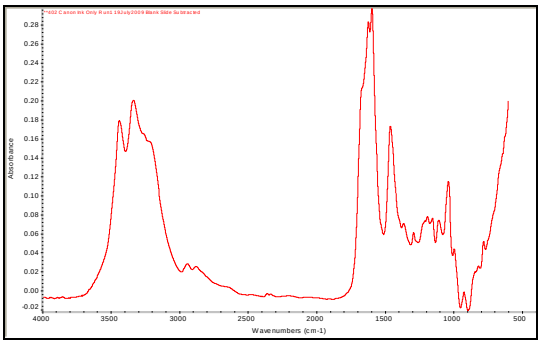

Figure 809: ATR spectrum of Canon 402 neat ink run 1 slide subtracted

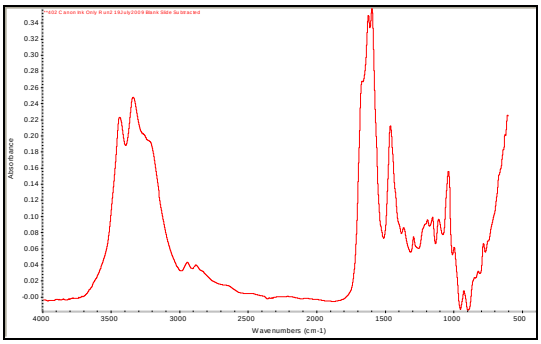

Figure 810: ATR spectrum of Canon 402 neat ink run 2 slide subtracted

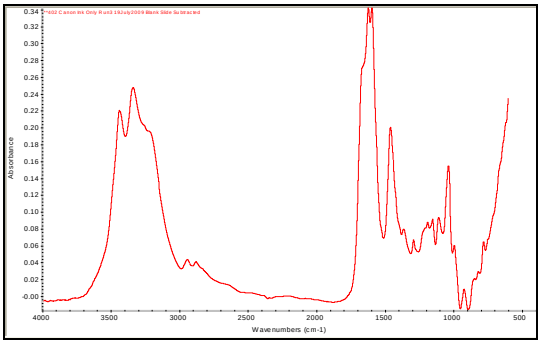

Figure 811: ATR spectrum of Canon 402 neat ink run 3 slide subtracted

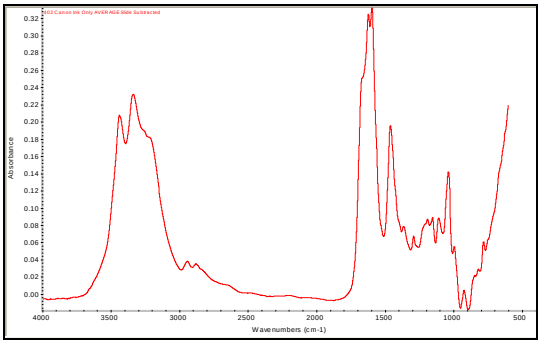

Figure 812: ATR spectrum of Canon 402 neat ink slide subtracted AVERAGE

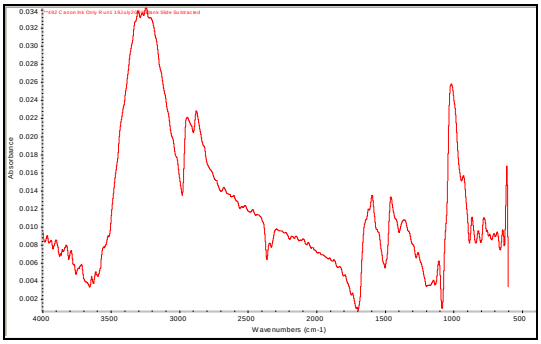

Figure 813: ATR spectrum of Canon 492 neat ink run 1 slide subtracted

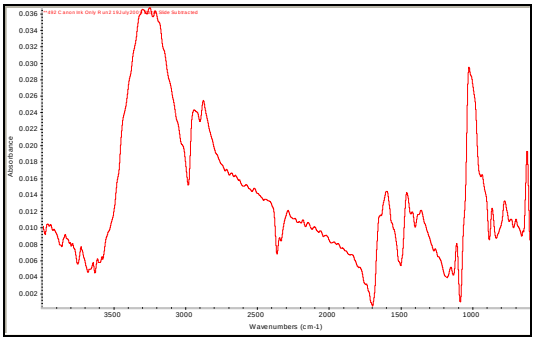

Figure 814: ATR spectrum of Canon 492 neat ink run 2 slide subtracted

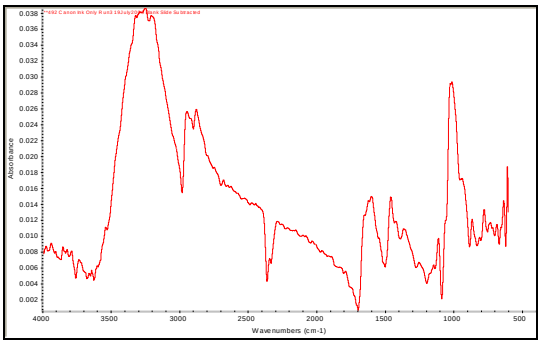

Figure 815: ATR spectrum of Canon 492 neat ink run 3 slide subtracted

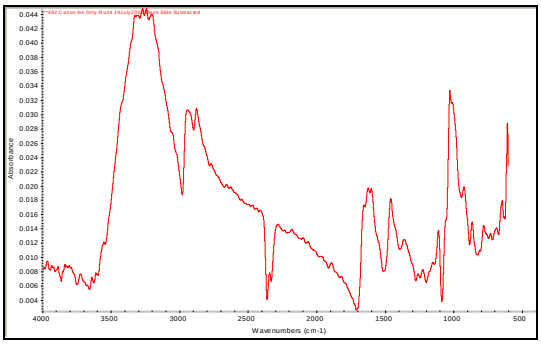

Figure 816: ATR spectrum of Canon 492 neat ink run 4 slide subtracted

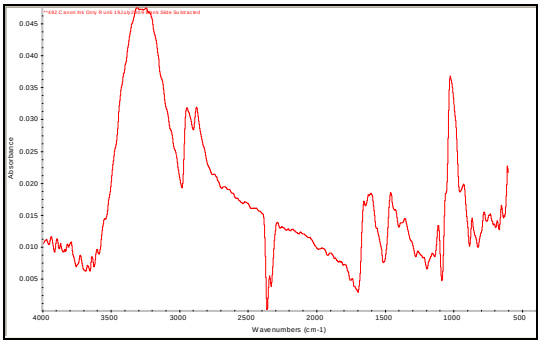

Figure 817: ATR spectrum of Canon 492 neat ink run 5 slide subtracted

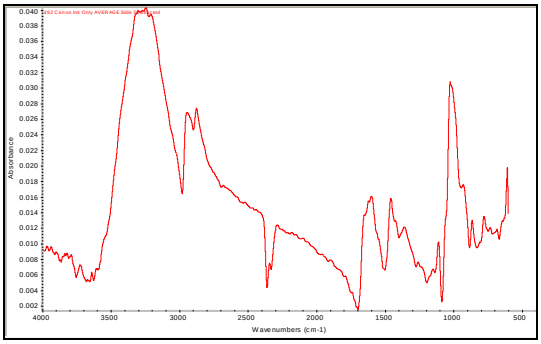

Figure 818: ATR spectrum of Canon 492 neat ink slide subtracted AVERAGE

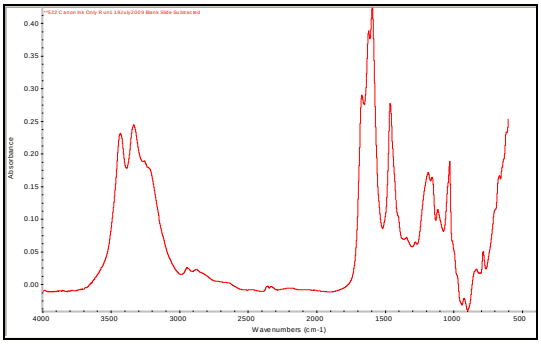

Figure 819: ATR spectrum of Canon 522 neat ink run 1 slide subtracted

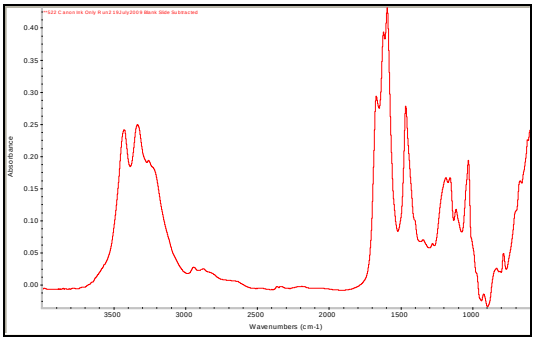

Figure 820: ATR spectrum of Canon 522 neat ink run 2 slide subtracted

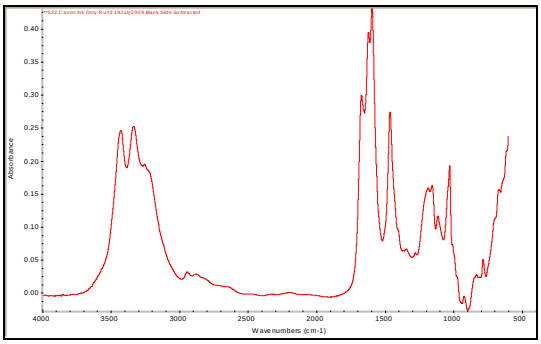

Figure 821: ATR spectrum of Canon 522 neat ink run 3 slide subtracted

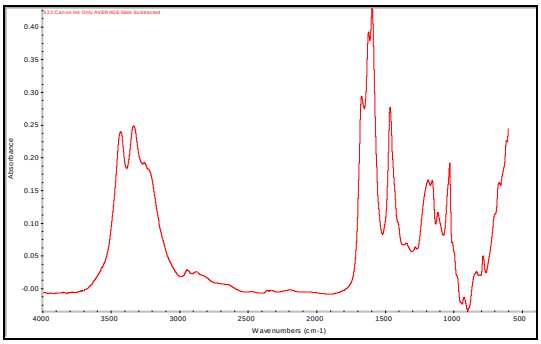

Figure 822: ATR spectrum of Canon 522 neat ink slide subtracted AVERAGE

ATR Data – Ink on Paper Samples

CANON

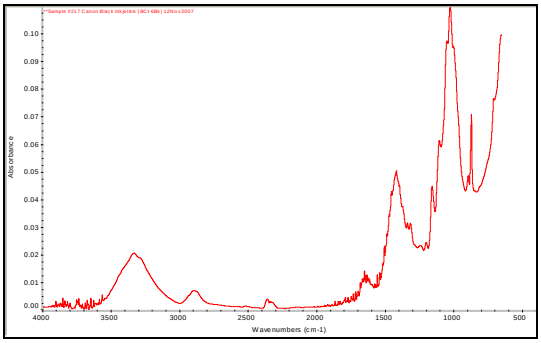

Figure 823: ATR spectrum of Canon 217 ink on paper collected November 12th, 2007

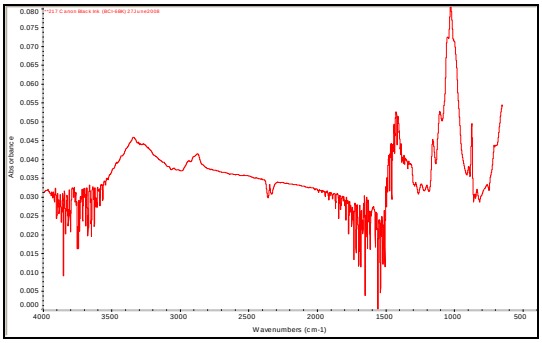

Figure 824: ATR spectrum of Canon 217 ink on paper collected June 27th, 2008

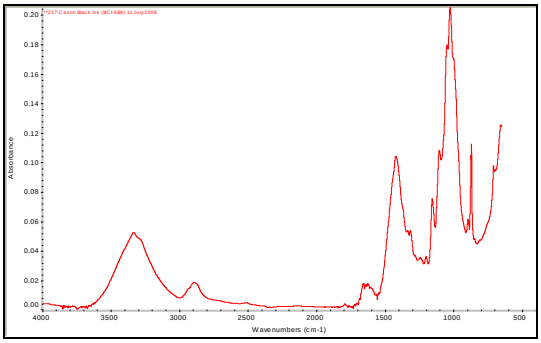

Figure 825: ATR spectrum of Canon 217 ink on paper collected July 11th, 2008

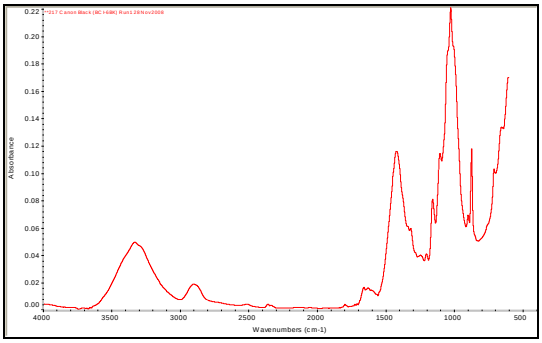

Figure 826: ATR spectrum of Canon 217 ink on paper collected November 28th, 2008

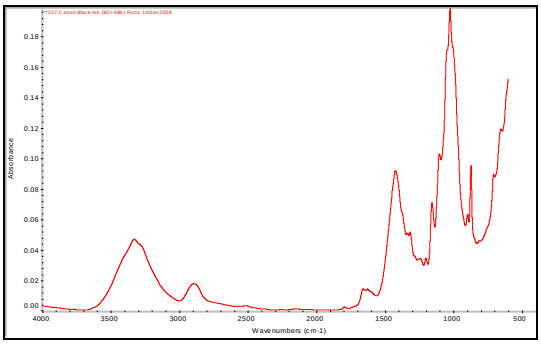

Figure 827: ATR spectrum of Canon 217 ink on paper collected December 14th, 2008

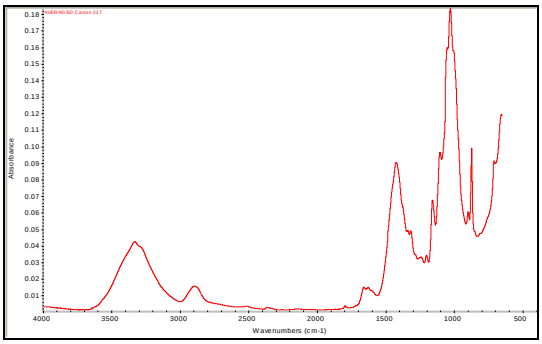

Figure 828: ATR spectrum of Canon 217 ink on paper AVERAGE

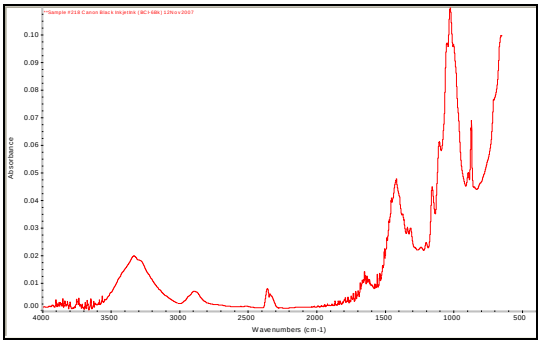

Figure 829: ATR spectrum of Canon 218 ink on paper collected November 12th, 2007

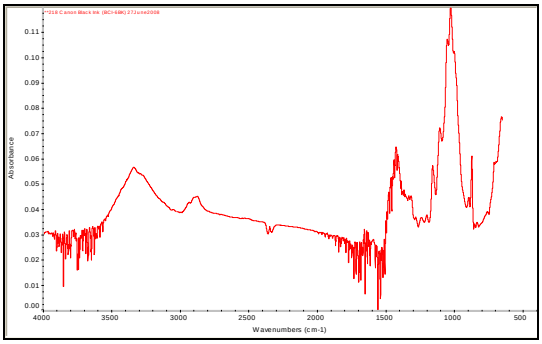

Figure 830: ATR spectrum of Canon 218 ink on paper collected June 27th, 2008

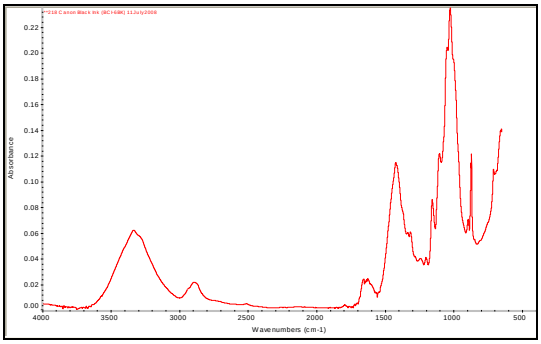

Figure 831: ATR spectrum of Canon 218 ink on paper collected July 11th, 2008

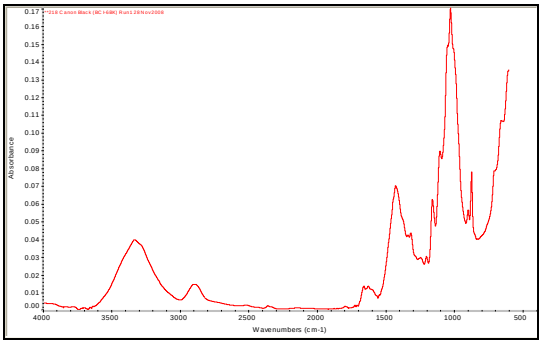

Figure 832: ATR spectrum of Canon 218 ink on paper collected November 28th, 2008

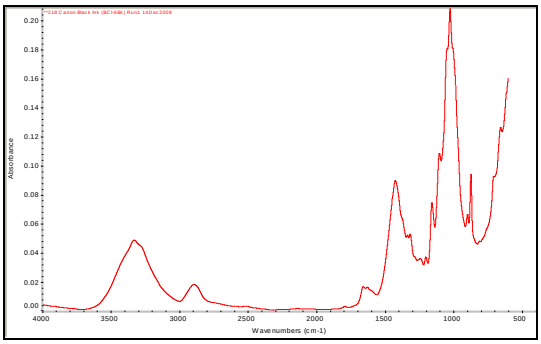

Figure 833: ATR spectrum of Canon 218 ink on paper collected December 14th, 2008

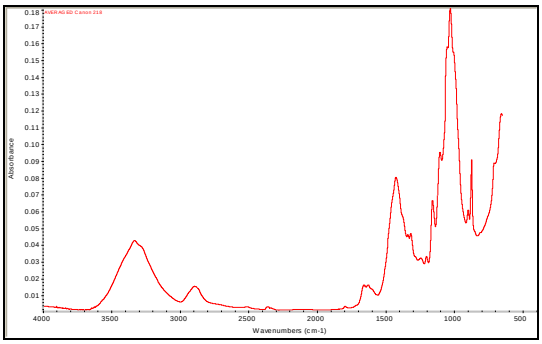

Figure 834: ATR spectrum of Canon 218 ink on paper AVERAGE

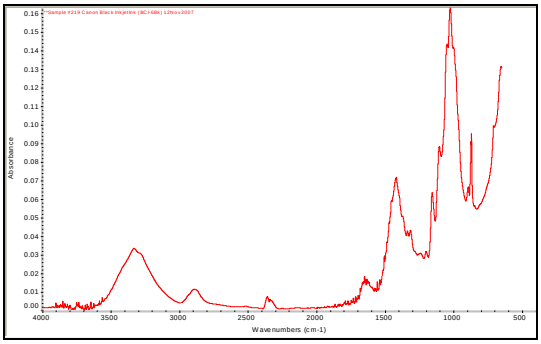

Figure 835: ATR spectrum of Canon 219 ink on paper collected November 12th, 2007

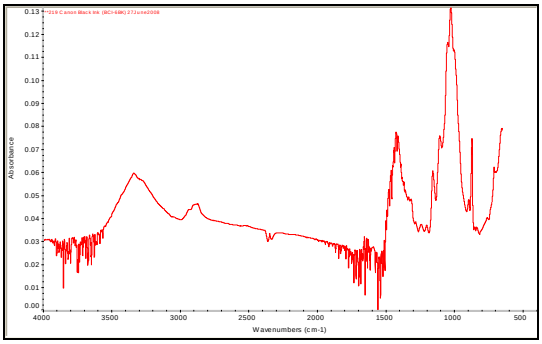

Figure 836: ATR spectrum of Canon 219 ink on paper collected June 27th, 2008

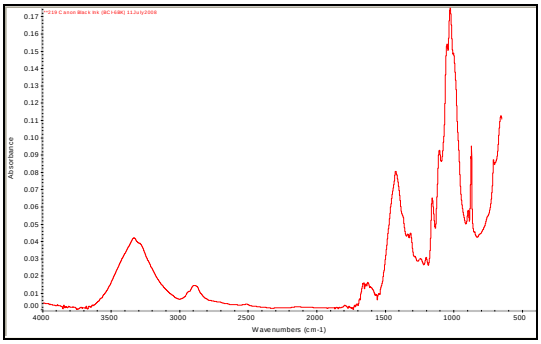

Figure 837: ATR spectrum of Canon 219 ink on paper collected July 11th, 2008

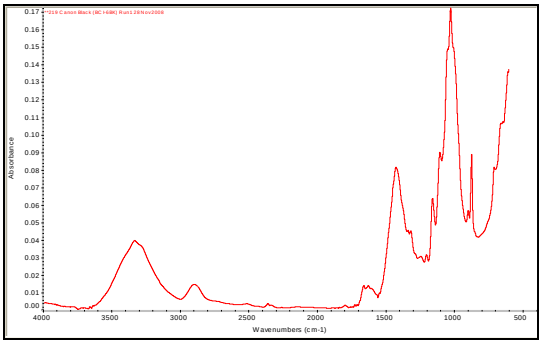

Figure 838: ATR spectrum of Canon 219 ink on paper collected November 28th, 2008

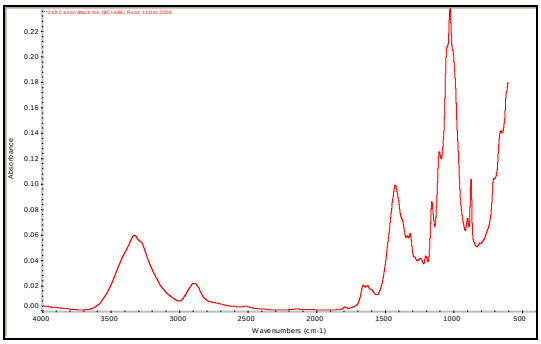

Figure 839: ATR spectrum of Canon 219 ink on paper collected December 14th, 2008

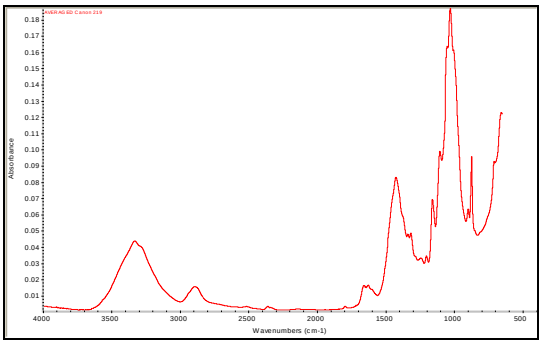

Figure 840: ATR spectrum of Canon 219 ink on paper AVERAGE

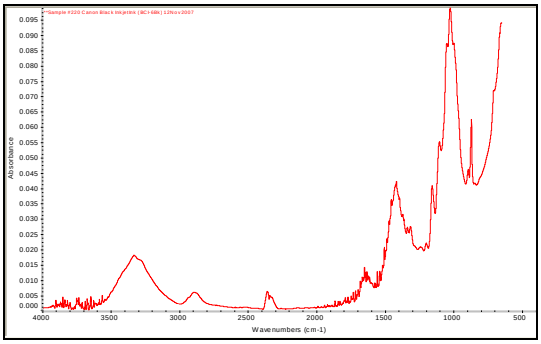

Figure 841: ATR spectrum of Canon 220 ink on paper collected November 12th, 2007

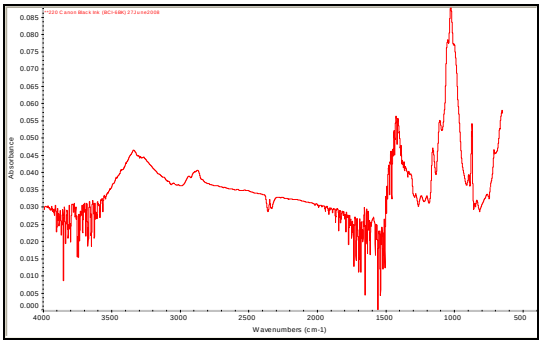

Figure 842: ATR spectrum of Canon 220 ink on paper collected June 27th, 2008

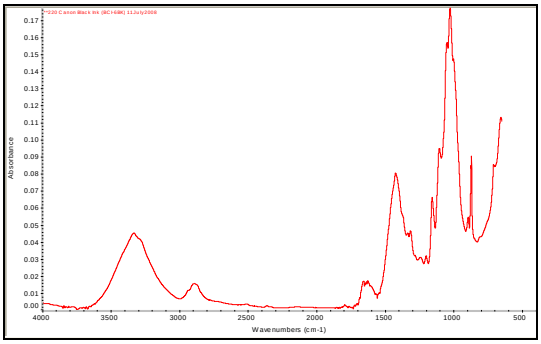

Figure 843: ATR spectrum of Canon 220 ink on paper collected July 11th, 2008

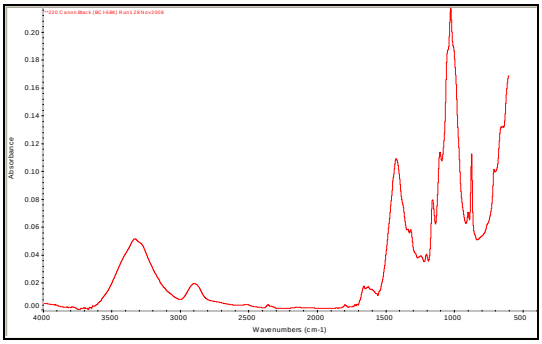

Figure 844: ATR spectrum of Canon 220 ink on paper collected November 28th, 2008

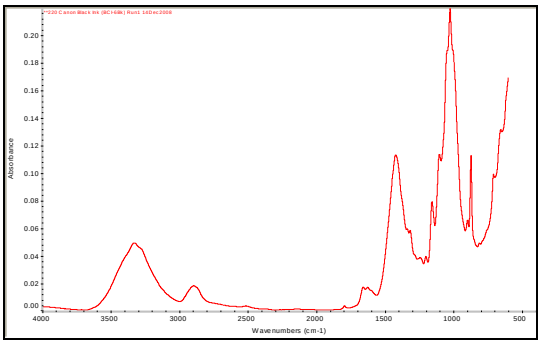

Figure 845: ATR spectrum of Canon 220 ink on paper collected December 14th, 2008

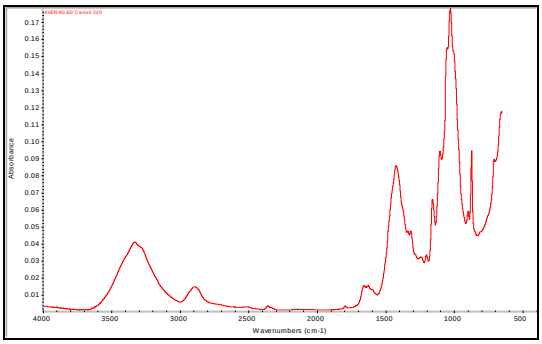

Figure 846: ATR spectrum of Canon 220 ink on paper AVERAGE

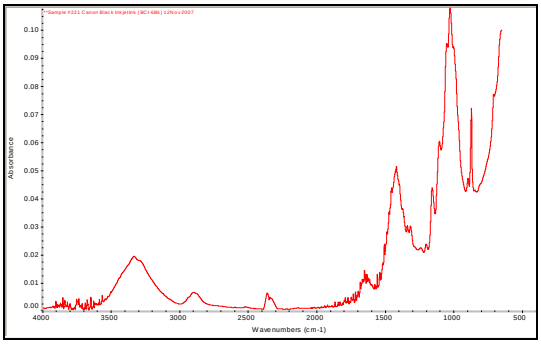

Figure 847: ATR spectrum of Canon 221 ink on paper collected November 12th, 2007

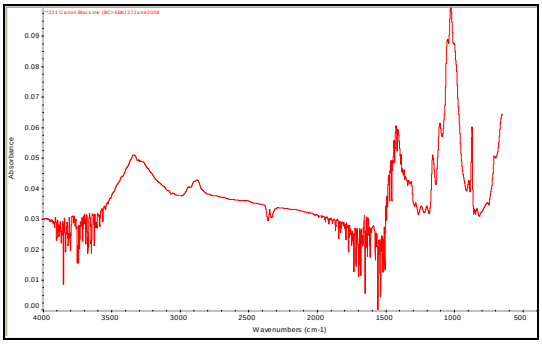

Figure 848: ATR spectrum of Canon 221 ink on paper collected June 27th, 2008

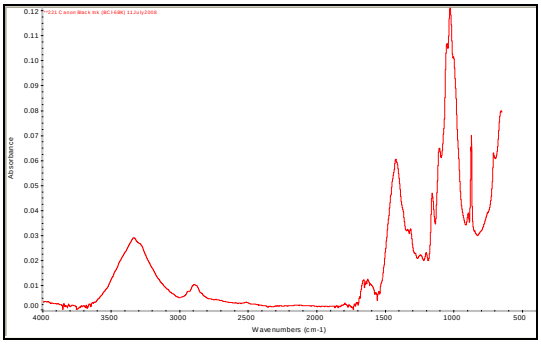

Figure 849: ATR spectrum of Canon 221 ink on paper collected July 11th, 2008

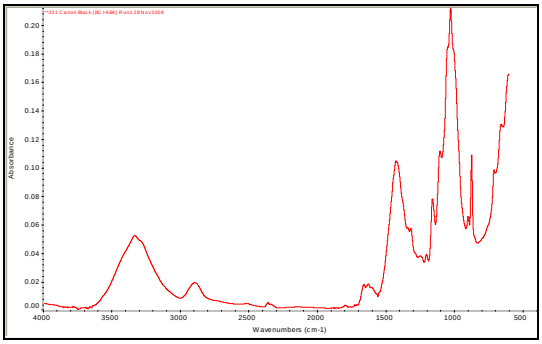

Figure 850: ATR spectrum of Canon 221 ink on paper collected November 28th, 2008

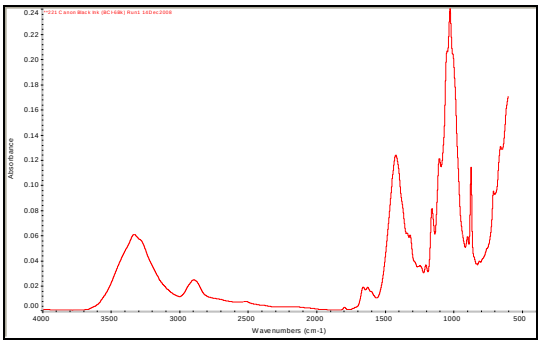

Figure 851: ATR spectrum of Canon 221 ink on paper collected December 14th, 2008

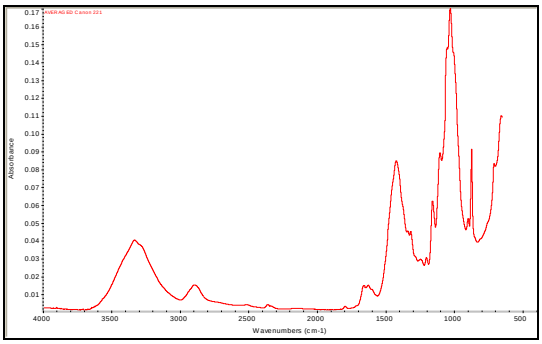

Figure 852: ATR spectrum of Canon 221 ink on paper AVERAGE

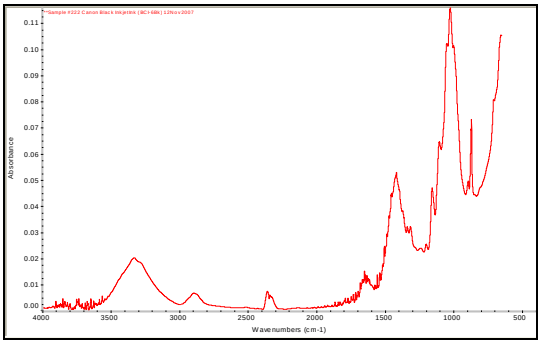

Figure 853: ATR spectrum of Canon 222 ink on paper collected November 12th, 2007

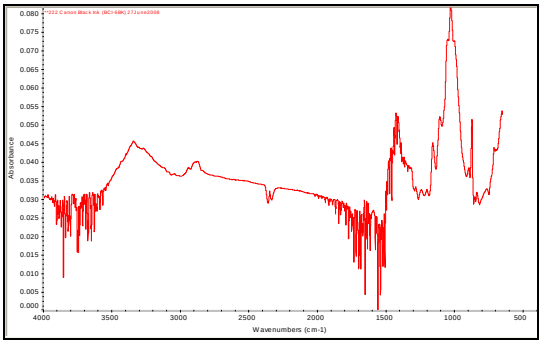

Figure 854: ATR spectrum of Canon 222 ink on paper collected June 27th, 2008

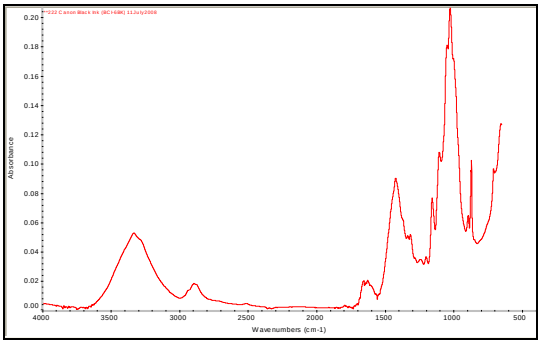

Figure 855: ATR spectrum of Canon 222 ink on paper collected July 11th, 2008

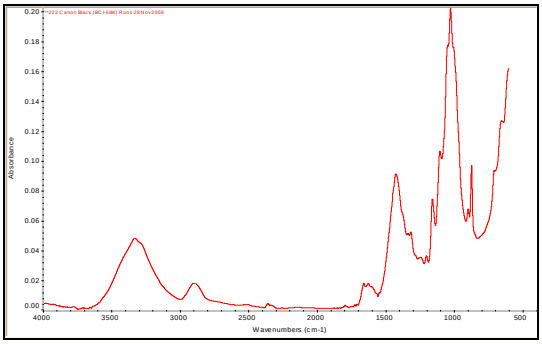

Figure 856: ATR spectrum of Canon 222 ink on paper collected November 28th, 2008

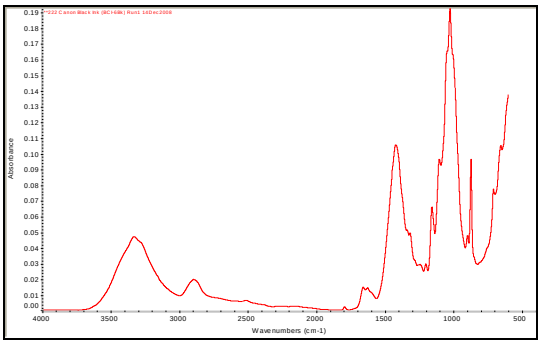

Figure 857: ATR spectrum of Canon 222 ink on paper collected December 14th, 2008

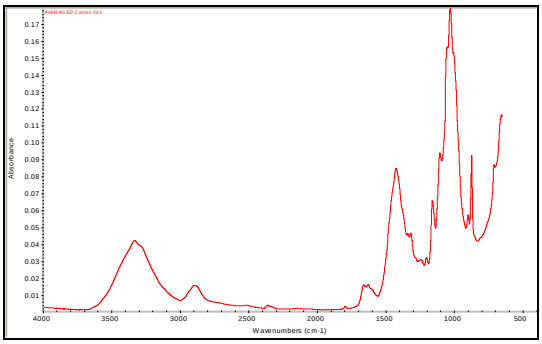

Figure 858: ATR spectrum of Canon 222 ink on paper AVERAGE

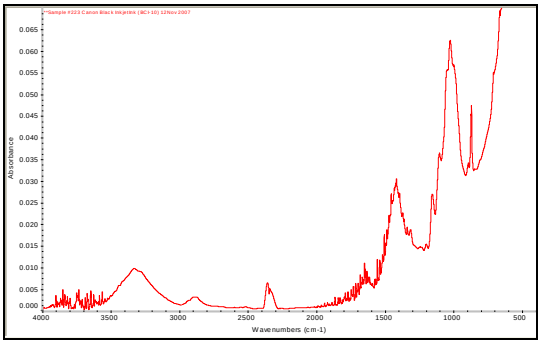

Figure 859: ATR spectrum of Canon 223 ink on paper collected November 12th, 2007

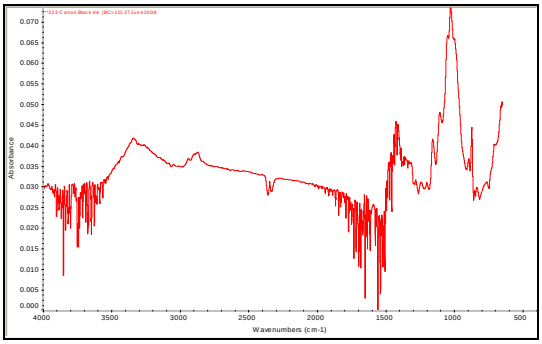

Figure 860: ATR spectrum of Canon 223 ink on paper collected June 27th, 2008

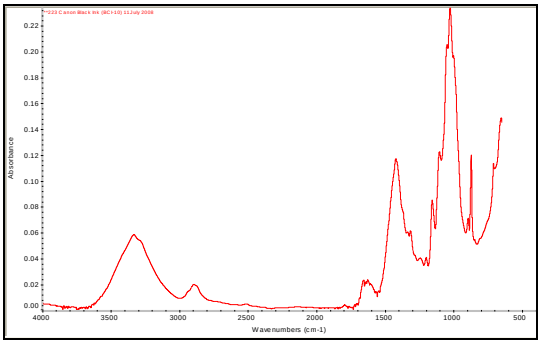

Figure 861: ATR spectrum of Canon 223 ink on paper collected July 11th, 2008

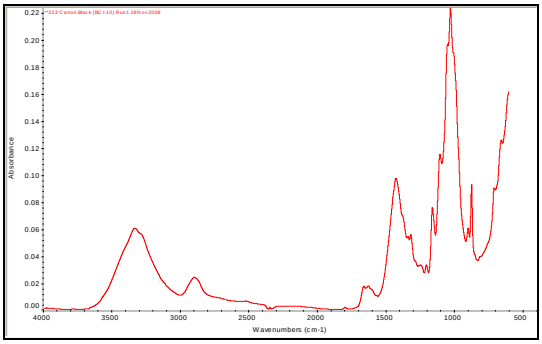

Figure 862: ATR spectrum of Canon 223 ink on paper collected November 28th, 2008

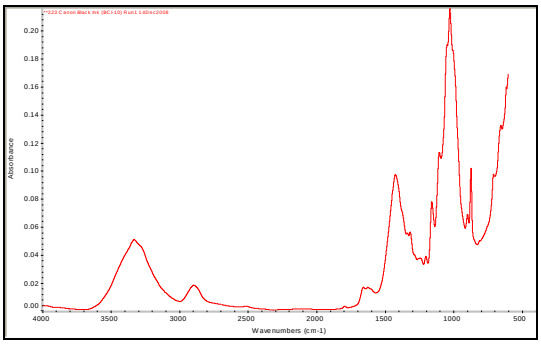

Figure 863: ATR spectrum of Canon 223 ink on paper collected December 14th, 2008

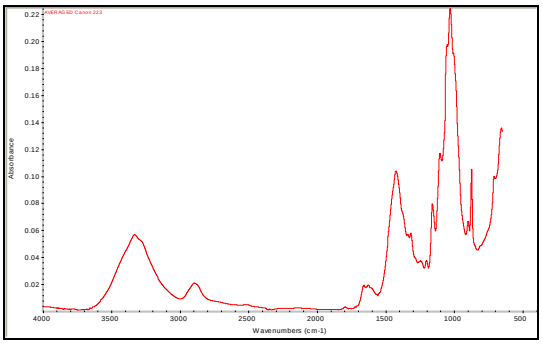

Figure 864: ATR spectrum of Canon 223 ink on paper AVERAGE

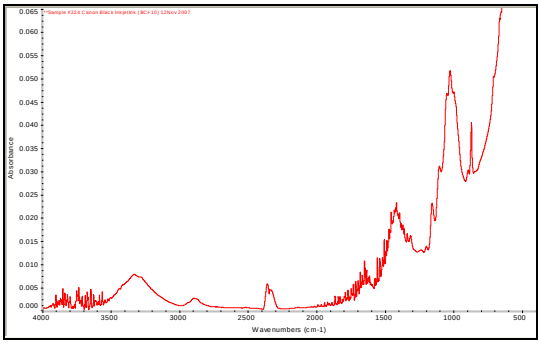

Figure 865: ATR spectrum of Canon 224 ink on paper collected November 12th, 2007

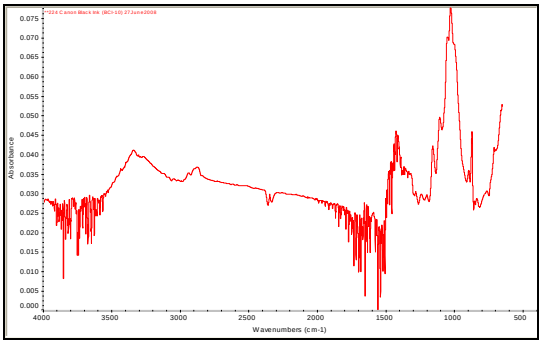

Figure 866: ATR spectrum of Canon 224 ink on paper collected June 27th, 2008

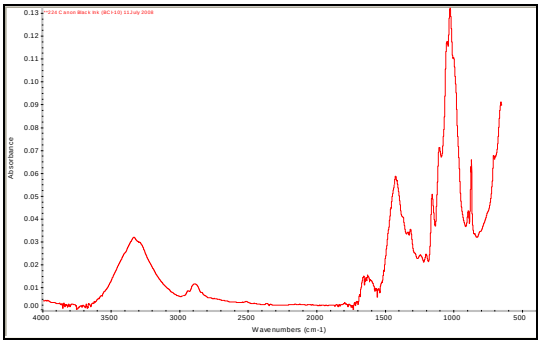

Figure 867: ATR spectrum of Canon 224 ink on paper collected July 11th, 2008

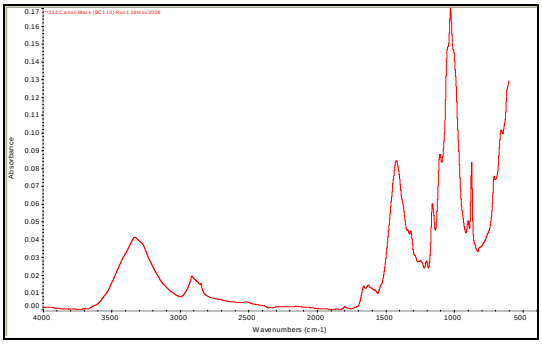

Figure 868: ATR spectrum of Canon 224 ink on paper collected November 28th, 2008

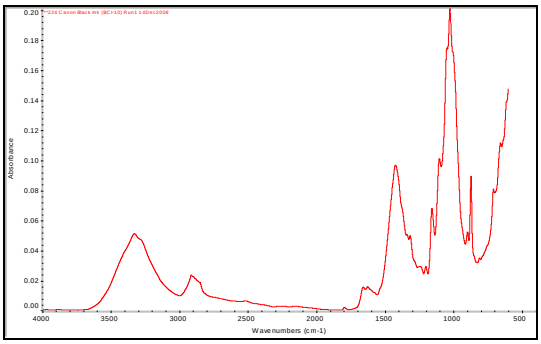

Figure 869: ATR spectrum of Canon 224 ink on paper collected December 14th, 2008

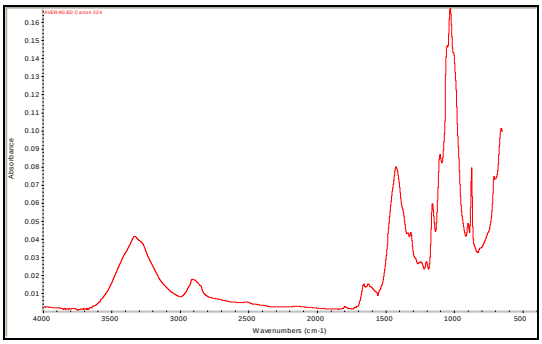

Figure 870: ATR spectrum of Canon 224 ink on paper AVERAGE

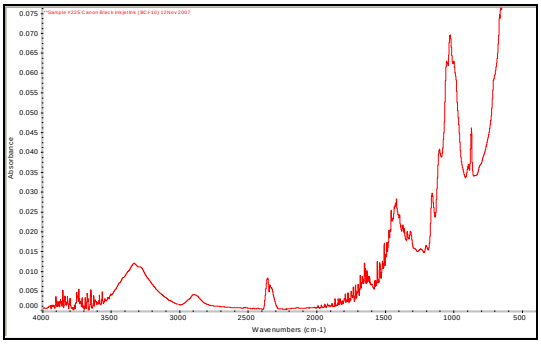

Figure 871: ATR spectrum of Canon 225 ink on paper collected November 12th, 2008

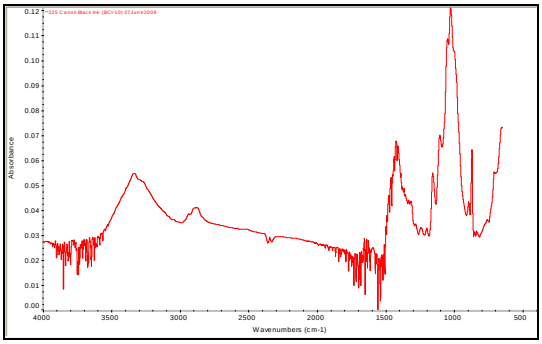

Figure 872: ATR spectrum of Canon 225 ink on paper collected June 27th, 2008

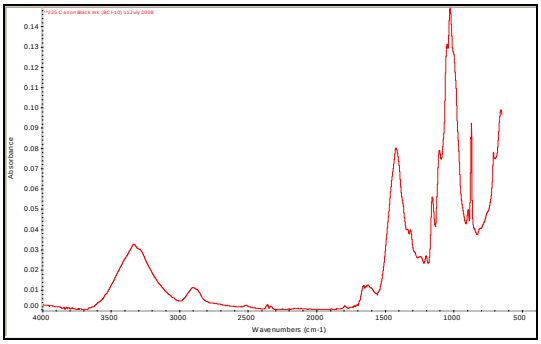

Figure 873: ATR spectrum of Canon 225 ink on paper collected July 11th, 2008

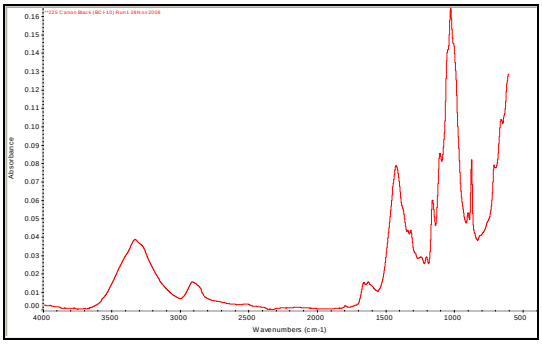

Figure 874: ATR spectrum of Canon 225 ink on paper collected November 28th, 2008

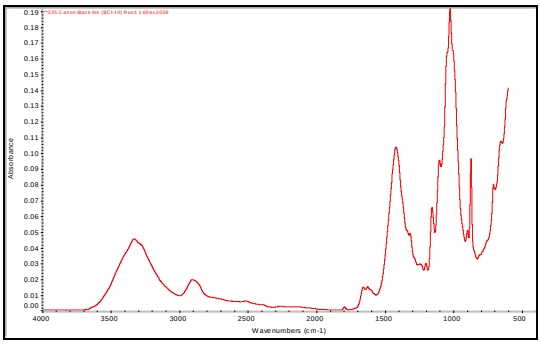

Figure 875: ATR spectrum of Canon 225 ink on paper collected December 14th, 2008

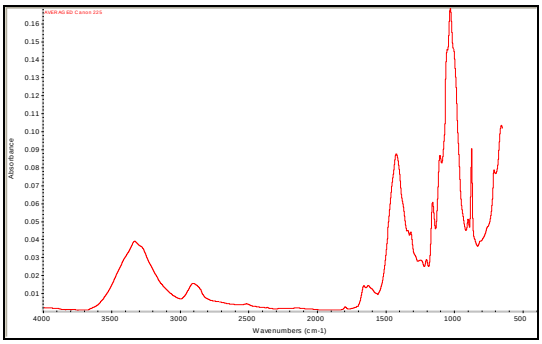

Figure 876: ATR spectrum of Canon 225 ink on paper AVERAGE

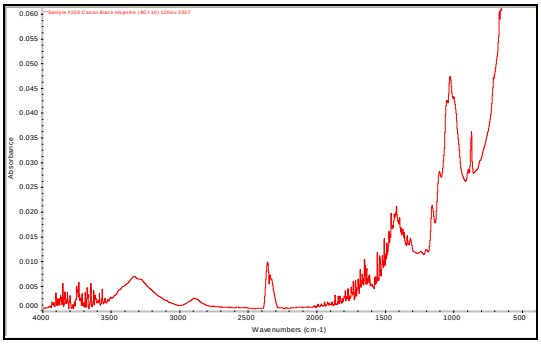

Figure 877: ATR spectrum of Canon 226 ink on paper collected November 12th, 2007

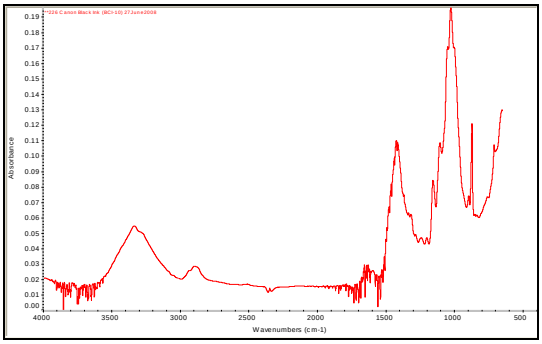

Figure 878: ATR spectrum of Canon 226 ink on paper collected June 27th, 2008

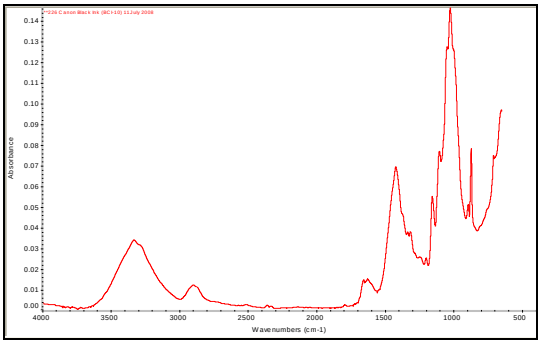

Figure 879: ATR spectrum of Canon 226 ink on paper collected July 11th, 2008

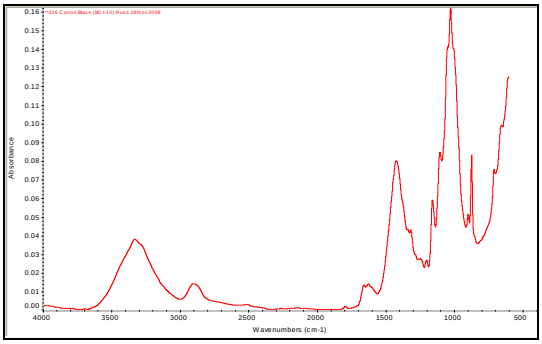

Figure 880: ATR spectrum of Canon 226 ink on paper collected November 28th, 2008

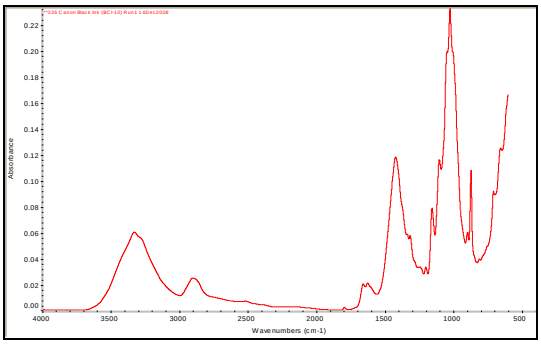

Figure 881: ATR spectrum of Canon 226 ink on paper collected December 14th, 2008

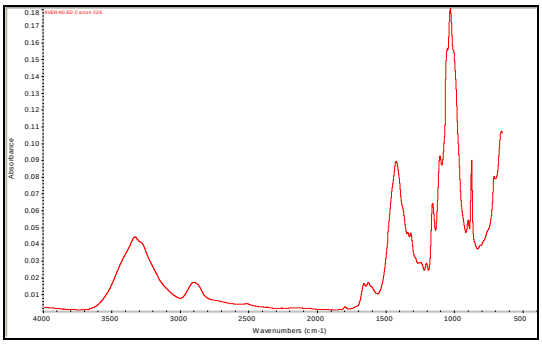

Figure 882: ATR spectrum of Canon 226 ink on paper AVERAGE

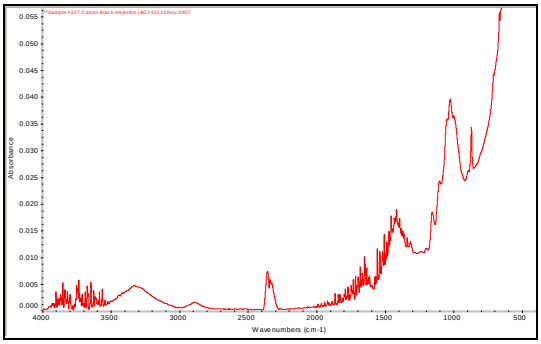

Figure 883: ATR spectrum of Canon 227 ink on paper collected November 12th, 2007

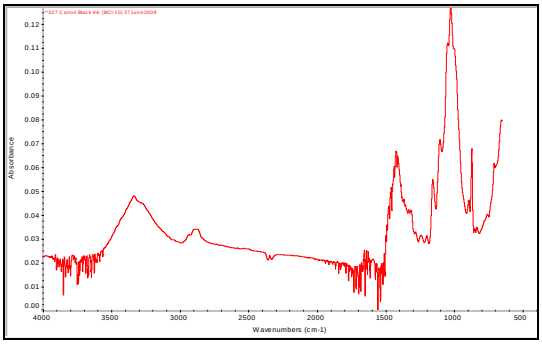

Figure 884: ATR spectrum of Canon 227 ink on paper collected June 27th, 2008

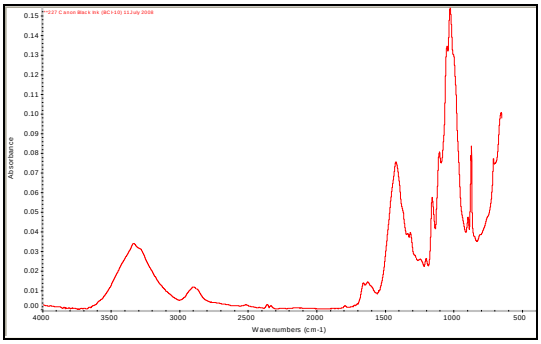

Figure 885: ATR spectrum of Canon 227 ink on paper collected July 11th, 2008

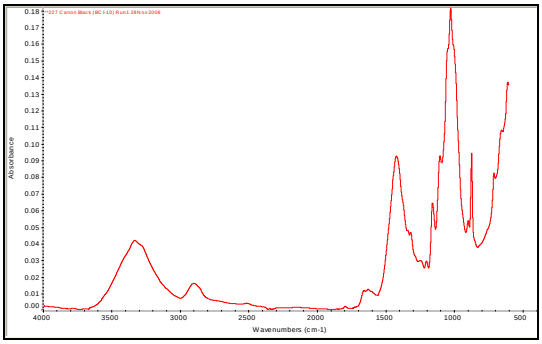

Figure 886: ATR spectrum of Canon 227 ink on paper collected November 28th, 2008

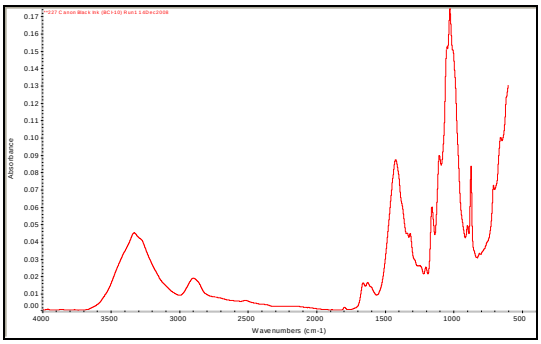

Figure 887: ATR spectrum of Canon 227 ink on paper collected December 14th, 2008

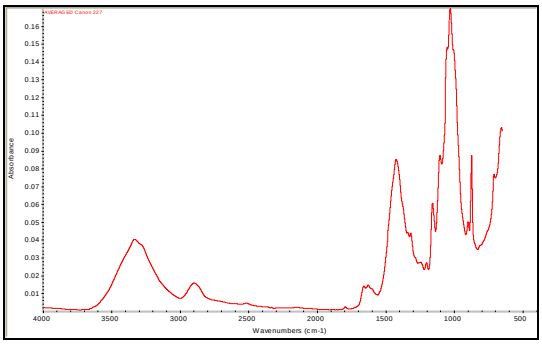

Figure 888: ATR spectrum of Canon 227 ink on paper AVERAGE

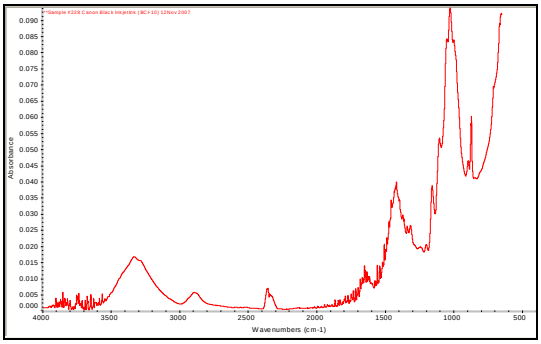

Figure 889: ATR spectrum of Canon 228 ink on paper collected November 12th, 2008

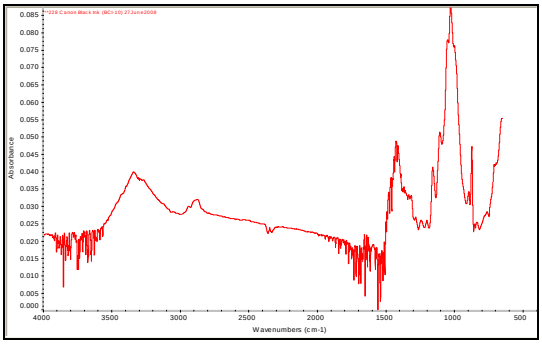

Figure 890: ATR spectrum of Canon 228 ink on paper collected June 27th, 2008

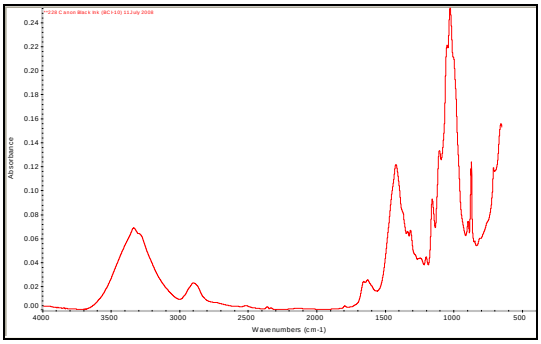

Figure 891: ATR spectrum of Canon 228 ink on paper collected July 11th, 2008

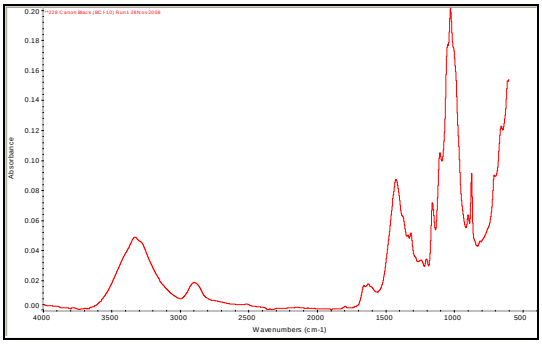

Figure 892: ATR spectrum of Canon 228 ink on paper collected November 28th, 2008

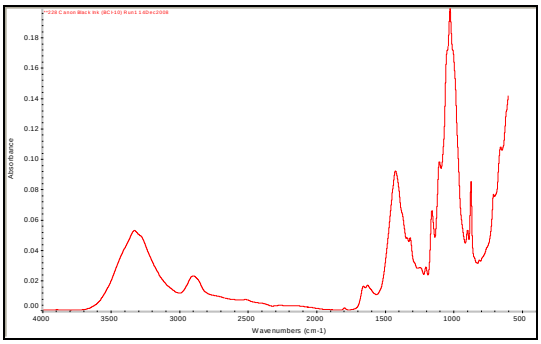

Figure 893: ATR spectrum of Canon 228 ink on paper collected December 14th, 2008

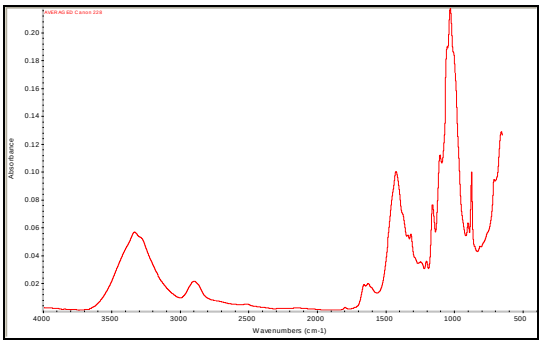

Figure 894: ATR spectrum of Canon 228 ink on paper AVERAGE

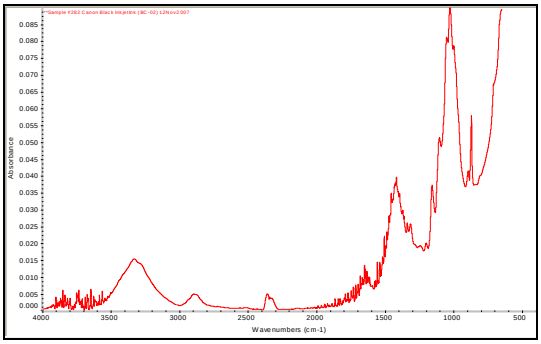

Figure 895: ATR spectrum of Canon 282 ink on paper collected November 12th, 2007

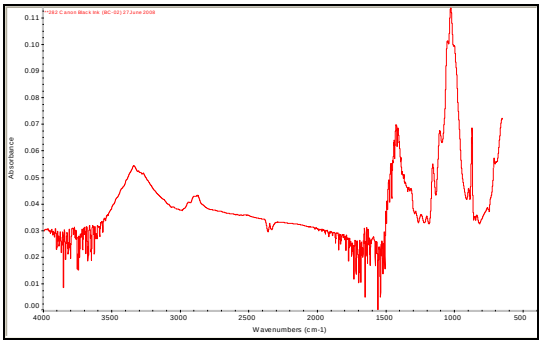

Figure 896: ATR spectrum of Canon 282 ink on paper collected June 27th, 2008

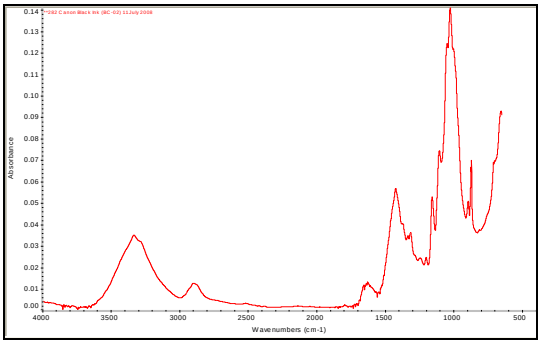

Figure 897: ATR spectrum of Canon 282 ink on paper collected July 11th, 2008

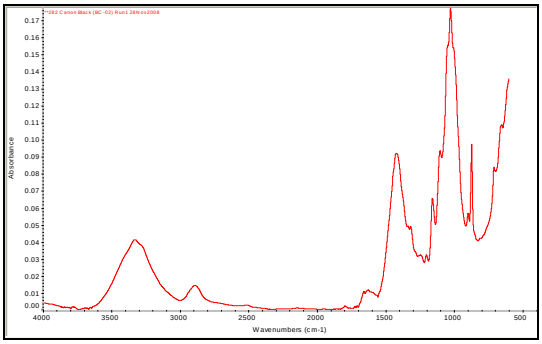

Figure 898: ATR spectrum of Canon 282 ink on paper collected November 28th, 2008

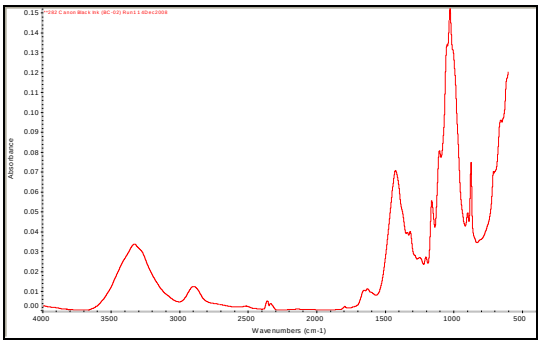

Figure 899: ATR spectrum of Canon 282 ink on paper collected December 14th, 2008

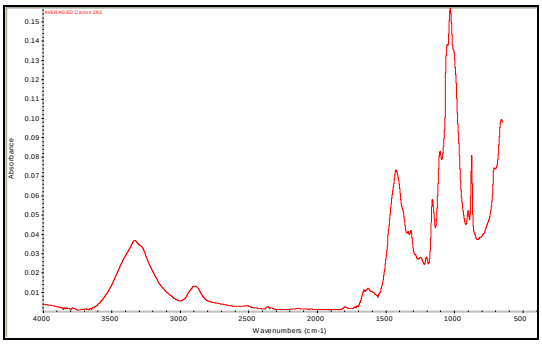

Figure 900: ATR spectrum of Canon 282 ink on paper AVERAGE

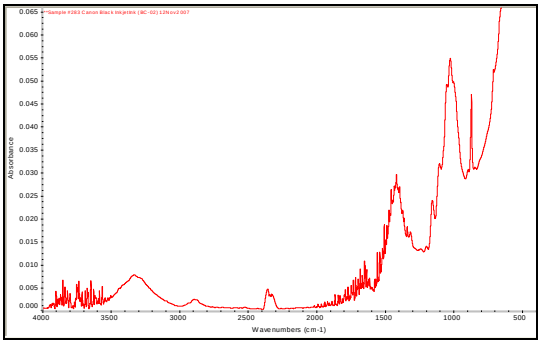

Figure 901: ATR spectrum of Canon 283 ink on paper collected November 12th, 2007

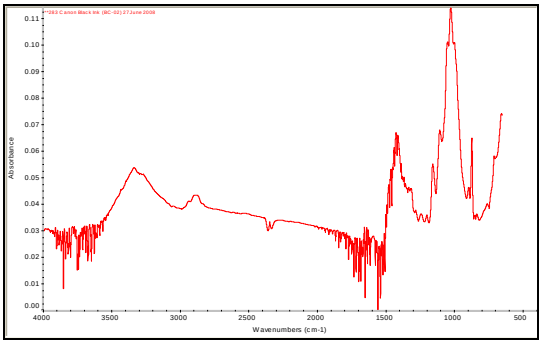

Figure 902: ATR spectrum of Canon 283 ink on paper collected June 27th, 2008

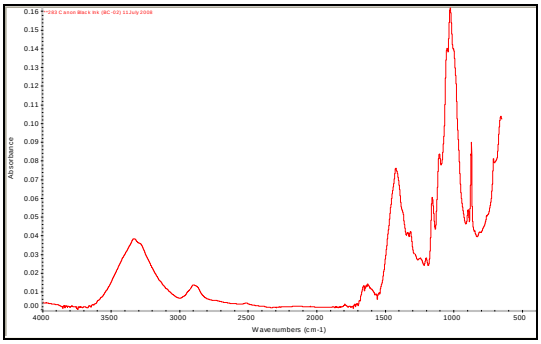

Figure 903: ATR spectrum of Canon 283 ink on paper collected July 11th, 2008

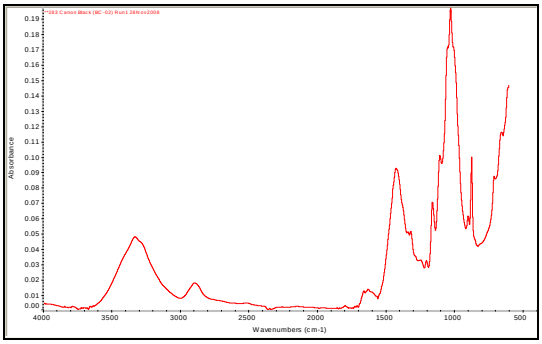

Figure 904: ATR spectrum of Canon 283 ink on paper collected November 28th, 2008

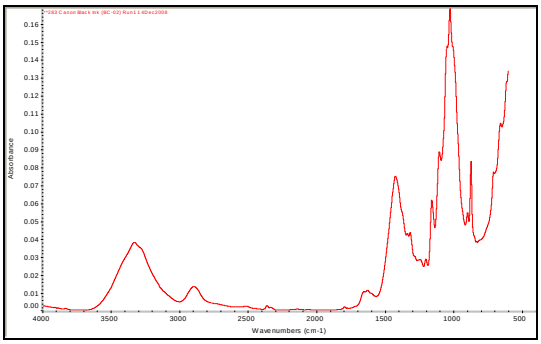

Figure 905: ATR spectrum of Canon 283 ink on paper collected December 14th, 2008

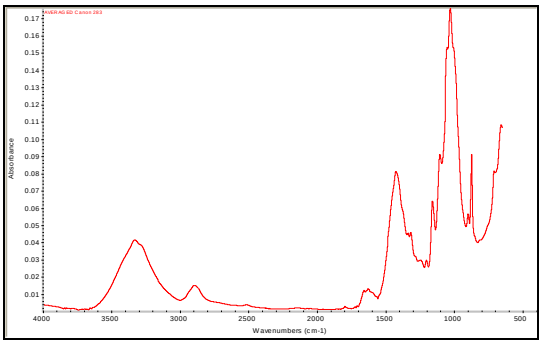

Figure 906: ATR spectrum of Canon 283 ink on paper AVERAGE

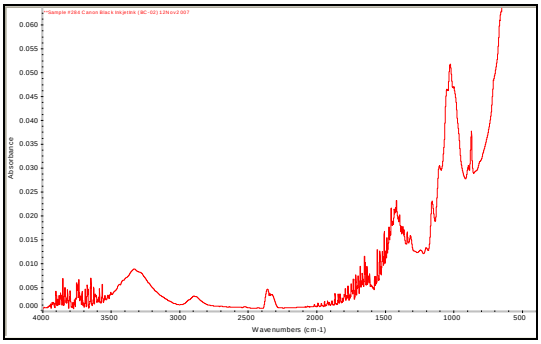

Figure 907: ATR spectrum of Canon 284 ink on paper collected November 12th, 2007

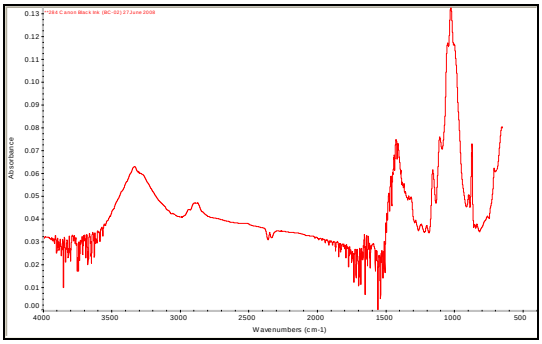

Figure 908: ATR spectrum of Canon 284 ink on paper collected June 27th, 2008

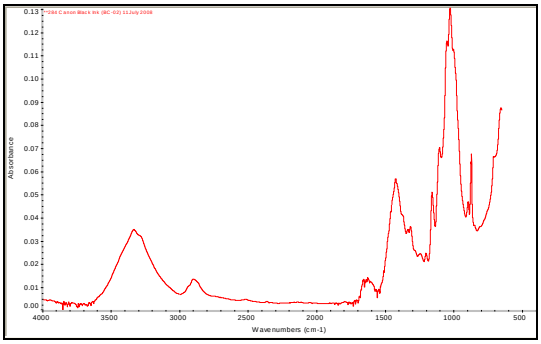

Figure 909: ATR spectrum of Canon 284 ink on paper collected July 11th, 2008

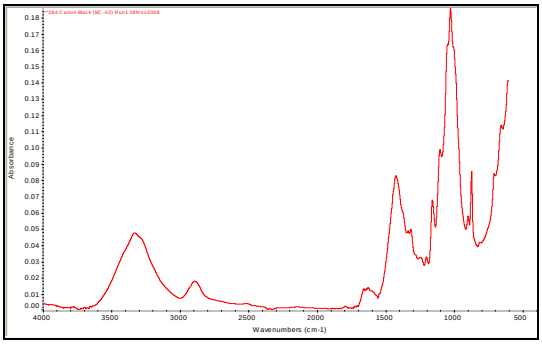

Figure 910: ATR spectrum of Canon 284 ink on paper collected November 28th, 2008

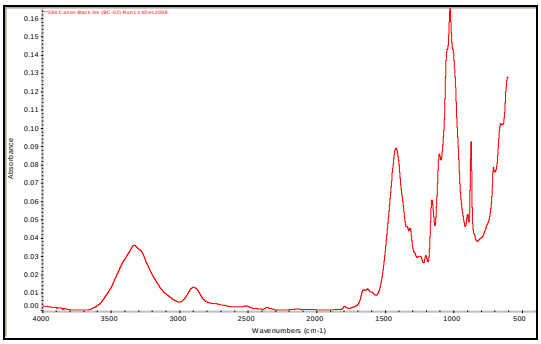

Figure 911: ATR spectrum of Canon 284 ink on paper collected December 14th, 2008

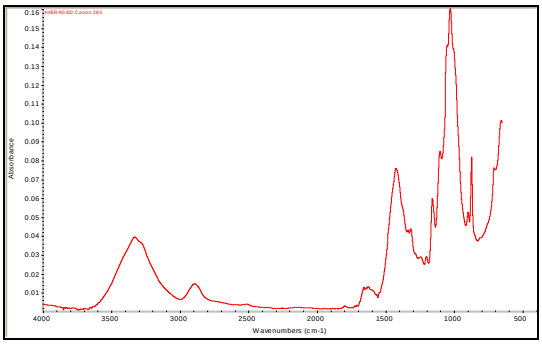

Figure 912: ATR spectrum of Canon 284 ink on paper AVERAGE

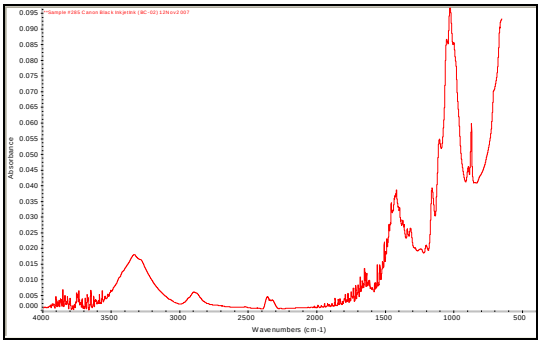

Figure 913: ATR spectrum of Canon 285 ink on paper collected November 12th, 2007

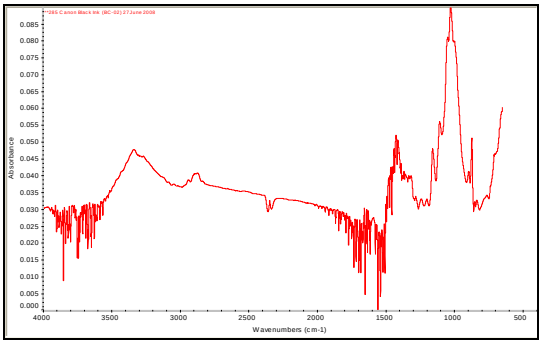

Figure 914: ATR spectrum of Canon 285 ink on paper collected June 27th, 2008

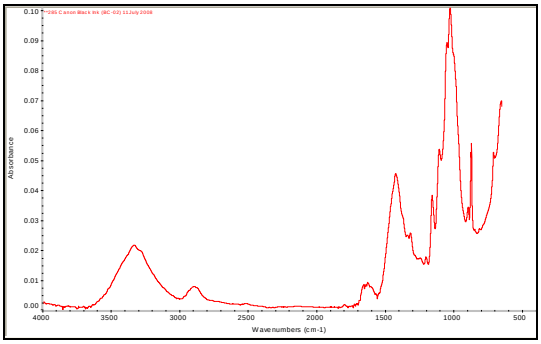

Figure 915: ATR spectrum of Canon 285 ink on paper collected July 11th, 2008

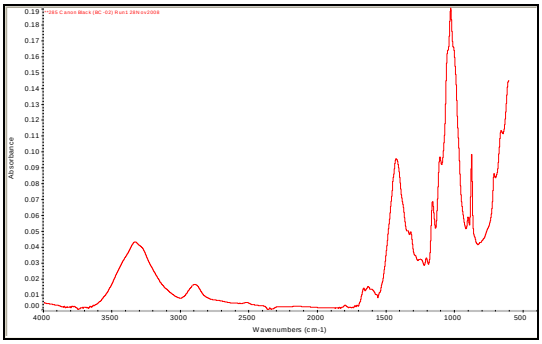

Figure 916: ATR spectrum of Canon 285 ink on paper collected November 28th, 2008

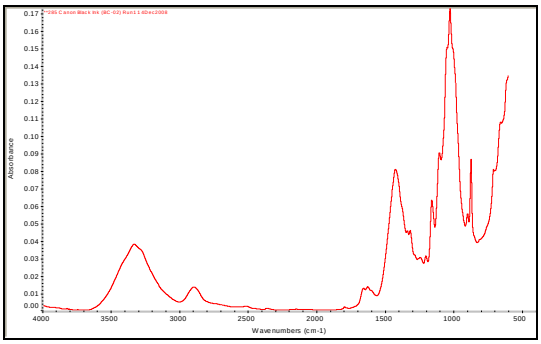

Figure 917: ATR spectrum of Canon 285 ink on paper collected December 14th, 2008

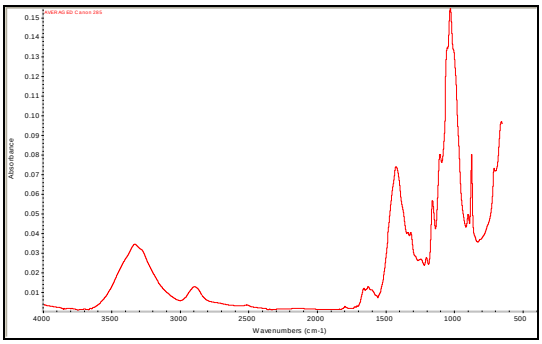

Figure 918: ATR spectrum of Canon 285 ink on paper AVERAGE

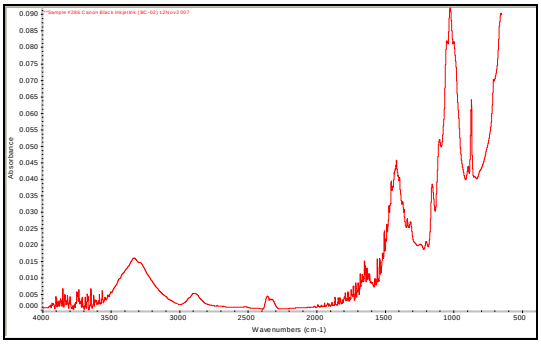

Figure 919: ATR spectrum of Canon 286 ink on paper collected November 12th, 2007

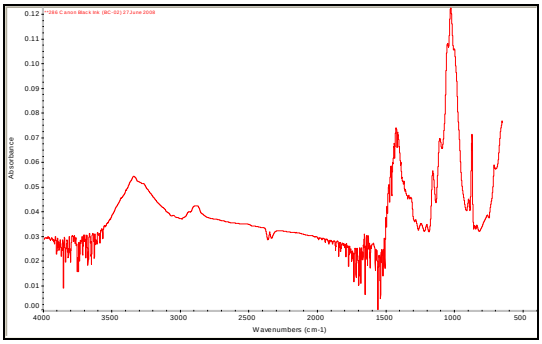

Figure 920: ATR spectrum of Canon 286 ink on paper collected June 27th, 2008

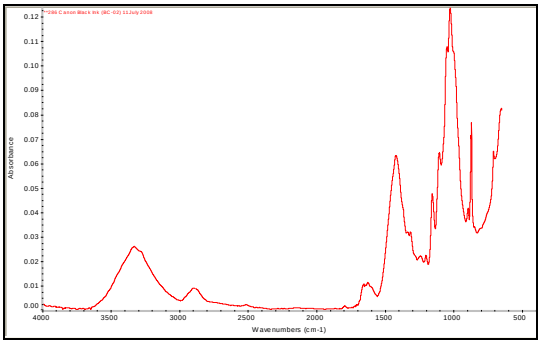

Figure 921: ATR spectrum of Canon 286 ink on paper collected July 11th, 2008

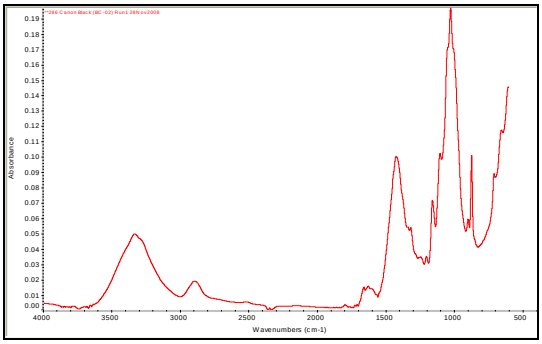

Figure 922: ATR spectrum of Canon 286 ink on paper collected November 28th, 2008

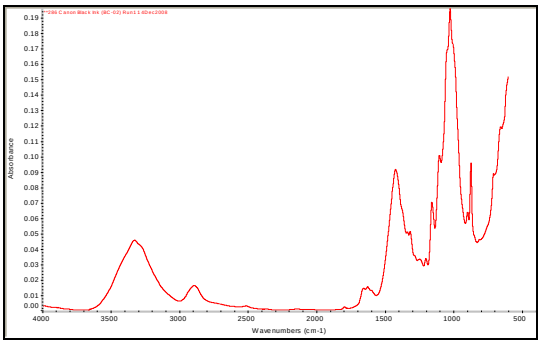

Figure 923: ATR spectrum of Canon 286 ink on paper collected December 14th, 2008

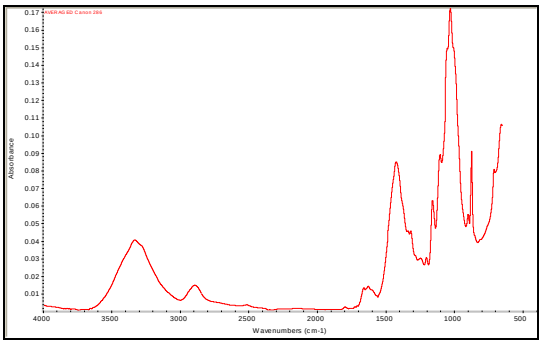

Figure 924: ATR spectrum of Canon 286 ink on paper AVERAGE

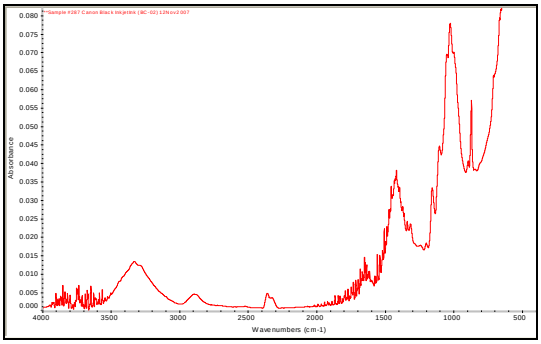

Figure 925: ATR spectrum of Canon 287 ink on paper collected November 12th, 2007

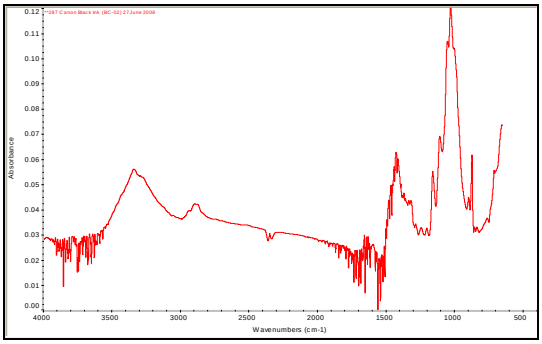

Figure 926: ATR spectrum of Canon 287 ink on paper collected June 27th, 2008

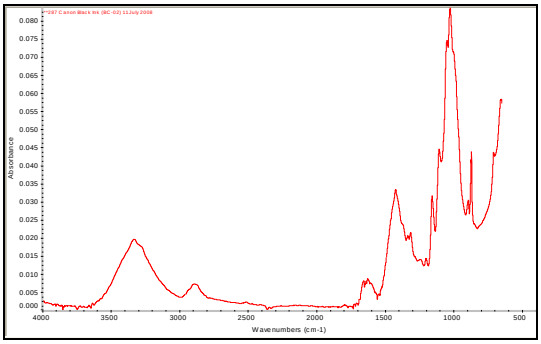

Figure 927: ATR spectrum of Canon 287 ink on paper collected July 11th, 2008

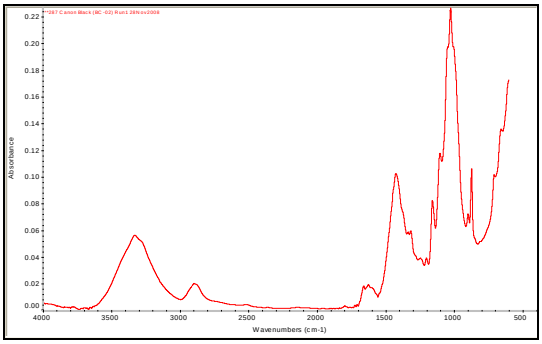

Figure 928: ATR spectrum of Canon 287 ink on paper collected November 28th, 2008

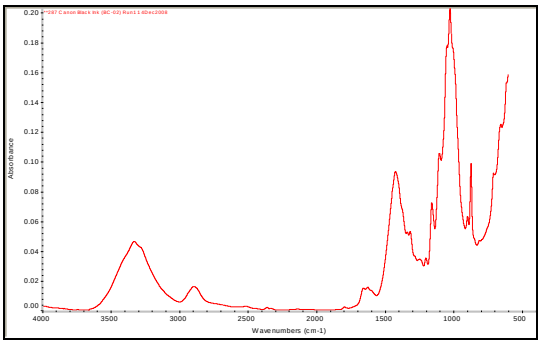

Figure 929: ATR spectrum of Canon 287 ink on paper collected December 14th, 2008

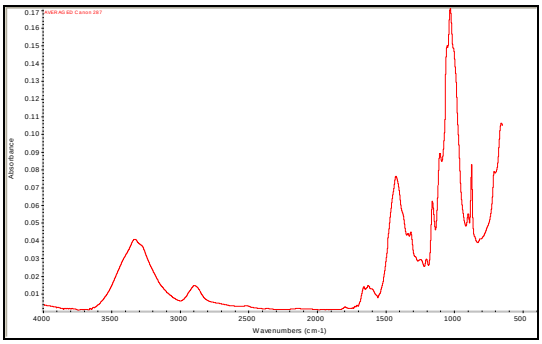

Figure 930: ATR spectrum of Canon 287 ink on paper AVERAGE

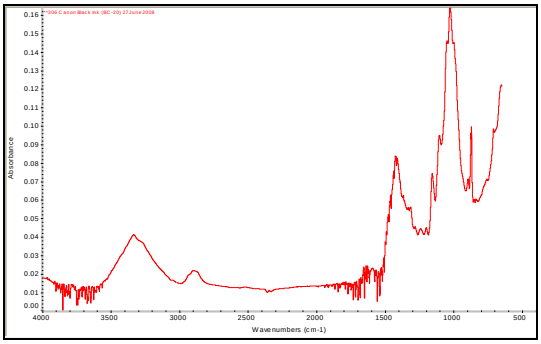

Figure 931: ATR spectrum of Canon 306 ink on paper collected June 27th, 2008

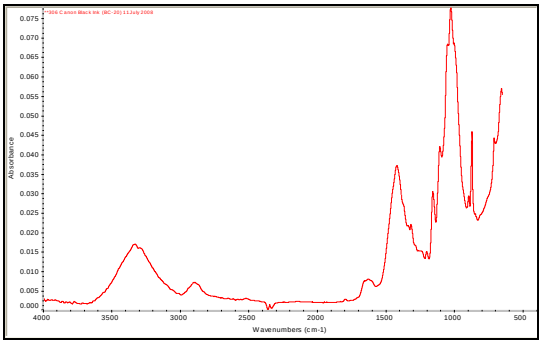

Figure 932: ATR spectrum of Canon 306 ink on paper collected July 11th, 2008

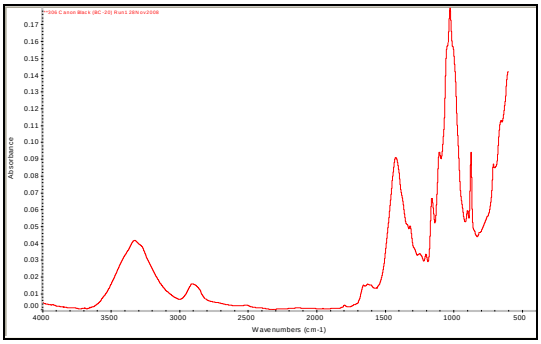

Figure 933: ATR spectrum of Canon 306 ink on paper collected November 28th, 2008

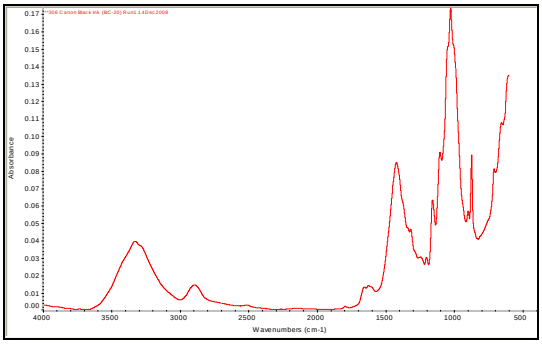

Figure 934: ATR spectrum of Canon 306 ink on paper collected December 14th, 2008

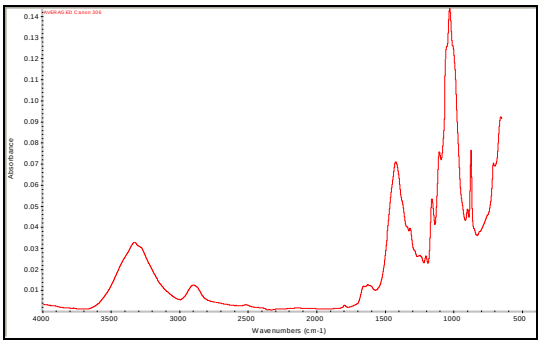

Figure 935: ATR spectrum of Canon 306 ink on paper AVERAGE

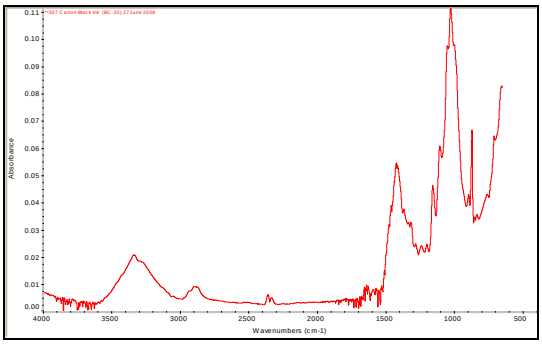

Figure 936: ATR spectrum of Canon 307 ink on paper collected June 27th, 2008

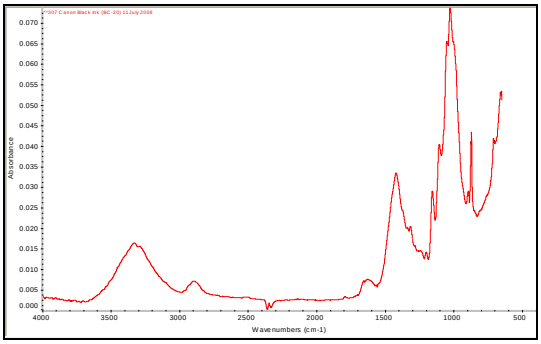

Figure 937: ATR spectrum of Canon 307 ink on paper collected July 11th, 2008

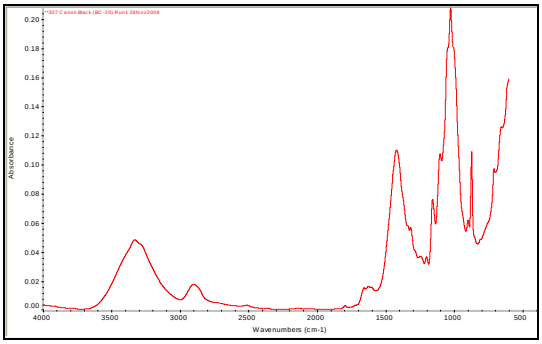

Figure 938: ATR spectrum of Canon 307 ink on paper collected November 28th, 2008

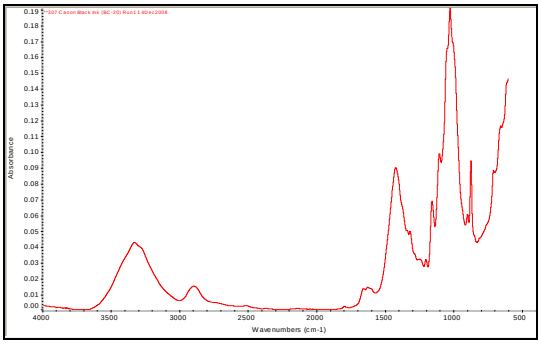

Figure 939: ATR spectrum of Canon 307 ink on paper collected December 14th, 2008

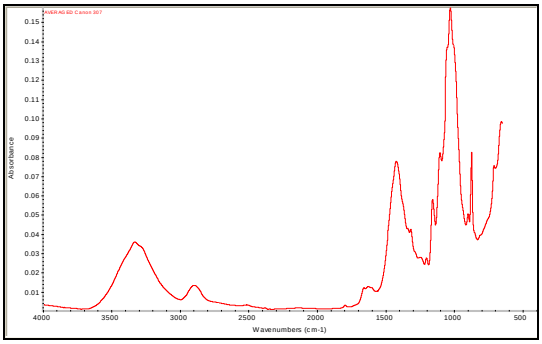

Figure 940: ATR spectrum of Canon 307 ink on paper AVERAGE

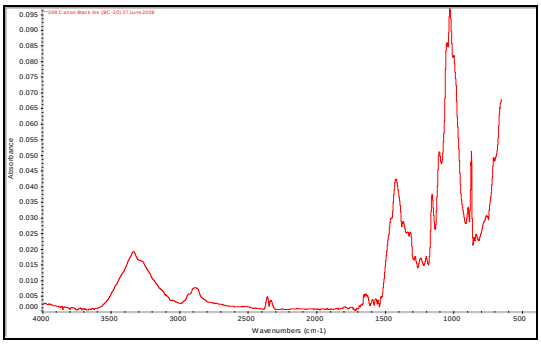

Figure 941: ATR spectrum of Canon 308 ink on paper collected June 27th, 2008

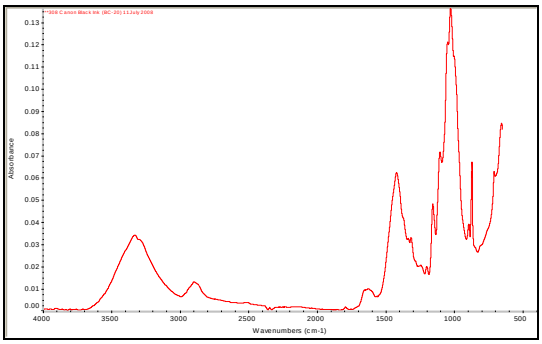

Figure 942: ATR spectrum of Canon 308 ink on paper collected July 11th, 2008

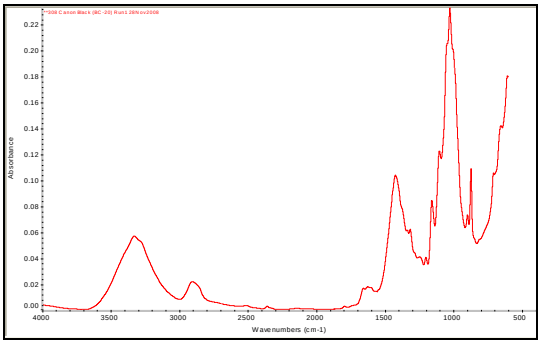

Figure 943: ATR spectrum of Canon 308 ink on paper collected November 28th, 2008

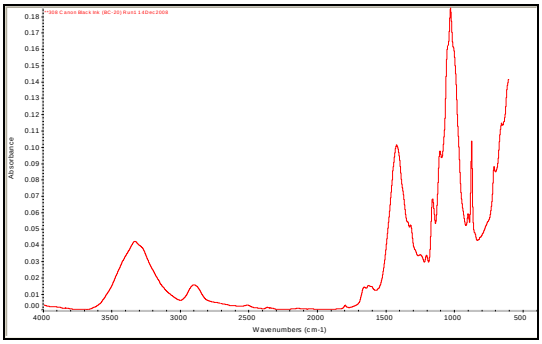

Figure 944: ATR spectrum of Canon 308 ink on paper collected December 14th, 2008

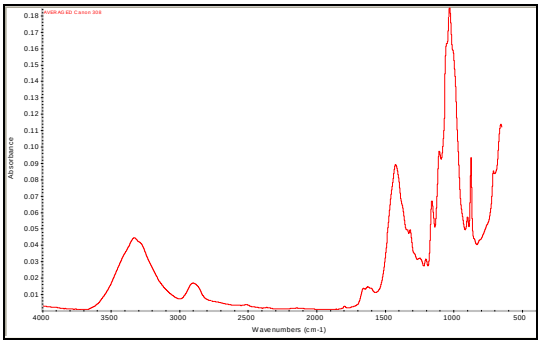

Figure 945: ATR spectrum of Canon 308 ink on paper AVERAGE

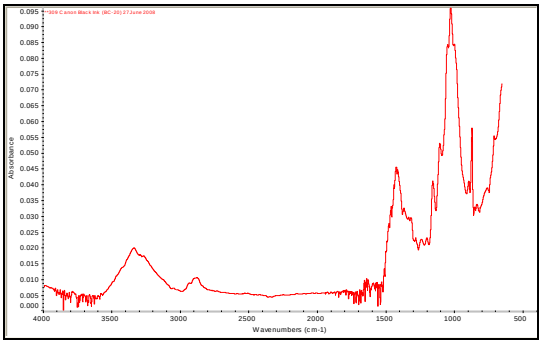

Figure 946: ATR spectrum of Canon 309 ink on paper collected June 27th, 2008

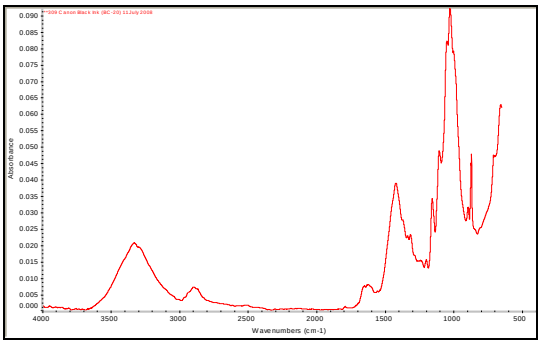

Figure 947: ATR spectrum of Canon 309 ink on paper collected July 11th, 2008

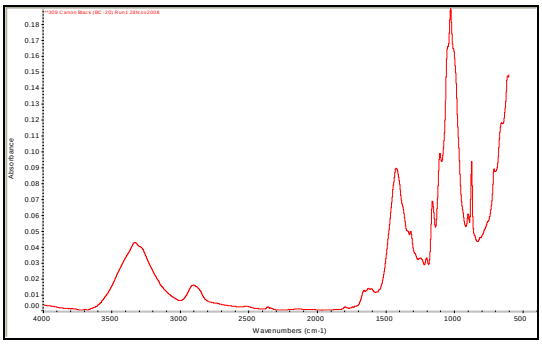

Figure 948: ATR spectrum of Canon 309 ink on paper collected November 28th, 2008

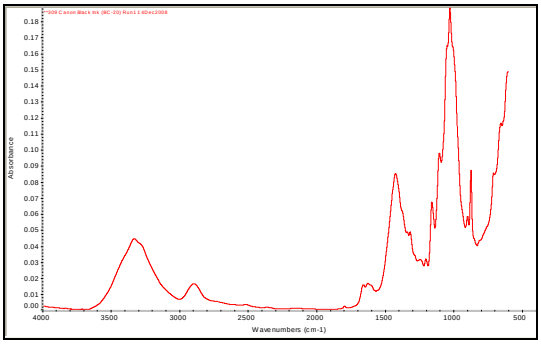

Figure 949: ATR spectrum of Canon 309 ink on paper collected December 14th, 2008

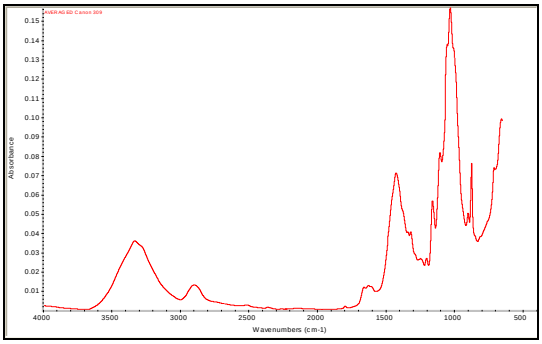

Figure 950: ATR spectrum of Canon 309 ink on paper AVERAGE

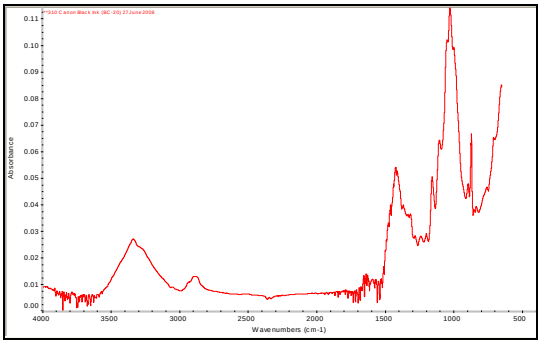

Figure 951: ATR spectrum of Canon 310 ink on paper collected June 27th, 2008

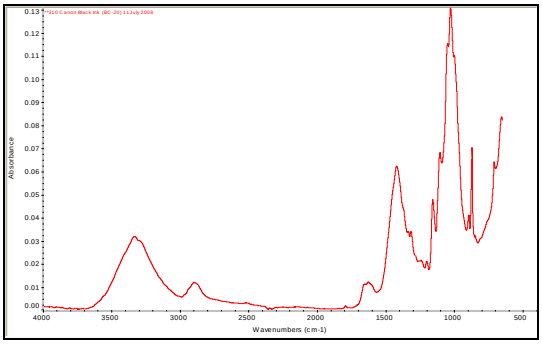

Figure 952: ATR spectrum of Canon 310 ink on paper collected July 11th, 2008

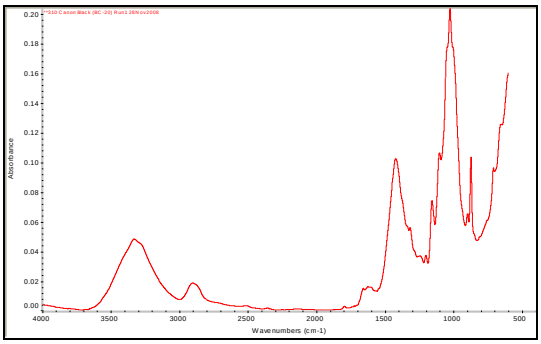

Figure 953: ATR spectrum of Canon 310 ink on paper collected November 28th, 2008

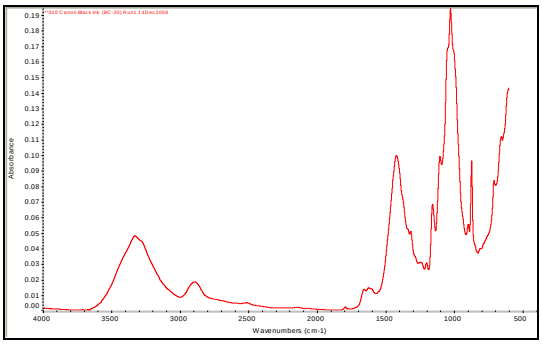

Figure 954: ATR spectrum of Canon 310 ink on paper collected December 14th, 2008

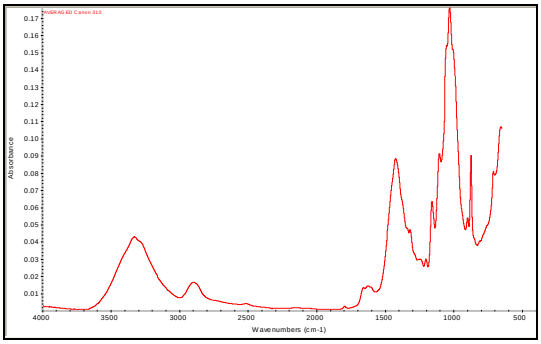

Figure 955: ATR spectrum of Canon 310 ink on paper AVERAGE

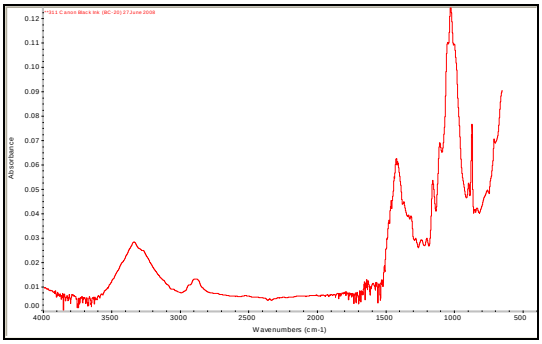

Figure 956: ATR spectrum of Canon 311 ink on paper collected June 27th, 2008

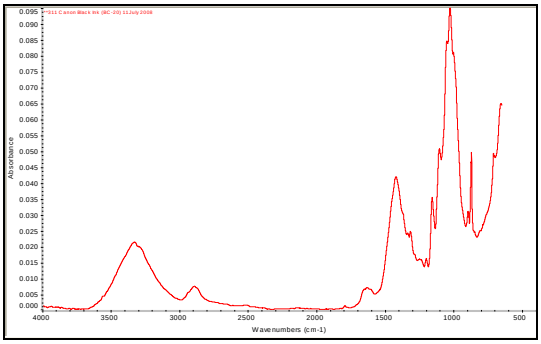

Figure 957: ATR spectrum of Canon 311 ink on paper collected July 11th, 2008

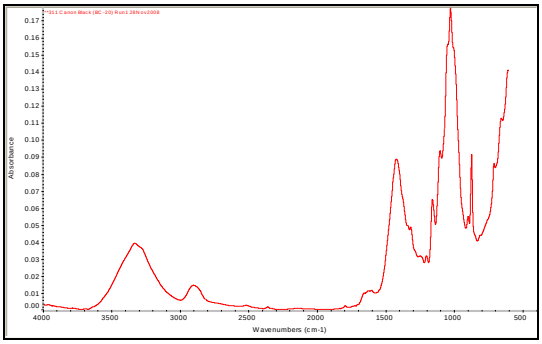

Figure 958: ATR spectrum of Canon 311 ink on paper collected November 28th, 2008

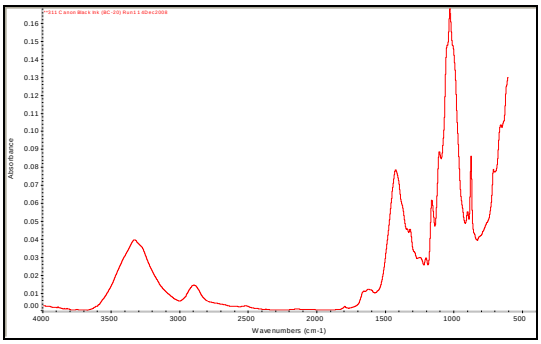

Figure 959: ATR spectrum of Canon 311 ink on paper collected December 14th, 2008

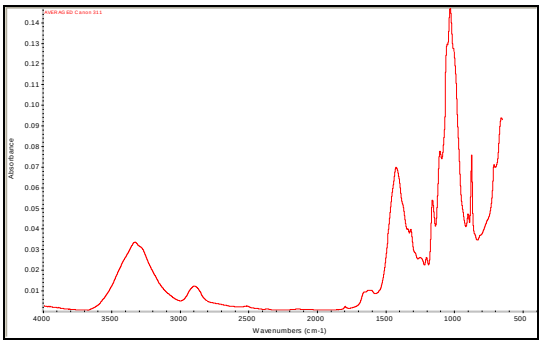

Figure 960: ATR spectrum of Canon 311 ink on paper AVERAGE

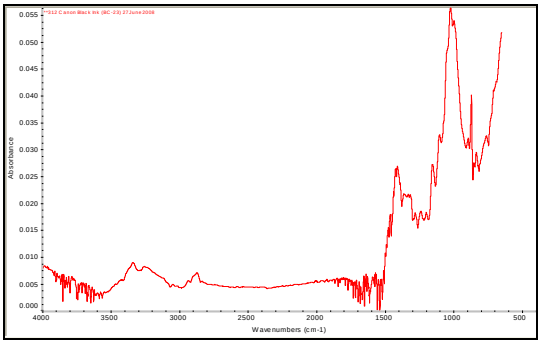

Figure 961: ATR spectrum of Canon 312 ink on paper collected June 27th, 2008

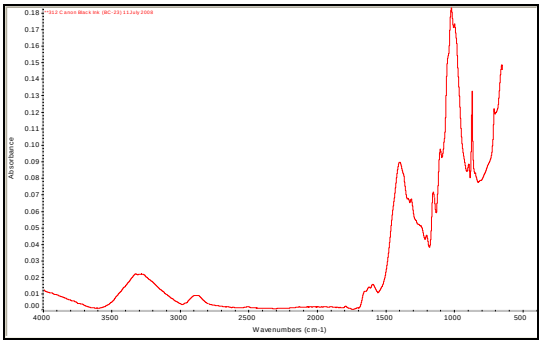

Figure 962: ATR spectrum of Canon 312 ink on paper collected July 11th, 2008

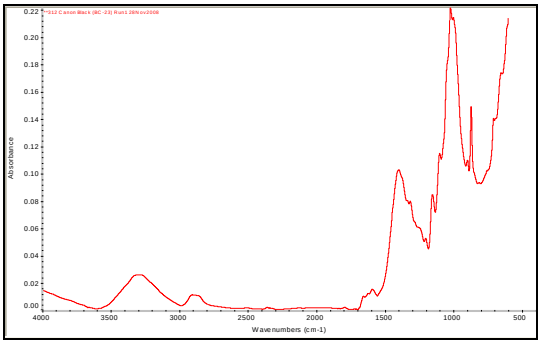

Figure 963: ATR spectrum of Canon 312 ink on paper collected November 28th, 2008

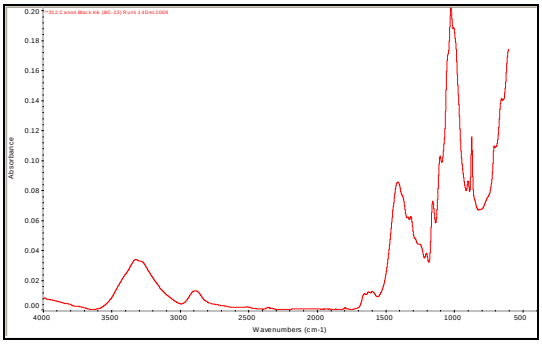

Figure 964: ATR spectrum of Canon 312 ink on paper collected December 14th, 2008

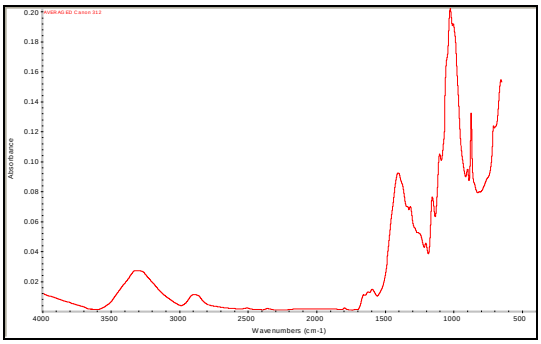

Figure 965: ATR spectrum of Canon 312 ink on paper AVERAGE

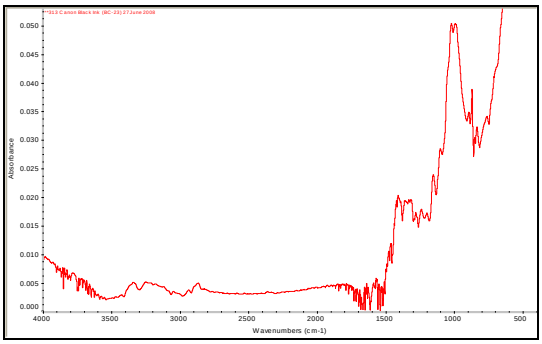

Figure 966: ATR spectrum of Canon 313 ink on paper collected June 27th, 2008

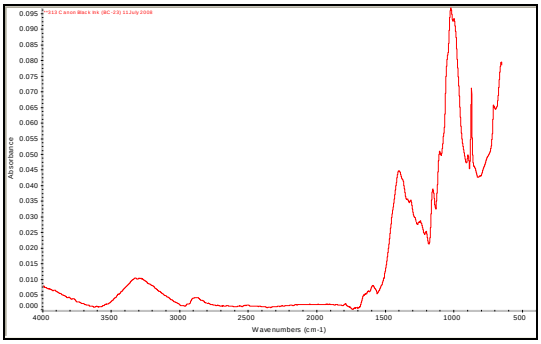

Figure 967: ATR spectrum of Canon 313 ink on paper collected July 11th, 2008

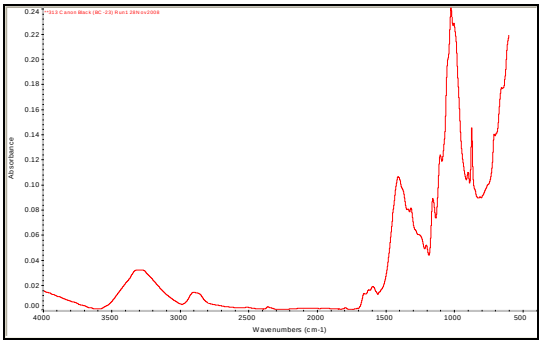

Figure 968: ATR spectrum of Canon 313 ink on paper collected November 28th, 2008

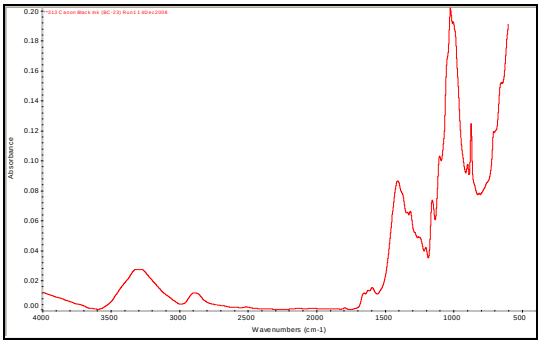

Figure 969: ATR spectrum of Canon 313 ink on paper collected December 14th, 2008

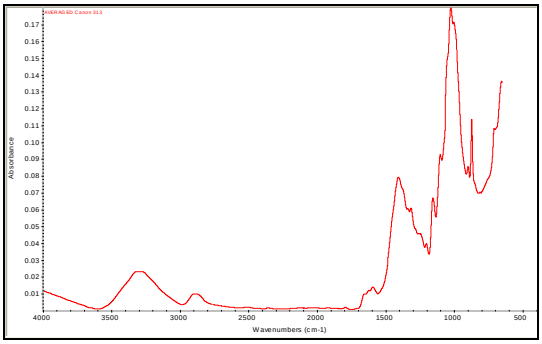

Figure 970: ATR spectrum of Canon 313 ink on paper AVERAGE

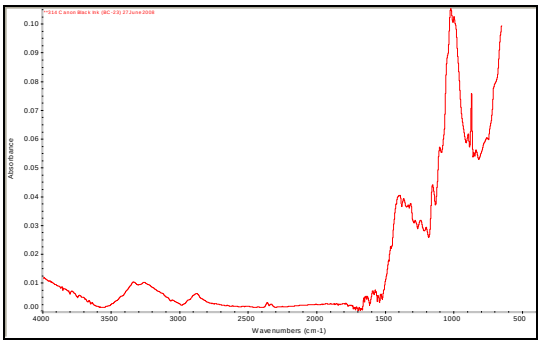

Figure 971: ATR spectrum of Canon 314 ink on paper collected June 27th, 2008

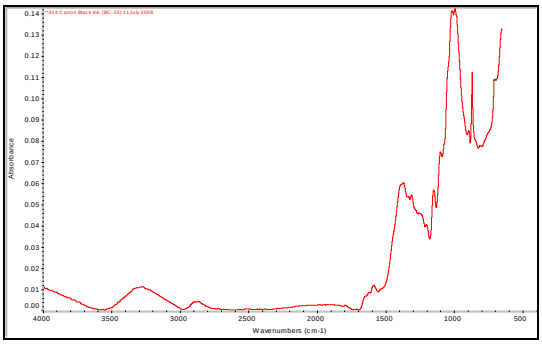

Figure 972: ATR spectrum of Canon 314 ink on paper collected July 11th, 2008

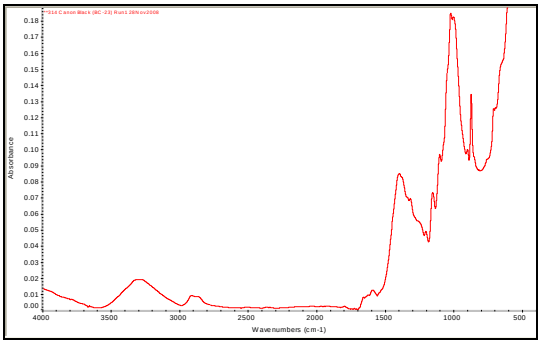

Figure 973: ATR spectrum of Canon 314 ink on paper collected November 28th, 2008

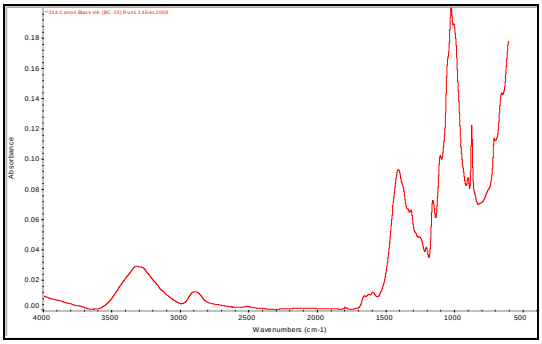

Figure 974: ATR spectrum of Canon 314 ink on paper collected December 14th, 2008

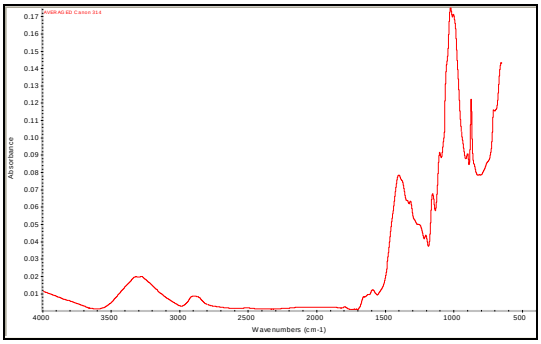

Figure 975: ATR spectrum of Canon 314 ink on paper AVERAGE

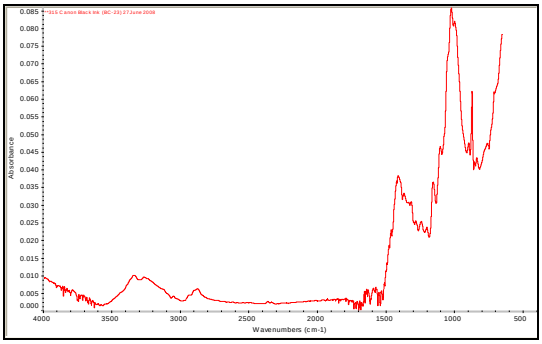

Figure 976: ATR spectrum of Canon 315 ink on paper collected June 27th, 2008

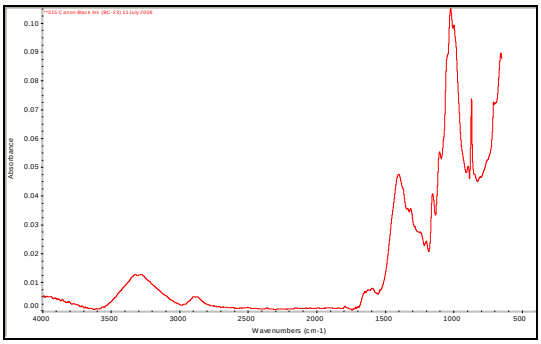

Figure 977: ATR spectrum of Canon 315 ink on paper collected July 11th, 2008

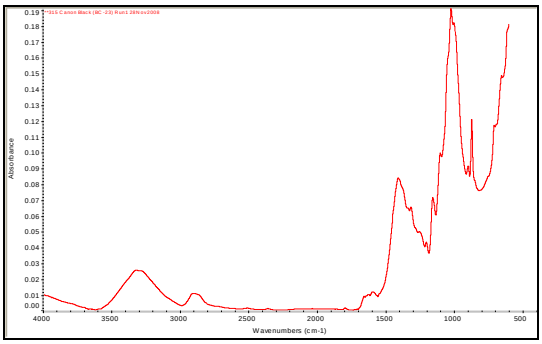

Figure 978: ATR spectrum of Canon 315 ink on paper collected November 28th, 2008

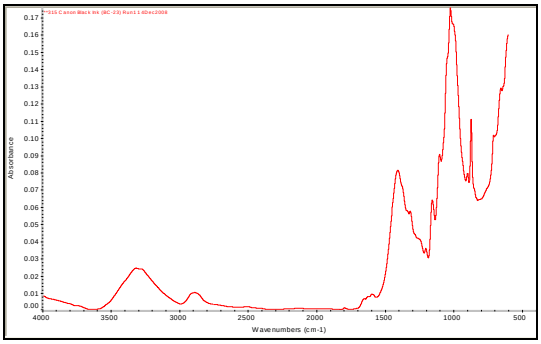

Figure 979: ATR spectrum of Canon 315 ink on paper collected December 14th, 2008

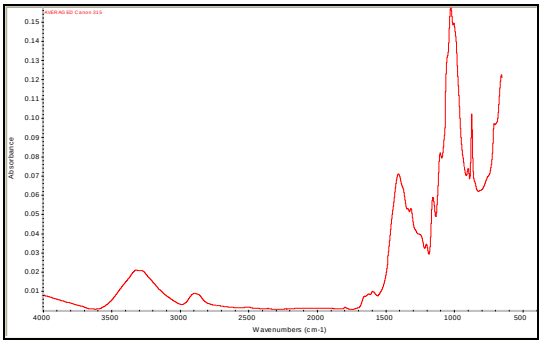

Figure 980: ATR spectrum of Canon 315 ink on paper AVERAGE

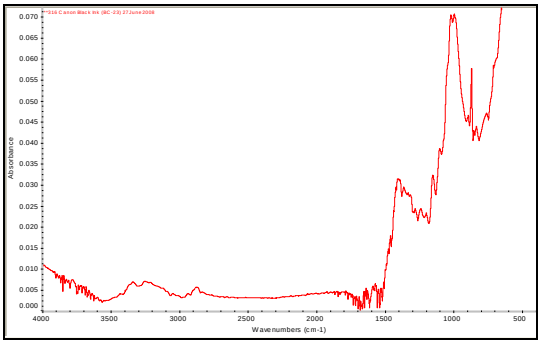

Figure 981: ATR spectrum of Canon 316 ink on paper collected June 27th, 2008

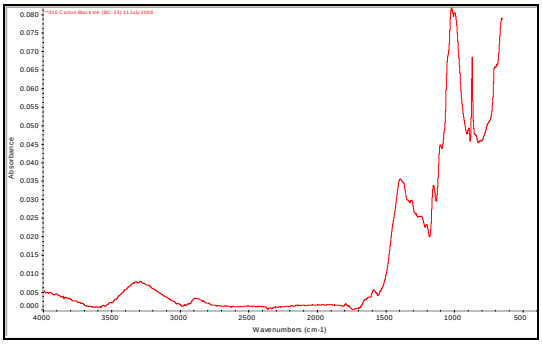

Figure 982: ATR spectrum of Canon 316 ink on paper collected July 11th, 2008

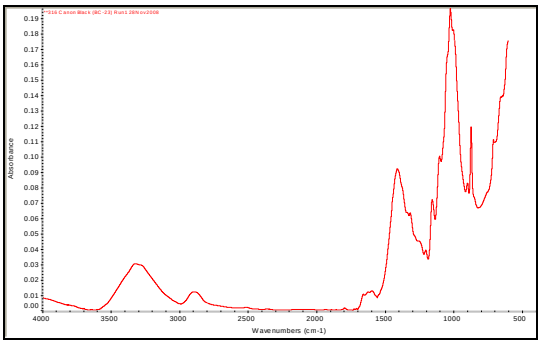

Figure 983: ATR spectrum of Canon 316 ink on paper collected November 28th, 2008

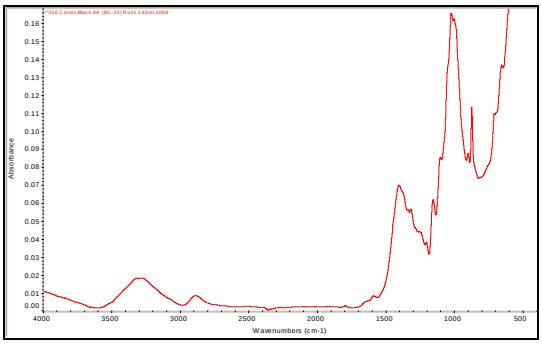

Figure 984: ATR spectrum of Canon 316 ink on paper collected December 14th, 2008

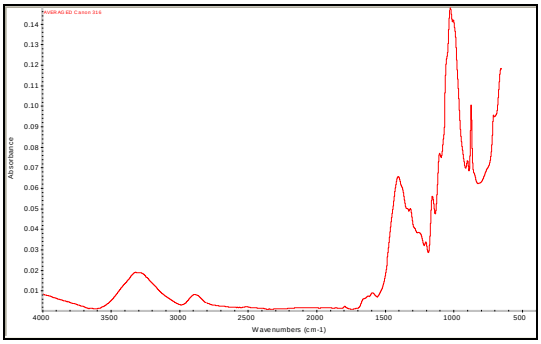

Figure 985: ATR spectrum of Canon 316 ink on paper AVERAGE

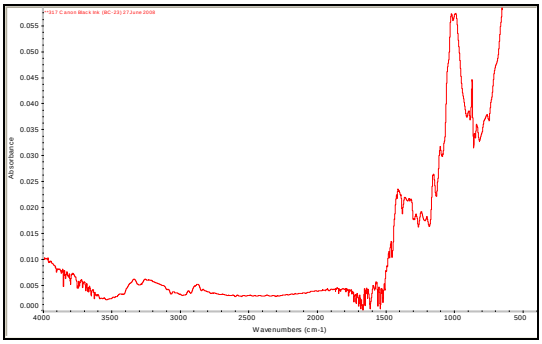

Figure 986: ATR spectrum of Canon 317 ink on paper collected June 27th, 2008

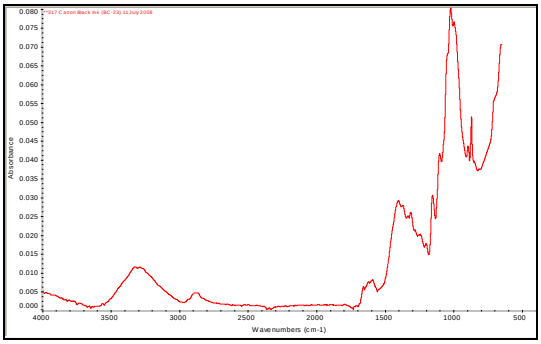

Figure 987: ATR spectrum of Canon 317 ink on paper collected July 11th, 2008

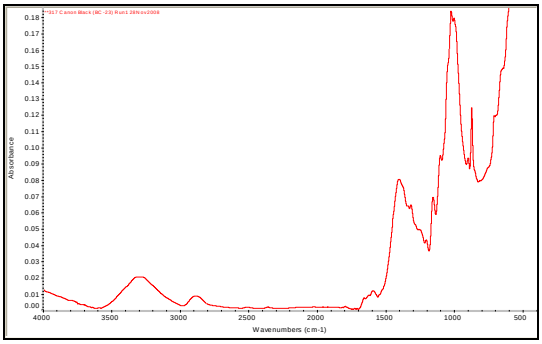

Figure 988: ATR spectrum of Canon 317 ink on paper collected November 28th, 2008

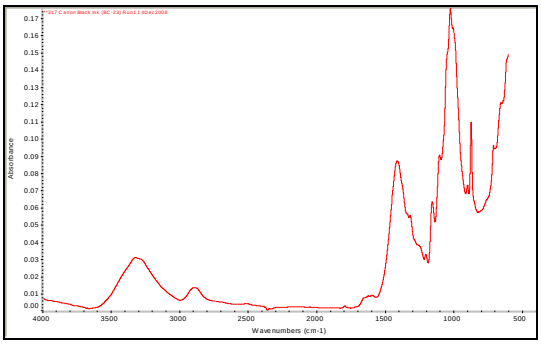

Figure 989: ATR spectrum of Canon 317 ink on paper collected December 14th, 2008

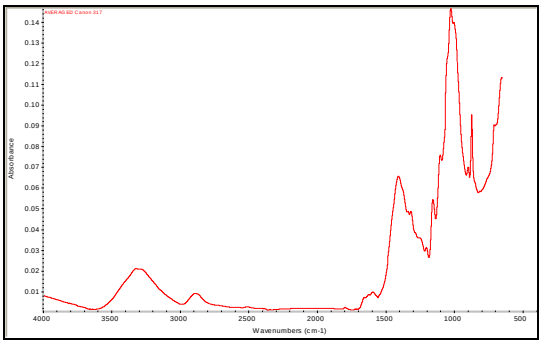

Figure 990: ATR spectrum of Canon 317 ink on paper AVERAGE

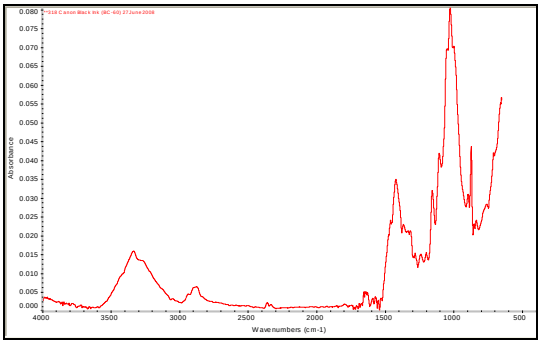

Figure 991: ATR spectrum of Canon 318 ink on paper collected June 27th, 2008

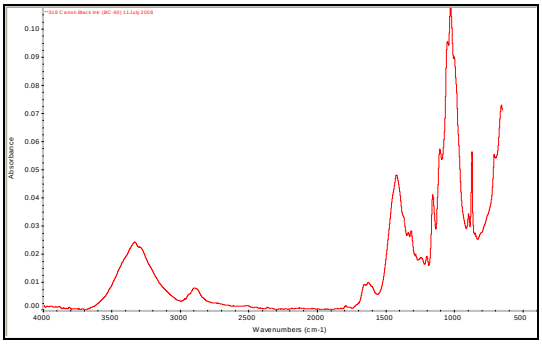

Figure 992: ATR spectrum of Canon 318 ink on paper collected July 11th, 2008

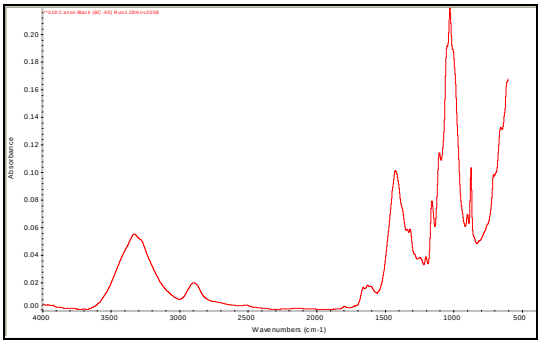

Figure 993: ATR spectrum of Canon 318 ink on paper collected November 28th, 2008

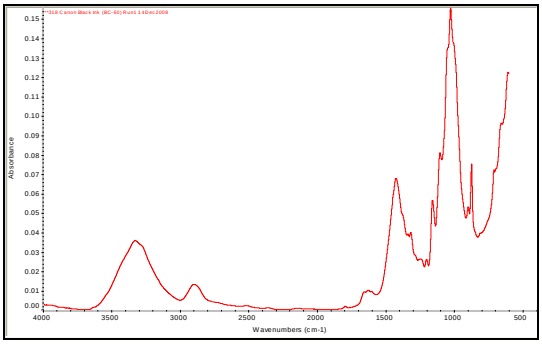

Figure 994: ATR spectrum of Canon 318 ink on paper collected December 14th, 2008

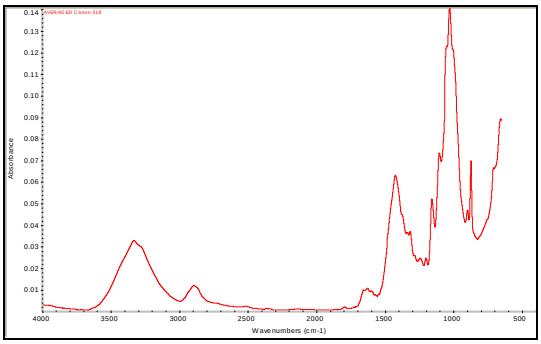

Figure 995: ATR spectrum of Canon 318 ink on paper AVERAGE

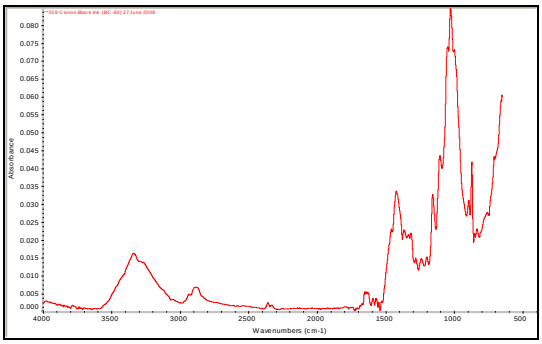

Figure 996: ATR spectrum of Canon 319 ink on paper collected June 27th, 2008

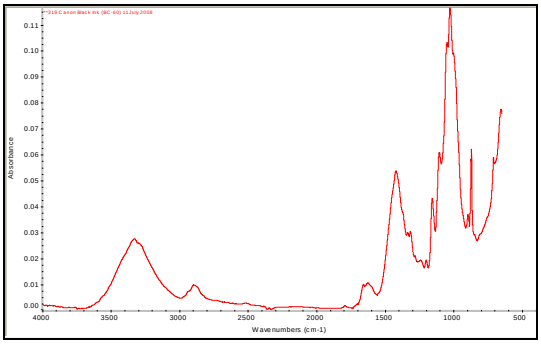

Figure 997: ATR spectrum of Canon 319 ink on paper collected July 11th, 2008

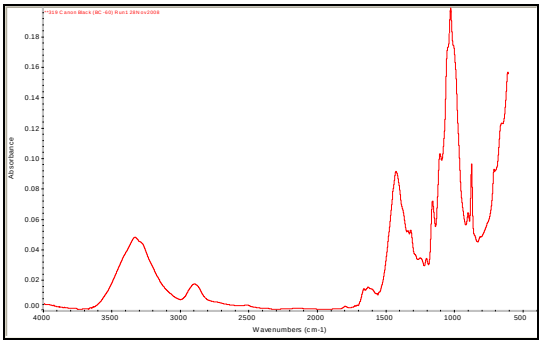

Figure 998: ATR spectrum of Canon 319 ink on paper collected November 28th, 2008

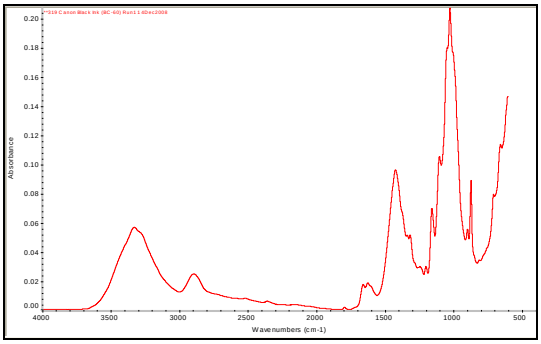

Figure 999: ATR spectrum of Canon 319 ink on paper collected December 14th, 2008

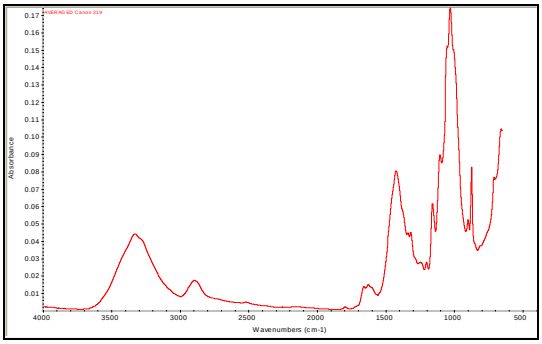

Figure 1000: ATR spectrum of Canon 319 ink on paper AVERAGE

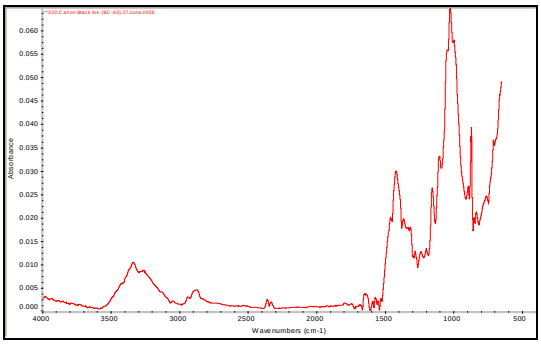

Figure 1001: ATR spectrum of Canon 320 ink on paper collected June 27th, 2008

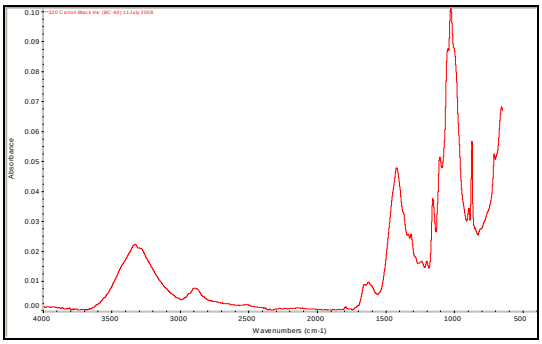

Figure 1002: ATR spectrum of Canon 320 ink on paper collected July 11th, 2008

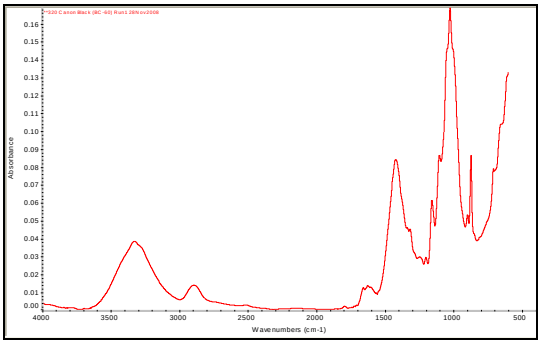

Figure 1003: ATR spectrum of Canon 320 ink on paper collected November 28th, 2008

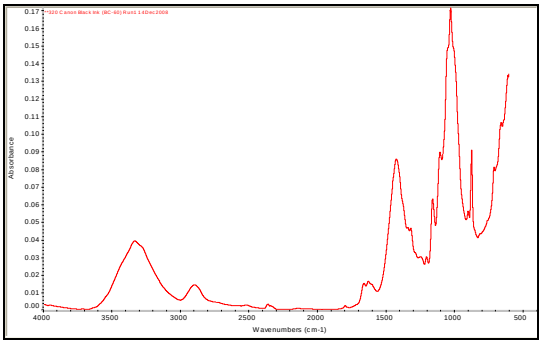

Figure 1004: ATR spectrum of Canon 320 ink on paper collected December 14th, 2008

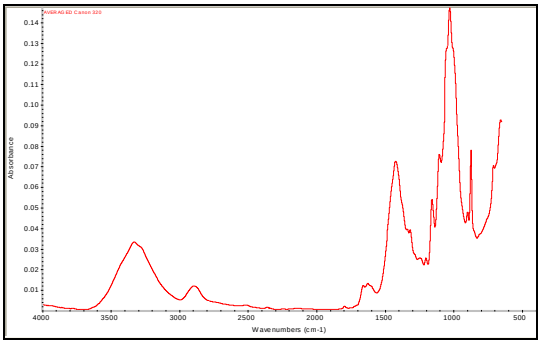

Figure 1005: ATR spectrum of Canon 320 ink on paper AVERAGE

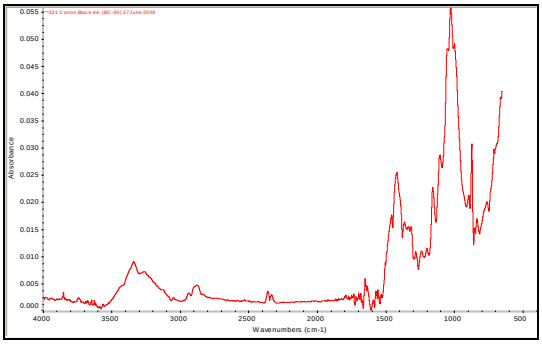

Figure 1006: ATR spectrum of Canon 321 ink on paper collected June 27th, 2008

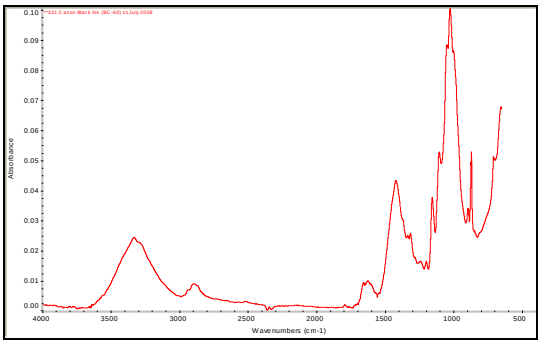

Figure 1007: ATR spectrum of Canon 321 ink on paper collected July 11th, 2008

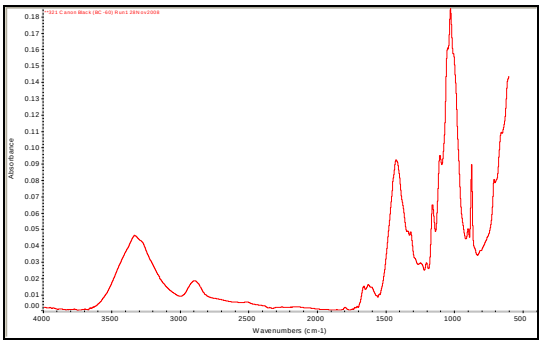

Figure 1008: ATR spectrum of Canon 321 ink on paper collected November 28th, 2008

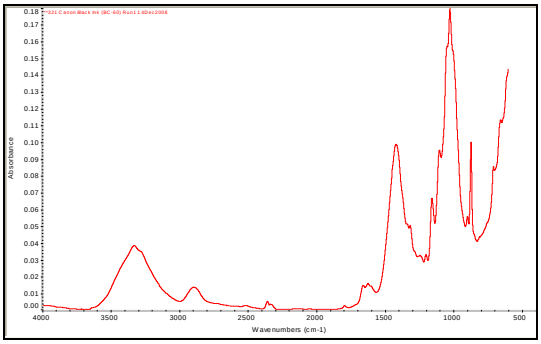

Figure 1009: ATR spectrum of Canon 321 ink on paper collected December 14th, 2008

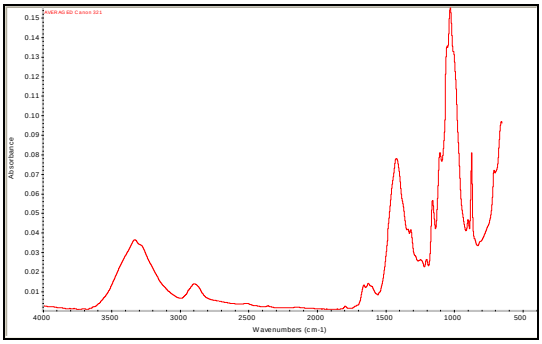

Figure 1010: ATR spectrum of Canon 321 ink on paper AVERAGE

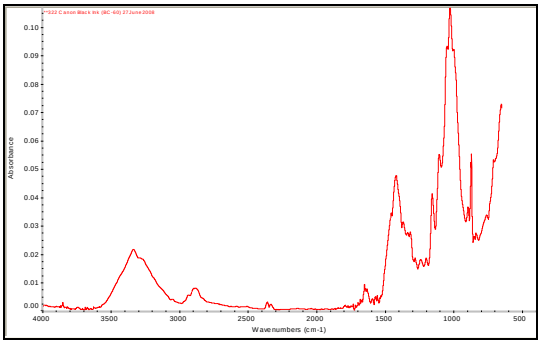

Figure 1011: ATR spectrum of Canon 322 ink on paper collected June 27th, 2008

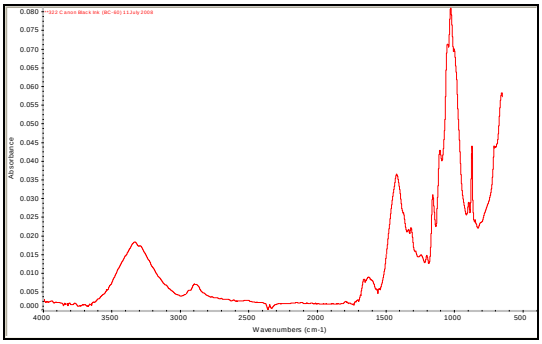

Figure 1012: ATR spectrum of Canon 322 ink on paper collected July 11th, 2008

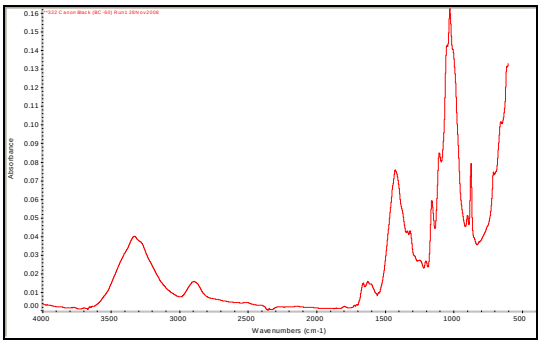

Figure 1013: ATR spectrum of Canon 322 ink on paper collected November 28th, 2008

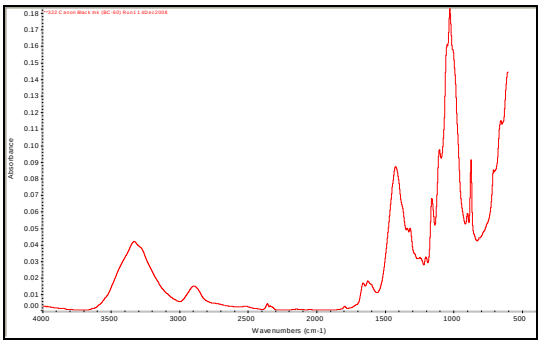

Figure 1014: ATR spectrum of Canon 322 ink on paper collected December 14th, 2008

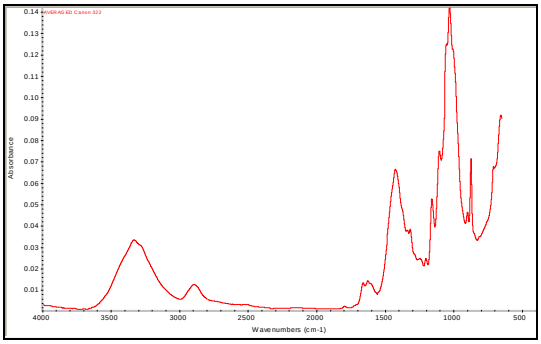

Figure 1015: ATR spectrum of Canon 322 ink on paper AVERAGE

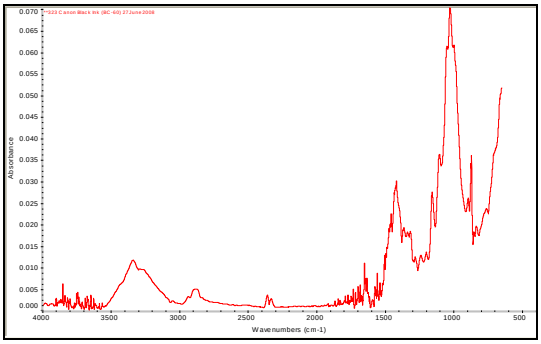

Figure 1016: ATR spectrum of Canon 323 ink on paper collected June 27th, 2008

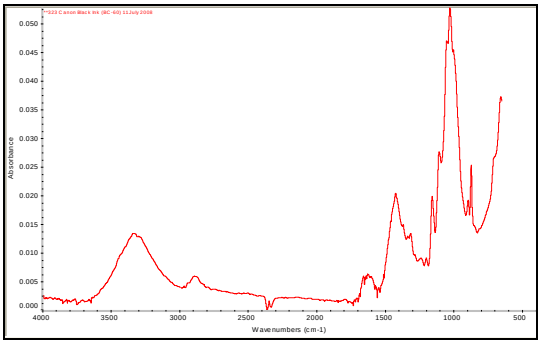

Figure 1017: ATR spectrum of Canon 323 ink on paper collected July 11th, 2008

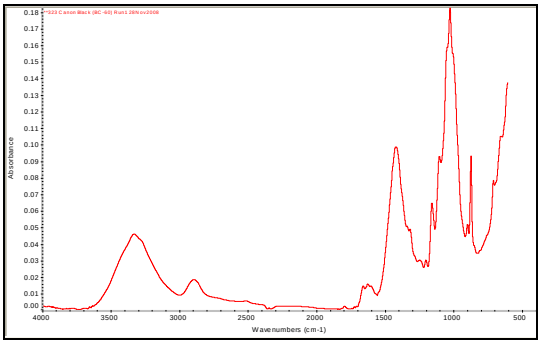

Figure 1018: ATR spectrum of Canon 323 ink on paper collected November 28th, 2008

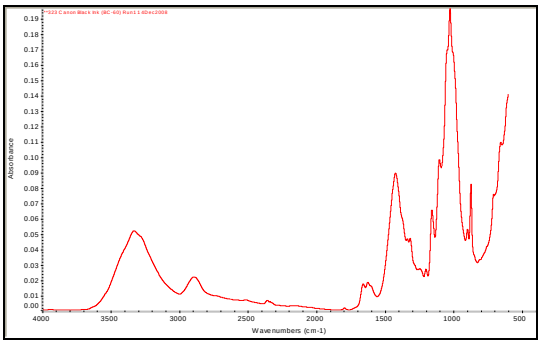

Figure 1019: ATR spectrum of Canon 323 ink on paper collected December 14th, 2008

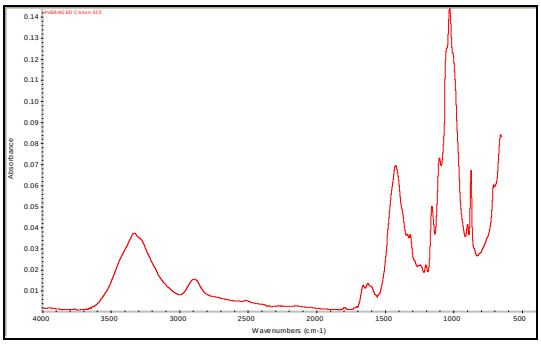

Figure 1020: ATR spectrum of Canon 323 ink on paper AVERAGE

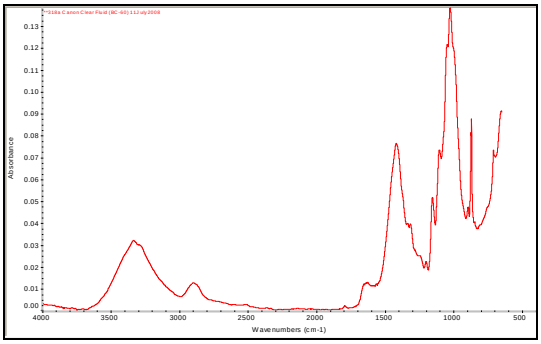

Figure 1021: ATR spectrum of Canon 318a ink on paper collected July 11th, 2008

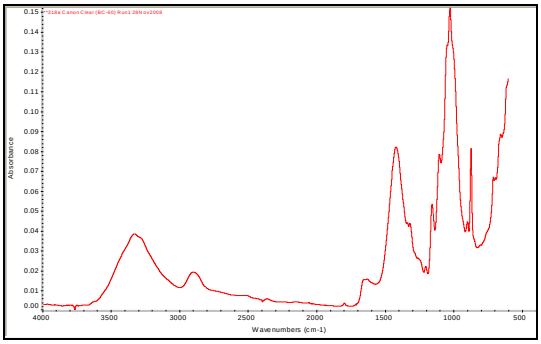

Figure 1022: ATR spectrum of Canon 318a ink on paper collected November 28th, 2008

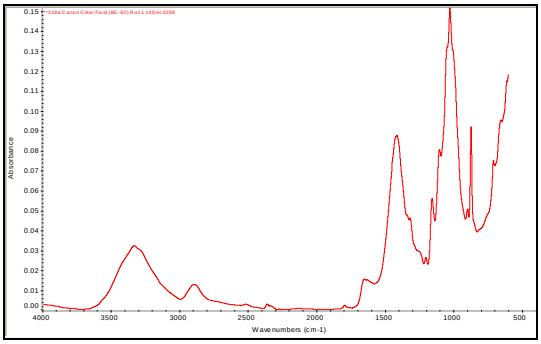

Figure 1023: ATR spectrum of Canon 318a ink on paper collected December 14th, 2008

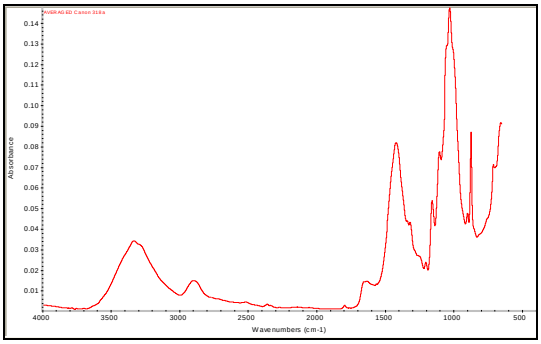

Figure 1024: ATR spectrum of Canon 318a ink on paper AVERAGE

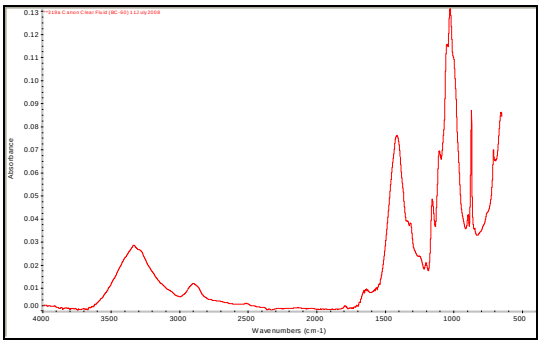

Figure 1025: ATR spectrum of Canon 319a ink on paper collected July 11th, 2008

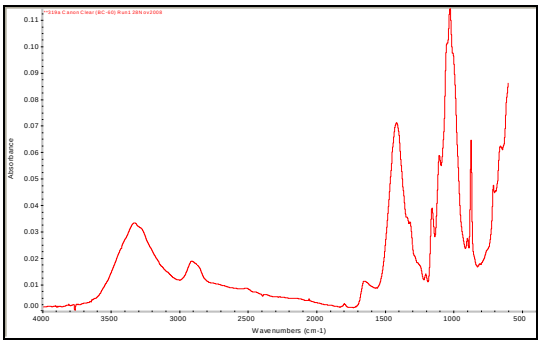

Figure 1026: ATR spectrum of Canon 319a ink on paper collected November 28th, 2008

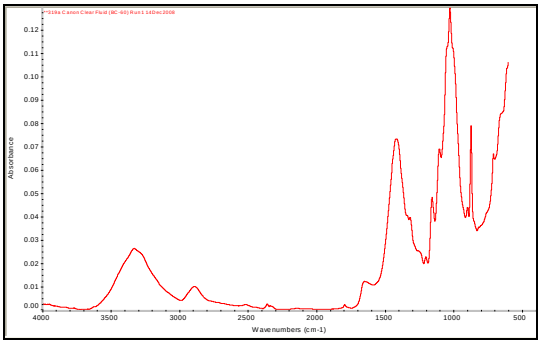

Figure 1027: ATR spectrum of Canon 319a ink on paper collected December 14th, 2008

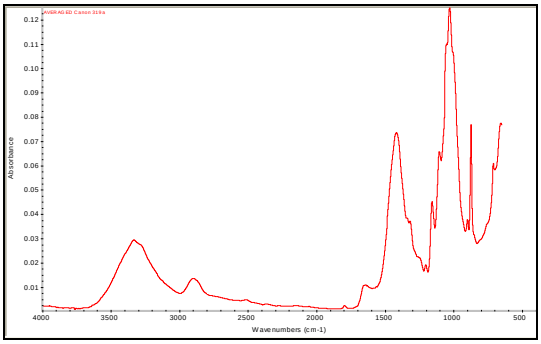

Figure 1028: ATR spectrum of Canon 319a ink on paper AVERAGE

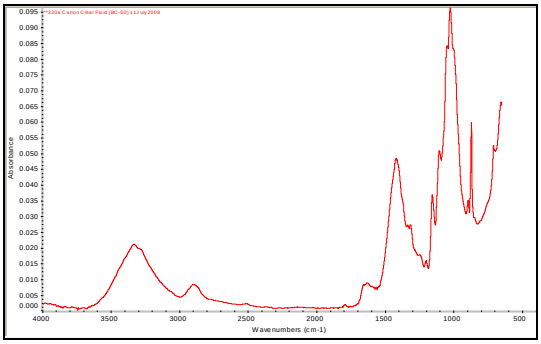

Figure 1029: ATR spectrum of Canon 320a ink on paper collected July 11th, 2008

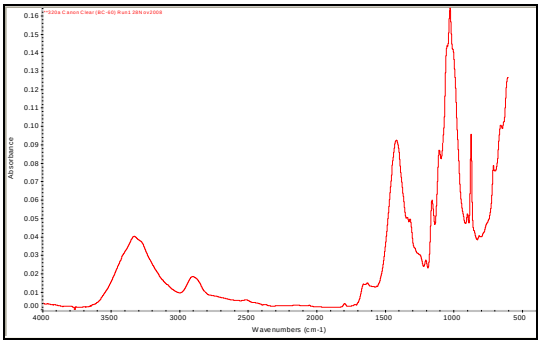

Figure 1030: ATR spectrum of Canon 320a ink on paper collected November 28th, 2008

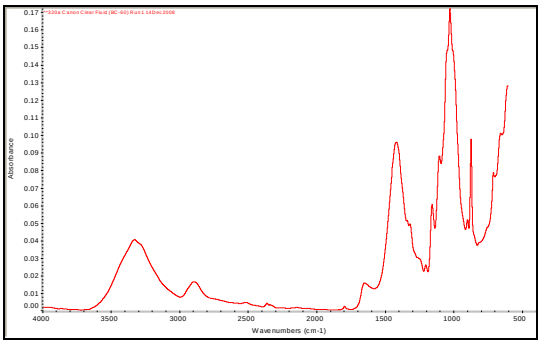

Figure 1031: ATR spectrum of Canon 320a ink on paper collected December 14th, 2008

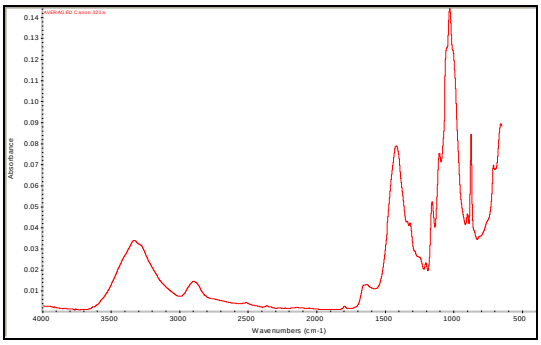

Figure 1032: ATR spectrum of Canon 320a ink on paper AVERAGE

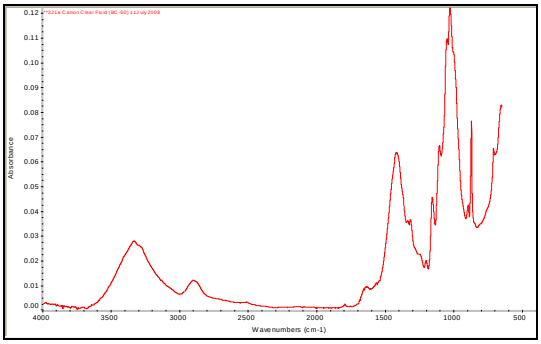

Figure 1033: ATR spectrum of Canon 321a ink on paper collected July 11th, 2008

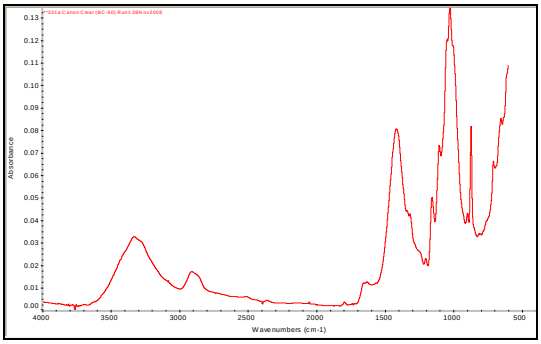

Figure 1034: ATR spectrum of Canon 321a ink on paper collected November 28th, 2008

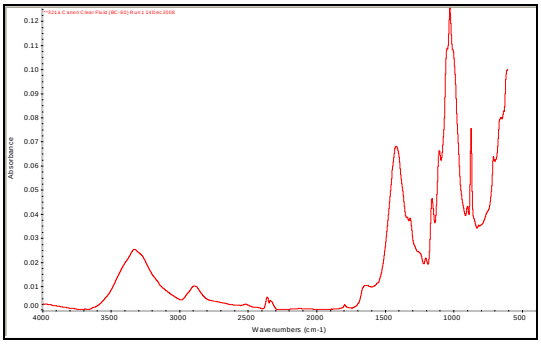

Figure 1035: ATR spectrum of Canon 321a ink on paper collected December 14th, 2008

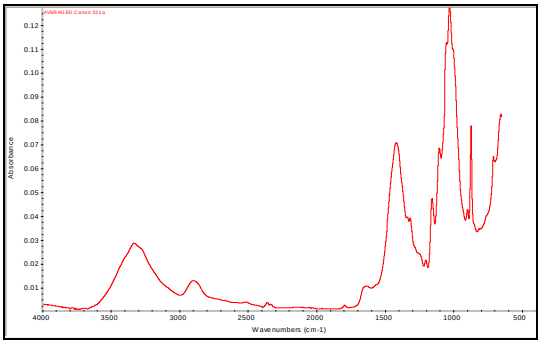

Figure 1036: ATR spectrum of Canon 321a ink on paper AVERAGE

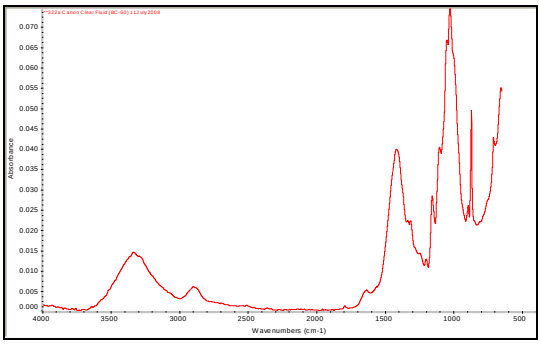

Figure 1037: ATR spectrum of Canon 322a ink on paper collected July 11th, 2008

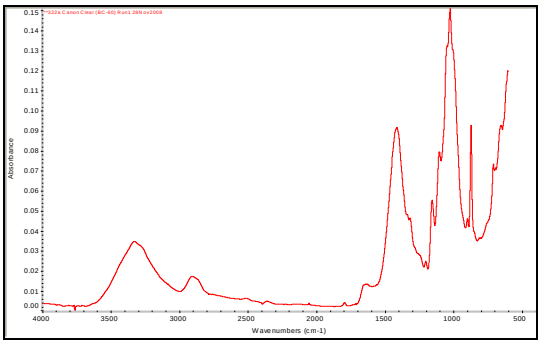

Figure 1038: ATR spectrum of Canon 322a ink on paper collected November 28th, 2008

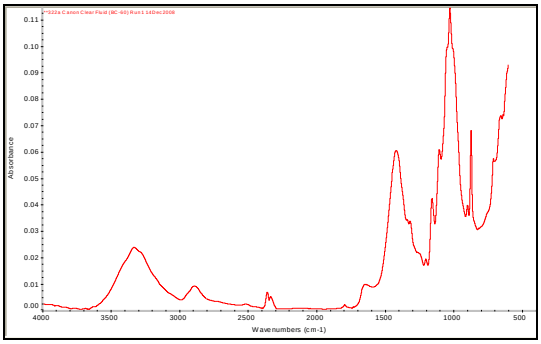

Figure 1039: ATR spectrum of Canon 322a ink on paper collected December 14th, 2008

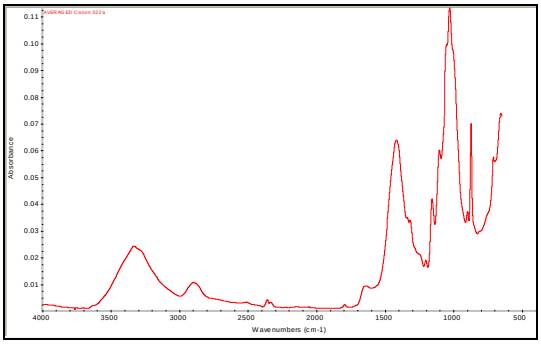

Figure 1040: ATR spectrum of Canon 322a ink on paper AVERAGE

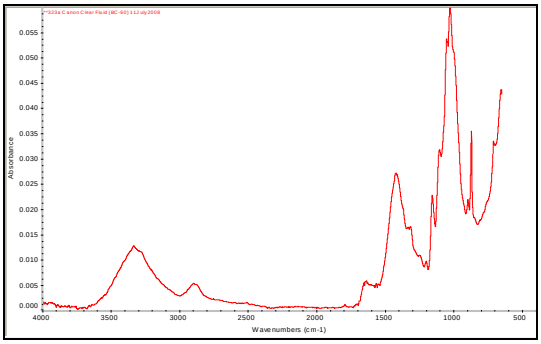

Figure 1041: ATR spectrum of Canon 323a ink on paper collected July 11th, 2008

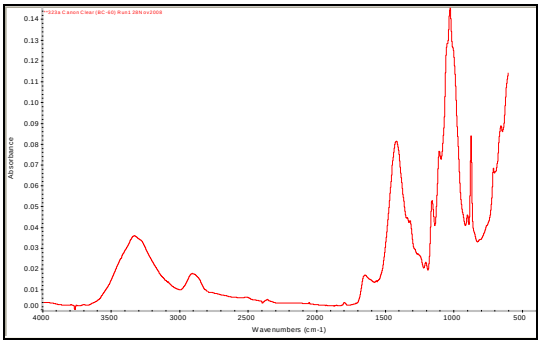

Figure 1042: ATR spectrum of Canon 323a ink on paper collected November 28th, 2008

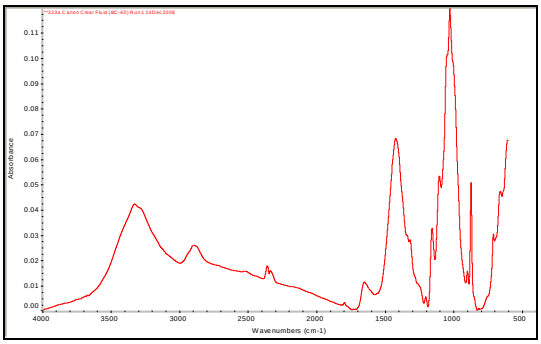

Figure 1043: ATR spectrum of Canon 323a ink on paper collected December 14th, 2008

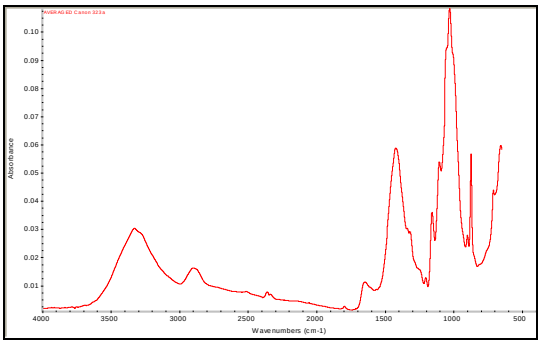

Figure 1044: ATR spectrum of Canon 323a ink on paper AVERAGE

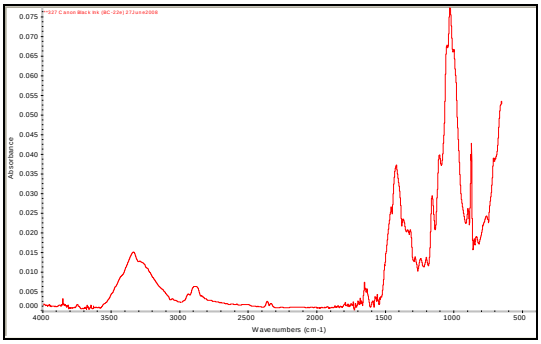

Figure 1045: ATR spectrum of Canon 327 ink on paper collected June 27th, 2008

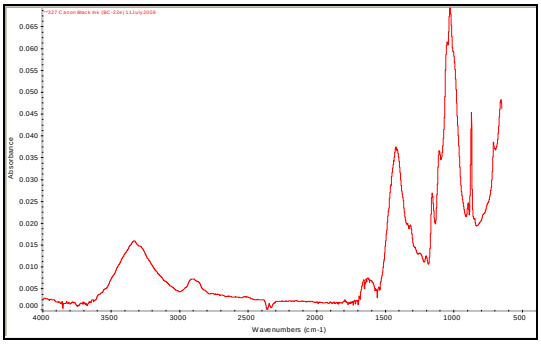

Figure 1046: ATR spectrum of Canon 327 ink on paper collected July 11th, 2008

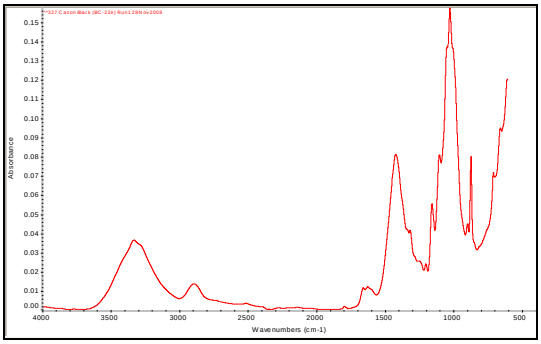

Figure 1047: ATR spectrum of Canon 327 ink on paper collected November 28th, 2008

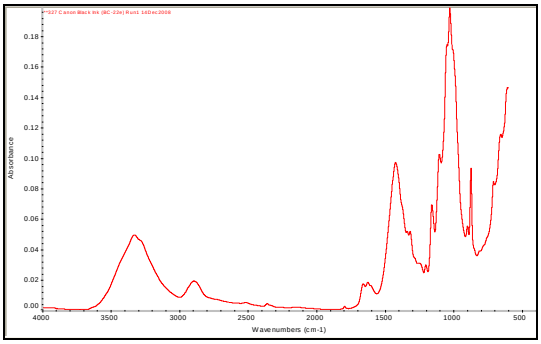

Figure 1048: ATR spectrum of Canon 327 ink on paper collected December 14th, 2008

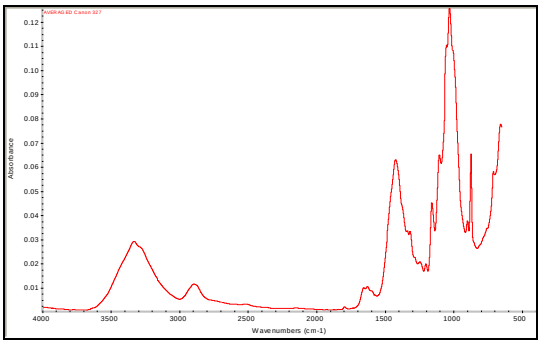

Figure 1049: ATR spectrum of Canon 327 ink on paper AVERAGE

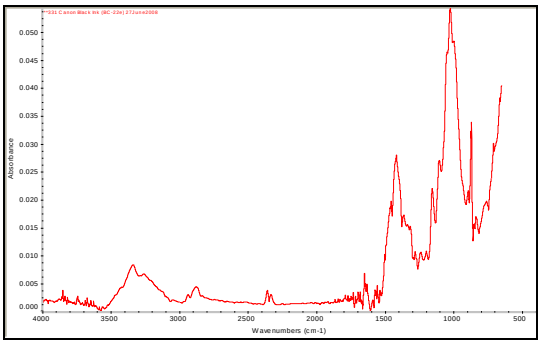

Figure 1050: ATR spectrum of Canon 331 ink on paper collected June 27th, 2008

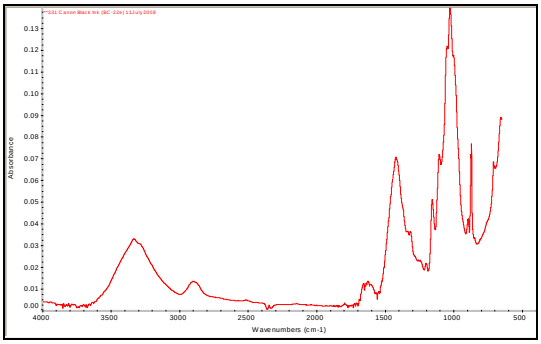

Figure 1051: ATR spectrum of Canon 331 ink on paper collected July 11th, 2008

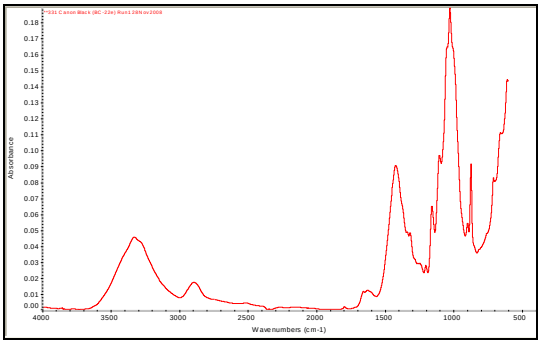

Figure 1052: ATR spectrum of Canon 331 ink on paper collected November 28th, 2008

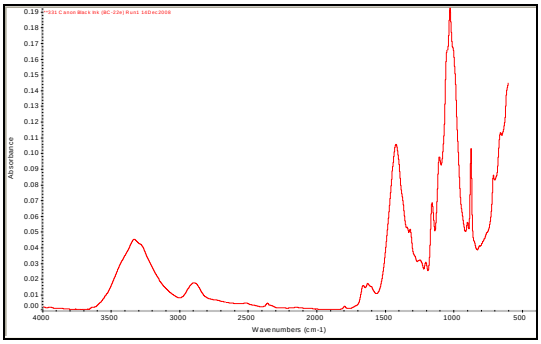

Figure 1053: ATR spectrum of Canon 331 ink on paper collected December 14th, 2008

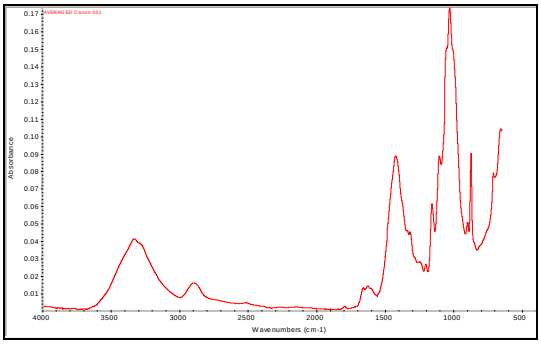

Figure 1054: ATR spectrum of Canon 331 ink on paper AVERAGE

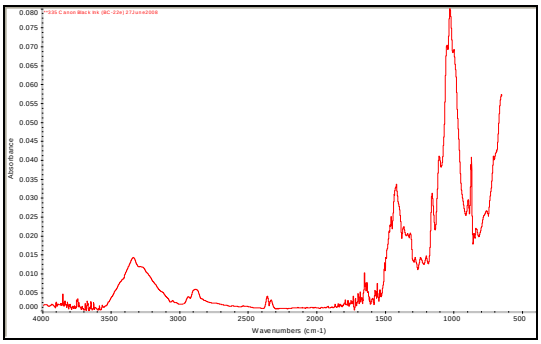

Figure 1055: ATR spectrum of Canon 335 ink on paper collected June 27th, 2008

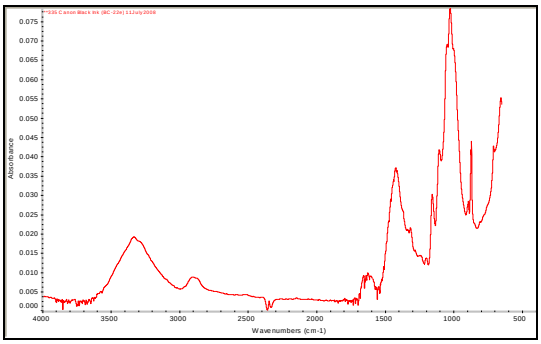

Figure 1056: ATR spectrum of Canon 335 ink on paper collected July 11th, 2008

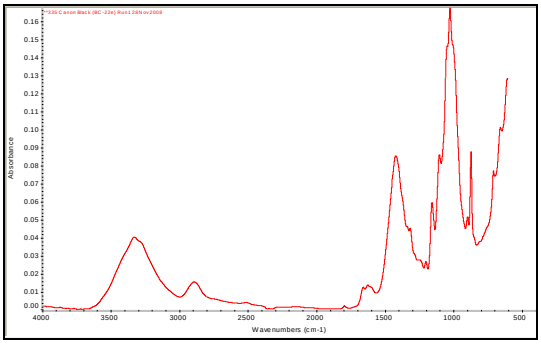

Figure 1057: ATR spectrum of Canon 335 ink on paper collected November 28th, 2008

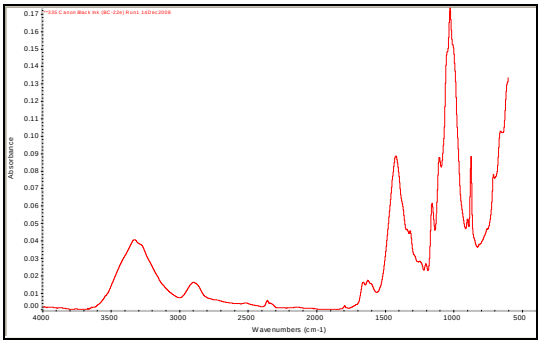

Figure 1058: ATR spectrum of Canon 335 ink on paper collected December 14th, 2008

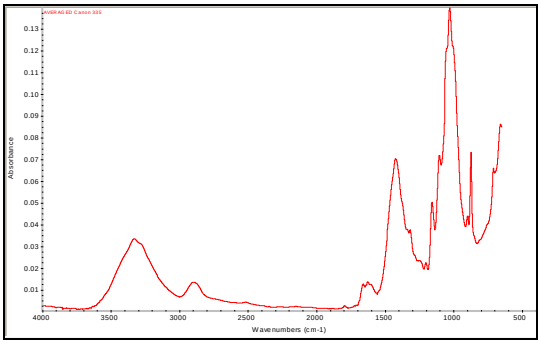

Figure 1059: ATR spectrum of Canon 335 ink on paper AVERAGE

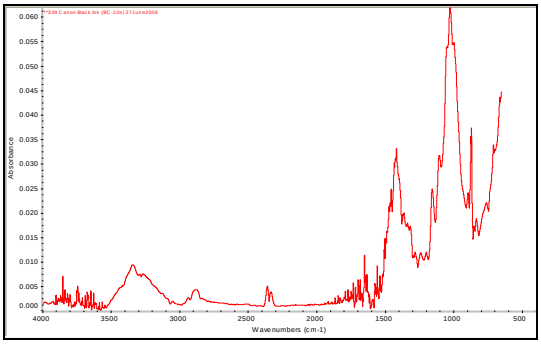

Figure 1060: ATR spectrum of Canon 339 ink on paper collected June 27th, 2008

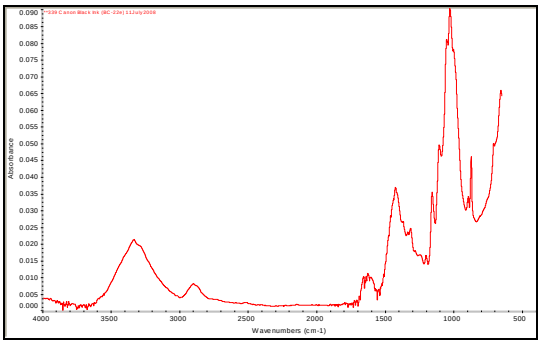

Figure 1061: ATR spectrum of Canon 339 ink on paper collected July 11th, 2008

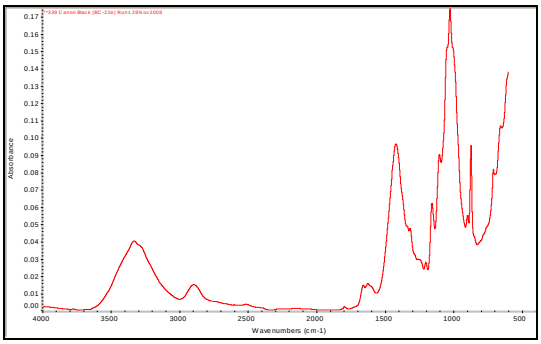

Figure 1062: ATR spectrum of Canon 339 ink on paper collected November 28th, 2008

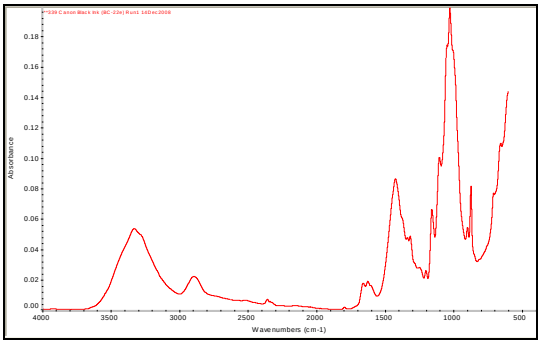

Figure 1063: ATR spectrum of Canon 339 ink on paper collected December 14th, 2008

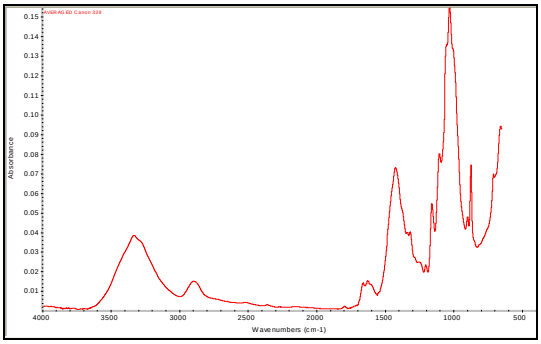

Figure 1064: ATR spectrum of Canon 339 ink on paper AVERAGE

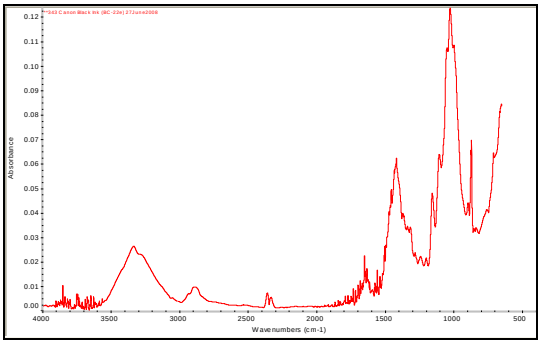

Figure 1065: ATR spectrum of Canon 343 ink on paper collected June 27th, 2008

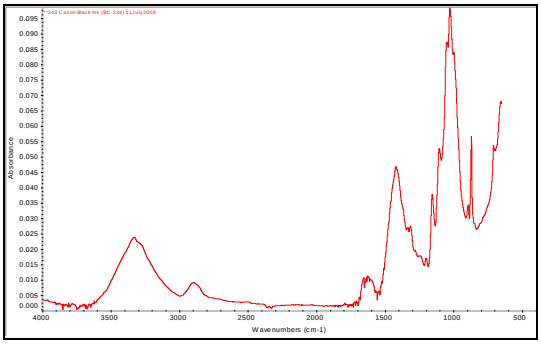

Figure 1066: ATR spectrum of Canon 343 ink on paper collected July 11th, 2008

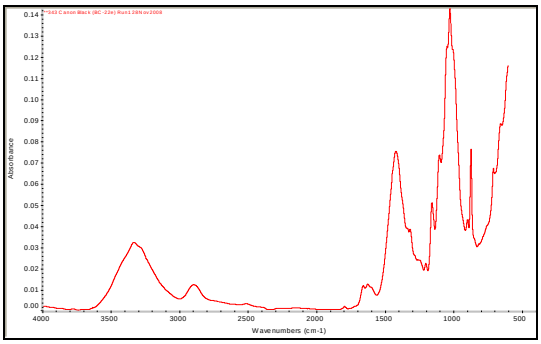

Figure 1067: ATR spectrum of Canon 343 ink on paper collected November 28th, 2008

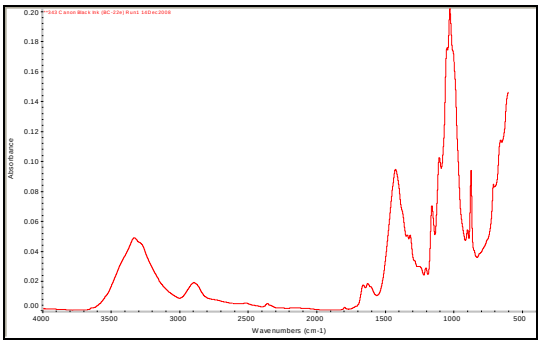

Figure 1068: ATR spectrum of Canon 343 ink on paper collected December 14th, 2008

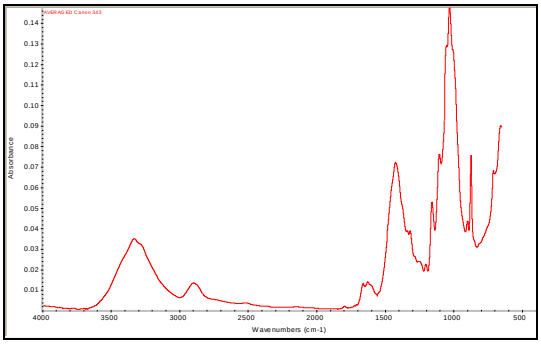

Figure 1069: ATR spectrum of Canon 343 ink on paper AVERAGE

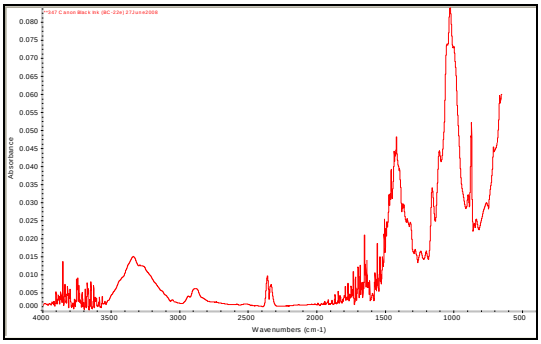

Figure 1070: ATR spectrum of Canon 347 ink on paper collected June 27th, 2008

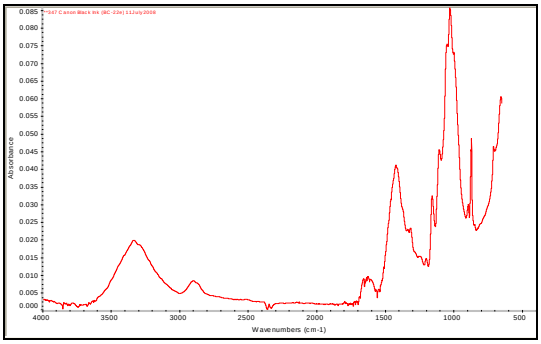

Figure 1071: ATR spectrum of Canon 347 ink on paper collected July 11th, 2008

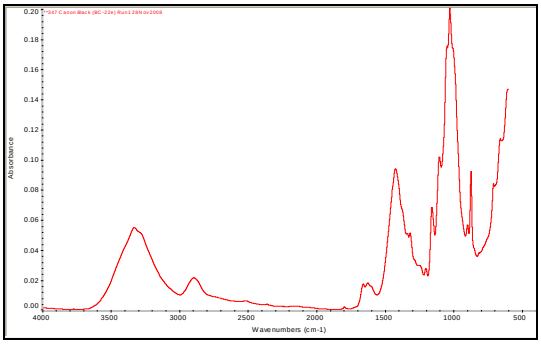

Figure 1072: ATR spectrum of Canon 347 ink on paper collected November 28th, 2008

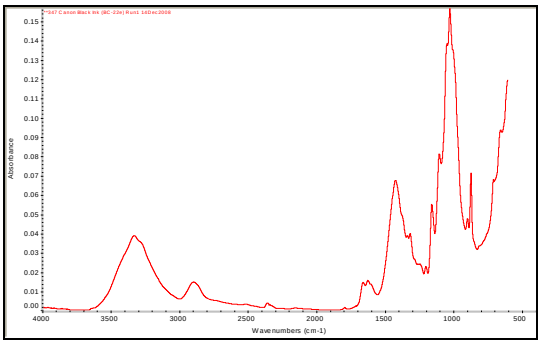

Figure 1073: ATR spectrum of Canon 347 ink on paper collected December 14th, 2008

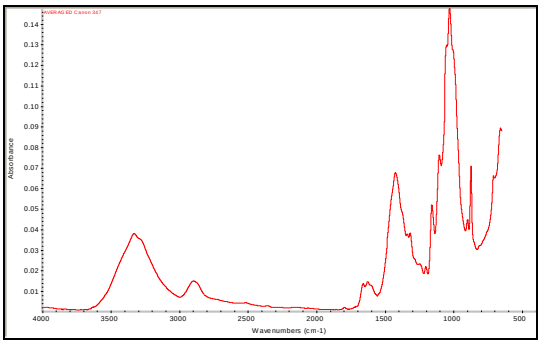

Figure 1074: ATR spectrum of Canon 347 ink on paper AVERAGE

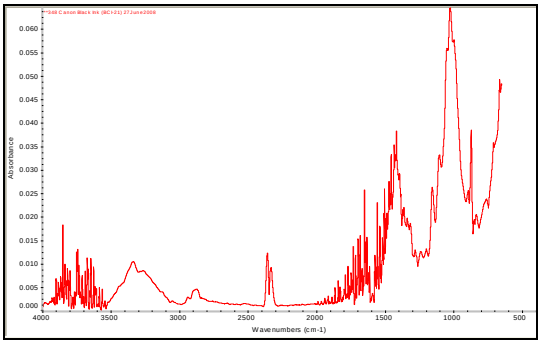

Figure 1075: ATR spectrum of Canon 348 ink on paper collected June 27th, 2008

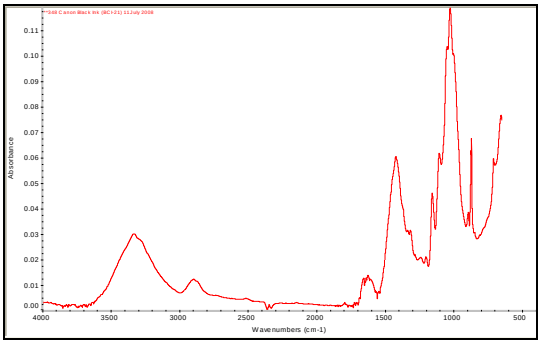

Figure 1076: ATR spectrum of Canon 348 ink on paper collected July 11th, 2008

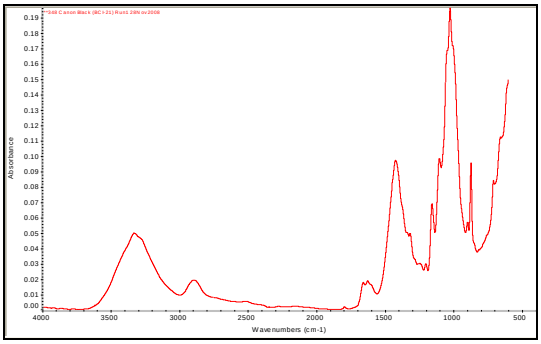

Figure 1077: ATR spectrum of Canon 348 ink on paper collected November 28th, 2008

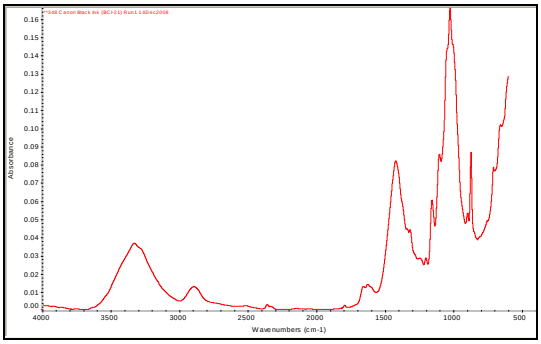

Figure 1078: ATR spectrum of Canon 348 ink on paper collected December 14th, 2008

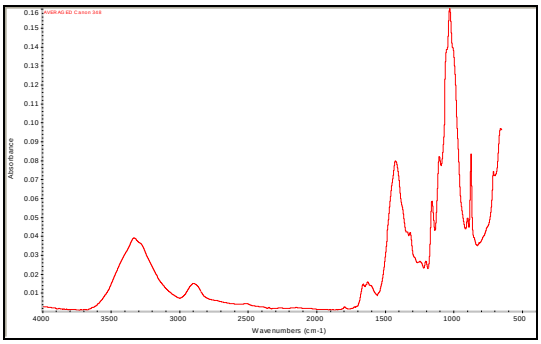

Figure 1079: ATR spectrum of Canon 348 ink on paper AVERAGE

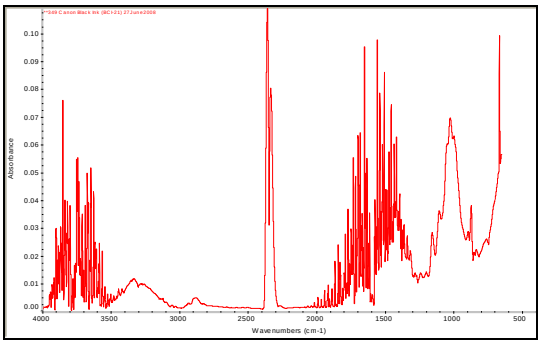

Figure 1080: ATR spectrum of Canon 349 ink on paper collected June 27th, 2008

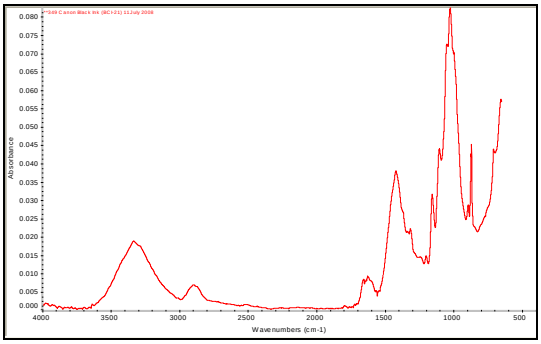

Figure 1081: ATR spectrum of Canon 349 ink on paper collected July 11th, 2008

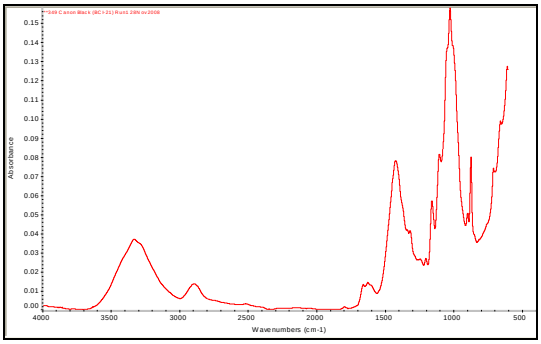

Figure 1082: ATR spectrum of Canon 349 ink on paper collected November 28th, 2008

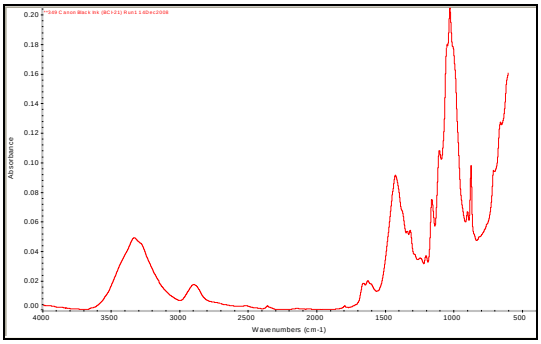

Figure 1083: ATR spectrum of Canon 349 ink on paper collected December 14th, 2008

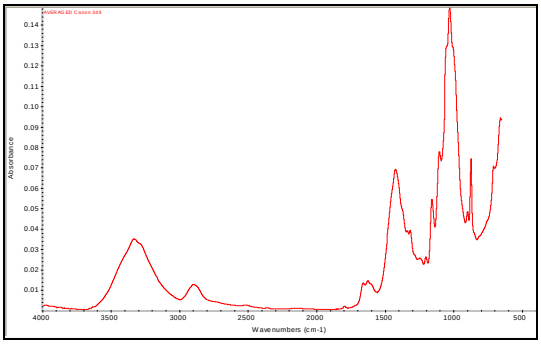

Figure 1084: ATR spectrum of Canon 349 ink on paper AVERAGE

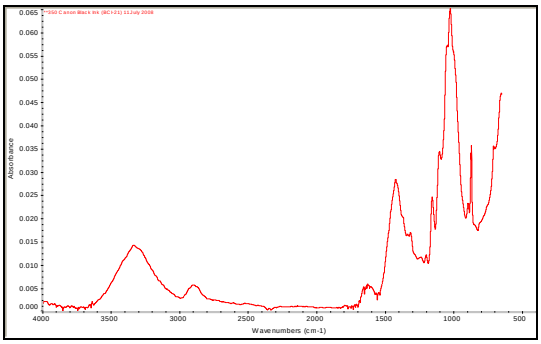

Figure 1085: ATR spectrum of Canon 350 ink on paper collected July 11th, 2008

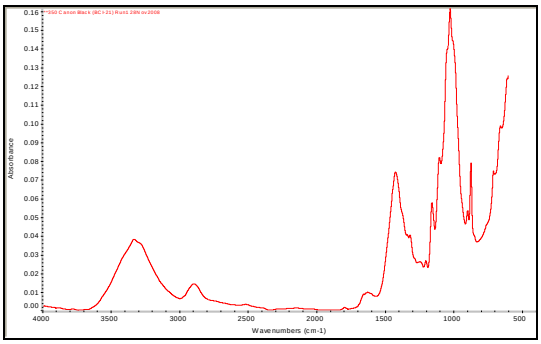

Figure 1086: ATR spectrum of Canon 350 ink on paper collected November 28th, 2008

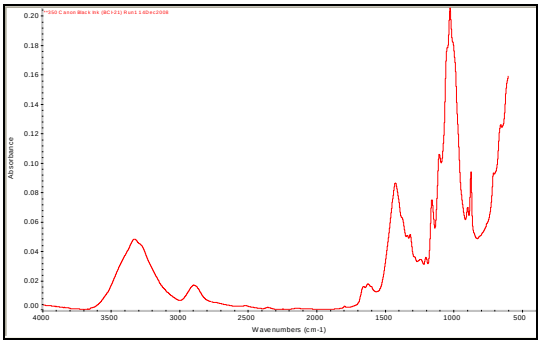

Figure 1087: ATR spectrum of Canon 350 ink on paper collected December 14th, 2008

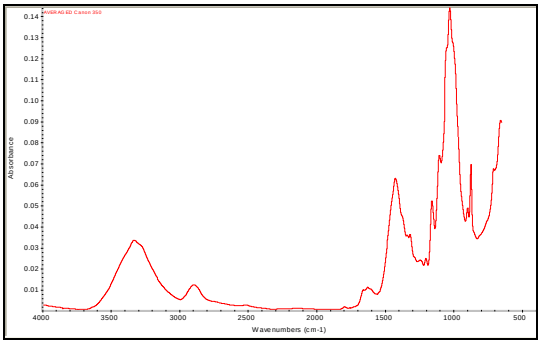

Figure 1088: ATR spectrum of Canon 350 ink on paper AVERAGE

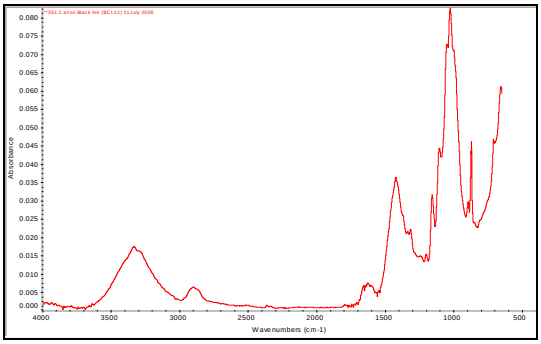

Figure 1089: ATR spectrum of Canon 351 ink on paper collected July 11th, 2008

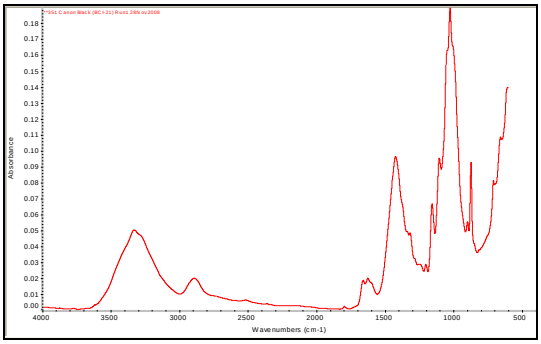

Figure 1090: ATR spectrum of Canon 351 ink on paper collected November 28th, 2008

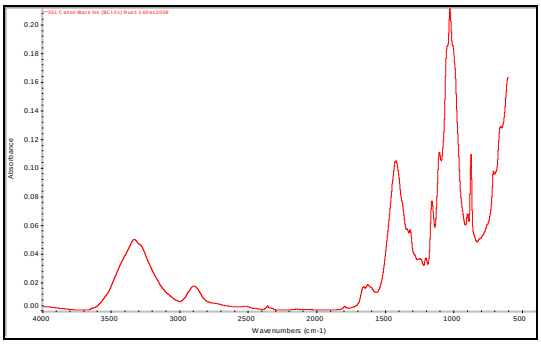

Figure 1091: ATR spectrum of Canon 351 ink on paper collected December 14th, 2008

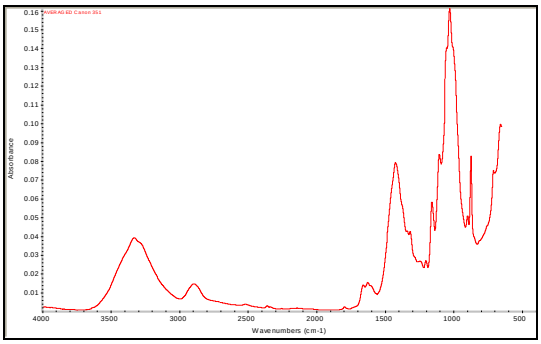

Figure 1092: ATR spectrum of Canon 351 ink on paper AVERAGE

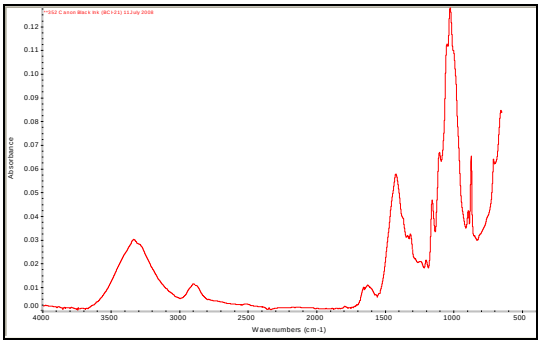

Figure 1093: ATR spectrum of Canon 352 ink on paper collected July 11th, 2008

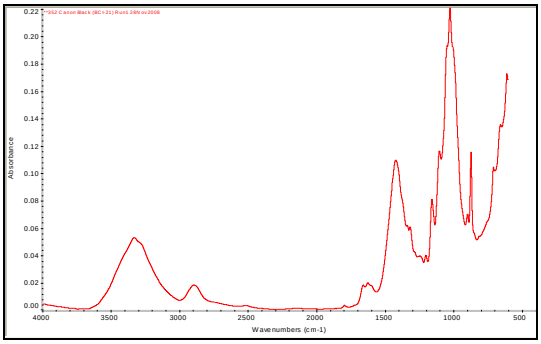

Figure 1094: ATR spectrum of Canon 352 ink on paper collected November 28th, 2008

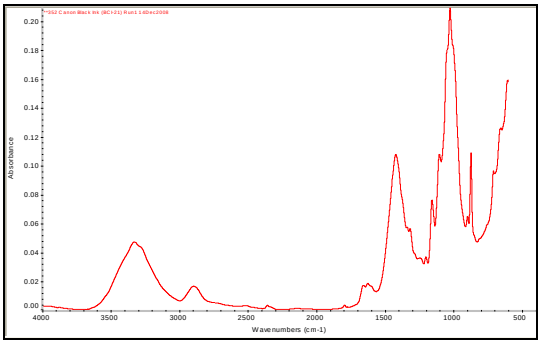

Figure 1095: ATR spectrum of Canon 352 ink on paper collected December 14th, 2008

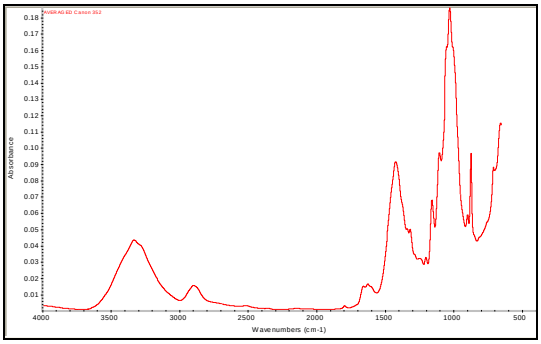

Figure 1096: ATR spectrum of Canon 352 ink on paper AVERAGE

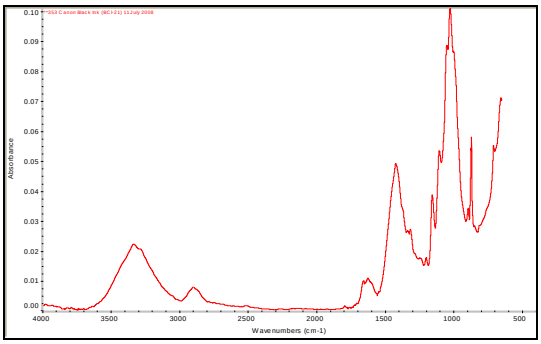

Figure 1097: ATR spectrum of Canon 353 ink on paper collected July 11th, 2008

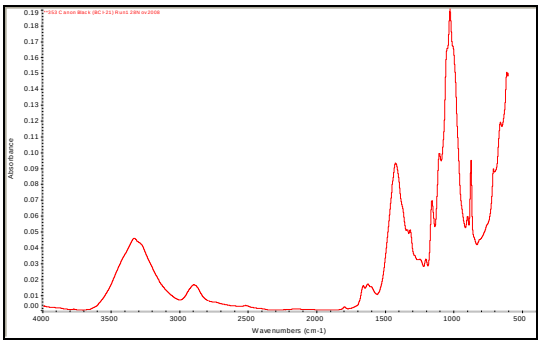

Figure 1098: ATR spectrum of Canon 353 ink on paper collected November 28th, 2008

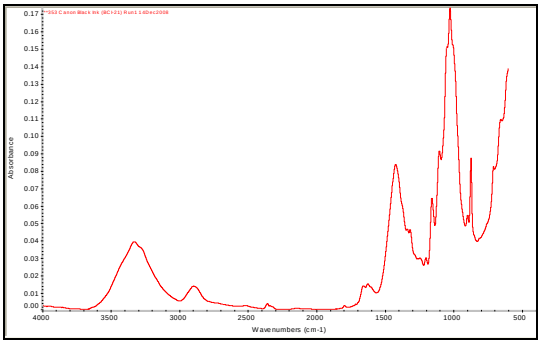

Figure 1099: ATR spectrum of Canon 353 ink on paper collected December 14th, 2008

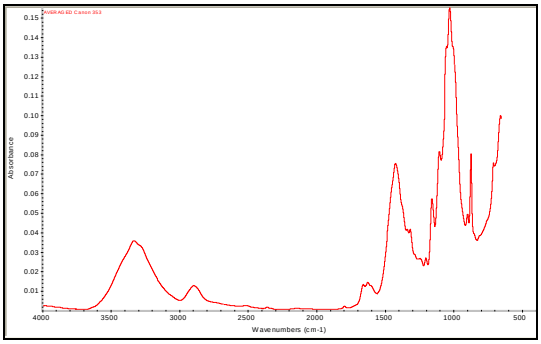

Figure 1100: ATR spectrum of Canon 353 ink on paper AVERAGE

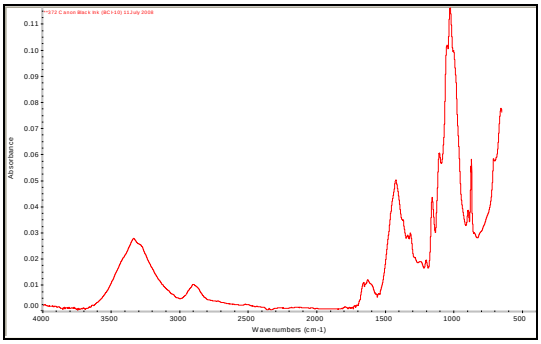

Figure 1101: ATR spectrum of Canon 372 ink on paper collected July 11th, 2008

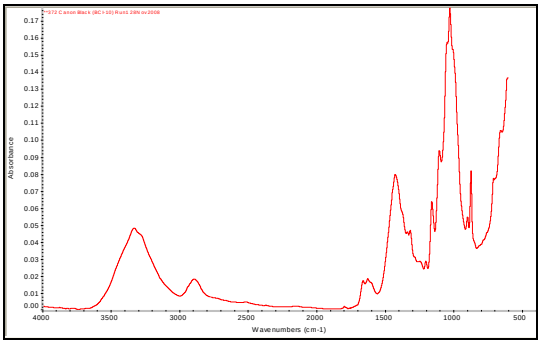

Figure 1102: ATR spectrum of Canon 372 ink on paper collected November 28th, 2008

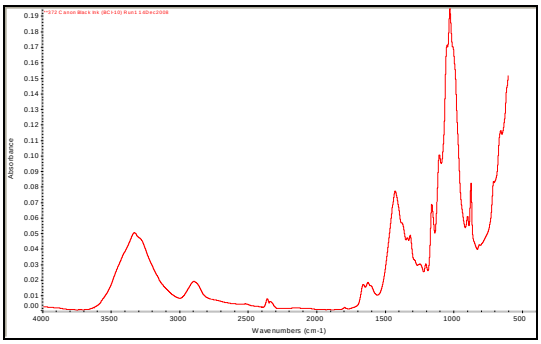

Figure 1103: ATR spectrum of Canon 372 ink on paper collected December 14th, 2008

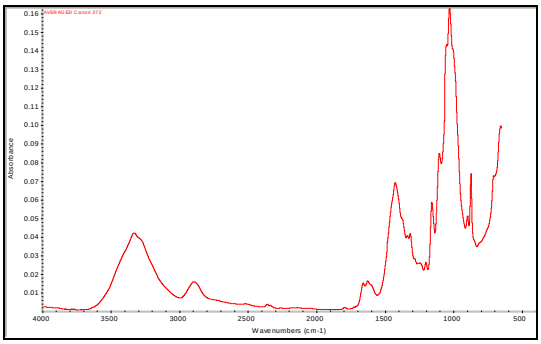

Figure 1104: ATR spectrum of Canon 372 ink on paper AVERAGE

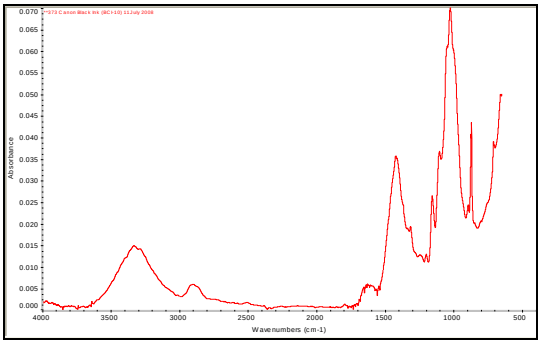

Figure 1105: ATR spectrum of Canon 373 ink on paper collected July 11th, 2008

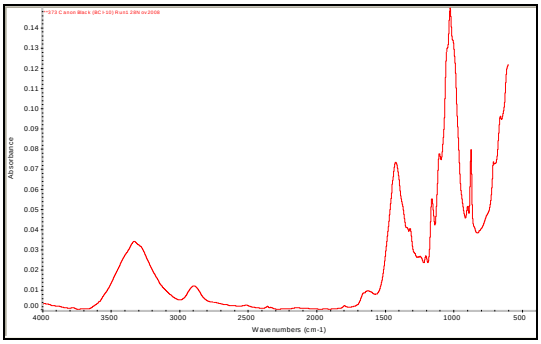

Figure 1106: ATR spectrum of Canon 373 ink on paper collected November 28th, 2008

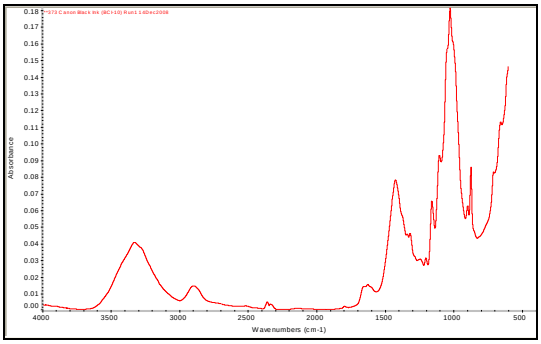

Figure 1107: ATR spectrum of Canon 373 ink on paper collected December 14th, 2008

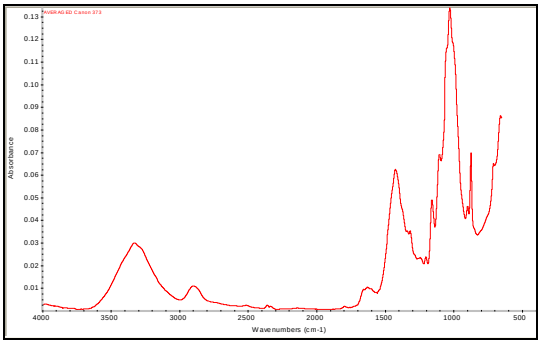

Figure 1108: ATR spectrum of Canon 373 ink on paper AVERAGE

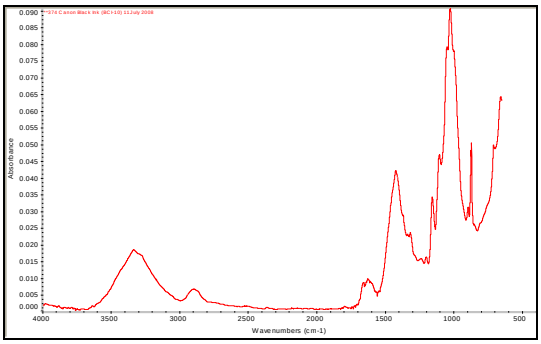

Figure 1109: ATR spectrum of Canon 374 ink on paper collected July 11th, 2008

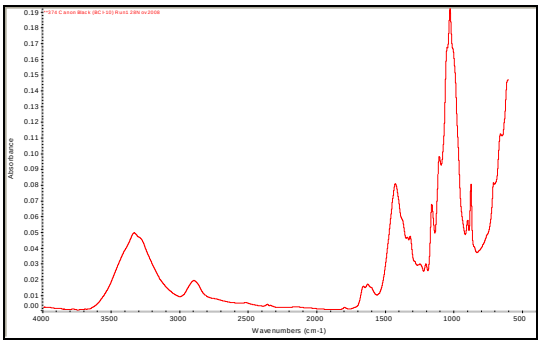

Figure 1110: ATR spectrum of Canon 374 ink on paper collected November 28th, 2008

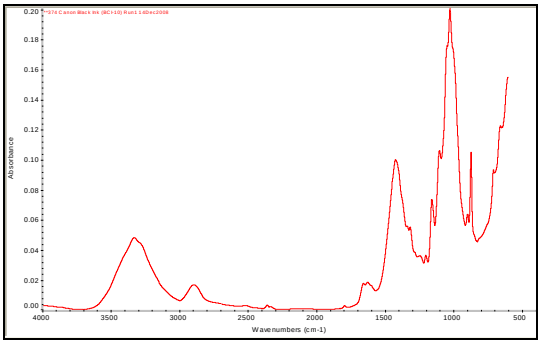

Figure 1111: ATR spectrum of Canon 374 ink on paper collected December 14th, 2008

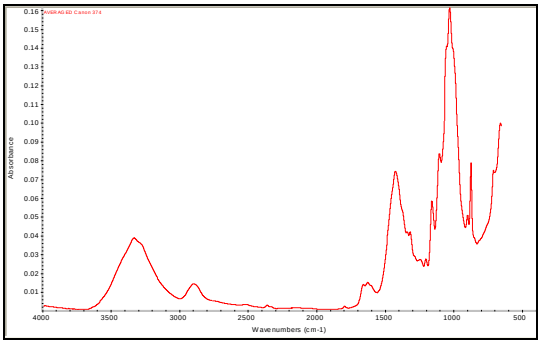

Figure 1112: ATR spectrum of Canon 374 ink on paper AVERAGE

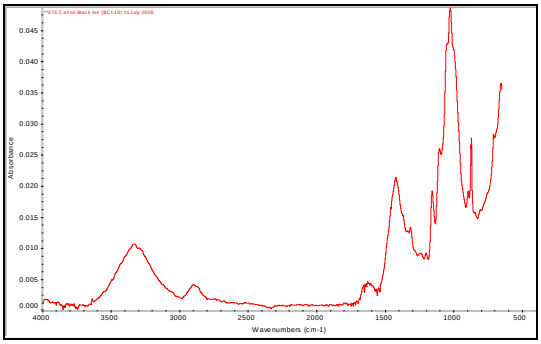

Figure 1113: ATR spectrum of Canon 375 ink on paper collected July 11th, 2008

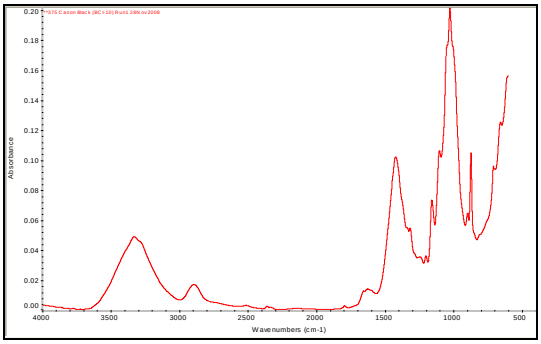

Figure 1114: ATR spectrum of Canon 375 ink on paper collected November 28th, 2008

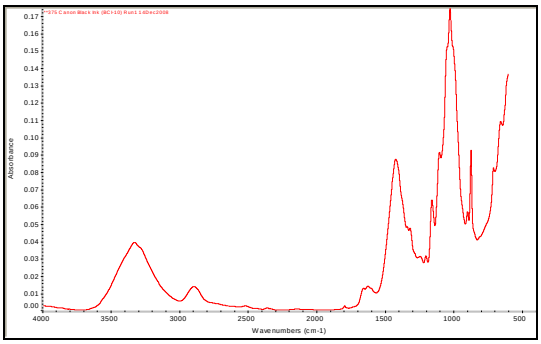

Figure 1115: ATR spectrum of Canon 375 ink on paper collected December 14th, 2008

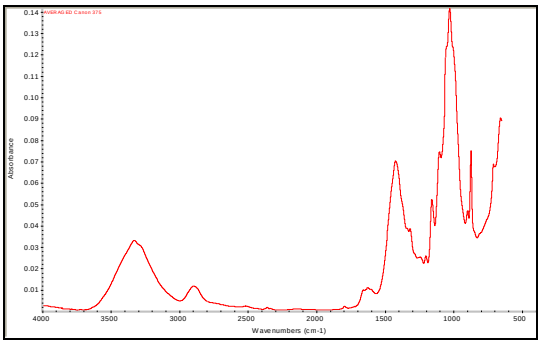

Figure 1116: ATR spectrum of Canon 375 ink on paper AVERAGE

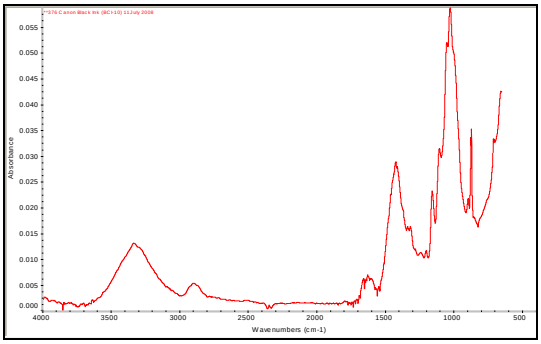

Figure 1117: ATR spectrum of Canon 376 ink on paper collected July 11th, 2008

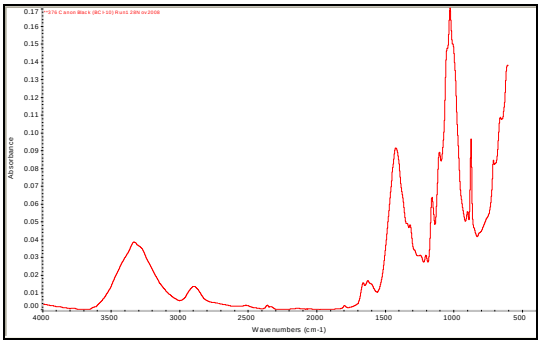

Figure 1118: ATR spectrum of Canon 376 ink on paper collected November 28th, 2008

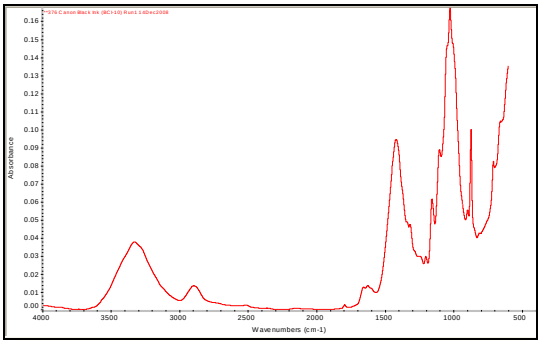

Figure 1119: ATR spectrum of Canon 376 ink on paper collected December 14th, 2008

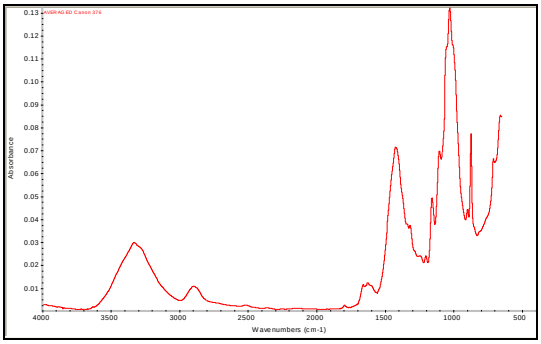

Figure 1120: ATR spectrum of Canon 376 ink on paper AVERAGE

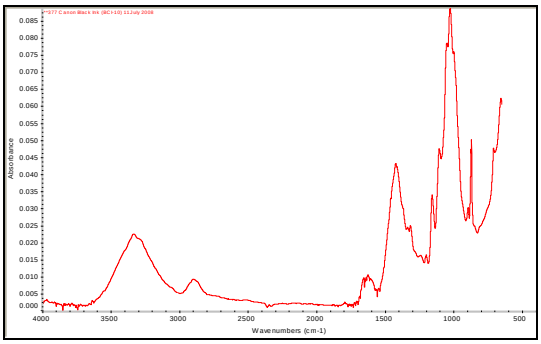

Figure 1121: ATR spectrum of Canon 377 ink on paper collected July 11th, 2008

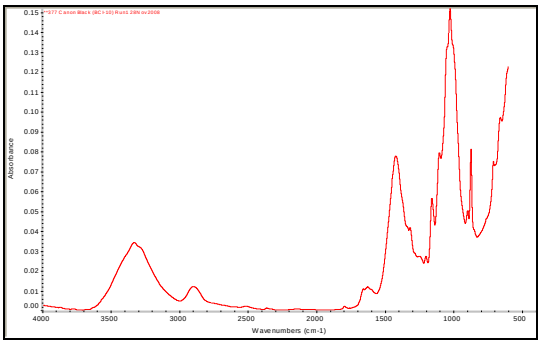

Figure 1122: ATR spectrum of Canon 377 ink on paper collected November 28th, 2008

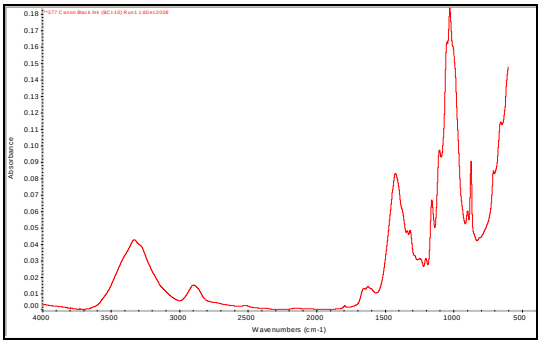

Figure 1123: ATR spectrum of Canon 377 ink on paper collected December 14th, 2008

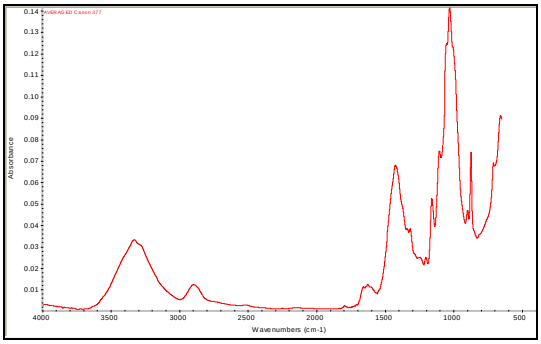

Figure 1124: ATR spectrum of Canon 377 ink on paper AVERAGE

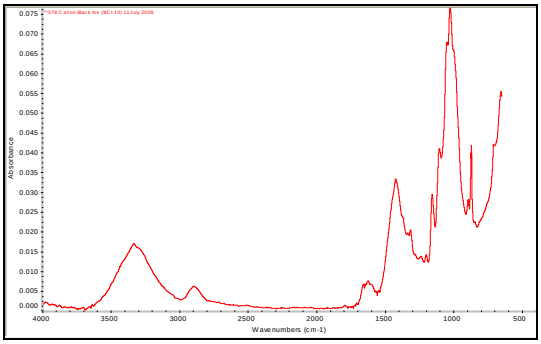

Figure 1125: ATR spectrum of Canon 378 ink on paper collected July 11th, 2008

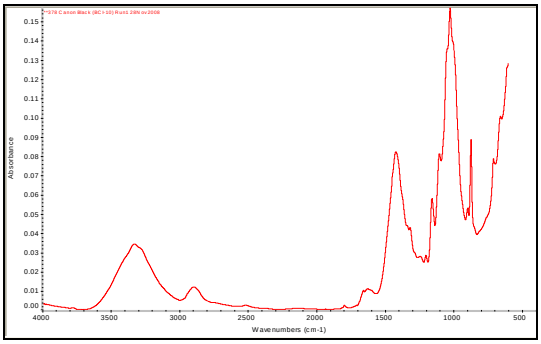

Figure 1126: ATR spectrum of Canon 378 ink on paper collected November 28th, 2008

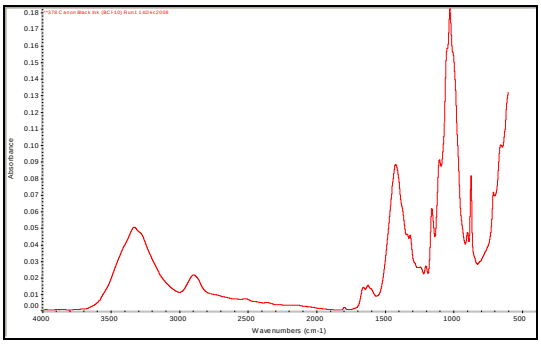

Figure 1127: ATR spectrum of Canon 378 ink on paper collected December 14th, 2008

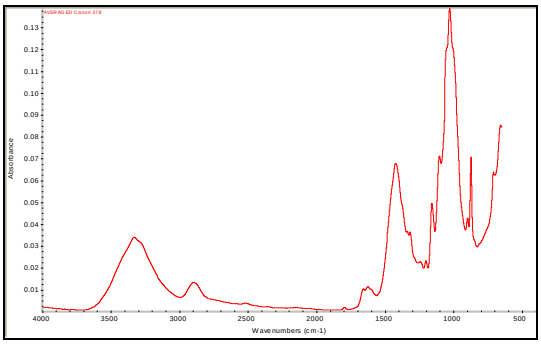

Figure 1128: ATR spectrum of Canon 378 ink on paper AVERAGE

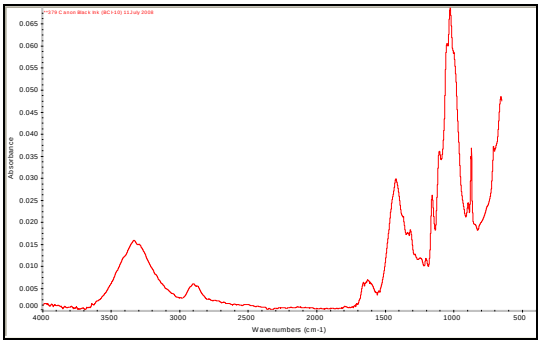

Figure 1129: ATR spectrum of Canon 379 ink on paper collected July 11th, 2008

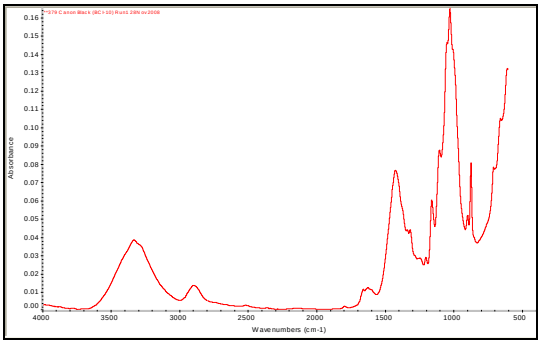

Figure 1130: ATR spectrum of Canon 379 ink on paper collected November 28th, 2008

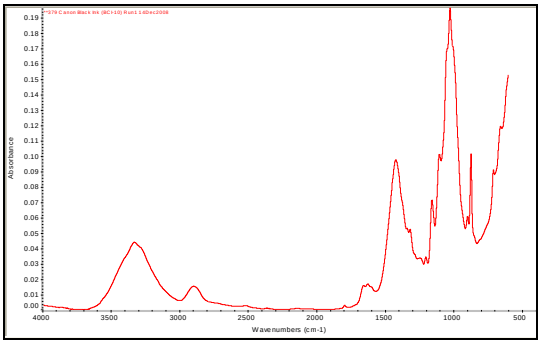

Figure 1131: ATR spectrum of Canon 379 ink on paper collected December 14th, 2008

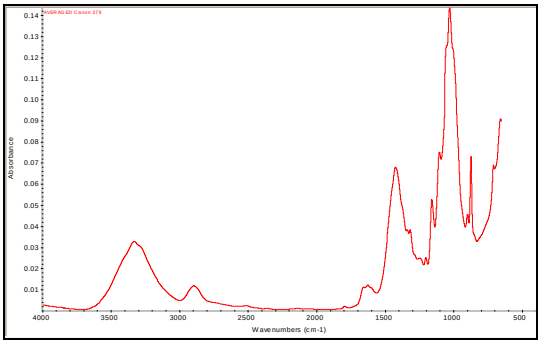

Figure 1132: ATR spectrum of Canon 379 ink on paper AVERAGE

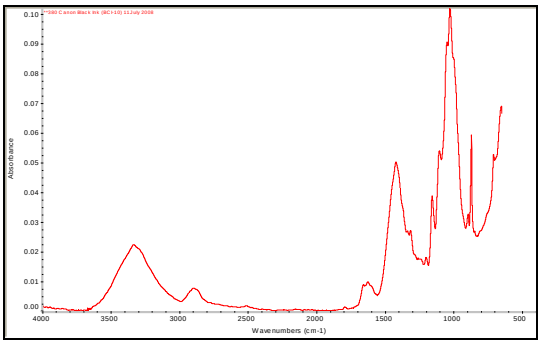

Figure 1133: ATR spectrum of Canon 380 ink on paper collected July 11th, 2008

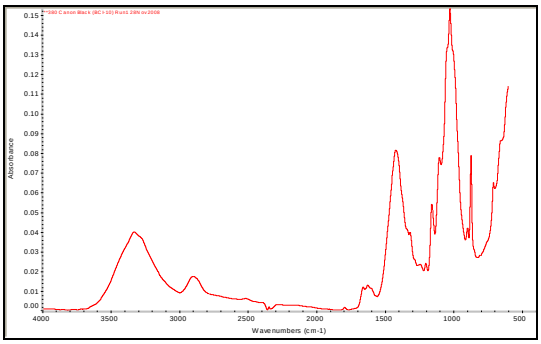

Figure 1134: ATR spectrum of Canon 380 ink on paper collected November 28th, 2008

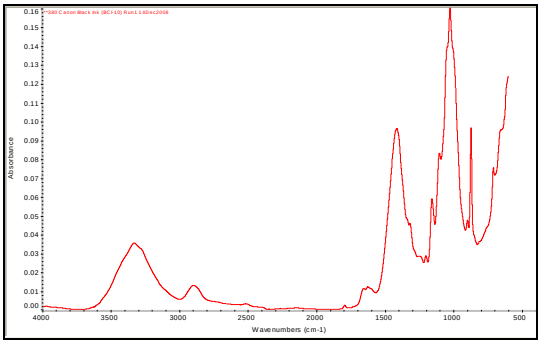

Figure 1135: ATR spectrum of Canon 380 ink on paper collected December 14th, 2008

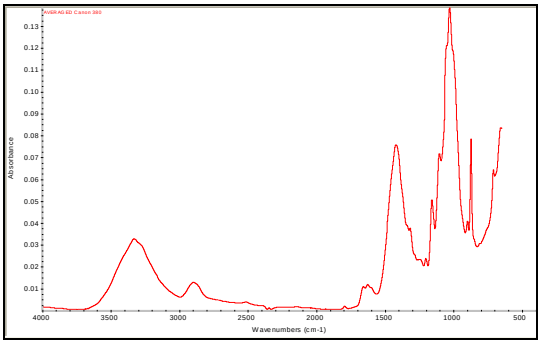

Figure 1136: ATR spectrum of Canon 380 ink on paper AVERAGE

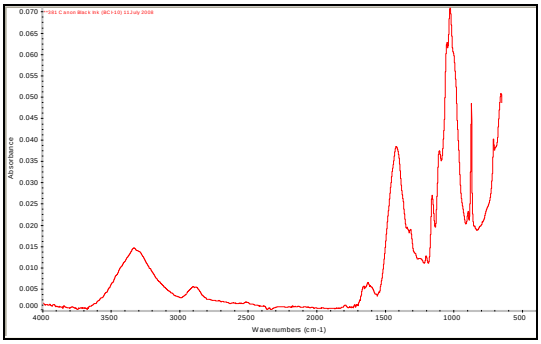

Figure 1137: ATR spectrum of Canon 381 ink on paper collected July 11th, 2008

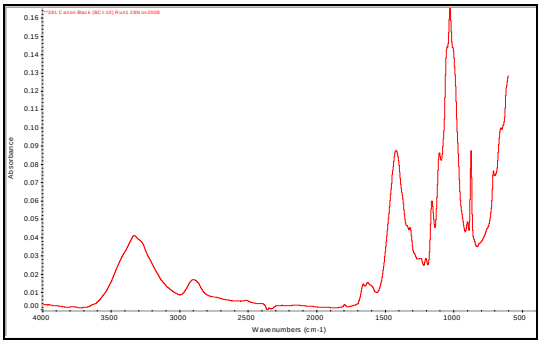

Figure 1138: ATR spectrum of Canon 381 ink on paper collected November 28th, 2008

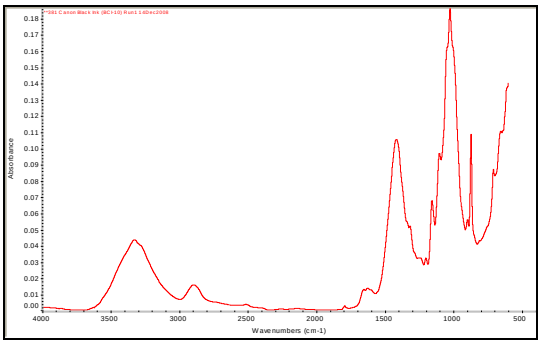

Figure 1139: ATR spectrum of Canon 381 ink on paper collected December 14th, 2008

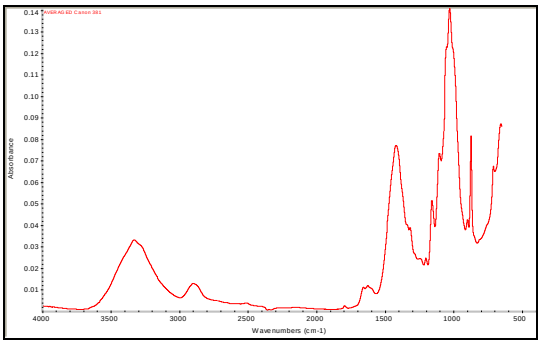

Figure 1140: ATR spectrum of Canon 381 ink on paper AVERAGE

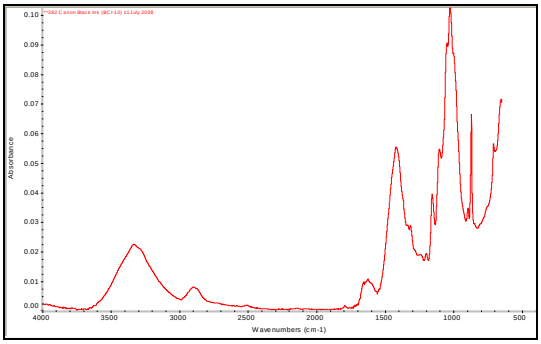

Figure 1141: ATR spectrum of Canon 382 ink on paper collected July 11th, 2008

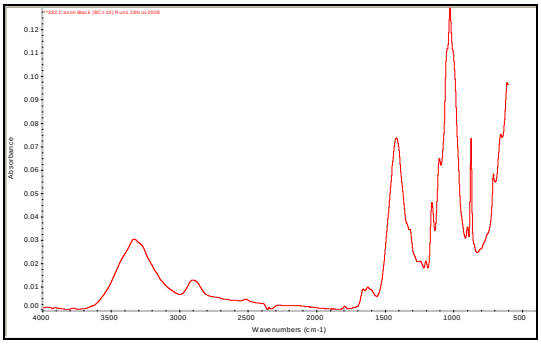

Figure 1142: ATR spectrum of Canon 382 ink on paper collected November 28th, 2008

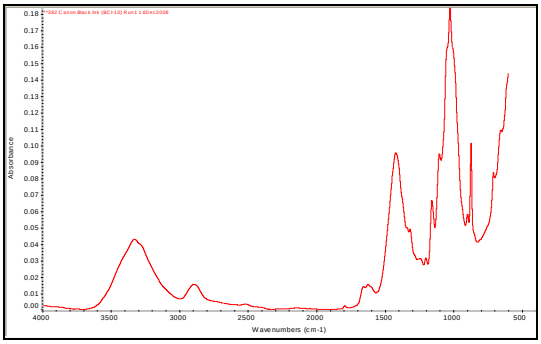

Figure 1143: ATR spectrum of Canon 382 ink on paper collected December 14th, 2008

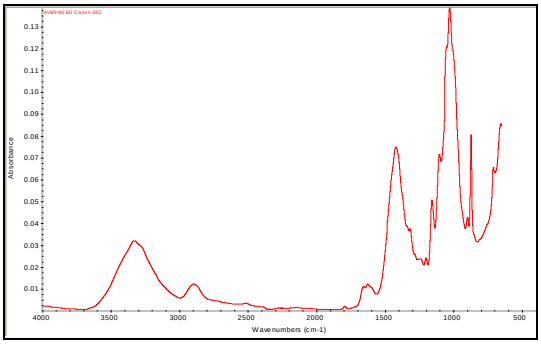

Figure 1144: ATR spectrum of Canon 382 ink on paper AVERAGE

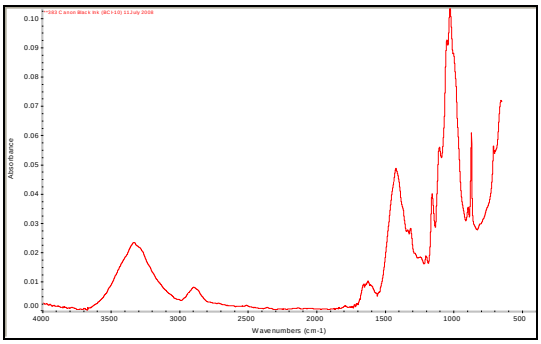

Figure 1145: ATR spectrum of Canon 383 ink on paper collected July 11th, 2008

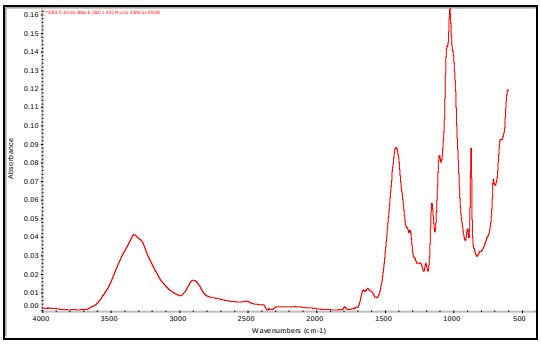

Figure 1146: ATR spectrum of Canon 383 ink on paper collected November 28th, 2008

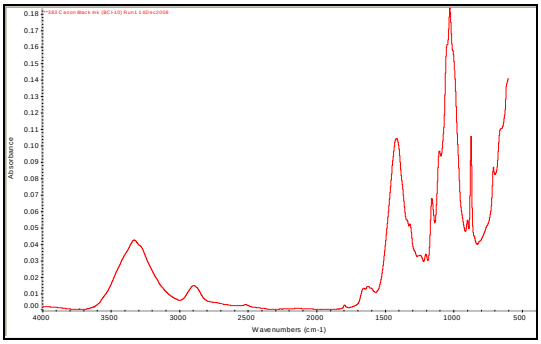

Figure 1147: ATR spectrum of Canon 383 ink on paper collected December 14th, 2008

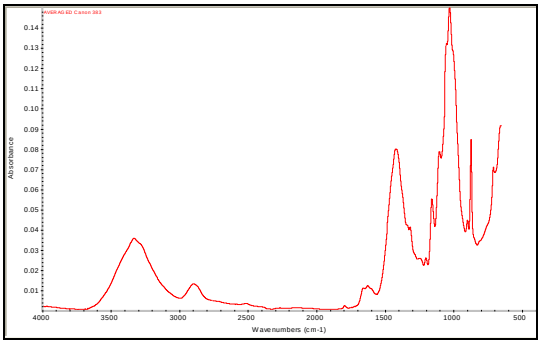

Figure 1148: ATR spectrum of Canon 383 ink on paper AVERAGE

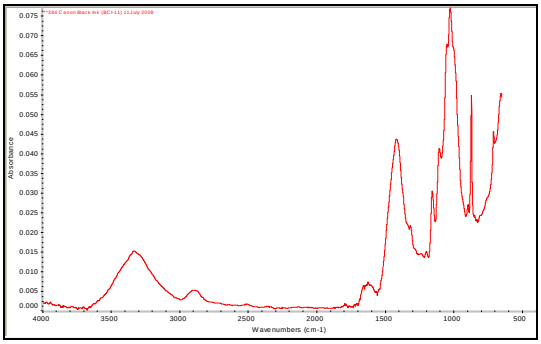

Figure 1149: ATR spectrum of Canon 384 ink on paper collected July 11th, 2008

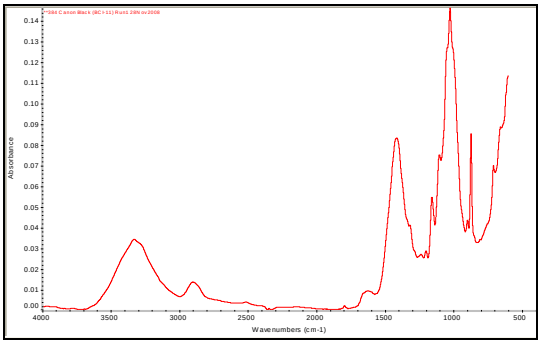

Figure 1150: ATR spectrum of Canon 384 ink on paper collected November 28th, 2008

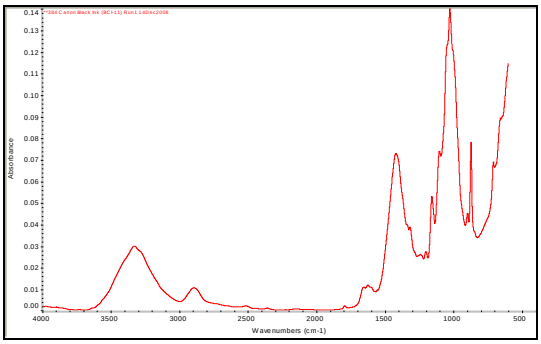

Figure 1151: ATR spectrum of Canon 384 ink on paper collected December 14th, 2008

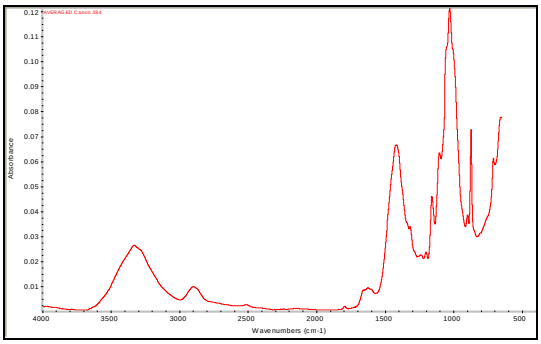

Figure 1152: ATR spectrum of Canon 384 ink on paper AVERAGE

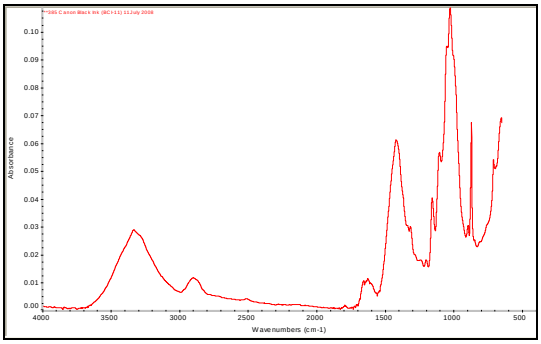

Figure 1153: ATR spectrum of Canon 385 ink on paper collected July 11th, 2008

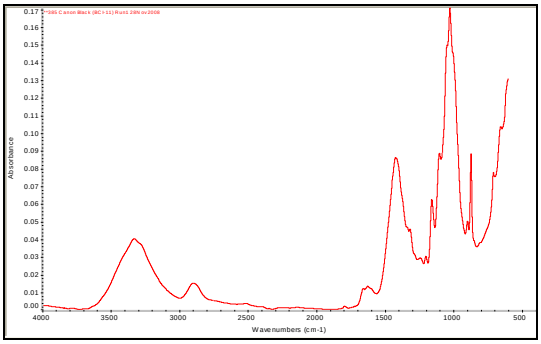

Figure 1154: ATR spectrum of Canon 385 ink on paper collected November 28th, 2008

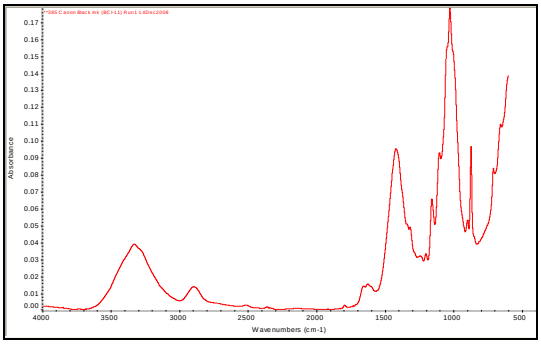

Figure 1155: ATR spectrum of Canon 385 ink on paper collected December 14th, 2008

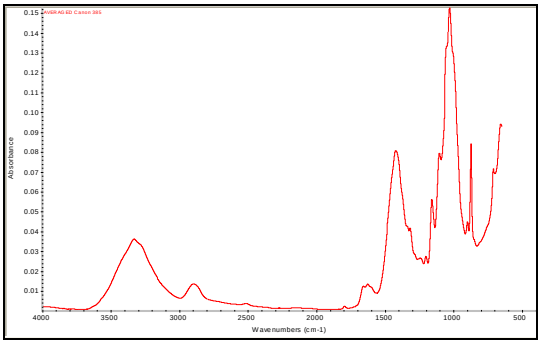

Figure 1156: ATR spectrum of Canon 385 ink on paper AVERAGE

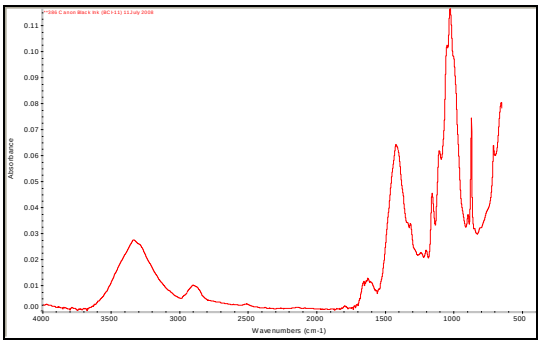

Figure 1157: ATR spectrum of Canon 386 ink on paper collected July 11th, 2008

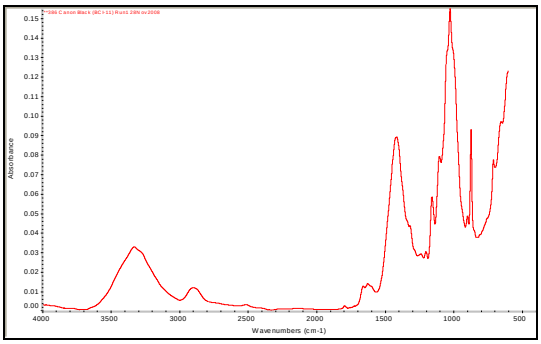

Figure 1158: ATR spectrum of Canon 386 ink on paper collected November 28th, 2008

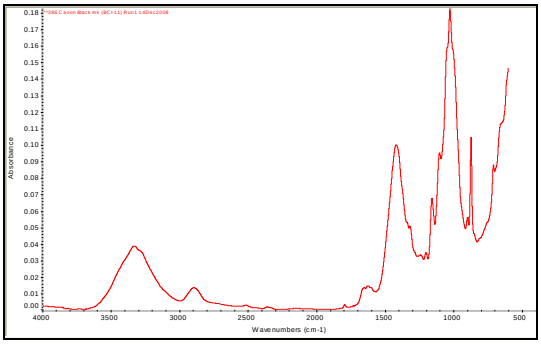

Figure 1159: ATR spectrum of Canon 386 ink on paper collected December 14th, 2008

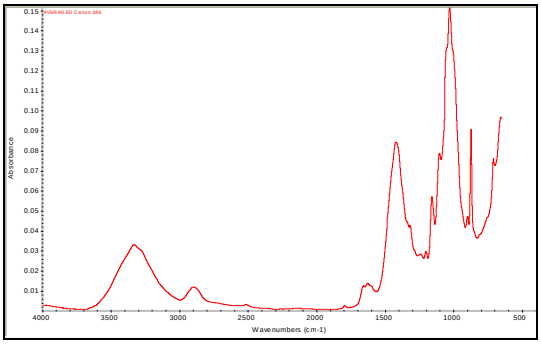

Figure 1160: ATR spectrum of Canon 386 ink on paper AVERAGE

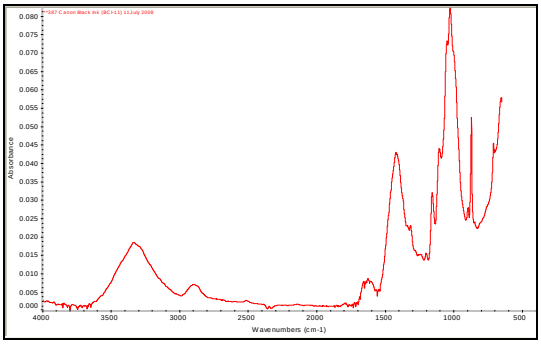

Figure 1161: ATR spectrum of Canon 387 ink on paper collected July 11th, 2008

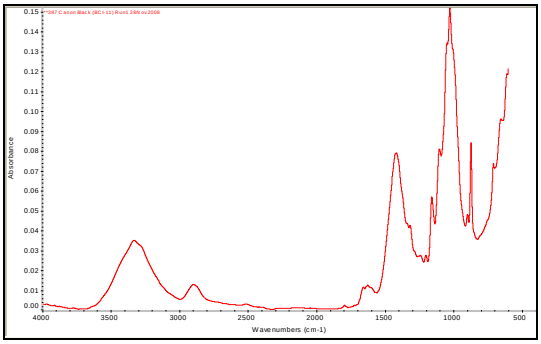

Figure 1162: ATR spectrum of Canon 387 ink on paper collected November 28th, 2008

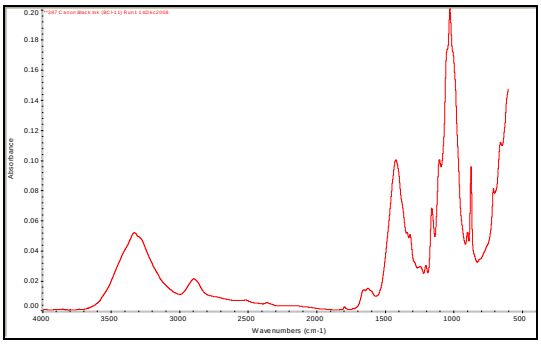

Figure 1163: ATR spectrum of Canon 387 ink on paper collected December 14th, 2008

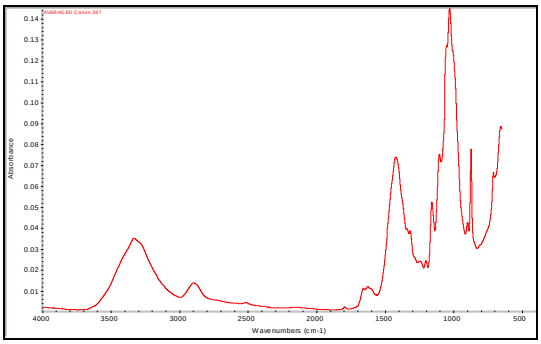

Figure 1164: ATR spectrum of Canon 387 ink on paper AVERAGE

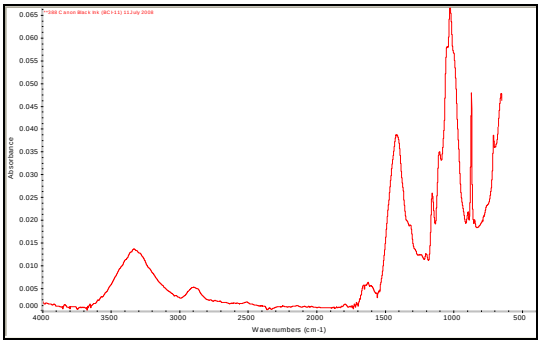

Figure 1165: ATR spectrum of Canon 388 ink on paper collected July 11th, 2008

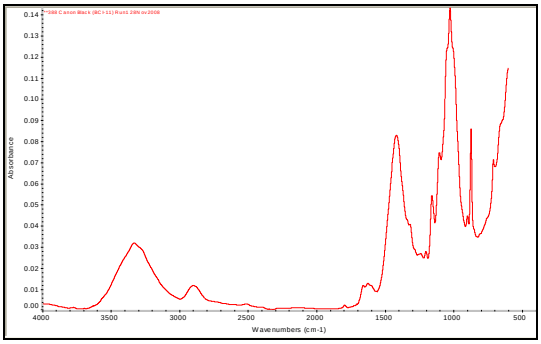

Figure 1166: ATR spectrum of Canon 388 ink on paper collected November 28th, 2008

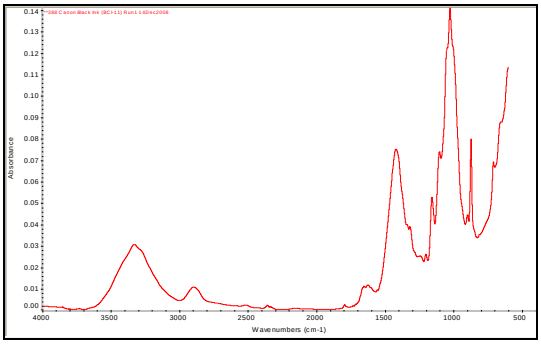

Figure 1167: ATR spectrum of Canon 388 ink on paper collected December 14th, 2008

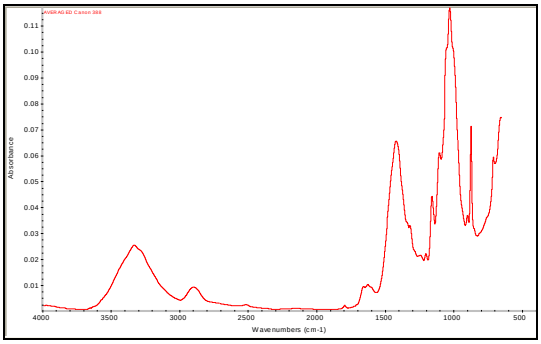

Figure 1168: ATR spectrum of Canon 388 ink on paper AVERAGE

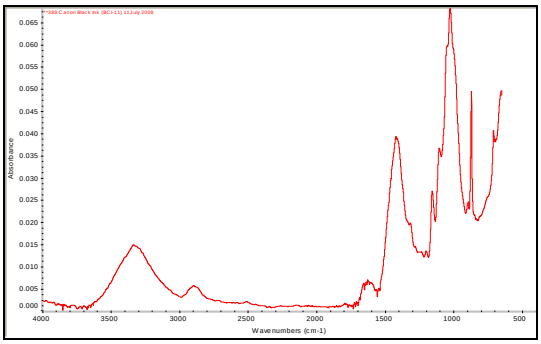

Figure 1169: ATR spectrum of Canon 389 ink on paper collected July 11th, 2008

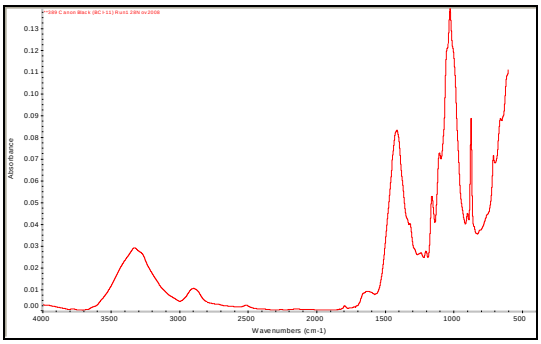

Figure 1170: ATR spectrum of Canon 389 ink on paper collected November 28th, 2008

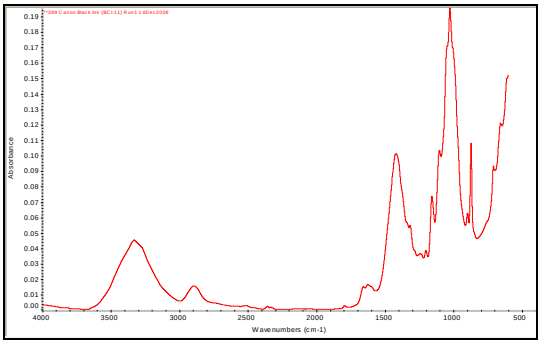

Figure 1171: ATR spectrum of Canon 389 ink on paper collected December 14th, 2008

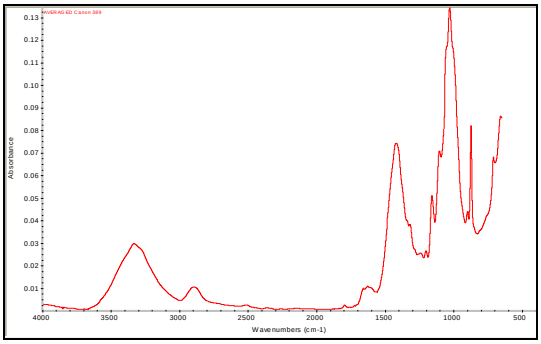

Figure 1172: ATR spectrum of Canon 389 ink on paper AVERAGE

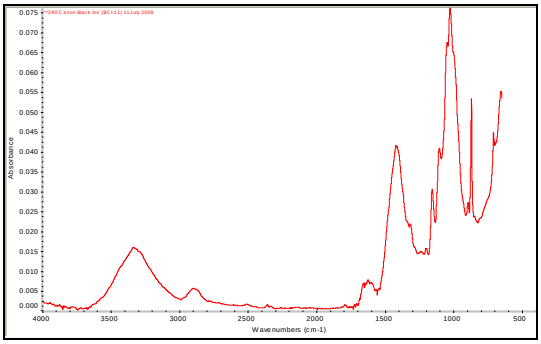

Figure 1173: ATR spectrum of Canon 390 ink on paper collected July 11th, 2008

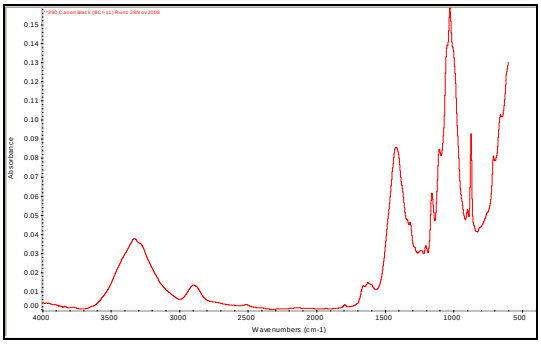

Figure 1174: ATR spectrum of Canon 390 ink on paper collected November 28th, 2008

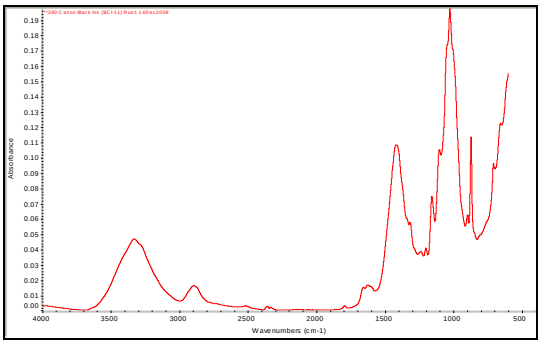

Figure 1175: ATR spectrum of Canon 390 ink on paper collected December 14th, 2008

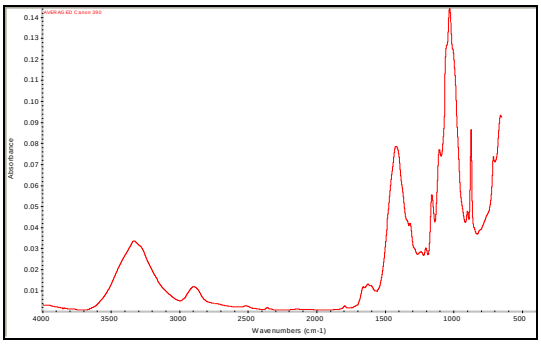

Figure 1176: ATR spectrum of Canon 390 ink on paper AVERAGE

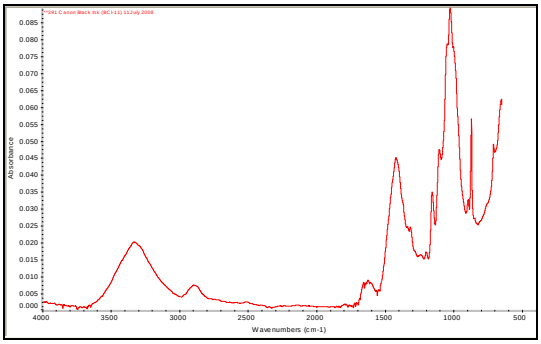

Figure 1177: ATR spectrum of Canon 391 ink on paper collected July 11th, 2008

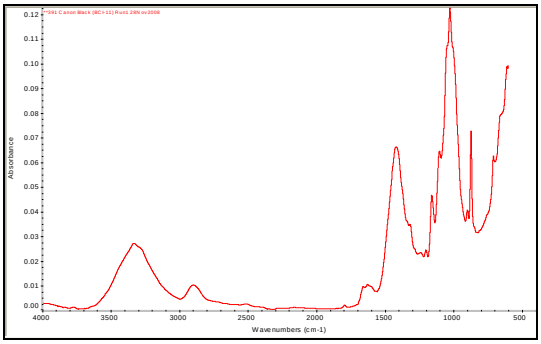

Figure 1178: ATR spectrum of Canon 391 ink on paper collected November 28th, 2008

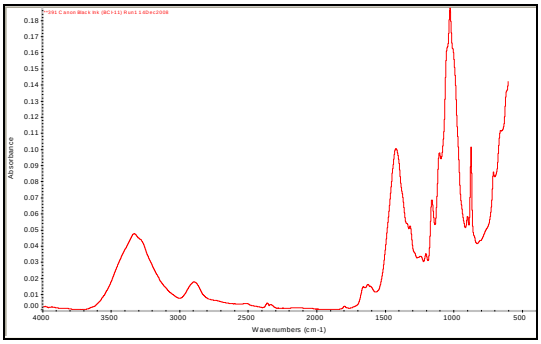

Figure 1179: ATR spectrum of Canon 391 ink on paper collected December 14th, 2008

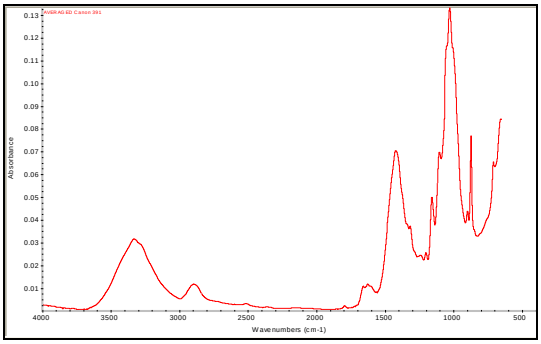

Figure 1180: ATR spectrum of Canon 391 ink on paper AVERAGE

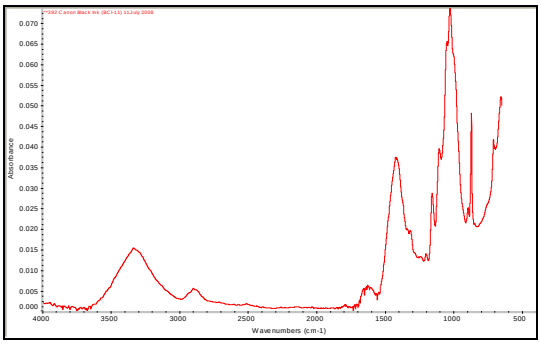

Figure 1181: ATR spectrum of Canon 392 ink on paper collected July 11th, 2008

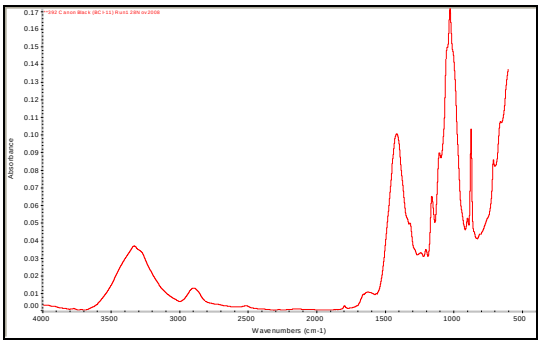

Figure 1182: ATR spectrum of Canon 392 ink on paper collected November 28th, 2008

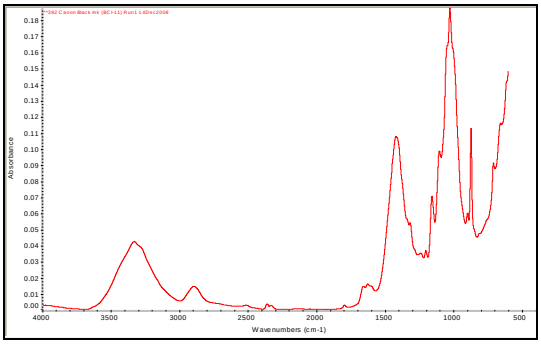

Figure 1183: ATR spectrum of Canon 392 ink on paper collected December 14th, 2008

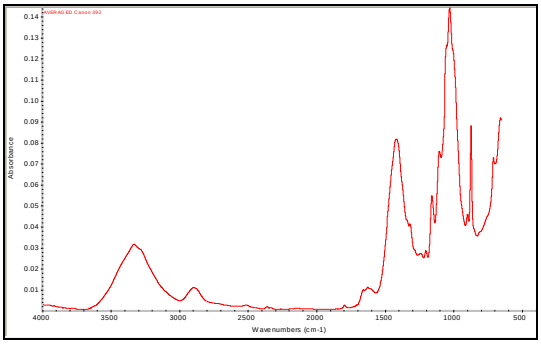

Figure 1184: ATR spectrum of Canon 392 ink on paper AVERAGE

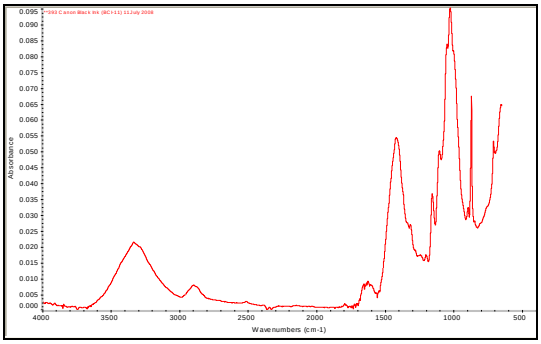

Figure 1185: ATR spectrum of Canon 393 ink on paper collected July 11th, 2008

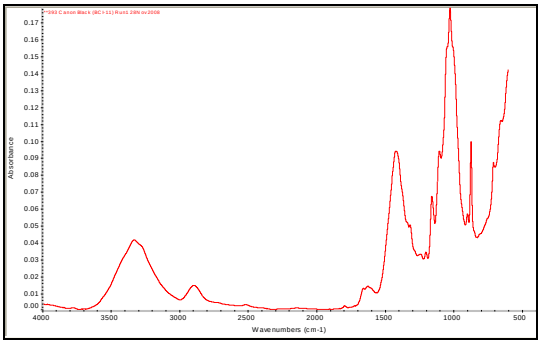

Figure 1186: ATR spectrum of Canon 393 ink on paper collected November 28th, 2008

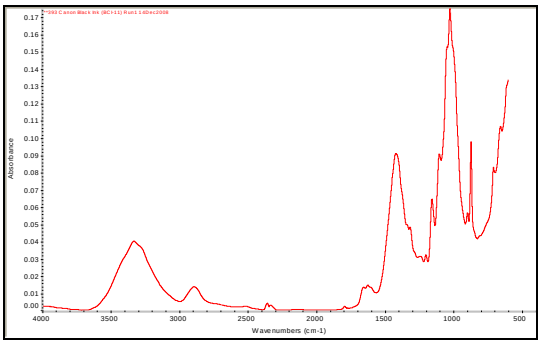

Figure 1187: ATR spectrum of Canon 393 ink on paper collected December 14th, 2008

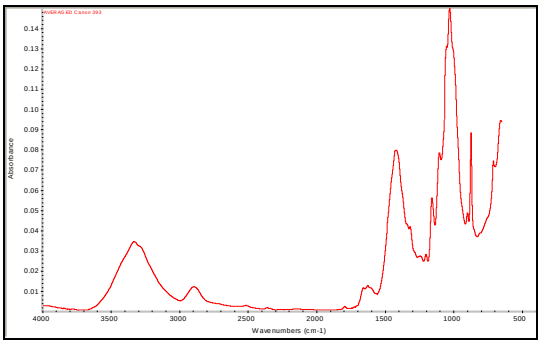

Figure 1188: ATR spectrum of Canon 393 ink on paper AVERAGE

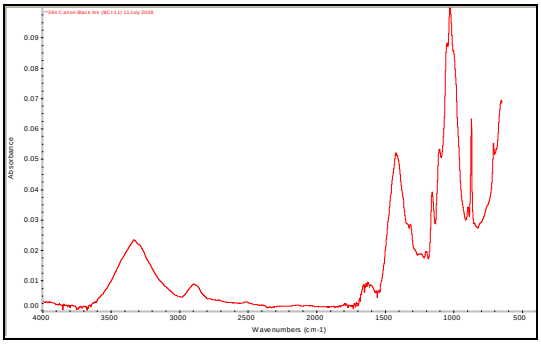

Figure 1189: ATR spectrum of Canon 394 ink on paper collected July 11th, 2008

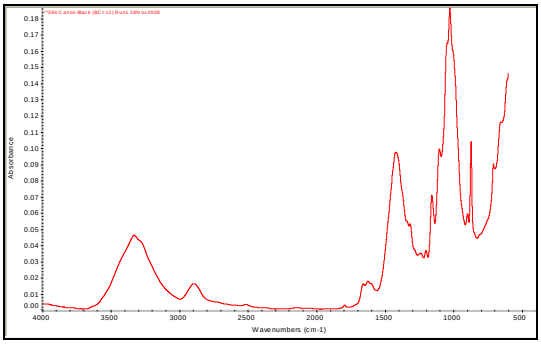

Figure 1190: ATR spectrum of Canon 394 ink on paper collected November 28th, 2008

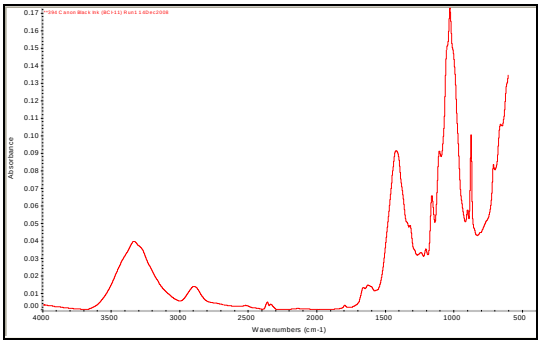

Figure 1191: ATR spectrum of Canon 394 ink on paper collected December 14th, 2008

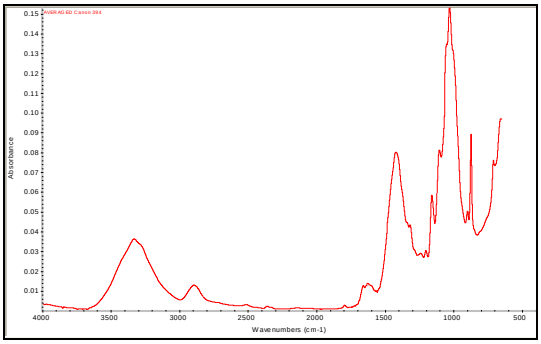

Figure 1192: ATR spectrum of Canon 394 ink on paper AVERAGE

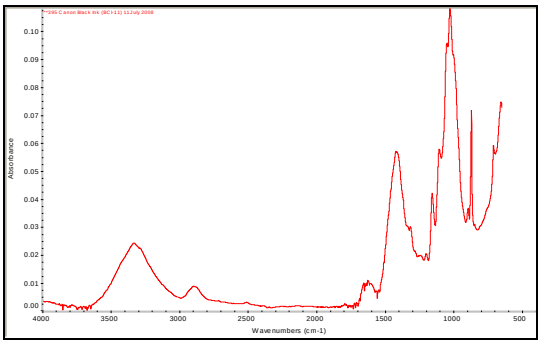

Figure 1193: ATR spectrum of Canon 395 ink on paper collected July 11th, 2008

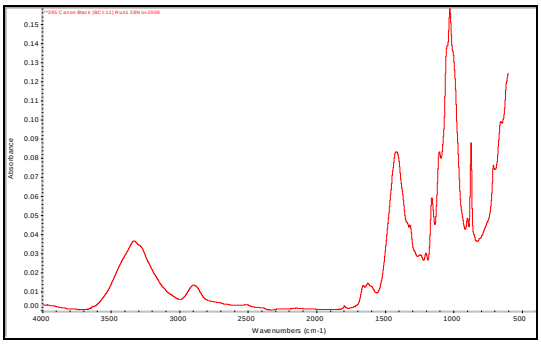

Figure 1194: ATR spectrum of Canon 395 ink on paper collected November 28th, 2008

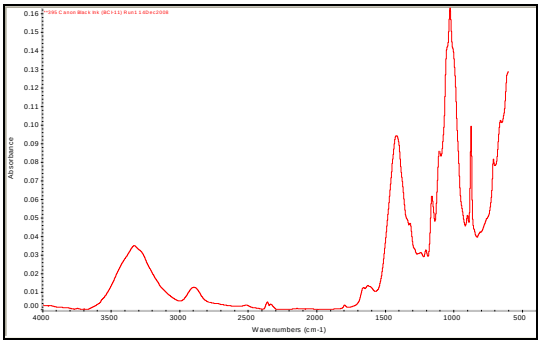

Figure 1195: ATR spectrum of Canon 395 ink on paper collected December 14th, 2008

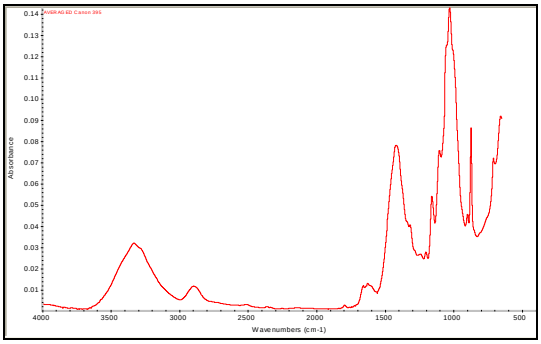

Figure 1196: ATR spectrum of Canon 395 ink on paper AVERAGE

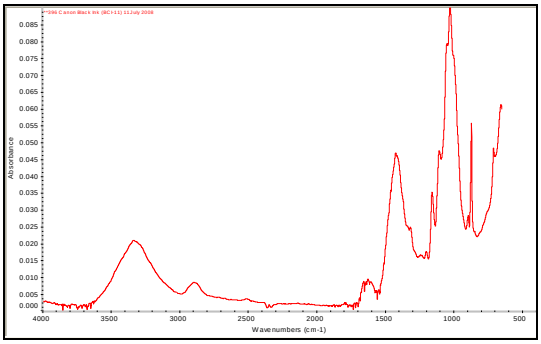

Figure 1197: ATR spectrum of Canon 396 ink on paper collected July 11th, 2008

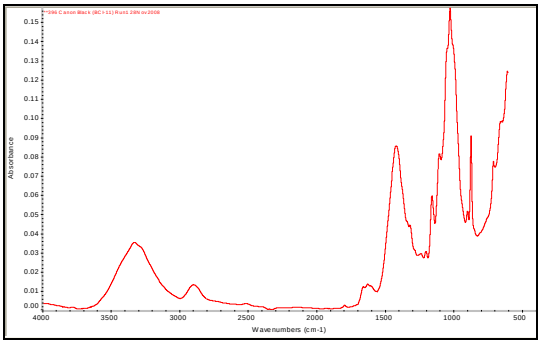

Figure 1198: ATR spectrum of Canon 396 ink on paper collected November 28th, 2008

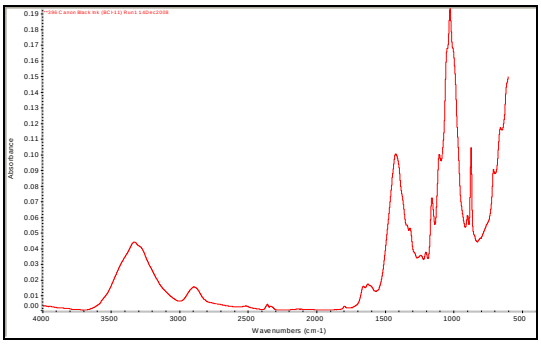

Figure 1199: ATR spectrum of Canon 396 ink on paper collected December 14th, 2008

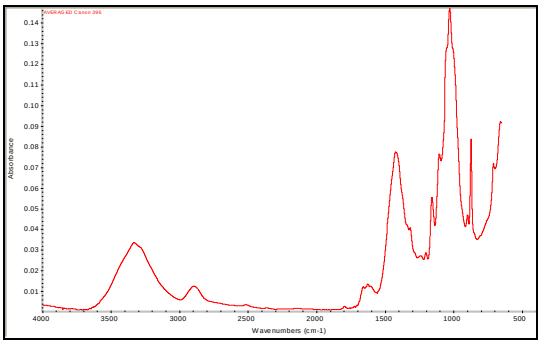

Figure 1200: ATR spectrum of Canon 396 ink on paper AVERAGE

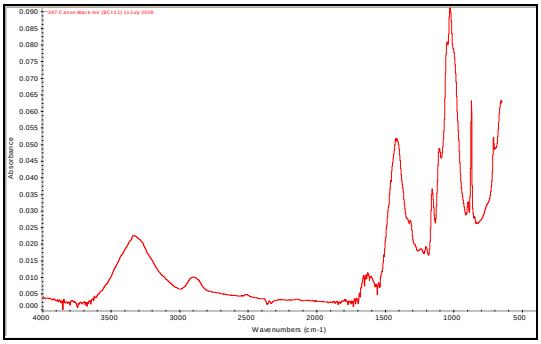

Figure 1201: ATR spectrum of Canon 397 ink on paper collected July 11th, 2008

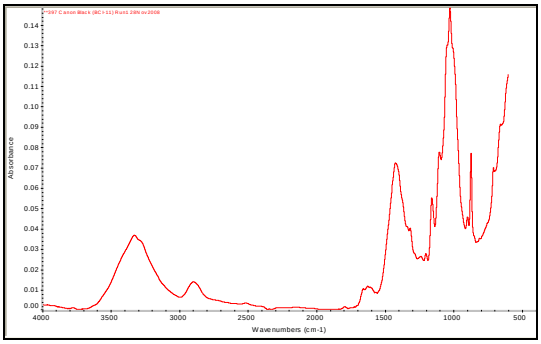

Figure 1202: ATR spectrum of Canon 397 ink on paper collected November 28th, 2008

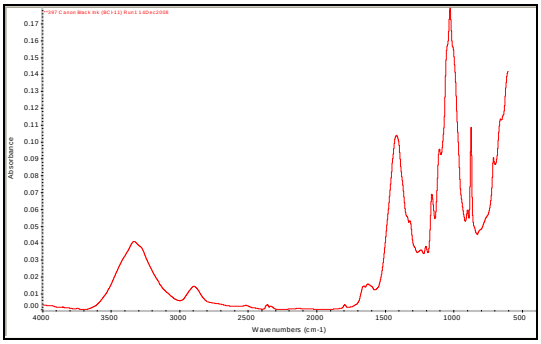

Figure 1203: ATR spectrum of Canon 397 ink on paper collected December 14th, 2008

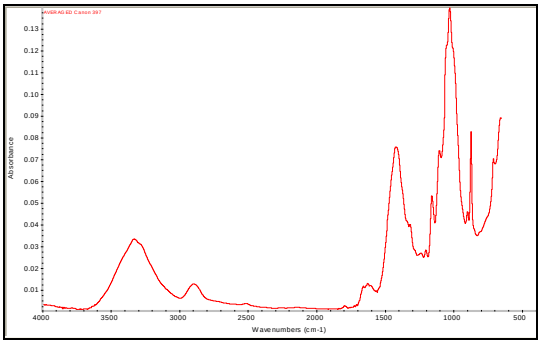

Figure 1204: ATR spectrum of Canon 397 ink on paper AVERAGE

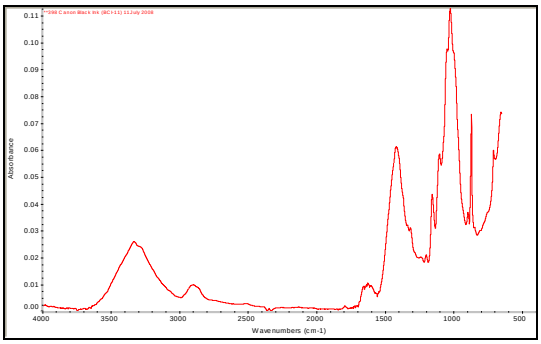

Figure 1205: ATR spectrum of Canon 398 ink on paper collected July 11th, 2008

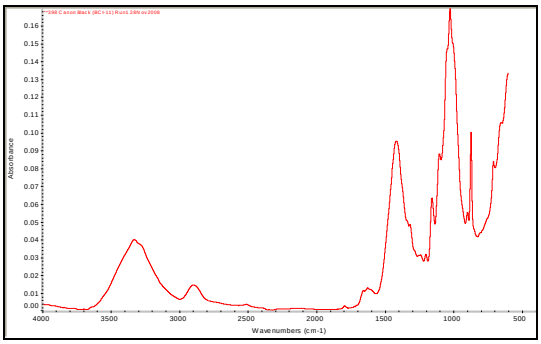

Figure 1206: ATR spectrum of Canon 398 ink on paper collected November 28th, 2008

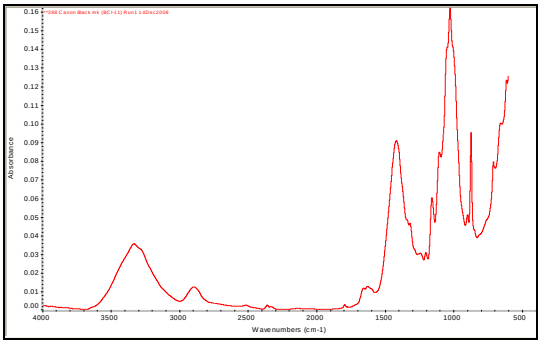

Figure 1207: ATR spectrum of Canon 398 ink on paper collected December 14th, 2008

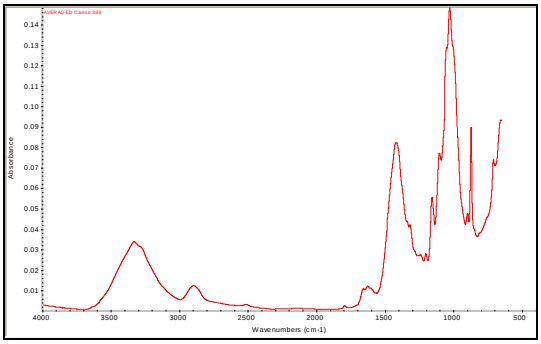

Figure 1208: ATR spectrum of Canon 398 ink on paper AVERAGE

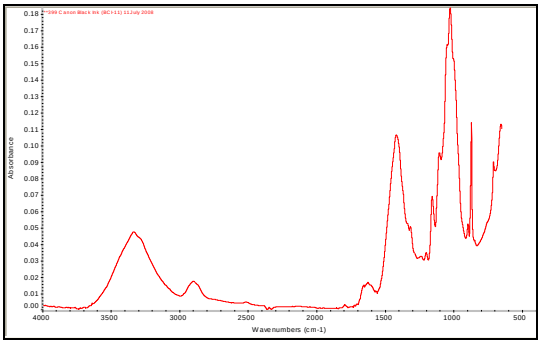

Figure 1209: ATR spectrum of Canon 399 ink on paper collected July 11th, 2008

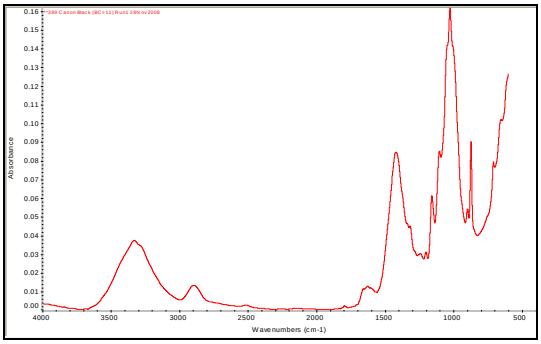

Figure 1210: ATR spectrum of Canon 399 ink on paper collected November 28th, 2008

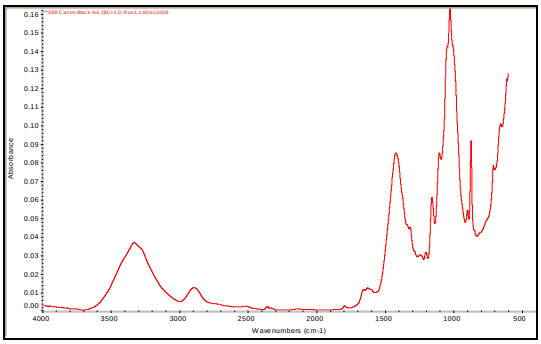

Figure 1211: ATR spectrum of Canon 399 ink on paper collected December 14th, 2008

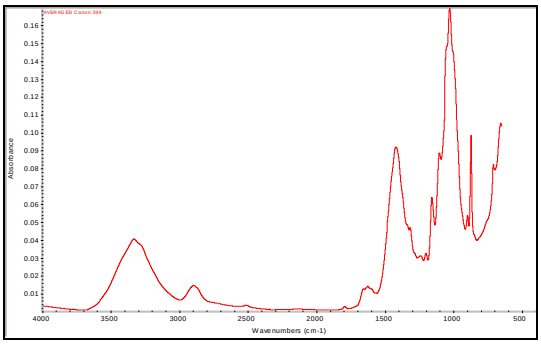

Figure 1212: ATR spectrum of Canon 399 ink on paper AVERAGE

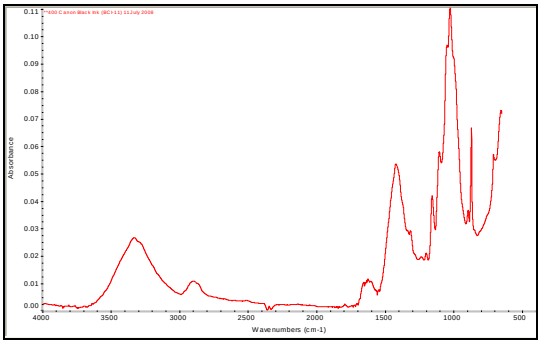

Figure 1213: ATR spectrum of Canon 400 ink on paper collected July 11th, 2008

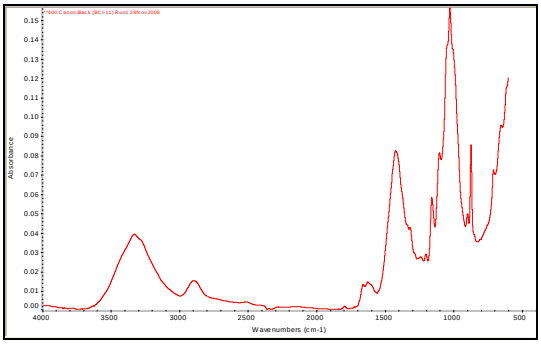

Figure 1214: ATR spectrum of Canon 400 ink on paper collected November 28th, 2008

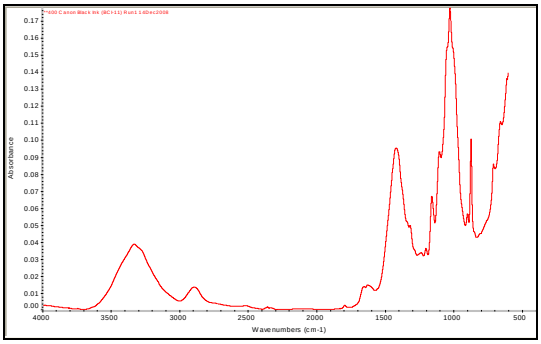

Figure 1215: ATR spectrum of Canon 400 ink on paper collected December 14th, 2008

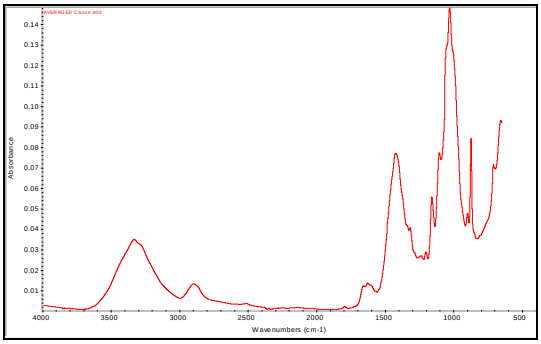

Figure 1216: ATR spectrum of Canon 400 ink on paper AVERAGE

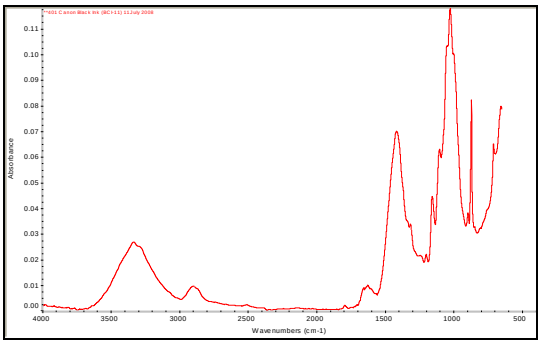

Figure 1217: ATR spectrum of Canon 401 ink on paper collected July 11th, 2008

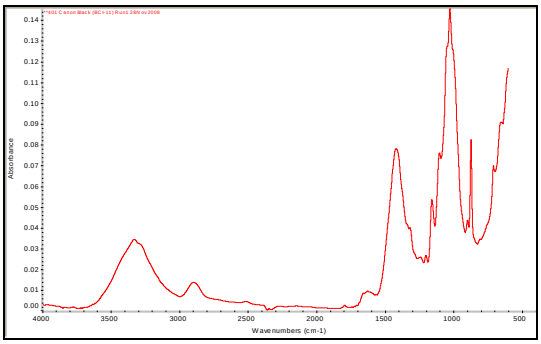

Figure 1218: ATR spectrum of Canon 401 ink on paper collected November 28th, 2008

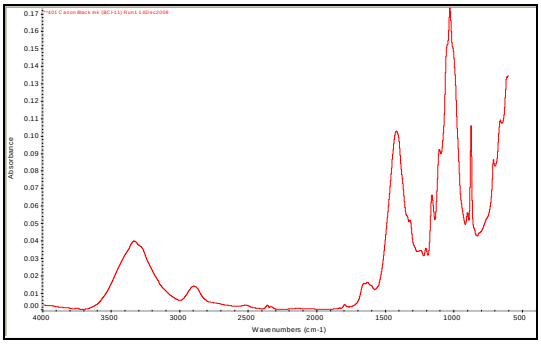

Figure 1219: ATR spectrum of Canon 401 ink on paper collected December 14th, 2008

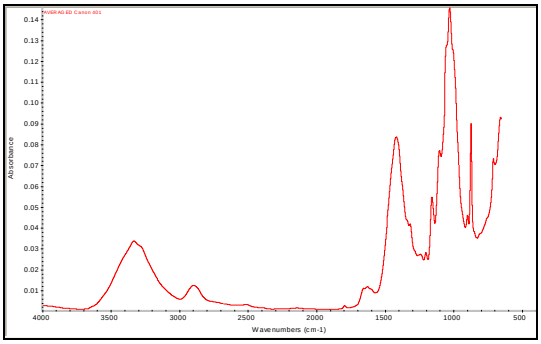

Figure 1220: ATR spectrum of Canon 401 ink on paper AVERAGE

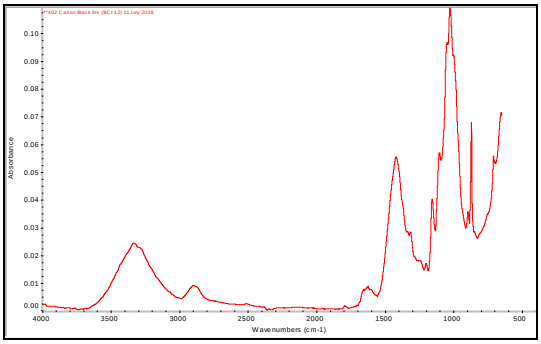

Figure 1221: ATR spectrum of Canon 402 ink on paper collected July 11th, 2008

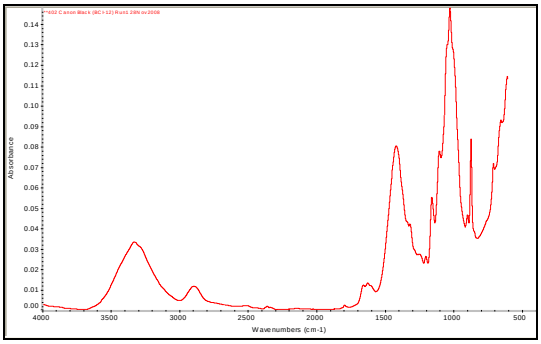

Figure 1222: ATR spectrum of Canon 402 ink on paper collected November 28th, 2008

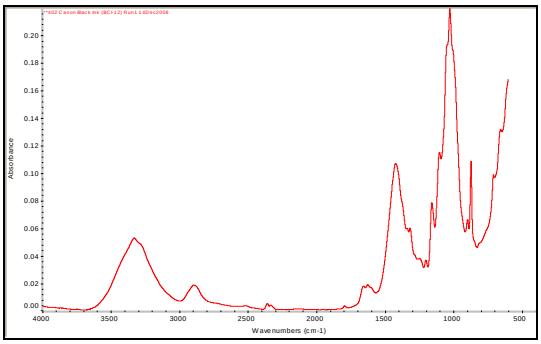

Figure 1223: ATR spectrum of Canon 402 ink on paper collected December 14th, 2008

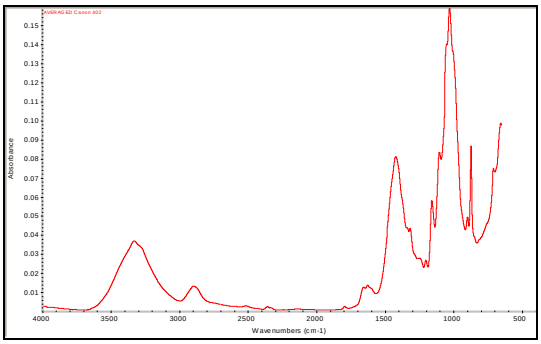

Figure 1224: ATR spectrum of Canon 402 ink on paper AVERAGE

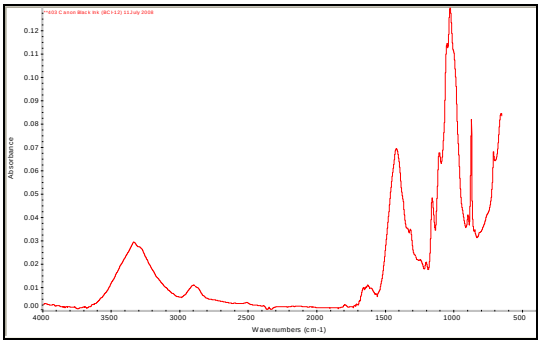

Figure 1225: ATR spectrum of Canon 403 ink on paper collected July 11th, 2008

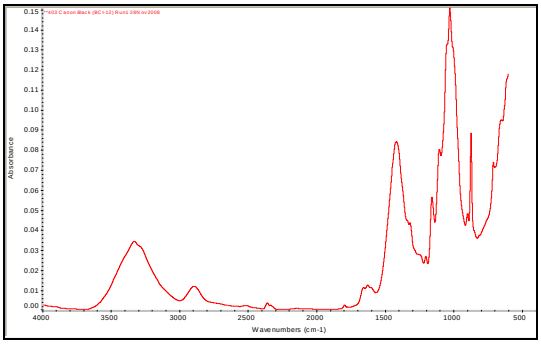

Figure 1226: ATR spectrum of Canon 403 ink on paper collected November 28th, 2008

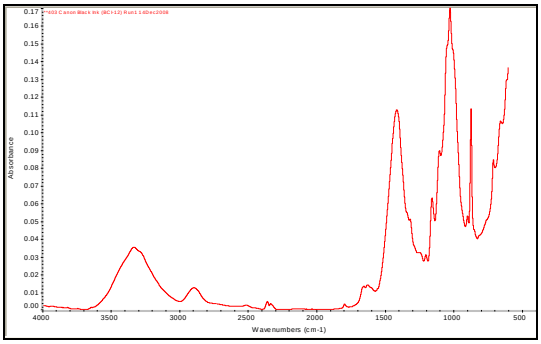

Figure 1227: ATR spectrum of Canon 403 ink on paper collected December 14th, 2008

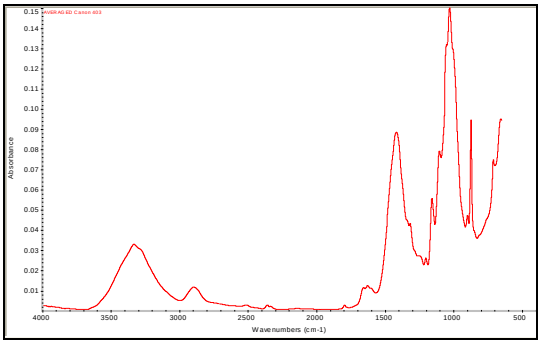

Figure 1228: ATR spectrum of Canon 403 ink on paper AVERAGE

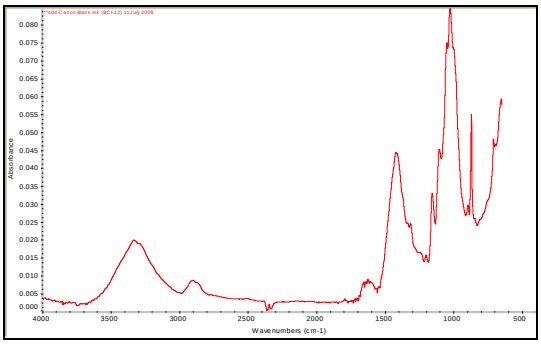

Figure 1229: ATR spectrum of Canon 404 ink on paper collected July 11th, 2008

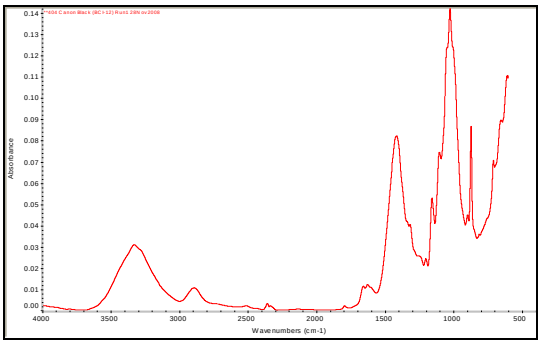

Figure 1230: ATR spectrum of Canon 404 ink on paper collected November 28th, 2008

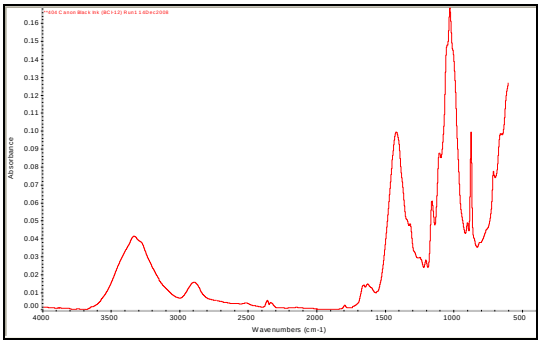

Figure 1231: ATR spectrum of Canon 404 ink on paper collected December 14th, 2008

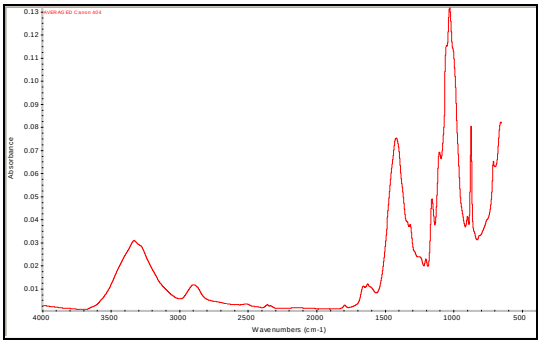

Figure 1232: ATR spectrum of Canon 404 ink on paper AVERAGE

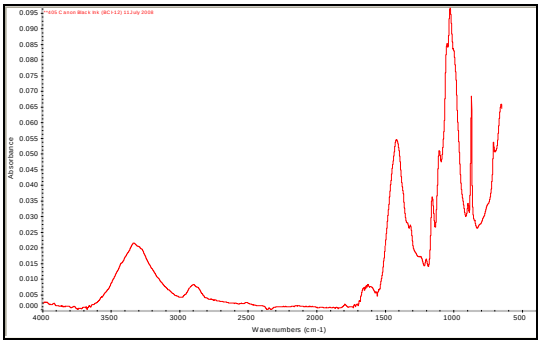

Figure 1233: ATR spectrum of Canon 405 ink on paper collected July 11th, 2008

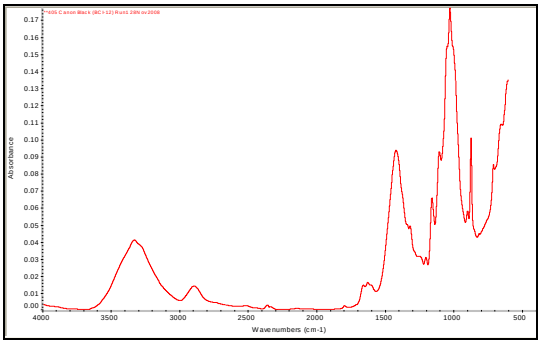

Figure 1234: ATR spectrum of Canon 405 ink on paper collected November 28th, 2008

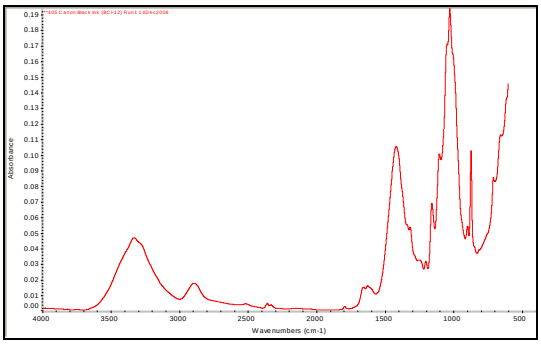

Figure 1235: ATR spectrum of Canon 405 ink on paper collected December 14th, 2008

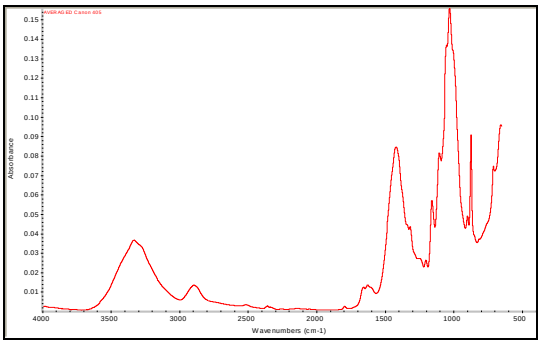

Figure 1236: ATR spectrum of Canon 405 ink on paper AVERAGE

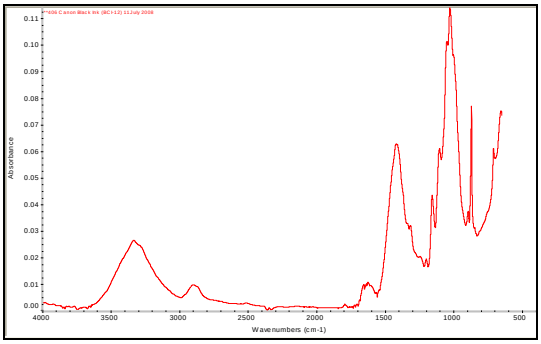

Figure 1237: ATR spectrum of Canon 406 ink on paper collected July 11th, 2008

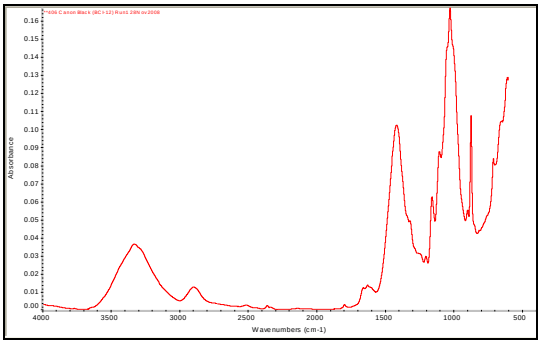

Figure 1238: ATR spectrum of Canon 406 ink on paper collected November 28th, 2008

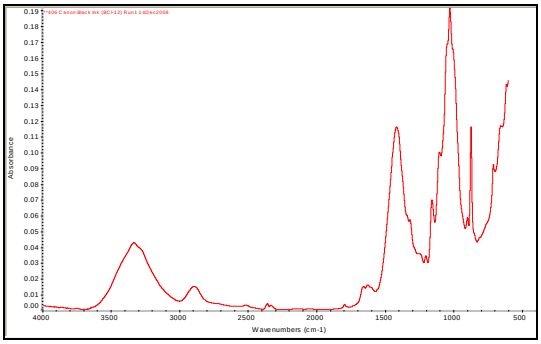

Figure 1239: ATR spectrum of Canon 406 ink on paper collected December 14th, 2008

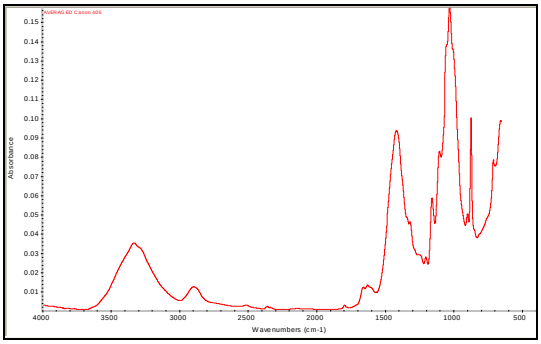

Figure 1240: ATR spectrum of Canon 406 ink on paper AVERAGE

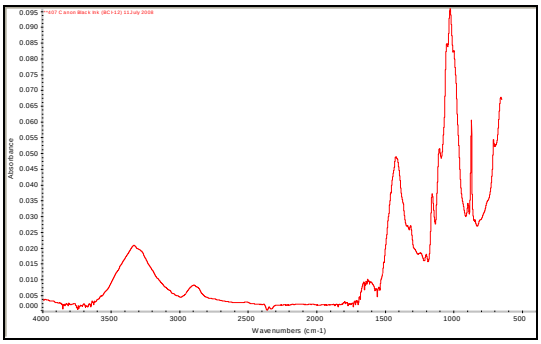

Figure 1241: ATR spectrum of Canon 407 ink on paper collected July 11th, 2008

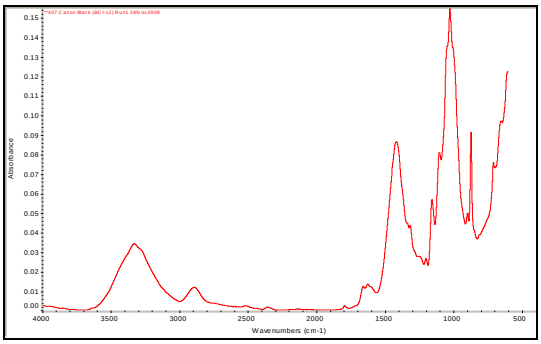

Figure 1242: ATR spectrum of Canon 407 ink on paper collected November 28th, 2008

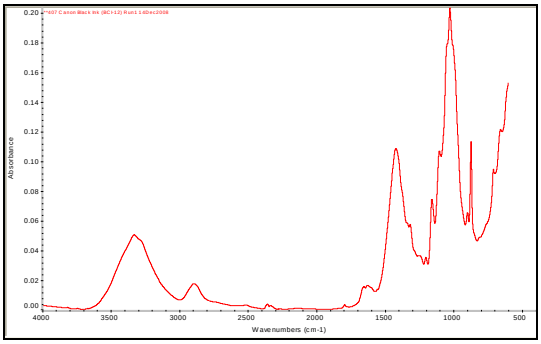

Figure 1243: ATR spectrum of Canon 407 ink on paper collected December 14th, 2008

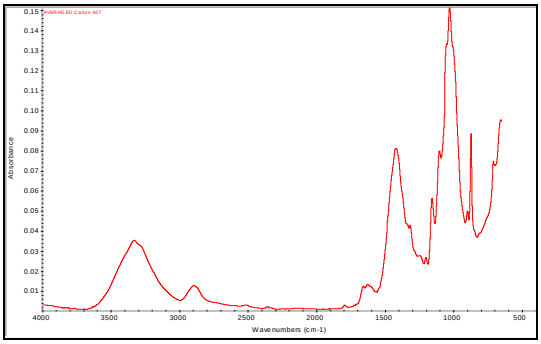

Figure 1244: ATR spectrum of Canon 407 ink on paper AVERAGE

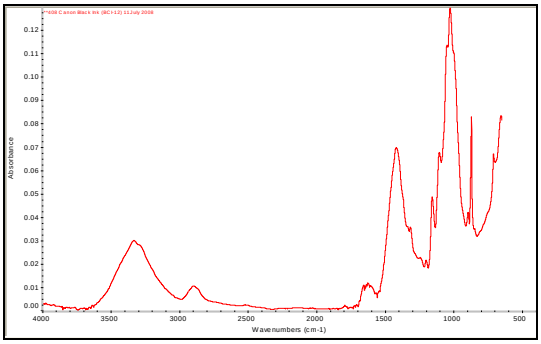

Figure 1245: ATR spectrum of Canon 408 ink on paper collected July 11th, 2008

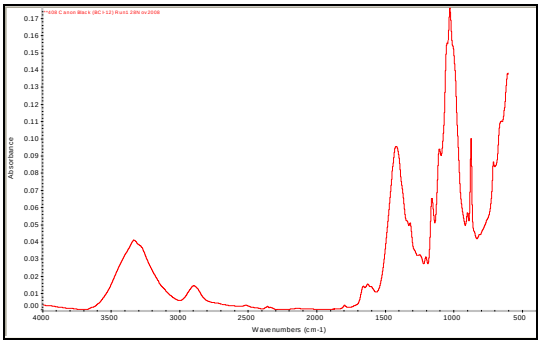

Figure 1246: ATR spectrum of Canon 408 ink on paper collected November 28th, 2008

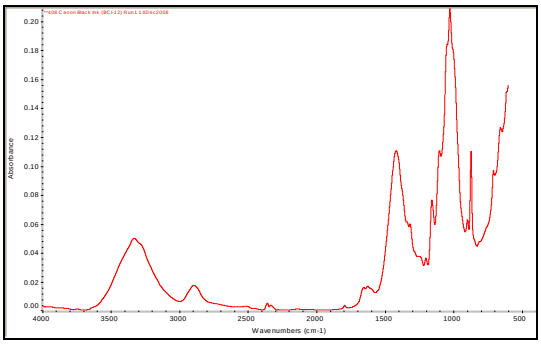

Figure 1247: ATR spectrum of Canon 408 ink on paper collected December 14th, 2008

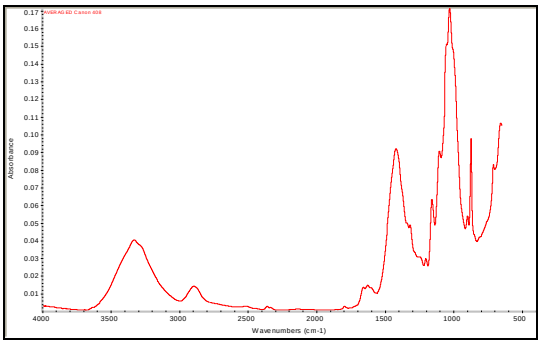

Figure 1248: ATR spectrum of Canon 408 ink on paper AVERAGE

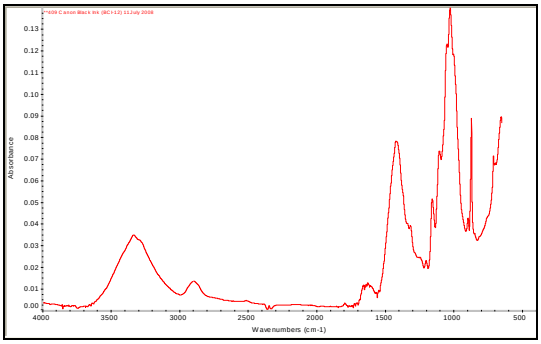

Figure 1249: ATR spectrum of Canon 409 ink on paper collected July 11th, 2008

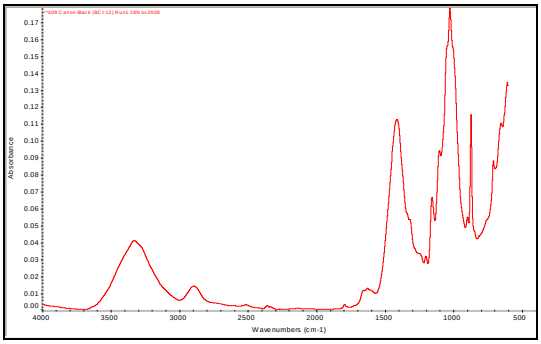

Figure 1250: ATR spectrum of Canon 409 ink on paper collected November 28th, 2008

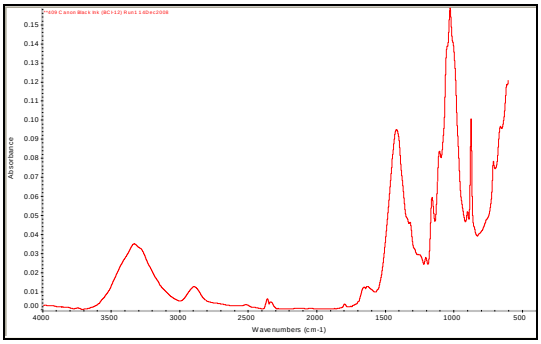

Figure 1251: ATR spectrum of Canon 409 ink on paper collected December 14th, 2008

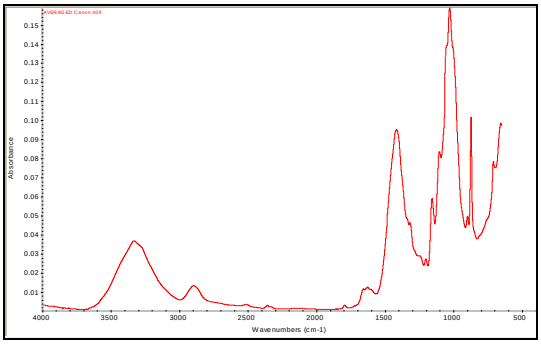

Figure 1252: ATR spectrum of Canon 409 ink on paper AVERAGE

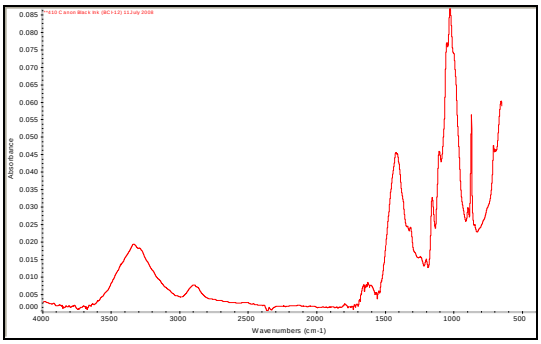

Figure 1253: ATR spectrum of Canon 410 ink on paper collected July 11th, 2008

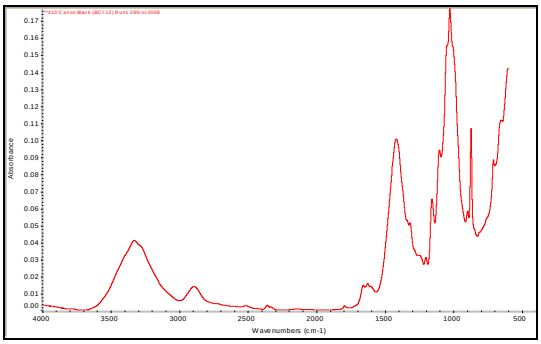

Figure 1254: ATR spectrum of Canon 410 ink on paper collected November 28th, 2008

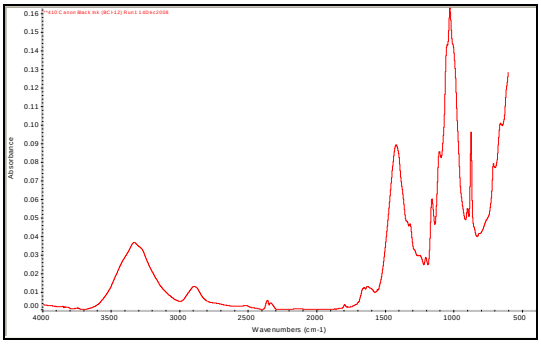

Figure 1255: ATR spectrum of Canon 410 ink on paper collected December 14th, 2008

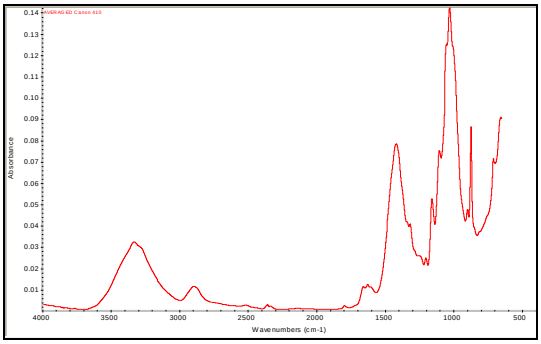

Figure 1256: ATR spectrum of Canon 410 ink on paper AVERAGE

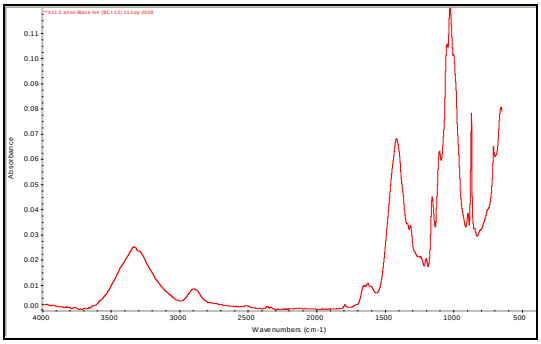

Figure 1257: ATR spectrum of Canon 411 ink on paper collected July 11th, 2008

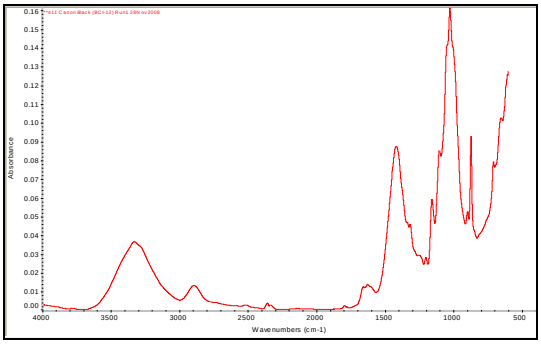

Figure 1258: ATR spectrum of Canon 411 ink on paper collected November 28th, 2008

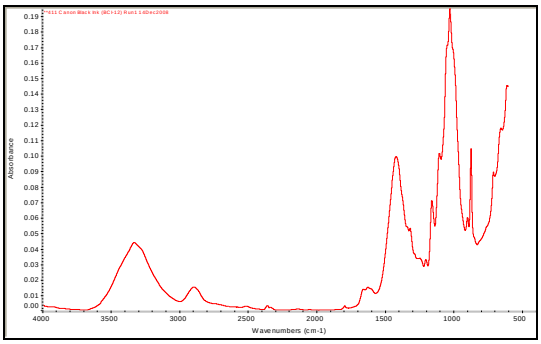

Figure 1259: ATR spectrum of Canon 411 ink on paper collected December 14th, 2008

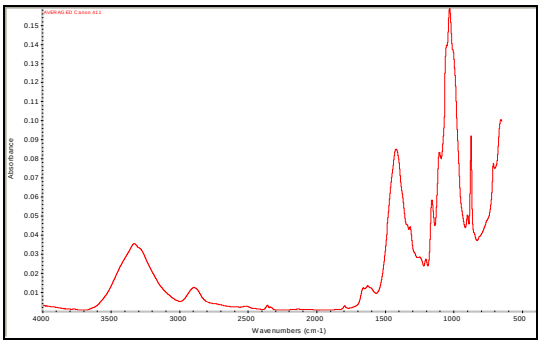

Figure 1260: ATR spectrum of Canon 411 ink on paper AVERAGE

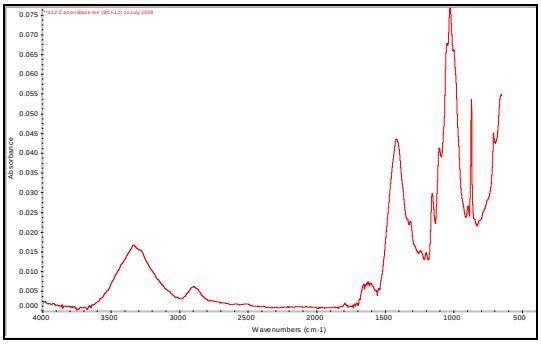

Figure 1261: ATR spectrum of Canon 412 ink on paper collected July 11th, 2008

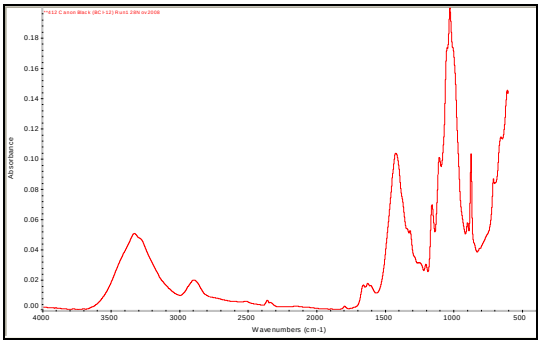

Figure 1262: ATR spectrum of Canon 412 ink on paper collected November 28th, 2008

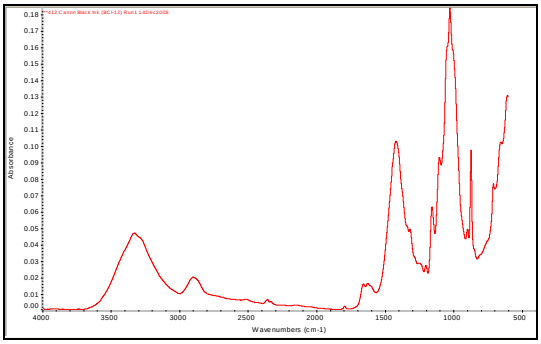

Figure 1263: ATR spectrum of Canon 412 ink on paper collected December 14th, 2008

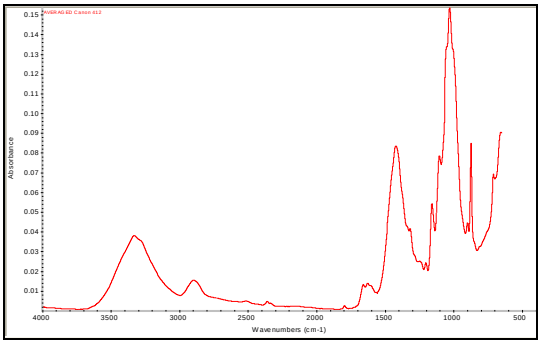

Figure 1264: ATR spectrum of Canon 412 ink on paper AVERAGE

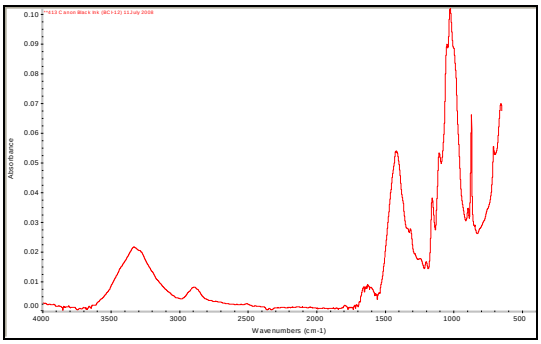

Figure 1265: ATR spectrum of Canon 413 ink on paper collected July 11th, 2008

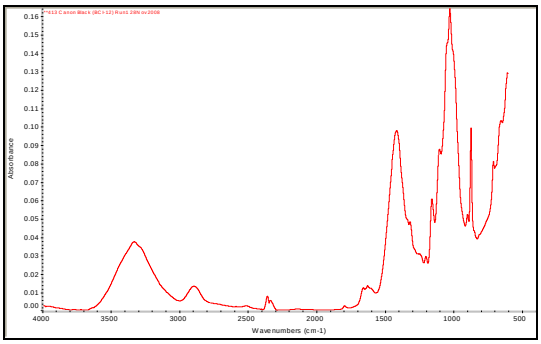

Figure 1266: ATR spectrum of Canon 413 ink on paper collected November 28th, 2008

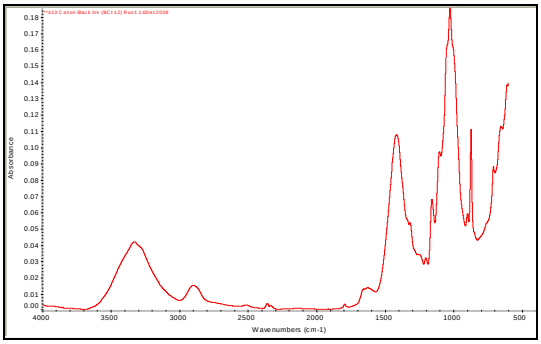

Figure 1267: ATR spectrum of Canon 413 ink on paper collected December 14th, 2008

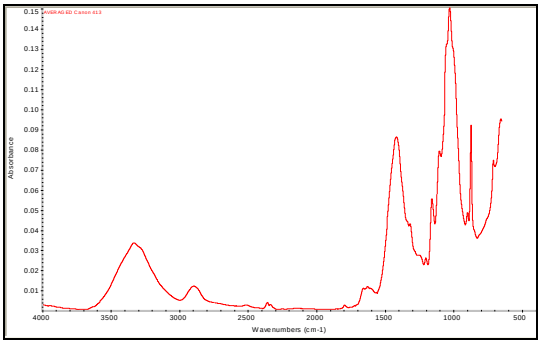

Figure 1268: ATR spectrum of Canon 413 ink on paper AVERAGE

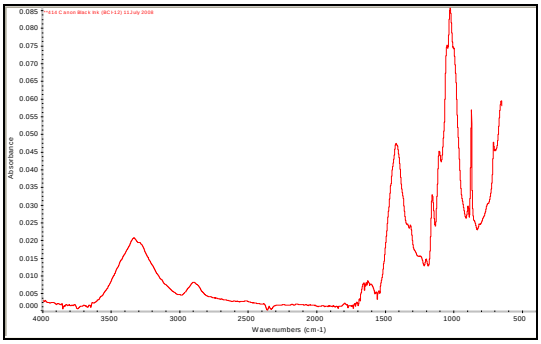

Figure 1269: ATR spectrum of Canon 414 ink on paper collected July 11th, 2008

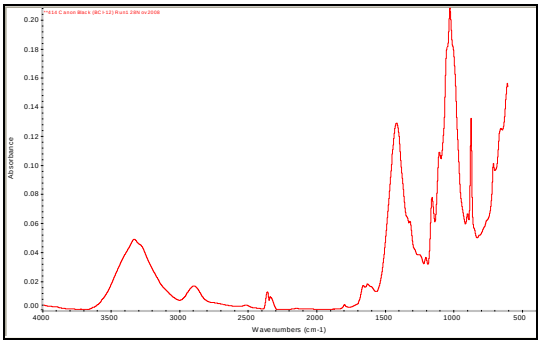

Figure 1270: ATR spectrum of Canon 414 ink on paper collected November 28th, 2008

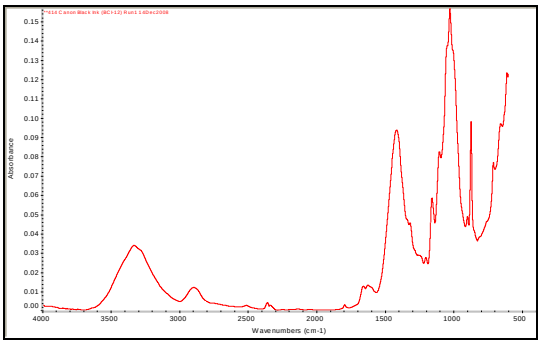

Figure 1271: ATR spectrum of Canon 414 ink on paper collected December 14th, 2008

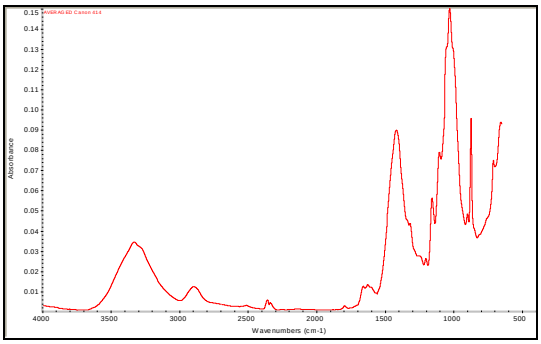

Figure 1272: ATR spectrum of Canon 414 ink on paper AVERAGE

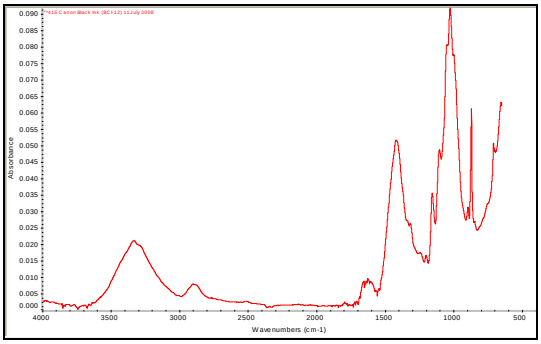

Figure 1273: ATR spectrum of Canon 415 ink on paper collected July 11th, 2008

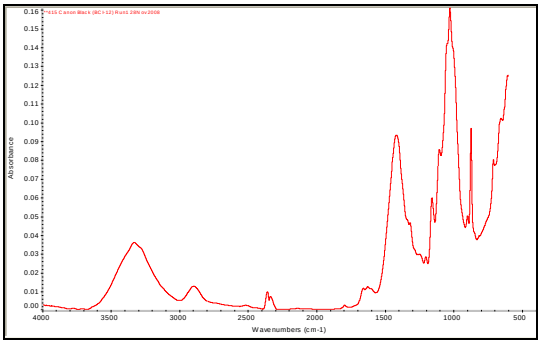

Figure 1274: ATR spectrum of Canon 415 ink on paper collected November 28th, 2008

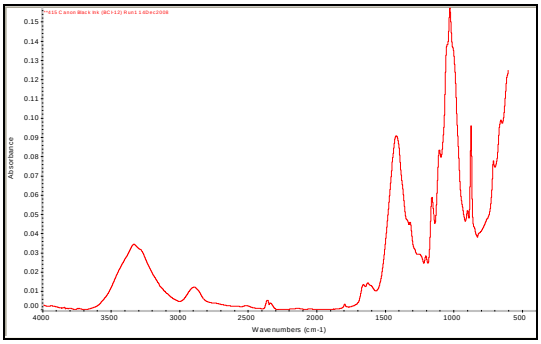

Figure 1275: ATR spectrum of Canon 415 ink on paper collected December 14th, 2008

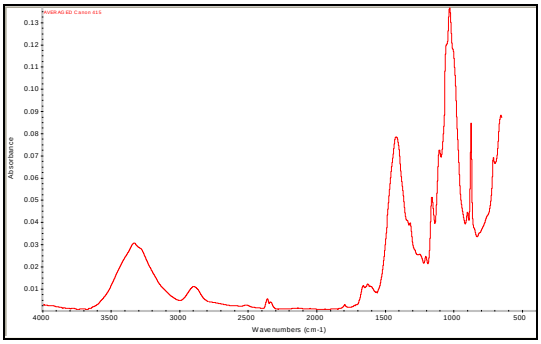

Figure 1276: ATR spectrum of Canon 415 ink on paper AVERAGE

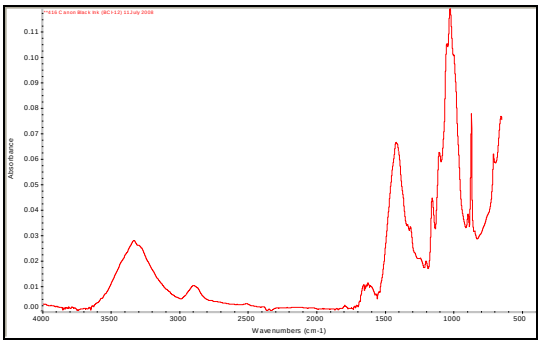

Figure 1277: ATR spectrum of Canon 416 ink on paper collected July 11th, 2008

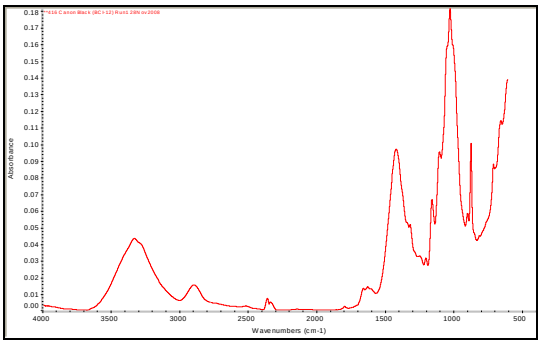

Figure 1278: ATR spectrum of Canon 416 ink on paper collected November 28th, 2008

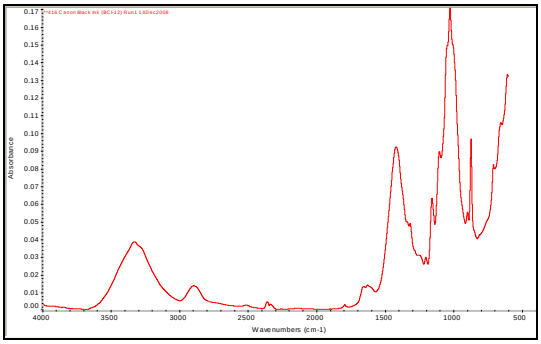

Figure 1279: ATR spectrum of Canon 416 ink on paper collected December 14th, 2008

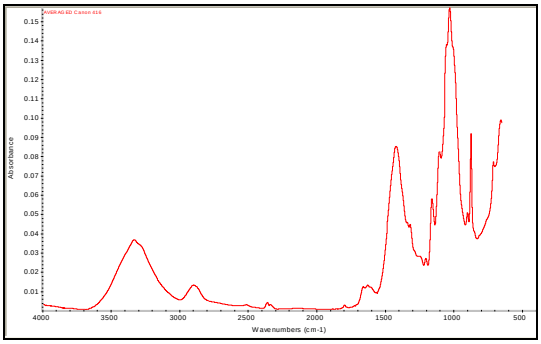

Figure 1280: ATR spectrum of Canon 416 ink on paper AVERAGE

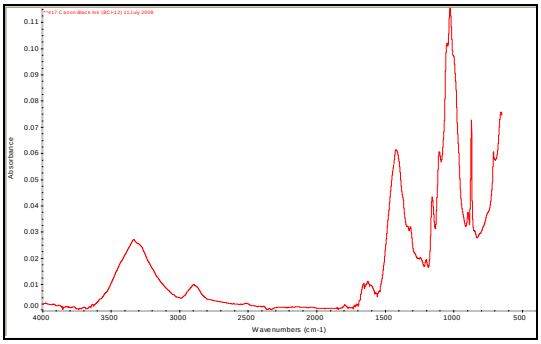

Figure 1281: ATR spectrum of Canon 417 ink on paper collected July 11th, 2008

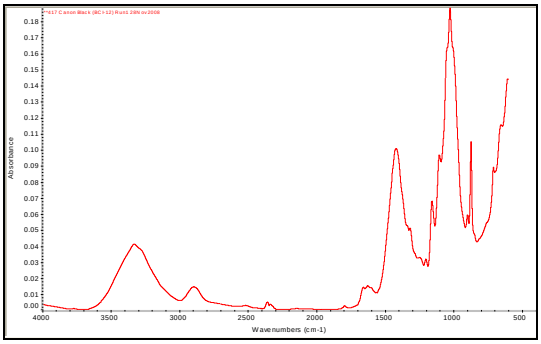

Figure 1282: ATR spectrum of Canon 417 ink on paper collected November 28th, 2008

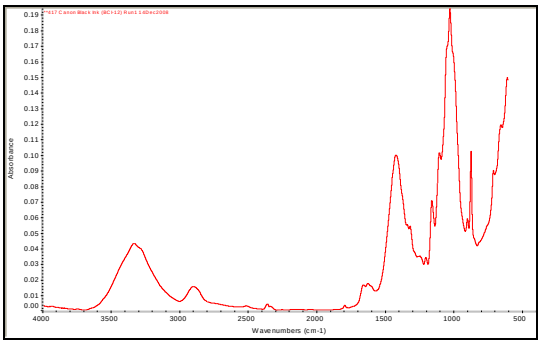

Figure 1283: ATR spectrum of Canon 417 ink on paper collected December 14th, 2008

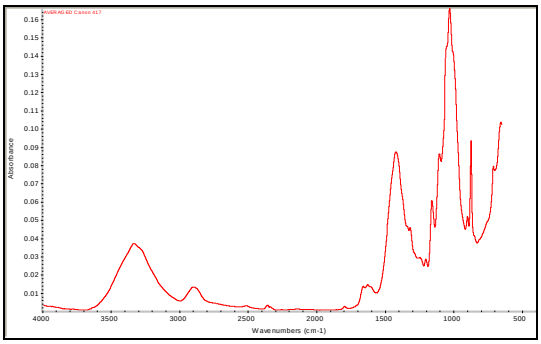

Figure 1284: ATR spectrum of Canon 417 ink on paper AVERAGE

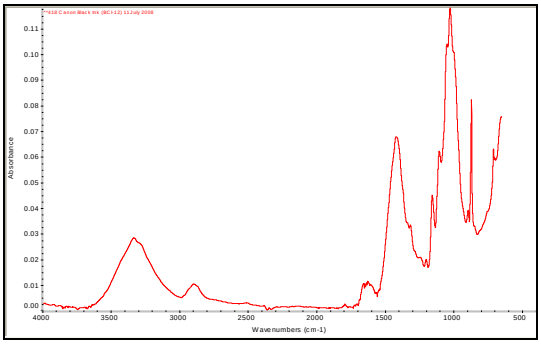

Figure 1285: ATR spectrum of Canon 418 ink on paper collected July 11th, 2008

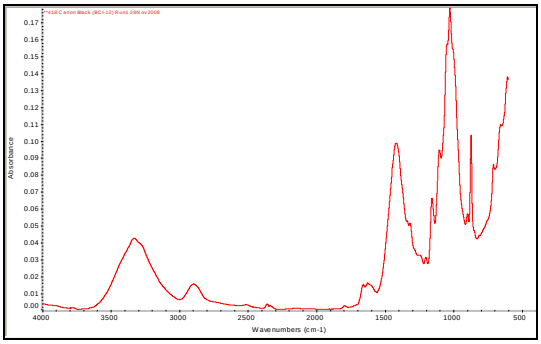

Figure 1286: ATR spectrum of Canon 418 ink on paper collected November 28th, 2008

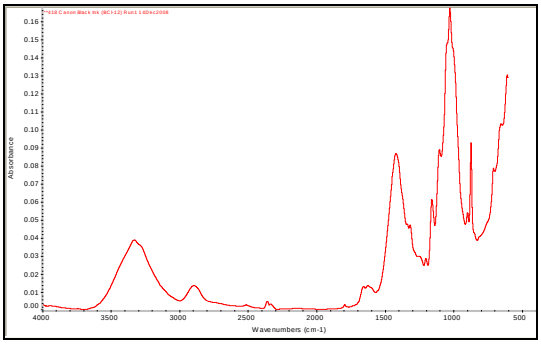

Figure 1287: ATR spectrum of Canon 418 ink on paper collected December 14th, 2008

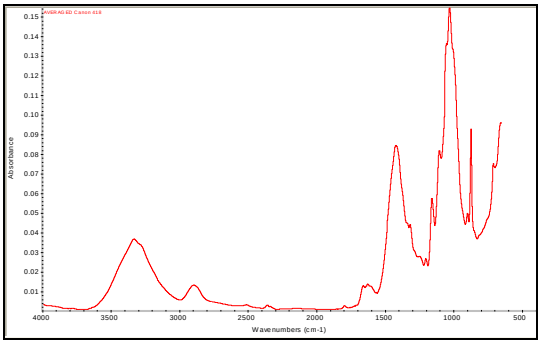

Figure 1288: ATR spectrum of Canon 418 ink on paper AVERAGE

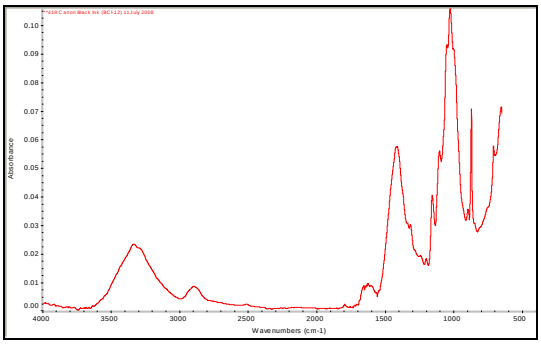

Figure 1289: ATR spectrum of Canon 419 ink on paper collected July 11th, 2008

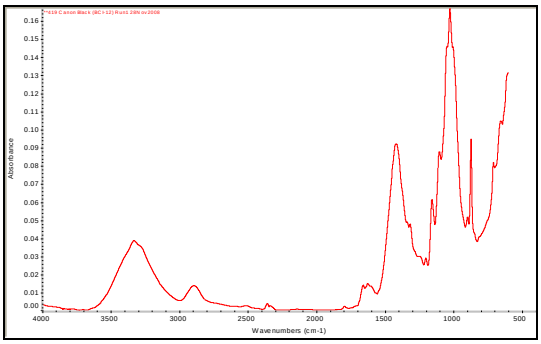

Figure 1290: ATR spectrum of Canon 419 ink on paper collected November 28th, 2008

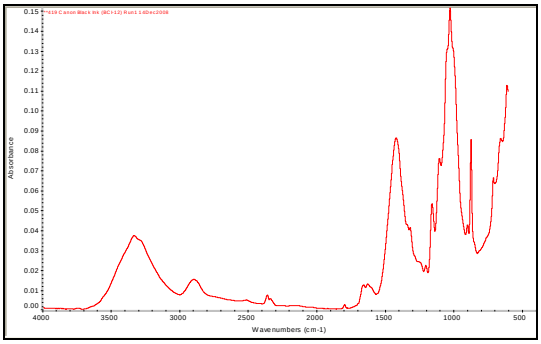

Figure 1291: ATR spectrum of Canon 419 ink on paper collected December 14th, 2008

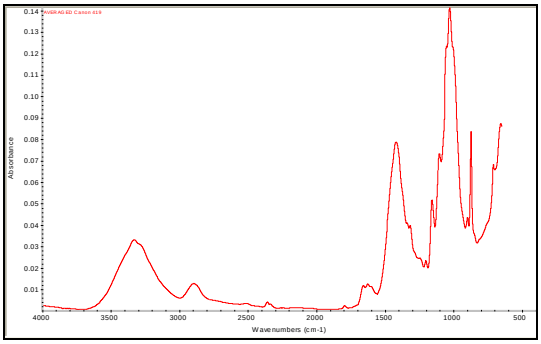

Figure 1292: ATR spectrum of Canon 419 ink on paper AVERAGE

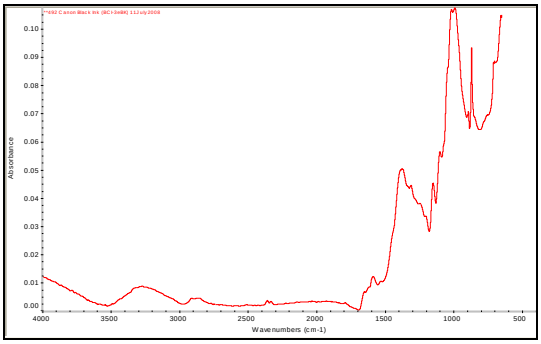

Figure 1293: ATR spectrum of Canon 492 ink on paper collected July 11th, 2008

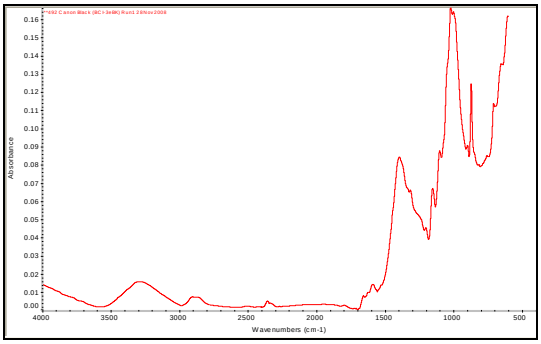

Figure 1294: ATR spectrum of Canon 492 ink on paper collected November 28th, 2008

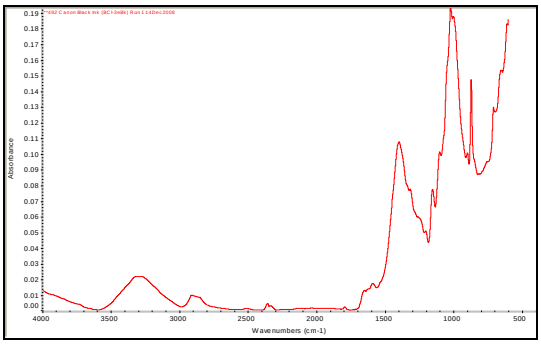

Figure 1295: ATR spectrum of Canon 492 ink on paper collected December 14th, 2008

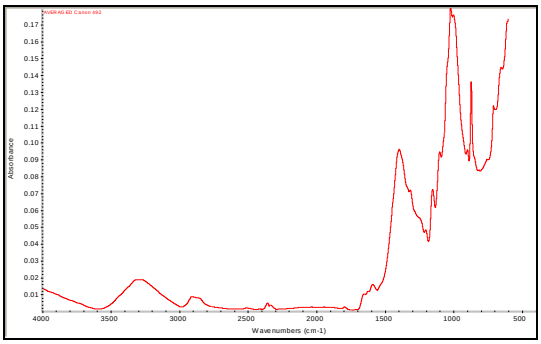

Figure 1296: ATR spectrum of Canon 492 ink on paper AVERAGE

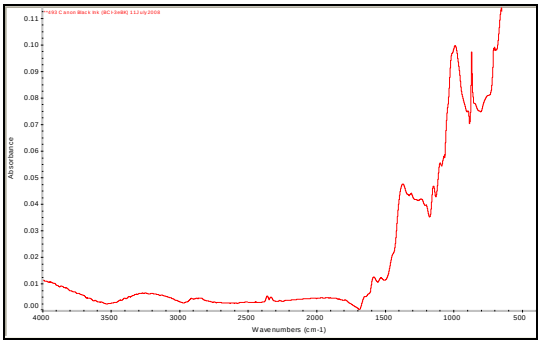

Figure 1297: ATR spectrum of Canon 493 ink on paper collected July 11th, 2008

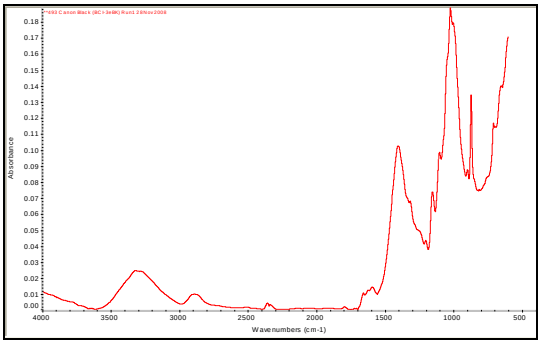

Figure 1298: ATR spectrum of Canon 493 ink on paper collected November 28th, 2008

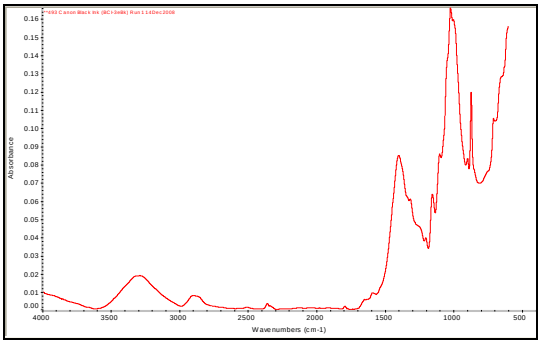

Figure 1299: ATR spectrum of Canon 493 ink on paper collected December 14th, 2008

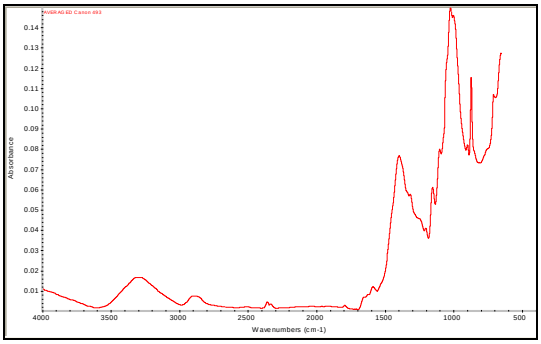

Figure 1300: ATR spectrum of Canon 493 ink on paper AVERAGE

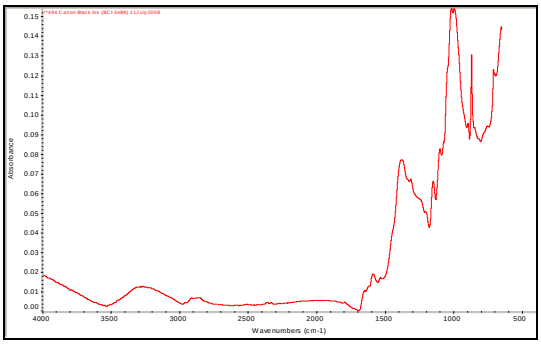

Figure 1301: ATR spectrum of Canon 494 ink on paper collected July 11th, 2008

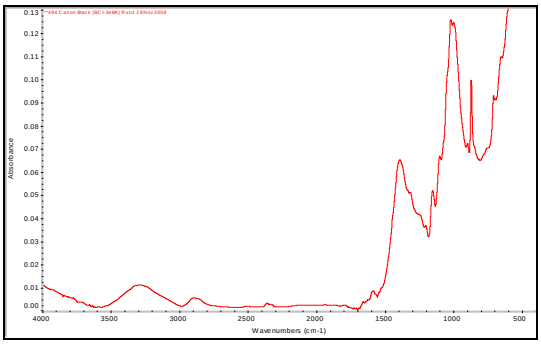

Figure 1302: ATR spectrum of Canon 494 ink on paper collected November 28th, 2008

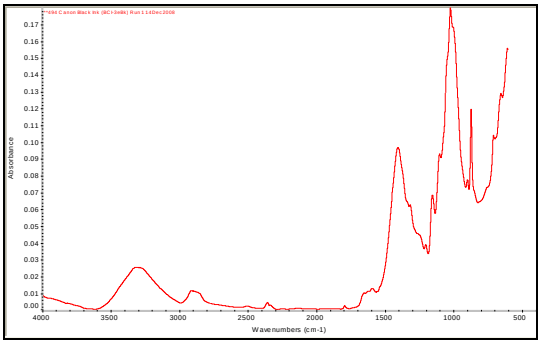

Figure 1303: ATR spectrum of Canon 494 ink on paper collected December 14th, 2008

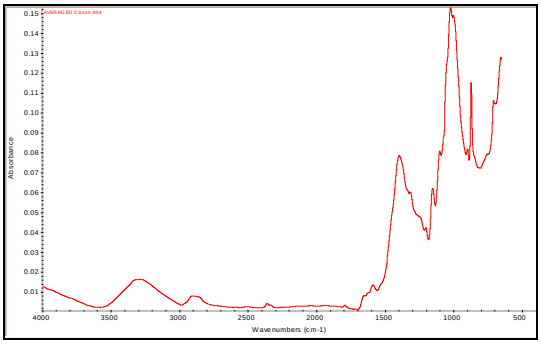

Figure 1304: ATR spectrum of Canon 494 ink on paper AVERAGE

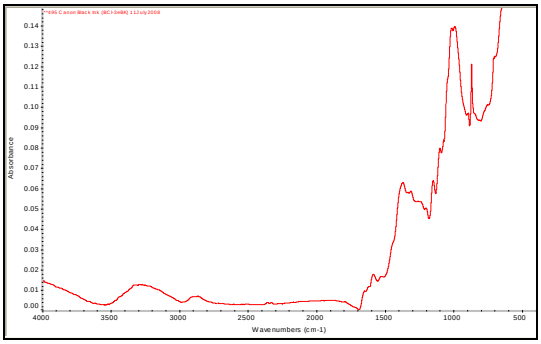

Figure 1305: ATR spectrum of Canon 495 ink on paper collected July 11th, 2008

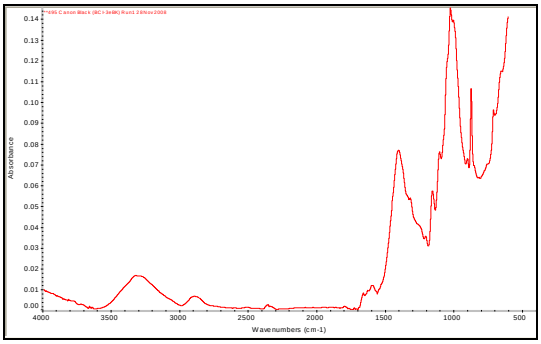

Figure 1306: ATR spectrum of Canon 495 ink on paper collected November 28th, 2008

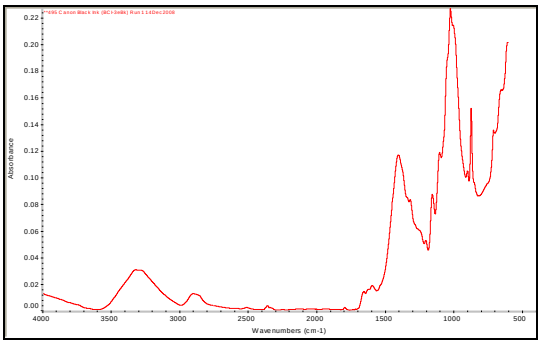

Figure 1307: ATR spectrum of Canon 495 ink on paper collected December 14th, 2008

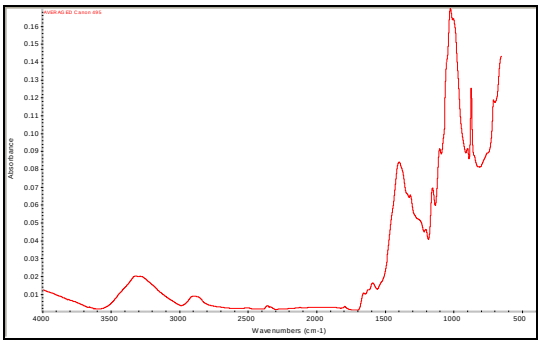

Figure 1308: ATR spectrum of Canon 495 ink on paper AVERAGE

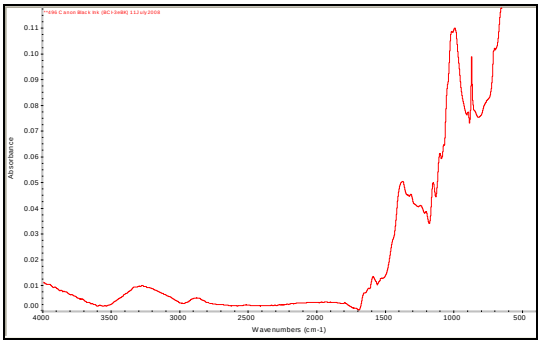

Figure 1309: ATR spectrum of Canon 496 ink on paper collected July 11th, 2008

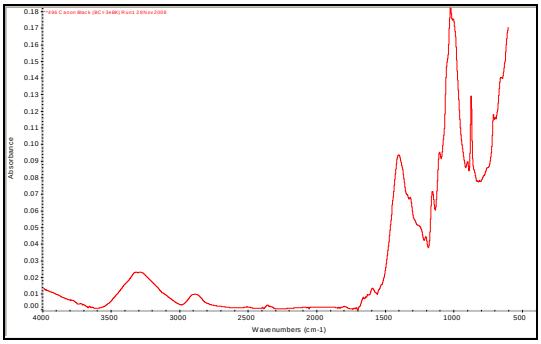

Figure 1310: ATR spectrum of Canon 496 ink on paper collected November 28th, 2008

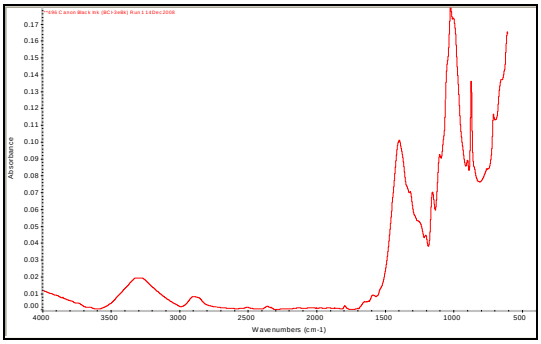

Figure 1311: ATR spectrum of Canon 496 ink on paper collected December 14th, 2008

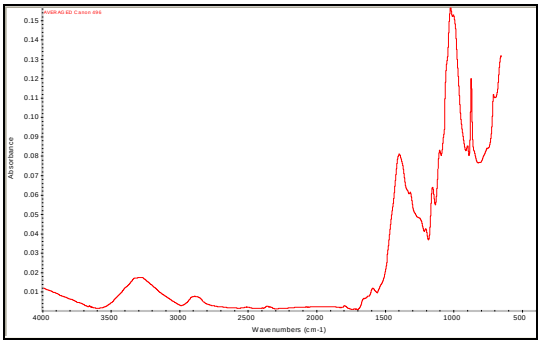

Figure 1312: ATR spectrum of Canon 496 ink on paper AVERAGE

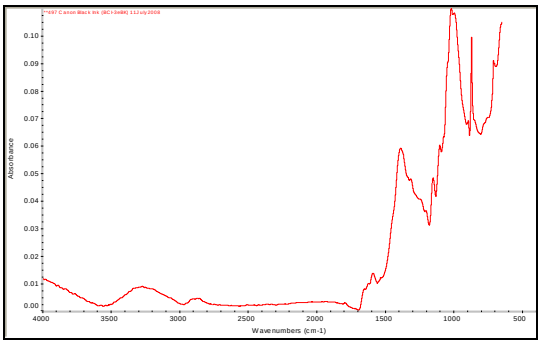

Figure 1313: ATR spectrum of Canon 497 ink on paper collected July 11th, 2008

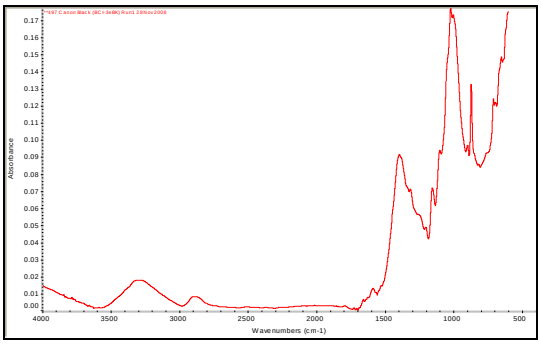

Figure 1314: ATR spectrum of Canon 497 ink on paper collected November 28th, 2008

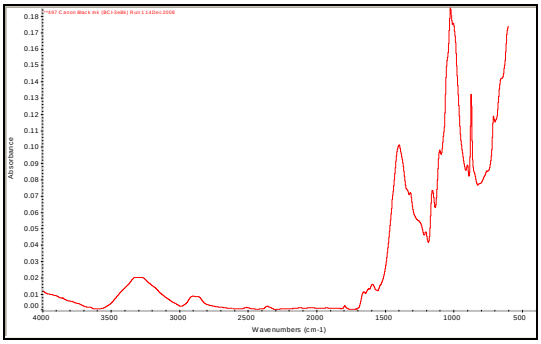

Figure 1315: ATR spectrum of Canon 497 ink on paper collected December 14th, 2008

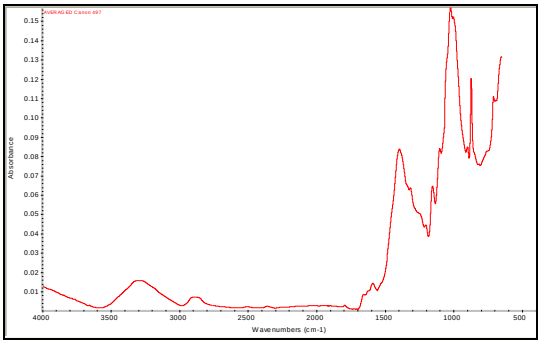

Figure 1316: ATR spectrum of Canon 497 ink on paper AVERAGE

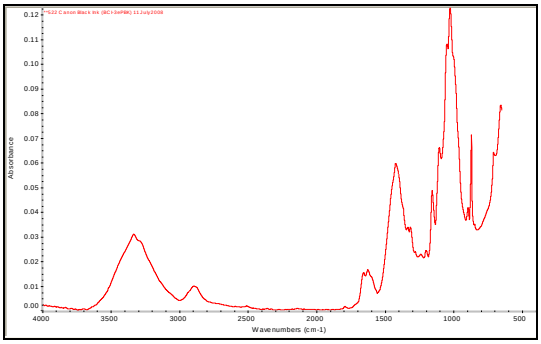

Figure 1317: ATR spectrum of Canon 522 ink on paper collected July 11th, 2008

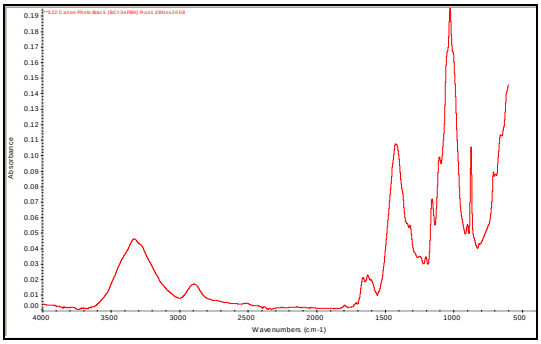

Figure 1318: ATR spectrum of Canon 522 ink on paper collected November 28th, 2008

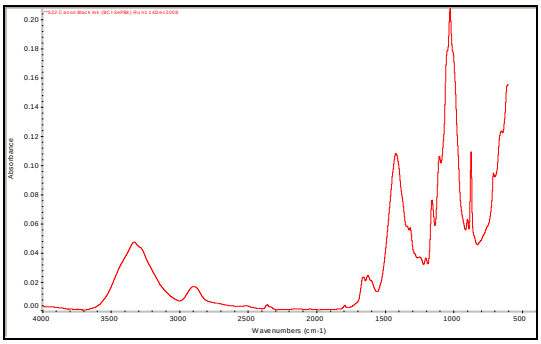

Figure 1319: ATR spectrum of Canon 522 ink on paper collected December 14th, 2008

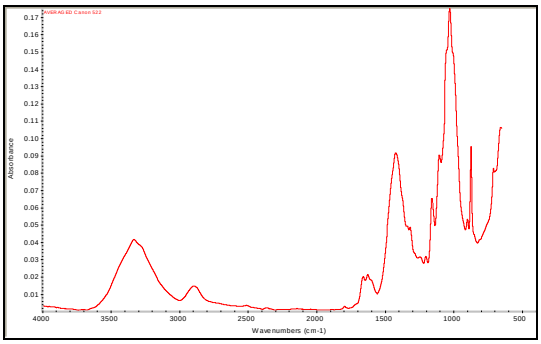

Figure 1320: ATR spectrum of Canon 522 ink on paper AVERAGE

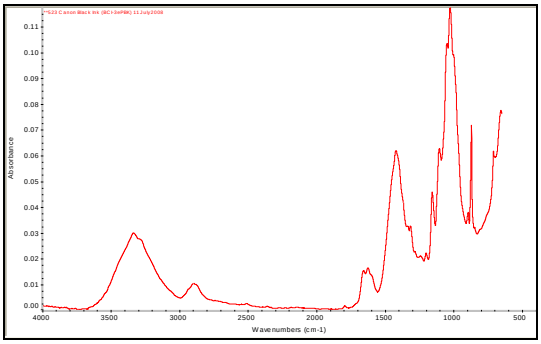

Figure 1321: ATR spectrum of Canon 523 ink on paper collected July 11th, 2008

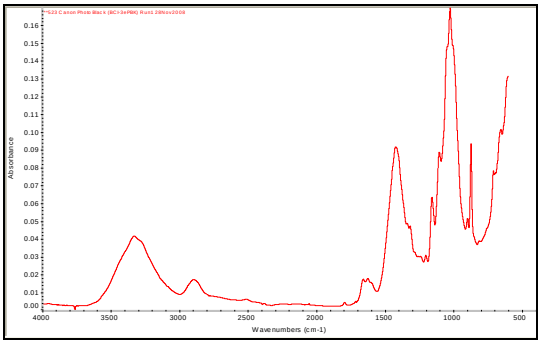

Figure 1322: ATR spectrum of Canon 523 ink on paper collected November 28th, 2008

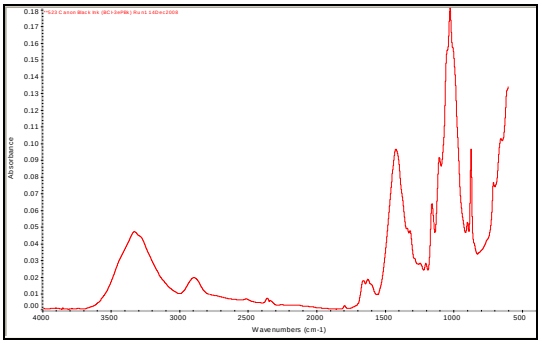

Figure 1323: ATR spectrum of Canon 523 ink on paper collected December 14th, 2008

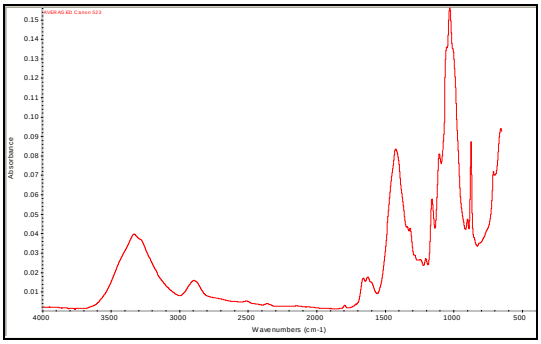

Figure 1324: ATR spectrum of Canon 523 ink on paper AVERAGE

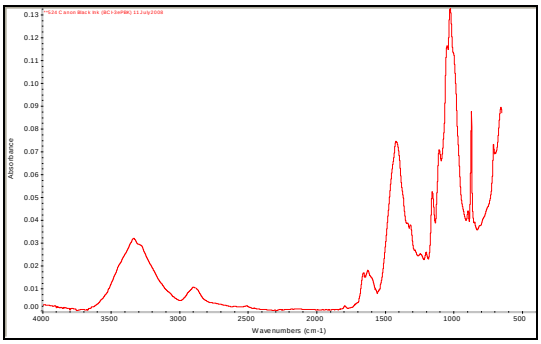

Figure 1325: ATR spectrum of Canon 524 ink on paper collected July 11th, 2008

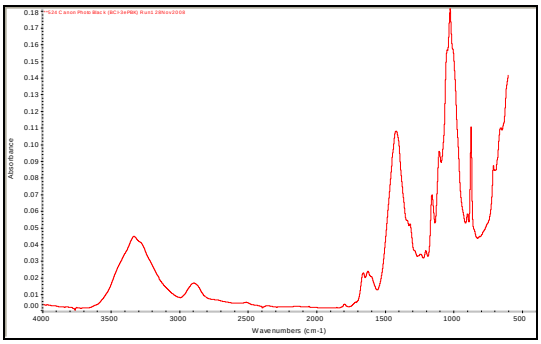

Figure 1326: ATR spectrum of Canon 524 ink on paper collected November 28th, 2008

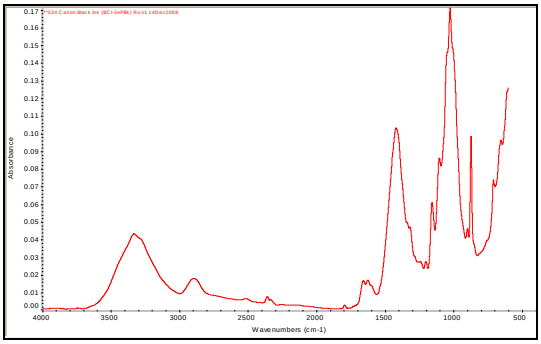

Figure 1327: ATR spectrum of Canon 524 ink on paper collected December 14th, 2008

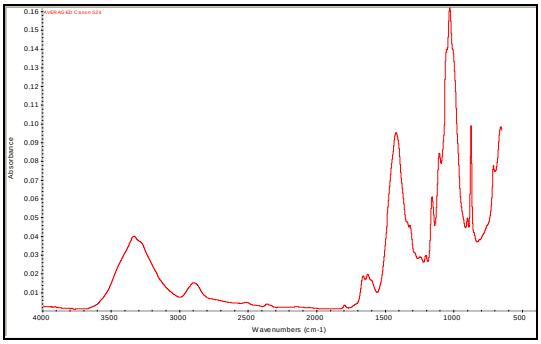

Figure 1328: ATR spectrum of Canon 524 ink on paper AVERAGE

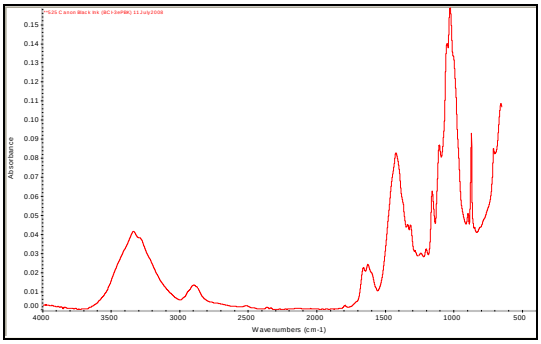

Figure 1329: ATR spectrum of Canon 525 ink on paper collected July 11th, 2008

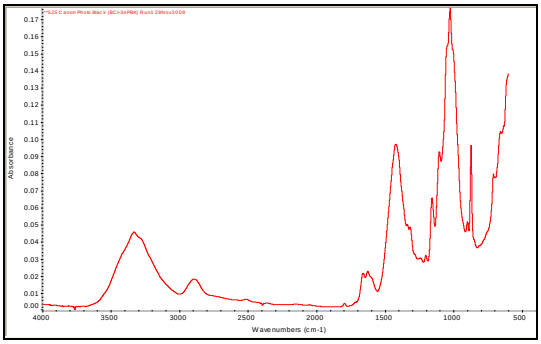

Figure 1330: ATR spectrum of Canon 525 ink on paper collected November 28th, 2008

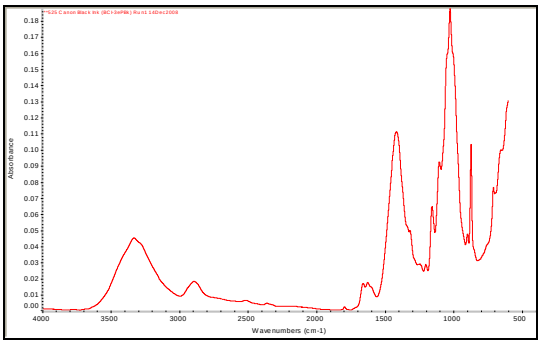

Figure 1331: ATR spectrum of Canon 525 ink on paper collected December 14th, 2008

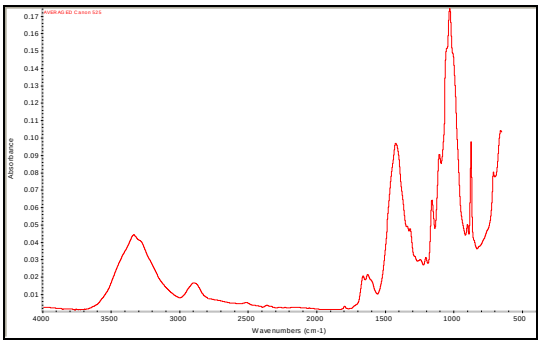

Figure 1332: ATR spectrum of Canon 525 ink on paper AVERAGE

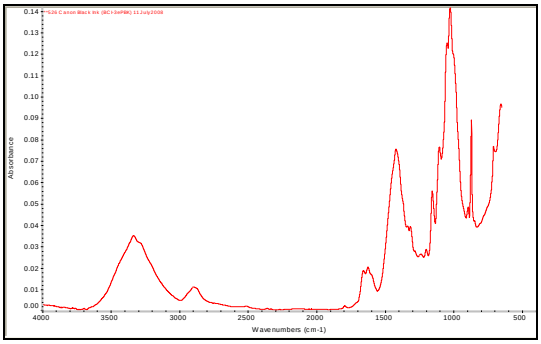

Figure 1333: ATR spectrum of Canon 526 ink on paper collected July 11th, 2008

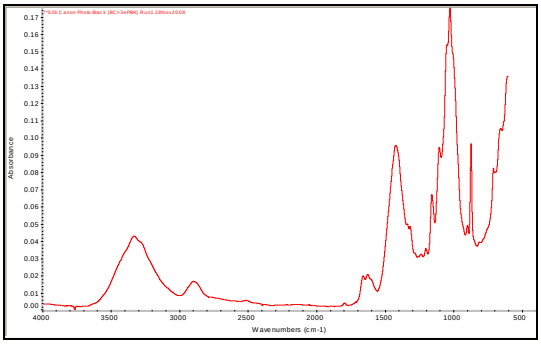

Figure 1334: ATR spectrum of Canon 526 ink on paper collected November 28th, 2008

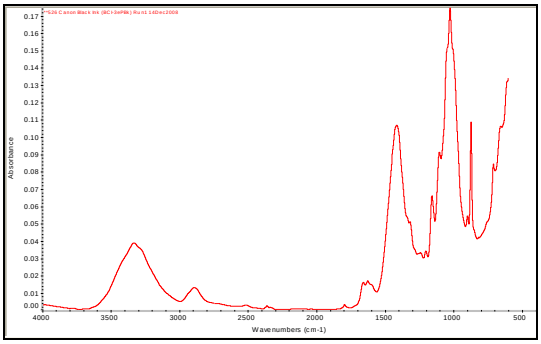

Figure 1335: ATR spectrum of Canon 526 ink on paper collected December 14th, 2008

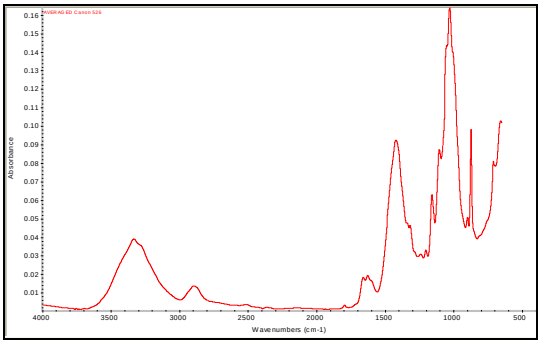

Figure 1336: ATR spectrum of Canon 526 ink on paper AVERAGE

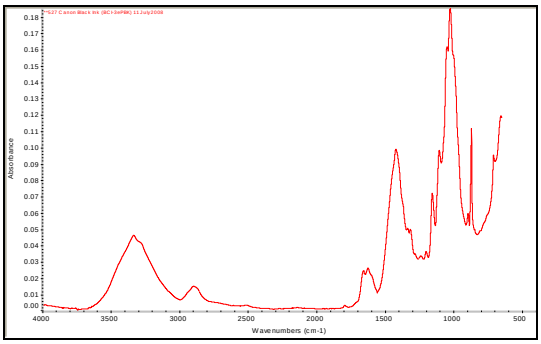

Figure 1337: ATR spectrum of Canon 527 ink on paper collected July 11th, 2008

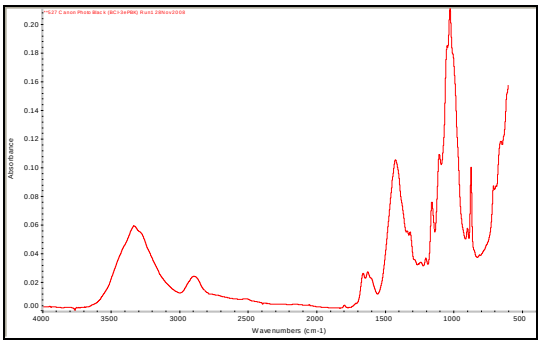

Figure 1338: ATR spectrum of Canon 527 ink on paper collected November 28th, 2008

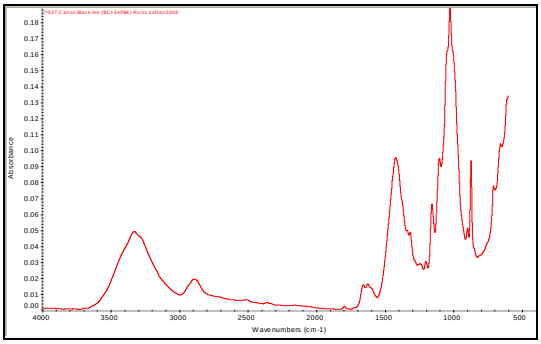

Figure 1339: ATR spectrum of Canon 527 ink on paper collected December 14th, 2008

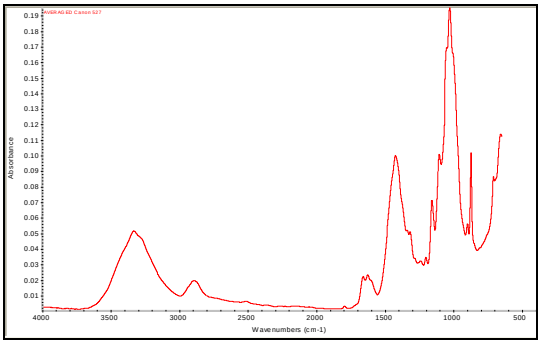

Figure 1340: ATR spectrum of Canon 527 ink on paper AVERAGE

EPSON

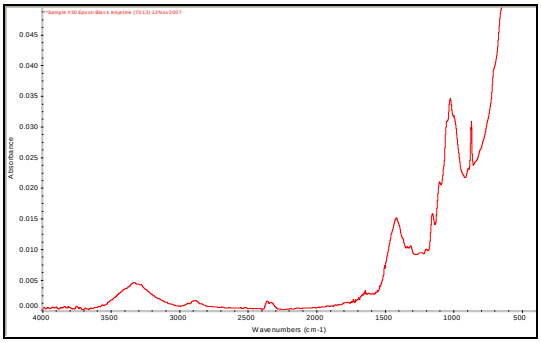

Figure 1341: ATR spectrum of Epson 30 ink on paper collected November 12th, 2007

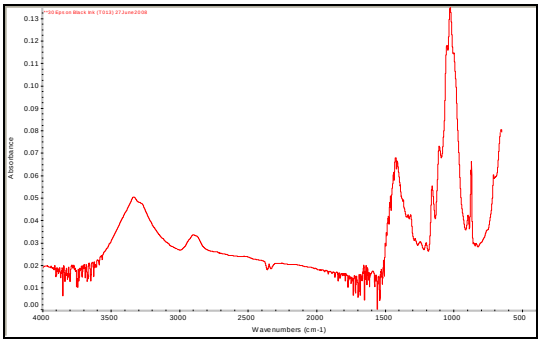

Figure 1342: ATR spectrum of Epson 30 ink on paper collected June 27th, 2008

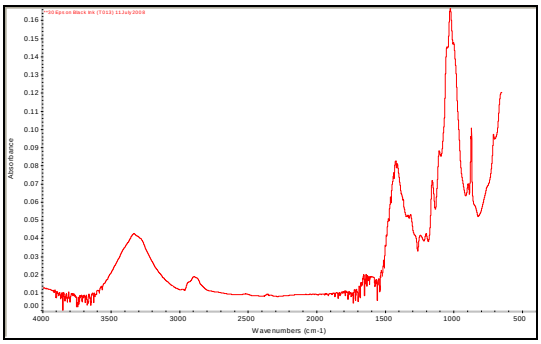

Figure 1343: ATR spectrum of Epson 30 ink on paper collected July 11th, 2008

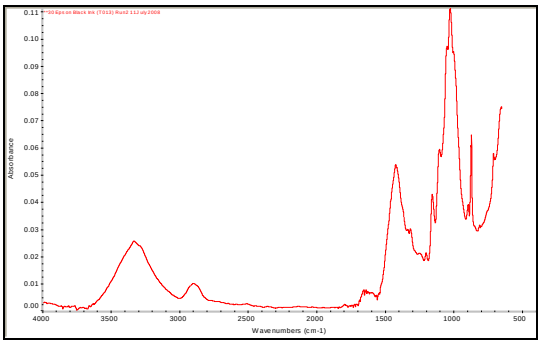

Figure 1344: ATR spectrum of Epson 30 ink on paper run 2 collected July 11th, 2008

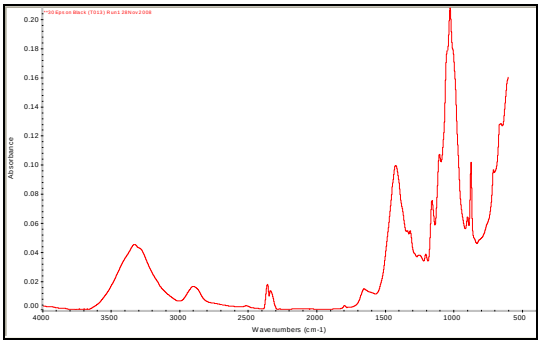

Figure 1345: ATR spectrum of Epson 30 ink on paper collected November 28th, 2008

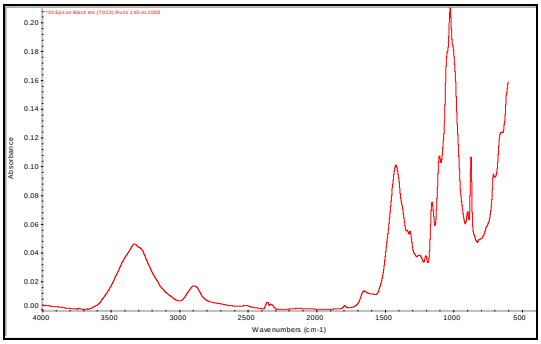

Figure 1346: ATR spectrum of Epson 30 ink on paper collected December 14th, 2008

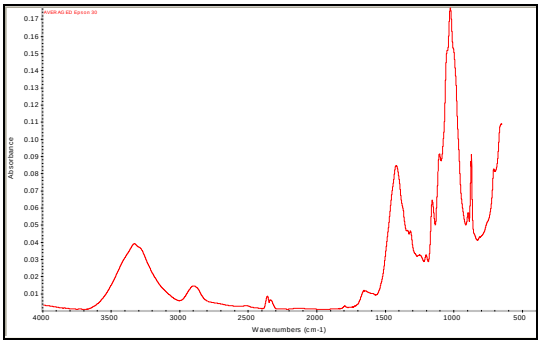

Figure 1347: ATR spectrum of Epson 30 ink on paper AVERAGE

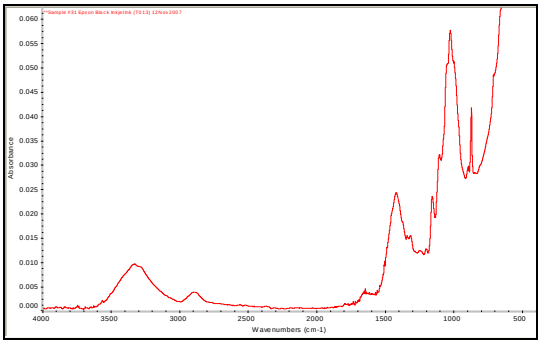

Figure 1348: ATR spectrum of Epson 31 ink on paper collected November 12th, 2007

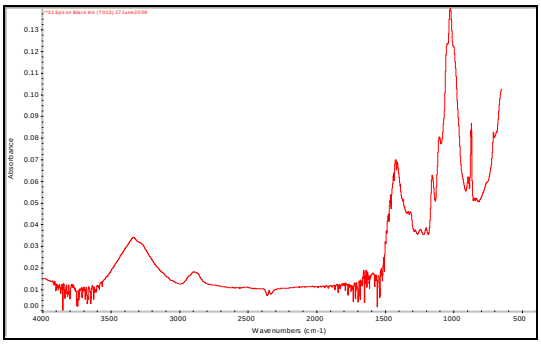

Figure 1349: ATR spectrum of Epson 31 ink on paper collected June 27th, 2008

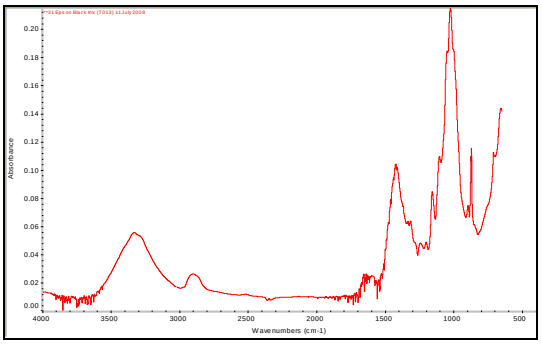

Figure 1350: ATR spectrum of Epson 31 ink on paper collected July 11th, 2008

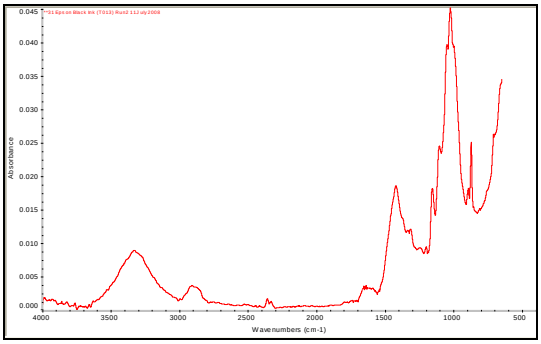

Figure 1351: ATR spectrum of Epson 31 ink on paper run 2 collected July 11th, 2008

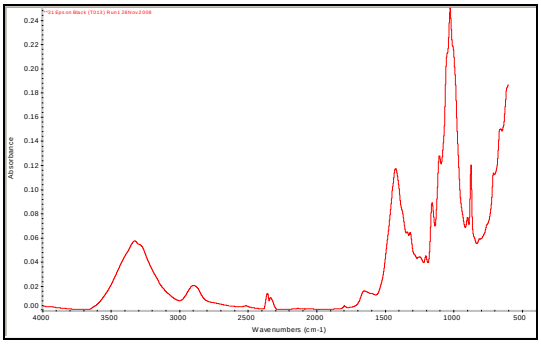

Figure 1352: ATR spectrum of Epson 31 ink on paper collected November 28th, 2008

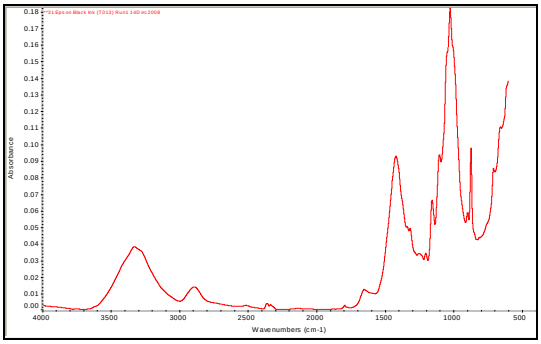

Figure 1353: ATR spectrum of Epson 31 ink on paper collected December 14th, 2008

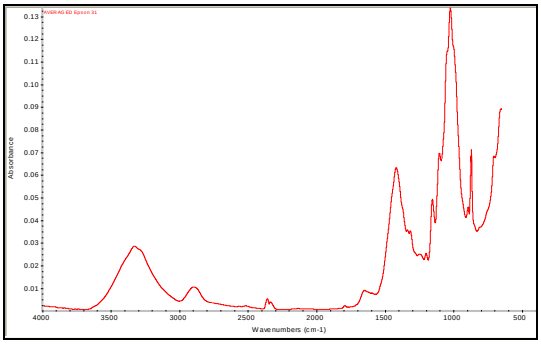

Figure 1354: ATR spectrum of Epson 31 ink on paper AVERAGE

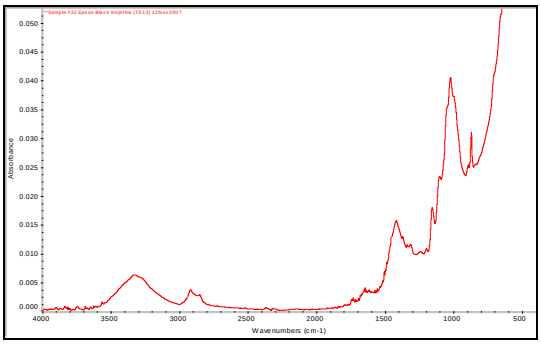

Figure 1355: ATR spectrum of Epson 32 ink on paper collected November 12th, 2007

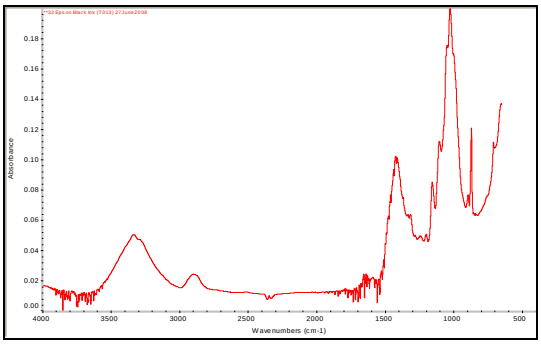

Figure 1356: ATR spectrum of Epson 32 ink on paper collected June 27th, 2008

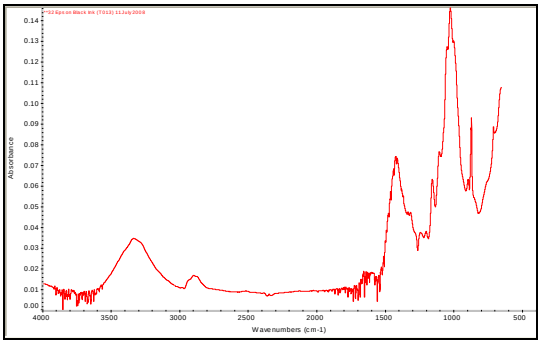

Figure 1357: ATR spectrum of Epson 32 ink on paper collected July 11th, 2008

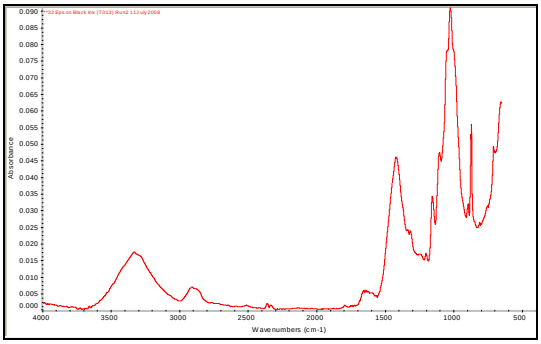

Figure 1358: ATR spectrum of Epson 32 ink on paper run 2 collected July 11th, 2008

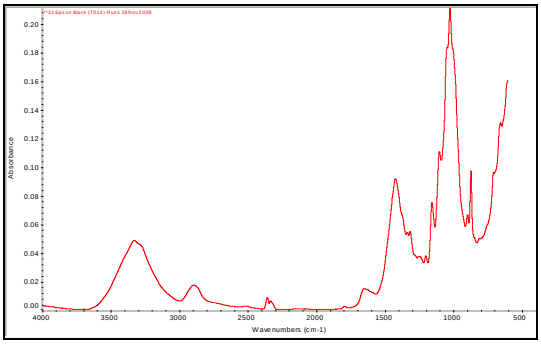

Figure 1359: ATR spectrum of Epson 32 ink on paper collected November 28th, 2008

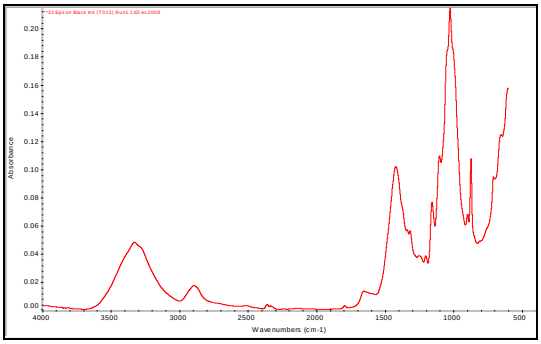

Figure 1360: ATR spectrum of Epson 32 ink on paper collected December 14th, 2008

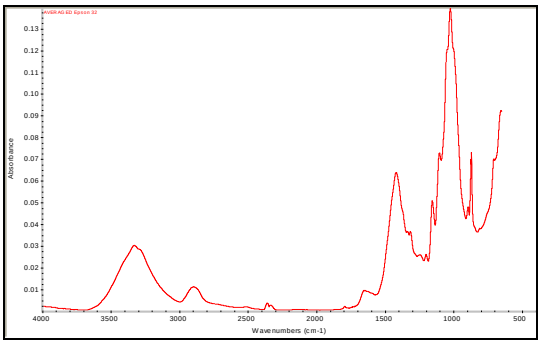

Figure 1361: ATR spectrum of Epson 32 ink on paper AVERAGE

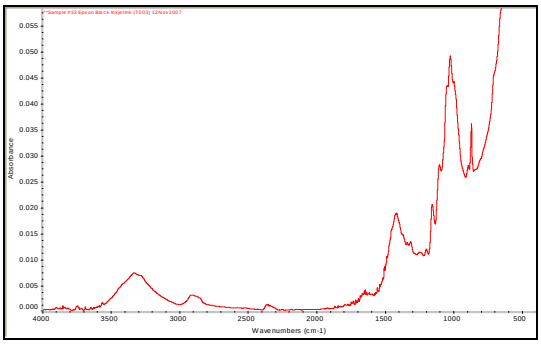

Figure 1362: ATR spectrum of Epson 33 ink on paper collected November 12th, 2007

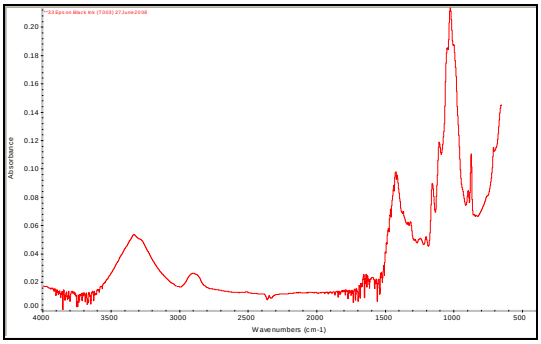

Figure 1363: ATR spectrum of Epson 33 ink on paper collected June 27th, 2008

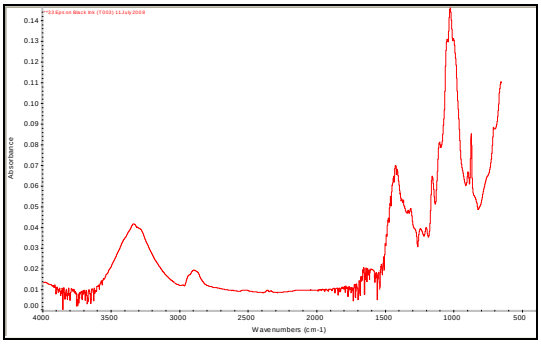

Figure 1364: ATR spectrum of Epson 33 ink on paper collected July 11th, 2008

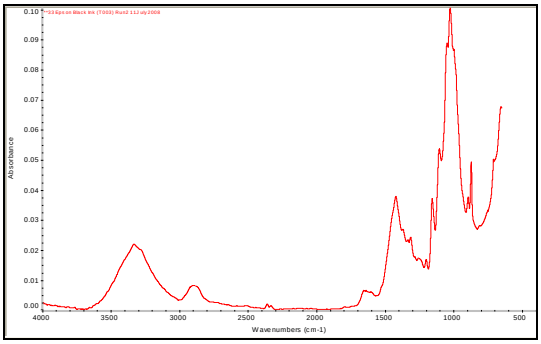

Figure 1365: ATR spectrum of Epson 33 ink on paper run 2 collected July 11th, 2008

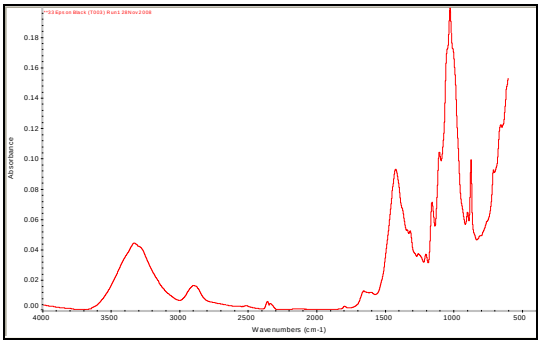

Figure 1366: ATR spectrum of Epson 33 ink on paper collected November 28th, 2008

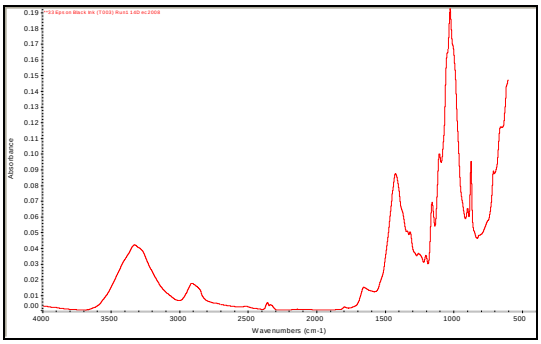

Figure 1367: ATR spectrum of Epson 33 ink on paper collected December 14th, 2008

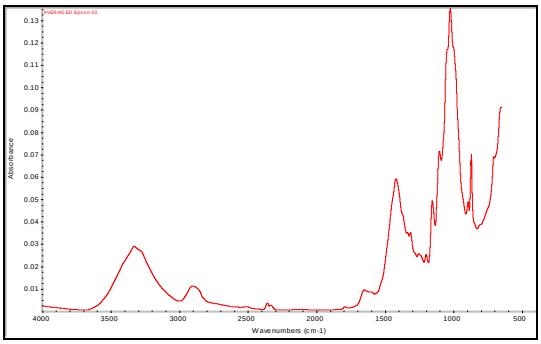

Figure 1368: ATR spectrum of Epson 33 ink on paper AVERAGE

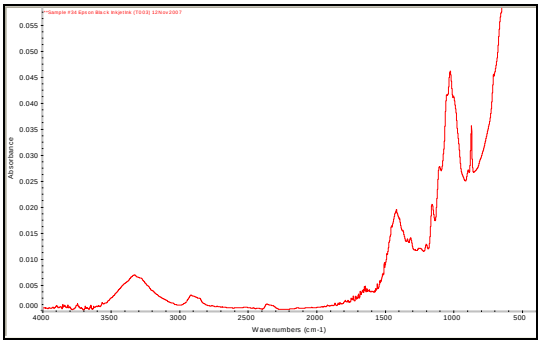

Figure 1369: ATR spectrum of Epson 34 ink on paper collected November 12th, 2007

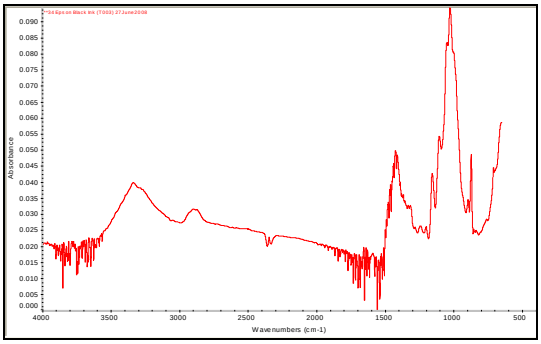

Figure 1370: ATR spectrum of Epson 34 ink on paper collected June 27th, 2008

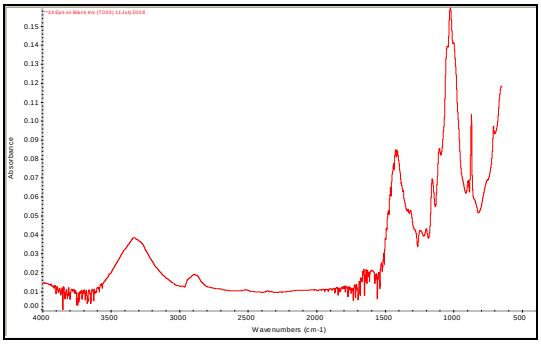

Figure 1371: ATR spectrum of Epson 34 ink on paper collected July 11th, 2008

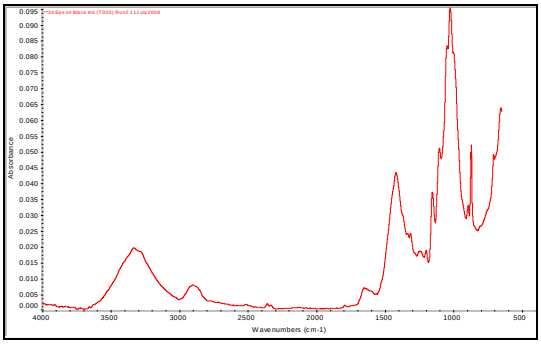

Figure 1372: ATR spectrum of Epson 34 ink on paper run 2 collected July 11th, 2008

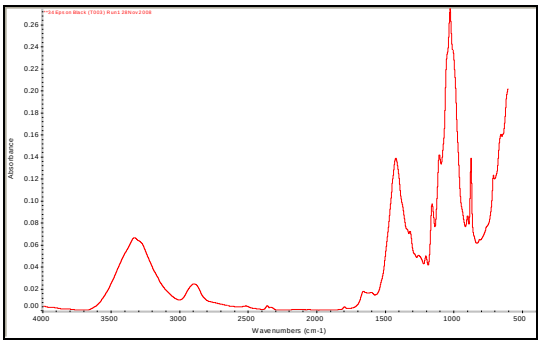

Figure 1373: ATR spectrum of Epson 34 ink on paper collected November 28th, 2008

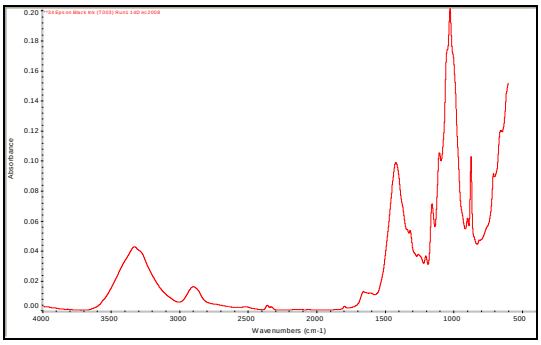

Figure 1374: ATR spectrum of Epson 34 ink on paper collected December 14th, 2008

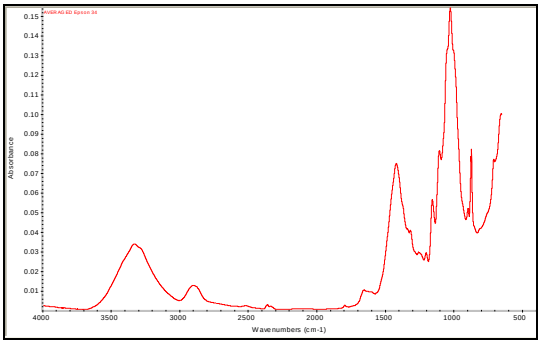

Figure 1375: ATR spectrum of Epson 34 ink on paper AVERAGE

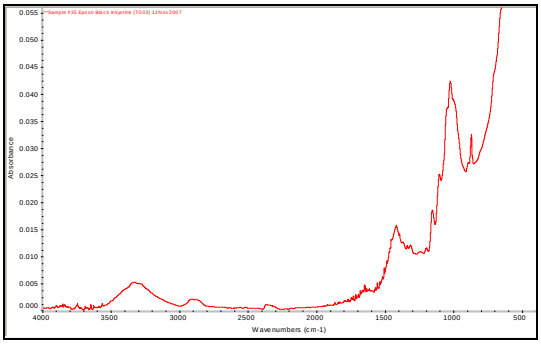

Figure 1376: ATR spectrum of Epson 35 ink on paper collected November 12th, 2007

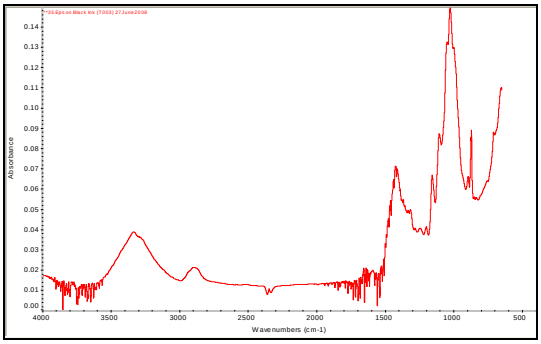

Figure 1377: ATR spectrum of Epson 35 ink on paper collected June 27th, 2008

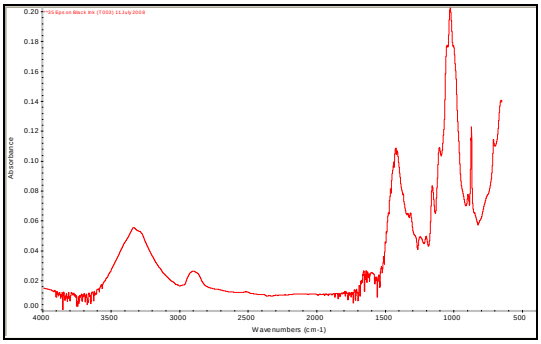

Figure 1378: ATR spectrum of Epson 35 ink on paper collected July 11th, 2008

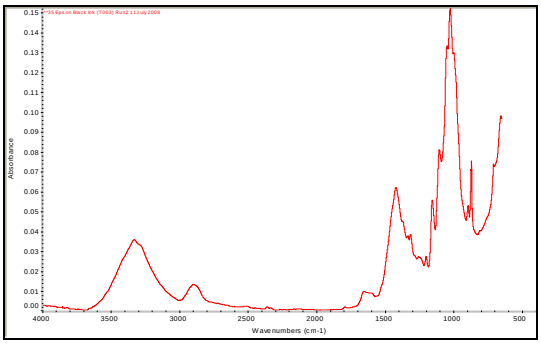

Figure 1379: ATR spectrum of Epson 35 ink on paper run 2 collected July 11th, 2008

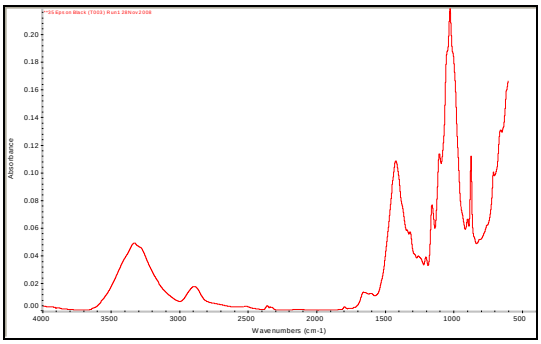

Figure 1380: ATR spectrum of Epson 35 ink on paper collected November 28th, 2008

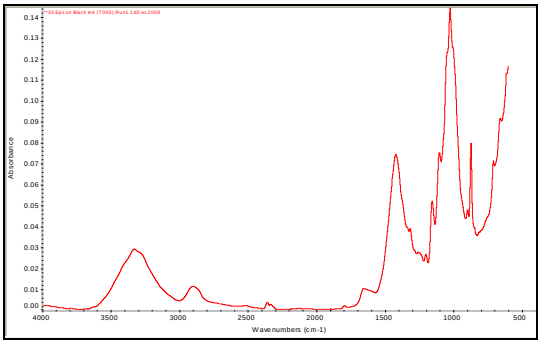

Figure 1381: ATR spectrum of Epson 35 ink on paper collected December 14th, 2008

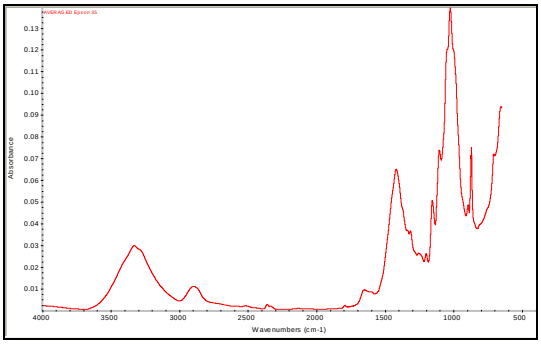

Figure 1382: ATR spectrum of Epson 35 ink on paper AVERAGE

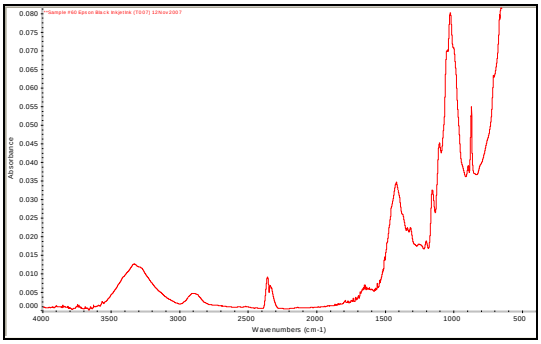

Figure 1383: ATR spectrum of Epson 60 ink on paper collected November 12th, 2007

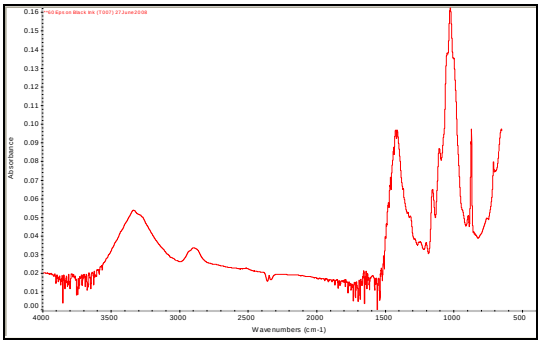

Figure 1384: ATR spectrum of Epson 60 ink on paper collected June 27th, 2008

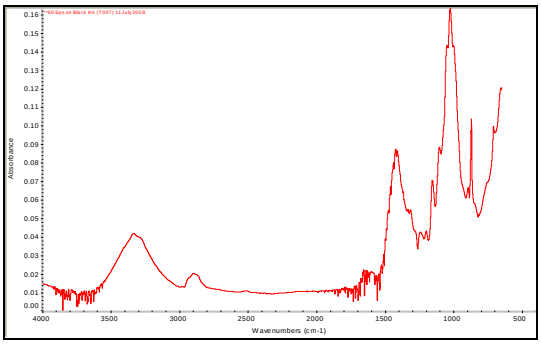

Figure 1385: ATR spectrum of Epson 60 ink on paper collected July 11th, 2008

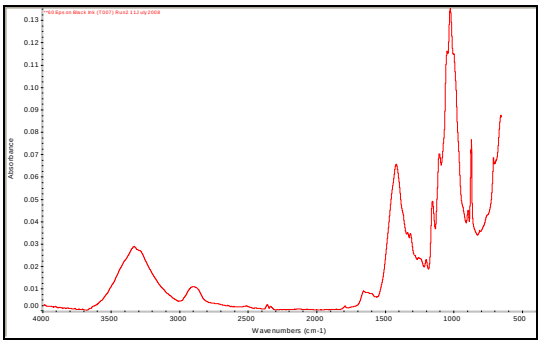

Figure 1386: ATR spectrum of Epson 60 ink on paper run 2 collected July 11th, 2008

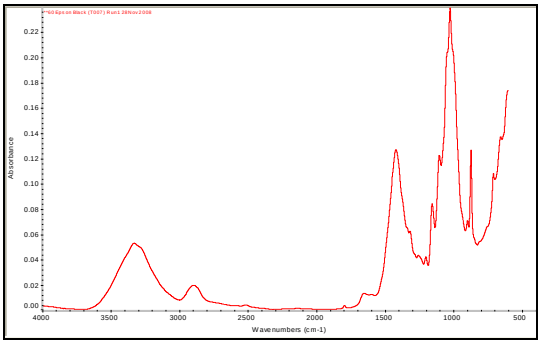

Figure 1387: ATR spectrum of Epson 60 ink on paper collected November 28th, 2008

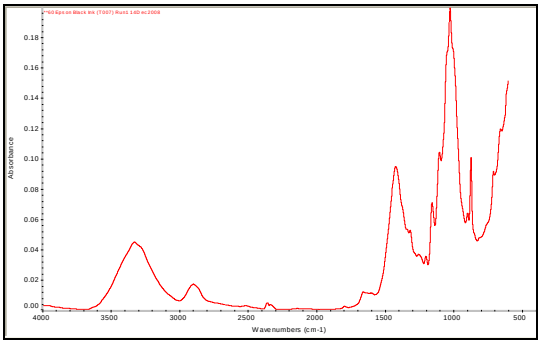

Figure 1388: ATR spectrum of Epson 60 ink on paper collected December 14th, 2008

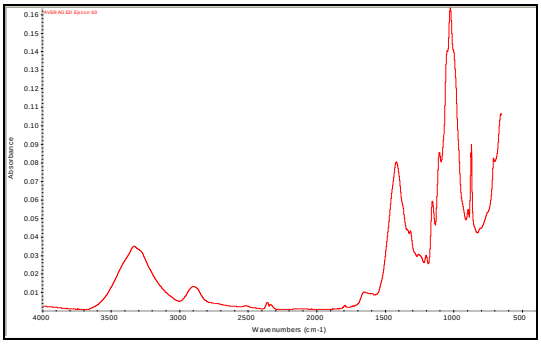

Figure 1389: ATR spectrum of Epson 60 ink on paper AVERAGE

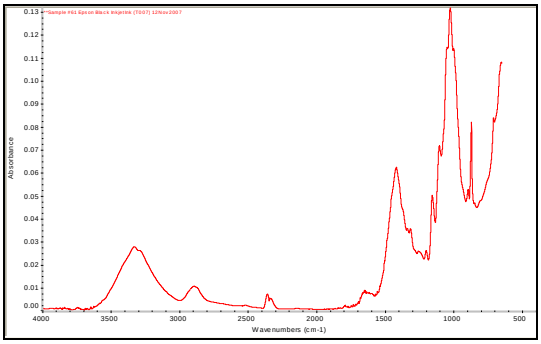

Figure 1390: ATR spectrum of Epson 61 ink on paper collected November 12th, 2007

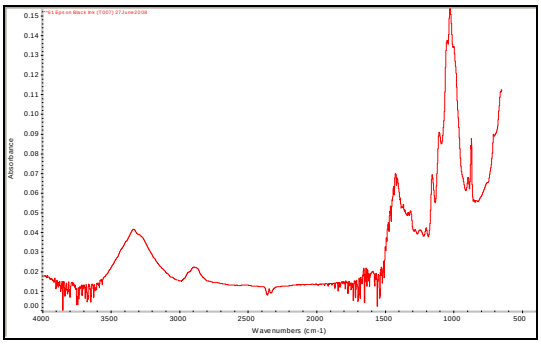

Figure 1391: ATR spectrum of Epson 61 ink on paper collected June 27th, 2008

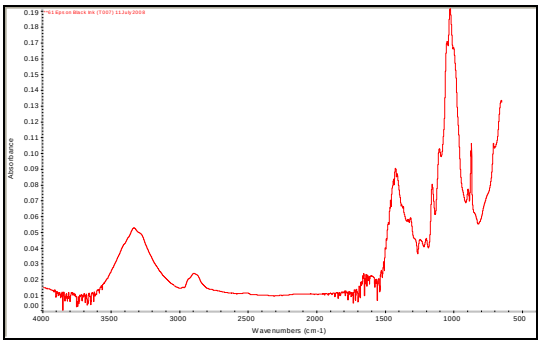

Figure 1392: ATR spectrum of Epson 61 ink on paper collected July 11th, 2008

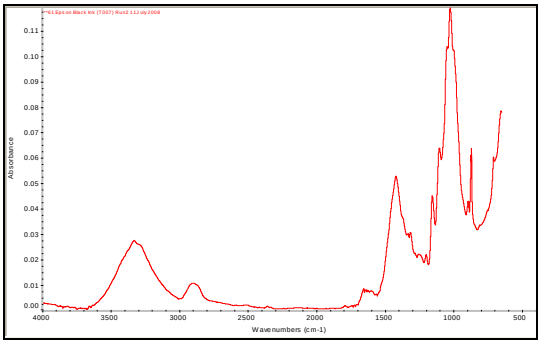

Figure 1393: ATR spectrum of Epson 61 ink on paper run 2 collected July 11th, 2008

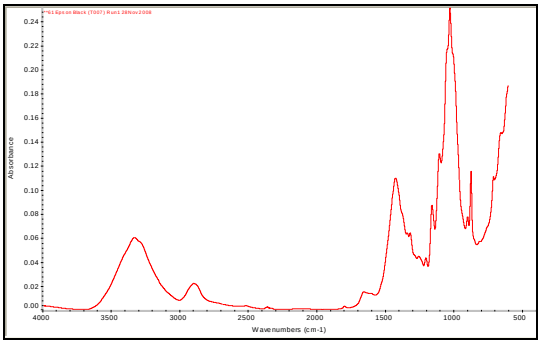

Figure 1394: ATR spectrum of Epson 61 ink on paper collected November 28th, 2008

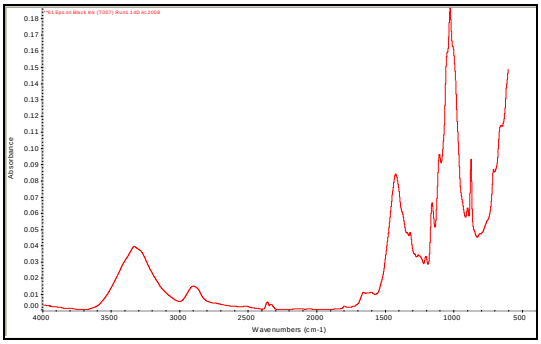

Figure 1395: ATR spectrum of Epson 61 ink on paper collected December 14th, 2008

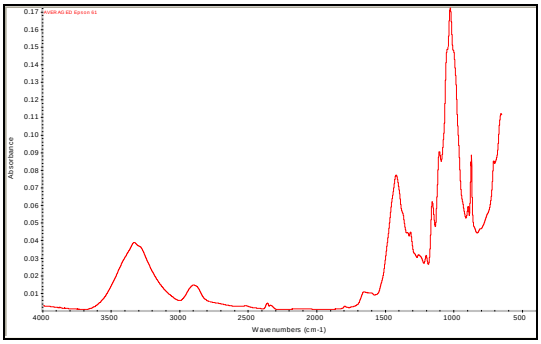

Figure 1396: ATR spectrum of Epson 61 ink on paper AVERAGE

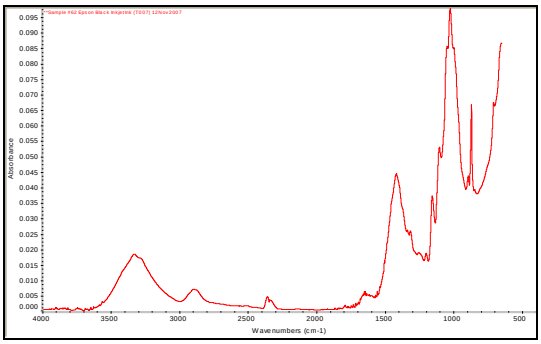

Figure 1397: ATR spectrum of Epson 62 ink on paper collected November 12th, 2008

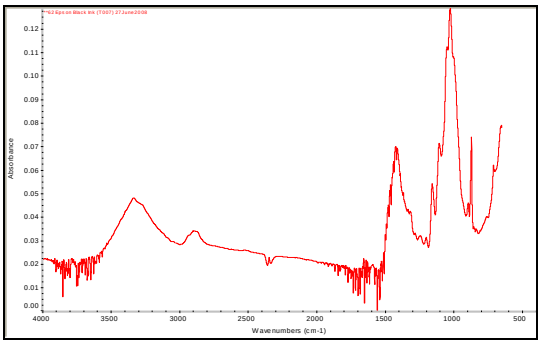

Figure 1398: ATR spectrum of Epson 62 ink on paper collected June 27th, 2008

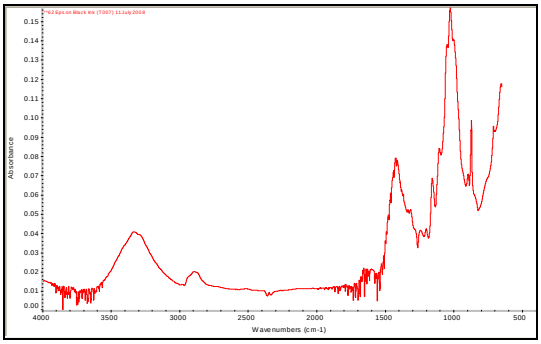

Figure 1399: ATR spectrum of Epson 62 ink on paper collected July 11th, 2008

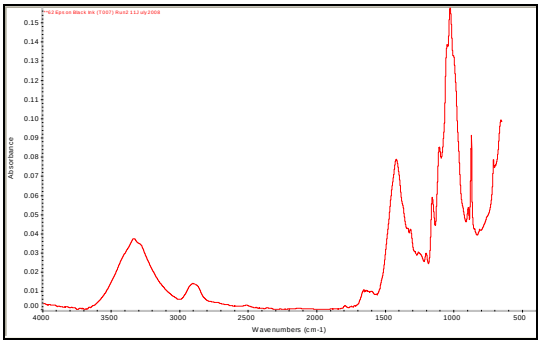

Figure 1400: ATR spectrum of Epson 62 ink on paper run 2 collected July 11th, 2008

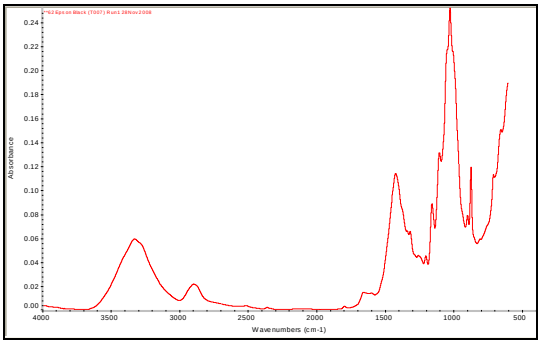

Figure 1401: ATR spectrum of Epson 62 ink on paper collected November 28th, 2008

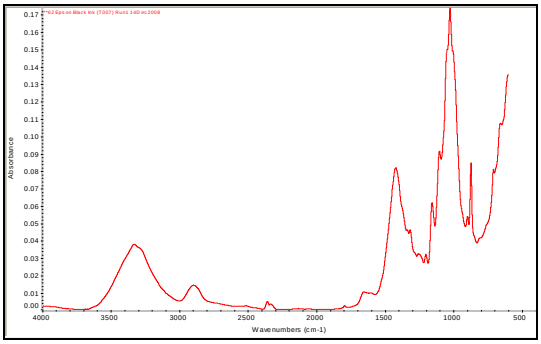

Figure 1402: ATR spectrum of Epson 62 ink on paper collected December 14th, 2008

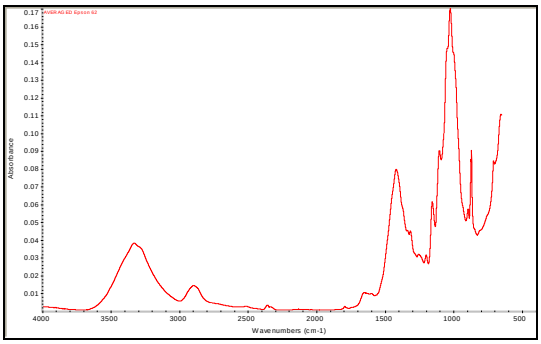

Figure 1403: ATR spectrum of Epson 62 ink on paper AVERAGE

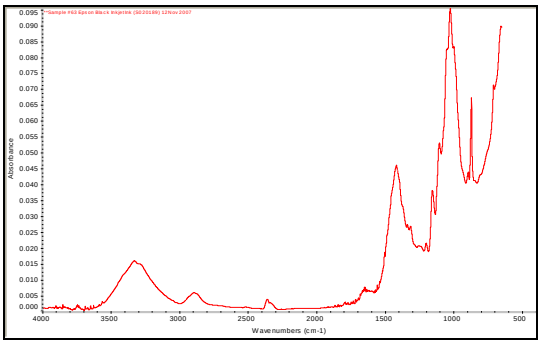

Figure 1404: ATR spectrum of Epson 63 ink on paper collected November 12th, 2007

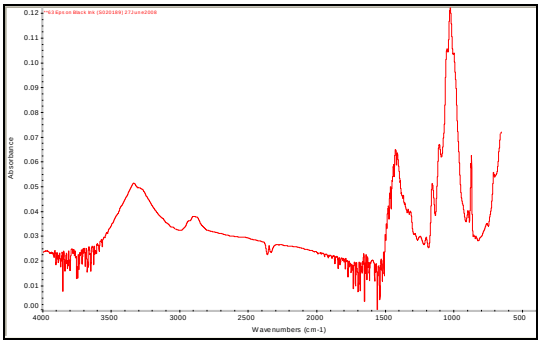

Figure 1405: ATR spectrum of Epson 63 ink on paper collected June 27th, 2008

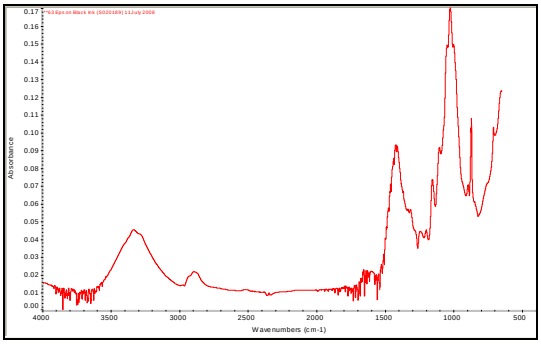

Figure 1406: ATR spectrum of Epson 63 ink on paper collected July 11th, 2008

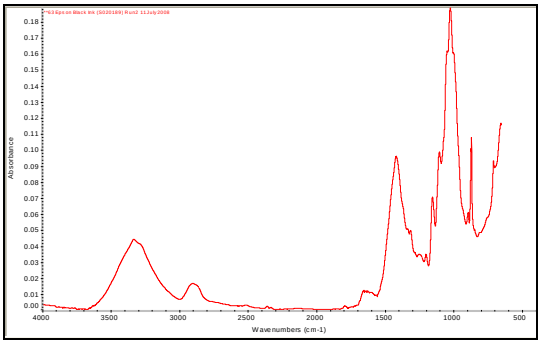

Figure 1407: ATR spectrum of Epson 63 ink on paper run 2 collected July 11th, 2008

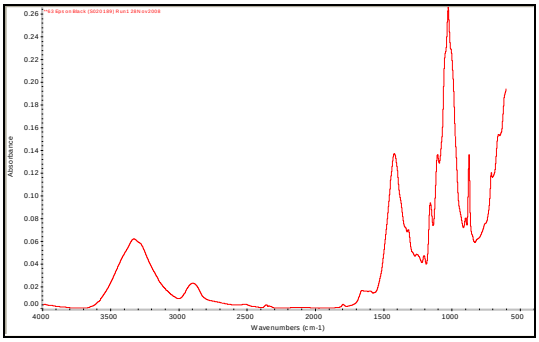

Figure 1408: ATR spectrum of Epson 63 ink on paper collected November 28th, 2008

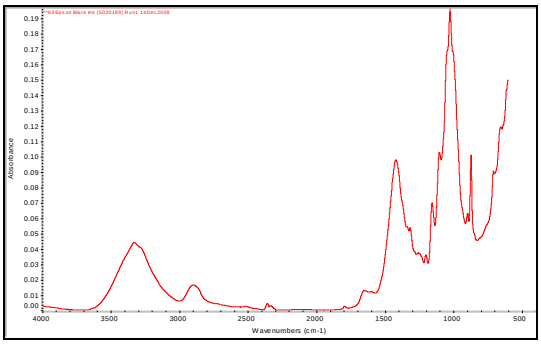

Figure 1409: ATR spectrum of Epson 63 ink on paper collected December 14th, 2008

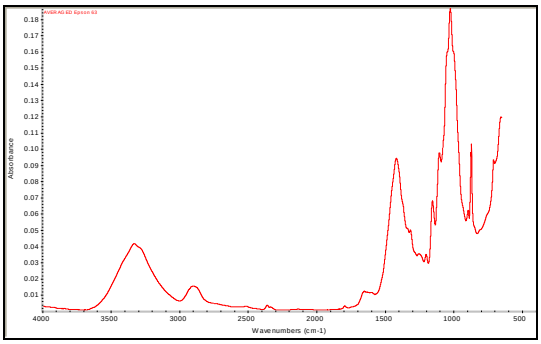

Figure 1410: ATR spectrum of Epson 63 ink on paper AVERAGE

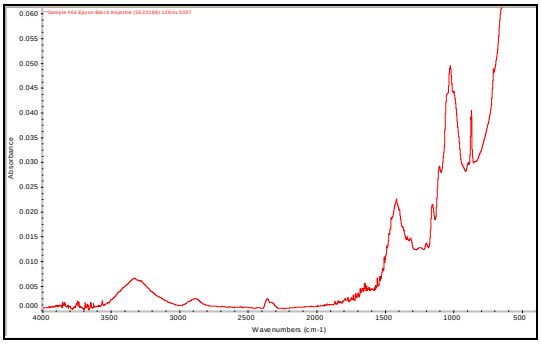

Figure 1411: ATR spectrum of Epson 64 ink on paper collected November 12th, 2007

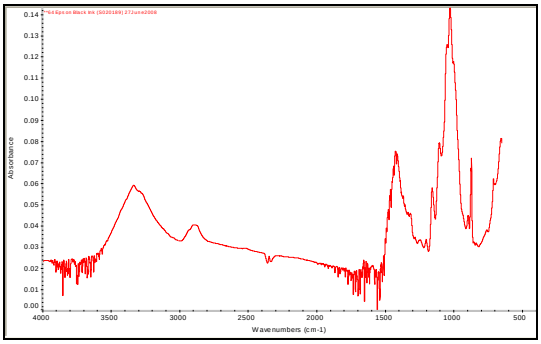

Figure 1412: ATR spectrum of Epson 64 ink on paper collected June 27th, 2008

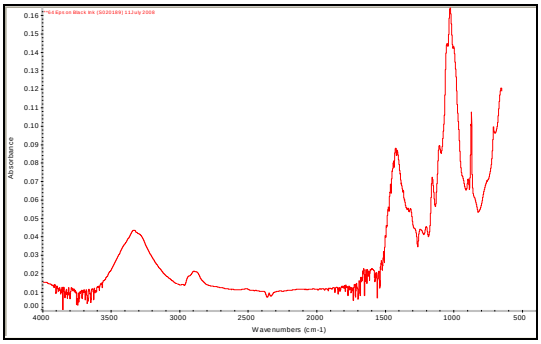

Figure 1413: ATR spectrum of Epson 64 ink on paper collected July 11th, 2008

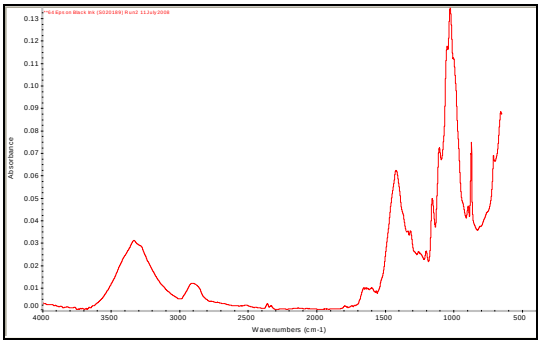

Figure 1414: ATR spectrum of Epson 64 ink on paper run 2 collected July 11th, 2008

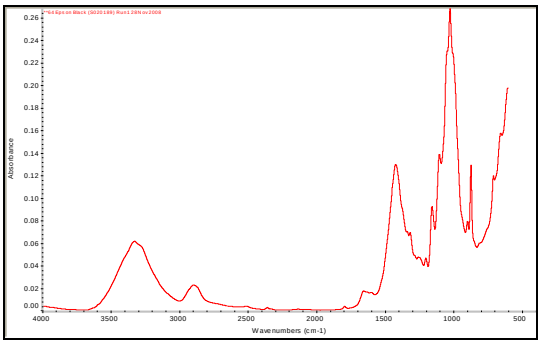

Figure 1415: ATR spectrum of Epson 64 ink on paper collected November 28th, 2008

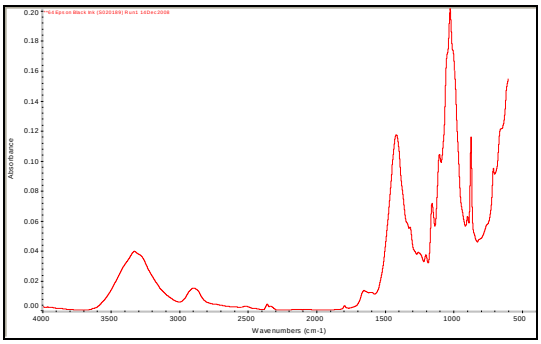

Figure 1416: ATR spectrum of Epson 64 ink on paper collected December 14th, 2008

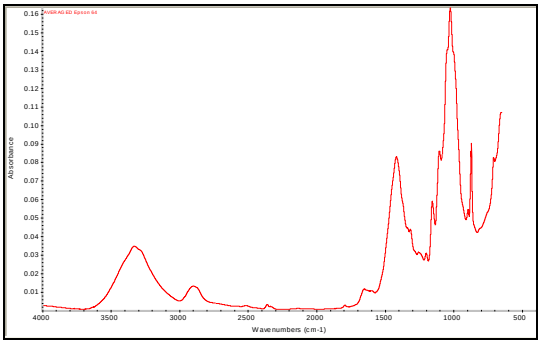

Figure 1417: ATR spectrum of Epson 64 ink on paper AVERAGE

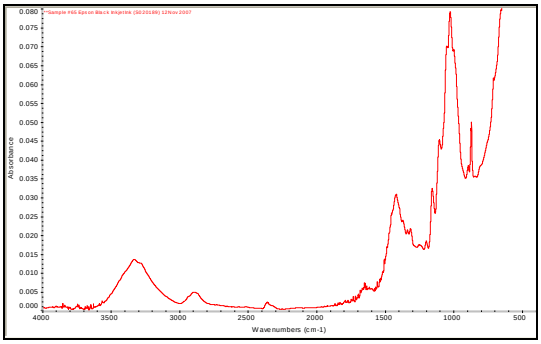

Figure 1418: ATR spectrum of Epson 65 ink on paper collected November 12th, 2007

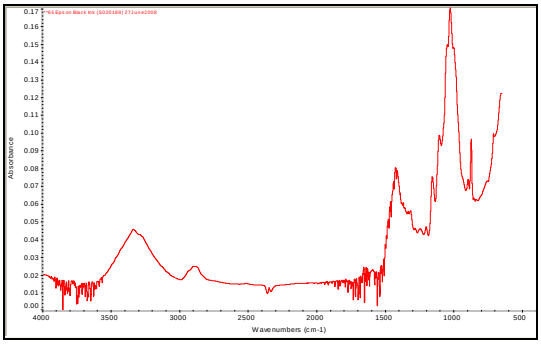

Figure 1419: ATR spectrum of Epson 65 ink on paper collected June 27th, 2008

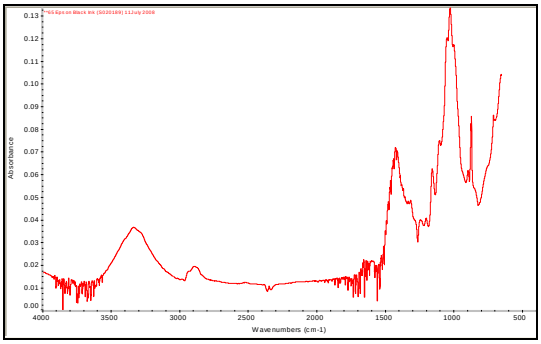

Figure 1420: ATR spectrum of Epson 65 ink on paper collected July 11th, 2008

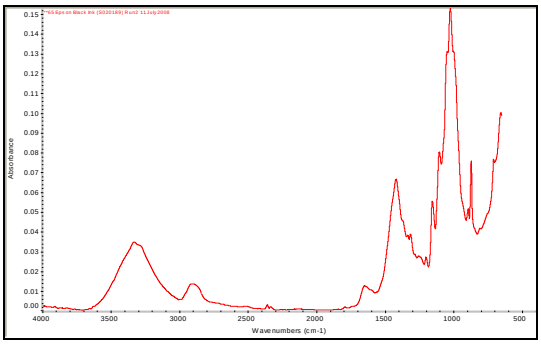

Figure 1421: ATR spectrum of Epson 65 ink on paper run 2 collected July 11th, 2008

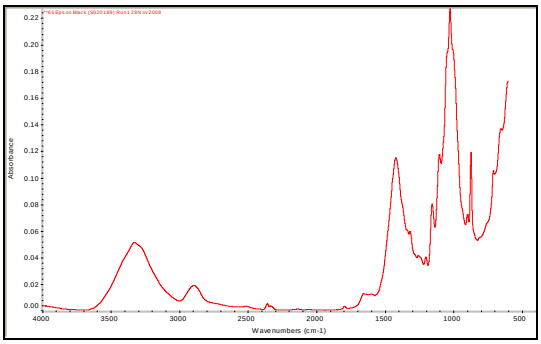

Figure 1422: ATR spectrum of Epson 65 ink on paper collected November 28th, 2008

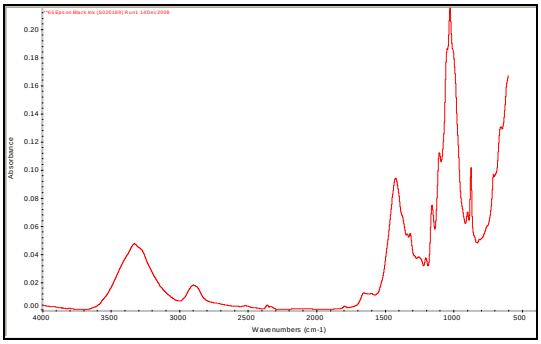

Figure 1423: ATR spectrum of Epson 65 ink on paper collected December 14th, 2008

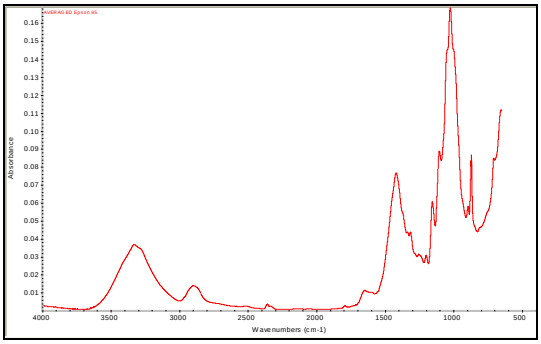

Figure 1424: ATR spectrum of Epson 65 ink on paper AVERAGE

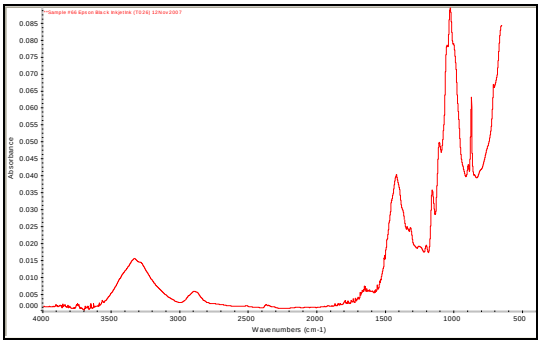

Figure 1425: ATR spectrum of Epson 66 ink on paper collected November 12th, 2007

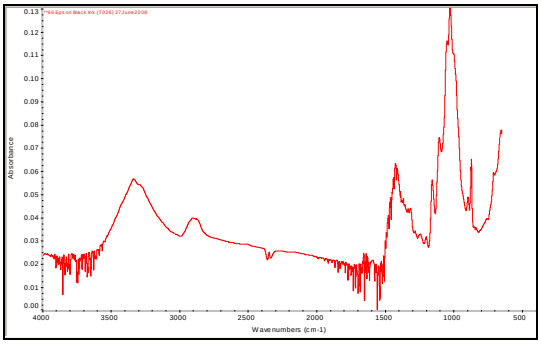

Figure 1426: ATR spectrum of Epson 66 ink on paper collected June 27th, 2008

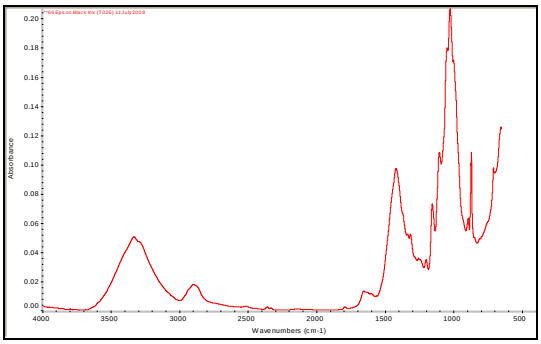

Figure 1427: ATR spectrum of Epson 66 ink on paper collected July 11th, 2008

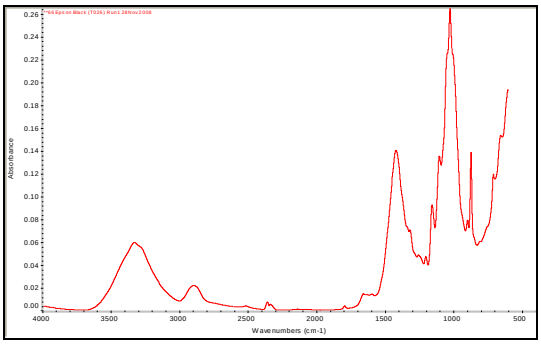

Figure 1428: ATR spectrum of Epson 66 ink on paper collected November 28th, 2008

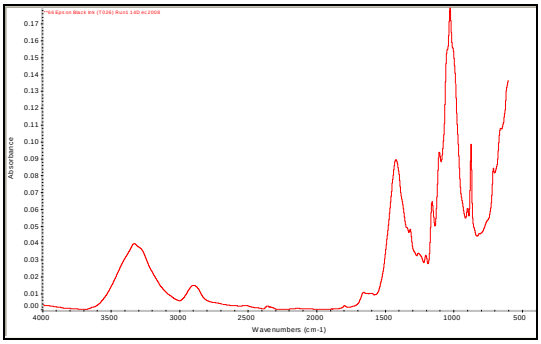

Figure 1429: ATR spectrum of Epson 66 ink on paper collected December 14th, 2008

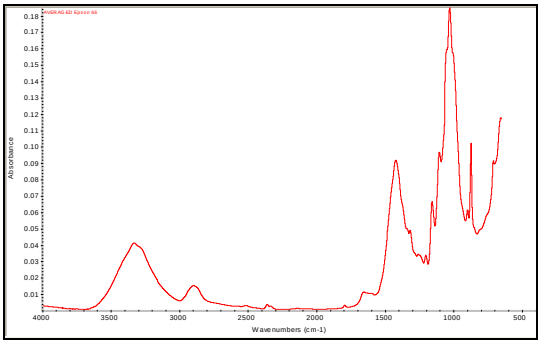

Figure 1430: ATR spectrum of Epson 66 ink on paper AVERAGE

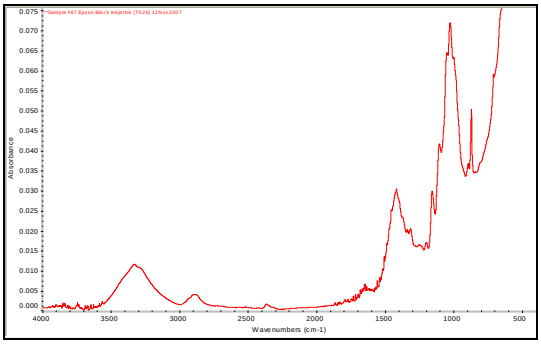

Figure 1431: ATR spectrum of Epson 67 ink on paper collected November 12th, 2007

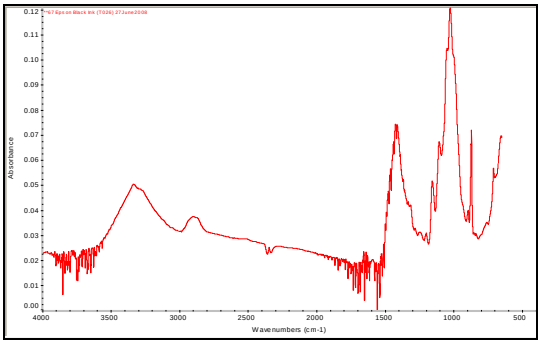

Figure 1432: ATR spectrum of Epson 67 ink on paper collected June 27th, 2008

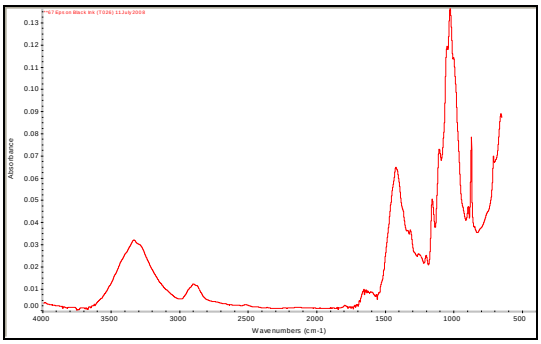

Figure 1433: ATR spectrum of Epson 67 ink on paper collected July 11th, 2008

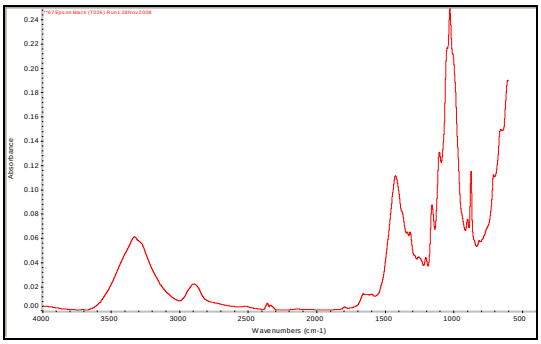

Figure 1434: ATR spectrum of Epson 67 ink on paper collected November 28th, 2008

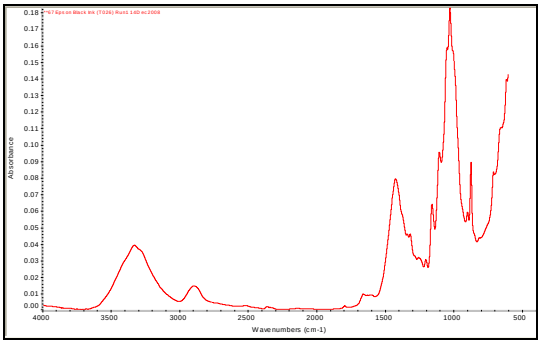

Figure 1435: ATR spectrum of Epson 67 ink on paper collected December 14th, 2008

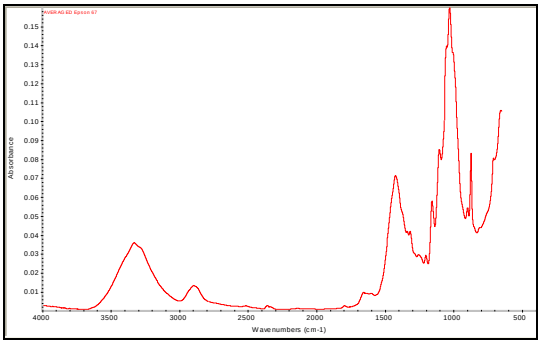

Figure 1436: ATR spectrum of Epson 67 ink on paper AVERAGE

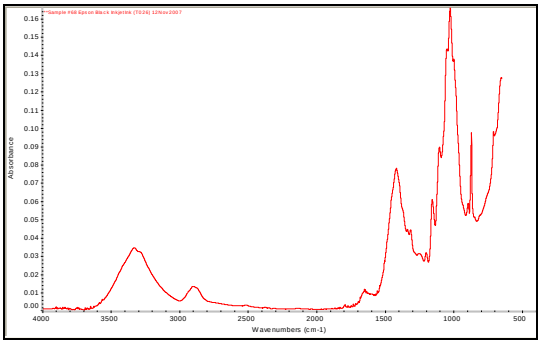

Figure 1437: ATR spectrum of Epson 68 ink on paper collected November 12th, 2007

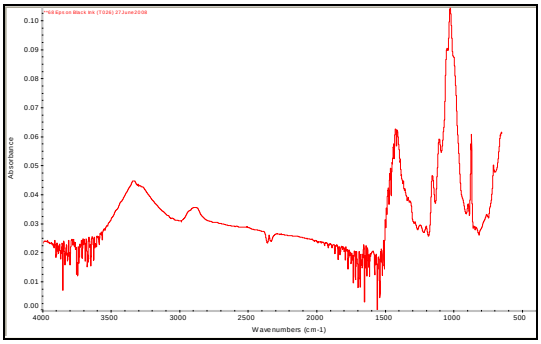

Figure 1438: ATR spectrum of Epson 68 ink on paper collected June 27th, 2008

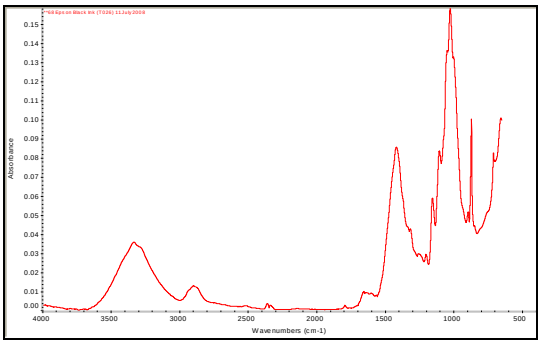

Figure 1439: ATR spectrum of Epson 68 ink on paper collected July 11th, 2008

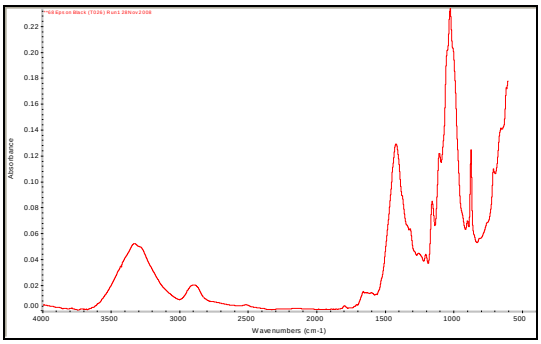

Figure 1440: ATR spectrum of Epson 68 ink on paper collected November 28th, 2008

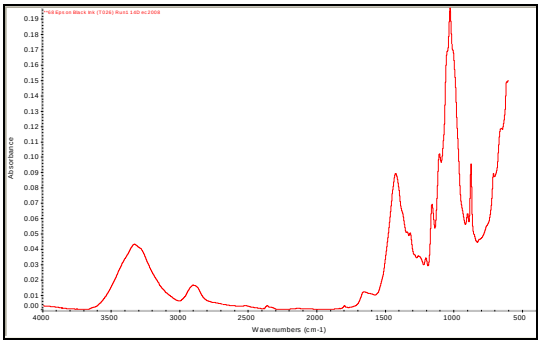

Figure 1441: ATR spectrum of Epson 68 ink on paper collected December 14th, 2008

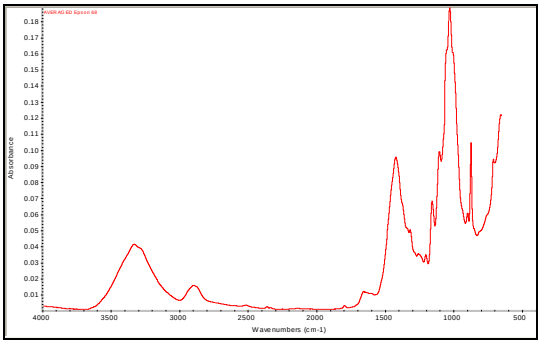

Figure 1442: ATR spectrum of Epson 68 ink on paper AVERAGE

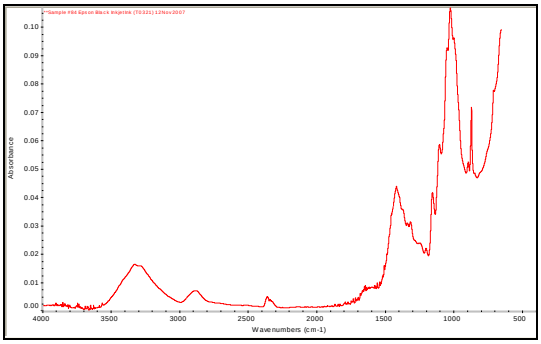

Figure 1443: ATR spectrum of Epson 84 ink on paper collected November 12th, 2007

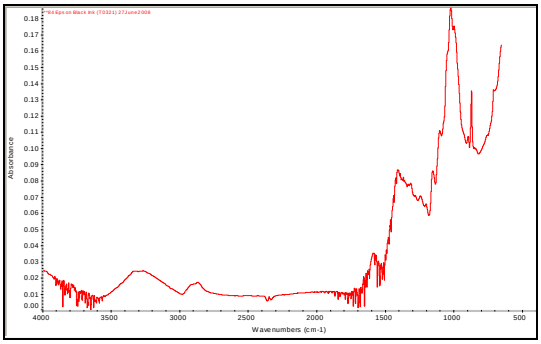

Figure 1444: ATR spectrum of Epson 84 ink on paper collected June 27th, 2008

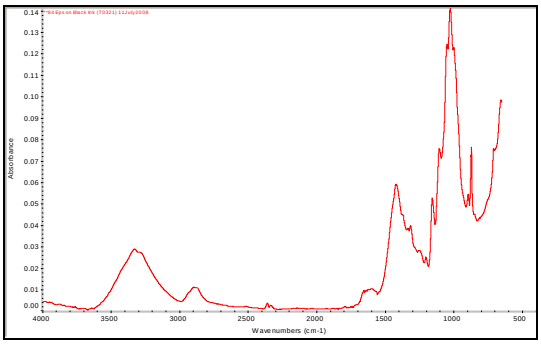

Figure 1445: ATR spectrum of Epson 84 ink on paper collected July 11th, 2008

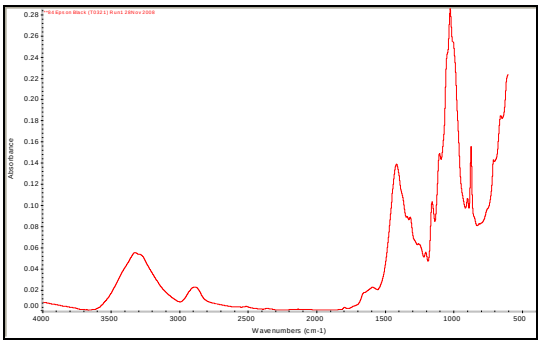

Figure 1446: ATR spectrum of Epson 84 ink on paper collected November 28th, 2008

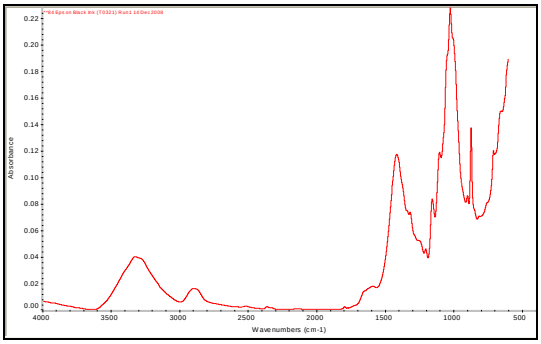

Figure 1447: ATR spectrum of Epson 84 ink on paper collected December 14th, 2008

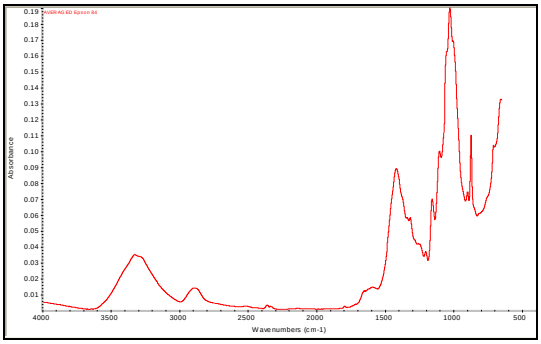

Figure 1448: ATR spectrum of Epson 84 ink on paper AVERAGE

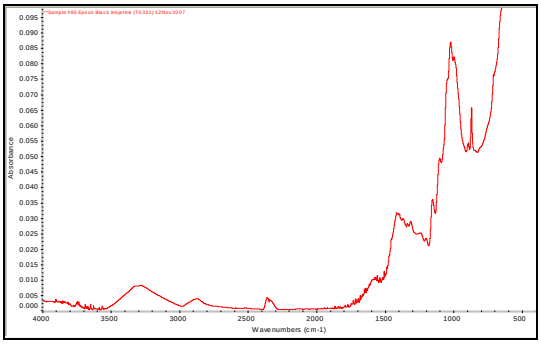

Figure 1449: ATR spectrum of Epson 85 ink on paper collected November 12th, 2007

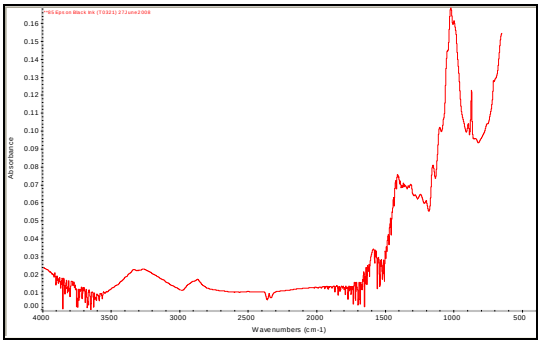

Figure 1450: ATR spectrum of Epson 85 ink on paper collected June 27th, 2008

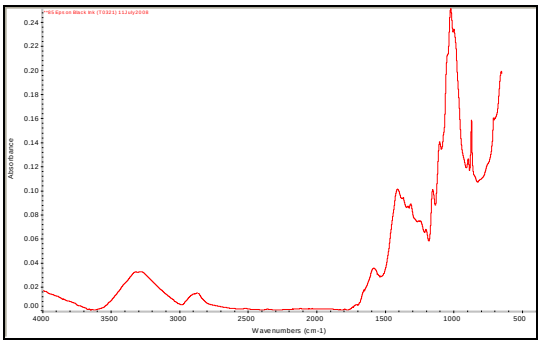

Figure 1451: ATR spectrum of Epson 85 ink on paper collected July 11th, 2008

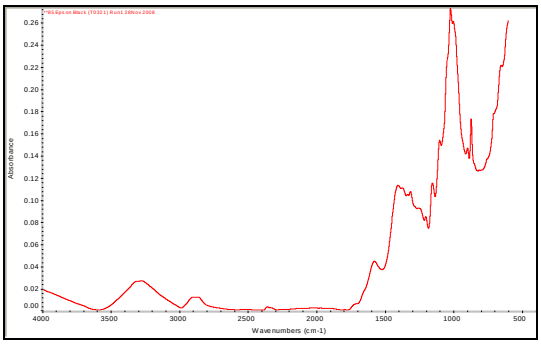

Figure 1452: ATR spectrum of Epson 85 ink on paper collected November 28th, 2008

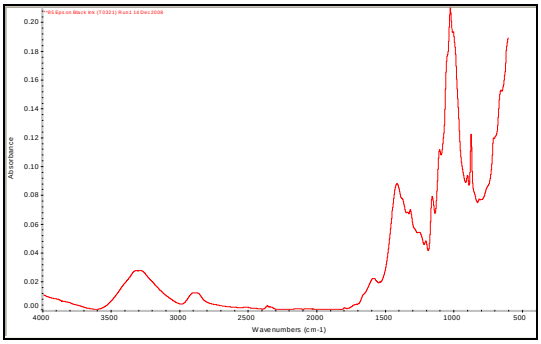

Figure 1453: ATR spectrum of Epson 85 ink on paper collected December 14th, 2008

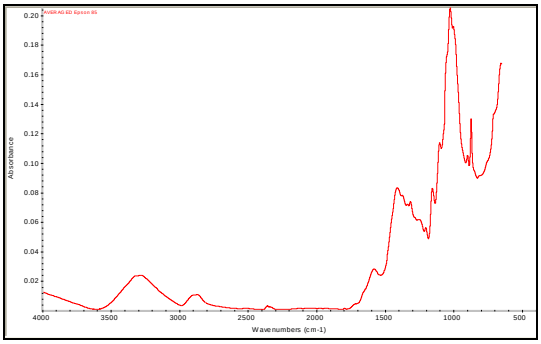

Figure 1454: ATR spectrum of Epson 85 ink on paper AVERAGE

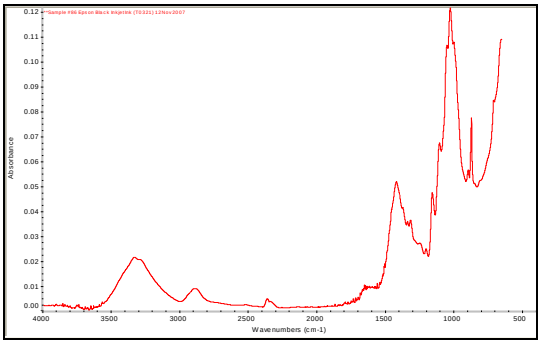

Figure 1455: ATR spectrum of Epson 86 ink on paper collected November 12th, 2008

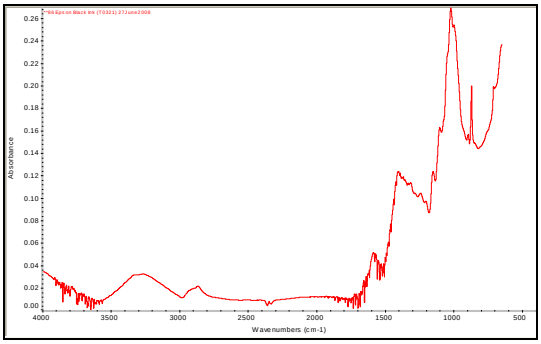

Figure 1456: ATR spectrum of Epson 86 ink on paper collected June 27th, 2008

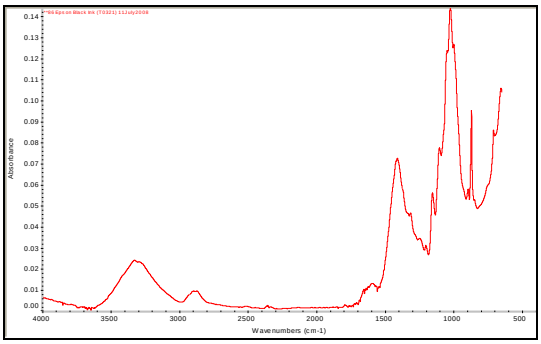

Figure 1457: ATR spectrum of Epson 86 ink on paper collected July 11th, 2008

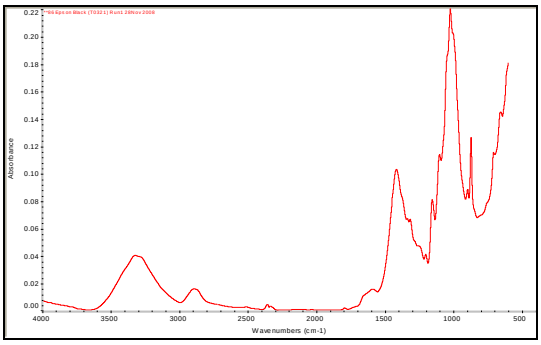

Figure 1458: ATR spectrum of Epson 86 ink on paper collected November 28th, 2008

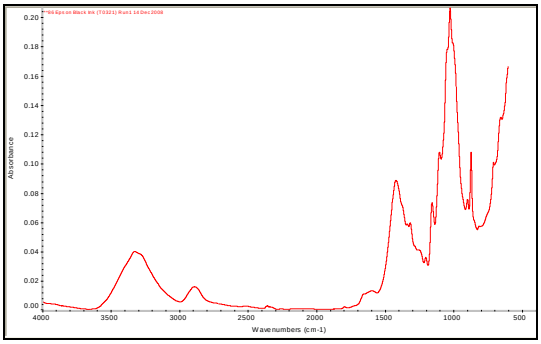

Figure 1459: ATR spectrum of Epson 86 ink on paper collected December 14th, 2008

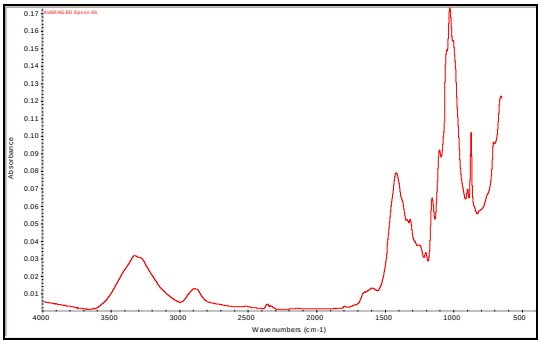

Figure 1460: ATR spectrum of Epson 86 ink on paper AVERAGE

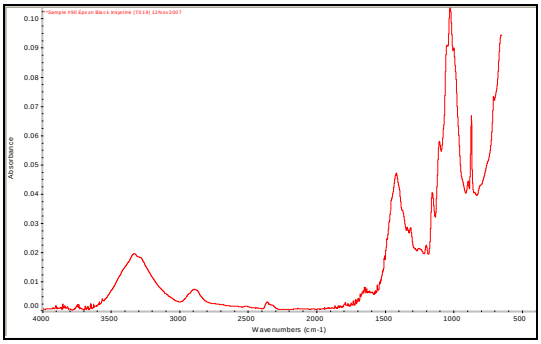

Figure 1461: ATR spectrum of Epson 90 ink on paper collected November 12th, 2007

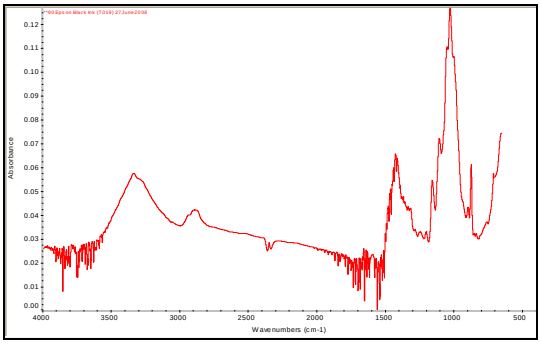

Figure 1462: ATR spectrum of Epson 90 ink on paper collected June 27th, 2008

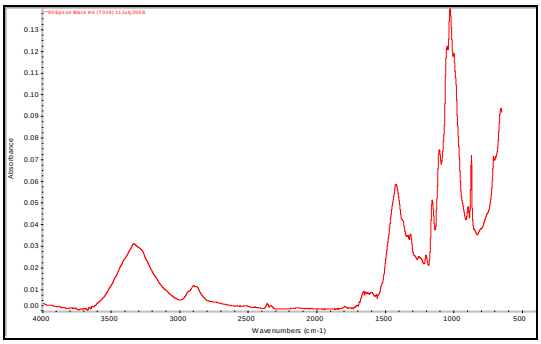

Figure 1463: ATR spectrum of Epson 90 ink on paper collected July 11th, 2008

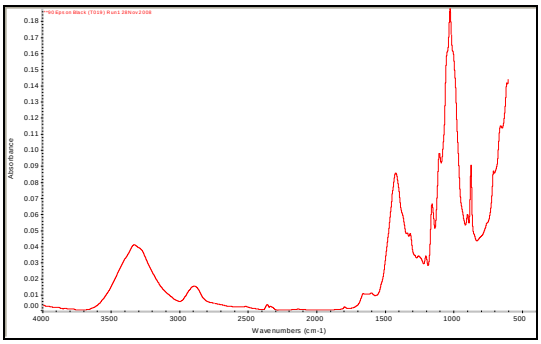

Figure 1464: ATR spectrum of Epson 90 ink on paper collected November 28th, 2008

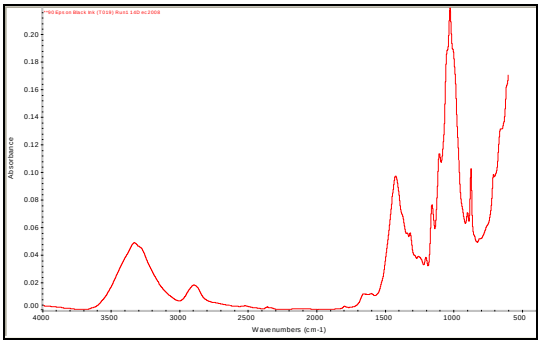

Figure 1465: ATR spectrum of Epson 90 ink on paper collected December 14th, 2008

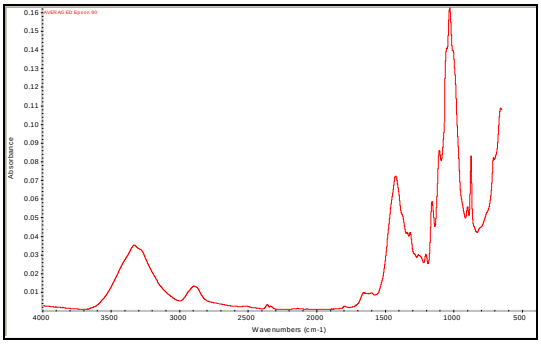

Figure 1466: ATR spectrum of Epson 90 ink on paper AVERAGE

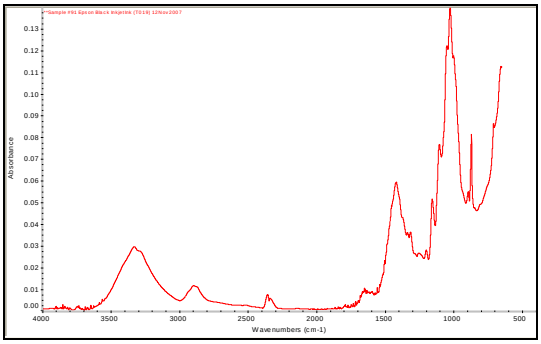

Figure 1467: ATR spectrum of Epson 91 ink on paper collected November 12th, 2007

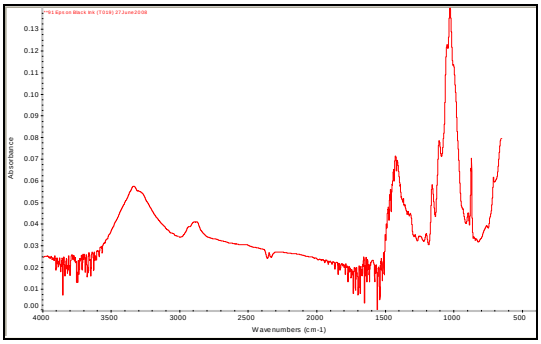

Figure 1468: ATR spectrum of Epson 91 ink on paper collected June 27th, 2008

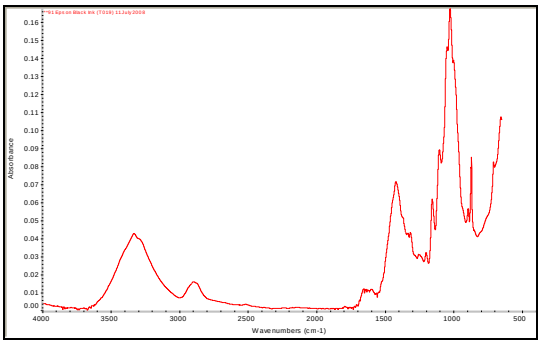

Figure 1469: ATR spectrum of Epson 91 ink on paper collected July 11th, 2008

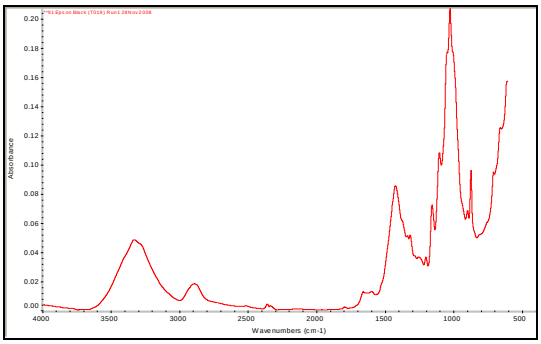

Figure 1470: ATR spectrum of Epson 91 ink on paper collected November 28th, 2008

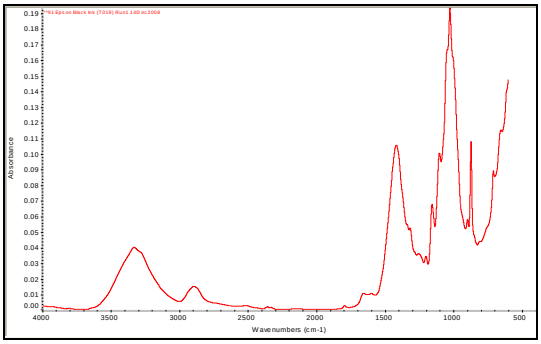

Figure 1471: ATR spectrum of Epson 91 ink on paper collected December 14th, 2008

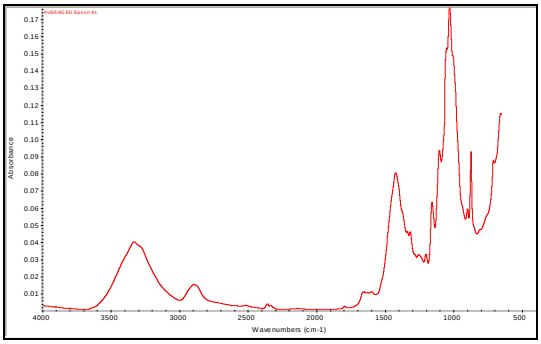

Figure 1472: ATR spectrum of Epson 91 ink on paper AVERAGE

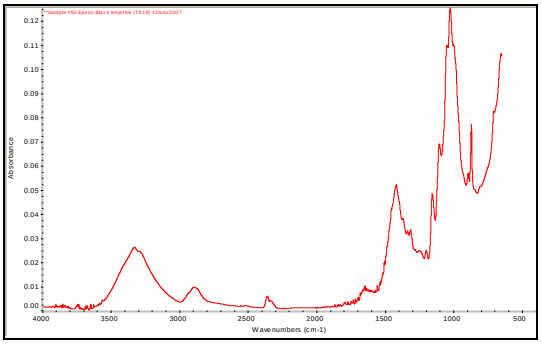

Figure 1473: ATR spectrum of Epson 92 ink on paper collected November 12th, 2007

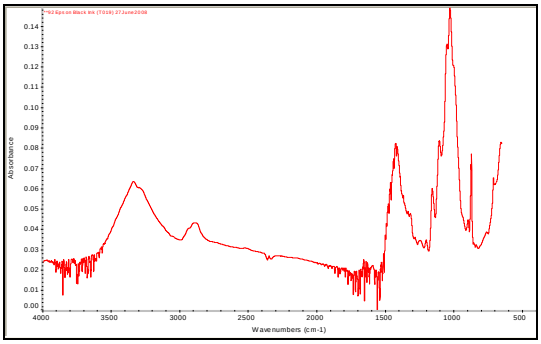

Figure 1474: ATR spectrum of Epson 92 ink on paper collected June 27th, 2008

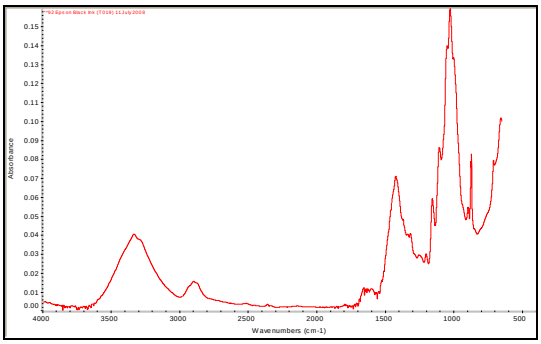

Figure 1475: ATR spectrum of Epson 92 ink on paper collected July 11th, 2008

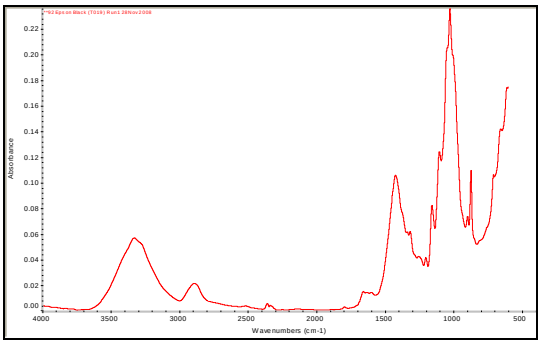

Figure 1476: ATR spectrum of Epson 92 ink on paper collected November 28th, 2008

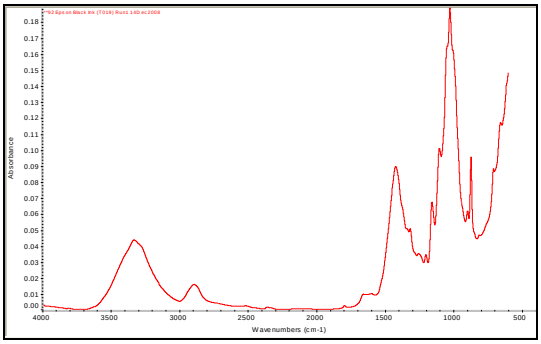

Figure 1477: ATR spectrum of Epson 92 ink on paper collected December 14th, 2008

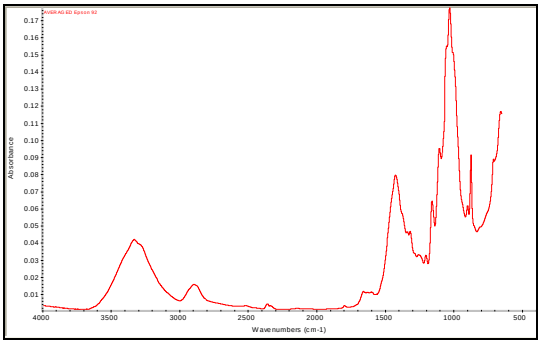

Figure 1478: ATR spectrum of Epson 92 ink on paper AVERAGE

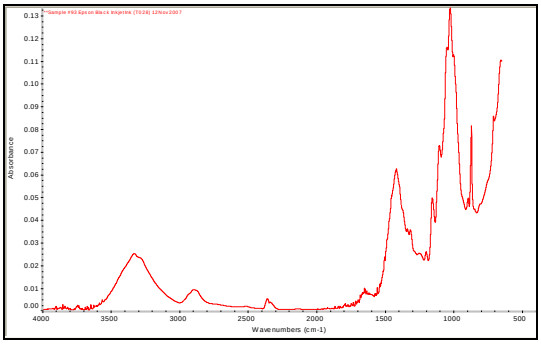

Figure 1479: ATR spectrum of Epson 93 ink on paper collected November 12th, 2007

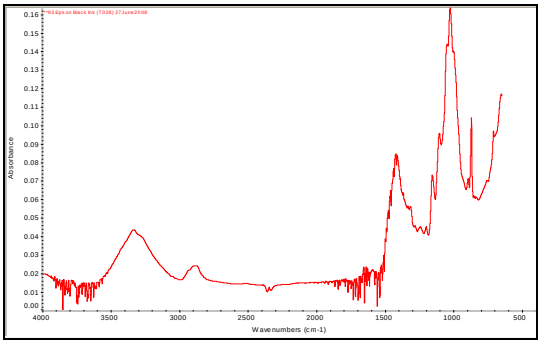

Figure 1480: ATR spectrum of Epson 93 ink on paper collected June 27th, 2008

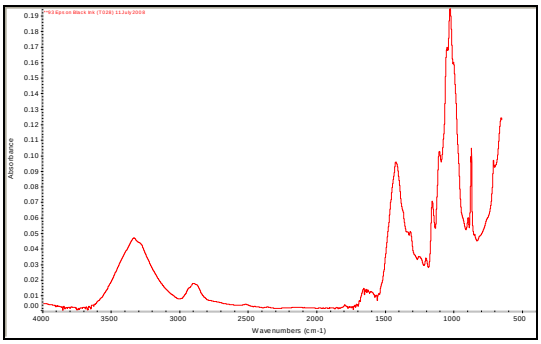

Figure 1481: ATR spectrum of Epson 93 ink on paper collected July 11th, 2008

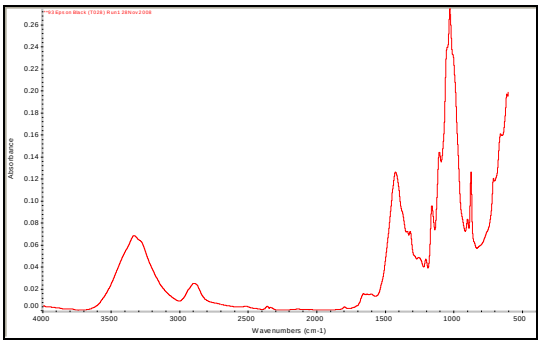

Figure 1482: ATR spectrum of Epson 93 ink on paper collected November 28th, 2008

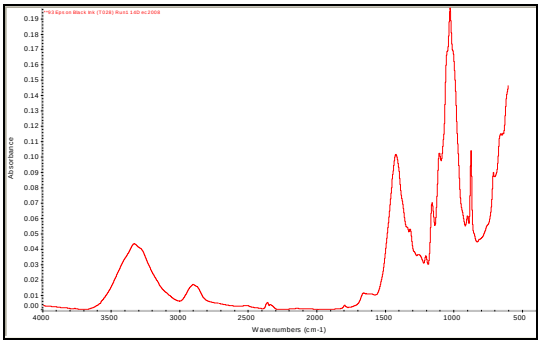

Figure 1483: ATR spectrum of Epson 93 ink on paper collected December 14th, 2008

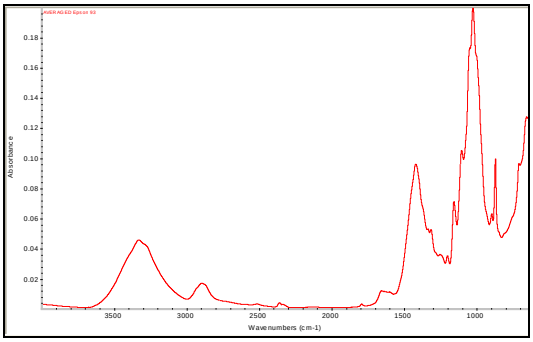

Figure 1484: ATR spectrum of Epson 93 ink on paper AVERAGE

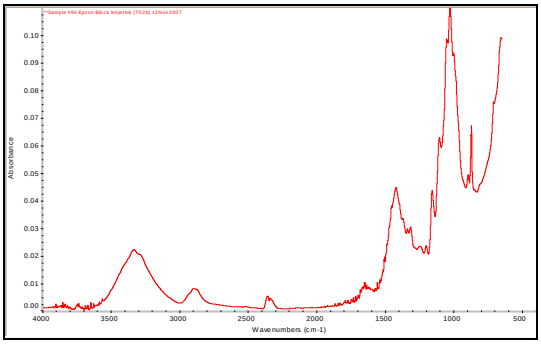

Figure 1485: ATR spectrum of Epson 94 ink on paper collected November 12th, 2007

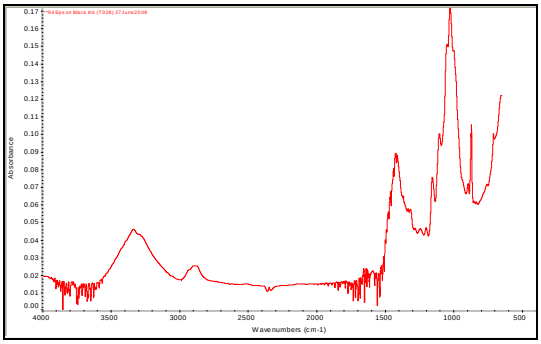

Figure 1486: ATR spectrum of Epson 94 ink on paper collected June 27th, 2008

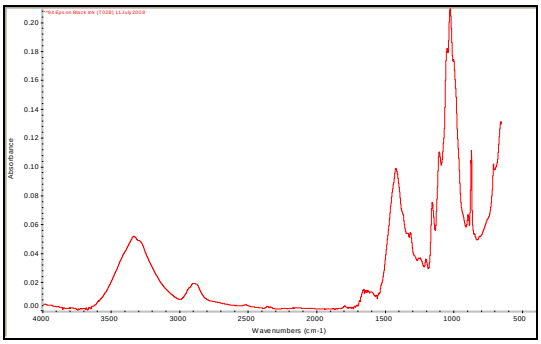

Figure 1487: ATR spectrum of Epson 94 ink on paper collected July 11th, 2008

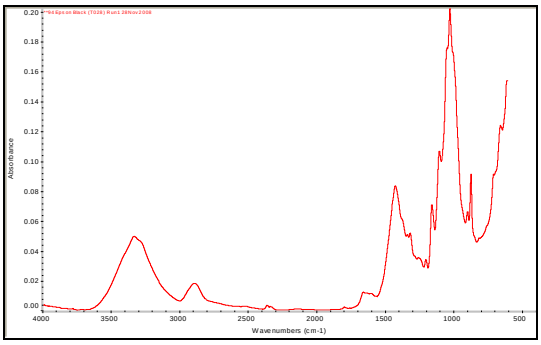

Figure 1488: ATR spectrum of Epson 94 ink on paper collected November 28th, 2008

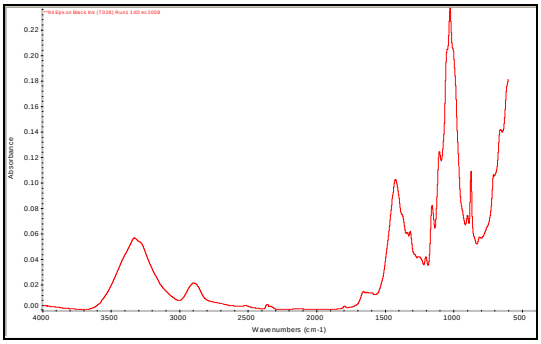

Figure 1489: ATR spectrum of Epson 94 ink on paper collected December 14th, 2008

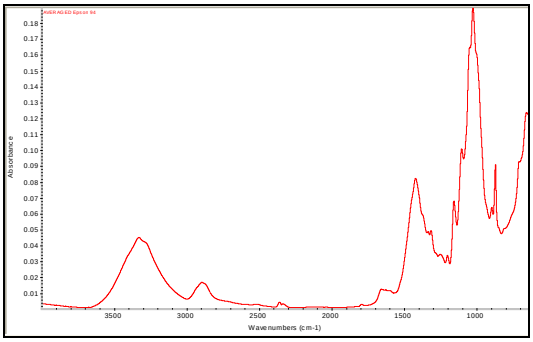

Figure 1490: ATR spectrum of Epson 94 ink on paper AVERAGE

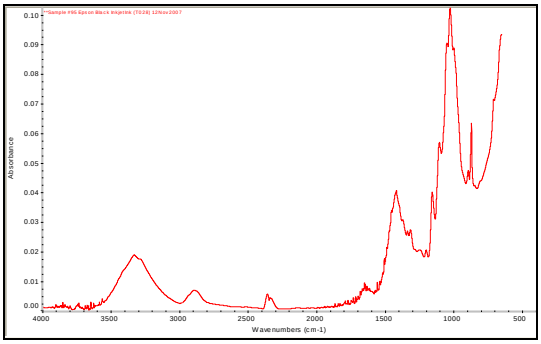

Figure 1491: ATR spectrum of Epson 95 ink on paper collected November 12th, 2007

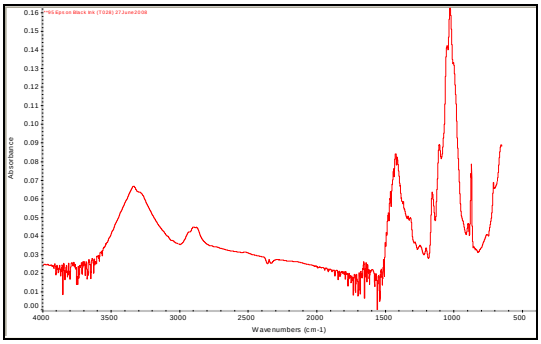

Figure 1492: ATR spectrum of Epson 95 ink on paper collected June 27th, 2008

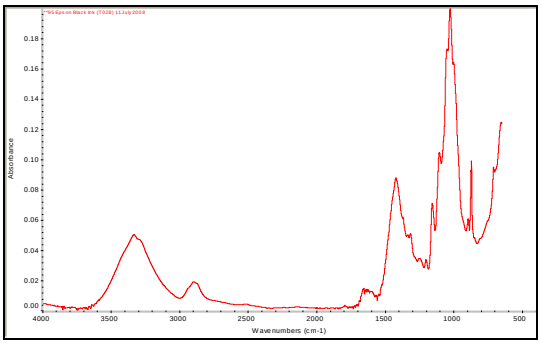

Figure 1493: ATR spectrum of Epson 95 ink on paper collected July 11th, 2008

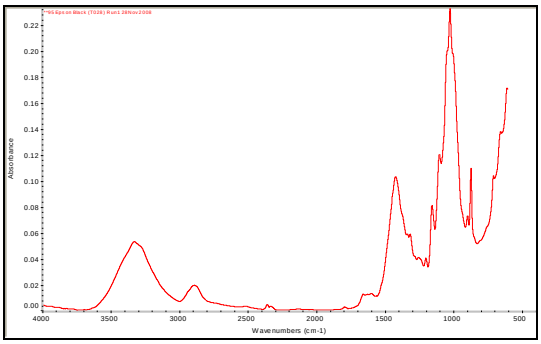

Figure 1494: ATR spectrum of Epson 95 ink on paper collected November 28th, 2008

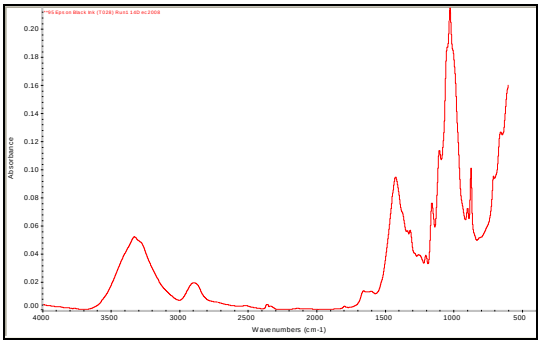

Figure 1495: ATR spectrum of Epson 95 ink on paper collected December 14th, 2008

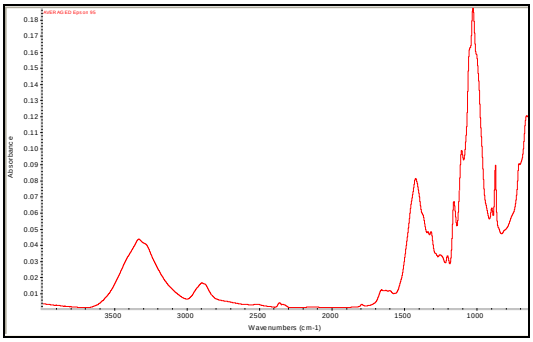

Figure 1496: ATR spectrum of Epson 95 ink on paper AVERAGE

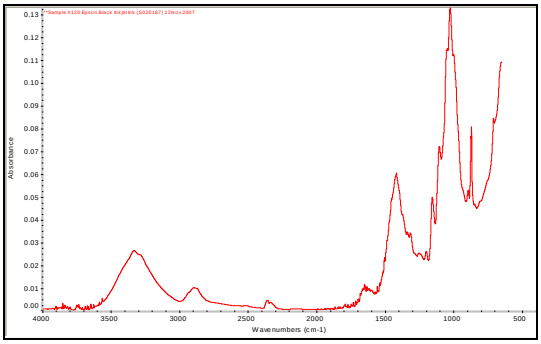

Figure 1497: ATR spectrum of Epson 120 ink on paper collected November 12th, 2007

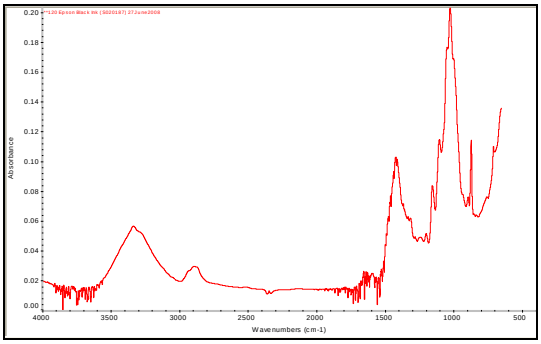

Figure 1498: ATR spectrum of Epson 120 ink on paper collected June 27th, 2008

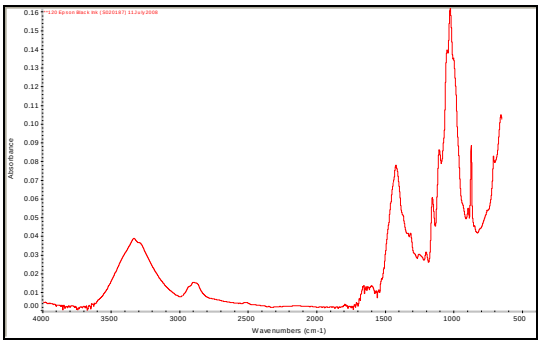

Figure 1499: ATR spectrum of Epson 120 ink on paper collected July 11th, 2008

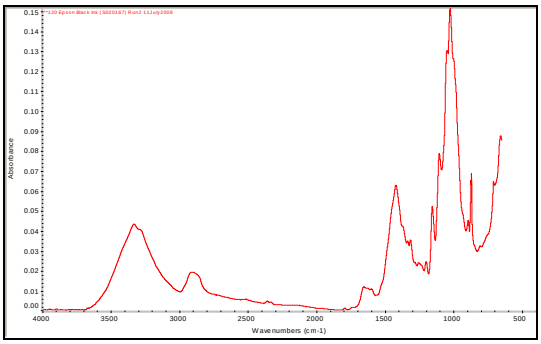

Figure 1500: ATR spectrum of Epson 120 ink on paper run 2 collected July 11th, 2008

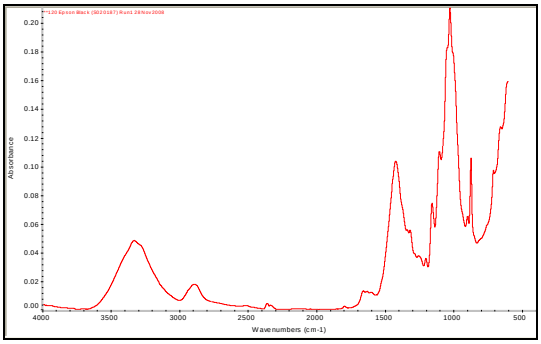

Figure 1501: ATR spectrum of Epson 120 ink on paper collected November 28th, 2008

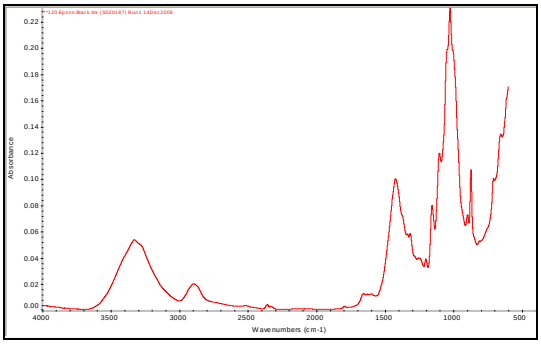

Figure 1502: ATR spectrum of Epson 120 ink on paper collected December 14th, 2008

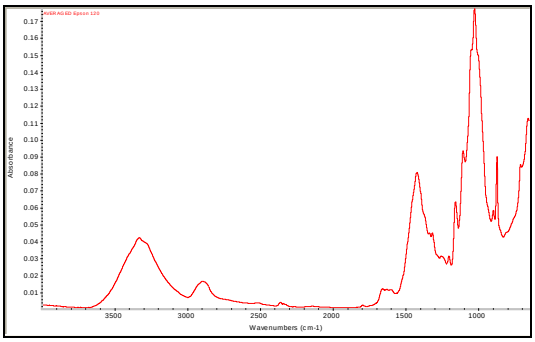

Figure 1503: ATR spectrum of Epson 120 ink on paper AVERAGE

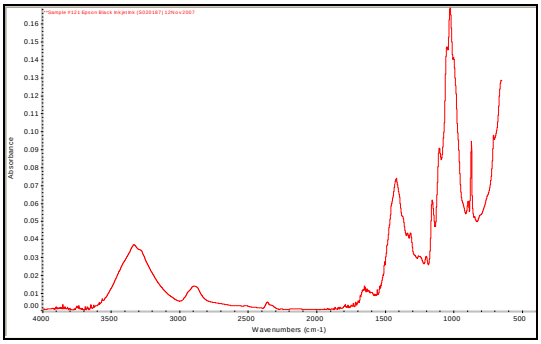

Figure 1504: ATR spectrum of Epson 121 ink on paper collected November 12th, 2007

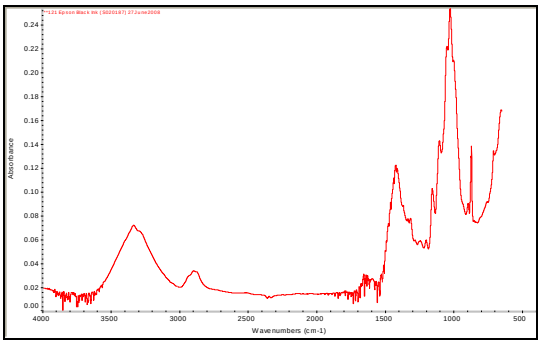

Figure 1505: ATR spectrum of Epson 121 ink on paper collected June 27th, 2008

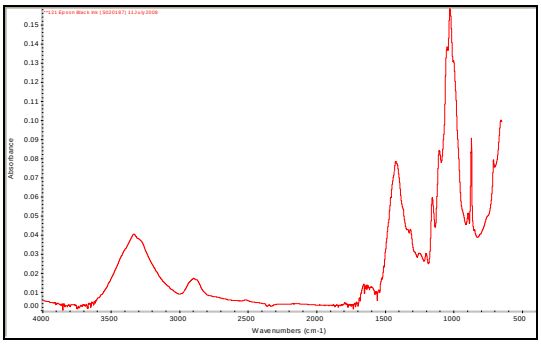

Figure 1506: ATR spectrum of Epson 121 ink on paper collected July 11th, 2008

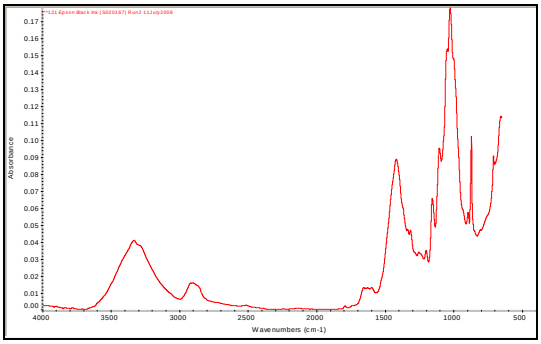

Figure 1507: ATR spectrum of Epson 121 ink on paper run 2 collected July 11th, 2008

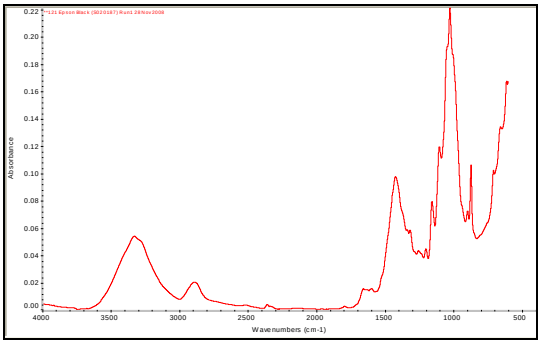

Figure 1508: ATR spectrum of Epson 121 ink on paper collected November 28th, 2008

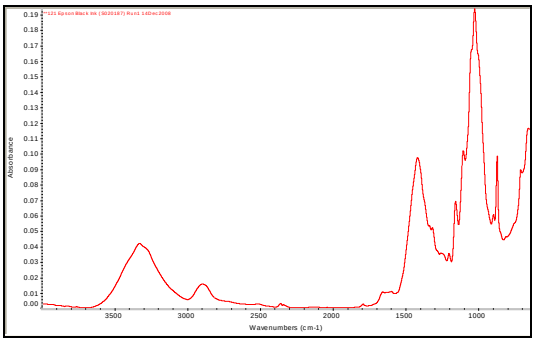

Figure 1509: ATR spectrum of Epson 121 ink on paper collected December 14th, 2008

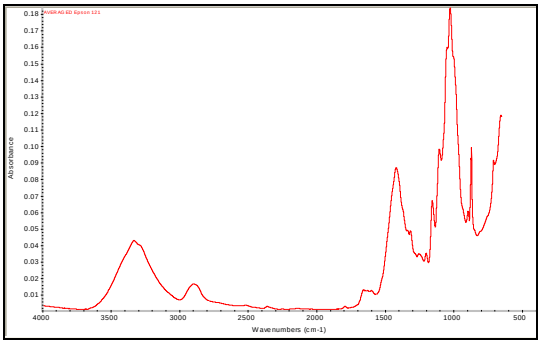

Figure 1510: ATR spectrum of Epson 121 ink on paper AVERAGE

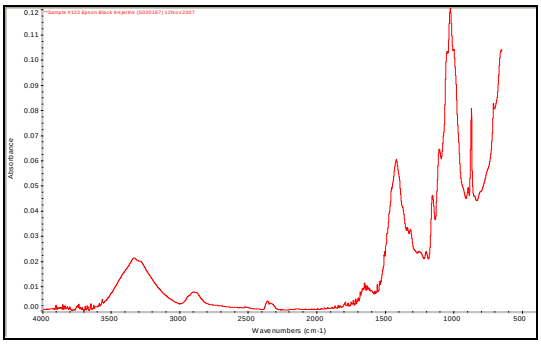

Figure 1511: ATR spectrum of Epson 122 ink on paper collected November 12th, 2007

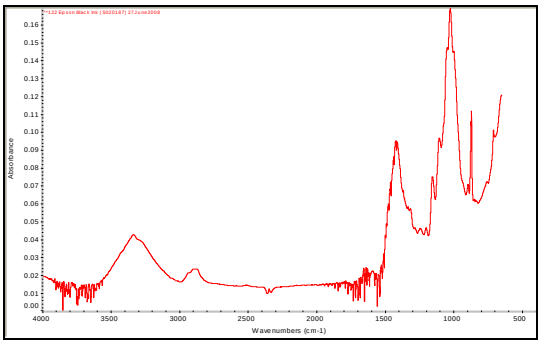

Figure 1512: ATR spectrum of Epson 122 ink on paper collected June 27th, 2008

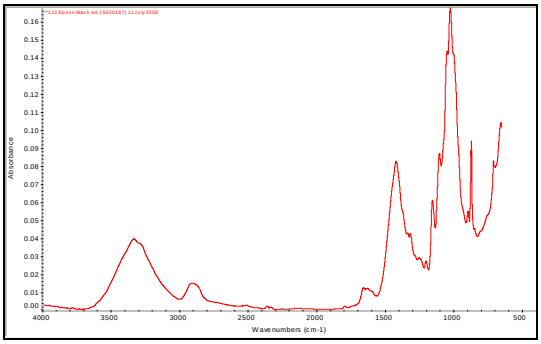

Figure 1513: ATR spectrum of Epson 122 ink on paper collected July 11th, 2008

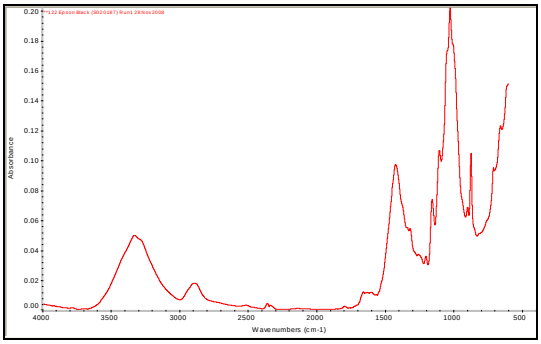

Figure 1514: ATR spectrum of Epson 122 ink on paper collected November 28th, 2008

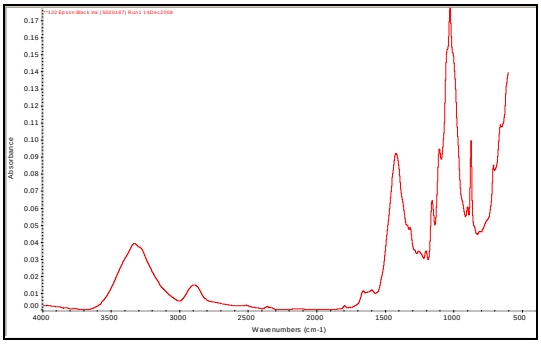

Figure 1515: ATR spectrum of Epson 122 ink on paper collected December 14th, 2008

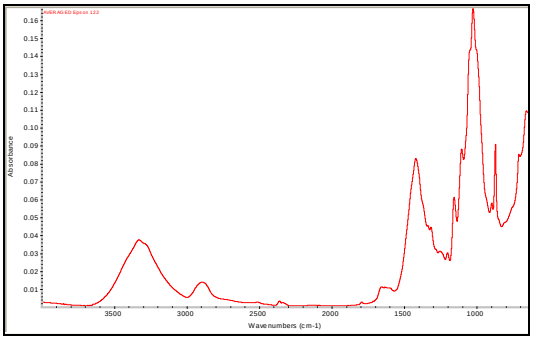

Figure 1516: ATR spectrum of Epson 122 ink on paper AVERAGE

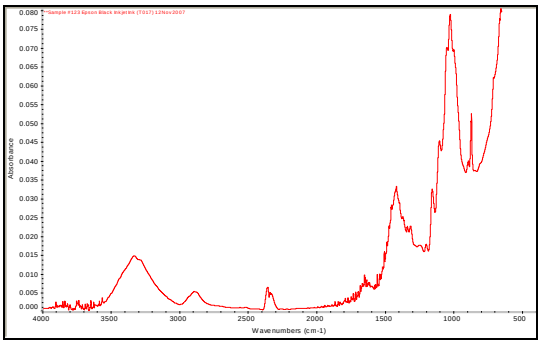

Figure 1517: ATR spectrum of Epson 123 ink on paper collected November 12th, 2007

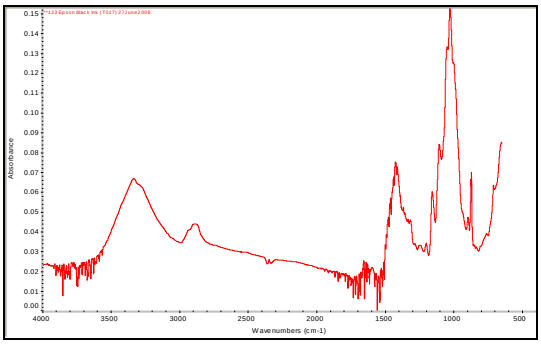

Figure 1518: ATR spectrum of Epson 123 ink on paper collected June 27th, 2008

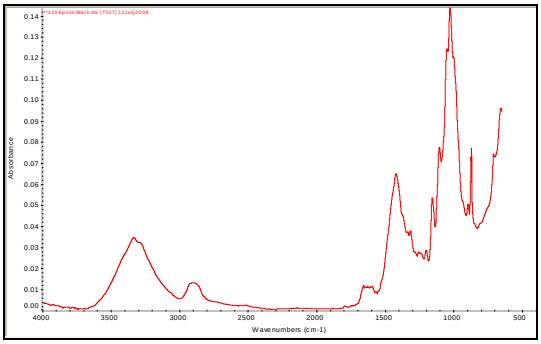

Figure 1519: ATR spectrum of Epson 123 ink on paper collected July 11th, 2008

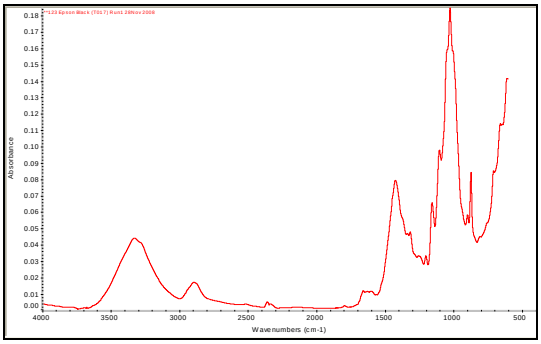

Figure 1520: ATR spectrum of Epson 123 ink on paper collected November 28th, 2008

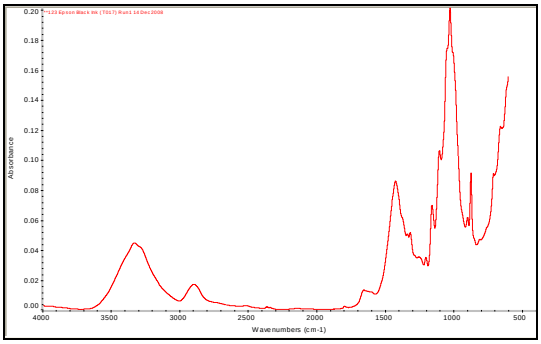

Figure 1521: ATR spectrum of Epson 123 ink on paper collected December 14th, 2008

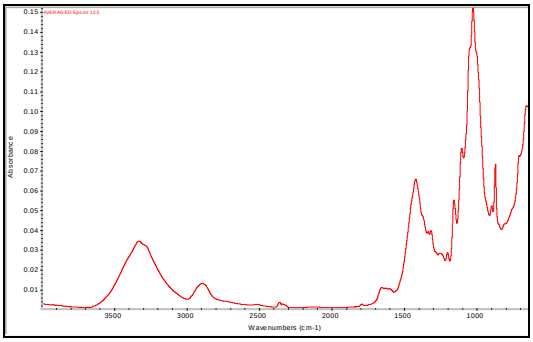

Figure 1522: ATR spectrum of Epson 123 ink on paper AVERAGE

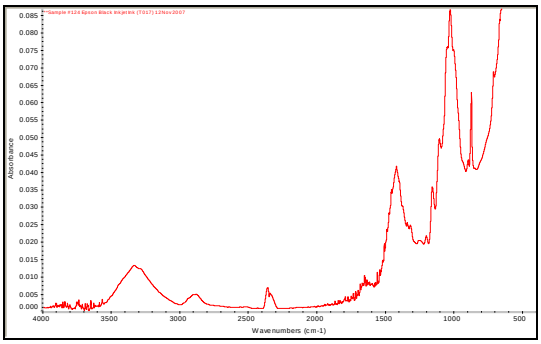

Figure 1523: ATR spectrum of Epson 124 ink on paper collected November 12th, 2007

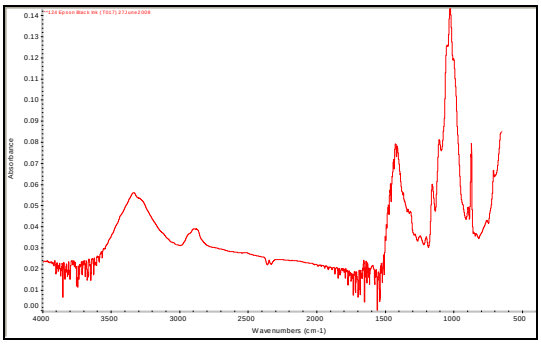

Figure 1524: ATR spectrum of Epson 124 ink on paper collected June 27th, 2008

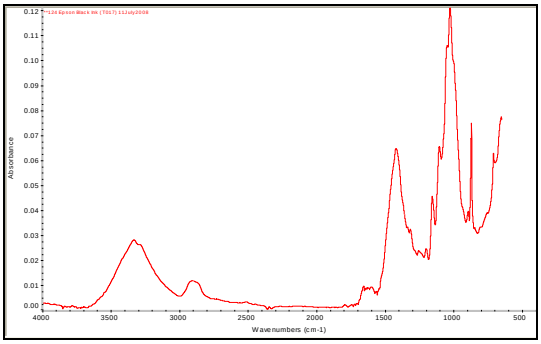

Figure 1525: ATR spectrum of Epson 124 ink on paper collected July 11th, 2008

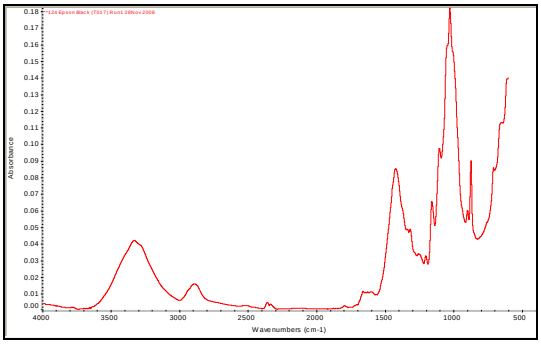

Figure 1526: ATR spectrum of Epson 124 ink on paper collected November 28th, 2008

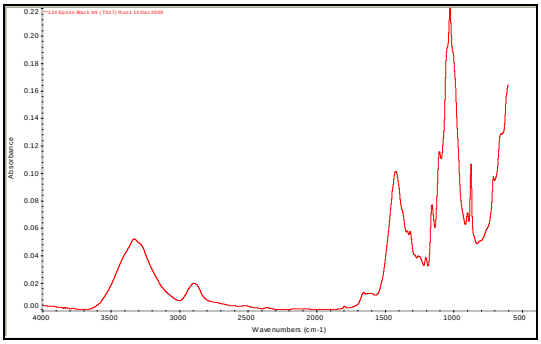

Figure 1527: ATR spectrum of Epson 124 ink on paper collected December 14th, 2008

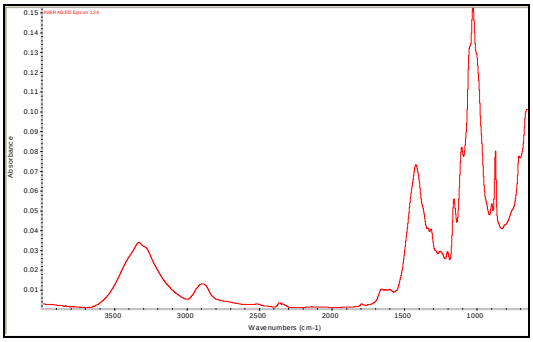

Figure 1528: ATR spectrum of Epson 124 ink on paper AVERAGE

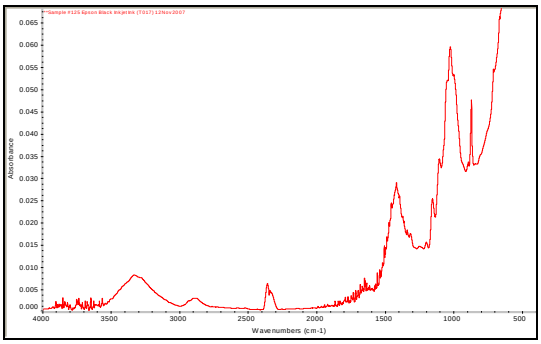

Figure 1529: ATR spectrum of Epson 125 ink on paper collected November 12th, 2007

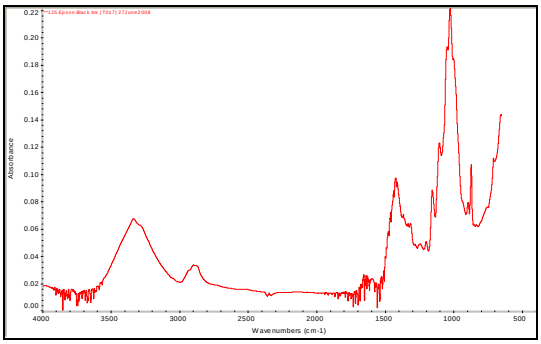

Figure 1530: ATR spectrum of Epson 125 ink on paper collected June 27th, 2008

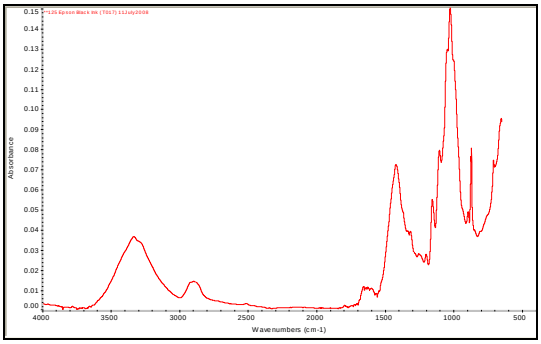

Figure 1531: ATR spectrum of Epson 125 ink on paper collected July 11th, 2008

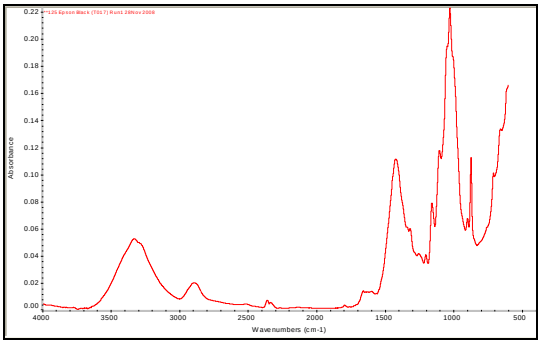

Figure 1532: ATR spectrum of Epson 125 ink on paper collected November 28th, 2008

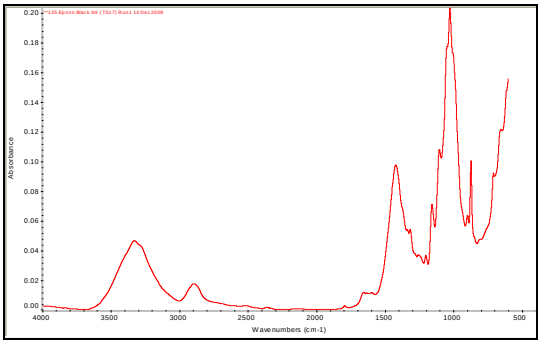

Figure 1533: ATR spectrum of Epson 125 ink on paper collected December 14th, 2008

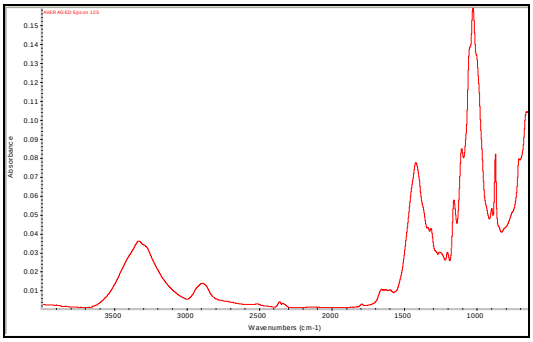

Figure 1534: ATR spectrum of Epson 125 ink on paper AVERAGE

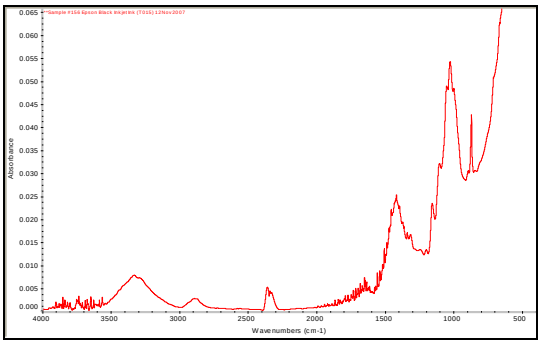

Figure 1535: ATR spectrum of Epson 156 ink on paper collected November 12th, 2007

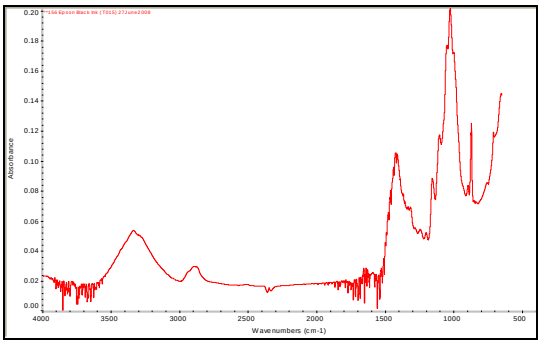

Figure 1536: ATR spectrum of Epson 156 ink on paper collected June 27th, 2008

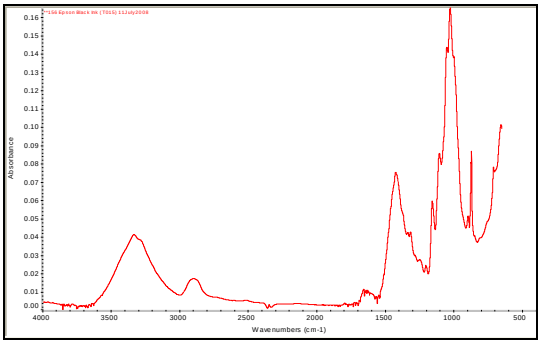

Figure 1537: ATR spectrum of Epson 156 ink on paper collected July 11th, 2008

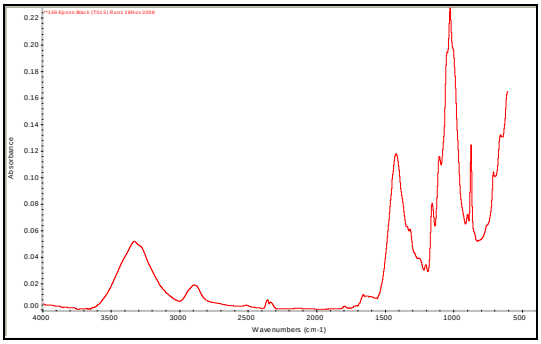

Figure 1538: ATR spectrum of Epson 156 ink on paper collected November 28th, 2008

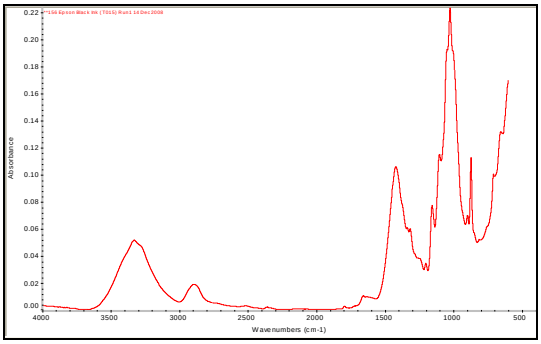

Figure 1539: ATR spectrum of Epson 156 ink on paper collected December 14th, 2008

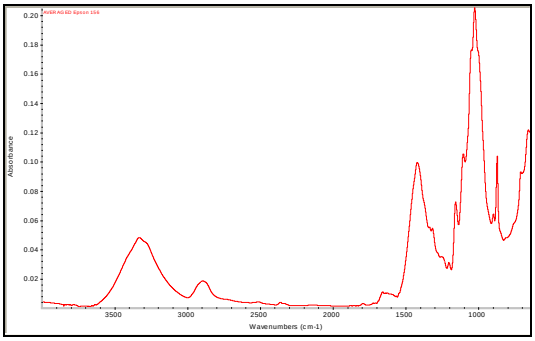

Figure 1540: ATR spectrum of Epson 156 ink on paper AVERAGE

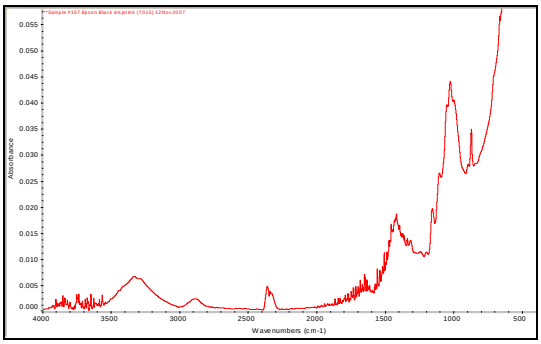

Figure 1541: ATR spectrum of Epson 157 ink on paper collected November 12th, 2007

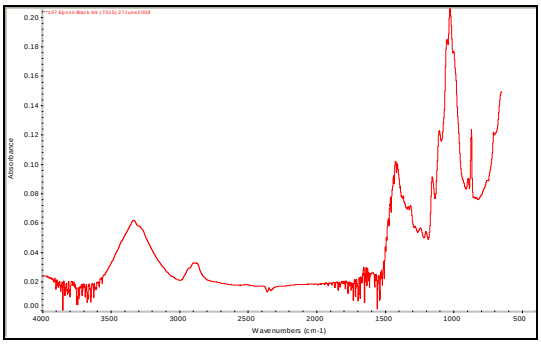

Figure 1542: ATR spectrum of Epson 157 ink on paper collected June 27th, 2008

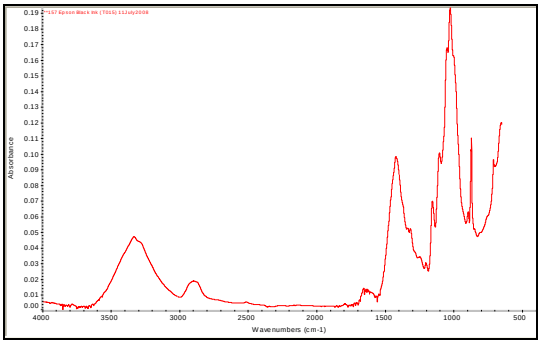

Figure 1543: ATR spectrum of Epson 157 ink on paper collected July 11th, 2008

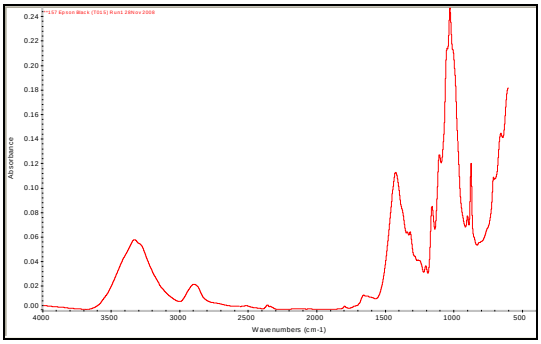

Figure 1544: ATR spectrum of Epson 157 ink on paper collected November 28th, 2008

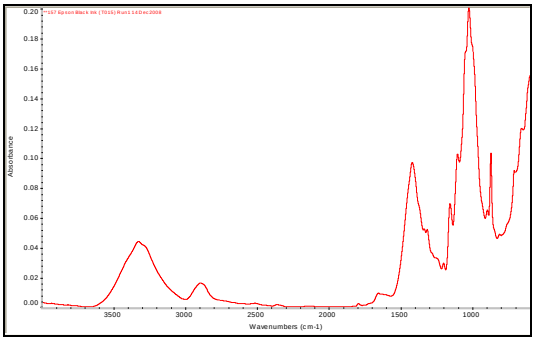

Figure 1545: ATR spectrum of Epson 157 ink on paper collected December 14th, 2008

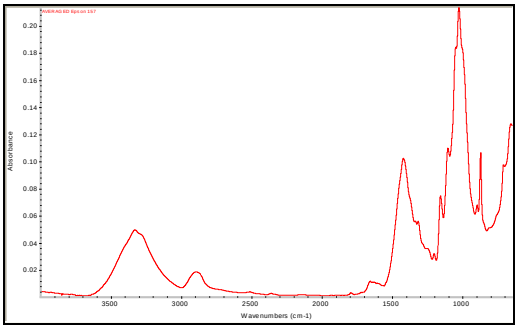

Figure 1546: ATR spectrum of Epson 157 ink on paper AVERAGE

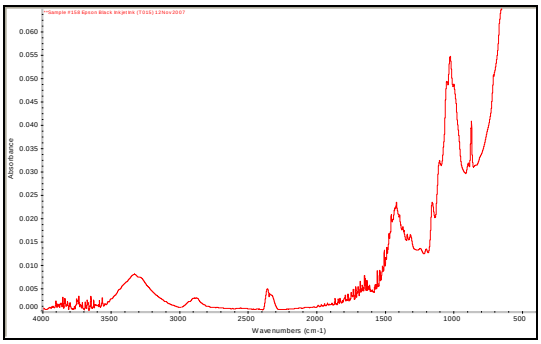

Figure 1547: ATR spectrum of Epson 158 ink on paper collected November 12th, 2007

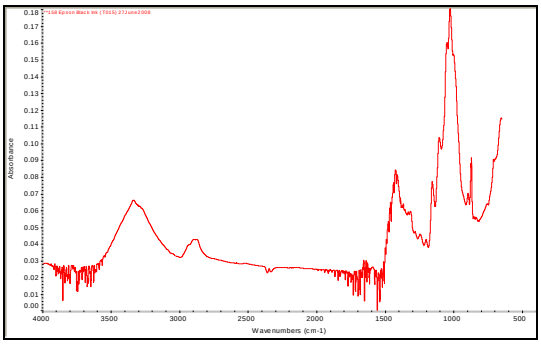

Figure 1548: ATR spectrum of Epson 158 ink on paper collected June 27th, 2008

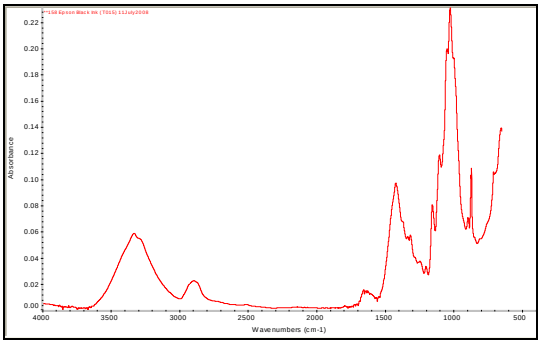

Figure 1549: ATR spectrum of Epson 158 ink on paper collected July 11th, 2008

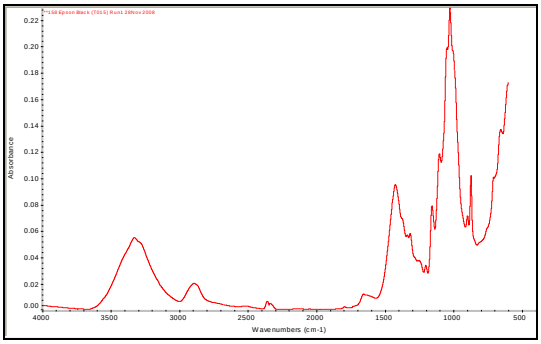

Figure 1550: ATR spectrum of Epson 158 ink on paper collected November 28th, 2008

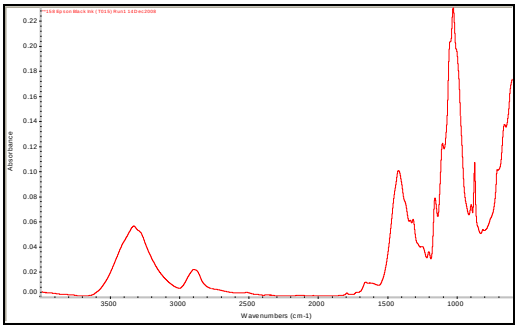

Figure 1551: ATR spectrum of Epson 158 ink on paper collected December 14th, 2008

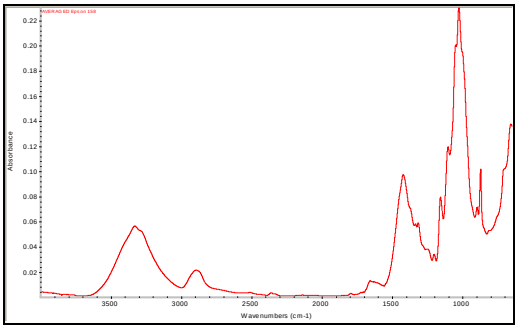

Figure 1552: ATR spectrum of Epson 158 ink on paper AVERAGE

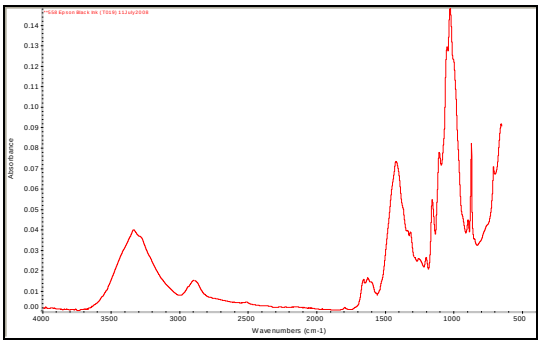

Figure 1553: ATR spectrum of Epson 558 ink on paper collected July 11th, 2008

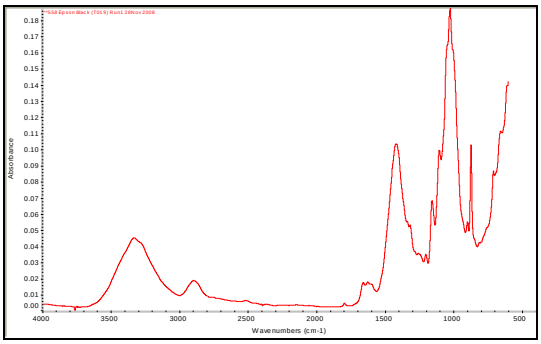

Figure 1554: ATR spectrum of Epson 558 ink on paper collected November 28th, 2008

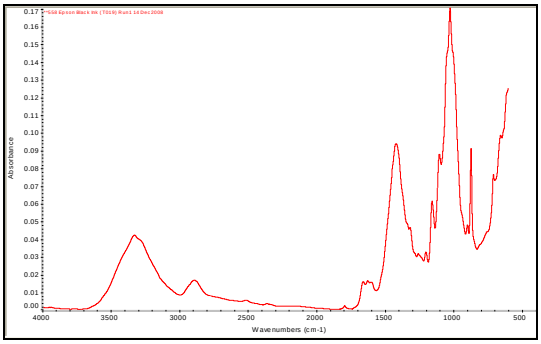

Figure 1555: ATR spectrum of Epson 558 ink on paper collected December 14th, 2008

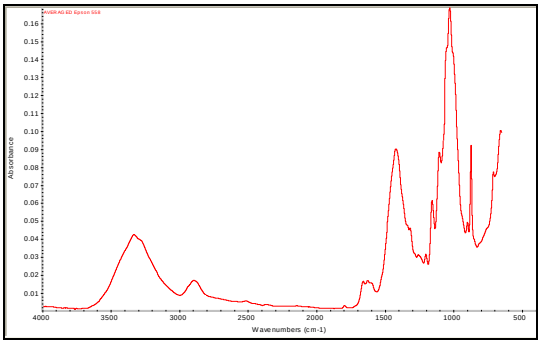

Figure 1556: ATR spectrum of Epson 558 ink on paper AVERAGE

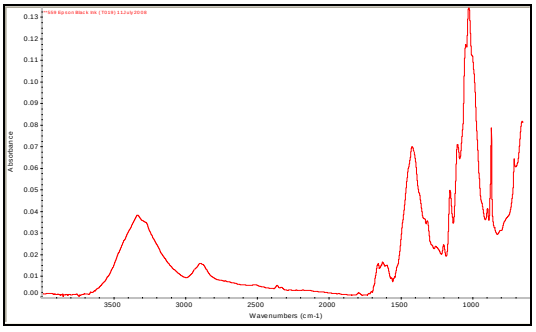

Figure 1557: ATR spectrum of Epson 559 ink on paper collected July 11th, 2008

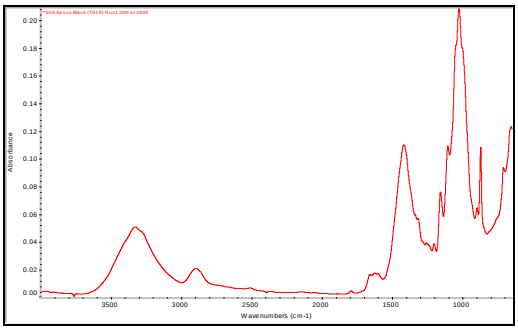

Figure 1558: ATR spectrum of Epson 559 ink on paper collected November 28th, 2008

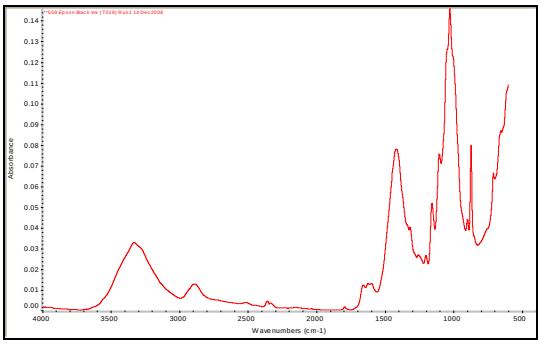

Figure 1559: ATR spectrum of Epson 559 ink on paper collected December 14th, 2008

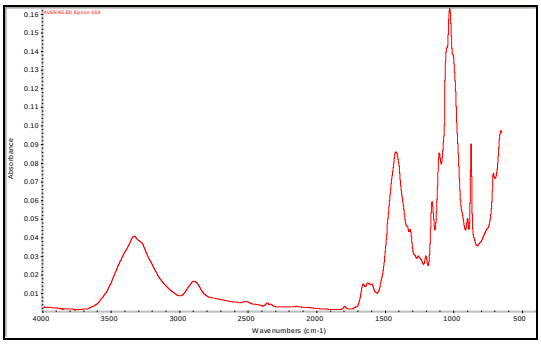

Figure 1560: ATR spectrum of Epson 559 ink on paper AVERAGE

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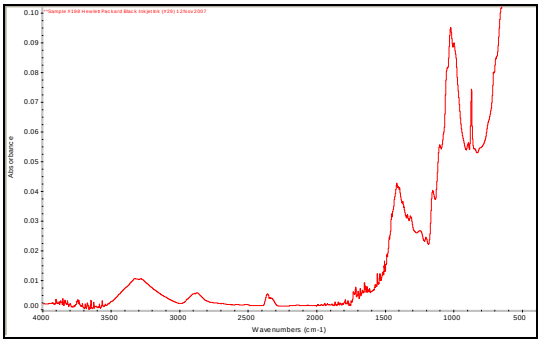

Figure 1561: ATR spectrum of HP 198 ink on paper collected November 12th, 2007

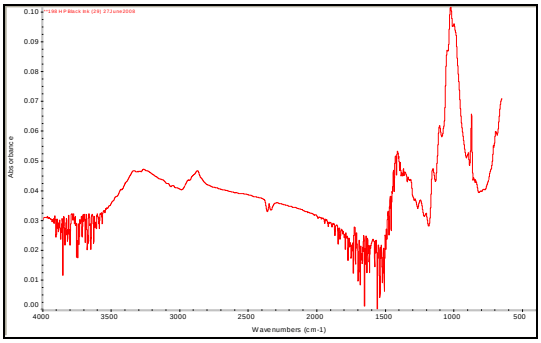

Figure 1562: ATR spectrum of HP 198 ink on paper collected June 27th, 2008

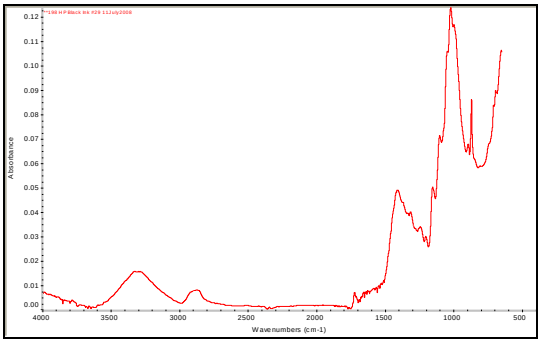

Figure 1563: ATR spectrum of HP 198 ink on paper collected July 11th, 2008

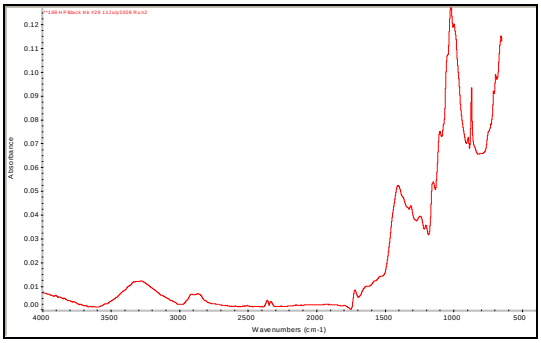

Figure 1564: ATR spectrum of HP 198 ink on paper run 2 collected July 11th, 2008

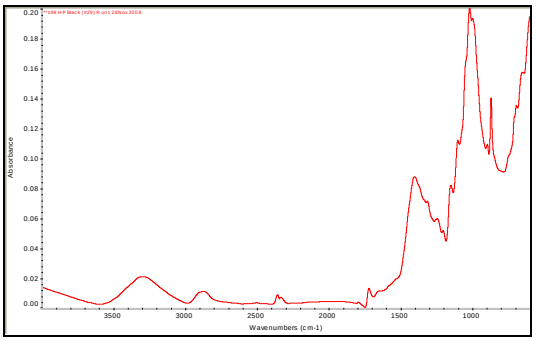

Figure 1565: ATR spectrum of HP 198 ink on paper collected November 28th, 2008

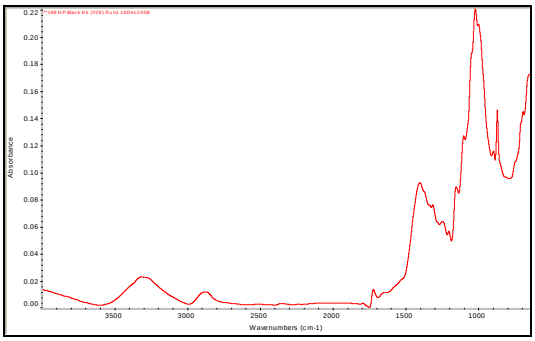

Figure 1566: ATR spectrum of HP 198 ink on paper collected December 14th, 2008

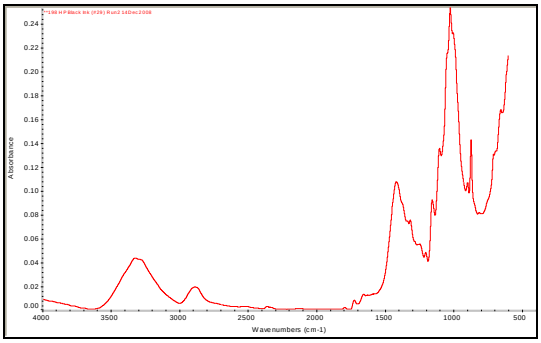

Figure 1567: ATR spectrum of HP 198 ink on paper run 2 collected Dec. 14th, 2008

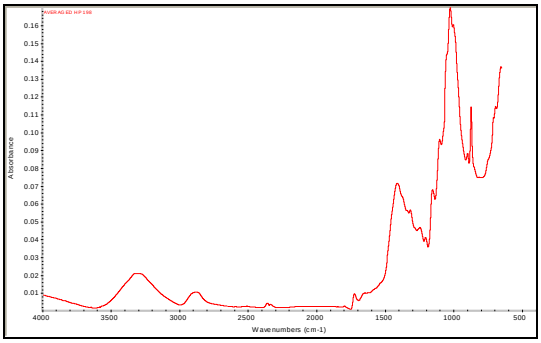

Figure 1568: ATR spectrum of HP 198 ink on paper collected AVERAGE

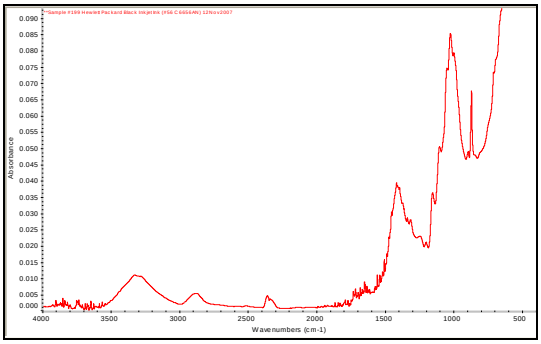

Figure 1569: ATR spectrum of HP 199 ink on paper collected November 12th, 2007

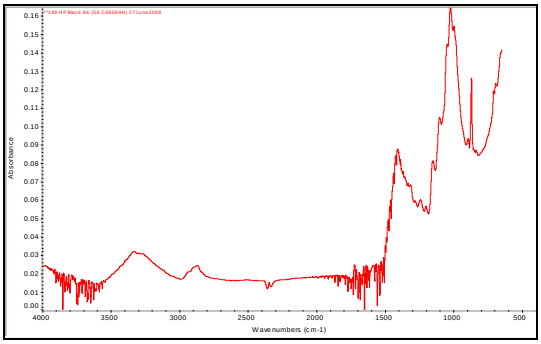

Figure 1570: ATR spectrum of HP 199 ink on paper collected June 27th, 2008

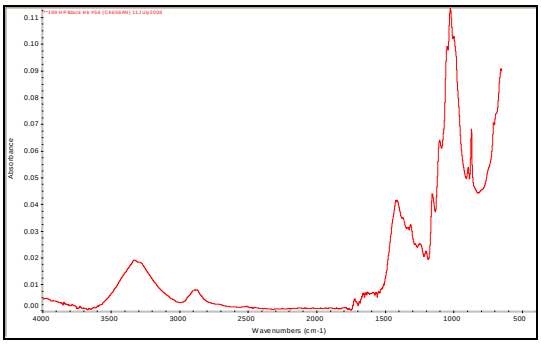

Figure 1571: ATR spectrum of HP 199 ink on paper collected July 11th, 2008

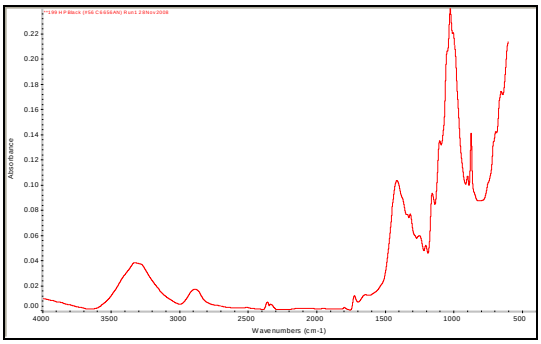

Figure 1572: ATR spectrum of HP 199 ink on paper collected November 28th, 2008

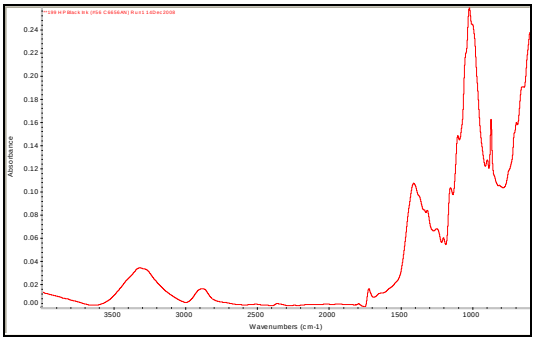

Figure 1573: ATR spectrum of HP 199 ink on paper collected December 14th, 2008

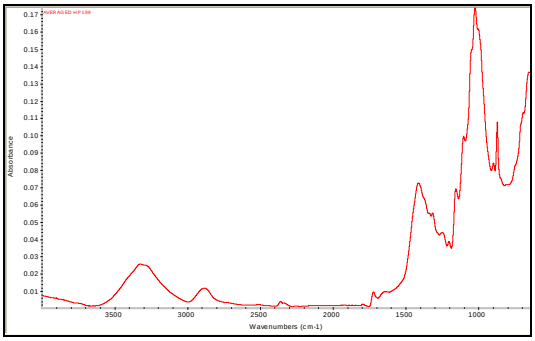

Figure 1574: ATR spectrum of HP 199 ink on paper AVERAGE

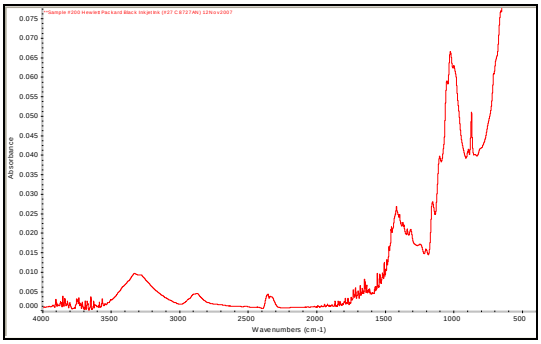

Figure 1575: ATR spectrum of HP 200 ink on paper collected November 12th, 2007

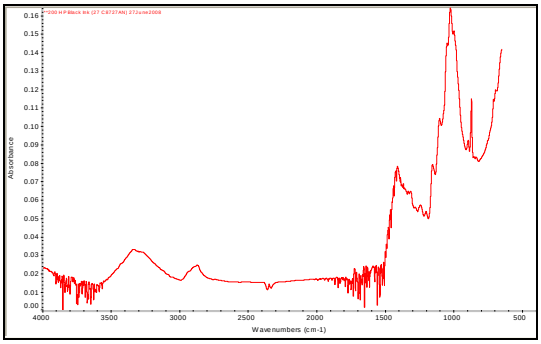

Figure 1576: ATR spectrum of HP 200 ink on paper collected June 27th, 2008

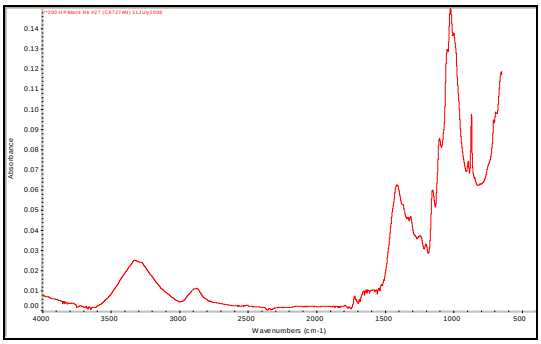

Figure 1577: ATR spectrum of HP 200 ink on paper collected July 11th, 2008

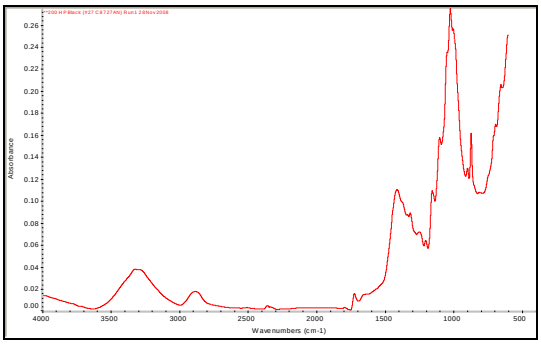

Figure 1578: ATR spectrum of HP 200 ink on paper collected November 28th, 2008

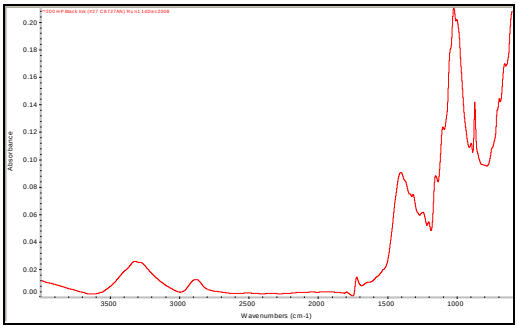

Figure 1579: ATR spectrum of HP 200 ink on paper collected December 14th, 2008

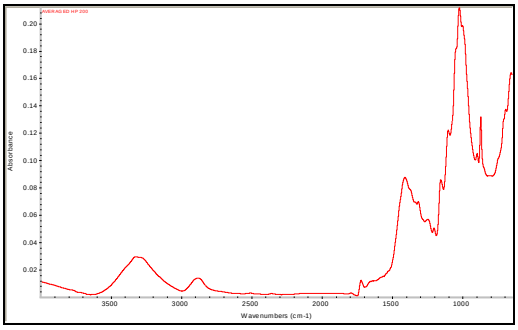

Figure 1580: ATR spectrum of HP 200 ink on paper AVERAGE

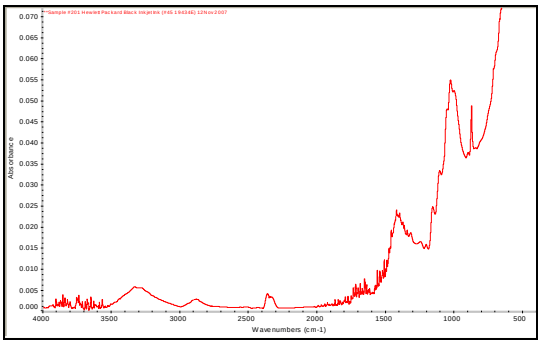

Figure 1581: ATR spectrum of HP 201 ink on paper collected November 12th, 2007

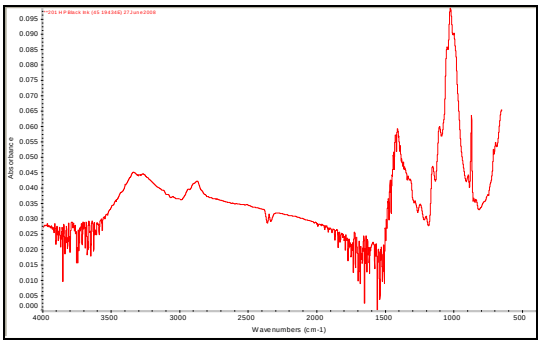

Figure 1582: ATR spectrum of HP 201 ink on paper collected June 27th, 2008

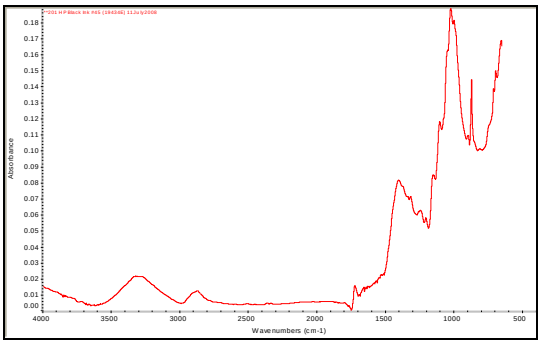

Figure 1583: ATR spectrum of HP 201 ink on paper collected July 11th, 2008

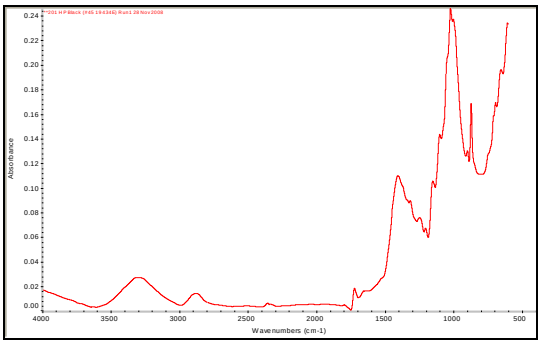

Figure 1584: ATR spectrum of HP 201 ink on paper collected November 28th, 2008

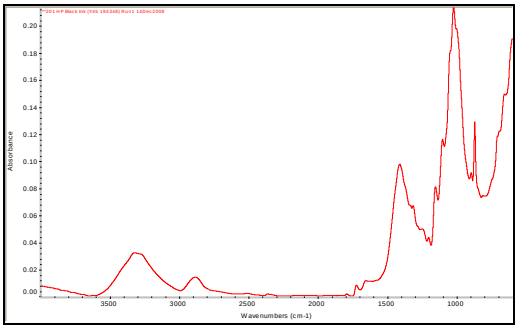

Figure 1585: ATR spectrum of HP 201 ink on paper collected December 14th, 2008

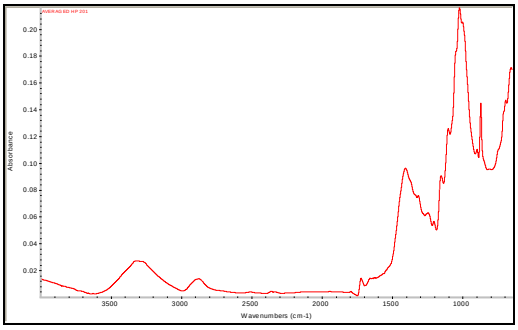

Figure 1586: ATR spectrum of HP 201 ink on paper AVERAGE

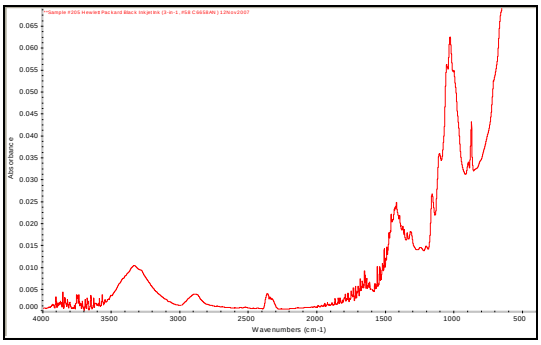

Figure 1587: ATR spectrum of HP 205 ink on paper collected November 12th, 2007

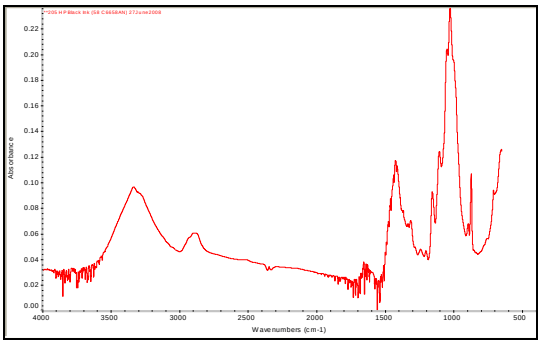

Figure 1588: ATR spectrum of HP 205 ink on paper collected June 27th, 2008

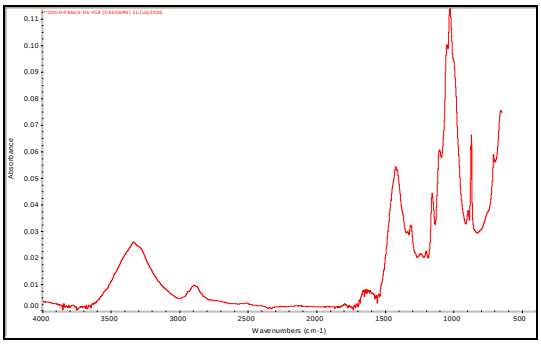

Figure 1589: ATR spectrum of HP 205 ink on paper collected July 11th, 2008

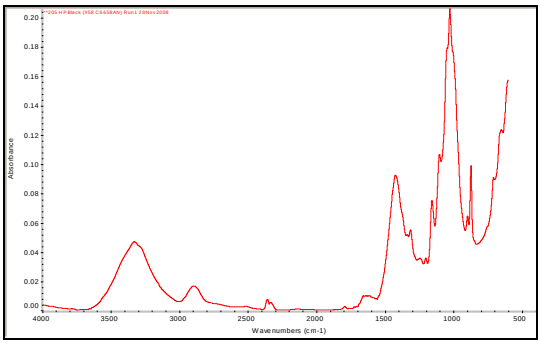

Figure 1590: ATR spectrum of HP 205 ink on paper collected November 28th, 2008

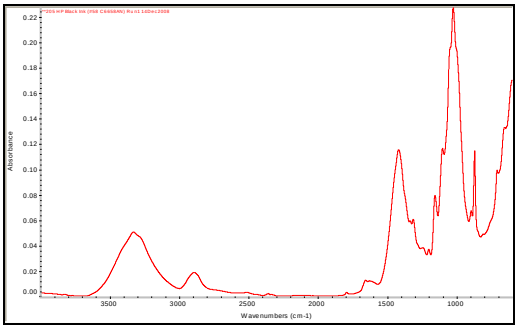

Figure 1591: ATR spectrum of HP 205 ink on paper collected December 14th, 2008

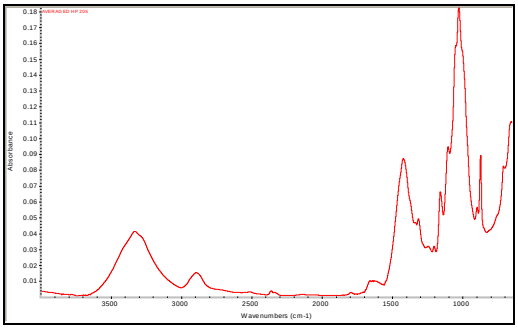

Figure 1592: ATR spectrum of HP 205 ink on paper AVERAGE

KODAK

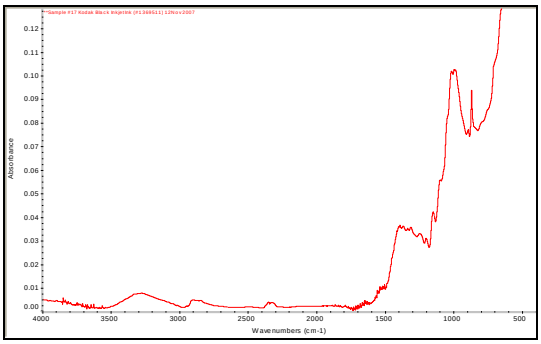

Figure 1593: ATR spectrum of Kodak 17 ink on paper collected November 12th, 2007

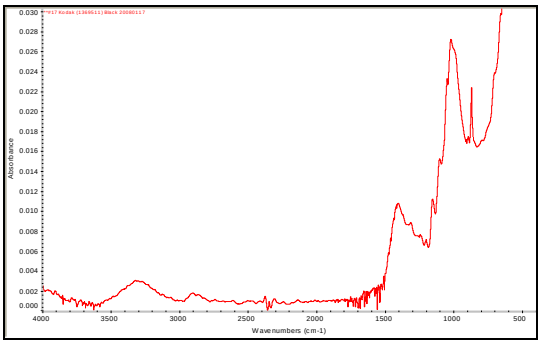

Figure 1594: ATR spectrum of Kodak 17 ink on paper collected January 17th, 2008

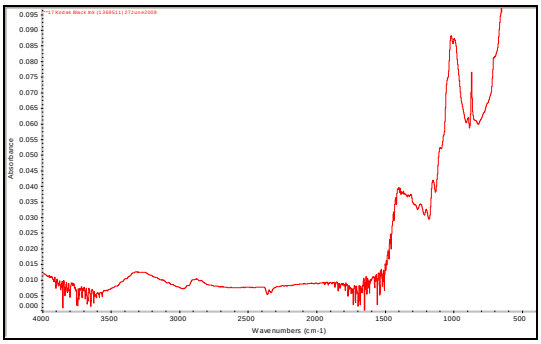

Figure 1595: ATR spectrum of Kodak 17 ink on paper collected June 27th, 2008

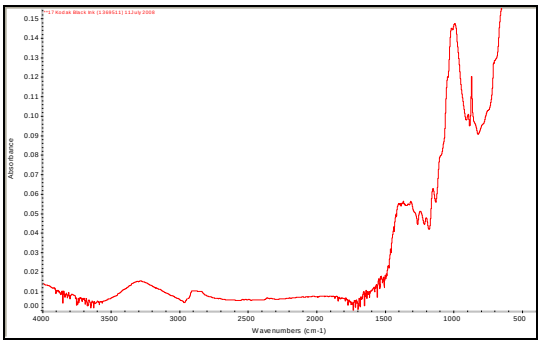

Figure 1596: ATR spectrum of Kodak 17 ink on paper collected July 11th, 2008

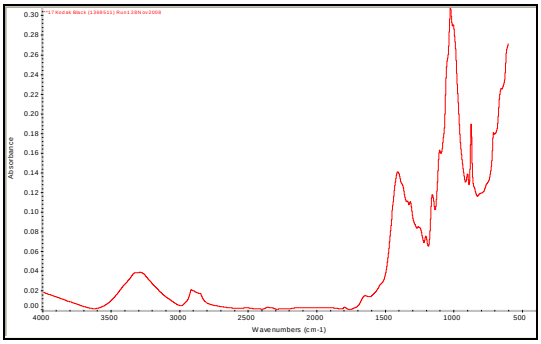

Figure 1597: ATR spectrum of Kodak 17 ink on paper collected November 28th, 2008

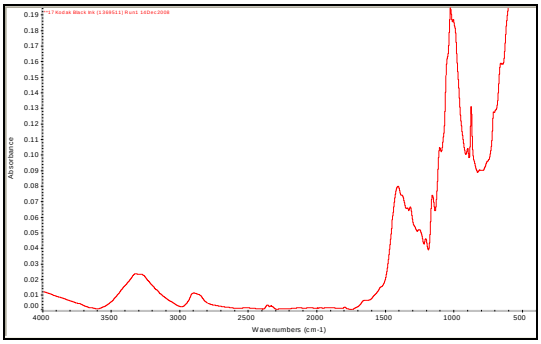

Figure 1598: ATR spectrum of Kodak 17 ink on paper collected December 14th, 2008

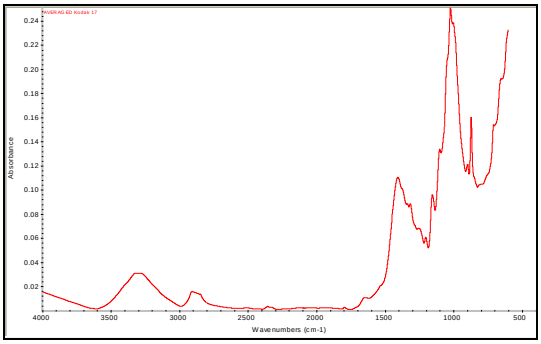

Figure 1599: ATR spectrum of Kodak 17 ink on paper AVERAGE

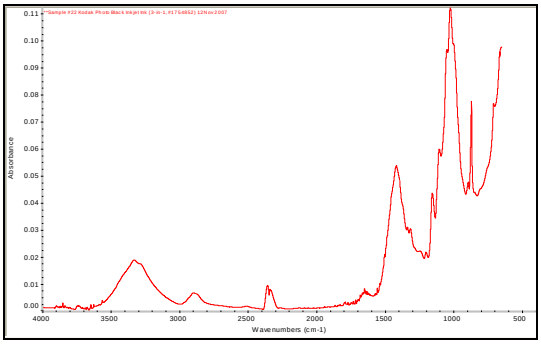

Figure 1600: ATR spectrum of Kodak 22 ink on paper collected November 12th, 2007

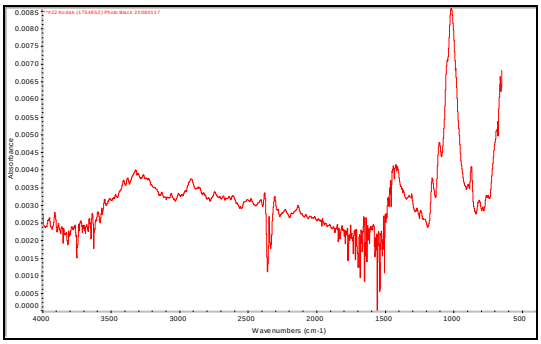

Figure 1601: ATR spectrum of Kodak 22 ink on paper collected January 17th, 2008

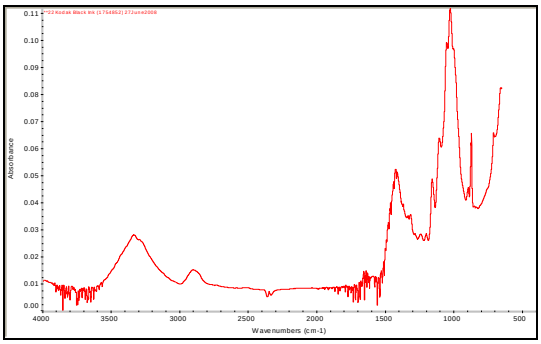

Figure 1602: ATR spectrum of Kodak 22 ink on paper collected June 27th, 2008

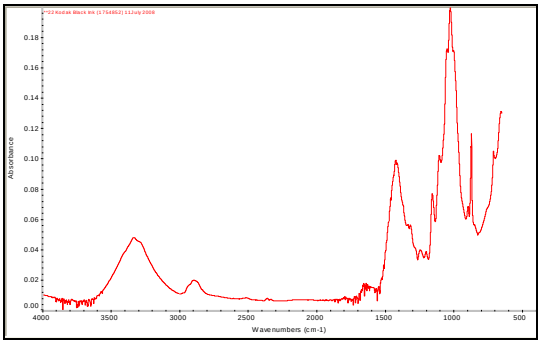

Figure 1603: ATR spectrum of Kodak 22 ink on paper collected July 11th, 2008

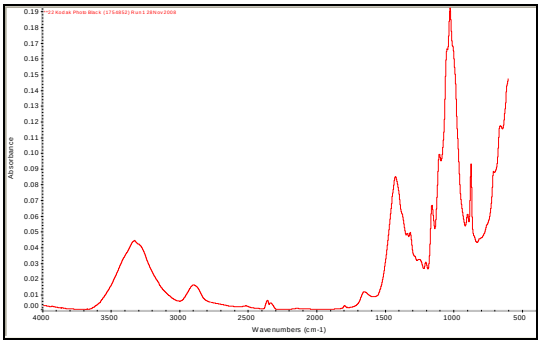

Figure 1604: ATR spectrum of Kodak 22 ink on paper collected November 28th, 2008

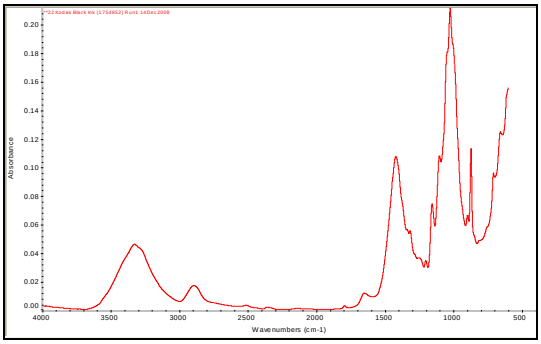

Figure 1605: ATR spectrum of Kodak 22 ink on paper collected December 14th, 2008

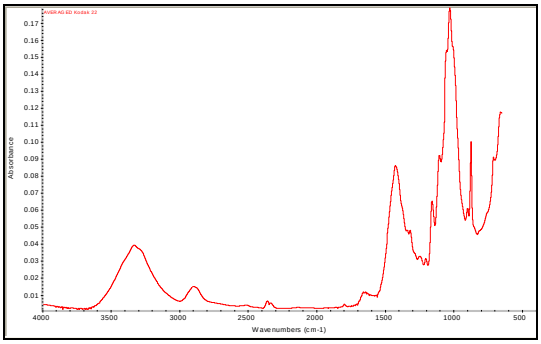

Figure 1606: ATR spectrum of Kodak 22 ink on paper AVERAGE

OKIDATA

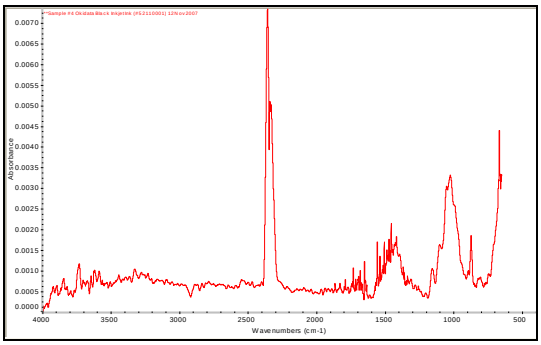

Figure 1607: ATR spectrum of Oki 04 ink on paper collected November 12th, 2007

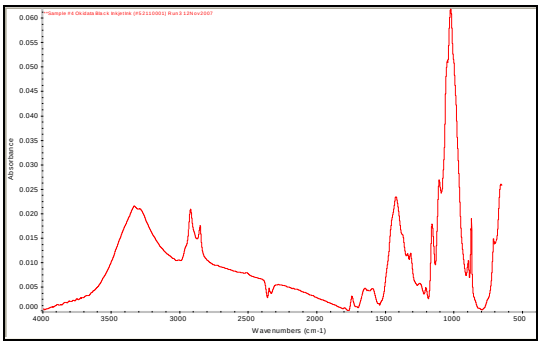

Figure 1608: ATR spectrum of Oki 04 ink on paper run 3 collected November 12th, 2007

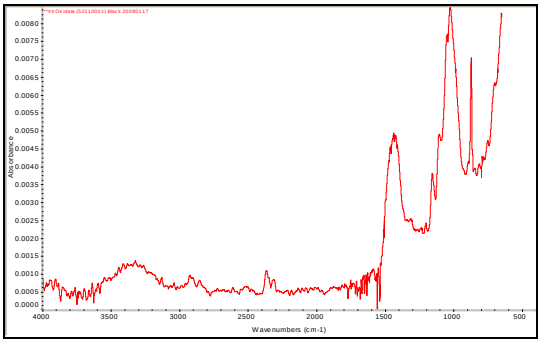

Figure 1609: ATR spectrum of Oki 04 ink on paper collected January 17th, 2008

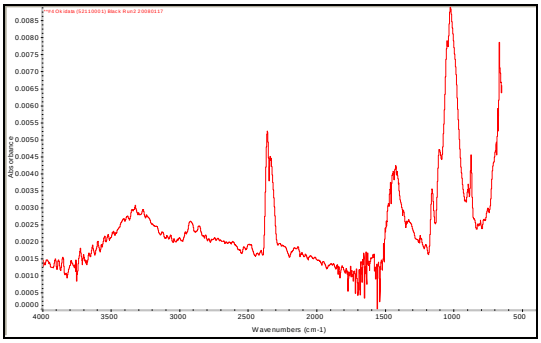

Figure 1610: ATR spectrum of Oki 04 ink on paper run 2 collected January 17th, 2008

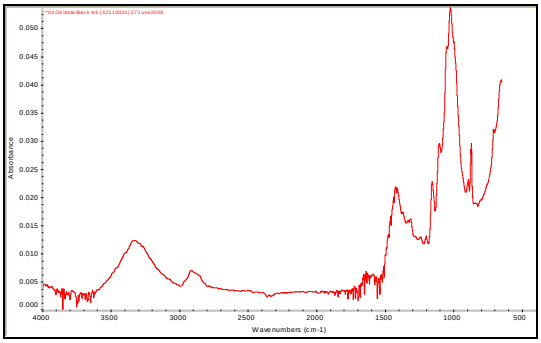

Figure 1611: ATR spectrum of Oki 04 ink on paper collected June 27th, 2008

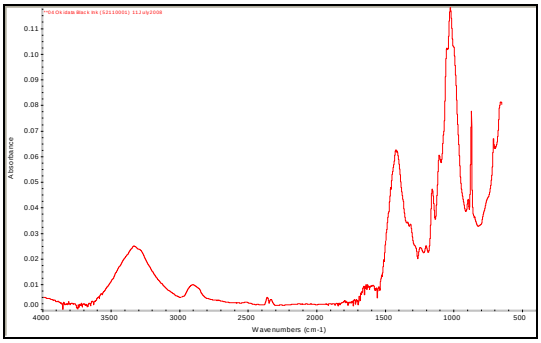

Figure 1612: ATR spectrum of Oki 04 ink on paper collected July 11th, 2008

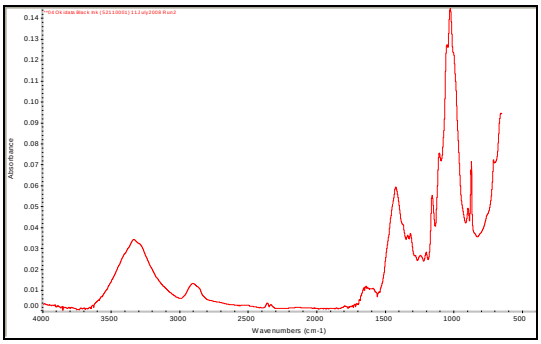

Figure 1613: ATR spectrum of Oki 04 ink on paper run 2 collected July 11th, 2008

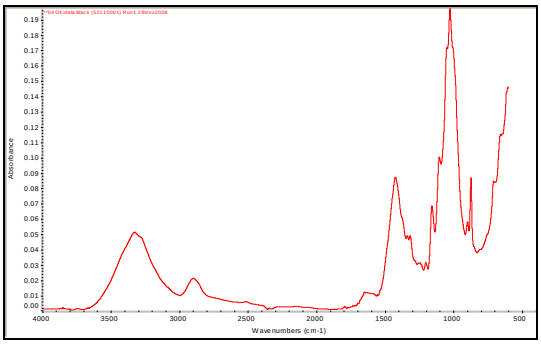

Figure 1614: ATR spectrum of Oki 04 ink on paper collected November 28th, 2008

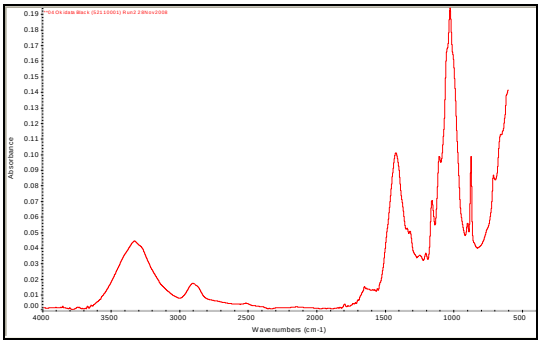

Figure 1615: ATR spectrum of Oki 04 ink on paper run 2 collected Nov. 28th, 2008

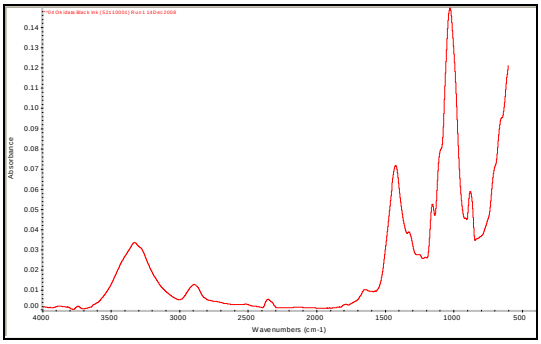

Figure 1616: ATR spectrum of Oki 04 ink on paper collected December 14th, 2008

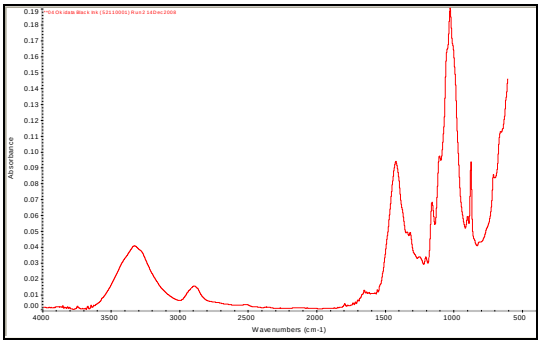

Figure 1617: ATR spectrum of Oki 04 ink on paper run 2 collected Dec. 14th, 2008

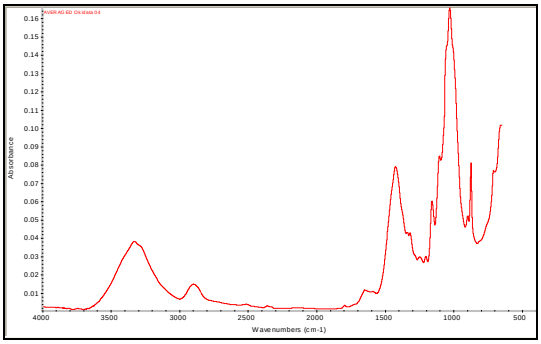

Figure 1618: ATR spectrum of Oki 04 ink on paper AVERAGE

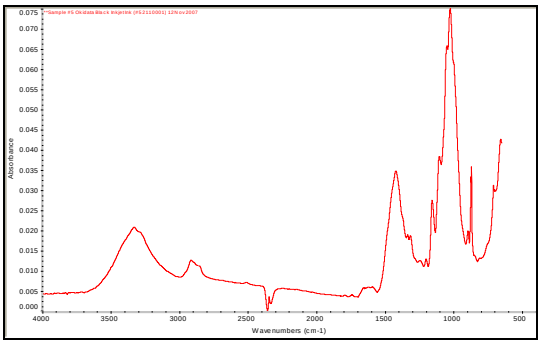

Figure 1619: ATR spectrum of Oki 05 ink on paper collected November 12th, 2007

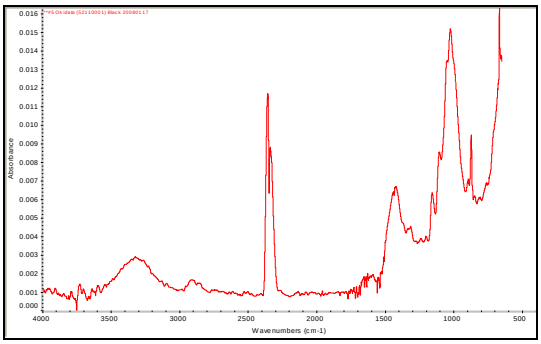

Figure 1620: ATR spectrum of Oki 05 ink on paper collected January 17th, 2008

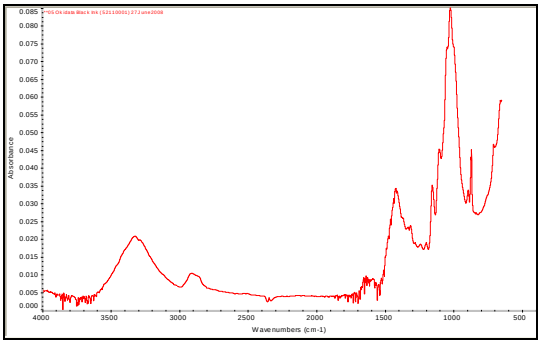

Figure 1621: ATR spectrum of Oki 05 ink on paper collected June 27th, 2008

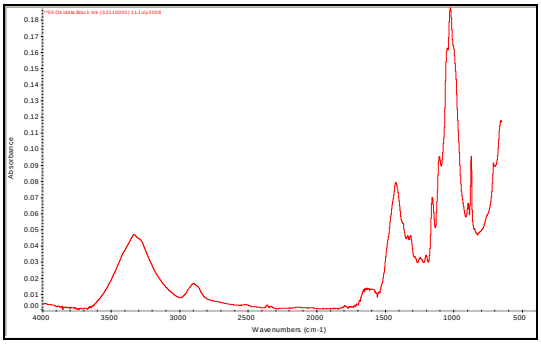

Figure 1622: ATR spectrum of Oki 05 ink on paper collected July 11th, 2008

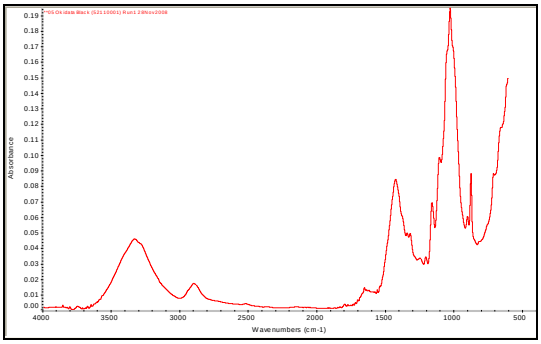

Figure 1623: ATR spectrum of Oki 05 ink on paper collected November 28th, 2008

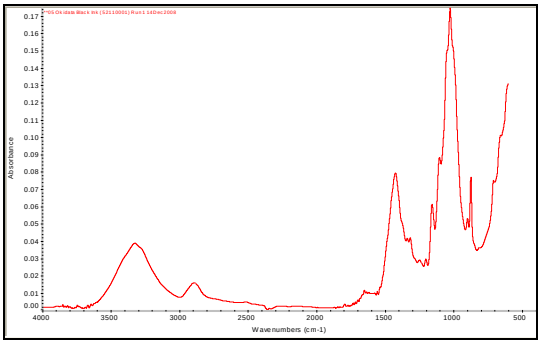

Figure 1624: ATR spectrum of Oki 05 ink on paper collected December 14th, 2008

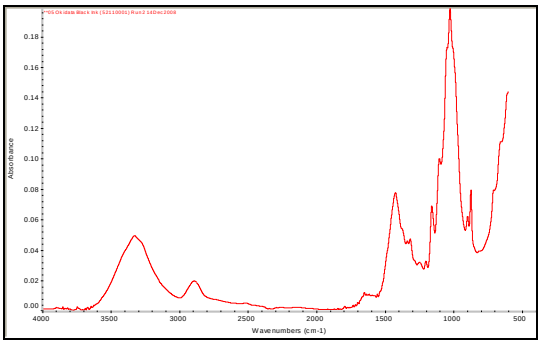

Figure 1625: ATR spectrum of Oki 05 ink on paper run 2 collected Dec. 14th, 2008

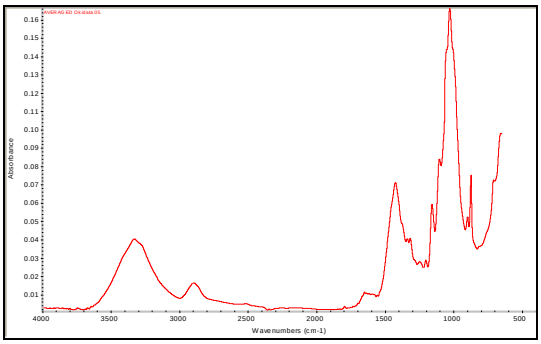

Figure 1626: ATR spectrum of Oki 05 ink on paper AVERAGE

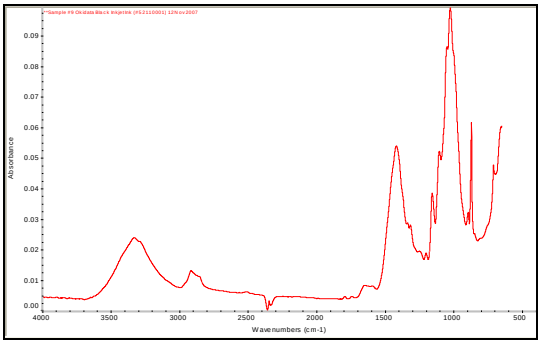

Figure 1627: ATR spectrum of Oki 09 ink on paper collected November 12th, 2007

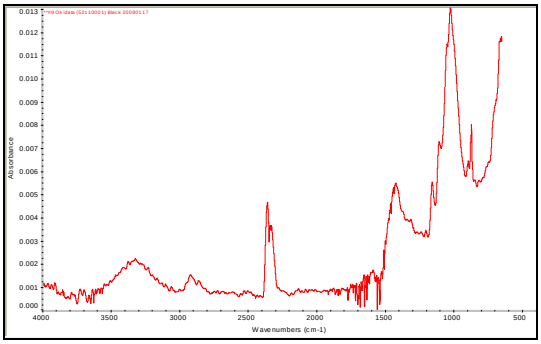

Figure 1628: ATR spectrum of Oki 09 ink on paper collected January 17th, 2008

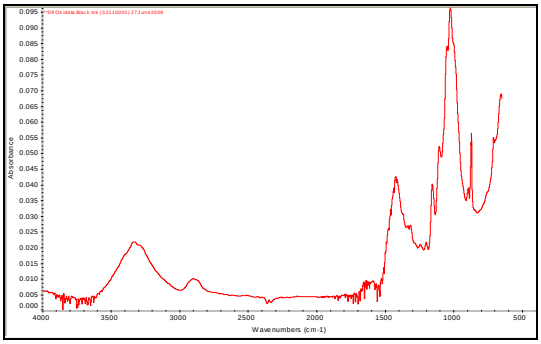

Figure 1629: ATR spectrum of Oki 09 ink on paper collected June 27th, 2008

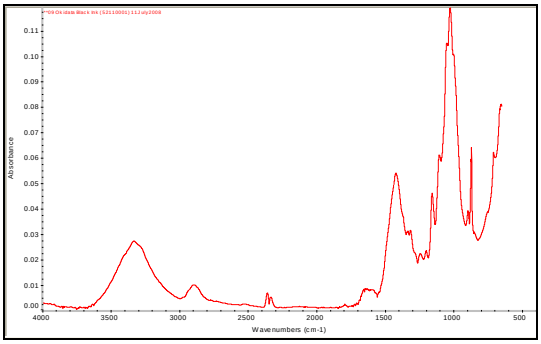

Figure 1630: ATR spectrum of Oki 09 ink on paper collected July 11th, 2008

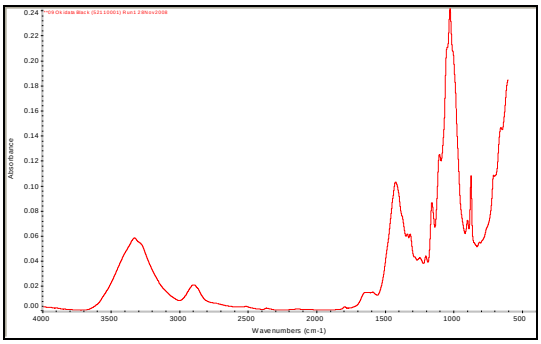

Figure 1631: ATR spectrum of Oki 09 ink on paper collected November 28th, 2008

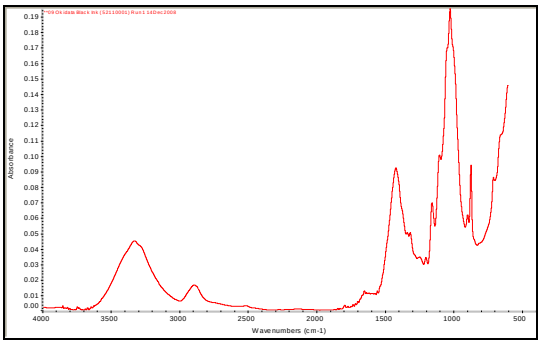

Figure 1632: ATR spectrum of Oki 09 ink on paper collected December 14th, 2008

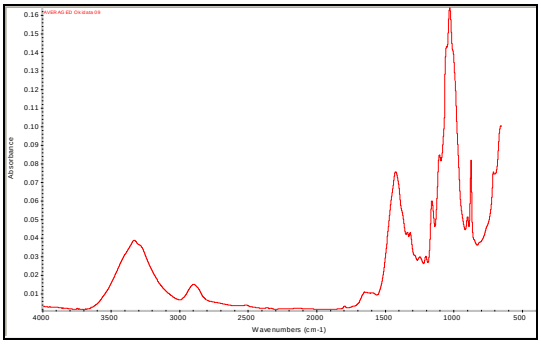

Figure 1633: ATR spectrum of Oki 09 ink on paper AVERAGE

XEROX

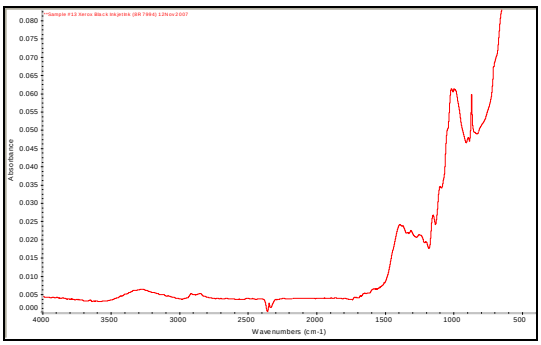

Figure 1634: ATR spectrum of Xerox 13 ink on paper collected November 12th, 2007

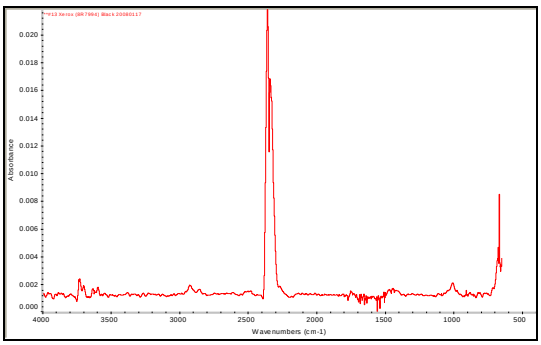

Figure 1635: ATR spectrum of Xerox 13 ink on paper collected January 17th, 2008

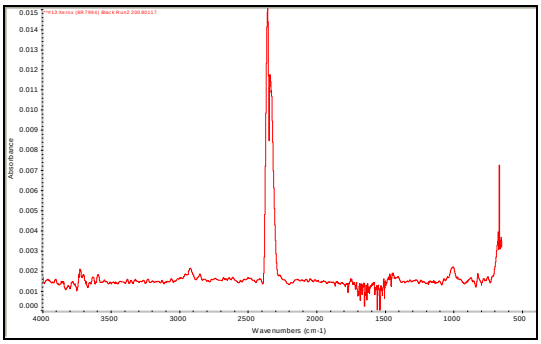

Figure 1636: ATR spectrum of Xerox 13 ink on paper run 2 collected Jan. 17th, 2008

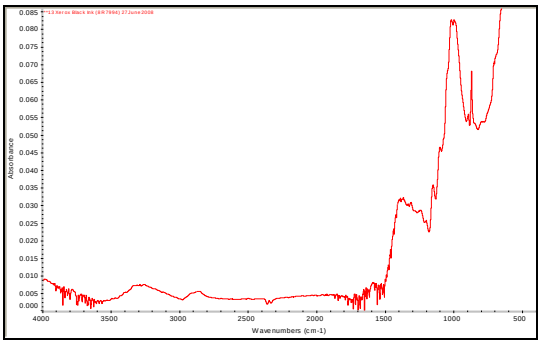

Figure 1637: ATR spectrum of Xerox 13 ink on paper collected June 27th, 2008

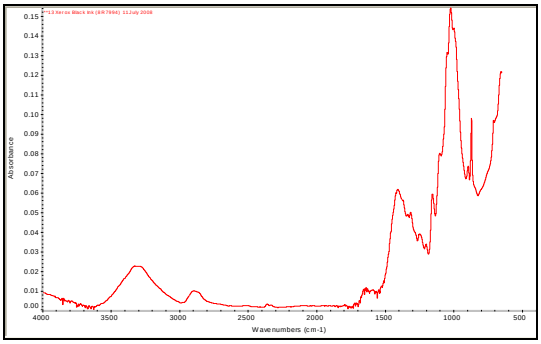

Figure 1638: ATR spectrum of Xerox 13 ink on paper collected July 11th, 2008

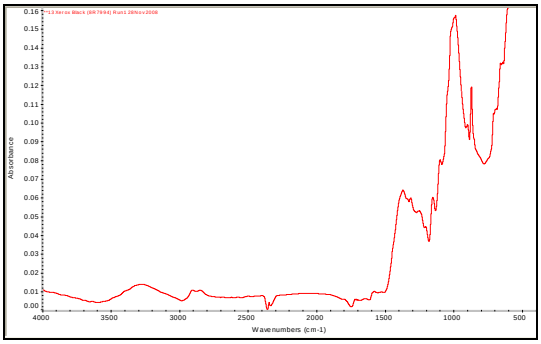

Figure 1639: ATR spectrum of Xerox 13 ink on paper collected November 28th, 2008

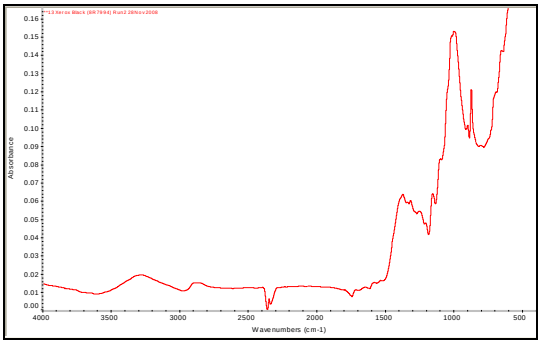

Figure 1640: ATR spectrum of Xerox 13 ink on paper run 2 collected Nov. 28th, 2008

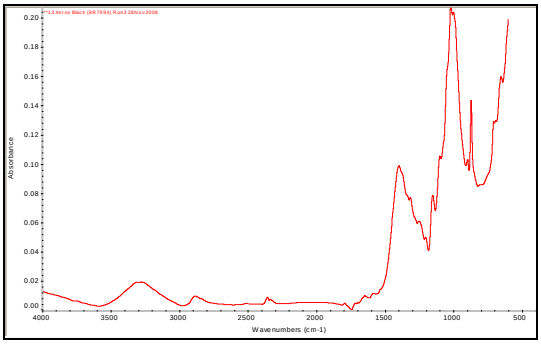

Figure 1641: ATR spectrum of Xerox 13 ink on paper run 3 collected Nov. 28th, 2008

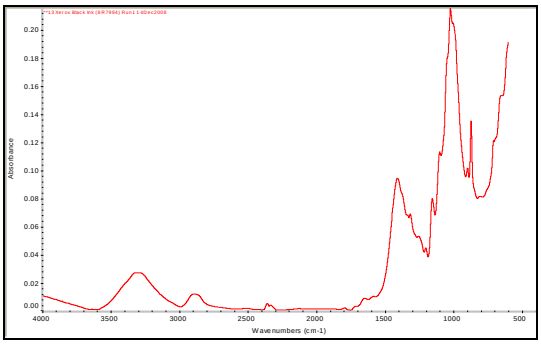

Figure 1642: ATR spectrum of Xerox 13 ink on paper collected December 14th, 2008

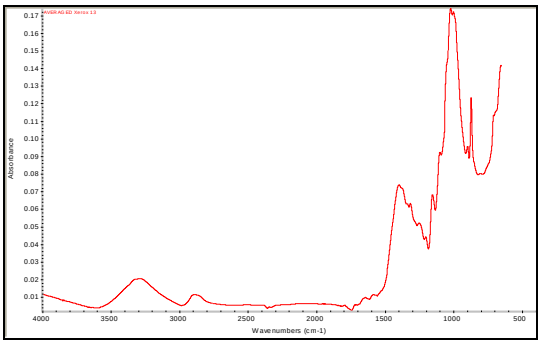

Figure 1643: ATR spectrum of Xerox 13 ink on paper AVERAGE

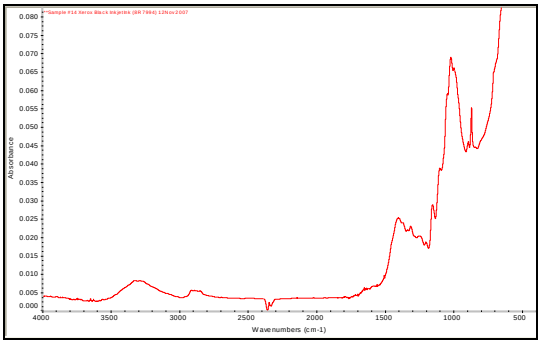

Figure 1644: ATR spectrum of Xerox 14 ink on paper collected November 12th, 2007

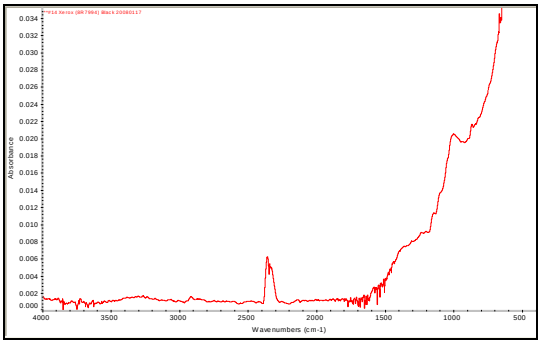

Figure 1645: ATR spectrum of Xerox 14 ink on paper collected January 17th, 2008

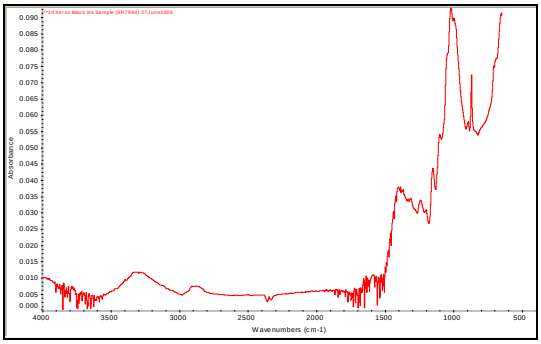

Figure 1646: ATR spectrum of Xerox 14 ink on paper collected June 27th, 2008

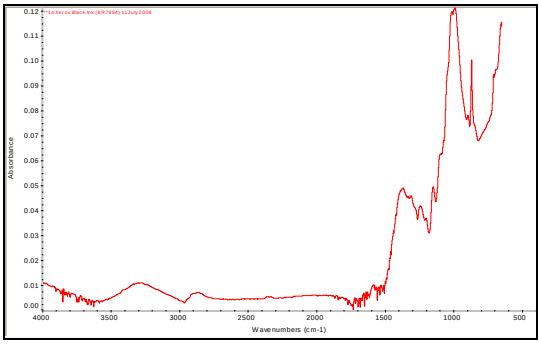

Figure 1647: ATR spectrum of Xerox 14 ink on paper collected July 11th, 2008

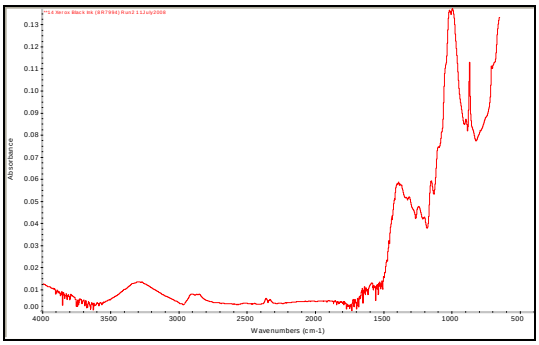

Figure 1648: ATR spectrum of Xerox 14 ink on paper run 2 collected July 11th, 2008

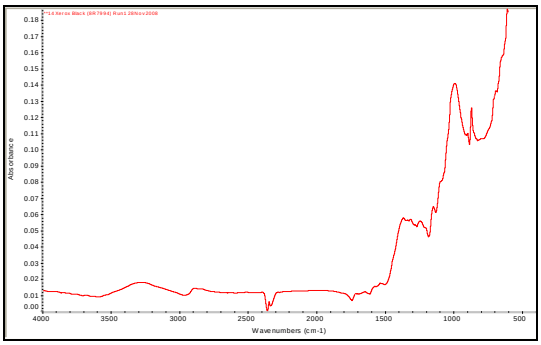

Figure 1649: ATR spectrum of Xerox 14 ink on paper collected November 28th, 2008

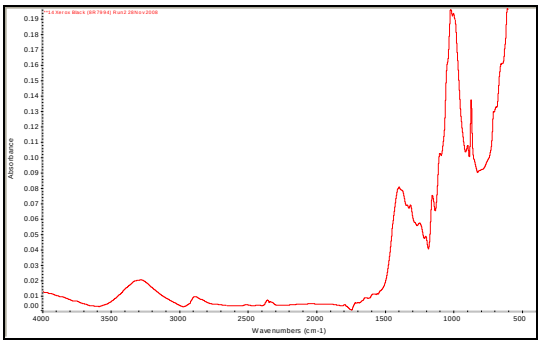

Figure 1650: ATR spectrum of Xerox 14 ink on paper run 2 collected Nov. 28th, 2008

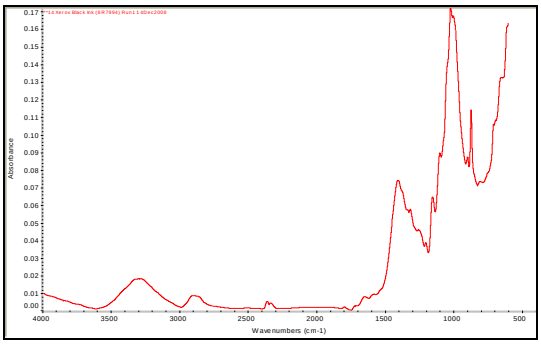

Figure 1651: ATR spectrum of Xerox 14 ink on paper collected December 14th, 2008

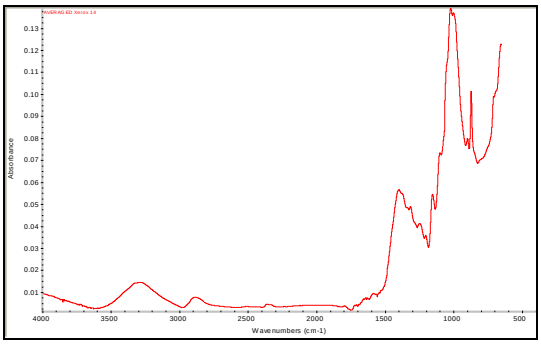

Figure 1652: ATR spectrum of Xerox 14 ink on paper AVERAGE

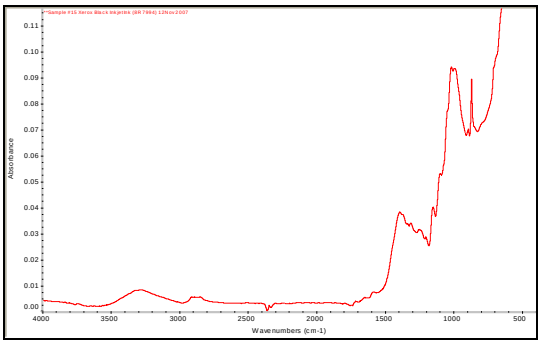

Figure 1653: ATR spectrum of Xerox 15 ink on paper collected November 12th, 2007

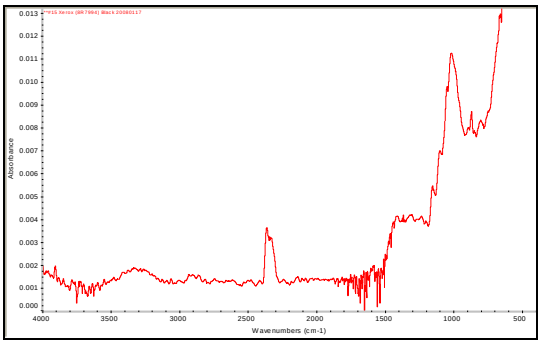

Figure 1654: ATR spectrum of Xerox 15 ink on paper collected January 17th, 2008

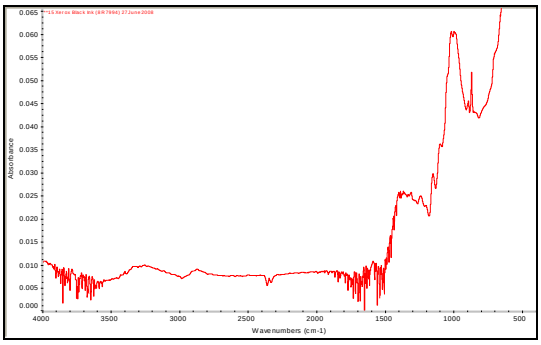

Figure 1655: ATR spectrum of Xerox 15 ink on paper collected June 27th, 2008

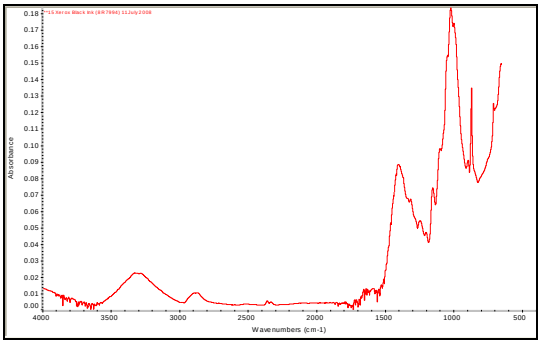

Figure 1656: ATR spectrum of Xerox 15 ink on paper collected July 11th, 2008

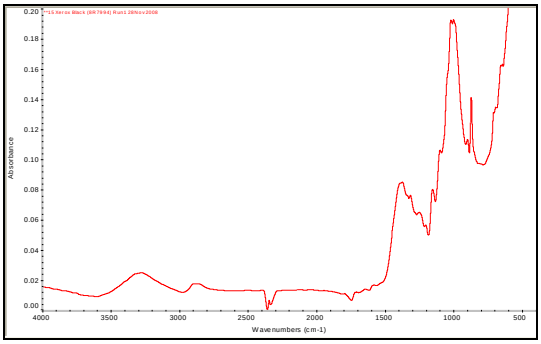

Figure 1657: ATR spectrum of Xerox 15 ink on paper collected November 28th, 2008

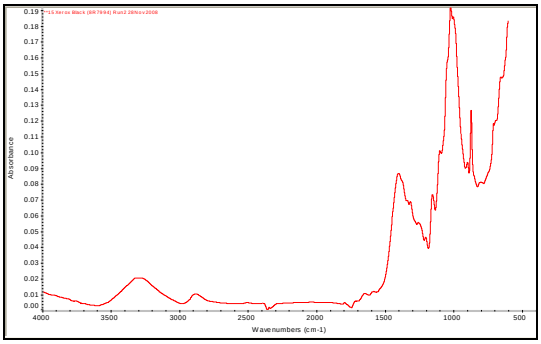

Figure 1658: ATR spectrum of Xerox 15 ink on paper run 2 collected Nov. 28th, 2008

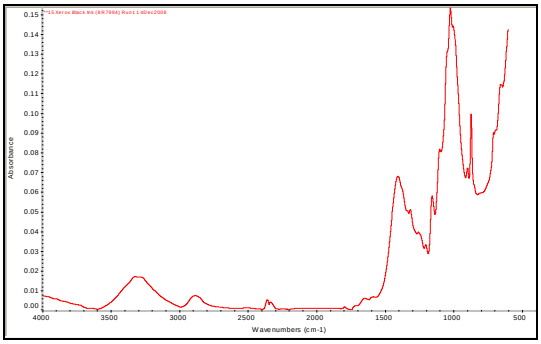

Figure 1659: ATR spectrum of Xerox 15 ink on paper collected December 14th, 2008

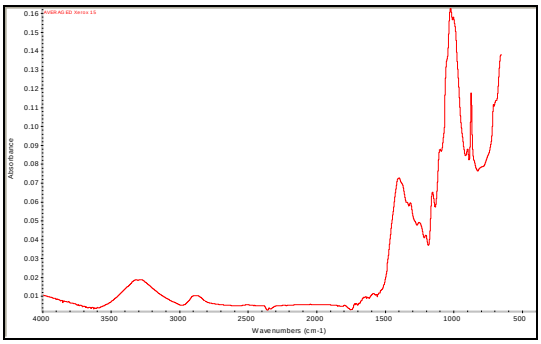

Figure 1660: ATR spectrum of Xerox 15 ink on paper AVERAGE

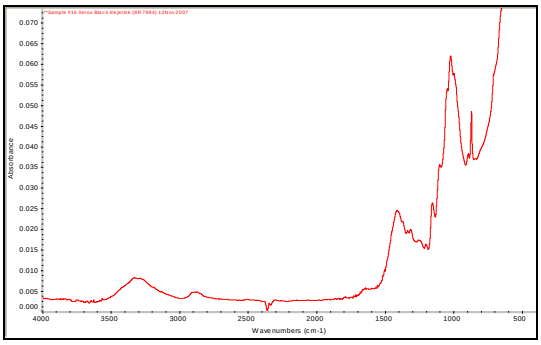

Figure 1661: ATR spectrum of Xerox 16 ink on paper collected November 12th, 2007

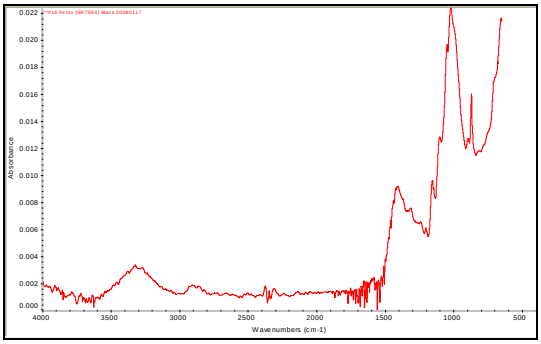

Figure 1662: ATR spectrum of Xerox 16 ink on paper collected January 17th, 2008

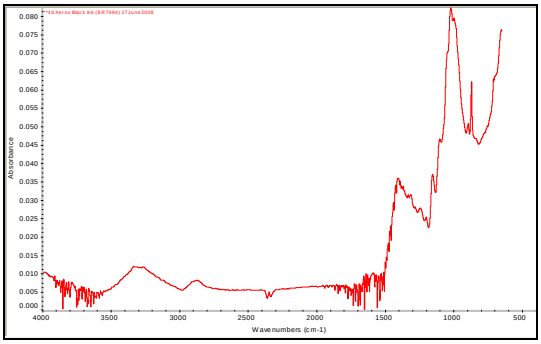

Figure 1663: ATR spectrum of Xerox 16 ink on paper collected June 27th, 2008

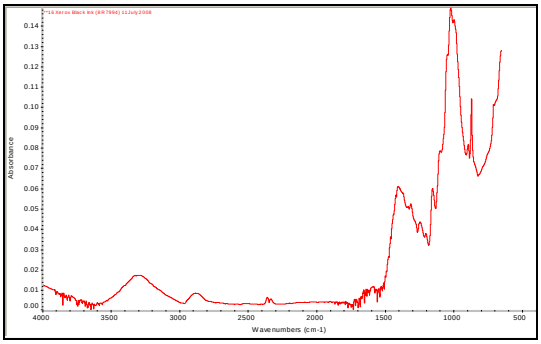

Figure 1664: ATR spectrum of Xerox 16 ink on paper collected July 11th, 2008

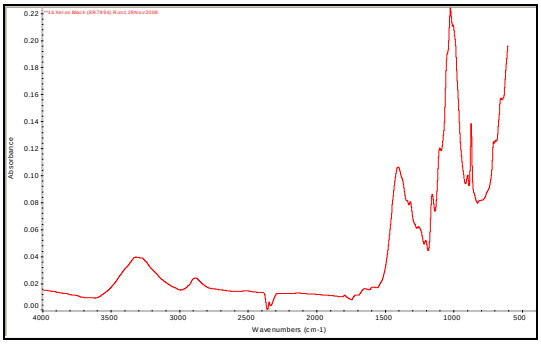

Figure 1665: ATR spectrum of Xerox 16 ink on paper collected November 28th, 2008

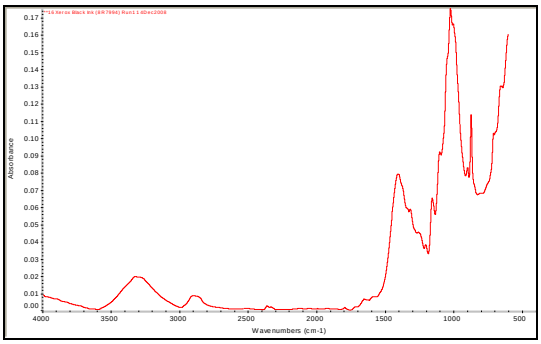

Figure 1666: ATR spectrum of Xerox 16 ink on paper collected December 14th, 2008

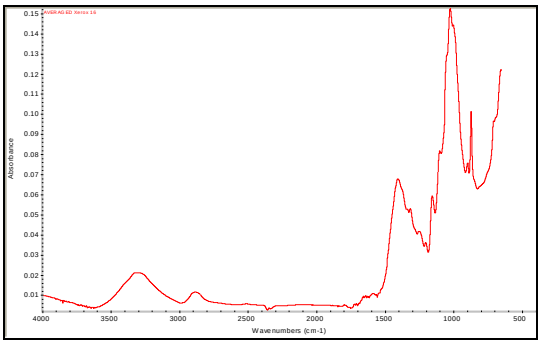

Figure 1667: ATR spectrum of Xerox 16 ink on paper AVERAGE

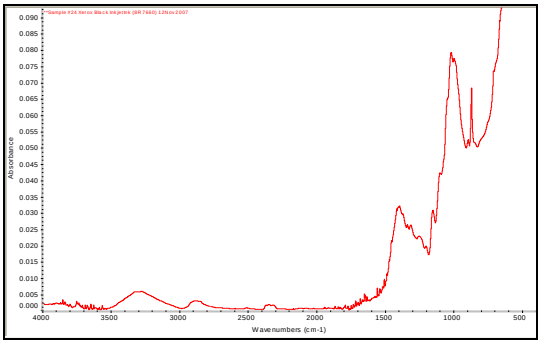

Figure 1668: ATR spectrum of Xerox 24 ink on paper collected November 12th, 2007

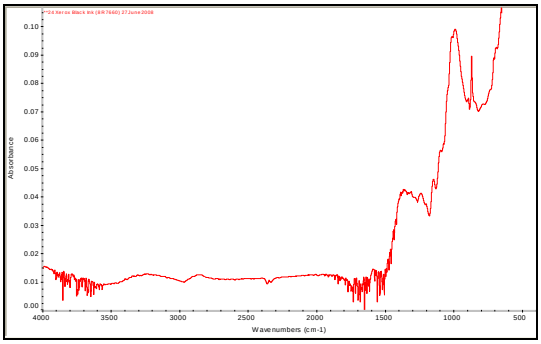

Figure 1669: ATR spectrum of Xerox 24 ink on paper collected June 27th, 2008

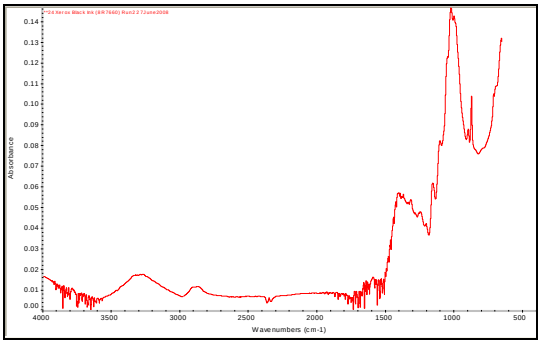

Figure 1670: ATR spectrum of Xerox 24 ink on paper run 2 collected June 27th, 2008

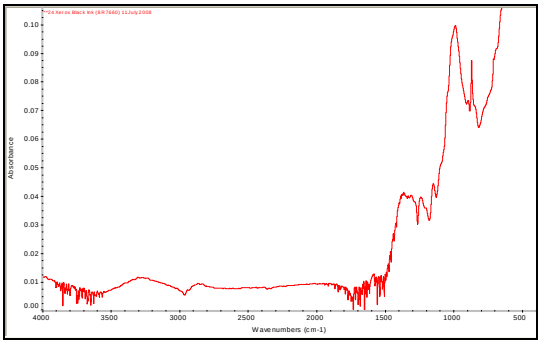

Figure 1671: ATR spectrum of Xerox 24 ink on paper collected July 11th, 2008

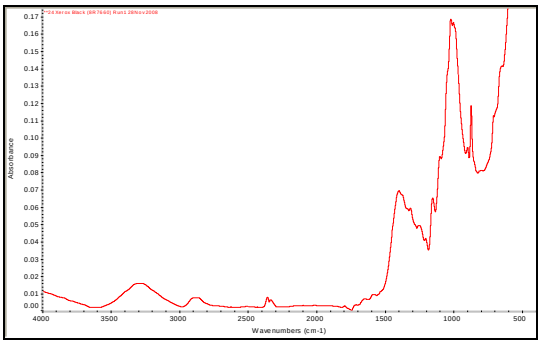

Figure 1672: ATR spectrum of Xerox 24 ink on paper collected November 28th, 2008

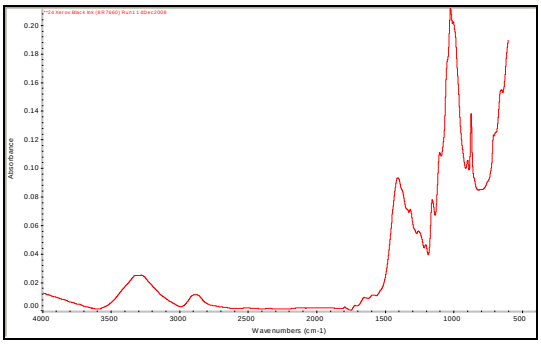

Figure 1673: ATR spectrum of Xerox 24 ink on paper collected December 14th, 2008

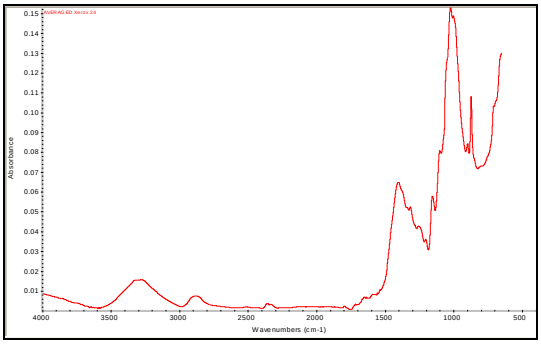

Figure 1674: ATR spectrum of Xerox 24 ink on paper AVERAGE

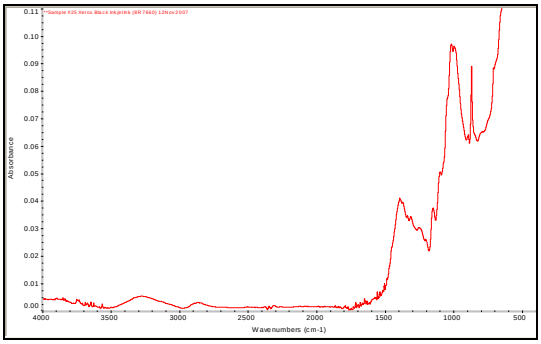

Figure 1675: ATR spectrum of Xerox 25 ink on paper collected November 12th, 2007

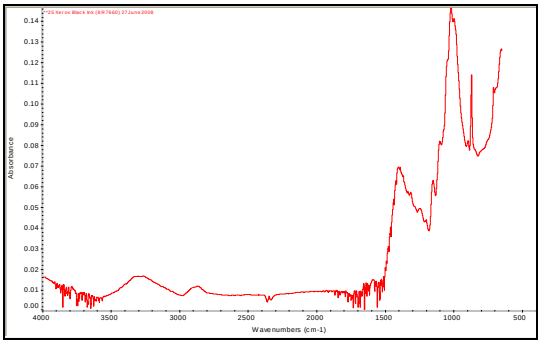

Figure 1676: ATR spectrum of Xerox 25 ink on paper collected June 27th, 2008

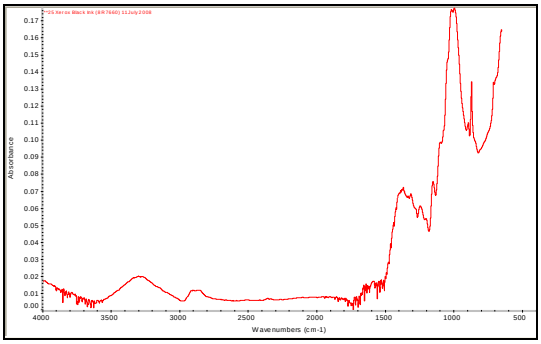

Figure 1677: ATR spectrum of Xerox 25 ink on paper collected July 11th, 2008

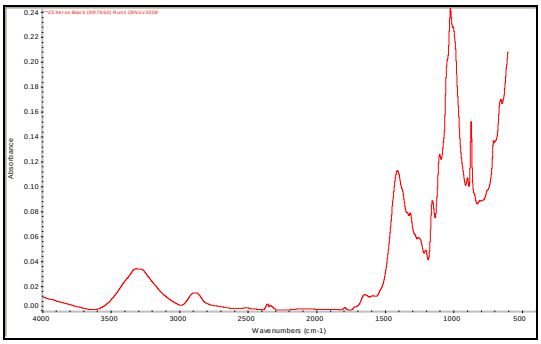

Figure 1678: ATR spectrum of Xerox 25 ink on paper collected November 28th, 2008

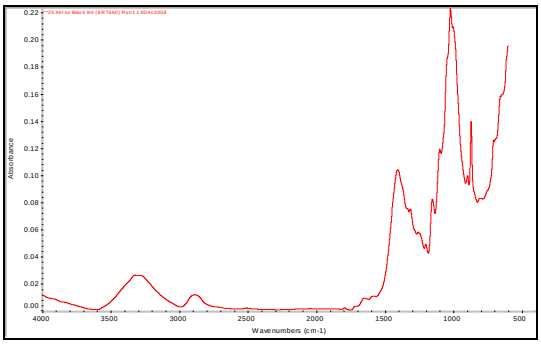

Figure 1679: ATR spectrum of Xerox 25 ink on paper collected December 14th, 2008

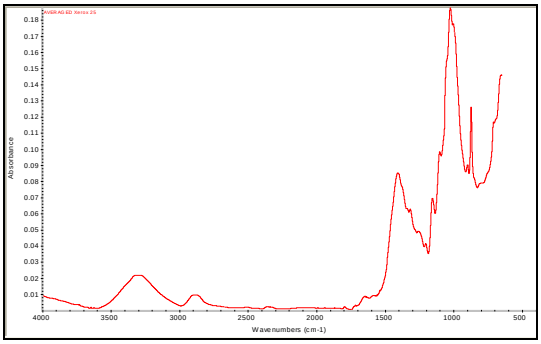

Figure 1680: ATR spectrum of Xerox 25 ink on paper AVERAGE

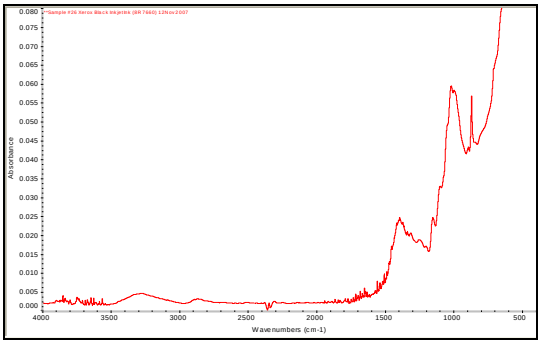

Figure 1681: ATR spectrum of Xerox 26 ink on paper collected November 12th, 2007

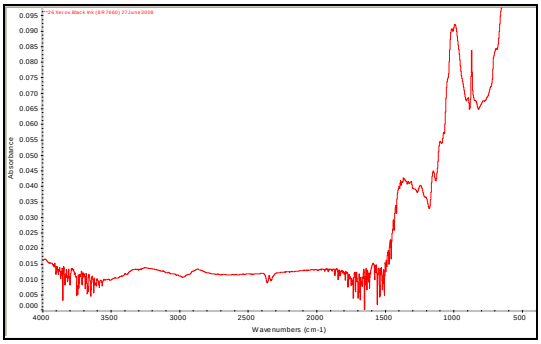

Figure 1682: ATR spectrum of Xerox 26 ink on paper collected June 27th, 2008

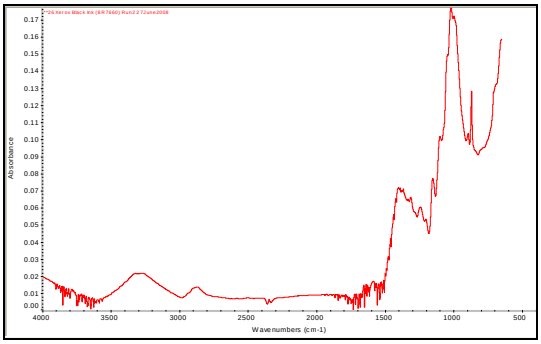

Figure 1683: ATR spectrum of Xerox 26 ink on paper run 2 collected June 27th, 2008

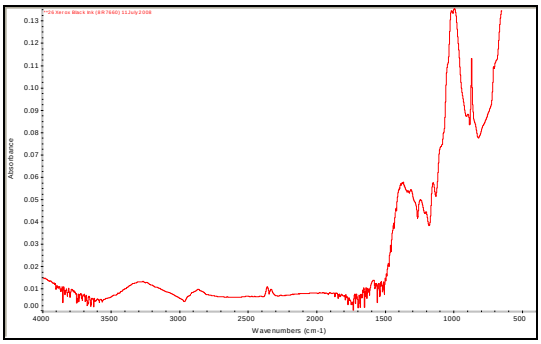

Figure 1684: ATR spectrum of Xerox 26 ink on paper collected July 11th, 2008

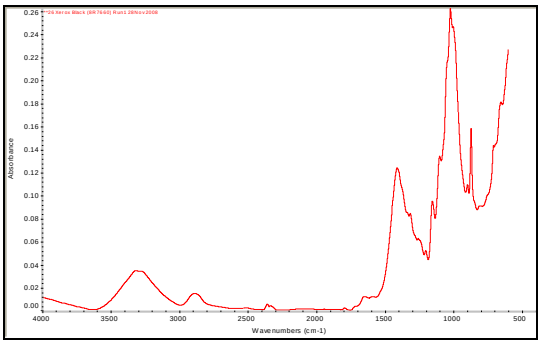

Figure 1685: ATR spectrum of Xerox 26 ink on paper collected November 28th, 2008

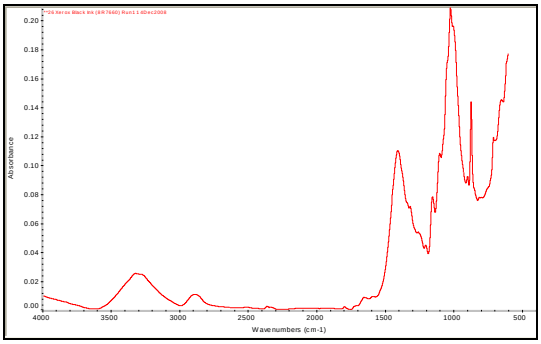

Figure 1686: ATR spectrum of Xerox 26 ink on paper collected December 14th, 2008

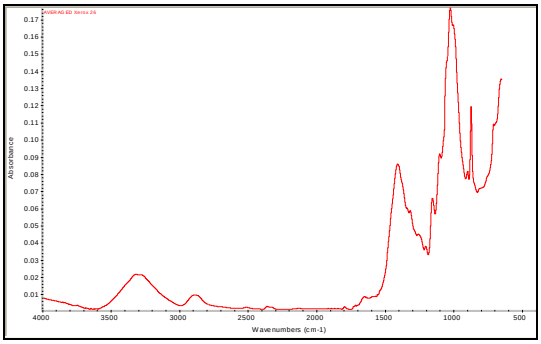

Figure 1687: ATR spectrum of Xerox 26 ink on paper AVERAGE

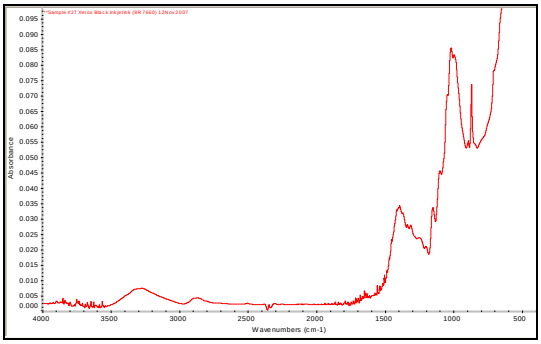

Figure 1688: ATR spectrum of Xerox 27 ink on paper collected November 12th, 2007

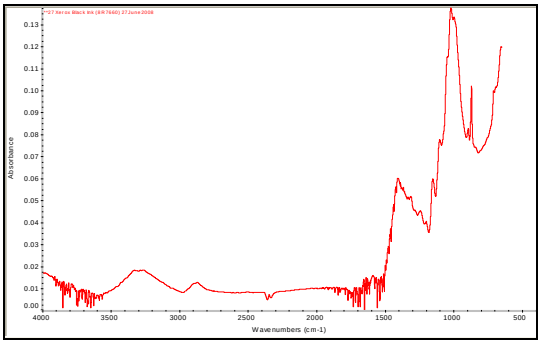

Figure 1689: ATR spectrum of Xerox 27 ink on paper collected June 27th, 2008

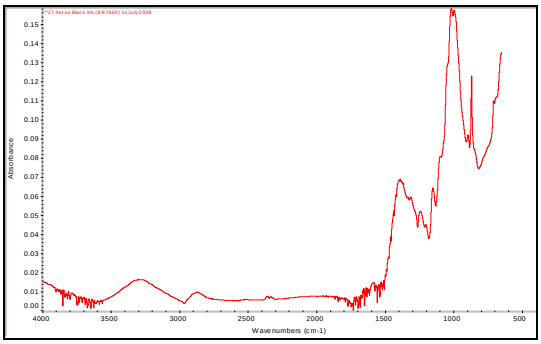

Figure 1690: ATR spectrum of Xerox 27 ink on paper collected July 11th, 2008

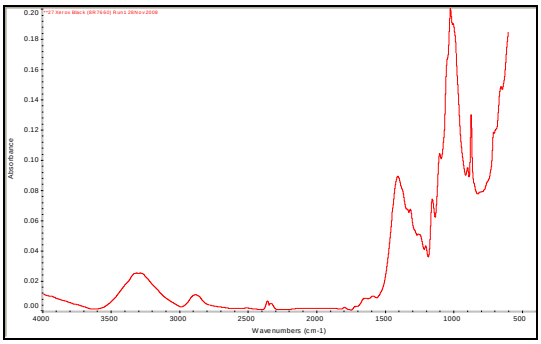

Figure 1691: ATR spectrum of Xerox 27 ink on paper collected November 28th, 2008

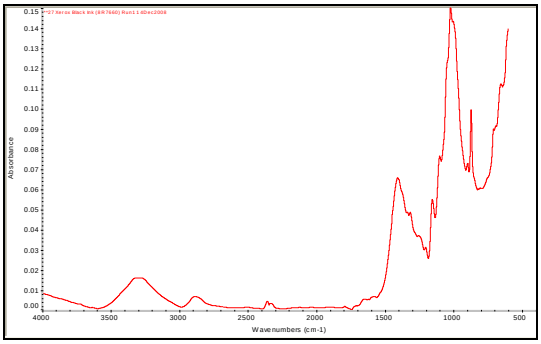

Figure 1692: ATR spectrum of Xerox 27 ink on paper collected December 14th, 2008

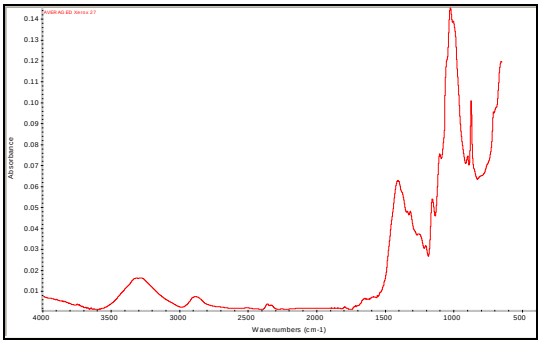

Figure 1693: ATR spectrum of Xerox 27 ink on paper AVERAGE

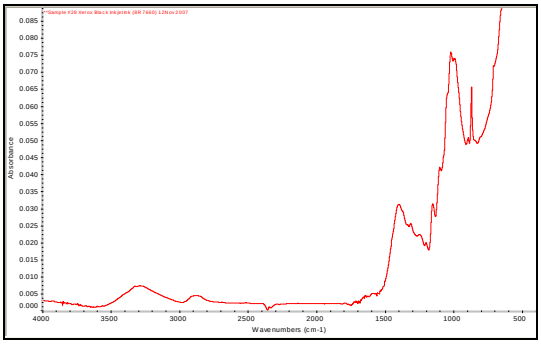

Figure 1694: ATR spectrum of Xerox 28 ink on paper collected November 12th, 2007

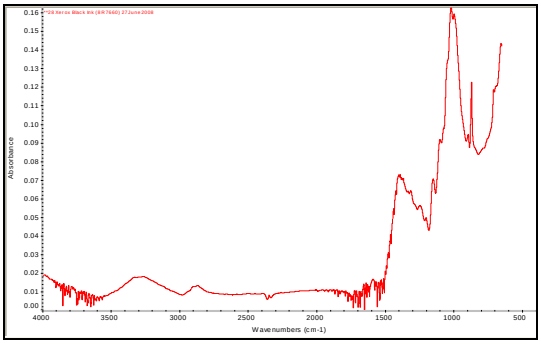

Figure 1695: ATR spectrum of Xerox 28 ink on paper collected June 27th, 2008

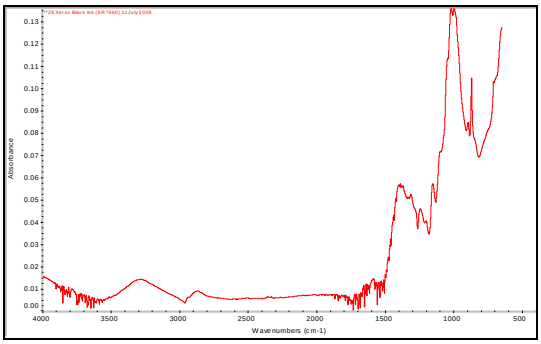

Figure 1696: ATR spectrum of Xerox 28 ink on paper collected July 11th, 2008

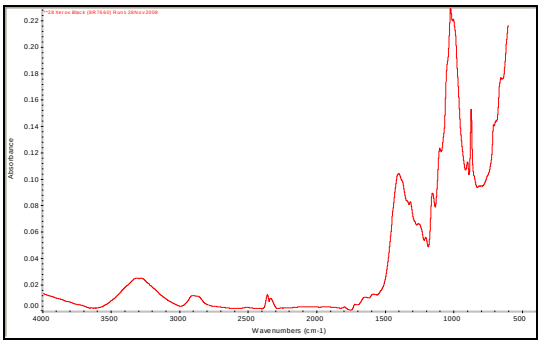

Figure 1697: ATR spectrum of Xerox 28 ink on paper collected November 28th, 2008

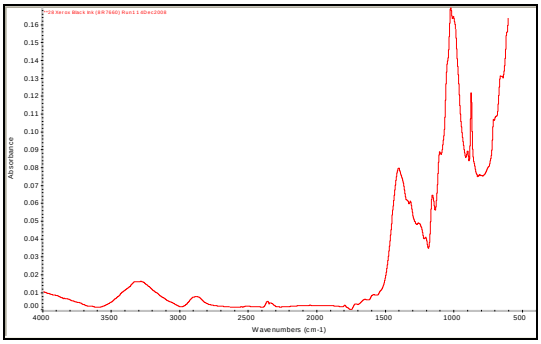

Figure 1698: ATR spectrum of Xerox 28 ink on paper collected December 14th, 2008

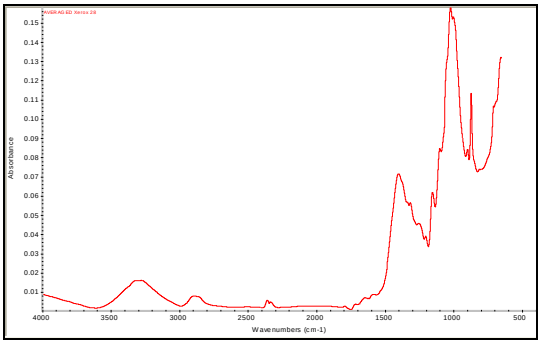

Figure 1699: ATR spectrum of Xerox 28 ink on paper AVERAGE

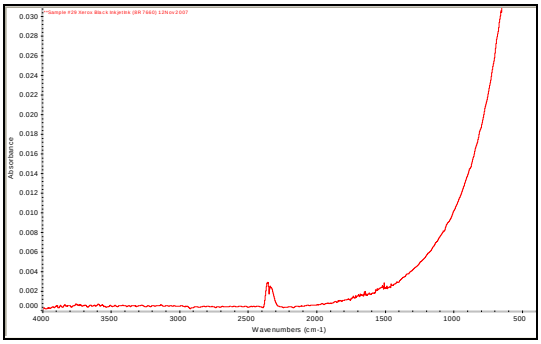

Figure 1700: ATR spectrum of Xerox 29 ink on paper collected November 12th, 2007

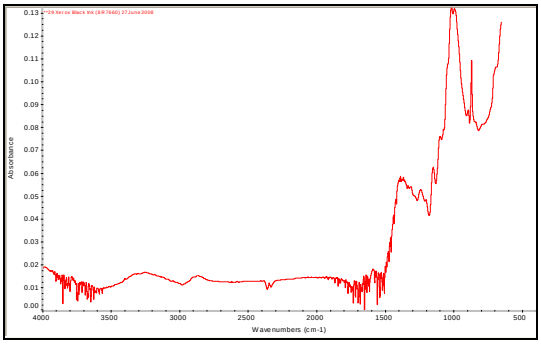

Figure 1701: ATR spectrum of Xerox 29 ink on paper collected June 27th, 2008

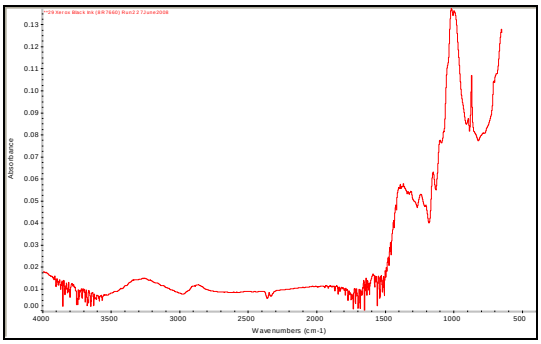

Figure 1702: ATR spectrum of Xerox 29 ink on paper run 2 collected June 27th, 2008

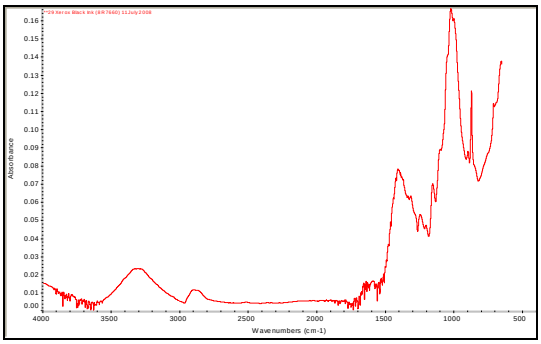

Figure 1703: ATR spectrum of Xerox 29 ink on paper collected July 11th, 2008

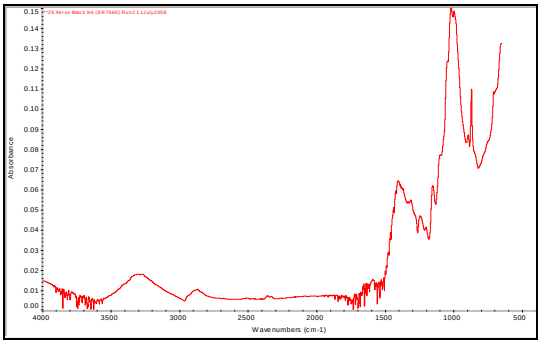

Figure 1704: ATR spectrum of Xerox 29 ink on paper run 2 collected July 11th, 2008

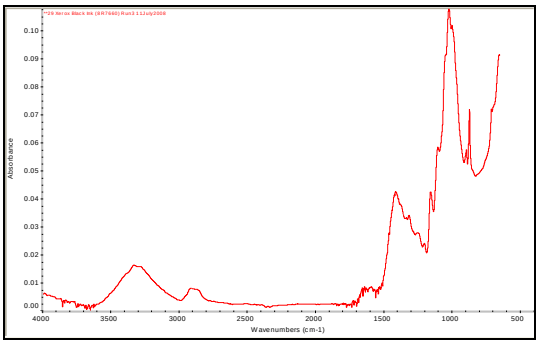

Figure 1705: ATR spectrum of Xerox 29 ink on paper run 3 collected July 11th, 2008

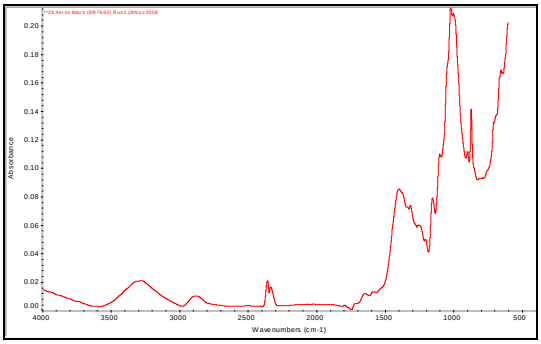

Figure 1706: ATR spectrum of Xerox 29 ink on paper collected November 28th, 2008

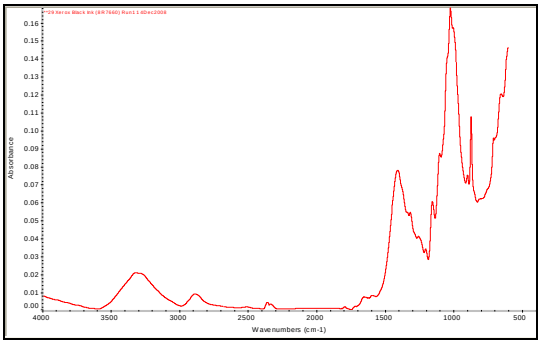

Figure 1707: ATR spectrum of Xerox 29 ink on paper collected December 14th, 2008

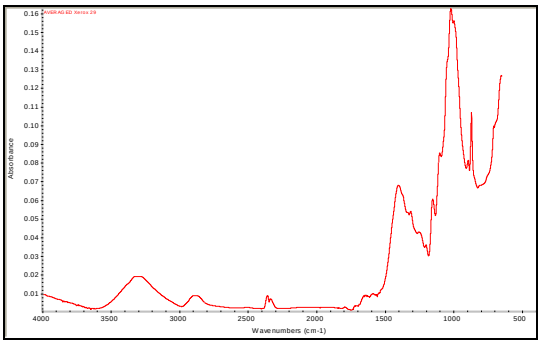

Figure 1708: ATR spectrum of Xerox 29 ink on paper AVERAGE

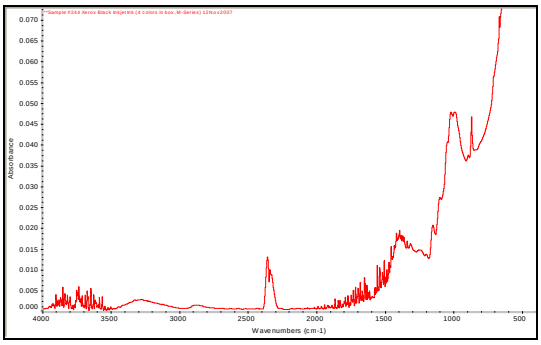

Figure 1709: ATR spectrum of Xerox 244 ink on paper collected November 12th, 2007

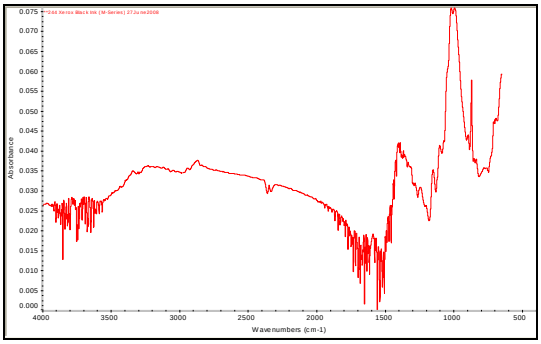

Figure 1710: ATR spectrum of Xerox 244 ink on paper collected June 27th, 2008

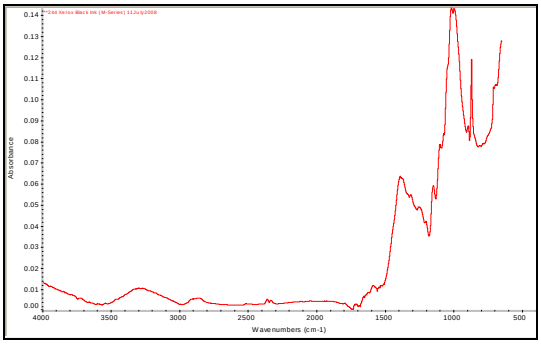

Figure 1711: ATR spectrum of Xerox 244 ink on paper collected July 11th, 2008

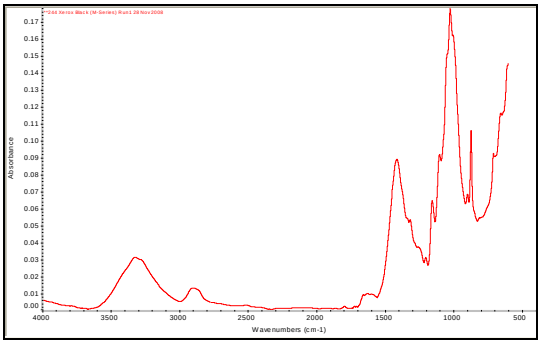

Figure 1712: ATR spectrum of Xerox 244 ink on paper collected November 28th, 2008

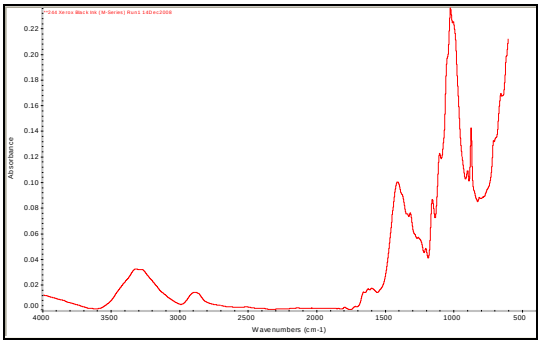

Figure 1713: ATR spectrum of Xerox 244 ink on paper collected December 14th, 2008

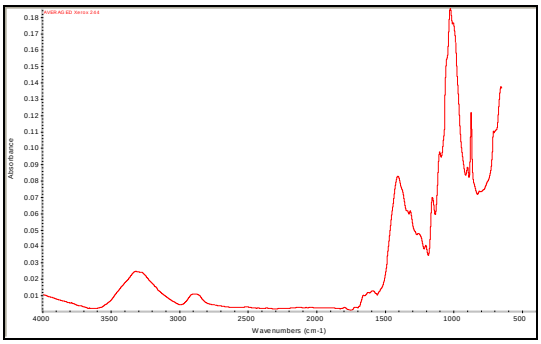

Figure 1714: ATR spectrum of Xerox 244 ink on paper AVERAGE

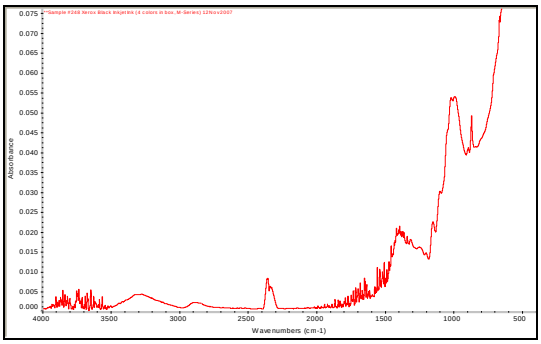

Figure 1715: ATR spectrum of Xerox 248 ink on paper collected November 12th, 2007

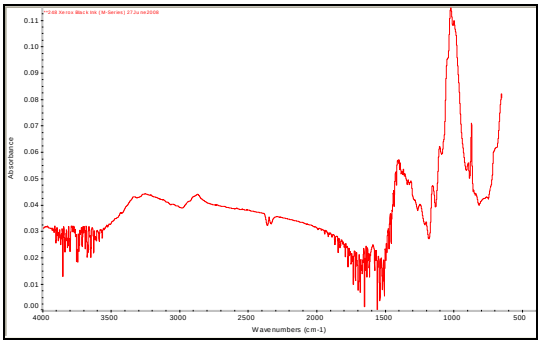

Figure 1716: ATR spectrum of Xerox 248 ink on paper collected June 27th, 2008

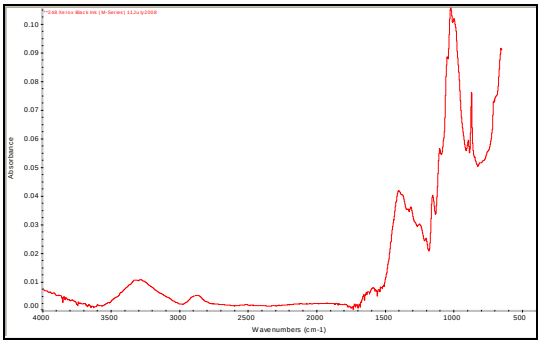

Figure 1717: ATR spectrum of Xerox 248 ink on paper collected July 11th, 2008

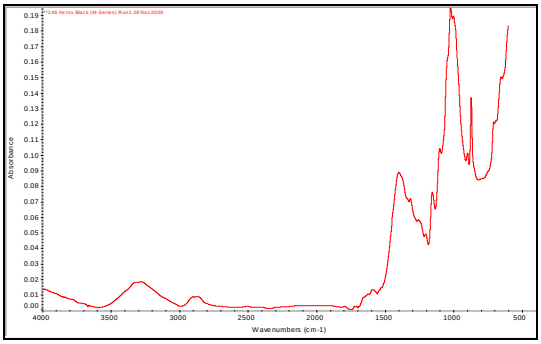

Figure 1718: ATR spectrum of Xerox 248 ink on paper collected November 28th, 2008

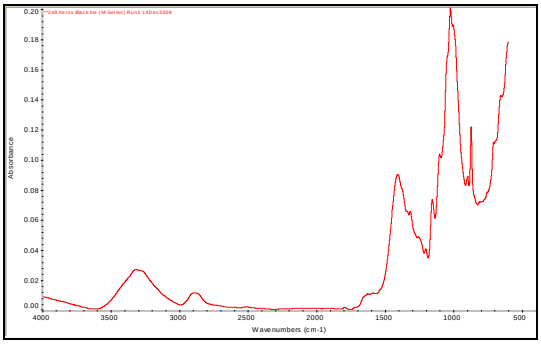

Figure 1719: ATR spectrum of Xerox 248 ink on paper collected December 14th, 2008

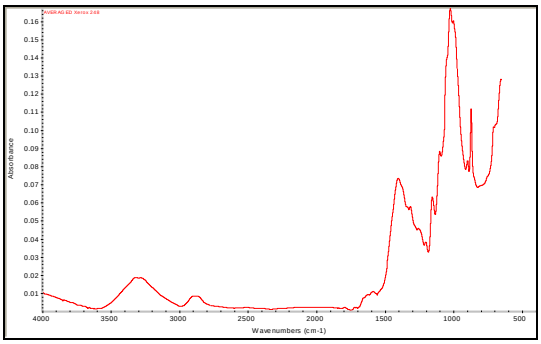

Figure 1720: ATR spectrum of Xerox 248 ink on paper AVERAGE

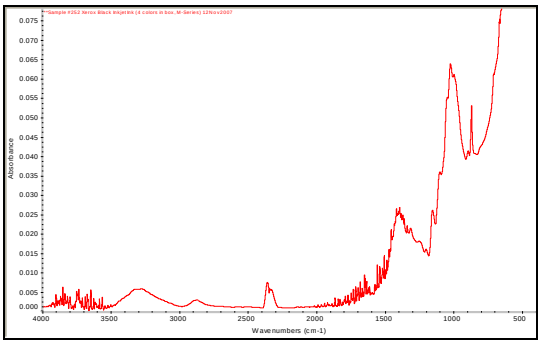

Figure 1721: ATR spectrum of Xerox 252 ink on paper collected November 12th, 2007

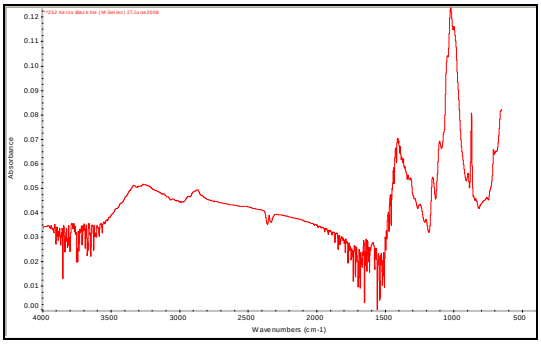

Figure 1722: ATR spectrum of Xerox 252 ink on paper collected June 27th, 2008

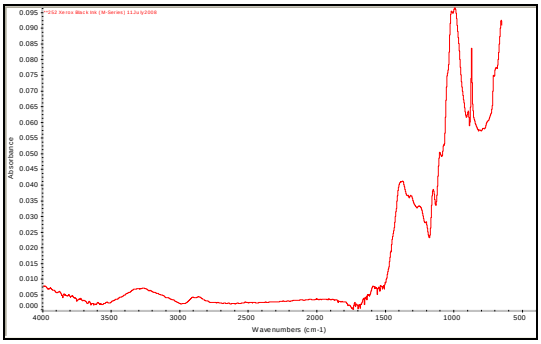

Figure 1723: ATR spectrum of Xerox 252 ink on paper collected July 11th, 2008

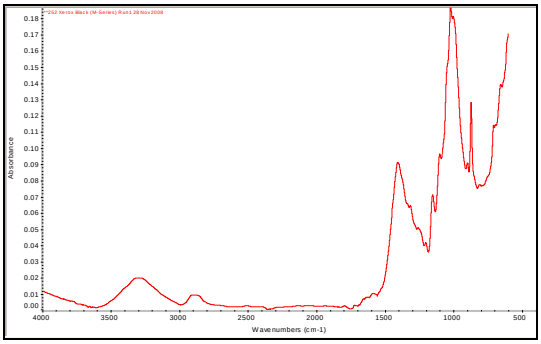

Figure 1724: ATR spectrum of Xerox 252 ink on paper collected November 28th, 2008

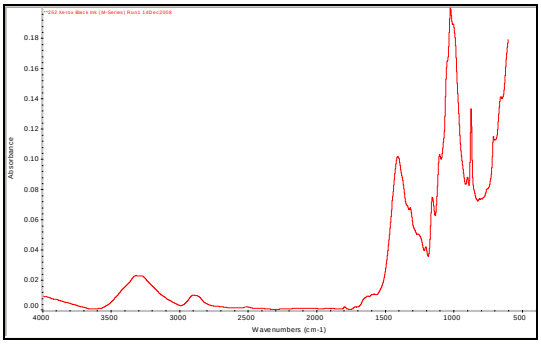

Figure 1725: ATR spectrum of Xerox 252 ink on paper collected December 14th, 2008

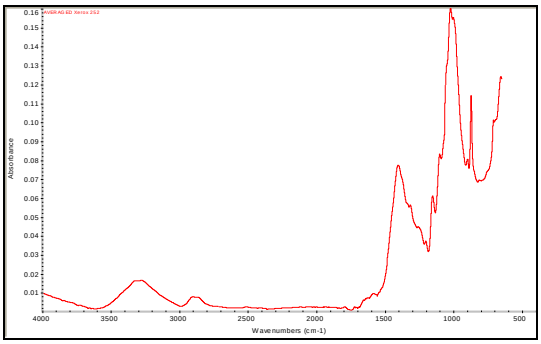

Figure 1726: ATR spectrum of Xerox 252 ink on paper AVERAGE

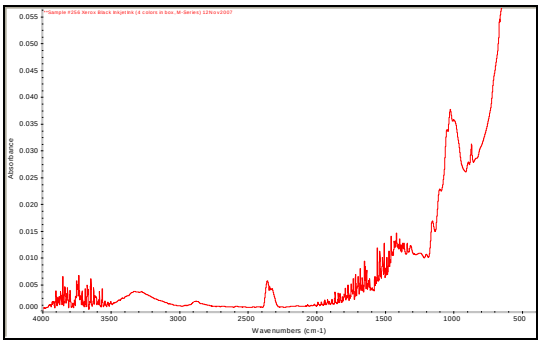

Figure 1727: ATR spectrum of Xerox 256 ink on paper collected November 12th, 2007

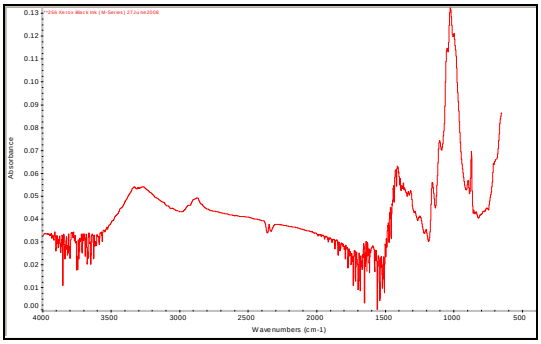

Figure 1728: ATR spectrum of Xerox 256 ink on paper collected June 27th, 2008

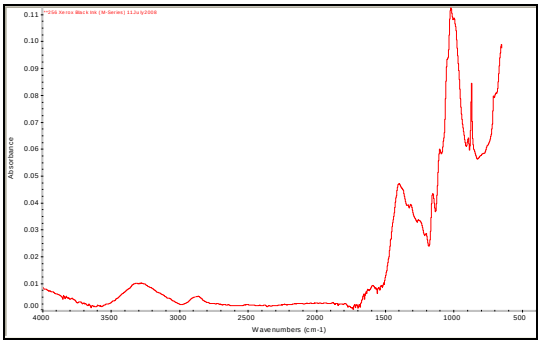

Figure 1729: ATR spectrum of Xerox 256 ink on paper collected July 11th, 2008

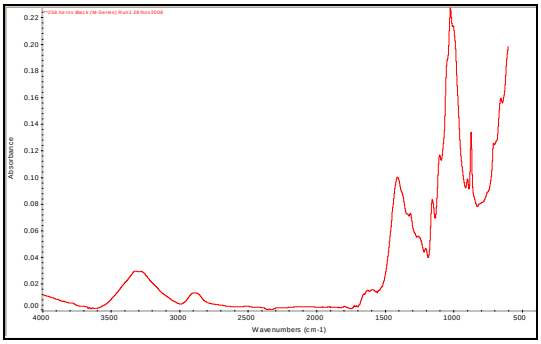

Figure 1730: ATR spectrum of Xerox 256 ink on paper collected November 28th, 2008

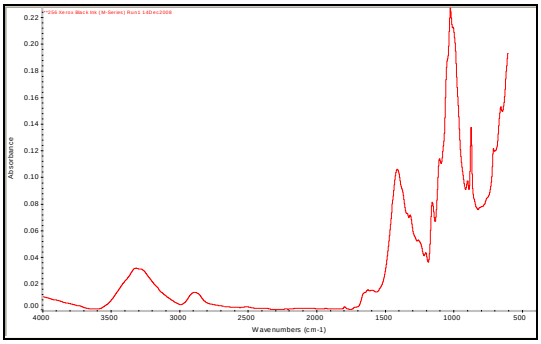

Figure 1731: ATR spectrum of Xerox 256 ink on paper collected December 14th, 2008

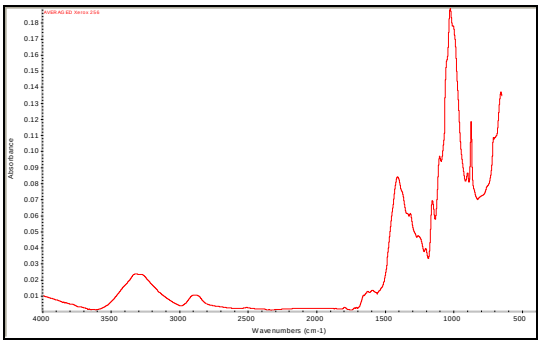

Figure 1732: ATR spectrum of Xerox 256 ink on paper AVERAGE

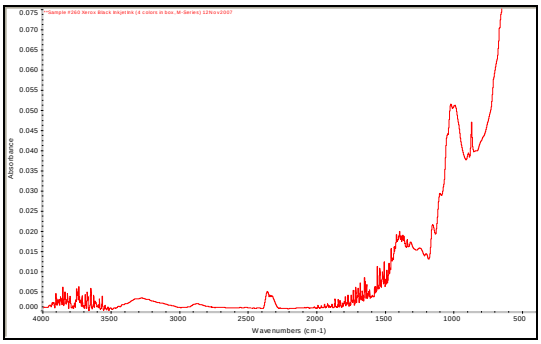

Figure 1733: ATR spectrum of Xerox 260 ink on paper collected November 12th, 2007

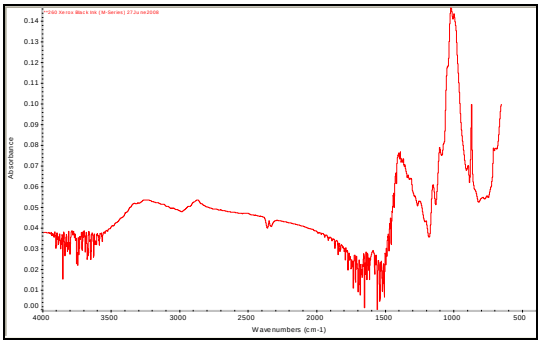

Figure 1734: ATR spectrum of Xerox 260 ink on paper collected June 27th, 2008

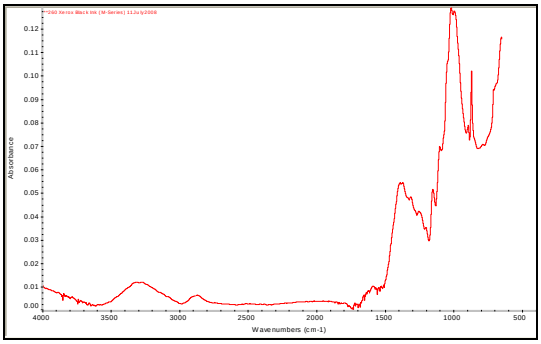

Figure 1735: ATR spectrum of Xerox 260 ink on paper collected July 11th, 2008

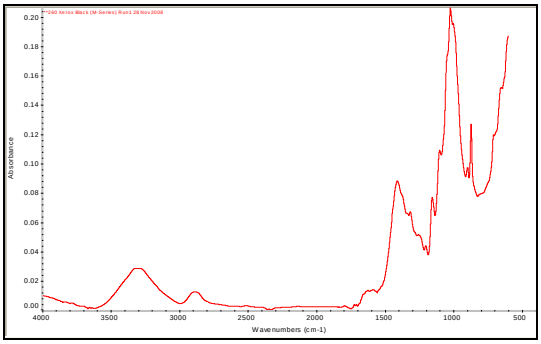

Figure 1736: ATR spectrum of Xerox 260 ink on paper collected November 28th, 2008

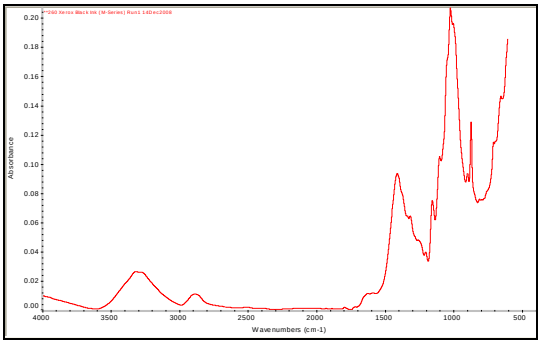

Figure 1737: ATR spectrum of Xerox 260 ink on paper collected December 14th, 2008

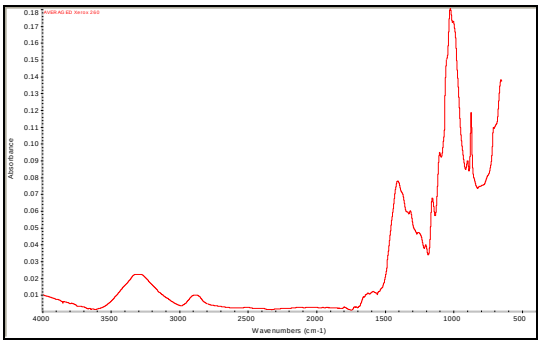

Figure 1738: ATR spectrum of Xerox 260 ink on paper AVERAGE

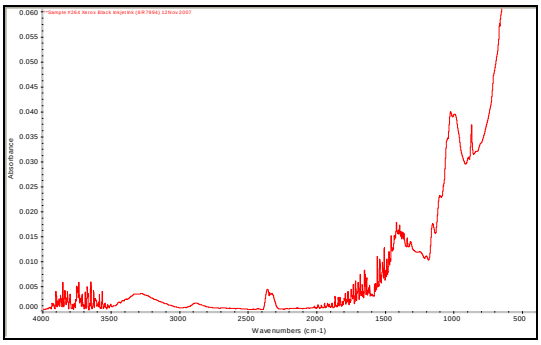

Figure 1739: ATR spectrum of Xerox 264 ink on paper collected November 12th, 2007

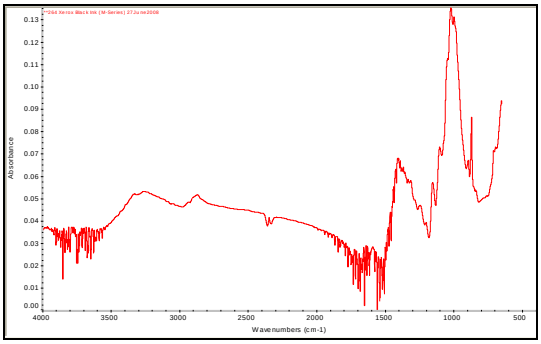

Figure 1740: ATR spectrum of Xerox 264 ink on paper collected June 27th, 2008

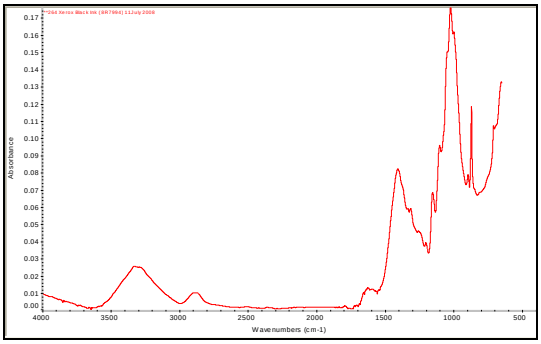

Figure 1741: ATR spectrum of Xerox 264 ink on paper collected July 11th, 2008

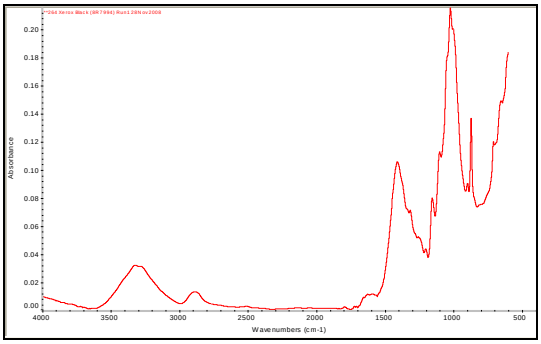

Figure 1742: ATR spectrum of Xerox 264 ink on paper collected November 28th, 2008

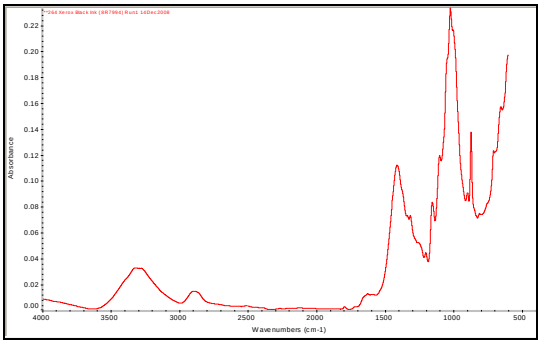

Figure 1743: ATR spectrum of Xerox 264 ink on paper collected December 14th, 2008

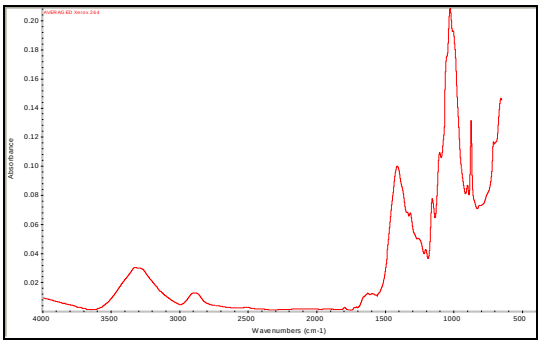

Figure 1744: ATR spectrum of Xerox 264 ink on paper AVERAGE

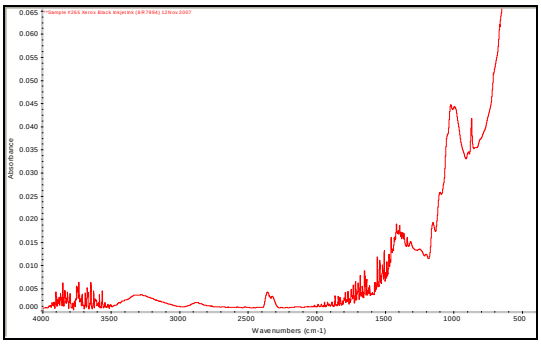

Figure 1745: ATR spectrum of Xerox 265 ink on paper collected November 12th, 2007

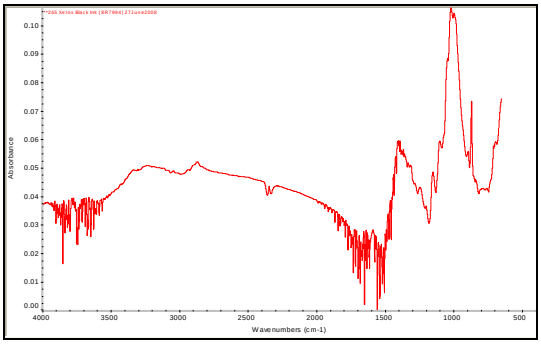

Figure 1746: ATR spectrum of Xerox 265 ink on paper collected June 27th, 2008

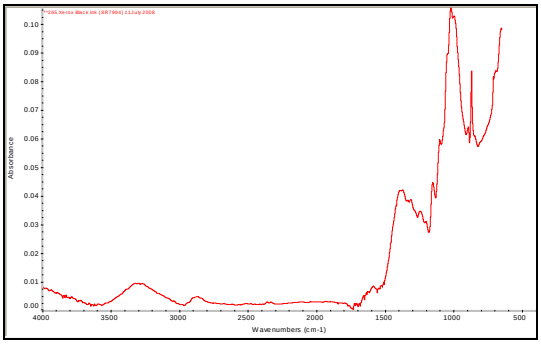

Figure 1747: ATR spectrum of Xerox 265 ink on paper collected July 11th, 2008

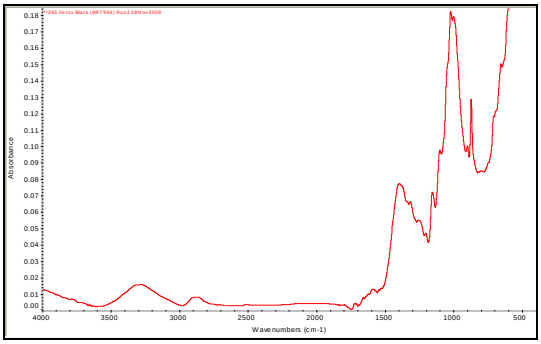

Figure 1748: ATR spectrum of Xerox 265 ink on paper collected November 28th, 2008

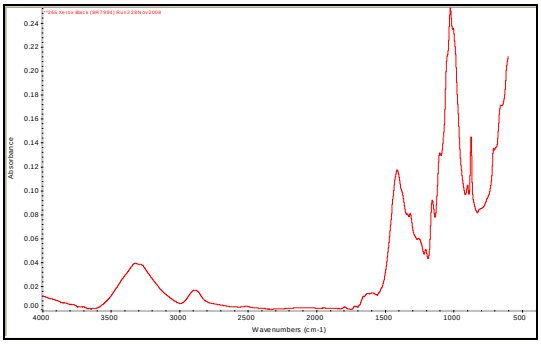

Figure 1749: ATR spectrum of Xerox 265 ink on paper run 2 collected November 28th, 2008

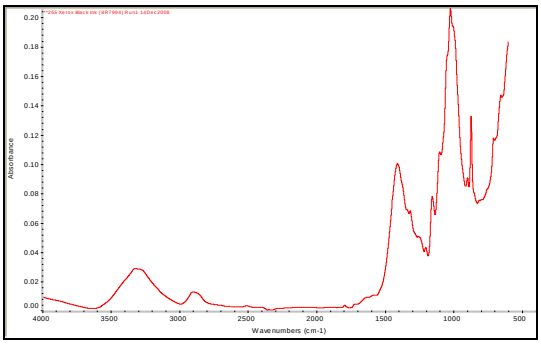

Figure 1750: ATR spectrum of Xerox 265 ink on paper collected December 14th, 2008

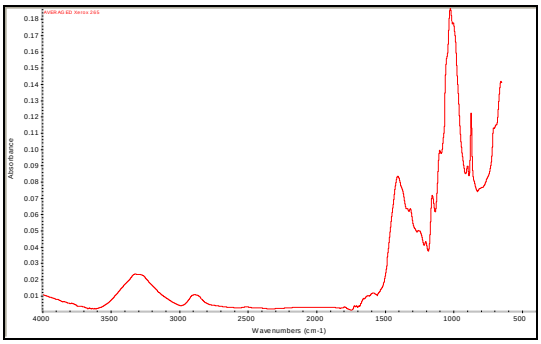

Figure 1751: ATR spectrum of Xerox 265 ink on paper AVERAGE

ATR Data – Blank Paper Spectra

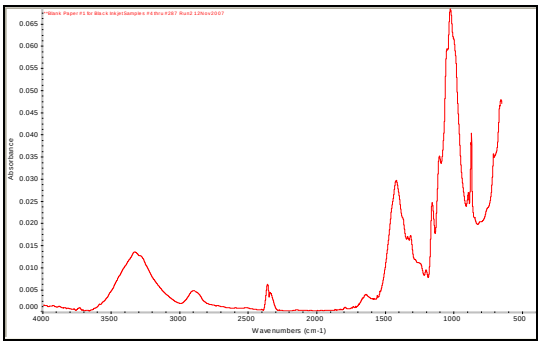

Figure 1752: ATR spectrum of blank paper #1 run 2 collected November 12th, 2007

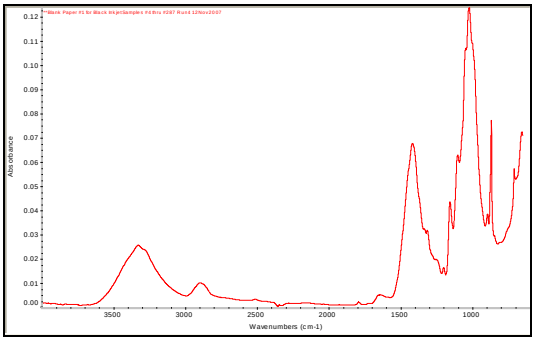

Figure 1753: ATR spectrum of blank paper #1 run 4 collected November 12th, 2007

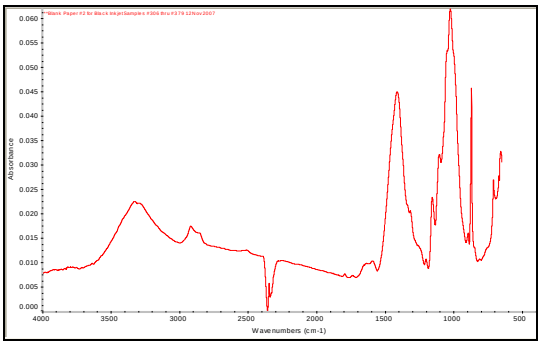

Figure 1754: ATR spectrum of blank paper #2 run 1 collected November 12th, 2007

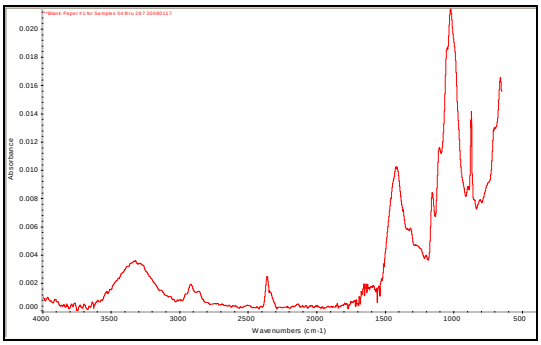

Figure 1755: ATR spectrum of blank paper #1 run 1 collected January 17th, 2008

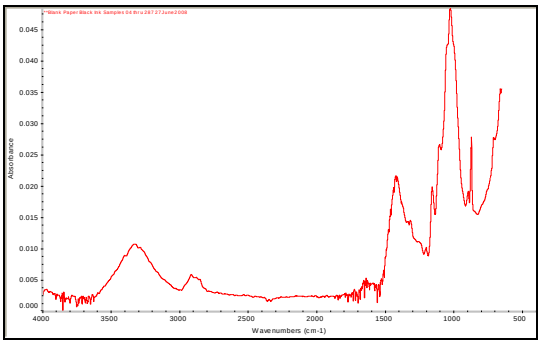

Figure 1756: ATR spectrum of blank paper #1 run 1 collected June 27th, 2008

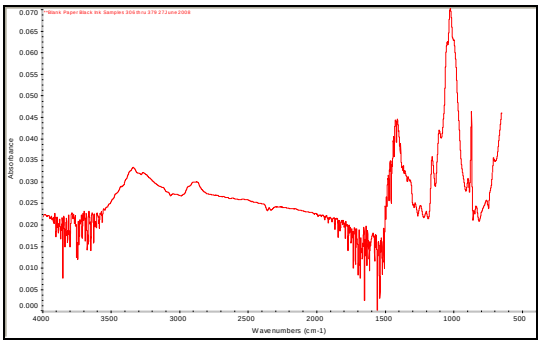

Figure 1757: ATR spectrum of blank paper #2 run 1 collected June 27th, 2008

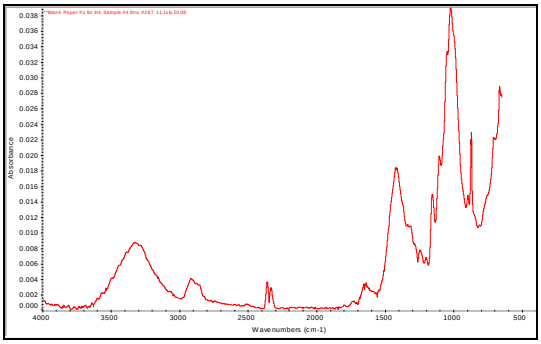

Figure 1758: ATR spectrum of blank paper #1 run 1 collected July 11th, 2008

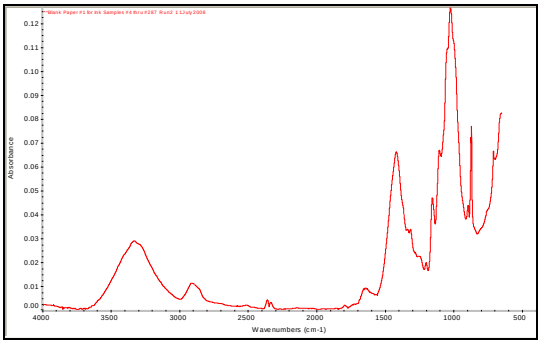

Figure 1759: ATR spectrum of blank paper #1 run 2 collected July 11th, 2008

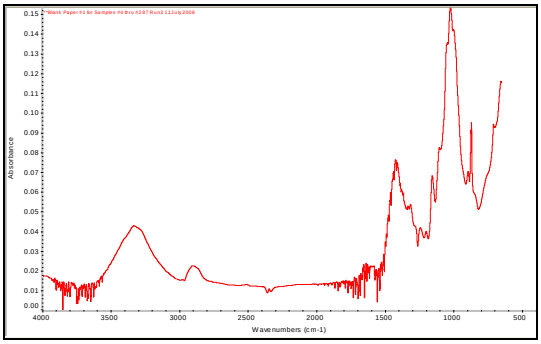

Figure 1760: ATR spectrum of blank paper #1 run 3 collected July 11th, 2008

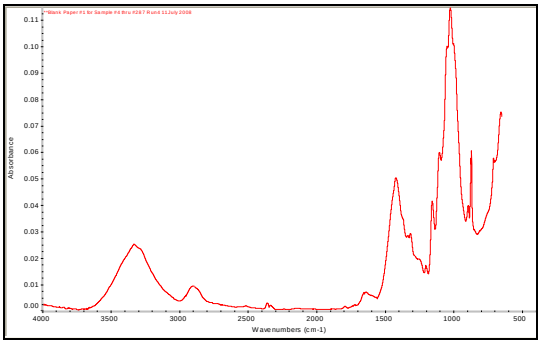

Figure 1761: ATR spectrum of blank paper #1 run 4 collected July 11th, 2008

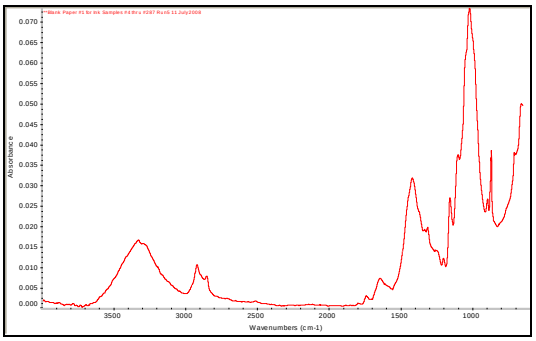

Figure 1762: ATR spectrum of blank paper #1 run 5 collected July 11th, 2008

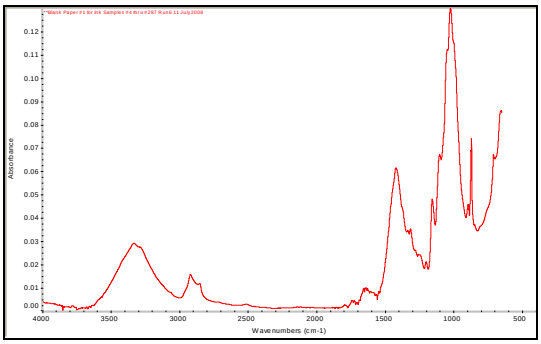

Figure 1763: ATR spectrum of blank paper #1 run 6 collected July 11th, 2008

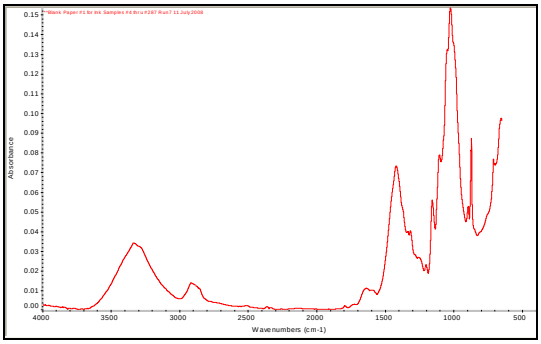

Figure 1764: ATR spectrum of blank paper #1 run 7 collected July 11th, 2008

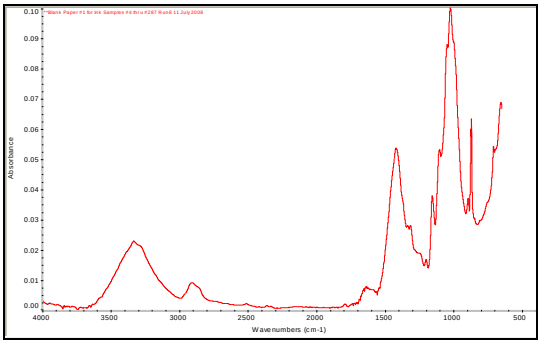

Figure 1765: ATR spectrum of blank paper #1 run 8 collected July 11th, 2008

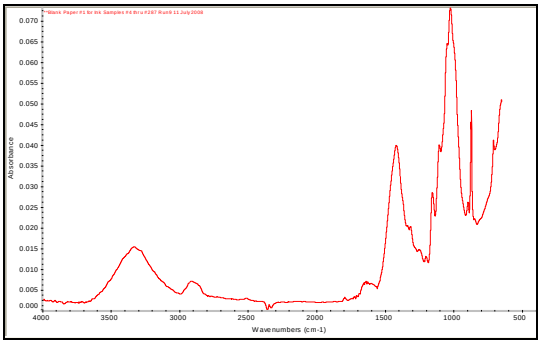

Figure 1766: ATR spectrum of blank paper #1 run 9 collected July 11th, 2008

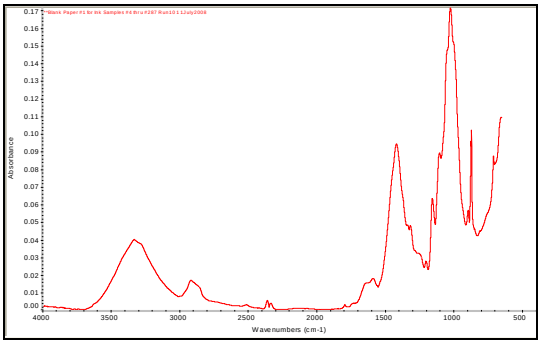

Figure 1767: ATR spectrum of blank paper #1 run 10 collected July 11th, 2008

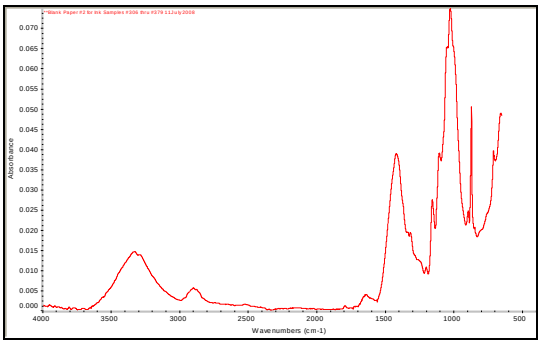

Figure 1768: ATR spectrum of blank paper #2 run 1 collected July 11th, 2008

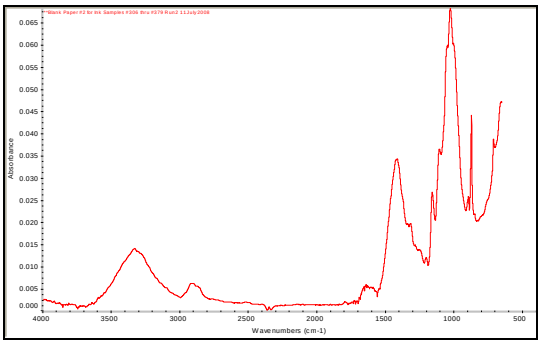

Figure 1769: ATR spectrum of blank paper #2 run 2 collected July 11th, 2008

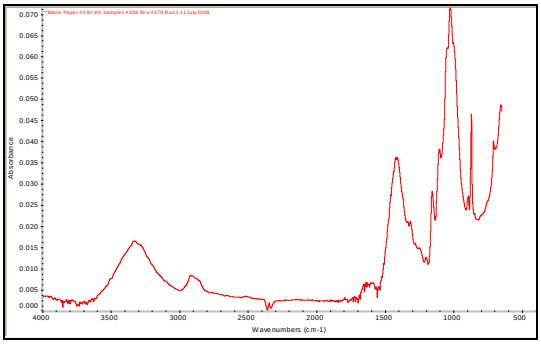

Figure 1770: ATR spectrum of blank paper #2 run 3 collected July 11th, 2008

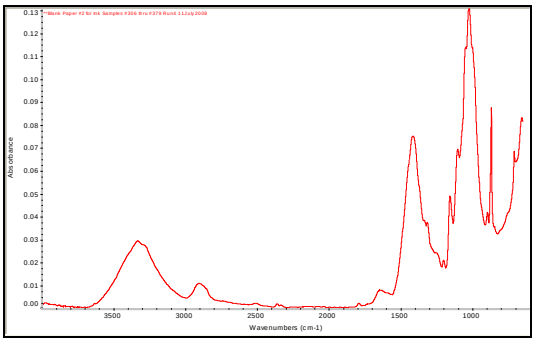

Figure 1771: ATR spectrum of blank paper #2 run 4 collected July 11th, 2008

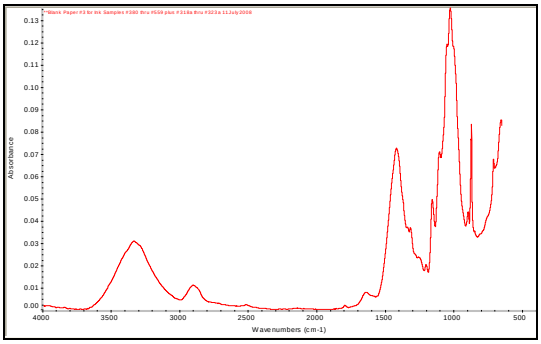

Figure 1772: ATR spectrum of blank paper #3 run 1 collected July 11th, 2008

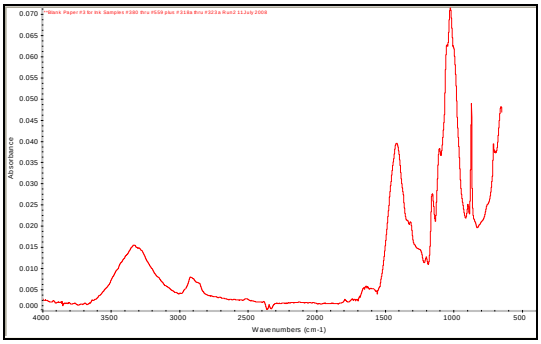

Figure 1773: ATR spectrum of blank paper #3 run 2 collected July 11th, 2008

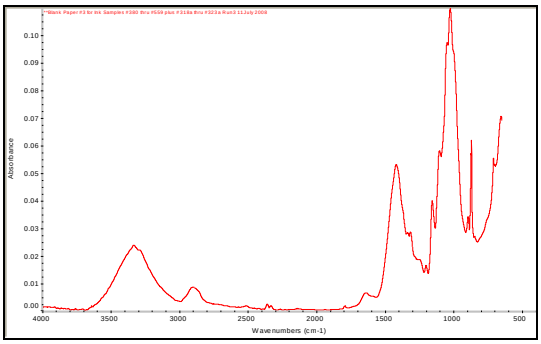

Figure 1774: ATR spectrum of blank paper #3 run 3 collected July 11th, 2008

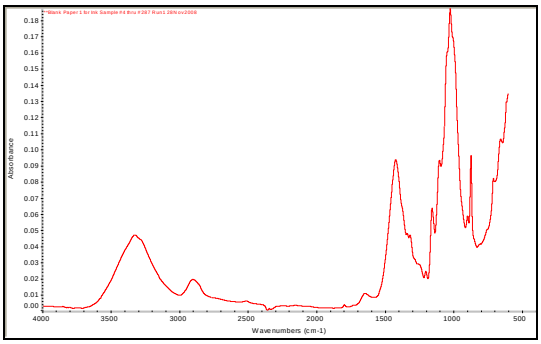

Figure 1775: ATR spectrum of blank paper #1 run 1 collected November 28th, 2008

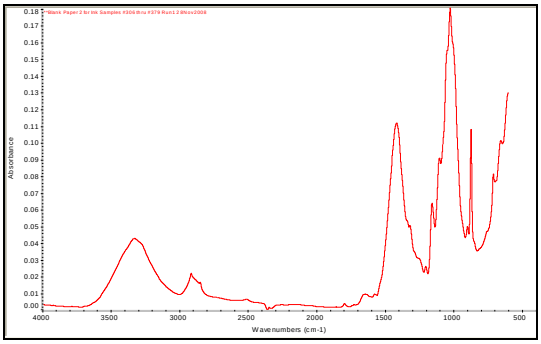

Figure 1776: ATR spectrum of blank paper #2 run 1 collected November 28th, 2008

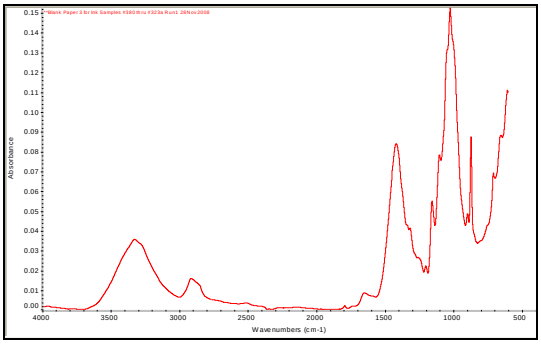

Figure 1777: ATR spectrum of blank paper #3 run 1 collected November 28th, 2008

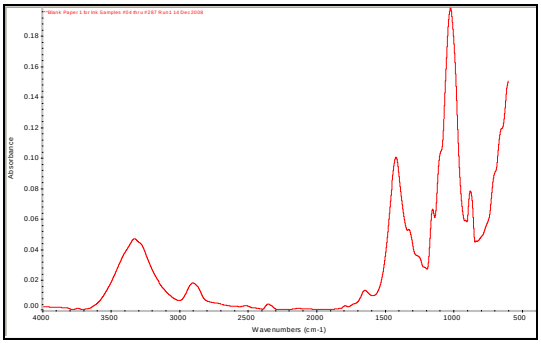

Figure 1778: ATR spectrum of blank paper #1 run 1 collected December 14th, 2008

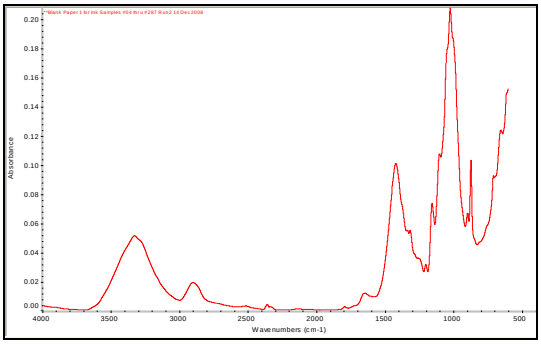

Figure 1779: ATR spectrum of blank paper #1 run 2 collected December 14th, 2008

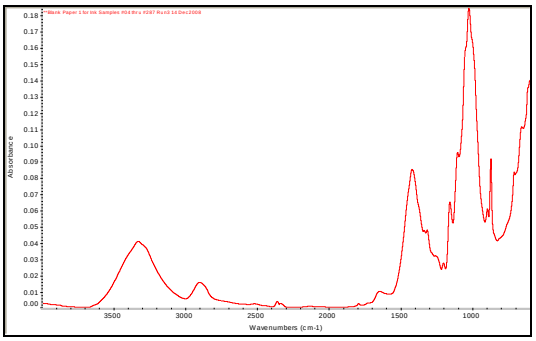

Figure 1780: ATR spectrum of blank paper #1 run 3 collected December 14th, 2008

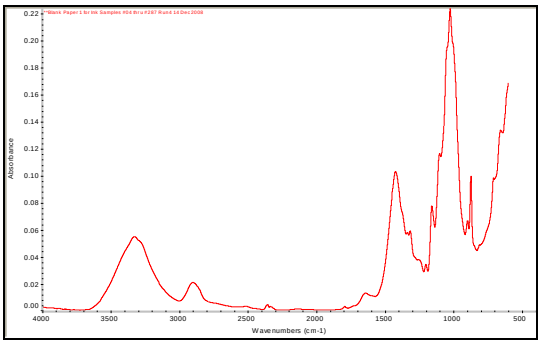

Figure 1781: ATR spectrum of blank paper #1 run 4 collected December 14th, 2008

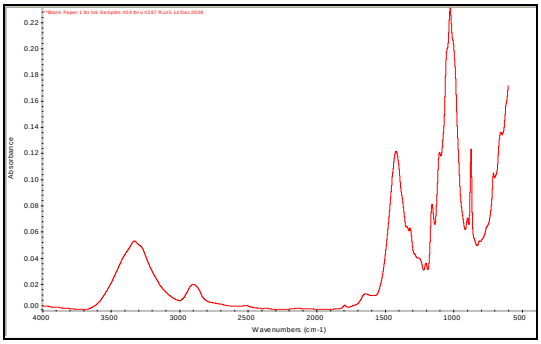

Figure 1782: ATR spectrum of blank paper #1 run 5 collected December 14th, 2008

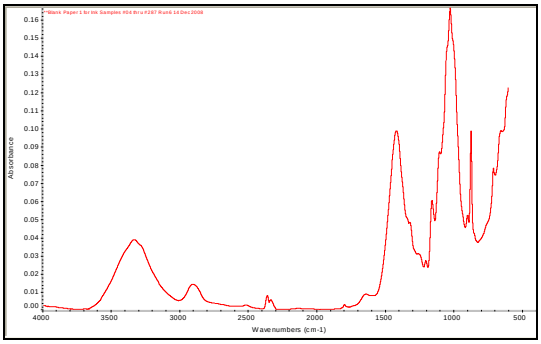

Figure 1783: ATR spectrum of blank paper #1 run 6 collected December 14th, 2008

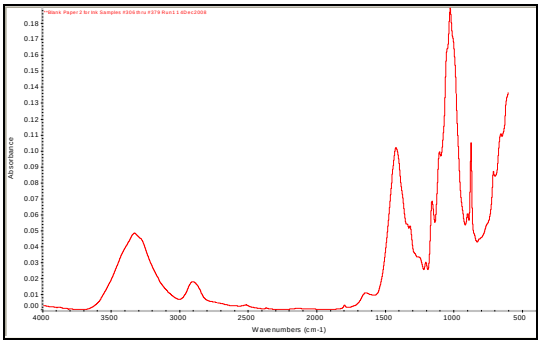

Figure 1784: ATR spectrum of blank paper #2 run 1 collected December 14th, 2008

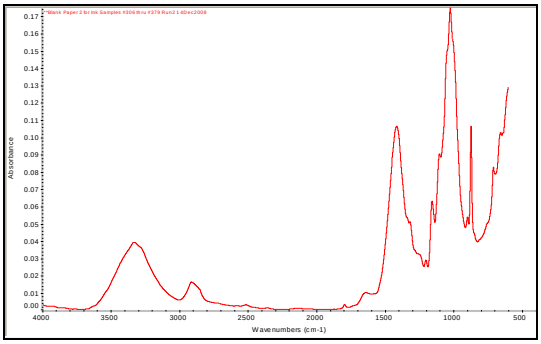

Figure 1785: ATR spectrum of blank paper #2 run 2 collected December 14th, 2008

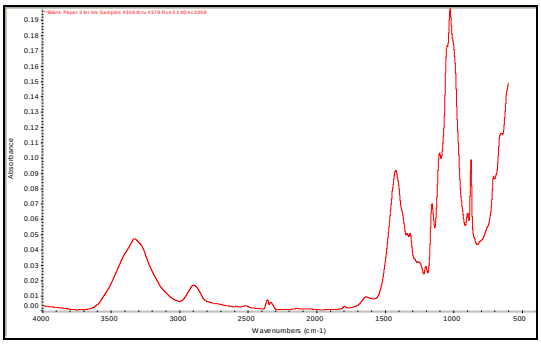

Figure 1786: ATR spectrum of blank paper #2 run 3 collected December 14th, 2008

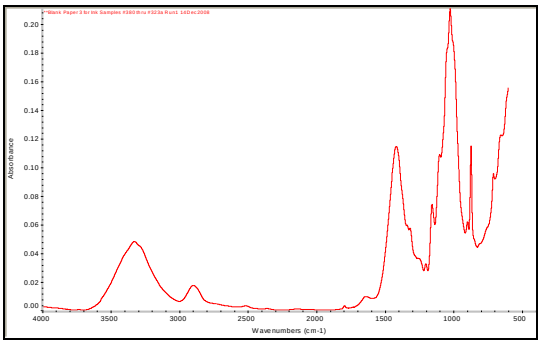

Figure 1787: ATR spectrum of blank paper #3 run 1 collected December 14th, 2008

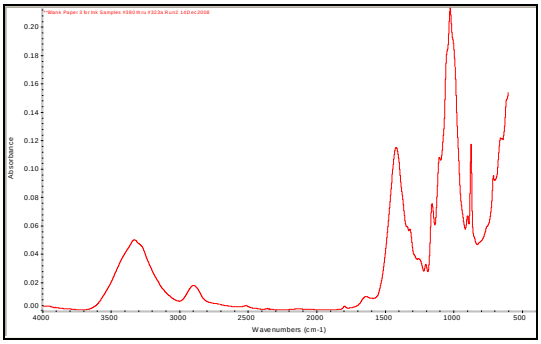

Figure 1788: ATR spectrum of blank paper #3 run 2 collected December 14th, 2008

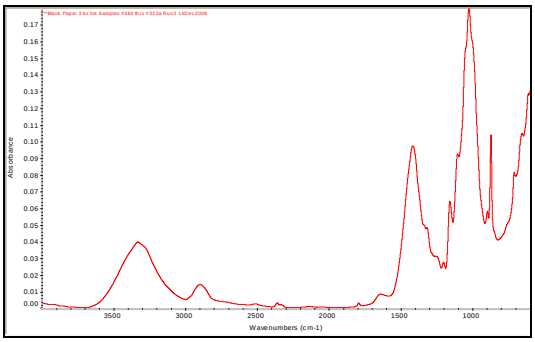

Figure 1789: ATR spectrum of blank paper #3 run 3 collected December 14th, 2008

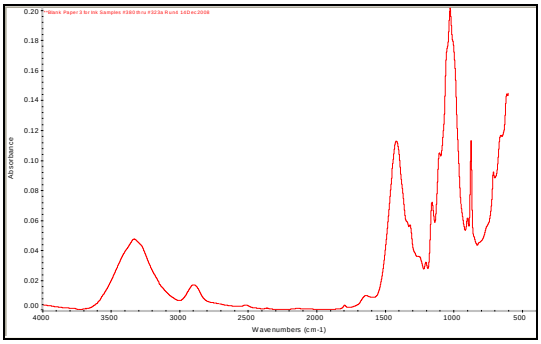

Figure 1790: ATR spectrum of blank paper #3 run 4 collected December 14th, 2008

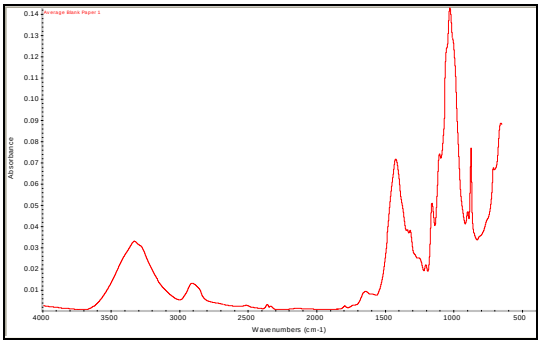

Figure 1791: ATR spectrum of blank paper #1 AVERAGE

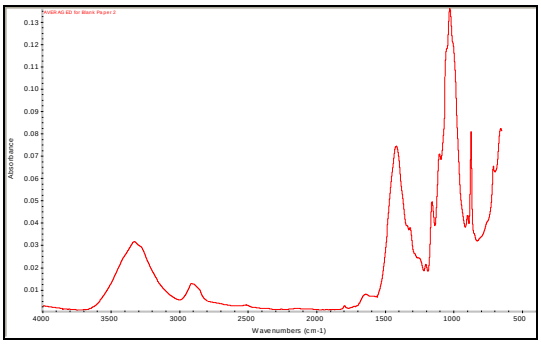

Figure 1792: ATR spectrum of blank paper #2 AVERAGE

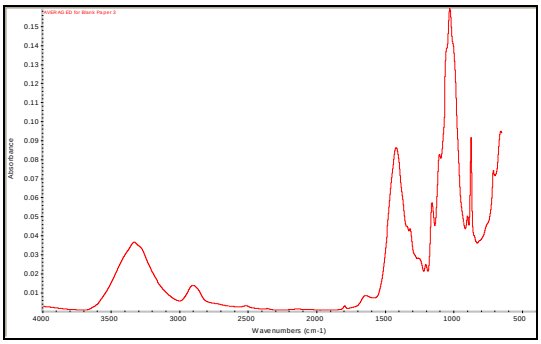

Figure 1793: ATR spectrum of blank paper #3 AVERAGE

Blind Study Blank Paper Spectra

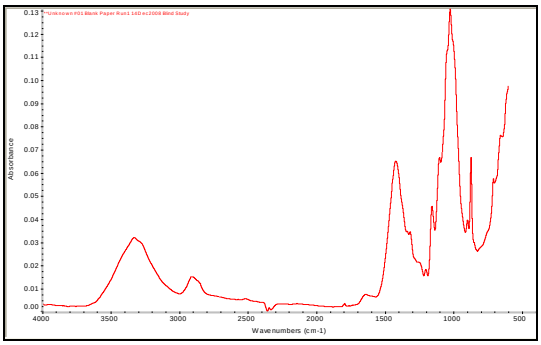

Figure 1794: ATR spectrum of blank paper from Unknown 01 run 1 collected December 14th, 2008

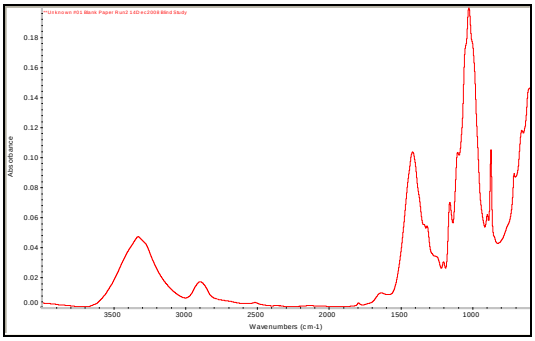

Figure 1795: ATR spectrum of blank paper from Unknown 01 run 2 collected December 14th, 2008

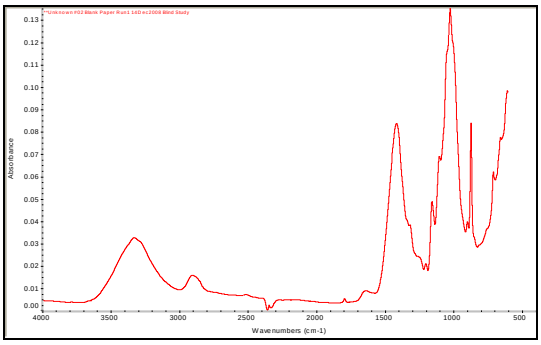

Figure 1796: ATR spectrum of blank paper from Unknown 02 run 1 collected December 14th, 2008

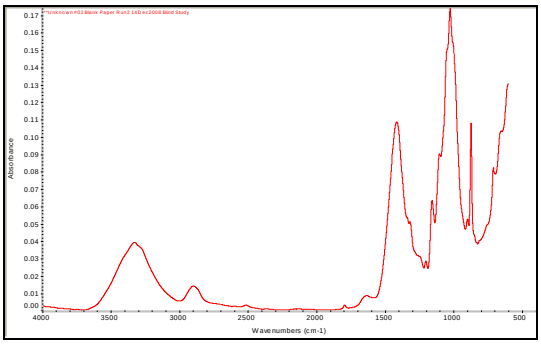

Figure 1797: ATR spectrum of blank paper from Unknown 02 run 2 collected December 14th, 2008

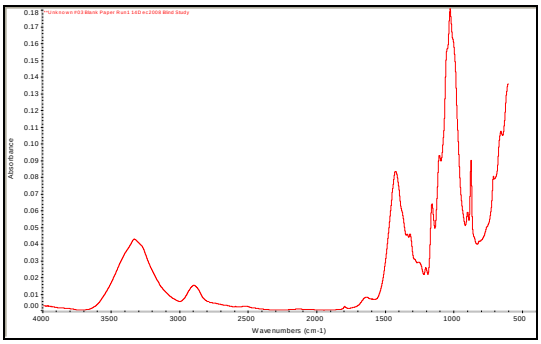

Figure 1798: ATR spectrum of blank paper from Unknown 03 run 1 collected December 14th, 2008

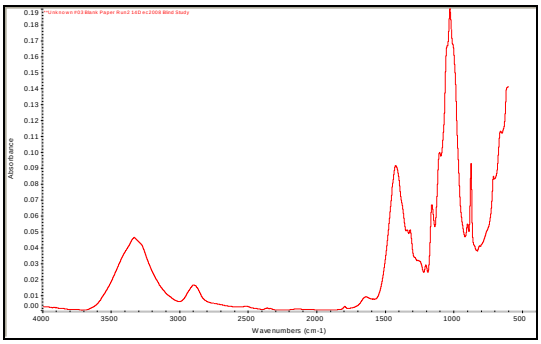

Figure 1799: ATR spectrum of blank paper from Unknown 03 run 2 collected December 14th, 2008

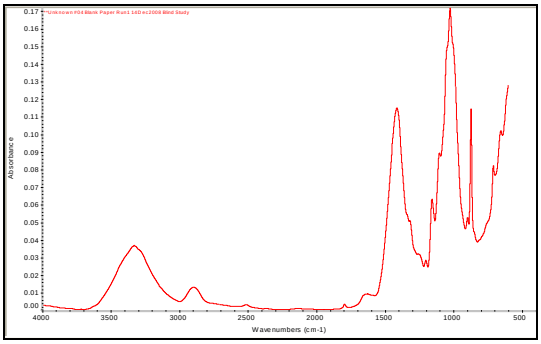

Figure 1800: ATR spectrum of blank paper from Unknown 04 run 1 collected December 14th, 2008

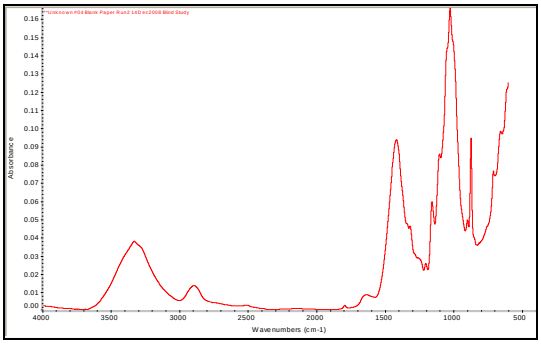

Figure 1801: ATR spectrum of blank paper from Unknown 04 run 2 collected December 14th, 2008

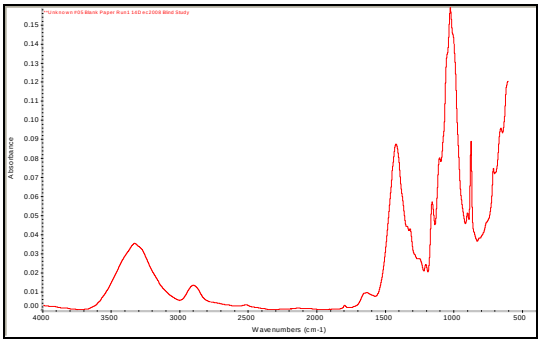

Figure 1802: ATR spectrum of blank paper from Unknown 05 run 1 collected December 14th, 2008

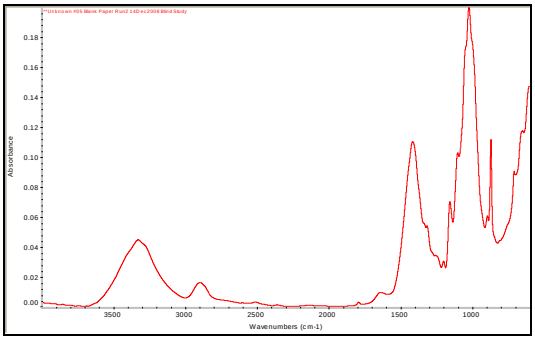

Figure 1803: ATR spectrum of blank paper from Unknown 05 run 2 collected December 14th, 2008

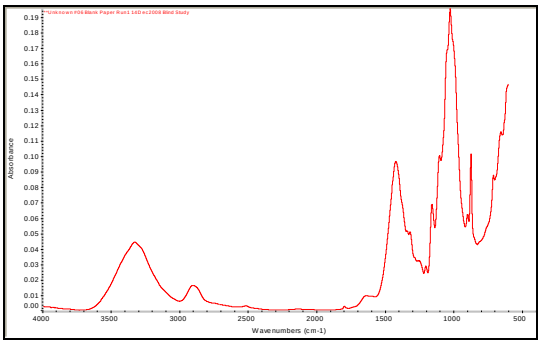

Figure 1804: ATR spectrum of blank paper from Unknown 06 run 1 collected December 14th, 2008

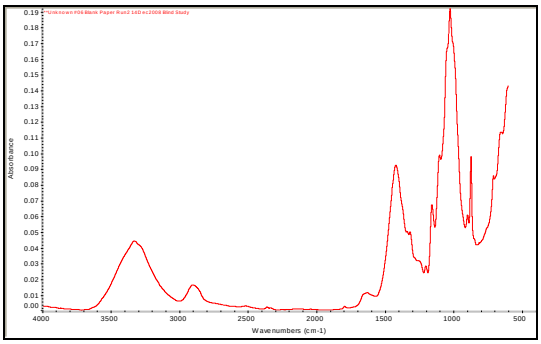

Figure 1805: ATR spectrum of blank paper from Unknown 06 run 2 collected December 14th, 2008

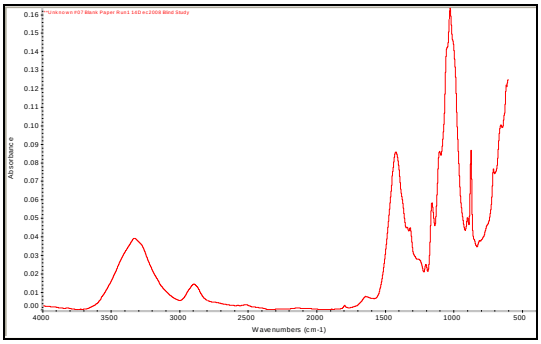

Figure 1806: ATR spectrum of blank paper from Unknown 07 run 1 collected December 14th, 2008

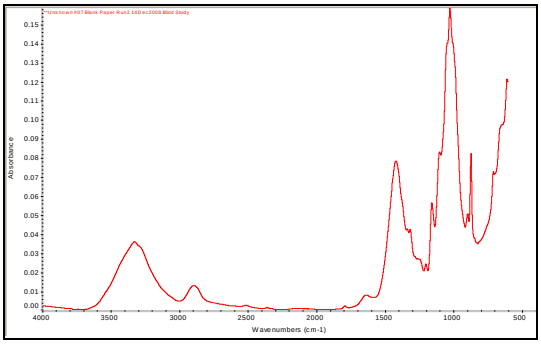

Figure 1807: ATR spectrum of blank paper from Unknown 07 run 2 collected December 14th, 2008

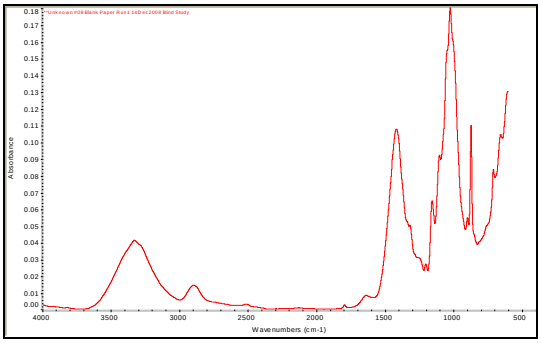

Figure 1808: ATR spectrum of blank paper from Unknown 08 run 1 collected December 14th, 2008

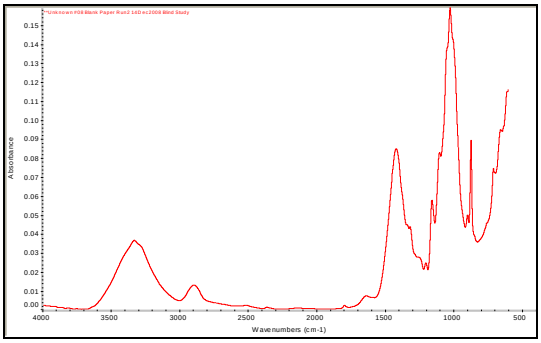

Figure 1809: ATR spectrum of blank paper from Unknown 08 run 2 collected December 14th, 2008

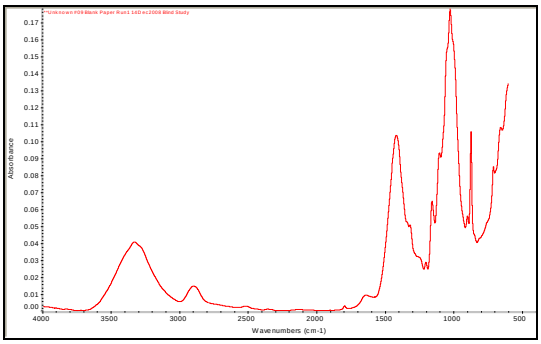

Figure 1810: ATR spectrum of blank paper from Unknown 09 run 1 collected December 14th, 2008

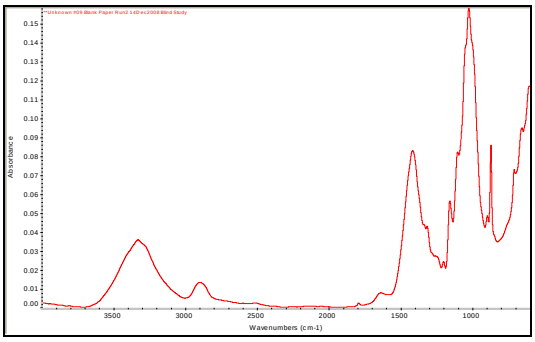

Figure 1811: ATR spectrum of blank paper from Unknown 09 run 2 collected December 14th, 2008

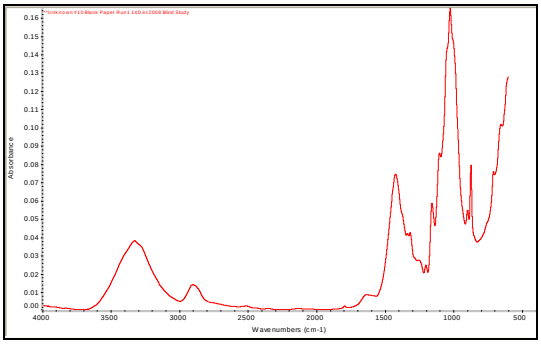

Figure 1812: ATR spectrum of blank paper from Unknown 10 run 1 collected December 14th, 2008

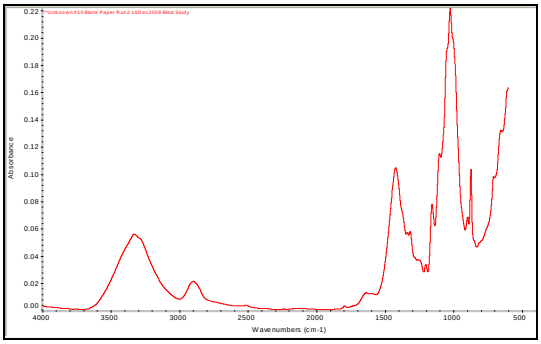

Figure 1813: ATR spectrum of blank paper from Unknown 10 run 2 collected December 14th, 2008

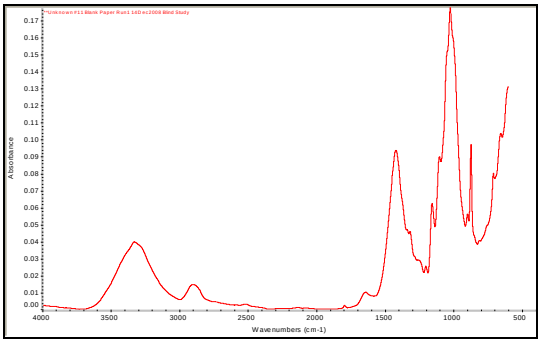

Figure 1814: ATR spectrum of blank paper from Unknown 11 run 1 collected December 14th, 2008

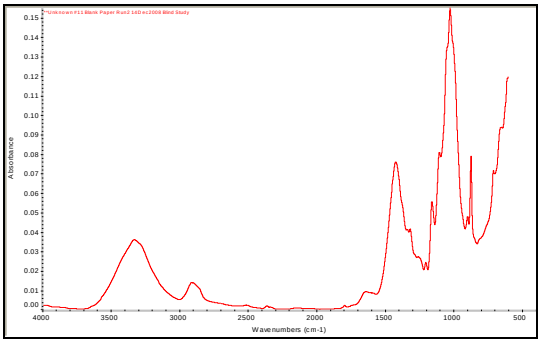

Figure 1815: ATR spectrum of blank paper from Unknown 11 run 2 collected December 14th, 2008

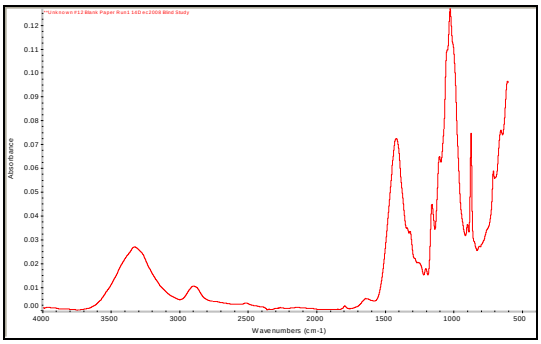

Figure 1816: ATR spectrum of blank paper from Unknown 12 run 1 collected December 14th, 2008

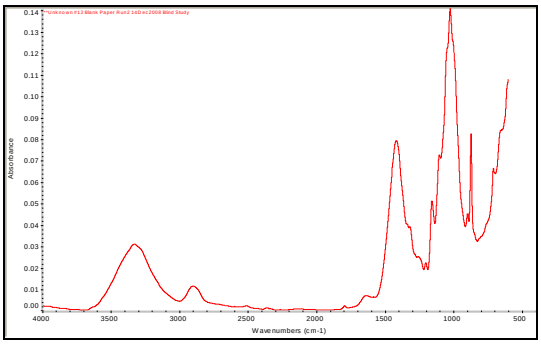

Figure 1817: ATR spectrum of blank paper from Unknown 12 run 2 collected December 14th, 2008

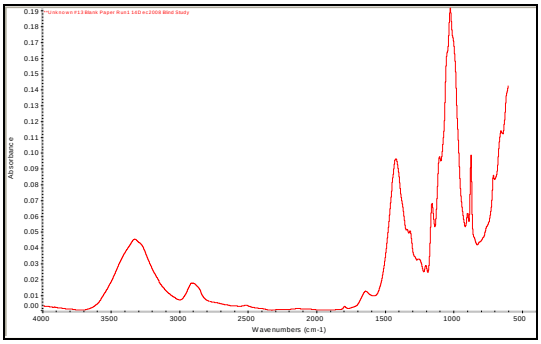

Figure 1818: ATR spectrum of blank paper from Unknown 13 run 1 collected December 14th, 2008

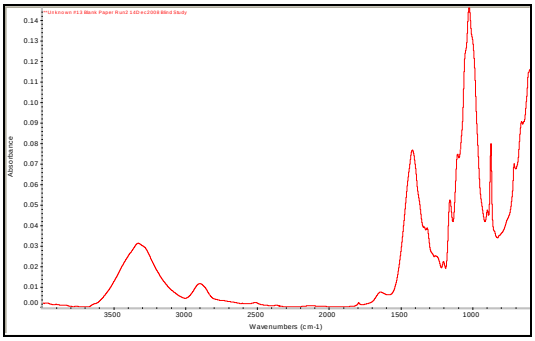

Figure 1819: ATR spectrum of blank paper from Unknown 13 run 2 collected December 14th, 2008

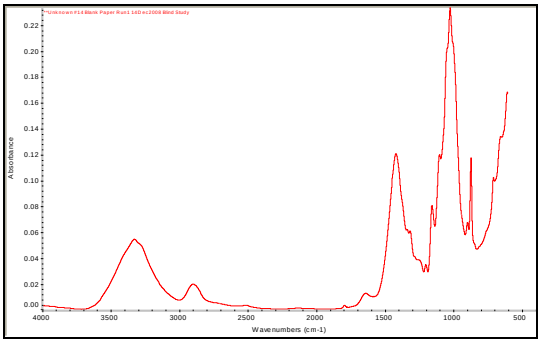

Figure 1820: ATR spectrum of blank paper from Unknown 14 run 1 collected December 14th, 2008

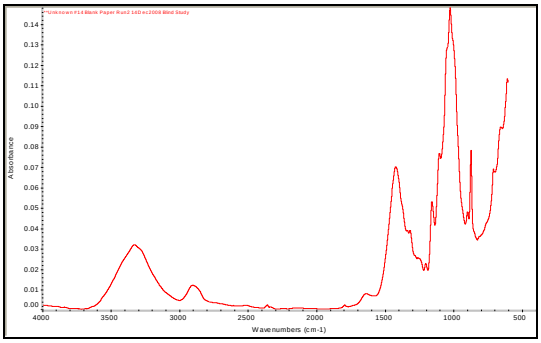

Figure 1821: ATR spectrum of blank paper from Unknown 14 run 2 collected December 14th, 2008

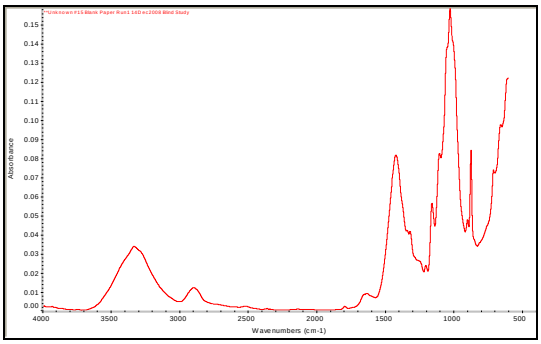

Figure 1822: ATR spectrum of blank paper from Unknown 15 run 1 collected December 14th, 2008

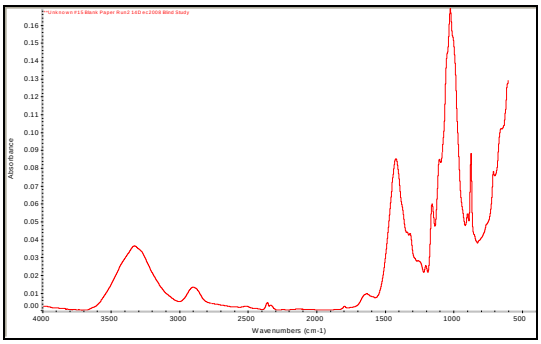

Figure 1823: ATR spectrum of blank paper from Unknown 15 run 2 collected December 14th, 2008

APPENDIX G:

Blind Study TLC, HPLC, Py-GC-MS and ATR FT-IR Data

Table 65 shows the results of the TLC analysis of the unknown ink samples extracted from the paper. The distance traveled by the mobile phase and any spot(s) noted for a specific ink sample were noted in the following table. The Rf value was calculated for each spot, if applicable, and was also included in the table. The colors within the following table represent the colors observed for the visible spots on the TLC plate for the specific ink sample.

Tables 66 through 71 show the results of the HPLC analysis of the ink samples extracted from the paper, as well as the results of the HPLC analysis of the blank paper samples and the blank extraction solvent samples. The samples were run in duplicate and the results from each trial were included in the Appendix. The results using the 256 nm wavelength were discussed in the HPLC results section, but the HPLC of all five monitoring wavelengths were included in this Appendix.

TLC Results – Blind Study

Table 65: TLC Results of Blind Study analyzed on December 11th, 2008

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
01	Unknown	**11.7**	**6.7**	**7.9**	**8.4**	**9.2**			
	Rf Values		**0.57265**	**0.67521**	**0.71795**	**0.78632**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
02	Unknown	**11.7**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
03	Unknown	**11.6**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
04	Unknown	**11.6**	**4**	**7.1**					
	Rf Values		**0.34483**	**0.61207**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
05	Unknown	**11.5**	**6.55**	**7.8**	**8.4**	**9.3**			
	Rf Values		**0.56957**	**0.67826**	**0.73043**	**0.8087**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
06	Unknown	**11.5**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
07	Unknown	**11.5**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
08	Unknown	**11.4**	**3.9**	**7.1**	**8.3**				
	Rf Values		**0.34211**	**0.62281**	**0.72807**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
09	Unknown	**11.5**	**8.4**						
	Rf Values		**0.73043**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
10	Unknown	**11.55**	**3.9**	**7.1**	**8.4**				
	Rf Values		**0.33766**	**0.61472**	**0.72727**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							

Table 65: TLC Results of Blind Study analyzed on December 11th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
11	Unknown	**11.6**	**2.1**	**6.75**	**7**				
	Rf Values		**0.18103**	**0.5819**	**0.60345**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	See bright orange spot. Blue fluorescent spot approx. 2cm from line							
12	Unknown	**11.3**	**8.5**						
	Rf Values		**0.75221**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
13	Unknown	**11.3**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
14	Unknown	**11.4**	**4.9**	**7.4**					
	Rf Values		**0.42982**	**0.64912**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
15	Unknown	**11.2**	**4.9**	**7.45**	**8.8**				
	Rf Values		**0.4375**	**0.66518**	**0.78571**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
01	Unknown	**11.4**	**6.4**	**7.75**	**8.35**	**9.4**			
	Rf Values		**0.5614**	**0.67982**	**0.73246**	**0.82456**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
02	Unknown	**11.3**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
03	Unknown	**11.3**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
04	Unknown	**11.4**	**3.7**	**6.8**					
	Rf Values		**0.32456**	**0.59649**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
05	Unknown	**11.5**	**6.6**	**7.5**	**8.2**	**9.05**			
	Rf Values		**0.57391**	**0.65217**	**0.71304**	**0.78696**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
06	Unknown	**11.4**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							

Table 65: TLC Results of Blind Study analyzed on December 11th, 2008 cont.

Sample		Solvent Distance	Spot 1	Spot 2	Spot 3	Spot 4	Spot 5	Spot 6	MISC
07	Unknown	**11.2**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
08	Unknown	**11.1**	**3.4**	**6.6**	**8.3**				
	Rf Values		**0.30631**	**0.59459**	**0.74775**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
09	Unknown	**11.05**	**8.3**						
	Rf Values		**0.75113**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
10	Unknown	**11**	**3.4**	**6.6**	**8.3**				
	Rf Values		**0.30909**	**0.6**	**0.75455**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
11	Unknown	**11.1**	**2**	**6.4**	**6.55**				
	Rf Values		**0.18018**	**0.57658**	**0.59009**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	See bright orange spot. Blue fluorescent spot approx. 2cm from line							
12	Unknown	**11.3**	**8.3**						
	Rf Values		**0.73451**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
13	Unknown	**11.2**							
	Rf Values		**0**	**0**	**0**	**0**	**0**	**0**	
	Short Wave UV	See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
14	Unknown	**11.4**	**3.4**	**4.2**	**6.9**				Bottom spot split into 2 spots
	Rf Values		**0.29825**	**0.36842**	**0.60526**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							
15	Unknown	**11.7**	**4.5**	**7.1**	**8.3**				
	Rf Values		**0.38462**	**0.60684**	**0.7094**	**0**	**0**	**0**	
	Short Wave UV	See visible spots. Appear "dark". See dark band approx. 2cm from line							
	Long Wave UV	Blue fluorescent spot approx. 2cm from line							

HPLC Data – Blind Study Results

Table 66: HPLC Results for 236 nm wavelengths – Retention Times (min)

BLANK EtOH: dH_2O (50:50)	Unknown 01 Run 1	Unknown 02 Run 1	Unknown 03 Run 1	Unknown 04 Run 1	Unknown 05 Run 1	Unknown 06 Run 1	Unknown 07 Run 1
1.812	1.546	1.524	1.526	1.068	1.538	1.524	1.529
3.853	10.890	6.724	3.706	1.492	3.499	3.743	3.764
				8.608	5.140	6.770	5.997
					7.171	7.072	11.324
					8.254	11.681	11.441
					10.831		13.659
					12.032		16.213

Unknown 08 Run 1	Unknown 09 Run 1	Unknown 10 Run 1	Unknown 11 Run 1	Unknown 12 Run 1	Unknown 13 Run 1	Unknown 14 Run 1	Unknown 15 Run 1
1.107	0.177	0.146	0.885	0.127	0.652	1.087	1.124
1.521	1.528	1.075	1.102	1.077	1.531	1.517	1.525
1.773	3.986	1.521	1.528	1.268	2.938		3.713
3.691	5.147	1.872	1.977	1.533	3.154		
5.903	5.442	2.321	2.502	5.362	4.712		
12.777	5.977	2.611	2.803	5.622	4.911		
13.866	6.207	2.965	3.158	5.817	7.588		
13.938	6.449	3.321	3.521	5.981	7.824		
14.463	6.782	3.644	3.832	6.198	10.294		
15.162	8.872	4.012	4.178	6.593	10.739		
15.704		4.304	4.458	6.796	10.967		
16.297		4.698	4.801	7.253			
16.844		4.979	5.063	7.450			
		5.393	5.398	8.107			
		5.663	5.642	8.291			
		6.115	5.980	10.022			
		6.369	6.208	14.688			
		6.926	6.555	14.890			
		7.175	6.775	14.963			
		7.791	7.135	15.121			
		8.031	7.346				
		8.761	7.718				
		8.946	7.921				
		12.025	8.321				
		12.230	8.516				
		12.719	8.965				
		12.898	9.153				
		13.275	9.728				
		13.840	9.912				
		14.511	11.944				
			12.636				
			14.560				

Table 66: HPLC Results for 236 nm wavelengths – Retention Times (min) cont.

BLANK EtOH: dH_2O (50:50)	Unknown 01 Run 2	Unknown 02 Run 2	Unknown 03 Run 2	Unknown 04 Run 2	Unknown 05 Run 2	Unknown 06 Run 2	Unknown 07 Run 2
0.173	1.555	1.524	1.526	1.088	1.550	1.526	1.528
1.521	10.975	6.892		1.505	10.997		
				2.482			
				8.767			

Unknown 08 Run 2	Unknown 09 Run 2	Unknown 10 Run 2	Unknown 11 Run 2	Unknown 12 Run 2	Unknown 13 Run 2	Unknown 14 Run 2	Unknown 15 Run 2
1.114	0.068	1.102	0.080	1.525	0.050	1.082	1.122
1.520	1.526	1.520	1.091		1.526	1.512	1.524
			1.542			3.618	
			12.499				

BLANK EtOH: dH_2O (50:50)	BLANK EtOH: dH_2O (50:50)	BLANK EtOH: dH_2O (50:50)	Unknown 05 Run 3	Unknown 06 Run 3	Unknown 07 Run 3	Unknown 08 Run 3
0.173	1.863	1.548	1.557	1.550	1.549	1.254
1.522	3.770	4.019	11.354	3.908		1.545
	4.537					3.894
						4.571

Unknown 09 Run 3	Unknown 10 Run 3	Unknown 11 Run 3	Unknown 12 Run 3	Unknown 13 Run 3
1.551	1.179	1.118	1.553	1.55
	1.548	1.563		
	3.893	4.126		
	5.43	6.225		
		6.477		
		12.624		

Table 67: HPLC Results for 256 nm wavelength – Retention Times (min)

BLANK EtOH: dH_2O (50:50)	Unknown 01 Run 1	Unknown 02 Run 1	Unknown 03 Run 1	Unknown 04 Run 1	Unknown 05 Run 1	Unknown 06 Run 1	Unknown 07 Run 1
	1.130	1.637	1.685	1.067	1.183	1.648	1.682
	1.551			1.478	1.548	6.780	2.492
	10.897				3.358	7.076	5.538
					5.265	11.681	5.997
					8.260		11.441
					10.833		13.659
					12.034		16.214

Unknown 08 Run 1	Unknown 09 Run 1	Unknown 10 Run 1	Unknown 11 Run 1	Unknown 12 Run 1	Unknown 13 Run 1	Unknown 14 Run 1	Unknown 15 Run 1
1.093	0.274	0.148	0.884	0.130	0.651	1.083	1.113
1.497	1.240	0.534	1.102	0.289	0.085	1.491	1.506
1.774	1.458	0.627	1.462	1.076	1.683		
5.906	1.661	1.073	1.559	1.244	1.849		
12.778	5.147	1.494	1.975	1.362	2.089		
13.867	5.448	1.871	2.219	1.659	2.937		
13.944	5.977	2.213	2.297	5.362	3.139		
14.463	6.214	2.611	2.803	5.636	4.712		
15.170	6.515	2.951	3.137	5.981	4.921		
15.704	6.782	3.321	3.527	6.211	7.588		
16.300	8.871	3.641	3.840	6.593	7.826		
16.844		4.012	4.178	6.805	10.295		
		4.317	4.472	7.253	10.739		
		4.698	4.801	7.450	10.967		
		4.986	5.075	8.108			
		5.394	5.398	8.296			
		5.666	5.650	10.022			
		6.115	5.980	14.688			
		6.377	6.218	14.891			
		6.926	6.555	14.965			
		7.180	6.783	15.121			
		7.791	7.135				
		8.036	7.350				
		8.770	7.718				
		8.946	7.924				
		12.025	8.321				
		12.232	8.520				
		12.719	8.965				
		12.899	9.157				
		13.300	9.728				
		13.840	9.914				
		14.510	11.784				
			11.944				
			12.684				
			14.561				

Table 67: HPLC Results for 256 nm wavelength – Retention Times (min) cont.

BLANK EtOH: dH_2O (50:50)	Unknown 01 Run 2	Unknown 02 Run 2	Unknown 03 Run 2	Unknown 04 Run 2	Unknown 05 Run 2	Unknown 06 Run 2	Unknown 07 Run 2
0.251	1.144	1.646	1.687	1.086	1.240	1.665	1.697
1.667	1.561			1.491	1.562		
	10.979				11.014		

Unknown 08 Run 2	Unknown 09 Run 2	Unknown 10 Run 2	Unknown 11 Run 2	Unknown 12 Run 2	Unknown 13 Run 2	Unknown 14 Run 2	Unknown 15 Run 2
1.098	0.148	1.098	0.120	1.357	0.112	1.077	1.111
1.498	1.341	1.493	1.087	1.649	1.670	1.487	1.503
	1.649		1.457				
			1.566				
			12.473				

BLANK EtOH: dH_2O (50:50)	BLANK EtOH: dH_2O (50:50)	BLANK EtOH: dH_2O (50:50)	Unknown 05 Run 3	Unknown 06 Run 3	Unknown 07 Run 3	Unknown 08 Run 3
0.240		1.745	1.164	1.709	1.749	1.183
1.667			1.595			4.577
			11.367			

Unknown 09 Run 3	Unknown 10 Run 3	Unknown 11 Run 3	Unknown 12 Run 3	Unknown 13 Run 3
1.292	0.045	1.102	1.36	1.72
1.704	0.311	1.456	1.677	
6.871	1.151	1.585		
7.276	1.496	6.237		
	10.348	6.481		

Table 68: HPLC Results for 417 nm wavelength – Retention Times (min)

BLANK EtOH: dH_2O (50:50)	Unknown 01 Run 1	Unknown 02 Run 1	Unknown 03 Run 1	Unknown 04 Run 1	Unknown 05 Run 1	Unknown 06 Run 1	Unknown 07 Run 1
	1.552	1.651		1.063	1.548	1.658	1.696
	10.901			1.481	3.346	6.779	2.492
					5.261	7.077	5.538
					8.264	11.683	5.997
					10.835		11.442
					12.034		16.213

Unknown 08 Run 1	Unknown 09 Run 1	Unknown 10 Run 1	Unknown 11 Run 1	Unknown 12 Run 1	Unknown 13 Run 1	Unknown 14 Run 1	Unknown 15 Run 1
1.081	0.341	0.148	0.884	0.130	0.652	1.076	1.099
1.499	1.367	0.651	1.130	0.298	0.848	1.494	1.507
1.774	1.458	1.070	1.470	1.075	1.683		
5.906	1.687	1.289	1.569	1.252	1.864		
12.778	5.147	1.497	1.976	1.385	2.938		
13.867	5.447	1.871	2.345	1.677	3.139		
14.463	5.977	2.227	2.803	5.362	4.712		
15.170	6.211	2.611	3.154	5.634	4.918		
15.704	6.782	2.954	3.521	5.981	7.588		
16.297		3.321	3.837	6.212	7.819		
16.844		3.644	4.178	6.593	10.296		
		4.012	4.466	6.803	10.739		
		4.313	4.801	7.253	10.955		
		4.698	5.075	7.445			
		4.987	5.398	8.108			
		5.394	5.649	8.293			
		5.666	5.981	10.022			
		6.115	6.216	14.687			
		6.375	6.555	14.891			
		6.926	6.780	14.964			
		7.178	7.135	15.121			
		7.791	7.347				
		8.034	7.718				
		8.946	7.922				
		12.025	8.321				
		12.228	8.517				
		12.719	8.965				
		12.897	9.154				
		13.840	9.729				
			9.913				
			11.944				
			12.772				
			14.560				

Table 68: HPLC Results for 417 nm wavelength – Retention Times (min) cont.

BLANK EtOH: dH_2O (50:50)	Unknown 01 Run 2	Unknown 02 Run 2	Unknown 03 Run 2	Unknown 04 Run 2	Unknown 05 Run 2	Unknown 06 Run 2	Unknown 07 Run 2
	1.561	1.655		1.081	1.562	1.676	
	10.986			1.495	11.020		

Unknown 08 Run 2	Unknown 09 Run 2	Unknown 10 Run 2	Unknown 11 Run 2	Unknown 12 Run 2	Unknown 13 Run 2	Unknown 14 Run 2	Unknown 15 Run 2
1.086	1.369	1.089	1.098	1.379	1.707	1.071	1.098
1.501	1.684	1.496	1.465	1.672		1.490	1.504
			1.566				
			12.611				

BLANK EtOH: dH_2O (50:50)	BLANK EtOH: dH_2O (50:50)	BLANK EtOH: dH_2O (50:50)	Unknown 05 Run 3	Unknown 06 Run 3	Unknown 07 Run 3	Unknown 08 Run 3
			1.591	1.704		1.150
			11.373			1.546
						4.579

Unknown 09 Run 3	Unknown 10 Run 3	Unknown 11 Run 3	Unknown 12 Run 3	Unknown 13 Run 3
1.331	0.042	1.481	1.39	
	0.322	1.598	1.688	
	1.138	6.236		
	1.529	13.153		

Table 69: HPLC Results for 564 nm wavelength – Retention Times (min)

BLANK EtOH: dH_2O (50:50)	Unknown 01 Run 1	Unknown 02 Run 1	Unknown 03 Run 1	Unknown 04 Run 1	Unknown 05 Run 1	Unknown 06 Run 1	Unknown 07 Run 1
	1.551	1.604	1.604	1.062	1.548	1.598	1.612
				1.480			5.998
				8.661			

Table 69: HPLC Results for 564 nm wavelength – Retention Times (min) cont.

Unknown 08 Run 1	Unknown 09 Run 1	Unknown 10 Run 1	Unknown 11 Run 1	Unknown 12 Run 1	Unknown 13 Run 1	Unknown 14 Run 1	Unknown 15 Run 1
1.084	1.464	0.147	1.093	0.128	1.677	1.077	1.100
1.495	1.595	1.082	1.572	1.080	2.939	1.492	1.502
1.773	5.147	1.498	2.802	1.242	4.714		
12.779	5.977	1.867	3.522	1.588	7.590		
14.464	6.784	2.611	4.180	5.982	10.315		
15.705		3.322	4.802	6.595	10.739		
16.845		4.013	5.399	7.254			
		4.699	5.982	8.109			
		5.395	6.556	10.022			
		6.116	7.136				
		6.927	7.720				
		7.792	8.322				
		8.947	8.967				
		12.026	9.731				
		12.720	11.945				
		13.842	14.561				

BLANK EtOH: dH_2O (50:50)	Unknown 01 Run 2	Unknown 02 Run 2	Unknown 03 Run 2	Unknown 04 Run 2	Unknown 05 Run 2	Unknown 06 Run 2	Unknown 07 Run 2
0.261	1.561	1.606	1.604	1.080	1.562	1.602	1.606
1.592				1.494			
				8.804			

Unknown 08 Run 2	Unknown 09 Run 2	Unknown 10 Run 2	Unknown 11 Run 2	Unknown 12 Run 2	Unknown 13 Run 2	Unknown 14 Run 2	Unknown 15 Run 2
1.087	0.147	1.090	0.124	1.579	0.120	1.071	1.098
1.497	1.594	1.497	1.089		1.609	1.488	1.501
			1.579				
			11.936				

BLANK EtOH: dH_2O (50:50)	BLANK EtOH: dH_2O (50:50)	BLANK EtOH: dH_2O (50:50)	Unknown 05 Run 3	Unknown 06 Run 3	Unknown 07 Run 3	Unknown 08 Run 3
0.248			1.611	1.662		1.141
1.594						1.520

Unknown 09 Run 3	Unknown 10 Run 3	Unknown 11 Run 3	Unknown 12 Run 3	Unknown 13 Run 3
1.642	1.135	1.162	1.624	1.664
	1.526	1.568		
		12.569		

Table 70: HPLC Results for 588 nm wavelength – Retention Times (min)

BLANK EtOH: dH_2O (50:50)	Unknown 01 Run 1	Unknown 02 Run 1	Unknown 03 Run 1	Unknown 04 Run 1	Unknown 05 Run 1	Unknown 06 Run 1	Unknown 07 Run 1
	1.551	1.611	1.633	1.062	1.549	1.608	1.657
				1.480		11.680	
				8.663			

Unknown 08 Run 1	Unknown 09 Run 1	Unknown 10 Run 1	Unknown 11 Run 1	Unknown 12 Run 1	Unknown 13 Run 1	Unknown 14 Run 1	Unknown 15 Run 1
1.084	0.178	0.149	0.886	0.131	0.653	1.076	1.101
1.495	1.460	1.078	1.094	1.078	1.683	1.492	1.503
1.775	1.613	1.498	1.975	1.274	2.939		
12.779	5.147	1.872	2.151	1.614	3.143		
13.971	5.451	2.065	2.804	5.364	4.714		
14.464	5.977	2.612	3.001	5.642	4.925		
15.191	6.215	2.939	3.523	5.982	7.590		
15.705	6.784	3.323	3.841	6.217	7.830		
16.315		3.647	4.180	6.595	10.298		
16.845		4.014	4.474	6.809	10.739		
		4.323	4.803	7.255			
		4.700	5.079	7.453			
		4.993	5.400	8.109			
		5.395	5.656	8.298			
		5.674	5.982	10.022			
		6.117	6.222	14.689			
		6.384	6.556	14.892			
		6.928	6.786	15.122			
		7.186	7.137				
		7.793	7.354				
		8.042	7.720				
		8.947	7.929				
		12.026	8.322				
		12.238	8.524				
		12.720	8.967				
		12.901	9.161				
		13.842	9.730				
			9.918				
			11.945				
			14.562				

Table 70: HPLC Results for 588 nm wavelength – Retention Times (min) cont.

BLANK EtOH: dH_2O (50:50)	Unknown 01 Run 2	Unknown 02 Run 2	Unknown 03 Run 2	Unknown 04 Run 2	Unknown 05 Run 2	Unknown 06 Run 2	Unknown 07 Run 2
0.263	1.562	1.614	1.632	1.080	1.563	1.616	
1.609				1.494			
				8.806			

Unknown 08 Run 2	Unknown 09 Run 2	Unknown 10 Run 2	Unknown 11 Run 2	Unknown 12 Run 2	Unknown 13 Run 2	Unknown 14 Run 2	Unknown 15 Run 2
1.087	0.149	1.089	0.125	1.203	0.121	1.071	1.099
1.497	1.608	1.497	1.089	1.603	1.623	1.488	1.502
			1.566				
			11.939				

BLANK EtOH: dH_2O (50:50)	BLANK EtOH: dH_2O (50:50)	BLANK EtOH: dH_2O (50:50)	Unknown 05 Run 3	Unknown 06 Run 3	Unknown 07 Run 3	Unknown 08 Run 3
0.251			1.619	1.679		1.141
1.610						1.518
						4.565

Unknown 09 Run 3	Unknown 10 Run 3	Unknown 11 Run 3	Unknown 12 Run 3	Unknown 13 Run 3
1.666	1.135	1.16	1.644	1.681
	1.525	12.572		

Blind Study Results – Modified

Raw data corrected to remove the impurities.

Table 71: HPLC Results of Blind Study with Impurities removed

Blind Study Runs	236 nm					
	Retention Times (min)					
Blank EtOH:dH2O (50:50)	1.812	3.853				
Unknown 01 Run 1	1.546	10.890				
Unknown 02 Run 1	1.524	6.724				
Unknown 03 Run 1	1.526	3.706				
Unknown 04 Run 1	1.068	1.492	8.608			
Unknown 05 Run 1	1.538	7.171	10.831	12.032		
Unknown 06 Run 1	1.524					
Unknown 07 Run 1	1.529					
Unknown 08 Run 1	1.107	1.521	1.773	3.691		
Unknown 09 Run 1	0.177	1.528	3.986			
Unknown 10 Run 1	0.146	1.075	1.521	1.872		
Unknown 11 Run 1	0.885	1.102	1.528	1.977	12.636	
Unknown 12 Run 1	0.127	1.077	1.268	1.533		
Unknown 13 Run 1	0.652	1.531				
Unknown 14 Run 1	1.087	1.517				
Unknown 15 Run 1	1.124	1.525	3.713			
Blank EtOH:dH2O (50:50)	0.173	1.521				
Unknown 01 Run 2	1.555	10.975				
Unknown 02 Run 2	1.524	6.892				
Unknown 03 Run 2	1.526					
Unknown 04 Run 2	1.088	1.505	2.482	8.767		
Unknown 05 Run 2	1.550	10.997				
Unknown 06 Run 2	1.526					
Unknown 07 Run 2	1.528					
Unknown 08 Run 2	1.114	1.520				
Unknown 09 Run 2	0.068	1.526				
Unknown 10 Run 2	1.102	1.520				
Unknown 11 Run 2	0.080	1.091	1.542	12.499		
Unknown 12 Run 2	1.525					
Unknown 13 Run 2	0.050	1.526				
Unknown 14 Run 2	1.082	1.512	3.618			
Unknown 15 Run 2	1.122	1.524				
Blank EtOH:dH2O (50:50)	0.173	1.522				
Blank EtOH:dH2O (50:50)	1.863	3.770	4.537			
Blank EtOH:dH2O (50:50)	1.548	4.019				
Unknown 05 Run 3	1.557	11.354				
Unknown 06 Run 3	1.550	3.908				
Unknown 07 Run 3	1.549					
Unknown 08 Run 3	1.254	1.545	3.894	4.571		
Unknown 09 Run 3	1.551					

Table 71: HPLC Results of Blind Study with Impurities removed cont.

Blind Study Runs	236 nm					
	Retention Times (min)					
Unknown 10 Run 3	1.179	1.548	3.893	5.430		
Unknown 11 Run 3	1.118	1.563	4.126	6.225	6.477	12.624
Unknown 12 Run 3	1.553					
Unknown 13 Run 3	1.550					

Blind Study Runs	256 nm					
	Retention Times (min)					
Blank EtOH:dH2O (50:50)						
Unknown 01 Run 1	1.130	1.551	10.897			
Unknown 02 Run 1	1.637					
Unknown 03 Run 1	1.685					
Unknown 04 Run 1	1.067	1.478				
Unknown 05 Run 1	1.183	1.548	10.833	12.034		
Unknown 06 Run 1	1.648					
Unknown 07 Run 1	1.682					
Unknown 08 Run 1	1.093	1.497	1.774			
Unknown 09 Run 1	0.274	1.240	1.458	1.661		
Unknown 10 Run 1	1.073	1.494	1.871	1.073	1.494	1.871
Unknown 11 Run 1	0.884	1.102	1.462	1.559	1.975	12.684
Unknown 12 Run 1	0.130	0.289	1.076	1.244	1.362	1.659
Unknown 13 Run 1	0.651	0.085	1.683	1.849		
Unknown 14 Run 1	1.083	1.491				
Unknown 15 Run 1	1.113	1.506				
Blank EtOH:dH2O (50:50)	0.251	1.667				
Unknown 01 Run 2	1.144	1.561	10.979			
Unknown 02 Run 2	1.646					
Unknown 03 Run 2	1.687					
Unknown 04 Run 2	1.086	1.491				
Unknown 05 Run 2	1.240	1.562	11.014			
Unknown 06 Run 2	1.665					
Unknown 07 Run 2	1.697					
Unknown 08 Run 2	1.098	1.498				
Unknown 09 Run 2	0.148	1.341	1.649			
Unknown 10 Run 2	1.098	1.493				
Unknown 11 Run 2	0.120	1.087	1.457	1.566	12.473	
Unknown 12 Run 2	1.357	1.649				
Unknown 13 Run 2	0.112	1.670				
Unknown 14 Run 2	1.077	1.487				
Unknown 15 Run 2	1.111	1.503				
Blank EtOH:dH2O (50:50)	0.240	1.667				
Blank EtOH:dH2O (50:50)						
Blank EtOH:dH2O (50:50)	1.745					
Unknown 05 Run 3	1.164	1.595	11.367			

Table 71: HPLC Results of Blind Study with Impurities removed cont.

Blind Study Runs	256 nm					
	Retention Times (min)					
Unknown 06 Run 3	1.709					
Unknown 07 Run 3	1.749					
Unknown 08 Run 3	1.183	4.577				
Unknown 09 Run 3	1.292	1.704	6.871	7.276		
Unknown 10 Run 3	0.045	0.311	1.151	1.496	10.348	
Unknown 11 Run 3	1.102	1.456	1.585	6.237	6.481	
Unknown 12 Run 3	1.360	1.677				
Unknown 13 Run 3	1.720					

Blind Study Runs	417 nm					
	Retention Times (min)					
Blank EtOH:dH2O (50:50)						
Unknown 01 Run 1	1.552	10.901				
Unknown 02 Run 1	1.651					
Unknown 03 Run 1						
Unknown 04 Run 1	1.063	1.481				
Unknown 05 Run 1	1.548	10.835	12.034			
Unknown 06 Run 1	1.658					
Unknown 07 Run 1	1.696					
Unknown 08 Run 1	1.081	1.499	1.774			
Unknown 09 Run 1	0.341	1.367	1.458	1.687		
Unknown 10 Run 1	1.070	1.289	1.497	1.871	1.497	1.871
Unknown 11 Run 1	0.884	1.130	1.470	1.569	1.976	12.772
Unknown 12 Run 1	0.130	0.298	1.075	1.252	1.385	1.677
Unknown 13 Run 1	0.652	0.848	1.683	1.864		
Unknown 14 Run 1	1.076	1.494				
Unknown 15 Run 1	1.099	1.507				
Blank EtOH:dH2O (50:50)						
Unknown 01 Run 2	1.561	10.986				
Unknown 02 Run 2	1.655					
Unknown 03 Run 2						
Unknown 04 Run 2	1.081	1.495				
Unknown 05 Run 2	1.562	11.020				
Unknown 06 Run 2	1.676					
Unknown 07 Run 2						
Unknown 08 Run 2	1.086	1.501				
Unknown 09 Run 2	1.369	1.684				
Unknown 10 Run 2	1.089	1.496				
Unknown 11 Run 2	1.098	1.465	1.566	12.611		
Unknown 12 Run 2	1.379	1.672				
Unknown 13 Run 2	1.707					
Unknown 14 Run 2	1.071	1.490				
Unknown 15 Run 2	1.098	1.504				

Table 71: HPLC Results of Blind Study with Impurities removed cont.

Blind Study Runs	417 nm					
	Retention Times (min)					
Blank EtOH:dH2O (50:50)						
Blank EtOH:dH2O (50:50)						
Blank EtOH:dH2O (50:50)						
Unknown 05 Run 3	1.591	11.373				
Unknown 06 Run 3	1.704					
Unknown 07 Run 3						
Unknown 08 Run 3	1.150	1.546	4.579			
Unknown 09 Run 3	1.331					
Unknown 10 Run 3	0.042	0.322	1.138	1.529		
Unknown 11 Run 3	1.481	1.598	6.236	13.153		
Unknown 12 Run 3	1.390	1.688				
Unknown 13 Run 3						

Blind Study Runs	564 nm			
	Retention Times (min)			
Blank EtOH:dH2O (50:50)				
Unknown 01 Run 1	1.551			
Unknown 02 Run 1	1.604			
Unknown 03 Run 1	1.604			
Unknown 04 Run 1	1.062	1.480	8.661	
Unknown 05 Run 1	1.548			
Unknown 06 Run 1	1.598			
Unknown 07 Run 1	1.612			
Unknown 08 Run 1	1.084	1.495	1.773	
Unknown 09 Run 1	1.464	1.595		
Unknown 10 Run 1	0.147	1.082	1.498	1.867
Unknown 11 Run 1	1.093	1.572	11.945	
Unknown 12 Run 1	0.128	1.080	1.242	1.588
Unknown 13 Run 1	1.677			
Unknown 14 Run 1	1.077	1.492		
Unknown 15 Run 1	1.100	1.502		
Blank EtOH:dH2O (50:50)	0.261	1.592		
Unknown 01 Run 2	1.561			
Unknown 02 Run 2	1.606			
Unknown 03 Run 2	1.604			
Unknown 04 Run 2	1.080	1.494	8.804	
Unknown 05 Run 2	1.562			
Unknown 06 Run 2	1.602			
Unknown 07 Run 2	1.606			
Unknown 08 Run 2	1.087	1.497		
Unknown 09 Run 2	0.147	1.594		
Unknown 10 Run 2	1.090	1.497		
Unknown 11 Run 2	0.124	1.089	1.579	11.936

Table 71: HPLC Results of Blind Study with Impurities removed cont.

Blind Study Runs	564 nm			
	Retention Times (min)			
Unknown 12 Run 2	1.579			
Unknown 13 Run 2	0.120	1.609		
Unknown 14 Run 2	1.071	1.488		
Unknown 15 Run 2	1.098	1.501		
Blank EtOH:dH2O (50:50)	0.248	1.594		
Blank EtOH:dH2O (50:50)				
Blank EtOH:dH2O (50:50)				
Unknown 05 Run 3	1.611			
Unknown 06 Run 3	1.662			
Unknown 07 Run 3				
Unknown 08 Run 3	1.141	1.520		
Unknown 09 Run 3	1.642			
Unknown 10 Run 3	1.135	1.526		
Unknown 11 Run 3	1.162	1.568	12.569	
Unknown 12 Run 3	1.624			
Unknown 13 Run 3	1.664			

Blind Study Runs	588 nm			
	Retention Times (min)			
Blank EtOH:dH2O (50:50)				
Unknown 01 Run 1	1.551			
Unknown 02 Run 1	1.611			
Unknown 03 Run 1	1.633			
Unknown 04 Run 1	1.062	1.480	8.663	
Unknown 05 Run 1	1.549			
Unknown 06 Run 1	1.608			
Unknown 07 Run 1	1.657			
Unknown 08 Run 1	1.084	1.495	1.775	
Unknown 09 Run 1	0.178	1.460	1.613	
Unknown 10 Run 1	0.149	1.078	1.498	1.872
Unknown 11 Run 1	0.886	1.094	1.975	11.945
Unknown 12 Run 1	0.131	1.078	1.274	1.614
Unknown 13 Run 1	0.653	1.683		
Unknown 14 Run 1	1.076	1.492		
Unknown 15 Run 1	1.101	1.503		
Blank EtOH:dH2O (50:50)	0.263	1.609		
Unknown 01 Run 2	1.562			
Unknown 02 Run 2	1.614			
Unknown 03 Run 2	1.632			
Unknown 04 Run 2	1.080	1.494	8.806	
Unknown 05 Run 2	1.563			
Unknown 06 Run 2	1.616			
Unknown 07 Run 2				

Table 71: HPLC Results of Blind Study with Impurities removed cont.

Blind Study Runs	588 nm			
	Retention Times (min)			
Unknown 08 Run 2	1.087	1.497		
Unknown 09 Run 2	0.149	1.608		
Unknown 10 Run 2	1.089	1.497		
Unknown 11 Run 2	0.125	1.089	1.566	11.939
Unknown 12 Run 2	1.203	1.603		
Unknown 13 Run 2	0.121	1.623		
Unknown 14 Run 2	1.071	1.488		
Unknown 15 Run 2	1.099	1.502		
Blank EtOH:dH2O (50:50)	0.251	1.610		
Blank EtOH:dH2O (50:50)				
Blank EtOH:dH2O (50:50)				
Unknown 05 Run 3	1.619			
Unknown 06 Run 3	1.679			
Unknown 07 Run 3				
Unknown 08 Run 3	1.141	1.518	4.565	
Unknown 09 Run 3	1.666			
Unknown 10 Run 3	1.135	1.525		
Unknown 11 Run 3	1.160	12.572		
Unknown 12 Run 3	1.644			
Unknown 13 Run 3	1.681			

Pyrolysis Data: Blind Study

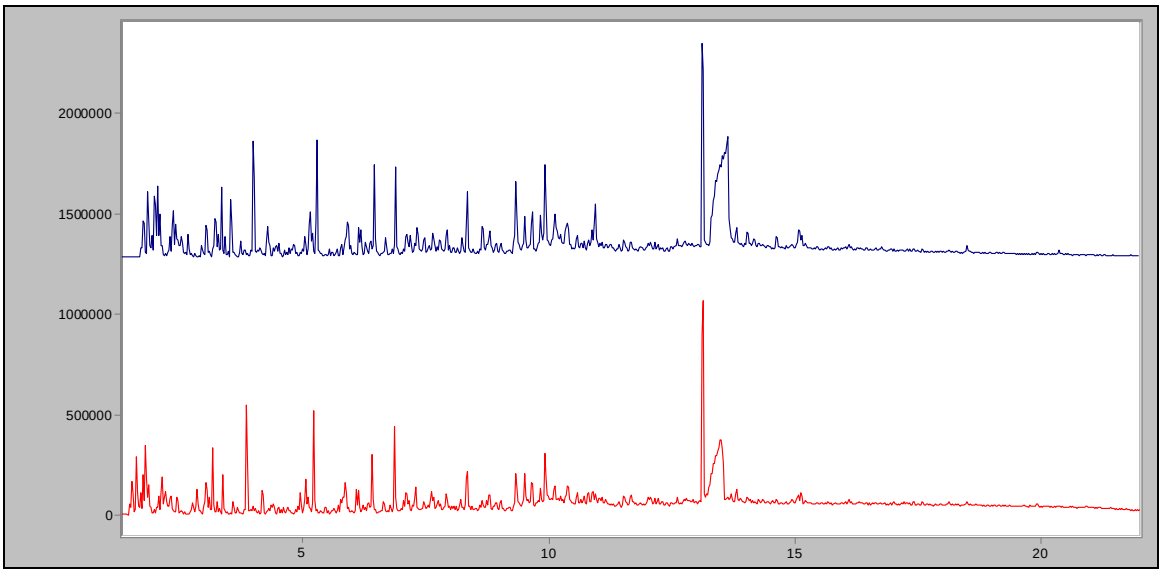

Figure 1824: From top to bottom: Unknown 01 Run 1 and Unknown 01 Run 2 ink on paper sample pyrograms.

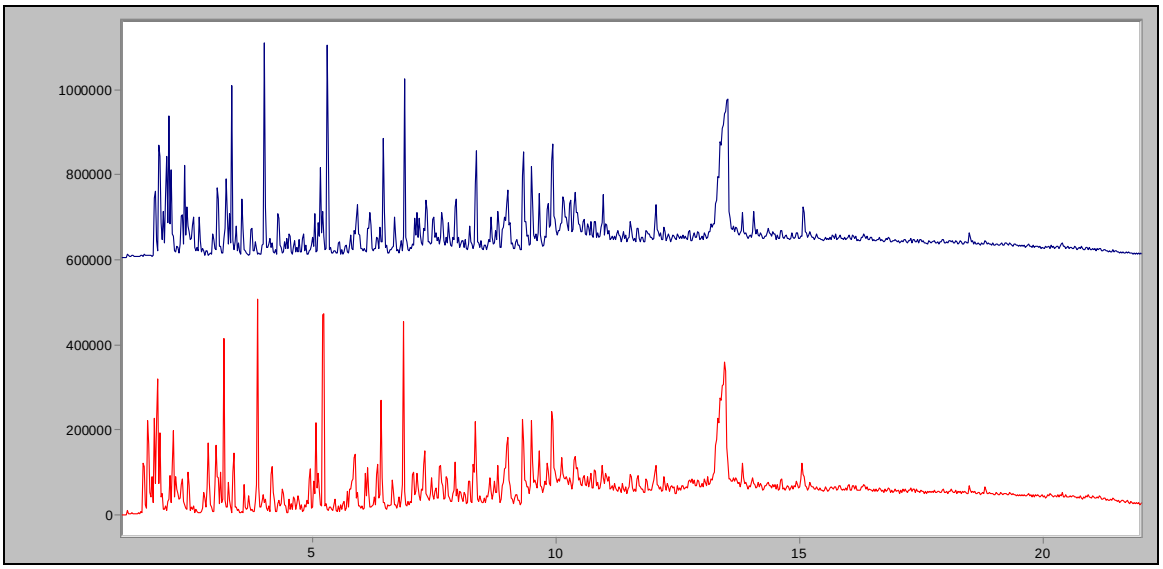

Figure 1825: From top to bottom: Unknown 02 Run 1 and Unknown 02 Run 2 ink on paper sample pyrograms.

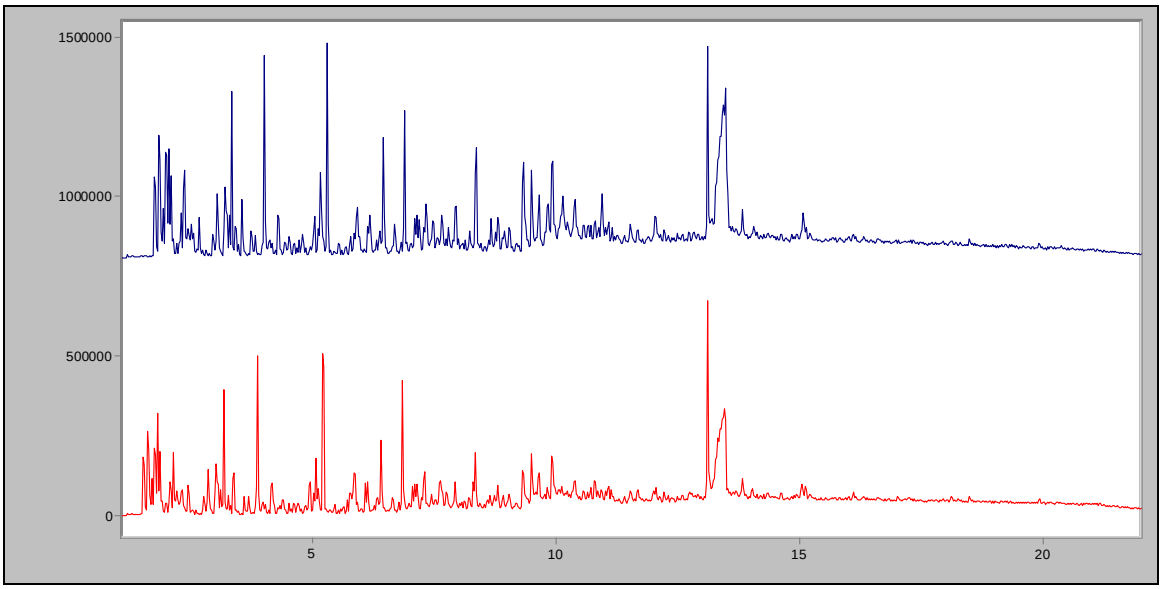

Figure 1826: From top to bottom: Unknown 03 Run 1 and Unknown 03 Run 2 ink on paper sample pyrograms.

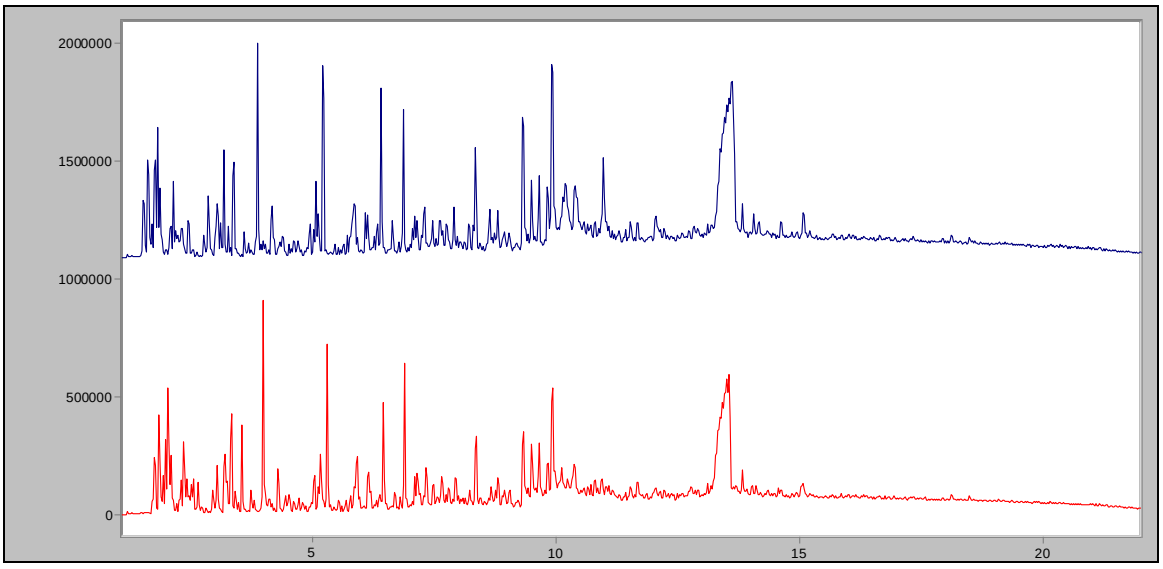

Figure 1827: From top to bottom: Unknown 04 Run 1 and Unknown 04 Run 2 ink on paper sample pyrograms.

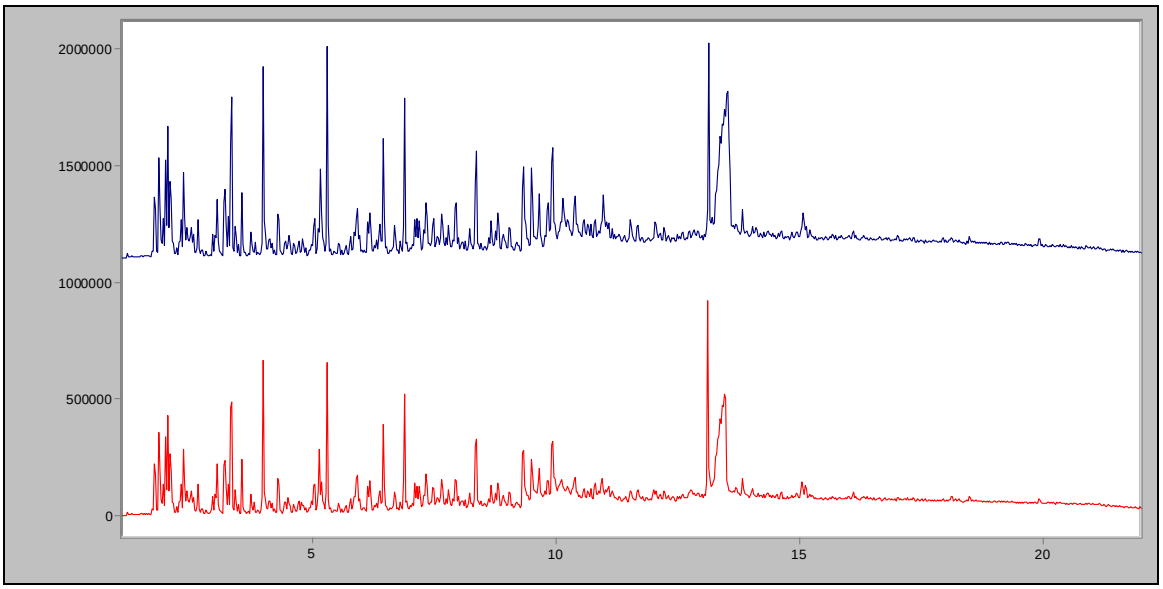

Figure 1828: From top to bottom: Unknown 05 Run 1 and Unknown 05 Run 2 ink on paper sample pyrograms.

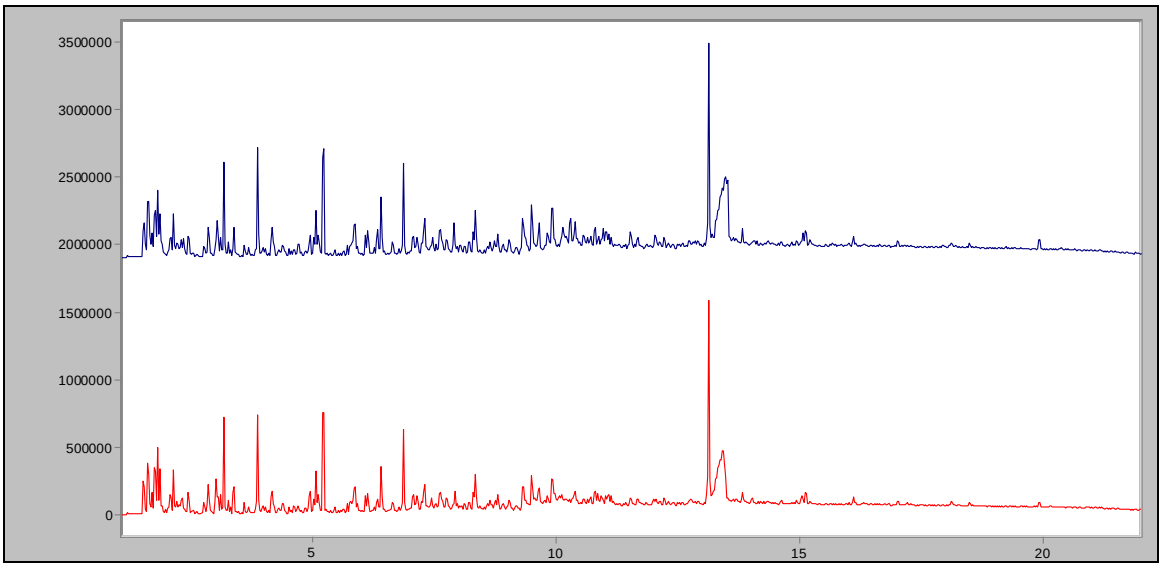

Figure 1829: From top to bottom: Unknown 06 Run 1 and Unknown 06 Run 2 ink on paper sample pyrograms.

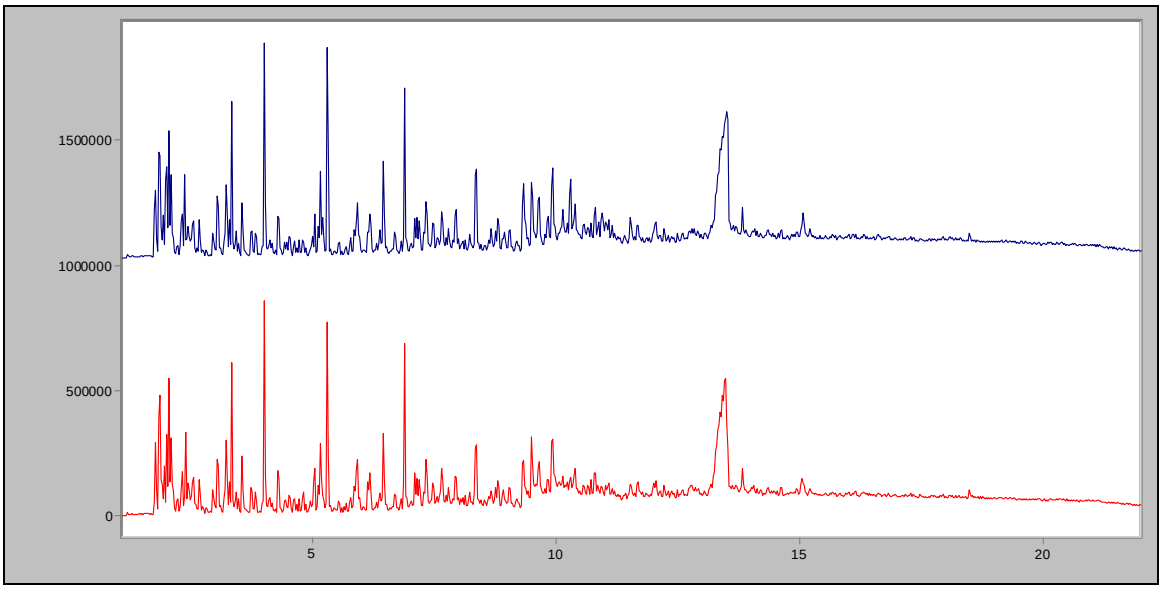

Figure 1830: From top to bottom: Unknown 07 Run 1 and Unknown 07 Run 2 ink on paper sample pyrograms.

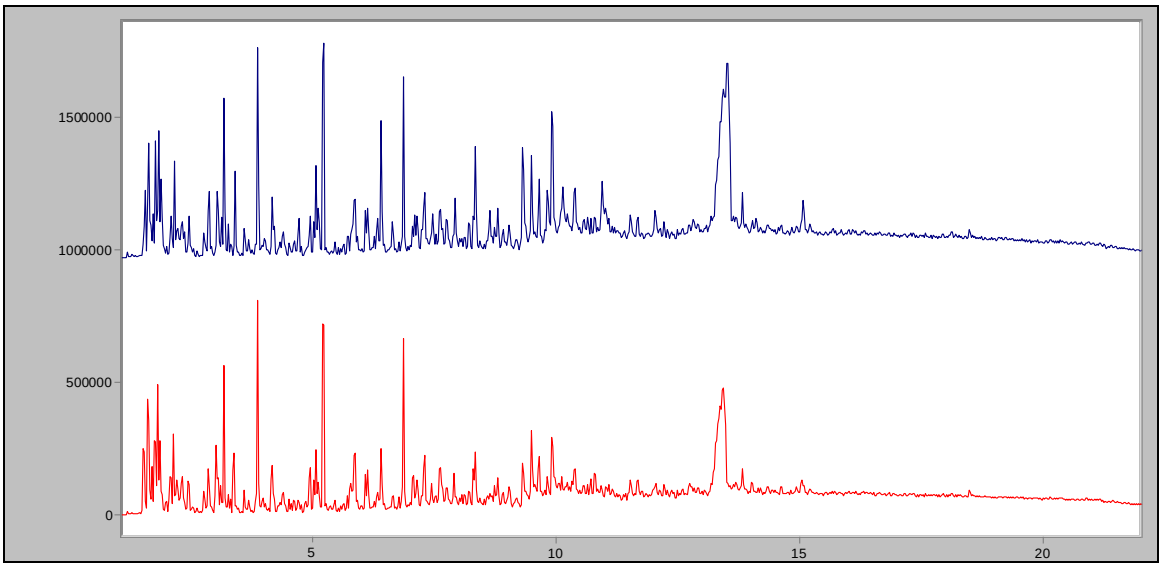

Figure 1831: From top to bottom: Unknown 08 Run 1 and Unknown 08 Run 2 ink on paper sample pyrograms.

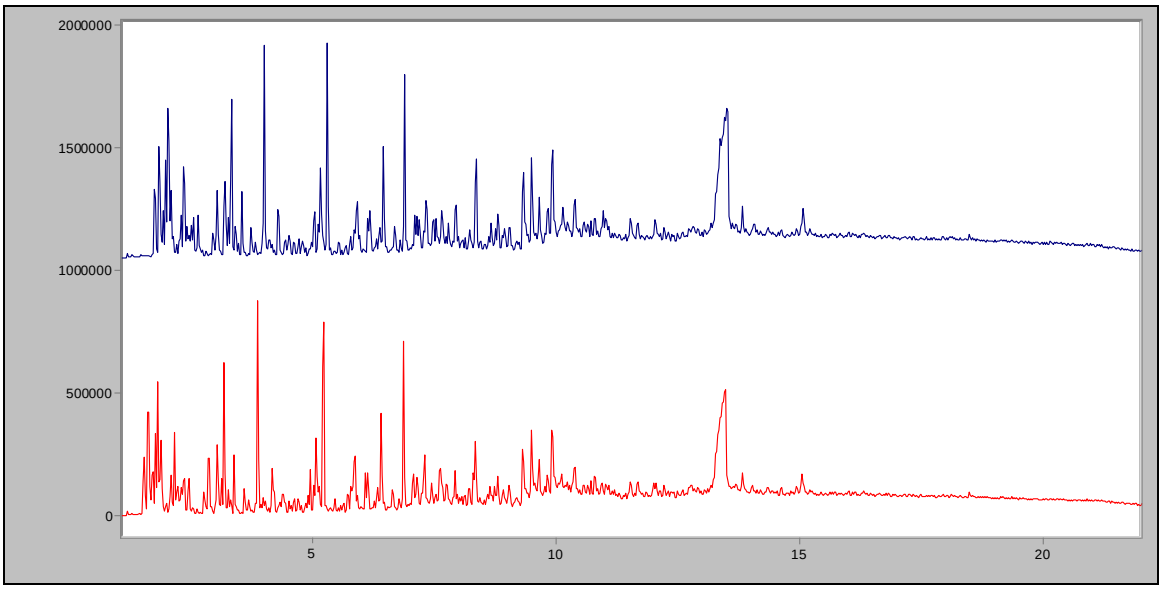

Figure 1832: From top to bottom: Unknown 09 Run 1 and Unknown 09 Run 2 ink on paper sample pyrograms.

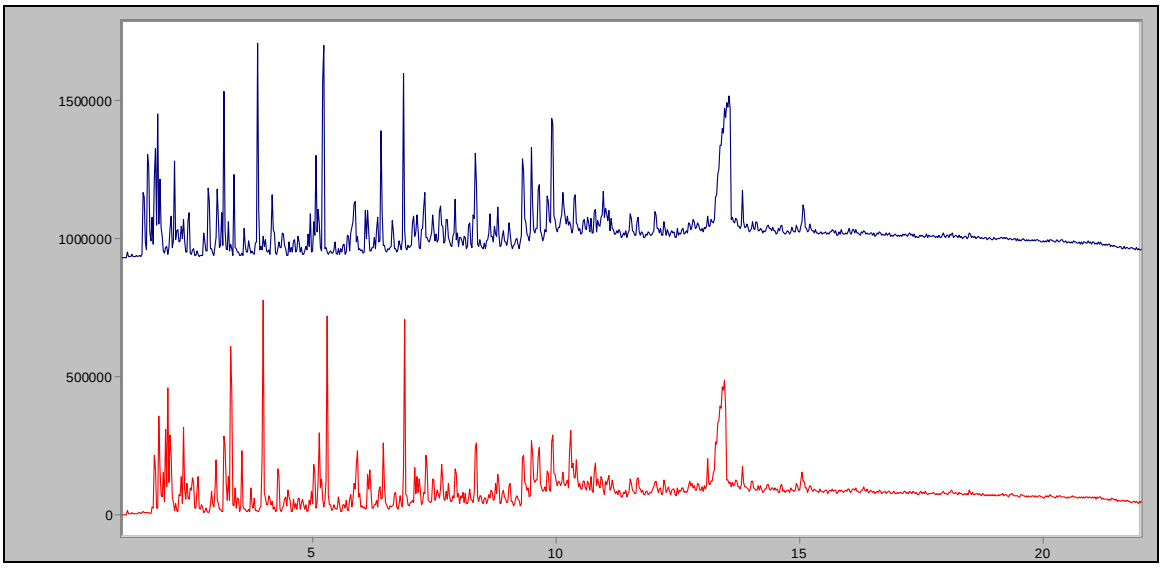

Figure 1833: From top to bottom: Unknown 10 Run 1 and Unknown 10 Run 2 ink on paper sample pyrograms.

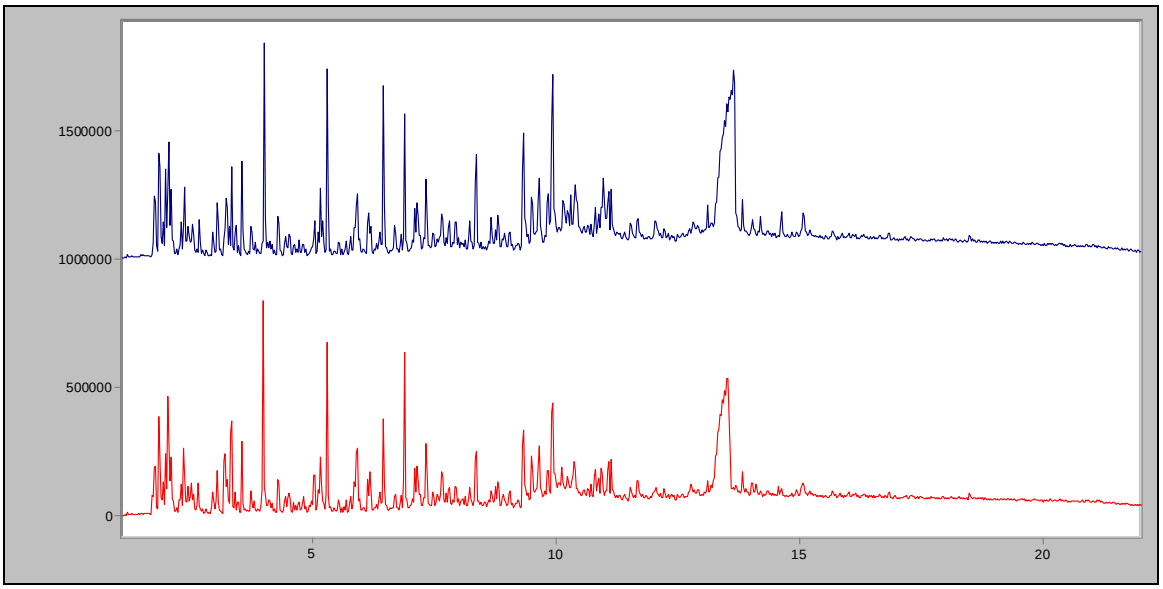

Figure 1834: From top to bottom: Unknown 11 Run 1 and Unknown 11 Run 2 ink on paper sample pyrograms.

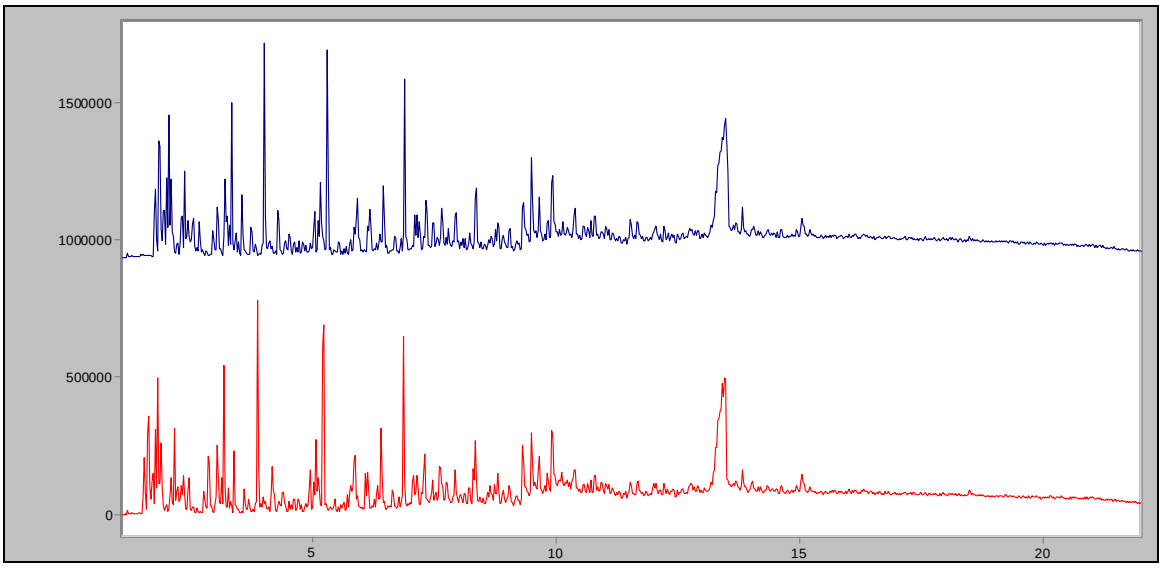

Figure 1835: From top to bottom: Unknown 12 Run 1 and Unknown 12 Run 2 ink on paper sample pyrograms.

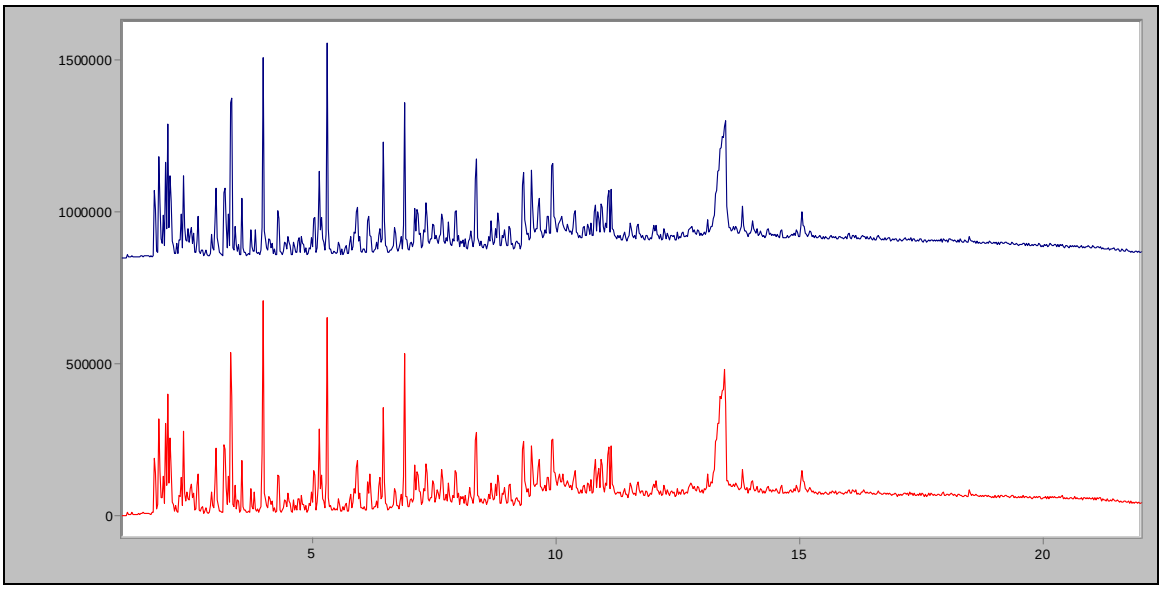

Figure 1836: From top to bottom: Unknown 13 Run 2 and Unknown 13 Run 3 ink on paper sample pyrograms.

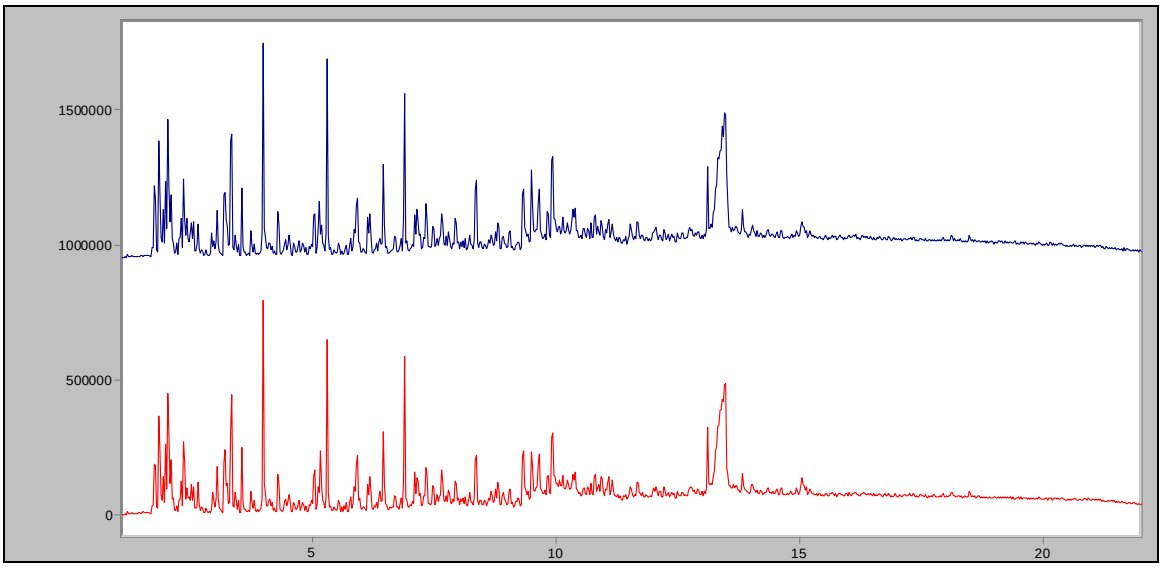

Figure 1837: From top to bottom: Unknown 14 Run 1 and Unknown 14 Run 2 ink on paper sample pyrograms.

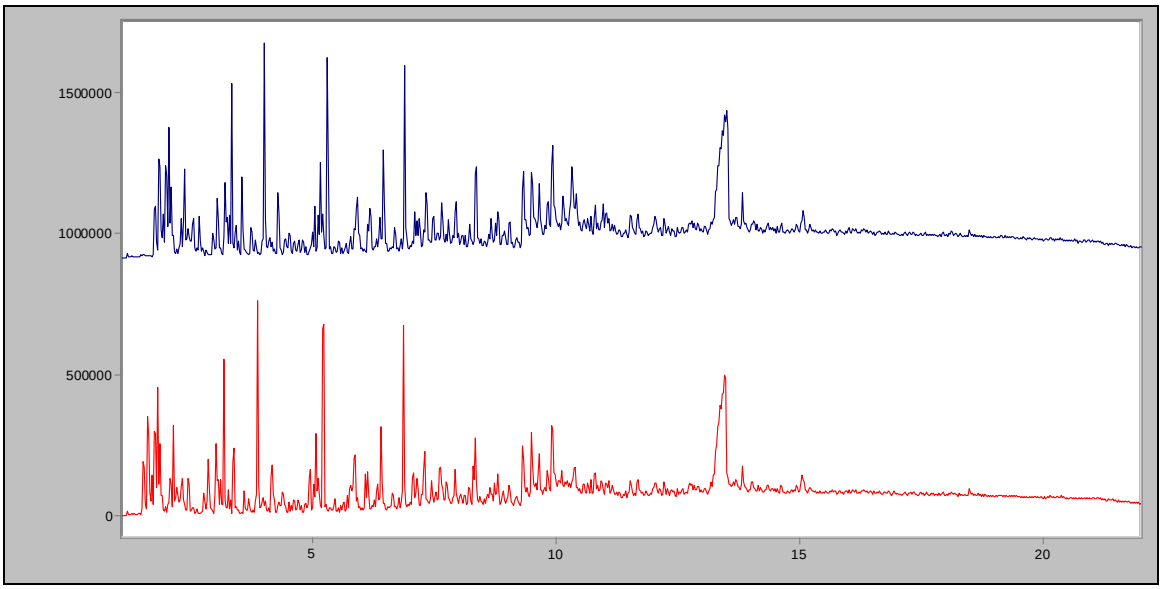

Figure 1838: From top to bottom: Unknown 15 Run 1 and Unknown 15 Run 2 ink on paper sample pyrograms.

ATR Data – Blind Study

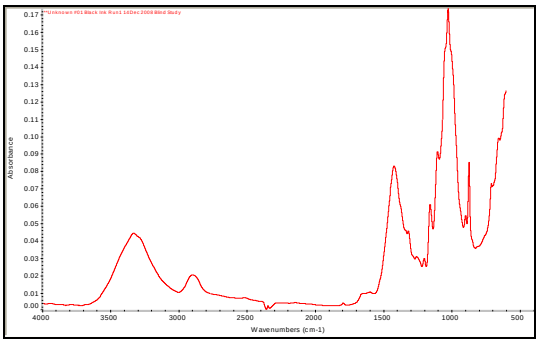

Figure 1839: ATR spectrum of Unknown 01 Run 1 collected December 14th, 2008

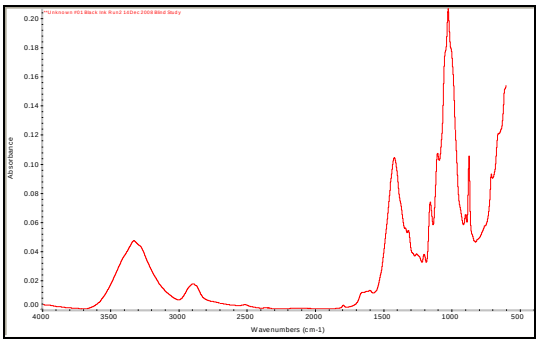

Figure 1840: ATR spectrum of Unknown 01 Run 2 collected December 14th, 2008

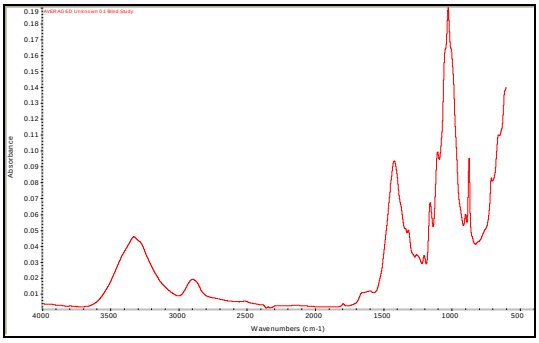

Figure 1841: ATR spectrum of Unknown 01 AVERAGE

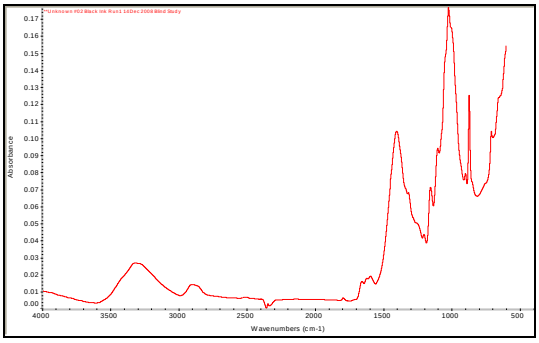

Figure 1842: ATR spectrum of Unknown 02 Run 1 collected December 14th, 2008

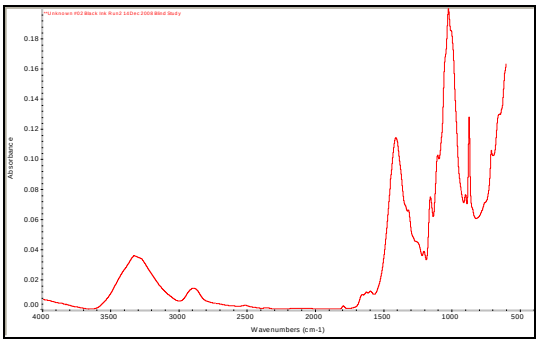

Figure 1843: ATR spectrum of Unknown 02 Run 2 collected December 14th, 2008

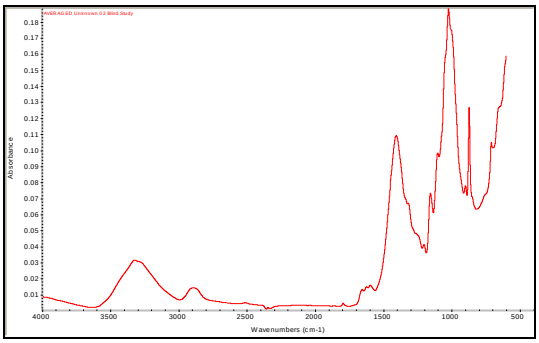

Figure 1844: ATR spectrum of Unknown 02 AVERAGE

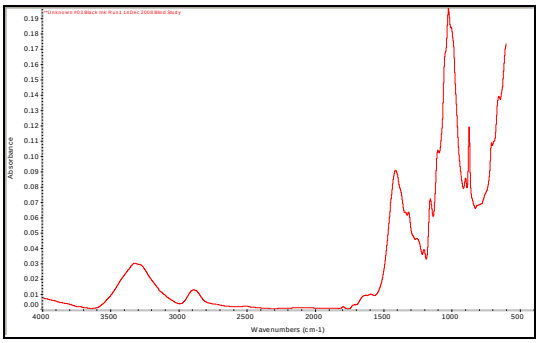

Figure 1845: ATR spectrum of Unknown 03 Run 1 collected December 14th, 2008

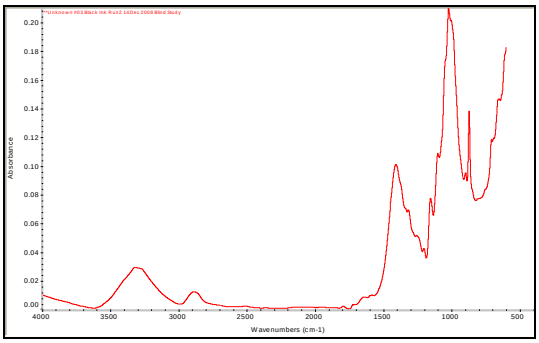

Figure 1846: ATR spectrum of Unknown 03 Run 2 collected December 14th, 2008

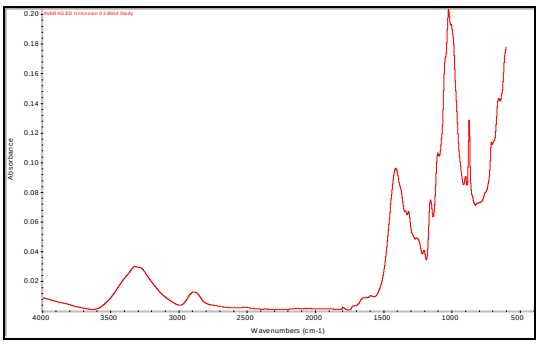

Figure 1847: ATR spectrum of Unknown 03 AVERAGE

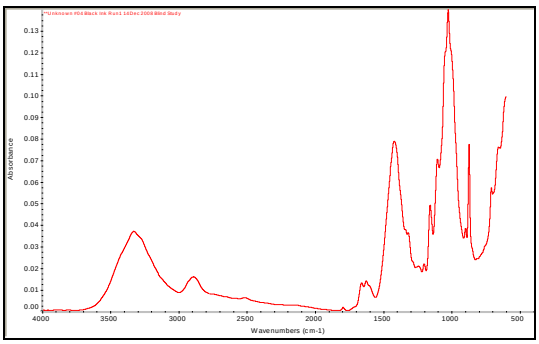

Figure 1848: ATR spectrum of Unknown 04 Run 1 collected December 14th, 2008

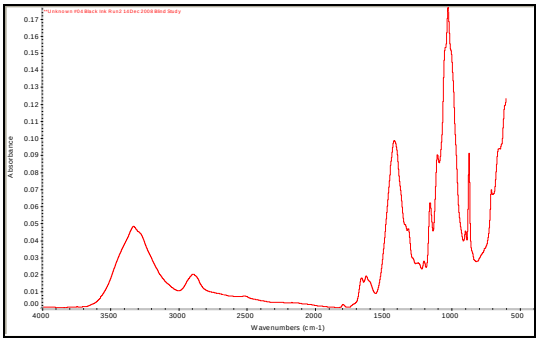

Figure 1849: ATR spectrum of Unknown 04 Run 2 collected December 14th, 2008

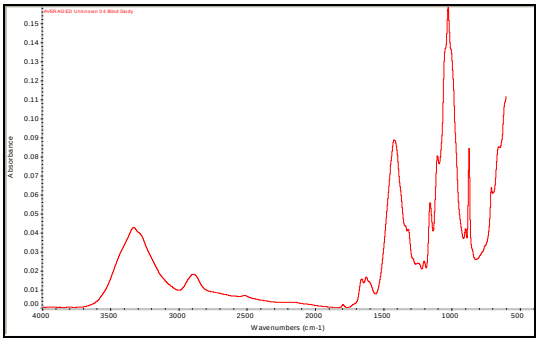

Figure 1850: ATR spectrum of Unknown 04 AVERAGE

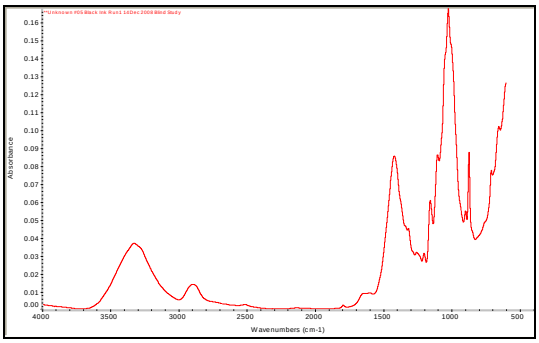

Figure 1851: ATR spectrum of Unknown 05 Run 1 collected December 14th, 2008

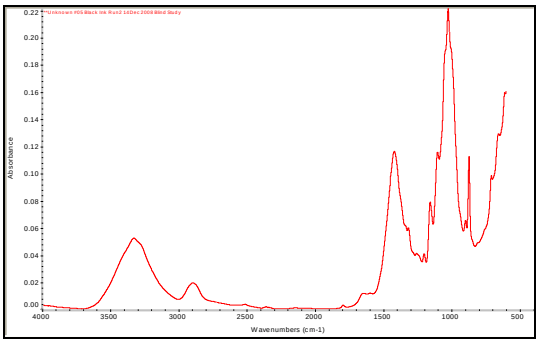

Figure 1852: ATR spectrum of Unknown 05 Run 2 collected December 14th, 2008

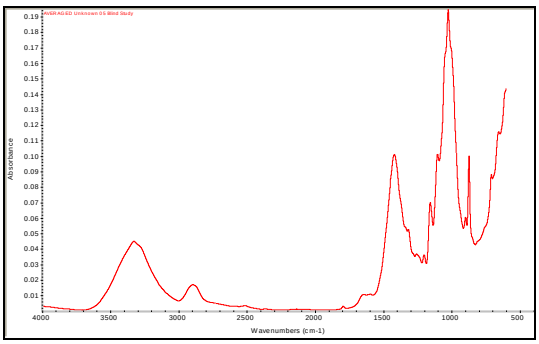

Figure 1853: ATR spectrum of Unknown 05 AVERAGE

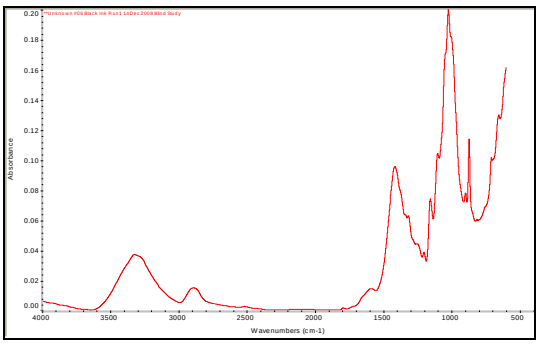

Figure 1854: ATR spectrum of Unknown 06 Run 1 collected December 14th, 2008

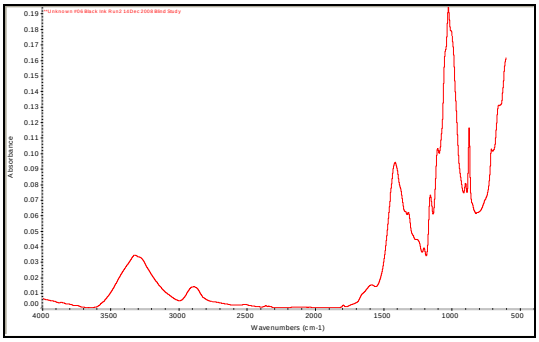

Figure 1855: ATR spectrum of Unknown 06 Run 2 collected December 14th, 2008

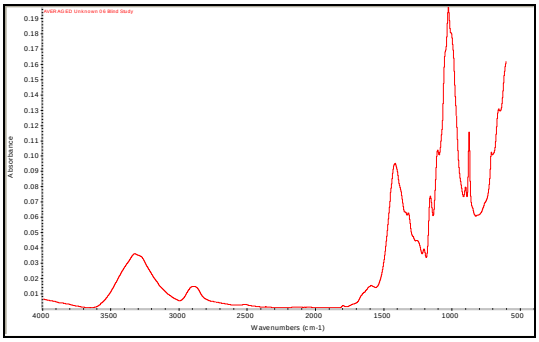

Figure 1856: ATR spectrum of Unknown 06 AVERAGE

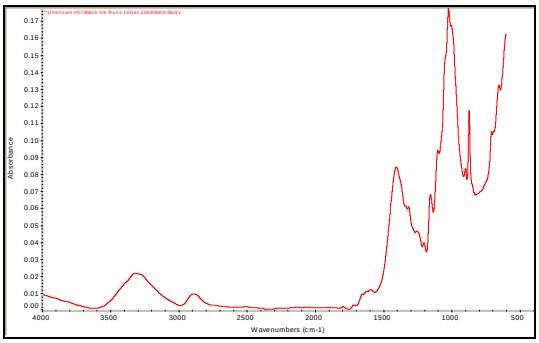

Figure 1857: ATR spectrum of Unknown 07 Run 1 collected December 14th, 2008

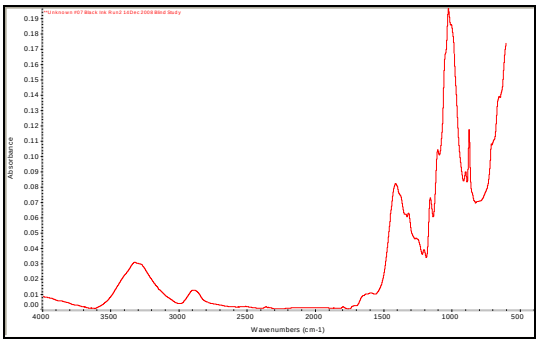

Figure 1858: ATR spectrum of Unknown 07 Run 2 collected December 14th, 2008

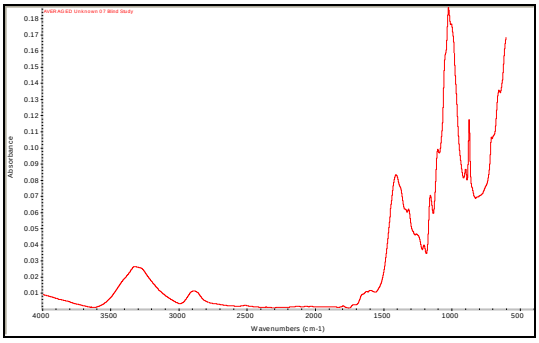

Figure 1859: ATR spectrum of Unknown 07 AVERAGE

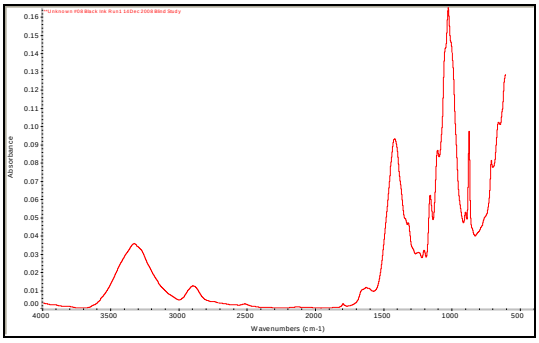

Figure 1860: ATR spectrum of Unknown 08 Run 1 collected December 14th, 2008

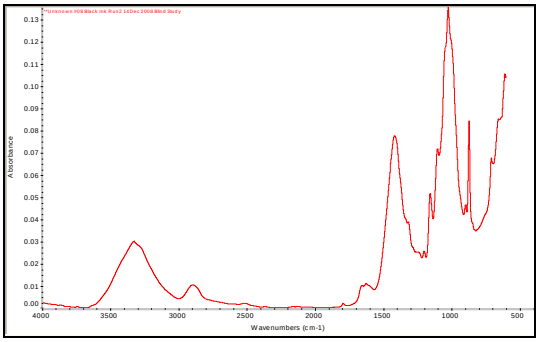

Figure 1861: ATR spectrum of Unknown 08 Run 2 collected December 14th, 2008

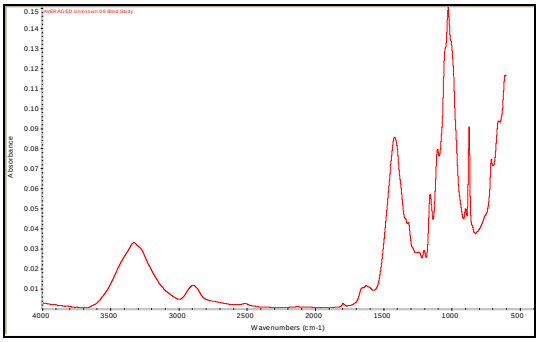

Figure 1862: ATR spectrum of Unknown 08 AVERAGE

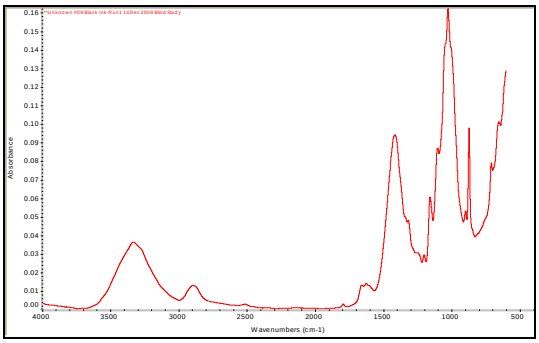

Figure 1863: ATR spectrum of Unknown 09 Run 1 collected December 14th, 2008

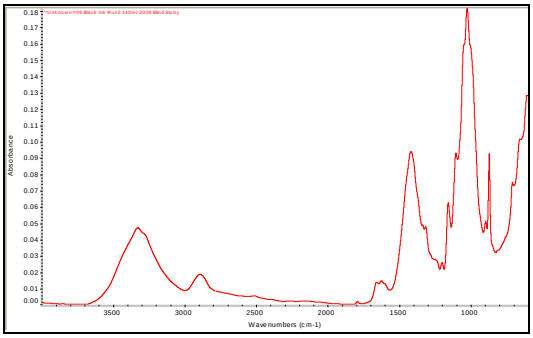

Figure 1864: ATR spectrum of Unknown 09 Run 2 collected December 14th, 2008

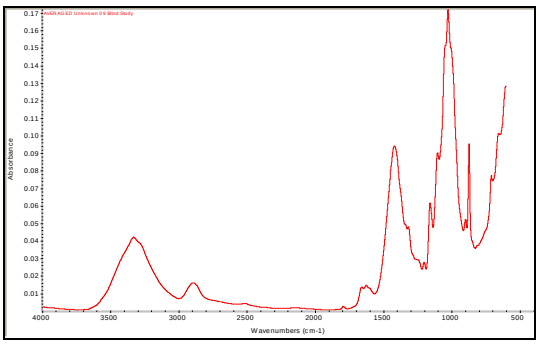

Figure 1865: ATR spectrum of Unknown 09 AVERAGE

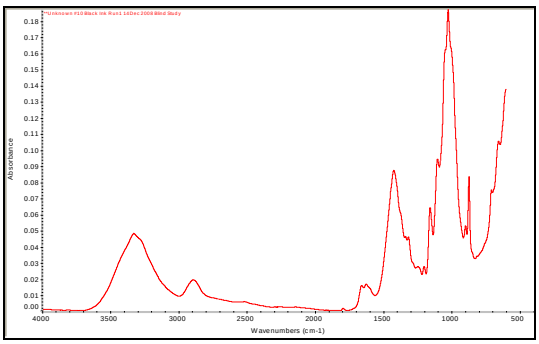

Figure 1866: ATR spectrum of Unknown 10 Run 1 collected December 14th, 2008

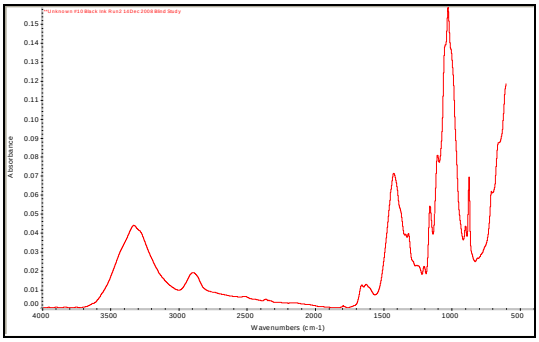

Figure 1867: ATR spectrum of Unknown 10 Run 2 collected December 14th, 2008

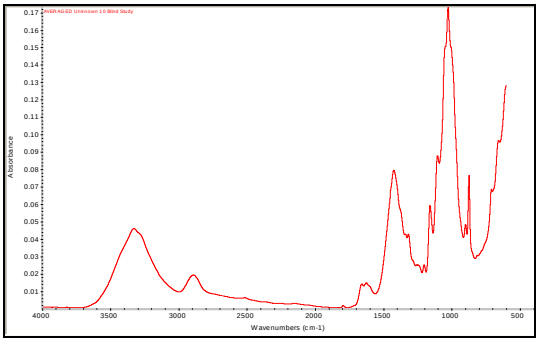

Figure 1868: ATR spectrum of Unknown 10 AVERAGE

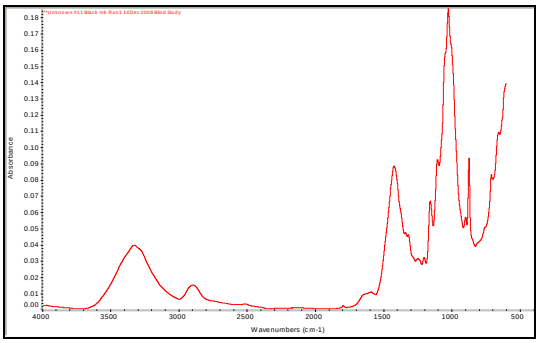

Figure 1869: ATR spectrum of Unknown 11 Run 1 collected December 14th, 2008

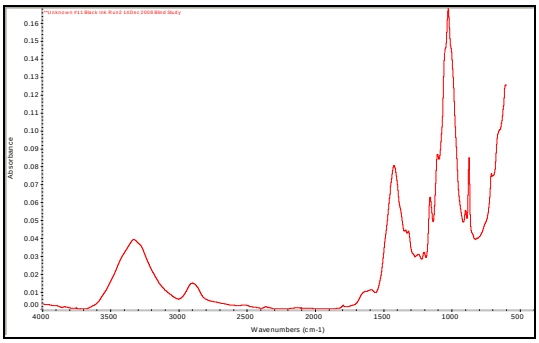

Figure 1870: ATR spectrum of Unknown 11 Run 2 collected December 14th, 2008

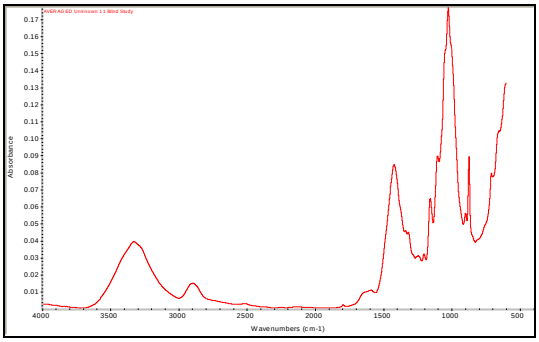

Figure 1871: ATR spectrum of Unknown 11 AVERAGE

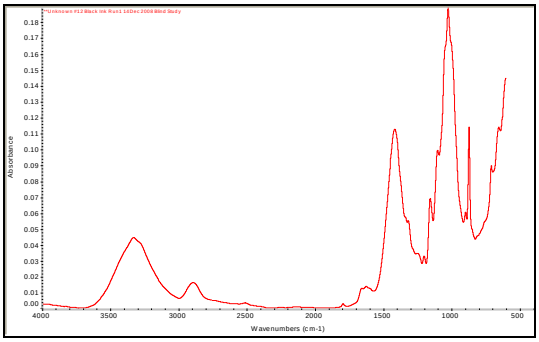

Figure 1872: ATR spectrum of Unknown 12 Run 1 collected December 14th, 2008

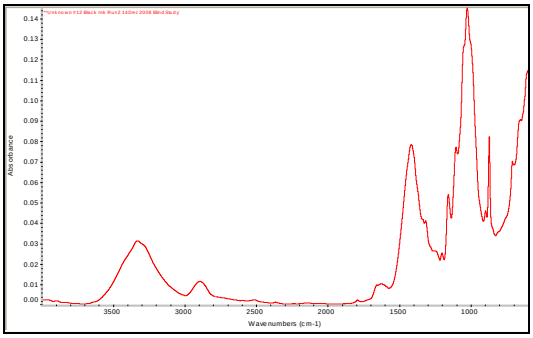

Figure 1873: ATR spectrum of Unknown 12 Run 2 collected December 14th, 2008

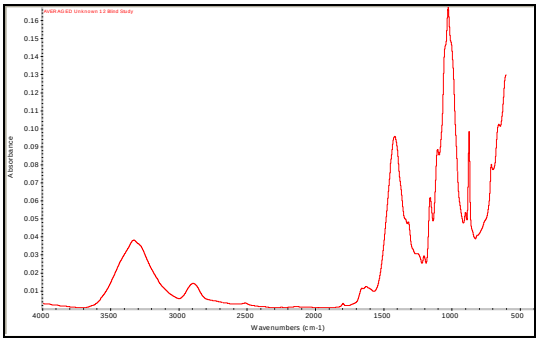

Figure 1874: ATR spectrum of Unknown 12 AVERAGE

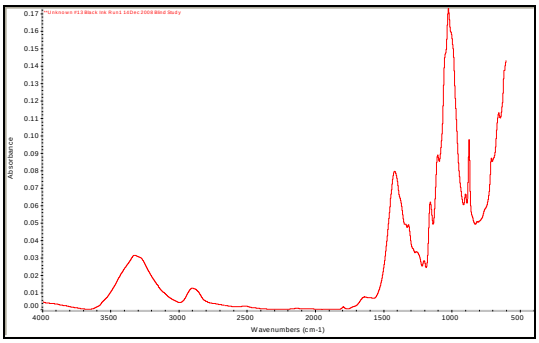

Figure 1875: ATR spectrum of Unknown 13 Run 1 collected December 14th, 2008

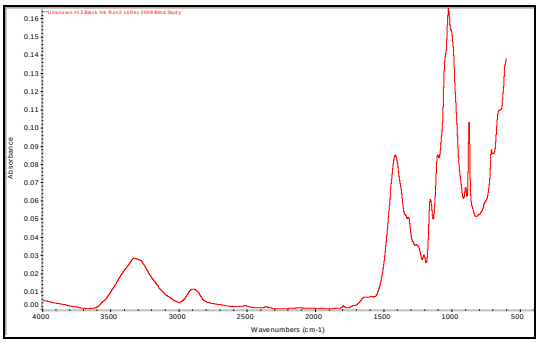

Figure 1876: ATR spectrum of Unknown 13 Run 2 collected December 14th, 2008

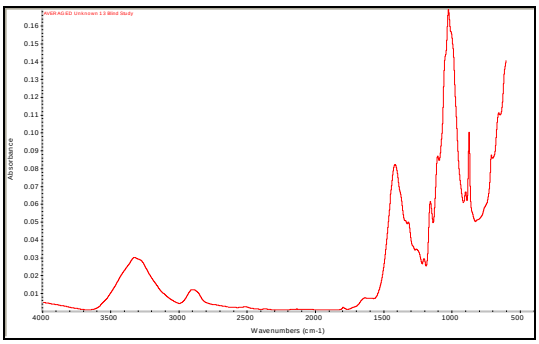

Figure 1877: ATR spectrum of Unknown 13 AVERAGE

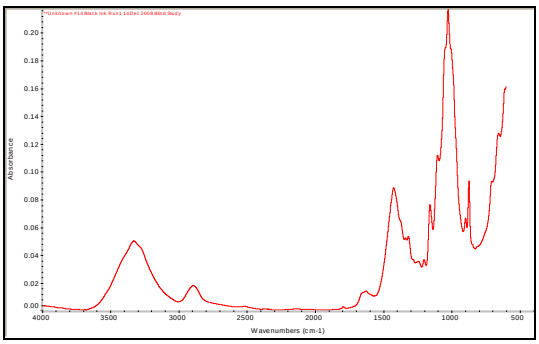

Figure 1878: ATR spectrum of Unknown 14 Run 1 collected December 14th, 2008

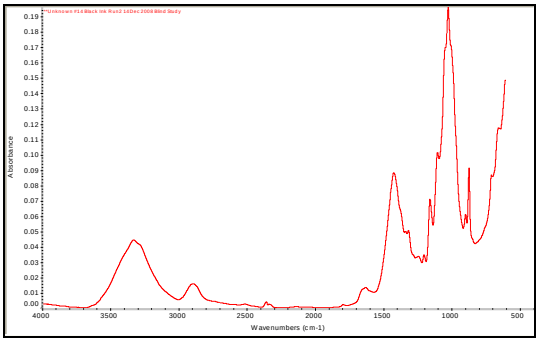

Figure 1879: ATR spectrum of Unknown 14 Run 2 collected December 14th, 2008

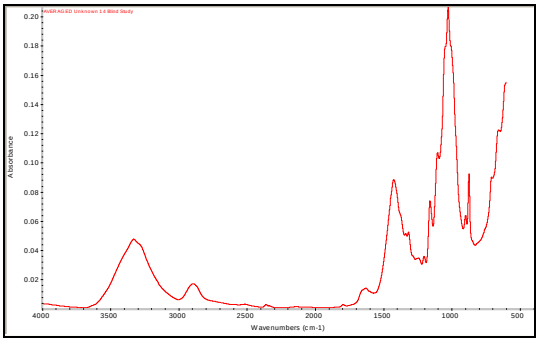

Figure 1880: ATR spectrum of Unknown 14 AVERAGE

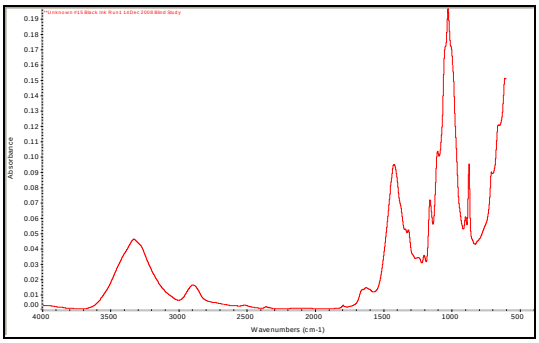

Figure 1881: ATR spectrum of Unknown 15 Run 1 collected December 14th, 2008

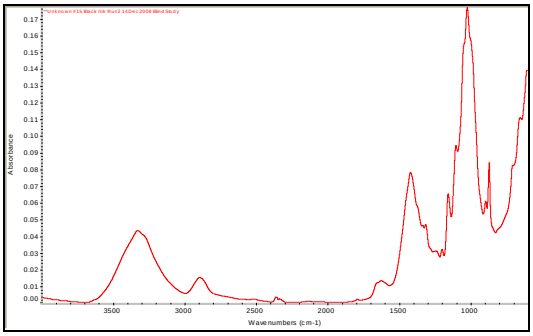

Figure 1882: ATR spectrum of Unknown 15 Run 2 collected December 14th, 2008

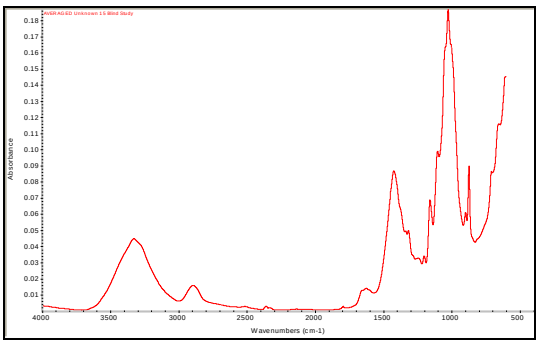

Figure 1883: ATR spectrum of Unknown 15 AVERAGE

APPENDIX H:

OMNIC Library Results – ATR FT-IR Data

ATR Library Results – OMNIC

Okidata 04 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #4 Okidata Black Inkjet Ink (#52110001) 12Nov2007

Region: 3999.84-651.85

Search type: Correlation

Hit List:

Match	Compound name
75.13	**13 Xerox Ink Only Run2 19July2009
69.76	**156 Epson Ink Only Run4 19July2009
63.22	**13 Xerox Ink Only Run3 19July2009
58.13	**24 Xerox Ink Only Run2 19July2009
52.46	**312 Canon Ink Only Run2 19July2009
51.72	24 Xerox Ink Only AVERAGE
51.44	**156 Epson Ink Only Run5 19July2009
51.04	156 Epson Ink Only AVERAGE
49.54	**312 Canon Ink Only Run3 19July2009
49.26	24 Xerox Ink Only R1R2 AVERAGE
48.81	312 Canon Ink Only AVERAGE
48.21	**156 Epson Ink Only Run2 19July2009
47.93	**312 Canon Ink Only Run1 19July2009
46.17	**24 Xerox Ink Only Run4 19July2009
45.63	**24 Xerox Ink Only Run3 19July2009
42.48	**312 Canon Ink Only Run4 19July2009
38.83	**156 Epson Ink Only Run3 19July2009
38.29	**13 Xerox Ink Only Run4 19July2009
34.26	**156 Epson Ink Only Run1 19July2009
32.09	13 Xerox Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #4 Okidata Black Inkjet Ink (#52110001) 12Nov2007

Region: 3999.84-651.85

Search type: Correlation

Hit List:

Match	Compound name
76.95	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
72.33	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
71.08	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
67.38	156 Epson Ink Only AVERAGE Slide Subtracted
61.00	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
59.58	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
59.02	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
56.25	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
56.06	**24 Xerox Ink Only Run2 19July2009 Slide Subtracted
55.91	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
53.12	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
53.03	312 Canon Ink Only AVERAGE Slide Subtracted
52.66	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
49.94	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
48.30	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
47.04	24 Xerox Ink Only AVERAGE Slide Subtracted
42.74	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
42.59	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
40.19	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
35.06	13 Xerox Ink Only AVERAGE Slide Subtracted

Okidata 04 17Jan2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**#4 Okidata (52110001) Black 20080117
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
22.33	**13 Xerox Ink Only Run2 19July2009
21.86	**24 Xerox Ink Only Run4 19July2009
20.13	**13 Xerox Ink Only Run3 19July2009
19.29	24 Xerox Ink Only AVERAGE
18.73	**24 Xerox Ink Only Run2 19July2009
17.78	24 Xerox Ink Only R1R2 AVERAGE
15.59	**24 Xerox Ink Only Run3 19July2009
14.79	**13 Xerox Ink Only Run4 19July2009
14.77	**24 Xerox Ink Only Run1 19July2009
14.61	**156 Epson Ink Only Run4 19July2009
13.83	13 Xerox Ink Only AVERAGE
13.18	**13 Xerox Ink Only Run5 19July2009
12.23	**492 Canon Ink Only Run2 19July2009
11.78	**13 Xerox Ink Only Run6 19July2009
11.05	**318a Canon Clear Ink Only Run1 19July2009
10.43	**492 Canon Ink Only Run1 19July2009
9.19	**84 Epson Ink Only Run4 19July2009
8.46	156 Epson Ink Only AVERAGE
8.25	**156 Epson Ink Only Run5 19July2009
8.05	**244 Xerox Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**#4 Okidata (52110001) Black 20080117
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
21.35	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
19.60	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
18.47	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
18.10	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
17.33	156 Epson Ink Only AVERAGE Slide Subtracted
16.88	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
15.41	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
14.72	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
14.37	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
14.30	**24 Xerox Ink Only Run2 19July2009 Slide Subtracted
13.25	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
13.04	**318a Canon Clear Ink Only Run1 19July2009 Blank Slide Subtracted
12.51	24 Xerox Ink Only AVERAGE Slide Subtracted
12.25	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
11.66	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
11.53	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
10.92	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
10.47	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
9.65	13 Xerox Ink Only AVERAGE Slide Subtracted
9.60	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted

Okidata 04 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**04 Okidata Black Ink (52110001) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
17.18	**13 Xerox Ink Only Run5 19July2009
17.03	13 Xerox Ink Only AVERAGE
16.39	**13 Xerox Ink Only Run6 19July2009
16.10	**13 Xerox Ink Only Run4 19July2009
12.75	**84 Epson Ink Only Run2 19July2009
11.95	**244 Xerox Ink Only Run4 19July2009
10.69	244 Xerox Ink Only AVERAGE
10.60	**244 Xerox Ink Only Run5 19July2009
10.43	**24 Xerox Ink Only Run1 19July2009
10.12	24 Xerox Ink Only R1R2 AVERAGE
9.93	**13 Xerox Ink Only Run1 19July2009
9.93	24 Xerox Ink Only AVERAGE
9.90	84 Epson Ink Only AVERAGE
9.62	**156 Epson Ink Only Run1 19July2009
9.50	**24 Xerox Ink Only Run2 19July2009
9.47	**84 Epson Ink Only Run5 19July2009
9.41	**201 HP Ink Only Run3 19July2009
9.08	**84 Epson Ink Only Run3 19July2009
9.06	**198 HP Ink Only Run4 19July2009
9.01	**244 Xerox Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**04 Okidata Black Ink (52110001) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
15.08	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
14.31	13 Xerox Ink Only AVERAGE Slide Subtracted
13.77	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
12.91	**244 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
12.90	**84 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
12.57	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
12.41	244 Xerox Ink Only AVERAGE Slide Subtracted
12.08	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
12.01	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
11.50	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
11.50	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
10.00	84 Epson Ink Only AVERAGE Slide Subtracted
9.56	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
8.79	**244 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
8.74	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
8.16	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
8.11	**84 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
8.08	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
7.92	24 Xerox Ink Only AVERAGE Slide Subtracted
7.85	**24 Xerox Ink Only Run2 19July2009 Slide Subtracted

Okidata 04 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**04 Okidata Black Ink (52110001) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
29.19	**04 Okidata Ink Only Black Spot Run3 19July2009
28.39	04 Okidata Ink Only Black Spot AVERAGE
28.13	**04 Okidata Ink Only Black Spot Run1 19July2009
28.01	**04 Okidata Ink Only Black Spot Run2 19July2009
27.12	04 Okidata Ink Only AVERAGE
19.08	**22 Kodak Ink Only Run1 19July2009
18.11	22 Kodak Ink Only AVERAGE
17.79	**22 Kodak Ink Only Run3 19July2009
17.32	**22 Kodak Ink Only Run2 19July2009
16.31	**66 Epson Ink Only Run2 19July2009
16.29	**04 Okidata Ink Only Brown Spot Run5 19July2009
15.89	66 Epson Ink Only AVERAGE
15.78	**66 Epson Ink Only Run1 19July2009
15.50	**66 Epson Ink Only Run3 19July2009
15.40	**04 Okidata Ink Only Brown Spot Run6 19July2009
15.16	**33 Epson Ink Only Brown Spot Run1 19July2009
14.98	**33 Epson Ink Only Brown Spot Run2 19July2009
14.75	33 Epson Ink Only Brown Spot AVERAGE
14.63	**63 Epson Ink Only Purple Spot Run3 19July2009
14.23	63 Epson Ink Only Purple Spot AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**04 Okidata Black Ink (52110001) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
29.23	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
28.45	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
28.19	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
28.08	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
26.70	04 Okidata Ink Only AVERAGE Slide Subtracted
21.25	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
20.34	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
20.04	22 Kodak Ink Only AVERAGE Slide Subtracted
19.47	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
19.35	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
19.21	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
17.43	30 Epson Ink Only AVERAGE Slide Subtracted
17.23	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
16.88	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
16.62	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
16.47	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
16.11	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
15.69	66 Epson Ink Only AVERAGE Slide Subtracted
15.58	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
15.32	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted

Okidata 04 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**04 Okidata Black (52110001) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
36.00	**282 Canon Ink Only Run3 19July2009
35.99	**312 Canon Ink Only Run2 19July2009
35.48	**282 Canon Ink Only Run4 19July2009
34.84	**282 Canon Ink Only Run2 19July2009
34.69	282 Canon Ink Only AVERAGE
34.23	**492 Canon Ink Only Run4 19July2009
34.21	**492 Canon Ink Only Run5 19July2009
33.46	**33 Epson Ink Only Brown Spot Run3 19July2009
33.23	**22 Kodak Ink Only Run3 19July2009
33.15	**13 Xerox Ink Only Run4 19July2009
32.98	**90 Epson Ink Only Run3 19July2009
32.75	33 Epson Ink Only Brown Spot AVERAGE
32.45	**33 Epson Ink Only Brown Spot Run2 19July2009
32.38	**348 Canon Ink Only Run3 19July2009
32.26	**13 Xerox Ink Only Run3 19July2009
32.20	492 Canon Ink Only AVERAGE
32.14	**33 Epson Ink Only Brown Spot Run1 19July2009
32.02	**312 Canon Ink Only Run3 19July2009
31.61	**348 Canon Ink Only Run2 19July2009
31.58	**312 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**04 Okidata Black (52110001) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
36.42	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
36.34	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
35.85	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
35.40	282 Canon Ink Only AVERAGE Slide Subtracted
35.24	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
34.83	312 Canon Ink Only AVERAGE Slide Subtracted
34.43	**492 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
34.38	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
34.29	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
33.56	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
33.23	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
33.21	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
33.03	13 Xerox Ink Only AVERAGE Slide Subtracted
32.86	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
32.75	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
32.57	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
32.36	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
32.32	492 Canon Ink Only AVERAGE Slide Subtracted
32.27	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
32.23	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted

Okidata 04 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**04 Okidata Black Ink (52110001) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
34.52	**04 Okidata Ink Only Black Spot Run2 19July2009
34.28	**04 Okidata Ink Only Black Spot Run1 19July2009
34.20	04 Okidata Ink Only Black Spot AVERAGE
33.87	04 Okidata Ink Only AVERAGE
33.23	**04 Okidata Ink Only Black Spot Run3 19July2009
28.62	**66 Epson Ink Only Run1 19July2009
28.38	**33 Epson Ink Only Brown Spot Run1 19July2009
28.30	**66 Epson Ink Only Run2 19July2009
28.22	66 Epson Ink Only AVERAGE
27.95	**33 Epson Ink Only Brown Spot Run2 19July2009
27.82	33 Epson Ink Only Brown Spot AVERAGE
27.61	**66 Epson Ink Only Run3 19July2009
27.22	**33 Epson Ink Only Brown Spot Run3 19July2009
27.04	**244 Xerox Ink Only Run4 19July2009
26.86	**244 Xerox Ink Only Run5 19July2009
26.42	244 Xerox Ink Only AVERAGE
26.40	**120 Epson Ink Only Run3 19July2009
26.27	120 Epson Ink Only AVERAGE
26.18	**120 Epson Ink Only Run1 19July2009
26.13	**120 Epson Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**04 Okidata Black Ink (52110001) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
35.01	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
34.86	04 Okidata Ink Only AVERAGE Slide Subtracted
34.74	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
34.62	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
33.48	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
32.19	30 Epson Ink Only AVERAGE Slide Subtracted
32.05	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
32.05	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
32.03	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
31.73	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
28.52	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
27.97	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
27.96	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
27.90	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
27.77	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
27.61	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
27.47	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
27.40	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
27.36	384 Canon Ink Only AVERAGE Slide Subtracted
27.35	66 Epson Ink Only AVERAGE Slide Subtracted

Okidata 04 17Jan2008 Run 2

Neat Ink Library

Spectrum: Subtraction Result:**#4 Okidata (52110001) Black Run2 20080117
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
48.49	**13 Xerox Ink Only Run2 19July2009
40.25	**156 Epson Ink Only Run4 19July2009
37.74	**13 Xerox Ink Only Run3 19July2009
36.72	**24 Xerox Ink Only Run2 19July2009
32.73	24 Xerox Ink Only AVERAGE
31.51	24 Xerox Ink Only R1R2 AVERAGE
30.07	**156 Epson Ink Only Run5 19July2009
29.03	156 Epson Ink Only AVERAGE
28.58	**24 Xerox Ink Only Run4 19July2009
28.45	**312 Canon Ink Only Run1 19July2009
28.21	**312 Canon Ink Only Run2 19July2009
27.99	312 Canon Ink Only AVERAGE
27.78	**156 Epson Ink Only Run2 19July2009
27.74	**24 Xerox Ink Only Run3 19July2009
26.61	**312 Canon Ink Only Run3 19July2009
25.17	**312 Canon Ink Only Run4 19July2009
21.73	**13 Xerox Ink Only Run4 19July2009
21.59	**156 Epson Ink Only Run3 19July2009
20.05	**24 Xerox Ink Only Run1 19July2009
17.63	**04 Okidata Ink Only Black Spot Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**#4 Okidata (52110001) Black Run2 20080117
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
45.25	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
44.93	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
43.45	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
39.22	156 Epson Ink Only AVERAGE Slide Subtracted
36.03	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
34.89	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
34.63	**24 Xerox Ink Only Run2 19July2009 Slide Subtracted
34.21	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
33.82	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
33.44	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
30.77	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
29.44	312 Canon Ink Only AVERAGE Slide Subtracted
29.16	24 Xerox Ink Only AVERAGE Slide Subtracted
28.75	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
28.61	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
28.51	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
25.36	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
25.29	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
22.35	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
21.10	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted

Okidata 04 11July2008 Run 2

Neat Ink Library

Spectrum: Subtraction Result:**04 Okidata Black Ink (52110001) Run2 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
42.14	**04 Okidata Ink Only Black Spot Run1 19July2009
42.12	04 Okidata Ink Only Black Spot AVERAGE
42.02	**04 Okidata Ink Only Black Spot Run2 19July2009
41.87	**04 Okidata Ink Only Black Spot Run3 19July2009
40.80	04 Okidata Ink Only AVERAGE
30.41	**30 Epson Ink Only Run4 19July2009
29.30	**30 Epson Ink Only Run3 19July2009
29.08	**384 Canon Ink Only Run1 19July2009
29.02	**223 Canon Ink Only Run3 19July2009
28.70	**384 Canon Ink Only Run2 19July2009
28.41	384 Canon Ink Only AVERAGE
28.20	**33 Epson Ink Only Brown Spot Run3 19July2009
28.17	**22 Kodak Ink Only Run3 19July2009
28.15	**33 Epson Ink Only Brown Spot Run1 19July2009
28.15	33 Epson Ink Only Brown Spot AVERAGE
28.12	**217 Canon Ink Only Run1 19July2009
28.05	**33 Epson Ink Only Brown Spot Run2 19July2009
28.00	30 Epson Ink Only AVERAGE
27.88	**282 Canon Ink Only Run2 19July2009
27.85	**282 Canon Ink Only Run4 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**04 Okidata Black Ink (52110001) Run2 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
42.43	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
42.39	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
42.33	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
42.03	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
41.14	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
41.06	04 Okidata Ink Only AVERAGE Slide Subtracted
40.43	30 Epson Ink Only AVERAGE Slide Subtracted
40.19	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
39.75	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
39.41	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
34.16	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
34.01	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
33.81	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
33.48	384 Canon Ink Only AVERAGE Slide Subtracted
33.45	282 Canon Ink Only AVERAGE Slide Subtracted
33.32	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
33.17	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
32.58	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
32.39	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
32.34	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted

Okidata 04 28Nov2008 Run 2

Neat Ink Library

Spectrum: Subtraction Result:**04 Okidata Black (52110001) Run2 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
45.44	04 Okidata Ink Only AVERAGE
45.28	**04 Okidata Ink Only Black Spot Run2 19July2009
44.92	**04 Okidata Ink Only Black Spot Run1 19July2009
44.77	04 Okidata Ink Only Black Spot AVERAGE
43.28	**04 Okidata Ink Only Black Spot Run3 19July2009
35.35	**04 Okidata Ink Only Brown Spot Run4 19July2009
35.26	**33 Epson Ink Only Brown Spot Run2 19July2009
35.20	**33 Epson Ink Only Brown Spot Run3 19July2009
35.19	33 Epson Ink Only Brown Spot AVERAGE
35.01	**33 Epson Ink Only Brown Spot Run1 19July2009
34.86	**282 Canon Ink Only Run3 19July2009
34.71	**282 Canon Ink Only Run4 19July2009
34.41	**217 Canon Ink Only Run2 19July2009
34.36	**282 Canon Ink Only Run2 19July2009
34.22	217 Canon Ink Only AVERAGE
34.22	**217 Canon Ink Only Run1 19July2009
34.00	**63 Epson Ink Only Green Spot Run1 19July2009
34.00	**217 Canon Ink Only Run3 19July2009
33.88	**30 Epson Ink Only Run4 19July2009
33.81	**04 Okidata Ink Only Brown Spot Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**04 Okidata Black (52110001) Run2 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
46.45	04 Okidata Ink Only AVERAGE Slide Subtracted
45.37	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
45.02	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
44.86	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
43.34	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
41.53	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
41.12	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
40.56	30 Epson Ink Only AVERAGE Slide Subtracted
39.11	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
39.11	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
38.96	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
38.88	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
38.49	282 Canon Ink Only AVERAGE Slide Subtracted
38.32	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
36.94	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
36.09	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
35.75	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
35.73	217 Canon Ink Only AVERAGE Slide Subtracted
35.60	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
35.14	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted

Okidata 04 14Dec2008 Run 2

Neat Ink Library

Spectrum: Subtraction Result:**04 Okidata Black Ink (52110001) Run2 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
27.21	**04 Okidata Ink Only Brown Spot Run4 19July2009
24.21	**04 Okidata Ink Only Brown Spot Run3 19July2009
22.02	04 Okidata Ink Only AVERAGE
21.95	**04 Okidata Ink Only Black Spot Run3 19July2009
21.68	**04 Okidata Ink Only Black Spot Run2 19July2009
21.66	04 Okidata Ink Only Black Spot AVERAGE
21.34	**04 Okidata Ink Only Black Spot Run1 19July2009
19.28	**04 Okidata Ink Only Brown Spot Run2 19July2009
16.96	**04 Okidata Ink Only Brown Spot Run1 19July2009
15.48	**33 Epson Ink Only Brown Spot Run1 19July2009
15.38	**66 Epson Ink Only Run1 19July2009
15.29	33 Epson Ink Only Brown Spot AVERAGE
15.24	**33 Epson Ink Only Brown Spot Run2 19July2009
15.23	**63 Epson Ink Only Green Spot Run1 19July2009
15.18	66 Epson Ink Only AVERAGE
15.17	**33 Epson Ink Only Brown Spot Run3 19July2009
15.16	**120 Epson Ink Only Run1 19July2009
15.14	**120 Epson Ink Only Run3 19July2009
15.07	**66 Epson Ink Only Run3 19July2009
15.03	120 Epson Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**04 Okidata Black Ink (52110001) Run2 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
28.38	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
25.80	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
23.30	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
23.11	04 Okidata Ink Only AVERAGE Slide Subtracted
21.98	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
21.72	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
21.70	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
21.39	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
18.05	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
16.91	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
16.38	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
15.73	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
15.63	30 Epson Ink Only AVERAGE Slide Subtracted
15.41	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
15.24	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
15.23	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
15.21	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
15.20	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
15.19	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
15.12	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted

Okidata 04 12Nov2007 Run 3

Neat Ink Library

Spectrum: Subtraction Result:**Sample #4 Okidata Black Inkjet Ink (#52110001) Run3 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
29.10	**04 Okidata Ink Only Brown Spot Run4 19July2009
25.37	**04 Okidata Ink Only Brown Spot Run3 19July2009
20.07	**04 Okidata Ink Only Brown Spot Run2 19July2009
13.99	**04 Okidata Ink Only Brown Spot Run1 19July2009
9.81	04 Okidata Ink Only Brown Spot AVERAGE
8.71	**492 Canon Ink Only Run2 19July2009
8.24	**492 Canon Ink Only Run1 19July2009
8.15	492 Canon Ink Only AVERAGE
7.90	**492 Canon Ink Only Run3 19July2009
7.47	**492 Canon Ink Only Run4 19July2009
7.24	**492 Canon Ink Only Run5 19July2009
6.91	**318a Canon Clear Ink Only Run1 19July2009
5.82	04 Okidata Ink Only AVERAGE
5.78	**312 Canon Ink Only Run3 19July2009
5.67	**205 HP Ink Only Run3 19July2009
5.62	**205 HP Ink Only Run2 19July2009
5.61	**156 Epson Ink Only Run1 19July2009
5.57	205 HP Ink Only AVERAGE
5.42	**205 HP Ink Only Run4 19July2009
5.31	**312 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #4 Okidata Black Inkjet Ink (#52110001) Run3 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
30.12	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
26.72	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
22.50	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
15.11	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
13.97	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
8.85	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
8.80	**318a Canon Clear Ink Only Run1 19July2009 Blank Slide Subtracted
8.71	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
8.69	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
8.24	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
8.15	492 Canon Ink Only AVERAGE Slide Subtracted
7.91	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
7.79	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
7.49	**492 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
7.35	156 Epson Ink Only AVERAGE Slide Subtracted
7.33	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
7.26	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
7.18	04 Okidata Ink Only AVERAGE Slide Subtracted
6.94	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
6.49	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted

Okidata 04 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Okidata 04
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
43.47	04 Okidata Ink Only AVERAGE
43.34	**04 Okidata Ink Only Black Spot Run2 19July2009
43.27	04 Okidata Ink Only Black Spot AVERAGE
43.25	**04 Okidata Ink Only Black Spot Run1 19July2009
42.80	**04 Okidata Ink Only Black Spot Run3 19July2009
32.31	**33 Epson Ink Only Brown Spot Run3 19July2009
32.20	33 Epson Ink Only Brown Spot AVERAGE
32.16	**33 Epson Ink Only Brown Spot Run2 19July2009
32.05	**33 Epson Ink Only Brown Spot Run1 19July2009
32.00	**22 Kodak Ink Only Run3 19July2009
31.50	**30 Epson Ink Only Run4 19July2009
30.49	22 Kodak Ink Only AVERAGE
30.31	**30 Epson Ink Only Run3 19July2009
29.83	**22 Kodak Ink Only Run1 19July2009
29.16	**22 Kodak Ink Only Run2 19July2009
29.06	120 Epson Ink Only AVERAGE
29.06	**120 Epson Ink Only Run1 19July2009
29.00	**120 Epson Ink Only Run3 19July2009
29.00	**120 Epson Ink Only Run2 19July2009
28.90	**90 Epson Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Okidata 04
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
44.21	04 Okidata Ink Only AVERAGE Slide Subtracted
43.53	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
43.44	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
43.44	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
42.91	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
40.39	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
38.80	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
38.60	30 Epson Ink Only AVERAGE Slide Subtracted
37.15	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
35.71	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
35.60	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
34.62	22 Kodak Ink Only AVERAGE Slide Subtracted
34.35	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
33.14	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
32.13	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
32.02	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
31.99	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
31.85	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
30.76	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
30.45	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Xerox 13 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #13 Xerox Black Inkjet Ink (8R7994) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
36.43	**13 Xerox Ink Only Run2 19July2009
32.68	**205 HP Ink Only Run2 19July2009
32.52	205 HP Ink Only AVERAGE
32.46	**205 HP Ink Only Run3 19July2009
32.35	**205 HP Ink Only Run4 19July2009
28.89	**223 Canon Ink Only Run3 19July2009
28.21	**318 Canon Ink Only Run1 19July2009
27.57	**217 Canon Ink Only Run3 19July2009
27.57	**318 Canon Ink Only Run2 19July2009
27.51	**327 Canon Ink Only Run1 19July2009
27.49	223 Canon Ink Only AVERAGE
27.46	**327 Canon Ink Only Run2 19July2009
27.43	217 Canon Ink Only AVERAGE
27.40	**217 Canon Ink Only Run2 19July2009
27.37	318 Canon Ink Only AVERAGE
27.28	**217 Canon Ink Only Run1 19July2009
27.06	327 Canon Ink Only AVERAGE
26.68	**223 Canon Ink Only Run1 19July2009
26.45	**223 Canon Ink Only Run2 19July2009
26.36	**318 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #13 Xerox Black Inkjet Ink (8R7994) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
32.98	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
32.95	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
32.38	205 HP Ink Only AVERAGE Slide Subtracted
31.79	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
30.66	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
27.50	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
27.38	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
27.18	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
26.99	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
26.84	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
26.83	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
26.78	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
26.70	318 Canon Ink Only AVERAGE Slide Subtracted
26.65	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
26.43	327 Canon Ink Only AVERAGE Slide Subtracted
26.39	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
26.23	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
26.13	223 Canon Ink Only AVERAGE Slide Subtracted
26.13	217 Canon Ink Only AVERAGE Slide Subtracted
26.05	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Xerox 13 17Jan2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**#13 Xerox (8R7994) Black 20080117
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
77.62	**13 Xerox Ink Only Run2 19July2009
74.15	**156 Epson Ink Only Run4 19July2009
65.69	**13 Xerox Ink Only Run3 19July2009
62.33	**24 Xerox Ink Only Run2 19July2009
55.21	24 Xerox Ink Only AVERAGE
54.22	**312 Canon Ink Only Run2 19July2009
53.83	**156 Epson Ink Only Run5 19July2009
53.54	156 Epson Ink Only AVERAGE
53.24	24 Xerox Ink Only R1R2 AVERAGE
51.09	**312 Canon Ink Only Run3 19July2009
50.68	**156 Epson Ink Only Run2 19July2009
49.70	312 Canon Ink Only AVERAGE
49.59	**312 Canon Ink Only Run1 19July2009
47.61	**24 Xerox Ink Only Run4 19July2009
46.89	**24 Xerox Ink Only Run3 19July2009
42.13	**312 Canon Ink Only Run4 19July2009
40.83	**13 Xerox Ink Only Run4 19July2009
40.62	**156 Epson Ink Only Run3 19July2009
34.57	**156 Epson Ink Only Run1 19July2009
33.91	13 Xerox Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**#13 Xerox (8R7994) Black 20080117
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
81.75	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
75.38	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
73.60	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
70.43	156 Epson Ink Only AVERAGE Slide Subtracted
63.51	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
61.89	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
61.85	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
60.10	**24 Xerox Ink Only Run2 19July2009 Slide Subtracted
58.08	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
57.89	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
54.88	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
54.68	312 Canon Ink Only AVERAGE Slide Subtracted
54.10	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
53.55	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
50.77	24 Xerox Ink Only AVERAGE Slide Subtracted
49.94	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
46.78	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
42.87	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
42.15	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
37.15	13 Xerox Ink Only AVERAGE Slide Subtracted

Xerox 13 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**13 Xerox Black Ink (8R7994) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
31.99	**04 Okidata Ink Only Brown Spot Run4 19July2009
31.52	**205 HP Ink Only Run2 19July2009
31.26	**13 Xerox Ink Only Run2 19July2009
31.17	205 HP Ink Only AVERAGE
30.99	**205 HP Ink Only Run3 19July2009
30.95	**205 HP Ink Only Run4 19July2009
30.76	**04 Okidata Ink Only Brown Spot Run1 19July2009
28.83	**04 Okidata Ink Only Brown Spot Run3 19July2009
26.99	04 Okidata Ink Only AVERAGE
26.38	**04 Okidata Ink Only Brown Spot Run2 19July2009
26.20	04 Okidata Ink Only Brown Spot AVERAGE
25.84	**223 Canon Ink Only Run3 19July2009
25.48	**217 Canon Ink Only Run3 19July2009
25.37	217 Canon Ink Only AVERAGE
25.33	**217 Canon Ink Only Run2 19July2009
25.26	**217 Canon Ink Only Run1 19July2009
25.05	**318 Canon Ink Only Run1 19July2009
24.80	**327 Canon Ink Only Run2 19July2009
24.57	**327 Canon Ink Only Run1 19July2009
24.51	223 Canon Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**13 Xerox Black Ink (8R7994) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
32.91	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
31.75	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
31.67	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
31.34	205 HP Ink Only AVERAGE Slide Subtracted
30.97	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
30.71	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
30.11	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
28.86	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
28.34	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
27.62	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
27.61	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
27.56	04 Okidata Ink Only AVERAGE Slide Subtracted
27.01	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
26.86	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
26.65	156 Epson Ink Only AVERAGE Slide Subtracted
26.36	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
25.40	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
24.56	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
24.56	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
24.43	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Xerox 13 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**13 Xerox Black Ink (8R7994) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
26.42	**13 Xerox Ink Only Run2 19July2009
24.03	**312 Canon Ink Only Run4 19July2009
23.45	**04 Okidata Ink Only Brown Spot Run1 19July2009
21.87	**156 Epson Ink Only Run4 19July2009
21.78	312 Canon Ink Only AVERAGE
21.13	04 Okidata Ink Only Brown Spot AVERAGE
20.93	04 Okidata Ink Only AVERAGE
20.86	**04 Okidata Ink Only Brown Spot Run6 19July2009
20.76	**24 Xerox Ink Only Run2 19July2009
19.80	**312 Canon Ink Only Run1 19July2009
19.36	**04 Okidata Ink Only Brown Spot Run4 19July2009
19.35	**04 Okidata Ink Only Brown Spot Run5 19July2009
19.24	**04 Okidata Ink Only Brown Spot Run7 19July2009
18.68	**04 Okidata Ink Only Brown Spot Run2 19July2009
18.65	**04 Okidata Ink Only Black Spot Run2 19July2009
18.10	**312 Canon Ink Only Run2 19July2009
18.07	04 Okidata Ink Only Black Spot AVERAGE
18.04	24 Xerox Ink Only AVERAGE
17.94	**24 Xerox Ink Only Run4 19July2009
17.89	**04 Okidata Ink Only Brown Spot Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**13 Xerox Black Ink (8R7994) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
25.98	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
24.79	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
24.50	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
23.62	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
23.38	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
23.32	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
23.22	156 Epson Ink Only AVERAGE Slide Subtracted
23.22	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
22.28	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
22.15	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
21.78	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
21.33	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
21.08	04 Okidata Ink Only AVERAGE Slide Subtracted
20.30	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
20.16	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
20.09	312 Canon Ink Only AVERAGE Slide Subtracted
20.09	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
19.72	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
19.42	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
19.04	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted

Xerox 13 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**13 Xerox Black (8R7994) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
37.61	**205 HP Ink Only Run2 19July2009
37.60	205 HP Ink Only AVERAGE
37.59	**205 HP Ink Only Run4 19July2009
37.50	**205 HP Ink Only Run3 19July2009
34.16	**223 Canon Ink Only Run3 19July2009
33.37	**217 Canon Ink Only Run1 19July2009
33.23	217 Canon Ink Only AVERAGE
33.15	**217 Canon Ink Only Run3 19July2009
33.13	**217 Canon Ink Only Run2 19July2009
32.18	223 Canon Ink Only AVERAGE
31.83	**318 Canon Ink Only Run1 19July2009
31.61	**04 Okidata Ink Only Brown Spot Run1 19July2009
31.41	**318 Canon Ink Only Run2 19July2009
31.26	318 Canon Ink Only AVERAGE
31.25	**223 Canon Ink Only Run2 19July2009
31.08	**348 Canon Ink Only Run2 19July2009
30.85	**348 Canon Ink Only Run1 19July2009
30.76	04 Okidata Ink Only AVERAGE
30.62	348 Canon Ink Only AVERAGE
30.53	**318 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**13 Xerox Black (8R7994) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
39.69	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
39.53	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
39.12	205 HP Ink Only AVERAGE Slide Subtracted
38.48	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
33.92	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
33.62	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
33.53	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
33.44	217 Canon Ink Only AVERAGE Slide Subtracted
33.39	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
33.37	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
32.96	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
32.95	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
32.45	348 Canon Ink Only AVERAGE Slide Subtracted
32.43	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
32.40	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
32.35	318 Canon Ink Only AVERAGE Slide Subtracted
32.28	223 Canon Ink Only AVERAGE Slide Subtracted
31.75	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
31.63	**318 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
31.60	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Xerox 13 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**13 Xerox Black Ink (8R7994) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
40.83	**205 HP Ink Only Run4 19July2009
40.64	**205 HP Ink Only Run3 19July2009
40.57	205 HP Ink Only AVERAGE
40.11	**205 HP Ink Only Run2 19July2009
35.56	**223 Canon Ink Only Run3 19July2009
34.16	**217 Canon Ink Only Run1 19July2009
34.12	217 Canon Ink Only AVERAGE
34.12	**217 Canon Ink Only Run3 19July2009
34.04	**217 Canon Ink Only Run2 19July2009
33.50	**348 Canon Ink Only Run2 19July2009
33.33	223 Canon Ink Only AVERAGE
33.09	348 Canon Ink Only AVERAGE
32.83	**348 Canon Ink Only Run3 19July2009
32.80	**348 Canon Ink Only Run1 19July2009
32.66	**318 Canon Ink Only Run2 19July2009
32.48	318 Canon Ink Only AVERAGE
32.46	**318 Canon Ink Only Run1 19July2009
32.25	**318 Canon Ink Only Run3 19July2009
32.14	**223 Canon Ink Only Run2 19July2009
31.71	**282 Canon Ink Only Run4 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**13 Xerox Black Ink (8R7994) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
42.51	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
42.20	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
41.56	205 HP Ink Only AVERAGE Slide Subtracted
40.19	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
36.50	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
34.81	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
34.35	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
34.35	348 Canon Ink Only AVERAGE Slide Subtracted
34.33	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
33.74	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
33.69	217 Canon Ink Only AVERAGE Slide Subtracted
33.66	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
33.63	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
33.61	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
33.60	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
33.59	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
33.48	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
33.26	282 Canon Ink Only AVERAGE Slide Subtracted
32.86	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
32.75	318 Canon Ink Only AVERAGE Slide Subtracted

Xerox 13 17Jan2008 Run 2

Neat Ink Library

Spectrum: Subtraction Result:**#13 Xerox (8R7994) Black Run2 20080117
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
75.18	**13 Xerox Ink Only Run2 19July2009
71.59	**156 Epson Ink Only Run4 19July2009
63.47	**13 Xerox Ink Only Run3 19July2009
60.15	**24 Xerox Ink Only Run2 19July2009
53.38	24 Xerox Ink Only AVERAGE
52.86	**312 Canon Ink Only Run2 19July2009
52.17	**156 Epson Ink Only Run5 19July2009
51.87	156 Epson Ink Only AVERAGE
51.41	24 Xerox Ink Only R1R2 AVERAGE
49.80	**312 Canon Ink Only Run3 19July2009
49.21	**156 Epson Ink Only Run2 19July2009
48.20	312 Canon Ink Only AVERAGE
47.94	**312 Canon Ink Only Run1 19July2009
46.61	**24 Xerox Ink Only Run4 19July2009
45.16	**24 Xerox Ink Only Run3 19July2009
40.75	**312 Canon Ink Only Run4 19July2009
39.49	**156 Epson Ink Only Run3 19July2009
38.88	**13 Xerox Ink Only Run4 19July2009
33.30	**156 Epson Ink Only Run1 19July2009
32.31	**24 Xerox Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**#13 Xerox (8R7994) Black Run2 20080117
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
78.70	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
72.63	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
71.42	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
67.81	156 Epson Ink Only AVERAGE Slide Subtracted
61.50	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
59.71	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
59.62	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
58.21	**24 Xerox Ink Only Run2 19July2009 Slide Subtracted
56.81	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
56.21	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
53.47	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
53.10	312 Canon Ink Only AVERAGE Slide Subtracted
52.58	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
51.94	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
49.26	24 Xerox Ink Only AVERAGE Slide Subtracted
48.25	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
45.18	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
41.15	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
40.72	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
35.66	13 Xerox Ink Only AVERAGE Slide Subtracted

Xerox 13 28Nov2008 Run 2

Neat Ink Library

Spectrum: Subtraction Result:**13 Xerox Black (8R7994) Run2 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
38.33	**205 HP Ink Only Run2 19July2009
38.16	205 HP Ink Only AVERAGE
38.08	**205 HP Ink Only Run3 19July2009
37.99	**205 HP Ink Only Run4 19July2009
34.76	**223 Canon Ink Only Run3 19July2009
33.46	**217 Canon Ink Only Run1 19July2009
33.44	217 Canon Ink Only AVERAGE
33.41	**217 Canon Ink Only Run3 19July2009
33.41	**217 Canon Ink Only Run2 19July2009
32.89	223 Canon Ink Only AVERAGE
32.69	**318 Canon Ink Only Run1 19July2009
32.01	**318 Canon Ink Only Run2 19July2009
31.91	**223 Canon Ink Only Run2 19July2009
31.83	318 Canon Ink Only AVERAGE
31.60	**348 Canon Ink Only Run1 19July2009
31.34	**223 Canon Ink Only Run1 19July2009
31.25	**348 Canon Ink Only Run2 19July2009
31.19	**327 Canon Ink Only Run2 19July2009
31.18	**327 Canon Ink Only Run1 19July2009
31.02	**13 Xerox Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**13 Xerox Black (8R7994) Run2 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
39.83	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
39.82	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
39.38	205 HP Ink Only AVERAGE Slide Subtracted
38.82	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
34.20	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
33.91	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
33.43	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
33.34	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
33.30	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
33.28	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
33.27	217 Canon Ink Only AVERAGE Slide Subtracted
32.82	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
32.79	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
32.66	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
32.64	223 Canon Ink Only AVERAGE Slide Subtracted
32.55	318 Canon Ink Only AVERAGE Slide Subtracted
32.41	348 Canon Ink Only AVERAGE Slide Subtracted
31.97	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
31.96	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
31.90	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Xerox 13 28Nov2008 Run 3

Neat Ink Library

Spectrum: Subtraction Result:**13 Xerox Black (8R7994) Run3 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
39.61	**205 HP Ink Only Run4 19July2009
39.55	**205 HP Ink Only Run3 19July2009
39.46	205 HP Ink Only AVERAGE
39.11	**205 HP Ink Only Run2 19July2009
37.10	**223 Canon Ink Only Run3 19July2009
36.87	**217 Canon Ink Only Run1 19July2009
36.75	217 Canon Ink Only AVERAGE
36.68	**217 Canon Ink Only Run3 19July2009
36.65	**217 Canon Ink Only Run2 19July2009
35.65	**348 Canon Ink Only Run2 19July2009
35.12	348 Canon Ink Only AVERAGE
35.08	223 Canon Ink Only AVERAGE
34.83	**348 Canon Ink Only Run3 19July2009
34.75	**348 Canon Ink Only Run1 19July2009
34.16	**318 Canon Ink Only Run1 19July2009
34.15	**318 Canon Ink Only Run2 19July2009
34.07	**223 Canon Ink Only Run2 19July2009
34.03	318 Canon Ink Only AVERAGE
33.96	**282 Canon Ink Only Run4 19July2009
33.86	**282 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**13 Xerox Black (8R7994) Run3 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
40.27	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
40.02	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
39.48	205 HP Ink Only AVERAGE Slide Subtracted
37.85	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
36.43	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
36.02	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
35.49	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
35.43	348 Canon Ink Only AVERAGE Slide Subtracted
35.37	217 Canon Ink Only AVERAGE Slide Subtracted
35.32	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
35.28	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
35.19	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
35.18	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
35.14	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
35.00	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
34.91	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
34.81	282 Canon Ink Only AVERAGE Slide Subtracted
34.53	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
33.32	223 Canon Ink Only AVERAGE Slide Subtracted
33.13	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Xerox 13 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Xerox 13
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
25.07	**04 Okidata Ink Only Brown Spot Run1 19July2009
23.83	04 Okidata Ink Only AVERAGE
22.88	**13 Xerox Ink Only Run2 19July2009
22.62	**04 Okidata Ink Only Brown Spot Run6 19July2009
22.53	04 Okidata Ink Only Brown Spot AVERAGE
22.29	**312 Canon Ink Only Run4 19July2009
21.87	**04 Okidata Ink Only Brown Spot Run7 19July2009
21.78	**04 Okidata Ink Only Black Spot Run2 19July2009
21.07	04 Okidata Ink Only Black Spot AVERAGE
21.00	**04 Okidata Ink Only Brown Spot Run5 19July2009
20.90	**04 Okidata Ink Only Black Spot Run1 19July2009
20.54	**217 Canon Ink Only Run1 19July2009
20.41	217 Canon Ink Only AVERAGE
20.39	**217 Canon Ink Only Run3 19July2009
20.35	**205 HP Ink Only Run4 19July2009
20.34	205 HP Ink Only AVERAGE
20.32	**205 HP Ink Only Run2 19July2009
20.31	**205 HP Ink Only Run3 19July2009
20.28	**217 Canon Ink Only Run2 19July2009
19.99	**04 Okidata Ink Only Black Spot Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Xerox 13
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
25.46	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
25.00	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
24.05	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
23.90	04 Okidata Ink Only AVERAGE Slide Subtracted
22.97	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
22.87	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
22.85	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
21.97	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
21.95	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
21.93	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
21.86	205 HP Ink Only AVERAGE Slide Subtracted
21.82	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
21.47	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
21.45	217 Canon Ink Only AVERAGE Slide Subtracted
21.24	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
21.24	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
21.13	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
21.10	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
21.05	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20.94	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted

Kodak 17 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #17 Kodak Black Inkjet Ink (#1369511) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
33.31	**205 HP Ink Only Run4 19July2009
33.31	205 HP Ink Only AVERAGE
33.29	**205 HP Ink Only Run3 19July2009
33.23	**205 HP Ink Only Run2 19July2009
29.73	**223 Canon Ink Only Run3 19July2009
29.10	**217 Canon Ink Only Run3 19July2009
28.94	217 Canon Ink Only AVERAGE
28.93	**217 Canon Ink Only Run1 19July2009
28.77	**217 Canon Ink Only Run2 19July2009
28.72	**318 Canon Ink Only Run1 19July2009
28.49	**318 Canon Ink Only Run2 19July2009
28.29	318 Canon Ink Only AVERAGE
28.21	223 Canon Ink Only AVERAGE
27.83	**327 Canon Ink Only Run1 19July2009
27.72	**327 Canon Ink Only Run2 19July2009
27.64	**318 Canon Ink Only Run3 19July2009
27.53	327 Canon Ink Only AVERAGE
27.50	**348 Canon Ink Only Run1 19July2009
27.32	**348 Canon Ink Only Run2 19July2009
27.30	**223 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #17 Kodak Black Inkjet Ink (#1369511) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
33.70	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
33.51	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
32.90	205 HP Ink Only AVERAGE Slide Subtracted
31.96	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
27.84	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
27.71	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
27.61	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
27.61	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
27.39	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
27.39	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
27.39	217 Canon Ink Only AVERAGE Slide Subtracted
27.28	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
27.25	318 Canon Ink Only AVERAGE Slide Subtracted
27.23	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
26.97	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
26.92	348 Canon Ink Only AVERAGE Slide Subtracted
26.73	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
26.73	**318 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
26.61	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
26.50	223 Canon Ink Only AVERAGE Slide Subtracted

Kodak 17 17Jan2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**#17 Kodak (1369511) Black 20080117
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
40.75	**13 Xerox Ink Only Run2 19July2009
28.01	**24 Xerox Ink Only Run2 19July2009
27.97	**205 HP Ink Only Run2 19July2009
27.57	205 HP Ink Only AVERAGE
27.43	**205 HP Ink Only Run3 19July2009
27.27	**205 HP Ink Only Run4 19July2009
26.27	**156 Epson Ink Only Run4 19July2009
25.89	**04 Okidata Ink Only Brown Spot Run1 19July2009
25.58	04 Okidata Ink Only AVERAGE
25.47	24 Xerox Ink Only AVERAGE
25.30	**04 Okidata Ink Only Brown Spot Run4 19July2009
24.87	**318 Canon Ink Only Run1 19July2009
24.56	**223 Canon Ink Only Run3 19July2009
24.44	**327 Canon Ink Only Run2 19July2009
24.29	**327 Canon Ink Only Run1 19July2009
24.22	24 Xerox Ink Only R1R2 AVERAGE
24.21	**04 Okidata Ink Only Black Spot Run2 19July2009
23.94	**13 Xerox Ink Only Run3 19July2009
23.91	**318 Canon Ink Only Run2 19July2009
23.89	327 Canon Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**#17 Kodak (1369511) Black 20080117
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
35.07	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
33.24	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
32.63	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
30.12	156 Epson Ink Only AVERAGE Slide Subtracted
29.91	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
28.14	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
28.08	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
27.75	205 HP Ink Only AVERAGE Slide Subtracted
27.63	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
27.17	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
26.02	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
25.99	04 Okidata Ink Only AVERAGE Slide Subtracted
25.84	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
24.74	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
24.57	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
24.37	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
24.22	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
24.11	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
23.85	327 Canon Ink Only AVERAGE Slide Subtracted
23.71	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Kodak 17 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**17 Kodak Black Ink (1369511) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
34.97	**04 Okidata Ink Only Brown Spot Run4 19July2009
31.30	**04 Okidata Ink Only Brown Spot Run3 19July2009
29.36	**13 Xerox Ink Only Run2 19July2009
28.94	**205 HP Ink Only Run2 19July2009
28.60	205 HP Ink Only AVERAGE
28.46	**04 Okidata Ink Only Brown Spot Run1 19July2009
28.45	**205 HP Ink Only Run3 19July2009
28.35	**205 HP Ink Only Run4 19July2009
28.13	**04 Okidata Ink Only Brown Spot Run2 19July2009
23.72	04 Okidata Ink Only Brown Spot AVERAGE
23.47	04 Okidata Ink Only AVERAGE
22.50	**223 Canon Ink Only Run3 19July2009
22.49	**327 Canon Ink Only Run2 19July2009
22.47	**318 Canon Ink Only Run1 19July2009
22.39	**217 Canon Ink Only Run3 19July2009
22.34	**217 Canon Ink Only Run2 19July2009
22.28	217 Canon Ink Only AVERAGE
22.21	**327 Canon Ink Only Run1 19July2009
22.07	**217 Canon Ink Only Run1 19July2009
21.98	327 Canon Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**17 Kodak Black Ink (1369511) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
35.83	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
32.48	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
28.95	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
28.43	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
28.26	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
28.19	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
27.75	205 HP Ink Only AVERAGE Slide Subtracted
27.56	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
27.39	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
27.29	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
27.15	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
26.58	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
26.54	156 Epson Ink Only AVERAGE Slide Subtracted
25.23	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
24.26	04 Okidata Ink Only AVERAGE Slide Subtracted
23.91	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
23.22	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
20.83	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20.78	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
20.77	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted

Kodak 17 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**17 Kodak Black Ink (1369511) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
31.46	**205 HP Ink Only Run2 19July2009
31.27	205 HP Ink Only AVERAGE
31.15	**205 HP Ink Only Run4 19July2009
31.13	**205 HP Ink Only Run3 19July2009
28.42	**04 Okidata Ink Only Brown Spot Run1 19July2009
27.89	**223 Canon Ink Only Run3 19July2009
27.26	**217 Canon Ink Only Run3 19July2009
27.10	217 Canon Ink Only AVERAGE
27.01	**217 Canon Ink Only Run1 19July2009
27.00	04 Okidata Ink Only AVERAGE
26.99	**217 Canon Ink Only Run2 19July2009
26.80	**318 Canon Ink Only Run1 19July2009
26.37	223 Canon Ink Only AVERAGE
26.34	**318 Canon Ink Only Run2 19July2009
26.15	318 Canon Ink Only AVERAGE
26.10	**327 Canon Ink Only Run2 19July2009
26.05	**327 Canon Ink Only Run1 19July2009
25.80	327 Canon Ink Only AVERAGE
25.57	**04 Okidata Ink Only Brown Spot Run4 19July2009
25.40	**223 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**17 Kodak Black Ink (1369511) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
32.17	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
32.05	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
31.63	205 HP Ink Only AVERAGE Slide Subtracted
31.19	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
28.38	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
27.34	04 Okidata Ink Only AVERAGE Slide Subtracted
26.71	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
26.70	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
26.62	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
26.61	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
26.37	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
26.32	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
26.28	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
26.22	217 Canon Ink Only AVERAGE Slide Subtracted
26.21	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
26.08	318 Canon Ink Only AVERAGE Slide Subtracted
26.06	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
26.02	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
25.82	327 Canon Ink Only AVERAGE Slide Subtracted
25.70	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Kodak 17 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**17 Kodak Black (1369511) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
40.43	**205 HP Ink Only Run4 19July2009
40.24	**205 HP Ink Only Run3 19July2009
40.23	205 HP Ink Only AVERAGE
39.91	**205 HP Ink Only Run2 19July2009
33.52	**217 Canon Ink Only Run3 19July2009
33.49	217 Canon Ink Only AVERAGE
33.48	**217 Canon Ink Only Run1 19July2009
33.44	**223 Canon Ink Only Run3 19July2009
33.43	**217 Canon Ink Only Run2 19July2009
32.43	**318 Canon Ink Only Run1 19July2009
32.27	**348 Canon Ink Only Run2 19July2009
32.22	**318 Canon Ink Only Run2 19July2009
32.06	**327 Canon Ink Only Run1 19July2009
32.04	**327 Canon Ink Only Run2 19July2009
32.04	327 Canon Ink Only AVERAGE
32.03	318 Canon Ink Only AVERAGE
31.94	**327 Canon Ink Only Run3 19July2009
31.79	348 Canon Ink Only AVERAGE
31.73	223 Canon Ink Only AVERAGE
31.73	**348 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**17 Kodak Black (1369511) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
39.62	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
39.11	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
38.40	205 HP Ink Only AVERAGE Slide Subtracted
36.54	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
34.05	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
30.56	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
30.41	217 Canon Ink Only AVERAGE Slide Subtracted
30.20	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
30.12	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
30.08	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
30.00	348 Canon Ink Only AVERAGE Slide Subtracted
29.96	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
29.63	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
29.57	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
29.38	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
29.30	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
29.27	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
29.25	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
29.15	282 Canon Ink Only AVERAGE Slide Subtracted
29.05	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Kodak 17 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**17 Kodak Black Ink (1369511) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
41.41	**205 HP Ink Only Run4 19July2009
41.15	**205 HP Ink Only Run3 19July2009
41.14	205 HP Ink Only AVERAGE
40.72	**205 HP Ink Only Run2 19July2009
33.25	**223 Canon Ink Only Run3 19July2009
32.72	**217 Canon Ink Only Run1 19July2009
32.60	**217 Canon Ink Only Run3 19July2009
32.59	217 Canon Ink Only AVERAGE
32.42	**217 Canon Ink Only Run2 19July2009
31.77	**348 Canon Ink Only Run2 19July2009
31.48	**318 Canon Ink Only Run2 19July2009
31.42	**318 Canon Ink Only Run1 19July2009
31.41	223 Canon Ink Only AVERAGE
31.35	348 Canon Ink Only AVERAGE
31.27	318 Canon Ink Only AVERAGE
31.21	**348 Canon Ink Only Run1 19July2009
30.96	**348 Canon Ink Only Run3 19July2009
30.94	04 Okidata Ink Only AVERAGE
30.85	**318 Canon Ink Only Run3 19July2009
30.33	**223 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**17 Kodak Black Ink (1369511) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
41.87	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
41.38	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
40.65	205 HP Ink Only AVERAGE Slide Subtracted
39.06	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
35.08	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
31.44	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
30.96	348 Canon Ink Only AVERAGE Slide Subtracted
30.93	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
30.92	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
30.88	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
30.87	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
30.85	04 Okidata Ink Only AVERAGE Slide Subtracted
30.78	217 Canon Ink Only AVERAGE Slide Subtracted
30.71	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
30.70	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
30.62	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
30.56	282 Canon Ink Only AVERAGE Slide Subtracted
30.45	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
30.29	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
29.85	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Kodak 17 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Kodak 17
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
41.31	**205 HP Ink Only Run4 19July2009
41.09	**205 HP Ink Only Run3 19July2009
41.08	205 HP Ink Only AVERAGE
40.70	**205 HP Ink Only Run2 19July2009
33.71	**223 Canon Ink Only Run3 19July2009
33.49	**217 Canon Ink Only Run1 19July2009
33.46	**217 Canon Ink Only Run3 19July2009
33.44	217 Canon Ink Only AVERAGE
33.32	**217 Canon Ink Only Run2 19July2009
32.39	**348 Canon Ink Only Run2 19July2009
32.32	**318 Canon Ink Only Run1 19July2009
32.22	**318 Canon Ink Only Run2 19July2009
32.02	318 Canon Ink Only AVERAGE
31.93	348 Canon Ink Only AVERAGE
31.92	223 Canon Ink Only AVERAGE
31.83	**348 Canon Ink Only Run1 19July2009
31.50	**318 Canon Ink Only Run3 19July2009
31.45	**348 Canon Ink Only Run3 19July2009
31.43	**327 Canon Ink Only Run3 19July2009
31.43	327 Canon Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Kodak 17
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
41.07	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
40.56	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
39.83	205 HP Ink Only AVERAGE Slide Subtracted
38.08	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
34.88	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
31.28	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
30.91	217 Canon Ink Only AVERAGE Slide Subtracted
30.76	348 Canon Ink Only AVERAGE Slide Subtracted
30.73	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
30.71	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
30.71	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
30.57	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
30.51	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
30.44	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
30.33	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
30.30	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
30.10	282 Canon Ink Only AVERAGE Slide Subtracted
30.04	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
29.67	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
29.67	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Kodak 22 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #22 Kodak Photo Black Inkjet Ink (3-in-1, #1754852) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
12.89	**04 Okidata Ink Only Brown Spot Run4 19July2009
11.07	**04 Okidata Ink Only Brown Spot Run3 19July2009
10.60	**22 Kodak Ink Only Run3 19July2009
10.30	22 Kodak Ink Only AVERAGE
10.12	**22 Kodak Ink Only Run1 19July2009
10.06	**22 Kodak Ink Only Run2 19July2009
9.56	**13 Xerox Ink Only Run2 19July2009
9.35	**24 Xerox Ink Only Run2 19July2009
9.29	**244 Xerox Ink Only Run1 19July2009
8.46	**200 HP Ink Only Run1 19July2009
8.41	24 Xerox Ink Only R1R2 AVERAGE
8.11	24 Xerox Ink Only AVERAGE
7.97	244 Xerox Ink Only AVERAGE
7.88	**200 HP Ink Only Run2 19July2009
7.77	**33 Epson Ink Only Black Spot Run1 19July2009
7.69	**199 HP Ink Only Run1 19July2009
7.41	**244 Xerox Ink Only Run5 19July2009
7.37	**04 Okidata Ink Only Brown Spot Run6 19July2009
7.33	**198 HP Ink Only Run1 19July2009
7.06	**402 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #22 Kodak Photo Black Inkjet Ink (3-in-1, #1754852) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
13.99	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
13.83	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
13.48	22 Kodak Ink Only AVERAGE Slide Subtracted
13.38	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
13.08	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
12.57	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
12.54	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
8.10	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
7.85	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
7.08	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
6.98	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
6.97	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
6.94	**84 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
6.54	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
6.14	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
6.12	33 Epson Ink Only AVERAGE Slide Subtracted
5.66	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
5.35	**306 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
5.32	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
5.28	**84 Epson Ink Only Run1 19July2009 Blank Slide Subtracted

Kodak 22 17Jan2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**#22 Kodak (1754852) Photo Black 20080117
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
23.12	**13 Xerox Ink Only Run2 19July2009
20.38	**13 Xerox Ink Only Run3 19July2009
20.08	**156 Epson Ink Only Run4 19July2009
19.51	**312 Canon Ink Only Run2 19July2009
18.89	**312 Canon Ink Only Run3 19July2009
18.71	312 Canon Ink Only AVERAGE
17.42	**312 Canon Ink Only Run4 19July2009
17.37	**24 Xerox Ink Only Run2 19July2009
17.33	**312 Canon Ink Only Run1 19July2009
15.14	24 Xerox Ink Only AVERAGE
15.03	**492 Canon Ink Only Run5 19July2009
15.00	24 Xerox Ink Only R1R2 AVERAGE
14.04	**156 Epson Ink Only Run5 19July2009
13.92	**492 Canon Ink Only Run4 19July2009
13.84	156 Epson Ink Only AVERAGE
13.20	492 Canon Ink Only AVERAGE
12.41	**24 Xerox Ink Only Run3 19July2009
12.41	**492 Canon Ink Only Run3 19July2009
12.02	**156 Epson Ink Only Run2 19July2009
11.46	**492 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**#22 Kodak (1754852) Photo Black 20080117
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
22.02	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
21.81	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
20.31	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
19.86	312 Canon Ink Only AVERAGE Slide Subtracted
19.79	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
19.74	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
18.84	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
17.56	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
17.49	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
17.40	156 Epson Ink Only AVERAGE Slide Subtracted
17.20	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
17.00	**24 Xerox Ink Only Run2 19July2009 Slide Subtracted
16.63	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
15.76	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
15.23	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
15.11	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
14.56	24 Xerox Ink Only AVERAGE Slide Subtracted
14.43	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
14.02	**492 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
13.71	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted

Kodak 22 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**22 Kodak Black Ink (1754852) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
22.63	**04 Okidata Ink Only Brown Spot Run4 19July2009
20.09	**04 Okidata Ink Only Brown Spot Run3 19July2009
15.67	**04 Okidata Ink Only Brown Spot Run2 19July2009
15.43	**22 Kodak Ink Only Run3 19July2009
14.41	22 Kodak Ink Only AVERAGE
14.11	**13 Xerox Ink Only Run4 19July2009
14.04	13 Xerox Ink Only AVERAGE
14.01	24 Xerox Ink Only AVERAGE
13.82	**24 Xerox Ink Only Run3 19July2009
13.77	**22 Kodak Ink Only Run2 19July2009
13.76	**22 Kodak Ink Only Run1 19July2009
13.57	**13 Xerox Ink Only Run5 19July2009
13.22	**33 Epson Ink Only Brown Spot Run3 19July2009
13.20	**13 Xerox Ink Only Run6 19July2009
13.09	**244 Xerox Ink Only Run4 19July2009
13.01	24 Xerox Ink Only R1R2 AVERAGE
12.99	**24 Xerox Ink Only Run2 19July2009
12.81	33 Epson Ink Only Brown Spot AVERAGE
12.76	**24 Xerox Ink Only Run4 19July2009
12.65	**33 Epson Ink Only Brown Spot Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**22 Kodak Black Ink (1754852) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
23.13	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
20.76	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
17.95	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
17.22	22 Kodak Ink Only AVERAGE Slide Subtracted
16.91	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
16.45	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
15.28	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
14.42	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
14.30	282 Canon Ink Only AVERAGE Slide Subtracted
14.25	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
14.20	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
14.02	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
13.45	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
13.38	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
13.29	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
13.10	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
12.68	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
12.52	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
12.47	156 Epson Ink Only AVERAGE Slide Subtracted
12.37	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted

Kodak 22 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**22 Kodak Black Ink (1754852) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
23.94	**282 Canon Ink Only Run3 19July2009
23.78	**282 Canon Ink Only Run4 19July2009
23.00	**282 Canon Ink Only Run2 19July2009
22.70	282 Canon Ink Only AVERAGE
21.56	**22 Kodak Ink Only Run3 19July2009
21.44	**348 Canon Ink Only Run3 19July2009
20.70	**348 Canon Ink Only Run2 19July2009
20.63	348 Canon Ink Only AVERAGE
20.57	**223 Canon Ink Only Run3 19July2009
20.34	**217 Canon Ink Only Run2 19July2009
20.30	22 Kodak Ink Only AVERAGE
20.26	217 Canon Ink Only AVERAGE
20.26	**217 Canon Ink Only Run1 19July2009
20.15	**217 Canon Ink Only Run3 19July2009
19.67	**04 Okidata Ink Only Brown Spot Run4 19July2009
19.66	**348 Canon Ink Only Run1 19July2009
19.55	**22 Kodak Ink Only Run2 19July2009
19.43	**22 Kodak Ink Only Run1 19July2009
19.40	223 Canon Ink Only AVERAGE
19.29	**384 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**22 Kodak Black Ink (1754852) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
27.29	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
27.19	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
26.82	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
26.77	282 Canon Ink Only AVERAGE Slide Subtracted
24.33	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
24.12	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
24.02	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
23.55	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
23.49	348 Canon Ink Only AVERAGE Slide Subtracted
23.01	22 Kodak Ink Only AVERAGE Slide Subtracted
22.41	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
22.35	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
22.18	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
22.05	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
21.89	217 Canon Ink Only AVERAGE Slide Subtracted
21.85	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
21.79	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
21.75	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
21.64	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
21.50	384 Canon Ink Only AVERAGE Slide Subtracted

Kodak 22 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**22 Kodak Photo Black (1754852) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
29.68	**223 Canon Ink Only Run3 19July2009
29.01	**33 Epson Ink Only Black Spot Run1 19July2009
28.38	**33 Epson Ink Only Black Spot Run2 19July2009
28.16	33 Epson Ink Only Black Spot AVERAGE
27.94	223 Canon Ink Only AVERAGE
27.92	33 Epson Ink Only AVERAGE
27.89	**217 Canon Ink Only Run1 19July2009
27.69	217 Canon Ink Only AVERAGE
27.65	**217 Canon Ink Only Run3 19July2009
27.65	**384 Canon Ink Only Run2 19July2009
27.51	**223 Canon Ink Only Run2 19July2009
27.48	**384 Canon Ink Only Run3 19July2009
27.48	**217 Canon Ink Only Run2 19July2009
27.47	384 Canon Ink Only AVERAGE
27.35	**63 Epson Ink Only Green Spot Run1 19July2009
27.10	**384 Canon Ink Only Run1 19July2009
27.02	**66 Epson Ink Only Run1 19July2009
26.94	66 Epson Ink Only AVERAGE
26.92	**66 Epson Ink Only Run3 19July2009
26.72	**66 Epson Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**22 Kodak Photo Black (1754852) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
35.49	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
35.44	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
35.31	384 Canon Ink Only AVERAGE Slide Subtracted
34.75	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
34.72	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
34.58	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
34.47	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
34.41	223 Canon Ink Only AVERAGE Slide Subtracted
33.92	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
33.87	30 Epson Ink Only AVERAGE Slide Subtracted
33.78	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
33.77	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
33.75	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
33.65	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
33.55	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
33.49	217 Canon Ink Only AVERAGE Slide Subtracted
33.19	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
32.98	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
32.90	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
31.96	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Kodak 22 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**22 Kodak Black Ink (1754852) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
25.35	**33 Epson Ink Only Black Spot Run1 19July2009
25.01	**33 Epson Ink Only Black Spot Run2 19July2009
24.67	**282 Canon Ink Only Run2 19July2009
24.59	**282 Canon Ink Only Run4 19July2009
24.59	**66 Epson Ink Only Run2 19July2009
24.58	33 Epson Ink Only AVERAGE
24.50	33 Epson Ink Only Black Spot AVERAGE
24.09	**282 Canon Ink Only Run3 19July2009
23.93	66 Epson Ink Only AVERAGE
23.84	**66 Epson Ink Only Run3 19July2009
23.62	282 Canon Ink Only AVERAGE
23.34	**63 Epson Ink Only Green Spot Run1 19July2009
23.22	**66 Epson Ink Only Run1 19July2009
22.99	**33 Epson Ink Only Brown Spot Run2 19July2009
22.95	33 Epson Ink Only Brown Spot AVERAGE
22.91	**33 Epson Ink Only Brown Spot Run3 19July2009
22.91	**33 Epson Ink Only Brown Spot Run1 19July2009
22.56	63 Epson Ink Only Green Spot AVERAGE
22.55	**120 Epson Ink Only Run3 19July2009
22.35	**217 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**22 Kodak Black Ink (1754852) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
27.08	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
26.67	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
26.17	282 Canon Ink Only AVERAGE Slide Subtracted
26.08	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
25.35	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
25.01	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
24.58	33 Epson Ink Only AVERAGE Slide Subtracted
24.50	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
24.45	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
23.79	66 Epson Ink Only AVERAGE Slide Subtracted
23.72	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
23.34	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
23.06	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
22.96	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
22.95	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
22.92	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
22.88	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
22.87	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
22.70	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
22.56	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted

Kodak 22 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Kodak 22
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
23.51	**22 Kodak Ink Only Run3 19July2009
22.93	**22 Kodak Ink Only Run1 19July2009
22.51	22 Kodak Ink Only AVERAGE
21.11	**33 Epson Ink Only Black Spot Run1 19July2009
20.72	**22 Kodak Ink Only Run2 19July2009
20.35	**33 Epson Ink Only Black Spot Run2 19July2009
20.06	33 Epson Ink Only AVERAGE
20.01	33 Epson Ink Only Black Spot AVERAGE
18.93	**33 Epson Ink Only Brown Spot Run2 19July2009
18.74	**33 Epson Ink Only Brown Spot Run1 19July2009
18.71	33 Epson Ink Only Brown Spot AVERAGE
18.58	**66 Epson Ink Only Run2 19July2009
18.47	**217 Canon Ink Only Run2 19July2009
18.44	**217 Canon Ink Only Run3 19July2009
18.42	**33 Epson Ink Only Brown Spot Run3 19July2009
18.40	217 Canon Ink Only AVERAGE
18.26	**217 Canon Ink Only Run1 19July2009
18.21	66 Epson Ink Only AVERAGE
18.13	**66 Epson Ink Only Run3 19July2009
17.85	**282 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Kodak 22
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
28.98	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
28.10	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
27.72	22 Kodak Ink Only AVERAGE Slide Subtracted
25.61	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
23.45	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
22.82	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
22.79	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
22.72	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
22.64	282 Canon Ink Only AVERAGE Slide Subtracted
22.59	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
22.36	217 Canon Ink Only AVERAGE Slide Subtracted
22.32	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
22.32	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
22.20	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
22.14	384 Canon Ink Only AVERAGE Slide Subtracted
21.73	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
21.55	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
21.24	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
21.16	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
21.15	223 Canon Ink Only AVERAGE Slide Subtracted

Xerox 24 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #24 Xerox Black Inkjet Ink (8R7660) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
30.29	**205 HP Ink Only Run3 19July2009
30.27	**205 HP Ink Only Run4 19July2009
30.25	205 HP Ink Only AVERAGE
30.11	**205 HP Ink Only Run2 19July2009
27.52	**223 Canon Ink Only Run3 19July2009
26.52	**217 Canon Ink Only Run3 19July2009
26.52	**13 Xerox Ink Only Run2 19July2009
26.42	217 Canon Ink Only AVERAGE
26.38	**318 Canon Ink Only Run1 19July2009
26.37	**217 Canon Ink Only Run1 19July2009
26.33	**217 Canon Ink Only Run2 19July2009
26.17	223 Canon Ink Only AVERAGE
26.12	**318 Canon Ink Only Run2 19July2009
25.97	318 Canon Ink Only AVERAGE
25.67	**327 Canon Ink Only Run1 19July2009
25.56	**327 Canon Ink Only Run2 19July2009
25.41	**318 Canon Ink Only Run3 19July2009
25.39	**223 Canon Ink Only Run1 19July2009
25.32	327 Canon Ink Only AVERAGE
25.17	**223 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #24 Xerox Black Inkjet Ink (8R7660) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
30.87	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
30.77	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
30.18	205 HP Ink Only AVERAGE Slide Subtracted
29.30	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
25.95	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
25.75	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
25.60	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
25.48	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
25.46	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
25.40	318 Canon Ink Only AVERAGE Slide Subtracted
25.38	217 Canon Ink Only AVERAGE Slide Subtracted
25.27	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
25.27	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
25.08	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
24.96	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
24.95	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
24.94	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
24.93	223 Canon Ink Only AVERAGE Slide Subtracted
24.93	**318 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
24.77	327 Canon Ink Only AVERAGE Slide Subtracted

Xerox 24 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**24 Xerox Black Ink (8R7660) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
33.92	**04 Okidata Ink Only Brown Spot Run4 19July2009
30.99	**205 HP Ink Only Run2 19July2009
30.70	205 HP Ink Only AVERAGE
30.58	**205 HP Ink Only Run3 19July2009
30.48	**205 HP Ink Only Run4 19July2009
30.25	**04 Okidata Ink Only Brown Spot Run3 19July2009
29.34	**04 Okidata Ink Only Brown Spot Run1 19July2009
27.00	**04 Okidata Ink Only Brown Spot Run2 19July2009
26.00	**223 Canon Ink Only Run3 19July2009
25.57	**13 Xerox Ink Only Run2 19July2009
25.44	**217 Canon Ink Only Run3 19July2009
25.34	**217 Canon Ink Only Run2 19July2009
25.32	217 Canon Ink Only AVERAGE
25.13	**217 Canon Ink Only Run1 19July2009
24.79	**318 Canon Ink Only Run1 19July2009
24.66	223 Canon Ink Only AVERAGE
24.48	**327 Canon Ink Only Run2 19July2009
24.38	04 Okidata Ink Only AVERAGE
24.29	04 Okidata Ink Only Brown Spot AVERAGE
24.28	**327 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**24 Xerox Black Ink (8R7660) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
34.89	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
31.57	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
31.11	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
31.08	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
30.67	205 HP Ink Only AVERAGE Slide Subtracted
30.22	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
29.29	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
28.79	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
27.83	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
26.12	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
25.65	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
25.45	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
25.18	04 Okidata Ink Only AVERAGE Slide Subtracted
24.95	156 Epson Ink Only AVERAGE Slide Subtracted
24.78	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
24.44	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
24.36	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
24.27	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
24.07	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
24.06	217 Canon Ink Only AVERAGE Slide Subtracted

Xerox 24 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**24 Xerox Black Ink (8R7660) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
29.10	**04 Okidata Ink Only Brown Spot Run4 19July2009
28.08	**205 HP Ink Only Run2 19July2009
27.78	205 HP Ink Only AVERAGE
27.67	**205 HP Ink Only Run3 19July2009
27.60	**04 Okidata Ink Only Brown Spot Run1 19July2009
27.54	**205 HP Ink Only Run4 19July2009
25.83	**223 Canon Ink Only Run3 19July2009
25.56	**04 Okidata Ink Only Brown Spot Run3 19July2009
24.68	**217 Canon Ink Only Run3 19July2009
24.56	217 Canon Ink Only AVERAGE
24.55	**217 Canon Ink Only Run2 19July2009
24.43	**217 Canon Ink Only Run1 19July2009
24.31	223 Canon Ink Only AVERAGE
24.01	**318 Canon Ink Only Run1 19July2009
23.49	04 Okidata Ink Only AVERAGE
23.47	**223 Canon Ink Only Run2 19July2009
23.43	**318 Canon Ink Only Run2 19July2009
23.28	318 Canon Ink Only AVERAGE
23.24	**13 Xerox Ink Only Run2 19July2009
23.17	**348 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**24 Xerox Black Ink (8R7660) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
30.12	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
28.97	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
28.89	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
28.61	205 HP Ink Only AVERAGE Slide Subtracted
28.47	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
27.54	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
26.92	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
26.02	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
25.23	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
25.13	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
24.63	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
24.59	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
24.53	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
24.33	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
24.26	04 Okidata Ink Only AVERAGE Slide Subtracted
24.24	217 Canon Ink Only AVERAGE Slide Subtracted
24.16	223 Canon Ink Only AVERAGE Slide Subtracted
24.13	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
24.10	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
24.04	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted

Xerox 24 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**24 Xerox Black (8R7660) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
42.86	**205 HP Ink Only Run4 19July2009
42.65	**205 HP Ink Only Run3 19July2009
42.57	205 HP Ink Only AVERAGE
42.06	**205 HP Ink Only Run2 19July2009
36.69	**223 Canon Ink Only Run3 19July2009
35.56	**348 Canon Ink Only Run2 19July2009
35.24	**217 Canon Ink Only Run1 19July2009
35.22	**217 Canon Ink Only Run3 19July2009
35.21	217 Canon Ink Only AVERAGE
35.13	**217 Canon Ink Only Run2 19July2009
35.05	348 Canon Ink Only AVERAGE
34.97	**348 Canon Ink Only Run3 19July2009
34.53	223 Canon Ink Only AVERAGE
34.49	**348 Canon Ink Only Run1 19July2009
34.31	**282 Canon Ink Only Run4 19July2009
34.26	**282 Canon Ink Only Run3 19July2009
33.77	**282 Canon Ink Only Run2 19July2009
33.71	**318 Canon Ink Only Run2 19July2009
33.55	318 Canon Ink Only AVERAGE
33.44	**223 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**24 Xerox Black (8R7660) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
43.71	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
43.30	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
42.53	205 HP Ink Only AVERAGE Slide Subtracted
40.88	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
37.00	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
35.88	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
35.62	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
35.61	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
35.55	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
35.31	348 Canon Ink Only AVERAGE Slide Subtracted
35.24	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
35.03	282 Canon Ink Only AVERAGE Slide Subtracted
34.46	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
34.20	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
33.68	217 Canon Ink Only AVERAGE Slide Subtracted
33.64	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
33.61	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
33.57	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
32.71	223 Canon Ink Only AVERAGE Slide Subtracted
32.61	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Xerox 24 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**24 Xerox Black Ink (8R7660) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
41.27	**205 HP Ink Only Run4 19July2009
41.16	205 HP Ink Only AVERAGE
41.15	**205 HP Ink Only Run3 19July2009
40.94	**205 HP Ink Only Run2 19July2009
33.42	**223 Canon Ink Only Run3 19July2009
32.04	**217 Canon Ink Only Run1 19July2009
31.92	217 Canon Ink Only AVERAGE
31.89	**217 Canon Ink Only Run3 19July2009
31.80	**217 Canon Ink Only Run2 19July2009
31.26	223 Canon Ink Only AVERAGE
30.98	**318 Canon Ink Only Run1 19July2009
30.82	**318 Canon Ink Only Run2 19July2009
30.76	04 Okidata Ink Only AVERAGE
30.67	**348 Canon Ink Only Run2 19July2009
30.63	318 Canon Ink Only AVERAGE
30.32	**348 Canon Ink Only Run1 19July2009
30.27	**327 Canon Ink Only Run1 19July2009
30.27	348 Canon Ink Only AVERAGE
30.26	**327 Canon Ink Only Run2 19July2009
30.26	327 Canon Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**24 Xerox Black Ink (8R7660) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
43.14	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
42.92	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
42.34	205 HP Ink Only AVERAGE Slide Subtracted
41.28	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
36.90	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
32.38	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
31.94	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
31.64	217 Canon Ink Only AVERAGE Slide Subtracted
31.62	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
31.53	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
31.49	348 Canon Ink Only AVERAGE Slide Subtracted
31.48	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
31.36	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
31.21	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
31.14	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
31.10	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
31.02	318 Canon Ink Only AVERAGE Slide Subtracted
30.92	04 Okidata Ink Only AVERAGE Slide Subtracted
30.85	**327 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
30.79	327 Canon Ink Only AVERAGE Slide Subtracted

Xerox 24 27June2008 Run 2

Neat Ink Library

Spectrum: Subtraction Result:**24 Xerox Black Ink (8R7660) Run2 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
35.03	**04 Okidata Ink Only Brown Spot Run4 19July2009
31.52	**04 Okidata Ink Only Brown Spot Run3 19July2009
29.50	**13 Xerox Ink Only Run2 19July2009
28.99	**04 Okidata Ink Only Brown Spot Run1 19July2009
28.11	**04 Okidata Ink Only Brown Spot Run2 19July2009
24.76	04 Okidata Ink Only Brown Spot AVERAGE
24.61	**156 Epson Ink Only Run4 19July2009
24.12	**205 HP Ink Only Run2 19July2009
23.59	205 HP Ink Only AVERAGE
23.51	04 Okidata Ink Only AVERAGE
23.33	**205 HP Ink Only Run3 19July2009
23.28	**205 HP Ink Only Run4 19July2009
21.39	**312 Canon Ink Only Run4 19July2009
20.67	**04 Okidata Ink Only Black Spot Run2 19July2009
20.06	**24 Xerox Ink Only Run2 19July2009
19.98	04 Okidata Ink Only Black Spot AVERAGE
19.84	**04 Okidata Ink Only Brown Spot Run6 19July2009
19.57	**04 Okidata Ink Only Black Spot Run3 19July2009
19.43	**04 Okidata Ink Only Black Spot Run1 19July2009
19.26	**327 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**24 Xerox Black Ink (8R7660) Run2 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
36.26	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
33.22	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
31.81	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
30.54	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
30.17	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
28.96	156 Epson Ink Only AVERAGE Slide Subtracted
28.93	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
28.61	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
28.43	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
27.00	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
25.53	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
24.40	04 Okidata Ink Only AVERAGE Slide Subtracted
24.24	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
24.24	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
24.23	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
24.14	205 HP Ink Only AVERAGE Slide Subtracted
22.31	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
20.81	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
20.70	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
20.62	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted

Xerox 24 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Xerox 24
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
23.26	04 Okidata Ink Only AVERAGE
23.00	**205 HP Ink Only Run4 19July2009
22.91	**205 HP Ink Only Run3 19July2009
22.88	205 HP Ink Only AVERAGE
22.66	**205 HP Ink Only Run2 19July2009
22.48	**04 Okidata Ink Only Brown Spot Run1 19July2009
21.70	**04 Okidata Ink Only Black Spot Run2 19July2009
21.30	**04 Okidata Ink Only Brown Spot Run6 19July2009
21.07	04 Okidata Ink Only Black Spot AVERAGE
20.95	**04 Okidata Ink Only Black Spot Run1 19July2009
20.80	**04 Okidata Ink Only Brown Spot Run7 19July2009
20.77	**217 Canon Ink Only Run1 19July2009
20.65	217 Canon Ink Only AVERAGE
20.65	**217 Canon Ink Only Run3 19July2009
20.51	**217 Canon Ink Only Run2 19July2009
20.42	04 Okidata Ink Only Brown Spot AVERAGE
20.03	**04 Okidata Ink Only Black Spot Run3 19July2009
20.01	**13 Xerox Ink Only Run2 19July2009
19.78	**223 Canon Ink Only Run3 19July2009
19.71	**04 Okidata Ink Only Brown Spot Run5 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Xerox 24
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
24.37	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
24.25	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
24.00	205 HP Ink Only AVERAGE Slide Subtracted
23.30	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
23.13	04 Okidata Ink Only AVERAGE Slide Subtracted
23.00	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
22.50	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
22.42	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
22.15	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
21.82	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
21.69	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
21.63	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
21.23	217 Canon Ink Only AVERAGE Slide Subtracted
21.06	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
20.98	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
20.94	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
20.90	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
20.78	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20.12	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
20.04	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted

Epson 30 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #30 Epson Black Inkjet Ink (T013) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
29.64	**205 HP Ink Only Run3 19July2009
29.49	**205 HP Ink Only Run4 19July2009
29.47	205 HP Ink Only AVERAGE
29.19	**205 HP Ink Only Run2 19July2009
29.07	**492 Canon Ink Only Run2 19July2009
28.36	**492 Canon Ink Only Run1 19July2009
27.21	**13 Xerox Ink Only Run2 19July2009
24.34	492 Canon Ink Only AVERAGE
23.14	**318 Canon Ink Only Run1 19July2009
22.71	**223 Canon Ink Only Run3 19July2009
22.69	**318 Canon Ink Only Run2 19July2009
22.60	318 Canon Ink Only AVERAGE
22.11	**492 Canon Ink Only Run3 19July2009
21.98	**318 Canon Ink Only Run3 19July2009
21.85	223 Canon Ink Only AVERAGE
21.65	**223 Canon Ink Only Run1 19July2009
21.65	**348 Canon Ink Only Run1 19July2009
21.64	**282 Canon Ink Only Run2 19July2009
21.60	**327 Canon Ink Only Run1 19July2009
21.46	**384 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #30 Epson Black Inkjet Ink (T013) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
29.17	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
28.50	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
27.42	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
27.23	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
26.11	205 HP Ink Only AVERAGE Slide Subtracted
24.67	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
24.66	492 Canon Ink Only AVERAGE Slide Subtracted
22.45	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
20.83	**492 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
20.29	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
19.88	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
19.80	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
19.42	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
19.35	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
18.65	282 Canon Ink Only AVERAGE Slide Subtracted
18.47	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
18.36	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
18.31	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
18.23	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
18.18	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Epson 30 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:***30 Epson Black Ink (T013) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
21.99	**63 Epson Ink Only Purple Spot Run2 19July2009
21.06	**63 Epson Ink Only Purple Spot Run3 19July2009
20.99	63 Epson Ink Only Purple Spot AVERAGE
19.92	**63 Epson Ink Only Purple Spot Run1 19July2009
18.91	**244 Xerox Ink Only Run3 19July2009
17.25	**244 Xerox Ink Only Run2 19July2009
16.99	63 Epson Ink Only AVERAGE
15.76	**90 Epson Ink Only Run3 19July2009
15.74	**33 Epson Ink Only Brown Spot Run3 19July2009
15.59	**63 Epson Ink Only Green Spot Run3 19July2009
15.57	90 Epson Ink Only AVERAGE
15.56	33 Epson Ink Only Brown Spot AVERAGE
15.56	**90 Epson Ink Only Run2 19July2009
15.53	**33 Epson Ink Only Brown Spot Run2 19July2009
15.48	**63 Epson Ink Only Green Spot Run2 19July2009
15.34	**33 Epson Ink Only Brown Spot Run1 19July2009
15.26	**90 Epson Ink Only Run1 19July2009
15.25	**93 Epson Ink Only Run3 19July2009
15.22	63 Epson Ink Only Green Spot AVERAGE
15.20	**60 Epson Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:***30 Epson Black Ink (T013) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
21.68	**63 Epson Ink Only Purple Spot Run2 19July2009 Blank Slide Subtracted
20.79	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
20.72	**63 Epson Ink Only Purple Spot Run3 19July2009 Blank Slide Subtracted
20.67	63 Epson Ink Only Purple Spot AVERAGE Slide Subtracted
20.49	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
19.61	**63 Epson Ink Only Purple Spot Run1 19July2009 Blank Slide Subtracted
19.09	**244 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
16.82	63 Epson Ink Only AVERAGE Slide Subtracted
16.33	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
16.24	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
16.04	30 Epson Ink Only AVERAGE Slide Subtracted
16.01	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
15.60	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
15.41	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
15.41	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
15.38	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
15.38	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
15.36	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
15.24	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
15.21	90 Epson Ink Only AVERAGE Slide Subtracted

Epson 30 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**30 Epson Black Ink (T013) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
34.18	**04 Okidata Ink Only Brown Spot Run4 19July2009
29.87	**04 Okidata Ink Only Brown Spot Run3 19July2009
24.17	**66 Epson Ink Only Run1 19July2009
23.89	66 Epson Ink Only AVERAGE
23.88	**04 Okidata Ink Only Brown Spot Run2 19July2009
23.85	**66 Epson Ink Only Run2 19July2009
23.54	**66 Epson Ink Only Run3 19July2009
22.46	**120 Epson Ink Only Run3 19July2009
22.03	**33 Epson Ink Only Black Spot Run1 19July2009
22.00	**63 Epson Ink Only Green Spot Run1 19July2009
21.73	**156 Epson Ink Only Run4 19July2009
21.65	120 Epson Ink Only AVERAGE
21.52	**33 Epson Ink Only Black Spot Run2 19July2009
21.51	33 Epson Ink Only AVERAGE
21.51	33 Epson Ink Only Black Spot AVERAGE
21.47	**123 Epson Ink Only Run3 19July2009
21.42	**120 Epson Ink Only Run2 19July2009
21.23	63 Epson Ink Only Green Spot AVERAGE
20.99	**120 Epson Ink Only Run1 19July2009
20.67	**60 Epson Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**30 Epson Black Ink (T013) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
35.85	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
32.12	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
30.52	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
24.64	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
24.16	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
23.80	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
23.53	66 Epson Ink Only AVERAGE Slide Subtracted
23.49	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
23.19	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
22.92	156 Epson Ink Only AVERAGE Slide Subtracted
22.10	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
22.08	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
21.98	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
21.56	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
21.53	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
21.51	33 Epson Ink Only AVERAGE Slide Subtracted
21.36	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
21.31	120 Epson Ink Only AVERAGE Slide Subtracted
21.22	**123 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
21.15	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted

Epson 30 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**30 Epson Black (T013) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
60.89	**156 Epson Ink Only Run4 19July2009
56.18	**13 Xerox Ink Only Run2 19July2009
48.60	**156 Epson Ink Only Run5 19July2009
47.58	156 Epson Ink Only AVERAGE
45.10	**156 Epson Ink Only Run2 19July2009
43.99	**13 Xerox Ink Only Run3 19July2009
43.51	**66 Epson Ink Only Run2 19July2009
43.22	66 Epson Ink Only AVERAGE
43.16	**66 Epson Ink Only Run3 19July2009
42.72	**66 Epson Ink Only Run1 19July2009
41.36	**24 Xerox Ink Only Run2 19July2009
39.91	**63 Epson Ink Only Purple Spot Run3 19July2009
39.06	**156 Epson Ink Only Run3 19July2009
38.47	**312 Canon Ink Only Run3 19July2009
36.91	**120 Epson Ink Only Run3 19July2009
36.68	63 Epson Ink Only Purple Spot AVERAGE
36.37	**63 Epson Ink Only Purple Spot Run2 19July2009
36.07	120 Epson Ink Only AVERAGE
35.77	**312 Canon Ink Only Run2 19July2009
35.70	**93 Epson Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**30 Epson Black (T013) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
61.39	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
57.47	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
57.44	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
52.44	156 Epson Ink Only AVERAGE Slide Subtracted
47.66	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
46.65	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
46.11	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
46.05	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
45.98	**24 Xerox Ink Only Run2 19July2009 Slide Subtracted
43.82	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
42.48	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
42.10	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
41.85	66 Epson Ink Only AVERAGE Slide Subtracted
41.81	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
41.70	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
41.39	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
40.81	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
40.47	30 Epson Ink Only AVERAGE Slide Subtracted
38.92	24 Xerox Ink Only AVERAGE Slide Subtracted
38.70	**63 Epson Ink Only Purple Spot Run3 19July2009 Blank Slide Subtracted

Epson 30 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**30 Epson Black Ink (T013) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
47.06	**33 Epson Ink Only Brown Spot Run2 19July2009
47.04	**66 Epson Ink Only Run2 19July2009
46.94	66 Epson Ink Only AVERAGE
46.77	**66 Epson Ink Only Run1 19July2009
46.74	**66 Epson Ink Only Run3 19July2009
46.70	**33 Epson Ink Only Brown Spot Run1 19July2009
46.69	**60 Epson Ink Only Run1 19July2009
46.68	**120 Epson Ink Only Run2 19July2009
46.63	**123 Epson Ink Only Run2 19July2009
46.62	**120 Epson Ink Only Run3 19July2009
46.60	33 Epson Ink Only Brown Spot AVERAGE
46.58	**123 Epson Ink Only Run3 19July2009
46.58	123 Epson Ink Only AVERAGE
46.43	**93 Epson Ink Only Run3 19July2009
46.38	120 Epson Ink Only AVERAGE
46.34	60 Epson Ink Only AVERAGE
46.31	**60 Epson Ink Only Run3 19July2009
46.27	**63 Epson Ink Only Green Spot Run1 19July2009
46.17	93 Epson Ink Only AVERAGE
46.14	63 Epson Ink Only Green Spot AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**30 Epson Black Ink (T013) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
46.89	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
46.50	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
46.49	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
46.48	**60 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
46.41	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
46.41	66 Epson Ink Only AVERAGE Slide Subtracted
46.28	**123 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
46.26	123 Epson Ink Only AVERAGE Slide Subtracted
46.25	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
46.25	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
46.25	**123 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
46.22	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
46.21	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
46.15	**60 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
46.14	60 Epson Ink Only AVERAGE Slide Subtracted
46.13	**93 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
46.10	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
46.04	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
45.96	63 Epson Ink Only AVERAGE Slide Subtracted
45.90	120 Epson Ink Only AVERAGE Slide Subtracted

Epson 30 11July2008 Run 2

Neat Ink Library

Spectrum: Subtraction Result:**30 Epson Black Ink (T013) Run2 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
21.68	**33 Epson Ink Only Brown Spot Run2 19July2009
21.66	33 Epson Ink Only Brown Spot AVERAGE
21.64	**33 Epson Ink Only Brown Spot Run1 19July2009
21.60	**33 Epson Ink Only Brown Spot Run3 19July2009
19.16	**22 Kodak Ink Only Run3 19July2009
18.33	22 Kodak Ink Only AVERAGE
18.12	**22 Kodak Ink Only Run2 19July2009
18.08	**66 Epson Ink Only Run1 19July2009
17.94	**120 Epson Ink Only Run2 19July2009
17.76	66 Epson Ink Only AVERAGE
17.73	**66 Epson Ink Only Run2 19July2009
17.69	120 Epson Ink Only AVERAGE
17.56	**120 Epson Ink Only Run1 19July2009
17.53	**90 Epson Ink Only Run3 19July2009
17.50	**120 Epson Ink Only Run3 19July2009
17.44	**22 Kodak Ink Only Run1 19July2009
17.40	**66 Epson Ink Only Run3 19July2009
17.24	33 Epson Ink Only AVERAGE
17.11	**90 Epson Ink Only Run2 19July2009
17.01	**24 Xerox Ink Only Run4 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**30 Epson Black Ink (T013) Run2 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
23.65	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
23.44	22 Kodak Ink Only AVERAGE Slide Subtracted
23.33	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
23.02	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
21.42	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
21.38	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
21.34	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
21.33	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
20.50	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
19.46	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
19.41	30 Epson Ink Only AVERAGE Slide Subtracted
19.16	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
18.66	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
18.18	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
18.02	384 Canon Ink Only AVERAGE Slide Subtracted
17.46	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
17.27	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
17.23	33 Epson Ink Only AVERAGE Slide Subtracted
17.12	66 Epson Ink Only AVERAGE Slide Subtracted
17.09	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 30 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result:*AVERAGED Epson 30
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
18.44	**22 Kodak Ink Only Run1 19July2009
18.31	**22 Kodak Ink Only Run3 19July2009
18.17	22 Kodak Ink Only AVERAGE
17.59	**22 Kodak Ink Only Run2 19July2009
14.79	**04 Okidata Ink Only Brown Spot Run4 19July2009
14.26	**04 Okidata Ink Only Brown Spot Run1 19July2009
14.11	04 Okidata Ink Only AVERAGE
13.85	**04 Okidata Ink Only Brown Spot Run3 19July2009
13.83	04 Okidata Ink Only Brown Spot AVERAGE
13.41	**04 Okidata Ink Only Brown Spot Run6 19July2009
13.24	**04 Okidata Ink Only Brown Spot Run2 19July2009
13.09	**217 Canon Ink Only Run1 19July2009
13.07	**04 Okidata Ink Only Brown Spot Run5 19July2009
12.95	**217 Canon Ink Only Run2 19July2009
12.84	217 Canon Ink Only AVERAGE
12.55	**04 Okidata Ink Only Black Spot Run2 19July2009
12.47	**217 Canon Ink Only Run3 19July2009
12.32	04 Okidata Ink Only Black Spot AVERAGE
12.22	**04 Okidata Ink Only Black Spot Run1 19July2009
12.13	**04 Okidata Ink Only Brown Spot Run7 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:*AVERAGED Epson 30
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
21.50	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
20.88	22 Kodak Ink Only AVERAGE Slide Subtracted
20.68	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
20.22	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
18.23	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
18.09	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
18.02	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
15.69	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
15.13	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
14.98	217 Canon Ink Only AVERAGE Slide Subtracted
14.81	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
14.71	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
14.66	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
14.60	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
14.44	04 Okidata Ink Only AVERAGE Slide Subtracted
14.20	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
14.11	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
13.51	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
12.92	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
12.68	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted

Epson 33 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #33 Epson Black Inkjet Ink (T003) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
26.74	**13 Xerox Ink Only Run2 19July2009
20.44	**24 Xerox Ink Only Run2 19July2009
20.16	**205 HP Ink Only Run3 19July2009
20.11	**205 HP Ink Only Run4 19July2009
20.09	205 HP Ink Only AVERAGE
19.94	**205 HP Ink Only Run2 19July2009
18.69	24 Xerox Ink Only AVERAGE
17.99	**492 Canon Ink Only Run1 19July2009
17.62	**24 Xerox Ink Only Run4 19July2009
17.46	24 Xerox Ink Only R1R2 AVERAGE
17.43	**492 Canon Ink Only Run2 19July2009
17.30	**24 Xerox Ink Only Run3 19July2009
16.23	**13 Xerox Ink Only Run1 19July2009
15.72	04 Okidata Ink Only AVERAGE
15.64	**04 Okidata Ink Only Black Spot Run2 19July2009
15.17	04 Okidata Ink Only Black Spot AVERAGE
15.01	**13 Xerox Ink Only Run3 19July2009
14.94	**04 Okidata Ink Only Black Spot Run1 19July2009
14.65	**318 Canon Ink Only Run1 19July2009
14.64	**04 Okidata Ink Only Black Spot Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #33 Epson Black Inkjet Ink (T003) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
20.82	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
18.72	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
18.54	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
18.09	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
17.81	205 HP Ink Only AVERAGE Slide Subtracted
17.51	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
16.90	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
16.68	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
15.35	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
14.93	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
14.88	04 Okidata Ink Only AVERAGE Slide Subtracted
14.83	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
14.68	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
14.51	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
14.50	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
14.44	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
14.43	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
14.39	156 Epson Ink Only AVERAGE Slide Subtracted
14.06	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
13.62	**24 Xerox Ink Only Run2 19July2009 Slide Subtracted

Epson 33 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**33 Epson Black Ink (T003) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
28.02	**90 Epson Ink Only Run3 19July2009
27.42	**90 Epson Ink Only Run2 19July2009
27.31	90 Epson Ink Only AVERAGE
27.16	**63 Epson Ink Only Purple Spot Run1 19July2009
26.99	63 Epson Ink Only Purple Spot AVERAGE
26.91	**120 Epson Ink Only Run2 19July2009
26.89	**60 Epson Ink Only Run3 19July2009
26.88	**33 Epson Ink Only Brown Spot Run3 19July2009
26.86	**63 Epson Ink Only Purple Spot Run2 19July2009
26.77	33 Epson Ink Only Brown Spot AVERAGE
26.73	**63 Epson Ink Only Purple Spot Run3 19July2009
26.73	**33 Epson Ink Only Brown Spot Run1 19July2009
26.66	**33 Epson Ink Only Brown Spot Run2 19July2009
26.52	60 Epson Ink Only AVERAGE
26.48	63 Epson Ink Only AVERAGE
26.33	**63 Epson Ink Only Green Spot Run3 19July2009
26.31	**90 Epson Ink Only Run1 19July2009
26.28	**60 Epson Ink Only Run1 19July2009
26.24	**63 Epson Ink Only Green Spot Run2 19July2009
26.24	**60 Epson Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**33 Epson Black Ink (T003) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
27.96	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
27.36	**90 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
27.27	90 Epson Ink Only AVERAGE Slide Subtracted
27.18	**63 Epson Ink Only Purple Spot Run1 19July2009 Blank Slide Subtracted
27.02	63 Epson Ink Only Purple Spot AVERAGE Slide Subtracted
26.90	**63 Epson Ink Only Purple Spot Run2 19July2009 Blank Slide Subtracted
26.90	**60 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
26.88	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
26.86	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
26.78	**63 Epson Ink Only Purple Spot Run3 19July2009 Blank Slide Subtracted
26.76	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
26.71	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
26.65	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
26.53	60 Epson Ink Only AVERAGE Slide Subtracted
26.50	63 Epson Ink Only AVERAGE Slide Subtracted
26.36	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
26.31	**90 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
26.30	**60 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
26.26	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
26.25	**60 Epson Ink Only Run2 19July2009 Blank Slide Subtracted

Epson 33 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**33 Epson Black Ink (T003) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
30.04	**156 Epson Ink Only Run4 19July2009
27.84	**66 Epson Ink Only Run1 19July2009
27.27	66 Epson Ink Only AVERAGE
27.08	**66 Epson Ink Only Run2 19July2009
26.75	**66 Epson Ink Only Run3 19July2009
24.88	**156 Epson Ink Only Run5 19July2009
24.78	**04 Okidata Ink Only Brown Spot Run4 19July2009
24.08	**120 Epson Ink Only Run3 19July2009
23.87	156 Epson Ink Only AVERAGE
23.38	**63 Epson Ink Only Green Spot Run1 19July2009
23.25	120 Epson Ink Only AVERAGE
23.24	**120 Epson Ink Only Run2 19July2009
22.98	**63 Epson Ink Only Purple Spot Run3 19July2009
22.92	**33 Epson Ink Only Brown Spot Run1 19July2009
22.72	33 Epson Ink Only AVERAGE
22.66	63 Epson Ink Only Green Spot AVERAGE
22.61	**33 Epson Ink Only Black Spot Run1 19July2009
22.44	33 Epson Ink Only Black Spot AVERAGE
22.42	63 Epson Ink Only AVERAGE
22.38	**156 Epson Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**33 Epson Black Ink (T003) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
33.39	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
32.01	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
29.81	156 Epson Ink Only AVERAGE Slide Subtracted
27.27	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
26.69	66 Epson Ink Only AVERAGE Slide Subtracted
26.50	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
26.42	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
26.20	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
25.86	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
25.78	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
24.07	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
23.49	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
23.35	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
22.81	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
22.71	33 Epson Ink Only AVERAGE Slide Subtracted
22.70	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
22.70	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
22.70	120 Epson Ink Only AVERAGE Slide Subtracted
22.68	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
22.54	**63 Epson Ink Only Purple Spot Run3 19July2009 Blank Slide Subtracted

Epson 33 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**33 Epson Black (T003) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
60.14	66 Epson Ink Only AVERAGE
60.07	**66 Epson Ink Only Run2 19July2009
60.02	**66 Epson Ink Only Run3 19July2009
60.01	**120 Epson Ink Only Run3 19July2009
59.96	**66 Epson Ink Only Run1 19July2009
59.86	**120 Epson Ink Only Run2 19July2009
59.85	**33 Epson Ink Only Brown Spot Run2 19July2009
59.81	**33 Epson Ink Only Brown Spot Run1 19July2009
59.59	120 Epson Ink Only AVERAGE
59.48	33 Epson Ink Only Brown Spot AVERAGE
58.75	**33 Epson Ink Only Brown Spot Run3 19July2009
58.70	**63 Epson Ink Only Purple Spot Run3 19July2009
58.63	**120 Epson Ink Only Run1 19July2009
58.49	63 Epson Ink Only AVERAGE
58.22	63 Epson Ink Only Green Spot AVERAGE
58.22	**63 Epson Ink Only Green Spot Run1 19July2009
58.22	**93 Epson Ink Only Run3 19July2009
58.07	**63 Epson Ink Only Green Spot Run2 19July2009
58.04	**63 Epson Ink Only Green Spot Run3 19July2009
58.03	**90 Epson Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**33 Epson Black (T003) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
59.45	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
59.32	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
59.05	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
59.02	66 Epson Ink Only AVERAGE Slide Subtracted
58.94	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
58.93	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
58.84	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
58.84	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
58.78	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
58.47	120 Epson Ink Only AVERAGE Slide Subtracted
58.35	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
58.15	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
58.06	63 Epson Ink Only AVERAGE Slide Subtracted
57.95	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
57.85	**63 Epson Ink Only Purple Spot Run3 19July2009 Blank Slide Subtracted
57.78	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
57.55	**120 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
57.46	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
57.45	**93 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
57.17	33 Epson Ink Only AVERAGE Slide Subtracted

Epson 33 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**33 Epson Black Ink (T003) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
45.24	**66 Epson Ink Only Run3 19July2009
45.18	**63 Epson Ink Only Purple Spot Run3 19July2009
45.12	66 Epson Ink Only AVERAGE
45.12	63 Epson Ink Only AVERAGE
45.00	**63 Epson Ink Only Green Spot Run3 19July2009
45.00	**120 Epson Ink Only Run2 19July2009
44.94	**66 Epson Ink Only Run1 19July2009
44.91	63 Epson Ink Only Green Spot AVERAGE
44.89	**66 Epson Ink Only Run2 19July2009
44.81	**63 Epson Ink Only Green Spot Run1 19July2009
44.80	**120 Epson Ink Only Run3 19July2009
44.74	**63 Epson Ink Only Green Spot Run2 19July2009
44.70	63 Epson Ink Only Purple Spot AVERAGE
44.55	120 Epson Ink Only AVERAGE
44.50	**93 Epson Ink Only Run3 19July2009
44.37	**63 Epson Ink Only Purple Spot Run2 19July2009
44.28	**60 Epson Ink Only Run1 19July2009
44.28	**63 Epson Ink Only Purple Spot Run1 19July2009
44.21	93 Epson Ink Only AVERAGE
44.06	**93 Epson Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**33 Epson Black Ink (T003) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
44.90	63 Epson Ink Only AVERAGE Slide Subtracted
44.78	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
44.78	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
44.74	**63 Epson Ink Only Purple Spot Run3 19July2009 Blank Slide Subtracted
44.71	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
44.63	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
44.59	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
44.48	66 Epson Ink Only AVERAGE Slide Subtracted
44.41	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
44.28	63 Epson Ink Only Purple Spot AVERAGE Slide Subtracted
44.28	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
44.25	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
44.16	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
44.09	**93 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
44.01	**60 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
43.98	**63 Epson Ink Only Purple Spot Run2 19July2009 Blank Slide Subtracted
43.95	120 Epson Ink Only AVERAGE Slide Subtracted
43.91	33 Epson Ink Only AVERAGE Slide Subtracted
43.85	**63 Epson Ink Only Purple Spot Run1 19July2009 Blank Slide Subtracted
43.80	93 Epson Ink Only AVERAGE Slide Subtracted

Epson 33 11July2008 Run 2

Neat Ink Library

Spectrum: Subtraction Result:**33 Epson Black Ink (T003) Run2 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
15.69	**33 Epson Ink Only Brown Spot Run1 19July2009
15.40	**66 Epson Ink Only Run1 19July2009
15.36	33 Epson Ink Only Brown Spot AVERAGE
15.31	**33 Epson Ink Only Brown Spot Run3 19July2009
15.13	**33 Epson Ink Only Brown Spot Run2 19July2009
14.72	**384 Canon Ink Only Run2 19July2009
14.70	33 Epson Ink Only AVERAGE
14.56	66 Epson Ink Only AVERAGE
14.50	**120 Epson Ink Only Run2 19July2009
14.46	**384 Canon Ink Only Run1 19July2009
14.39	384 Canon Ink Only AVERAGE
14.22	**120 Epson Ink Only Run3 19July2009
14.17	**66 Epson Ink Only Run3 19July2009
14.16	**33 Epson Ink Only Black Spot Run1 19July2009
14.12	**33 Epson Ink Only Black Spot Run2 19July2009
14.08	120 Epson Ink Only AVERAGE
14.07	33 Epson Ink Only Black Spot AVERAGE
14.05	**90 Epson Ink Only Run2 19July2009
14.05	**66 Epson Ink Only Run2 19July2009
14.04	**90 Epson Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**33 Epson Black Ink (T003) Run2 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
15.64	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
15.55	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
15.32	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
15.27	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
15.26	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
15.16	384 Canon Ink Only AVERAGE Slide Subtracted
15.14	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
15.10	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
14.70	33 Epson Ink Only AVERAGE Slide Subtracted
14.69	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
14.54	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
14.46	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
14.44	66 Epson Ink Only AVERAGE Slide Subtracted
14.44	348 Canon Ink Only AVERAGE Slide Subtracted
14.40	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
14.35	**244 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
14.21	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
14.17	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
14.13	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
14.12	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 33 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Epson 33
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
19.42	**66 Epson Ink Only Run1 19July2009
18.93	66 Epson Ink Only AVERAGE
18.73	**33 Epson Ink Only Brown Spot Run1 19July2009
18.73	**120 Epson Ink Only Run3 19July2009
18.67	**66 Epson Ink Only Run3 19July2009
18.64	**120 Epson Ink Only Run2 19July2009
18.61	**66 Epson Ink Only Run2 19July2009
18.54	120 Epson Ink Only AVERAGE
18.43	**33 Epson Ink Only Brown Spot Run2 19July2009
18.43	33 Epson Ink Only Brown Spot AVERAGE
18.18	**120 Epson Ink Only Run1 19July2009
18.17	**33 Epson Ink Only Brown Spot Run3 19July2009
18.00	**90 Epson Ink Only Run2 19July2009
17.89	**63 Epson Ink Only Purple Spot Run3 19July2009
17.73	**93 Epson Ink Only Run3 19July2009
17.70	93 Epson Ink Only AVERAGE
17.70	**93 Epson Ink Only Run2 19July2009
17.62	63 Epson Ink Only Purple Spot AVERAGE
17.61	**93 Epson Ink Only Run1 19July2009
17.60	**63 Epson Ink Only Purple Spot Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Epson 33
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
19.15	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
18.67	66 Epson Ink Only AVERAGE Slide Subtracted
18.62	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
18.47	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
18.42	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
18.40	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
18.35	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
18.35	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
18.34	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
18.30	120 Epson Ink Only AVERAGE Slide Subtracted
18.08	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
17.95	**120 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
17.76	**90 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
17.71	**63 Epson Ink Only Purple Spot Run3 19July2009 Blank Slide Subtracted
17.57	**93 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
17.54	93 Epson Ink Only AVERAGE Slide Subtracted
17.53	**93 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
17.46	**93 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
17.45	63 Epson Ink Only Purple Spot AVERAGE Slide Subtracted
17.43	**63 Epson Ink Only Purple Spot Run1 19July2009 Blank Slide Subtracted

Epson 60 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #60 Epson Black Inkjet Ink (T007) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
15.38	**492 Canon Ink Only Run1 19July2009
15.09	**492 Canon Ink Only Run2 19July2009
15.09	**205 HP Ink Only Run4 19July2009
14.86	**205 HP Ink Only Run3 19July2009
14.66	205 HP Ink Only AVERAGE
13.94	**205 HP Ink Only Run2 19July2009
13.41	492 Canon Ink Only AVERAGE
12.95	**205 HP Ink Only Run1 19July2009
12.82	**492 Canon Ink Only Run3 19July2009
12.75	**04 Okidata Ink Only Brown Spot Run7 19July2009
12.51	**04 Okidata Ink Only Brown Spot Run6 19July2009
12.42	**156 Epson Ink Only Run1 19July2009
11.75	**492 Canon Ink Only Run5 19July2009
11.63	**156 Epson Ink Only Run5 19July2009
11.16	**04 Okidata Ink Only Brown Spot Run5 19July2009
11.12	156 Epson Ink Only AVERAGE
11.12	04 Okidata Ink Only AVERAGE
10.89	**04 Okidata Ink Only Black Spot Run2 19July2009
10.75	**244 Xerox Ink Only Run1 19July2009
10.70	**04 Okidata Ink Only Black Spot Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #60 Epson Black Inkjet Ink (T007) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
15.57	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
15.25	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
13.81	492 Canon Ink Only AVERAGE Slide Subtracted
13.22	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
12.37	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
12.26	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
12.15	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
11.95	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
11.61	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
11.59	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
11.33	**492 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
10.75	205 HP Ink Only AVERAGE Slide Subtracted
10.47	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
10.33	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
10.32	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
10.16	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
10.02	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
9.81	04 Okidata Ink Only AVERAGE Slide Subtracted
8.98	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
8.14	**198 HP Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 60 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:***60 Epson Black Ink (T007) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
24.88	**63 Epson Ink Only Purple Spot Run2 19July2009
23.96	**63 Epson Ink Only Purple Spot Run3 19July2009
23.93	63 Epson Ink Only Purple Spot AVERAGE
22.92	**63 Epson Ink Only Purple Spot Run1 19July2009
19.68	63 Epson Ink Only AVERAGE
19.31	**244 Xerox Ink Only Run3 19July2009
18.92	**90 Epson Ink Only Run3 19July2009
18.69	**90 Epson Ink Only Run2 19July2009
18.66	90 Epson Ink Only AVERAGE
18.40	**93 Epson Ink Only Run3 19July2009
18.26	**63 Epson Ink Only Green Spot Run3 19July2009
18.24	**90 Epson Ink Only Run1 19July2009
18.22	**244 Xerox Ink Only Run2 19July2009
18.14	**93 Epson Ink Only Run2 19July2009
18.12	93 Epson Ink Only AVERAGE
18.08	**63 Epson Ink Only Green Spot Run2 19July2009
18.07	**123 Epson Ink Only Run2 19July2009
18.02	**123 Epson Ink Only Run1 19July2009
17.98	**60 Epson Ink Only Run3 19July2009
17.97	**120 Epson Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:***60 Epson Black Ink (T007) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
24.62	**63 Epson Ink Only Purple Spot Run2 19July2009 Blank Slide Subtracted
23.67	**63 Epson Ink Only Purple Spot Run3 19July2009 Blank Slide Subtracted
23.65	63 Epson Ink Only Purple Spot AVERAGE Slide Subtracted
22.65	**63 Epson Ink Only Purple Spot Run1 19July2009 Blank Slide Subtracted
22.28	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
20.88	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
19.55	63 Epson Ink Only AVERAGE Slide Subtracted
19.46	**244 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
18.61	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
18.54	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
18.35	90 Epson Ink Only AVERAGE Slide Subtracted
18.34	**90 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
18.16	**93 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
18.08	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
17.99	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
17.96	**90 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
17.89	**93 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
17.87	93 Epson Ink Only AVERAGE Slide Subtracted
17.85	**60 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
17.83	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted

Epson 60 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**60 Epson Black Ink (T007) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
20.73	**04 Okidata Ink Only Brown Spot Run4 19July2009
18.01	**04 Okidata Ink Only Brown Spot Run3 19July2009
13.24	**04 Okidata Ink Only Brown Spot Run2 19July2009
9.52	**384 Canon Ink Only Run1 19July2009
9.15	**384 Canon Ink Only Run2 19July2009
9.11	**306 Canon Ink Only Run1 19July2009
9.01	**63 Epson Ink Only Purple Spot Run2 19July2009
8.99	384 Canon Ink Only AVERAGE
8.88	**223 Canon Ink Only Run3 19July2009
8.77	**306 Canon Ink Only Run2 19July2009
8.74	306 Canon Ink Only AVERAGE
8.67	**522 Canon Ink Only Run1 19July2009
8.66	223 Canon Ink Only AVERAGE
8.61	**223 Canon Ink Only Run2 19July2009
8.40	63 Epson Ink Only Purple Spot AVERAGE
8.36	**244 Xerox Ink Only Run4 19July2009
8.35	**223 Canon Ink Only Run1 19July2009
8.28	**306 Canon Ink Only Run3 19July2009
8.25	**384 Canon Ink Only Run3 19July2009
8.25	**522 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**60 Epson Black Ink (T007) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
21.38	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
18.89	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
14.29	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
12.75	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
10.84	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
10.52	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
10.35	384 Canon Ink Only AVERAGE Slide Subtracted
10.09	**306 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
9.90	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted
9.79	**306 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
9.72	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
9.72	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
9.70	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
9.65	223 Canon Ink Only AVERAGE Slide Subtracted
9.64	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
9.60	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
9.57	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
9.56	306 Canon Ink Only AVERAGE Slide Subtracted
9.46	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
9.43	348 Canon Ink Only AVERAGE Slide Subtracted

Epson 60 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**60 Epson Black (T007) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
48.82	33 Epson Ink Only AVERAGE
48.71	**33 Epson Ink Only Brown Spot Run2 19July2009
48.68	**33 Epson Ink Only Brown Spot Run1 19July2009
48.64	33 Epson Ink Only Brown Spot AVERAGE
48.60	**120 Epson Ink Only Run2 19July2009
48.45	**33 Epson Ink Only Brown Spot Run3 19July2009
48.35	**90 Epson Ink Only Run3 19July2009
48.32	**33 Epson Ink Only Black Spot Run2 19July2009
48.16	**66 Epson Ink Only Run1 19July2009
48.14	**90 Epson Ink Only Run2 19July2009
48.05	**33 Epson Ink Only Black Spot Run1 19July2009
48.02	**63 Epson Ink Only Green Spot Run1 19July2009
47.91	66 Epson Ink Only AVERAGE
47.85	**120 Epson Ink Only Run3 19July2009
47.82	120 Epson Ink Only AVERAGE
47.75	90 Epson Ink Only AVERAGE
47.66	**66 Epson Ink Only Run3 19July2009
47.63	**66 Epson Ink Only Run2 19July2009
47.57	33 Epson Ink Only Black Spot AVERAGE
47.50	63 Epson Ink Only Green Spot AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**60 Epson Black (T007) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
48.82	33 Epson Ink Only AVERAGE Slide Subtracted
48.68	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
48.64	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
48.60	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
48.51	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
48.41	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
48.30	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
48.22	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
48.02	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
48.02	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
48.00	**90 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
47.90	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
47.74	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
47.73	120 Epson Ink Only AVERAGE Slide Subtracted
47.71	66 Epson Ink Only AVERAGE Slide Subtracted
47.65	90 Epson Ink Only AVERAGE Slide Subtracted
47.56	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
47.52	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
47.50	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
47.45	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted

Epson 60 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**60 Epson Black Ink (T007) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
55.34	33 Epson Ink Only AVERAGE
55.07	**120 Epson Ink Only Run2 19July2009
54.92	**63 Epson Ink Only Green Spot Run1 19July2009
54.87	**33 Epson Ink Only Brown Spot Run2 19July2009
54.81	63 Epson Ink Only Green Spot AVERAGE
54.77	**33 Epson Ink Only Black Spot Run2 19July2009
54.76	**63 Epson Ink Only Green Spot Run2 19July2009
54.73	**120 Epson Ink Only Run3 19July2009
54.64	63 Epson Ink Only AVERAGE
54.61	120 Epson Ink Only AVERAGE
54.51	**33 Epson Ink Only Brown Spot Run1 19July2009
54.51	33 Epson Ink Only Brown Spot AVERAGE
54.37	**63 Epson Ink Only Green Spot Run3 19July2009
54.22	**93 Epson Ink Only Run3 19July2009
54.20	**33 Epson Ink Only Black Spot Run1 19July2009
54.16	33 Epson Ink Only Black Spot AVERAGE
54.13	123 Epson Ink Only AVERAGE
54.12	**123 Epson Ink Only Run3 19July2009
54.05	**90 Epson Ink Only Run2 19July2009
54.03	**33 Epson Ink Only Brown Spot Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**60 Epson Black Ink (T007) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
55.33	33 Epson Ink Only AVERAGE Slide Subtracted
54.87	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
54.85	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
54.63	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
54.58	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
54.56	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
54.34	63 Epson Ink Only AVERAGE Slide Subtracted
54.31	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
54.29	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
54.22	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
54.20	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
54.16	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
53.97	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
53.88	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
53.80	120 Epson Ink Only AVERAGE Slide Subtracted
53.74	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
53.67	**93 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
53.55	123 Epson Ink Only AVERAGE Slide Subtracted
53.51	**123 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
53.41	**123 Epson Ink Only Run2 19July2009 Blank Slide Subtracted

Epson 60 11July2008 Run 2

Neat Ink Library

Spectrum: Subtraction Result:**60 Epson Black Ink (T007) Run2 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
39.79	**33 Epson Ink Only Black Spot Run2 19July2009
39.78	33 Epson Ink Only AVERAGE
39.68	**33 Epson Ink Only Black Spot Run1 19July2009
39.16	33 Epson Ink Only Black Spot AVERAGE
38.80	**33 Epson Ink Only Brown Spot Run1 19July2009
38.76	**120 Epson Ink Only Run2 19July2009
38.74	**33 Epson Ink Only Brown Spot Run2 19July2009
38.56	**66 Epson Ink Only Run2 19July2009
38.54	33 Epson Ink Only Brown Spot AVERAGE
38.43	**63 Epson Ink Only Green Spot Run1 19July2009
38.36	120 Epson Ink Only AVERAGE
38.34	66 Epson Ink Only AVERAGE
38.29	**120 Epson Ink Only Run3 19July2009
38.20	**66 Epson Ink Only Run3 19July2009
38.08	**33 Epson Ink Only Brown Spot Run3 19July2009
38.03	**66 Epson Ink Only Run1 19July2009
37.91	63 Epson Ink Only Green Spot AVERAGE
37.84	**120 Epson Ink Only Run1 19July2009
37.72	**63 Epson Ink Only Green Spot Run2 19July2009
37.62	63 Epson Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**60 Epson Black Ink (T007) Run2 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
39.86	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
39.78	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
39.77	33 Epson Ink Only AVERAGE Slide Subtracted
39.21	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
38.50	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
38.49	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
38.39	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
38.29	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
38.11	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
37.88	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
37.84	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
37.75	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
37.69	120 Epson Ink Only AVERAGE Slide Subtracted
37.67	66 Epson Ink Only AVERAGE Slide Subtracted
37.59	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
37.56	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
37.55	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
37.37	63 Epson Ink Only AVERAGE Slide Subtracted
37.35	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
37.19	**120 Epson Ink Only Run1 19July2009 Blank Slide Subtracted

Epson 60 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Epson 60
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
29.05	**33 Epson Ink Only Black Spot Run1 19July2009
28.83	**33 Epson Ink Only Black Spot Run2 19July2009
28.58	33 Epson Ink Only AVERAGE
28.48	33 Epson Ink Only Black Spot AVERAGE
26.94	**63 Epson Ink Only Green Spot Run1 19July2009
26.87	**33 Epson Ink Only Brown Spot Run3 19July2009
26.74	33 Epson Ink Only Brown Spot AVERAGE
26.70	**33 Epson Ink Only Brown Spot Run2 19July2009
26.55	**33 Epson Ink Only Brown Spot Run1 19July2009
26.19	63 Epson Ink Only Green Spot AVERAGE
26.08	**33 Epson Ink Only Black Spot Run3 19July2009
25.84	**63 Epson Ink Only Green Spot Run2 19July2009
25.25	**63 Epson Ink Only Green Spot Run3 19July2009
25.07	63 Epson Ink Only AVERAGE
24.62	**90 Epson Ink Only Run3 19July2009
24.22	**120 Epson Ink Only Run2 19July2009
24.02	**90 Epson Ink Only Run2 19July2009
23.86	90 Epson Ink Only AVERAGE
23.80	120 Epson Ink Only AVERAGE
23.58	**120 Epson Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Epson 60
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
29.13	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
28.88	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
28.58	33 Epson Ink Only AVERAGE Slide Subtracted
28.52	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
27.55	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
26.91	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
26.78	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
26.71	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
26.56	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
26.53	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
26.35	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
26.07	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
26.01	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
25.78	30 Epson Ink Only AVERAGE Slide Subtracted
25.72	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
25.56	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
25.27	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
25.01	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
24.90	63 Epson Ink Only AVERAGE Slide Subtracted
24.31	22 Kodak Ink Only AVERAGE Slide Subtracted

Epson 63 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #63 Epson Black Inkjet Ink (S020189) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
27.22	**13 Xerox Ink Only Run2 19July2009
22.85	**24 Xerox Ink Only Run2 19July2009
20.87	24 Xerox Ink Only AVERAGE
20.10	24 Xerox Ink Only R1R2 AVERAGE
18.96	**24 Xerox Ink Only Run4 19July2009
18.62	**13 Xerox Ink Only Run3 19July2009
16.91	**24 Xerox Ink Only Run3 19July2009
14.74	**13 Xerox Ink Only Run4 19July2009
14.05	**13 Xerox Ink Only Run1 19July2009
13.82	**24 Xerox Ink Only Run1 19July2009
13.19	**156 Epson Ink Only Run4 19July2009
12.71	**312 Canon Ink Only Run1 19July2009
12.70	**312 Canon Ink Only Run4 19July2009
12.67	13 Xerox Ink Only AVERAGE
12.66	312 Canon Ink Only AVERAGE
12.37	**22 Kodak Ink Only Run3 19July2009
11.84	**22 Kodak Ink Only Run2 19July2009
11.78	**13 Xerox Ink Only Run5 19July2009
11.58	22 Kodak Ink Only AVERAGE
11.47	**33 Epson Ink Only Black Spot Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #63 Epson Black Inkjet Ink (S020189) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
22.07	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
19.06	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
17.13	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
17.12	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
16.83	**24 Xerox Ink Only Run2 19July2009 Slide Subtracted
16.72	156 Epson Ink Only AVERAGE Slide Subtracted
16.06	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
15.48	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
15.07	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
14.97	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
14.83	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
14.80	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
14.63	22 Kodak Ink Only AVERAGE Slide Subtracted
13.98	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
13.78	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
13.76	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
13.62	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
13.50	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
13.43	312 Canon Ink Only AVERAGE Slide Subtracted
13.28	24 Xerox Ink Only AVERAGE Slide Subtracted

Epson 63 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**63 Epson Black Ink (S020189) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
22.58	**04 Okidata Ink Only Brown Spot Run4 19July2009
19.22	**04 Okidata Ink Only Brown Spot Run3 19July2009
15.59	**04 Okidata Ink Only Brown Spot Run2 19July2009
12.05	**33 Epson Ink Only Black Spot Run1 19July2009
11.49	33 Epson Ink Only Black Spot AVERAGE
11.44	**33 Epson Ink Only Black Spot Run2 19July2009
10.56	33 Epson Ink Only AVERAGE
10.43	**63 Epson Ink Only Green Spot Run1 19July2009
10.21	**33 Epson Ink Only Black Spot Run3 19July2009
9.68	63 Epson Ink Only Green Spot AVERAGE
9.54	**244 Xerox Ink Only Run3 19July2009
9.23	**244 Xerox Ink Only Run2 19July2009
9.20	**63 Epson Ink Only Green Spot Run2 19July2009
9.17	**348 Canon Ink Only Run2 19July2009
9.11	**223 Canon Ink Only Run3 19July2009
9.00	348 Canon Ink Only AVERAGE
8.98	**63 Epson Ink Only Green Spot Run3 19July2009
8.96	**348 Canon Ink Only Run1 19July2009
8.93	**384 Canon Ink Only Run2 19July2009
8.88	**223 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**63 Epson Black Ink (S020189) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
23.46	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
20.38	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
18.24	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
12.05	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
11.49	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
11.44	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
10.56	33 Epson Ink Only AVERAGE Slide Subtracted
10.43	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
10.21	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
9.82	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
9.67	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
9.67	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
9.65	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
9.63	348 Canon Ink Only AVERAGE Slide Subtracted
9.57	**244 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
9.52	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
9.50	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
9.34	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
9.20	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
9.07	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Epson 63 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**63 Epson Black Ink (S020189) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
24.72	**04 Okidata Ink Only Brown Spot Run4 19July2009
21.20	**04 Okidata Ink Only Brown Spot Run3 19July2009
17.31	**04 Okidata Ink Only Brown Spot Run2 19July2009
12.41	**22 Kodak Ink Only Run3 19July2009
12.00	**22 Kodak Ink Only Run2 19July2009
11.96	22 Kodak Ink Only AVERAGE
11.65	**13 Xerox Ink Only Run6 19July2009
11.31	**22 Kodak Ink Only Run1 19July2009
11.28	**282 Canon Ink Only Run3 19July2009
11.26	**282 Canon Ink Only Run4 19July2009
11.09	**348 Canon Ink Only Run3 19July2009
11.07	**282 Canon Ink Only Run2 19July2009
11.03	**384 Canon Ink Only Run1 19July2009
11.01	282 Canon Ink Only AVERAGE
10.70	**156 Epson Ink Only Run4 19July2009
10.69	**384 Canon Ink Only Run2 19July2009
10.62	384 Canon Ink Only AVERAGE
10.53	348 Canon Ink Only AVERAGE
10.53	**04 Okidata Ink Only Brown Spot Run1 19July2009
10.26	**348 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**63 Epson Black Ink (S020189) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
25.63	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
22.39	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
19.74	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
14.66	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
14.37	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
14.24	156 Epson Ink Only AVERAGE Slide Subtracted
13.60	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
13.49	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
13.35	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
13.33	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
13.28	22 Kodak Ink Only AVERAGE Slide Subtracted
12.96	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
12.81	282 Canon Ink Only AVERAGE Slide Subtracted
12.73	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
12.73	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
12.73	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
12.70	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
12.38	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
12.00	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11.78	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted

Epson 63 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**63 Epson Black (S020189) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
55.69	**63 Epson Ink Only Green Spot Run1 19July2009
55.02	63 Epson Ink Only Green Spot AVERAGE
54.77	**33 Epson Ink Only Black Spot Run2 19July2009
54.57	**63 Epson Ink Only Green Spot Run2 19July2009
54.53	33 Epson Ink Only AVERAGE
54.49	63 Epson Ink Only AVERAGE
54.16	**63 Epson Ink Only Green Spot Run3 19July2009
54.15	**33 Epson Ink Only Black Spot Run1 19July2009
53.95	33 Epson Ink Only Black Spot AVERAGE
53.67	**120 Epson Ink Only Run2 19July2009
53.46	**120 Epson Ink Only Run3 19July2009
53.40	120 Epson Ink Only AVERAGE
53.25	**66 Epson Ink Only Run2 19July2009
53.24	**66 Epson Ink Only Run3 19July2009
53.09	**60 Epson Ink Only Run1 19July2009
53.02	66 Epson Ink Only AVERAGE
52.83	**120 Epson Ink Only Run1 19July2009
52.65	60 Epson Ink Only AVERAGE
52.53	**60 Epson Ink Only Run3 19July2009
52.42	**63 Epson Ink Only Purple Spot Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**63 Epson Black (S020189) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
55.65	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
54.88	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
54.83	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
54.52	33 Epson Ink Only AVERAGE Slide Subtracted
54.41	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
54.25	63 Epson Ink Only AVERAGE Slide Subtracted
54.24	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
54.00	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
53.84	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
53.02	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
52.79	**60 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
52.75	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
52.73	120 Epson Ink Only AVERAGE Slide Subtracted
52.57	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
52.53	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
52.36	60 Epson Ink Only AVERAGE Slide Subtracted
52.31	66 Epson Ink Only AVERAGE Slide Subtracted
52.31	**60 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
52.19	**120 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
52.01	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted

Epson 63 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**63 Epson Black Ink (S020189) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
35.54	**33 Epson Ink Only Black Spot Run1 19July2009
35.47	**63 Epson Ink Only Green Spot Run1 19July2009
35.45	**33 Epson Ink Only Black Spot Run2 19July2009
35.44	**66 Epson Ink Only Run2 19July2009
35.29	**66 Epson Ink Only Run3 19July2009
35.10	33 Epson Ink Only Black Spot AVERAGE
35.03	33 Epson Ink Only AVERAGE
35.03	66 Epson Ink Only AVERAGE
34.38	63 Epson Ink Only Green Spot AVERAGE
34.12	**66 Epson Ink Only Run1 19July2009
33.92	63 Epson Ink Only AVERAGE
33.61	**63 Epson Ink Only Green Spot Run2 19July2009
33.34	**63 Epson Ink Only Green Spot Run3 19July2009
32.96	**33 Epson Ink Only Brown Spot Run1 19July2009
32.90	**63 Epson Ink Only Purple Spot Run3 19July2009
32.87	**33 Epson Ink Only Black Spot Run3 19July2009
32.83	**120 Epson Ink Only Run3 19July2009
32.64	**120 Epson Ink Only Run2 19July2009
32.49	120 Epson Ink Only AVERAGE
32.22	33 Epson Ink Only Brown Spot AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**63 Epson Black Ink (S020189) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
36.01	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
35.68	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
35.55	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
35.48	384 Canon Ink Only AVERAGE Slide Subtracted
35.42	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
35.33	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
35.21	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
35.17	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
35.02	33 Epson Ink Only AVERAGE Slide Subtracted
34.84	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
34.69	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
34.64	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
34.57	30 Epson Ink Only AVERAGE Slide Subtracted
34.54	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
34.26	66 Epson Ink Only AVERAGE Slide Subtracted
34.18	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
33.78	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
33.68	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
33.61	63 Epson Ink Only AVERAGE Slide Subtracted
33.54	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted

Epson 63 11July2008 Run 2

Neat Ink Library

Spectrum: Subtraction Result:**63 Epson Black Ink (S020189) Run2 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
48.64	**33 Epson Ink Only Black Spot Run2 19July2009
48.33	33 Epson Ink Only AVERAGE
48.27	**33 Epson Ink Only Black Spot Run1 19July2009
47.68	33 Epson Ink Only Black Spot AVERAGE
47.03	**33 Epson Ink Only Brown Spot Run3 19July2009
46.74	**63 Epson Ink Only Green Spot Run1 19July2009
46.58	**90 Epson Ink Only Run3 19July2009
46.50	33 Epson Ink Only Brown Spot AVERAGE
46.41	**33 Epson Ink Only Brown Spot Run2 19July2009
46.00	63 Epson Ink Only Green Spot AVERAGE
45.87	**63 Epson Ink Only Green Spot Run2 19July2009
45.83	**33 Epson Ink Only Brown Spot Run1 19July2009
45.64	**90 Epson Ink Only Run2 19July2009
45.39	90 Epson Ink Only AVERAGE
44.73	**63 Epson Ink Only Green Spot Run3 19July2009
44.65	63 Epson Ink Only AVERAGE
43.93	**120 Epson Ink Only Run2 19July2009
43.74	**33 Epson Ink Only Black Spot Run3 19July2009
43.65	**90 Epson Ink Only Run1 19July2009
43.24	120 Epson Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**63 Epson Black Ink (S020189) Run2 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
48.71	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
48.36	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
48.32	33 Epson Ink Only AVERAGE Slide Subtracted
47.79	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
47.73	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
47.44	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
47.14	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
46.85	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
46.80	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
46.72	348 Canon Ink Only AVERAGE Slide Subtracted
46.71	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
46.48	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
46.48	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
46.26	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
46.19	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
46.01	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
45.86	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
45.74	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
45.72	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
45.66	282 Canon Ink Only AVERAGE Slide Subtracted

Epson 63 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Epson 63
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
33.01	**33 Epson Ink Only Black Spot Run2 19July2009
32.95	**33 Epson Ink Only Black Spot Run1 19July2009
32.80	33 Epson Ink Only AVERAGE
32.45	33 Epson Ink Only Black Spot AVERAGE
31.62	**33 Epson Ink Only Brown Spot Run3 19July2009
31.32	**63 Epson Ink Only Green Spot Run1 19July2009
31.31	33 Epson Ink Only Brown Spot AVERAGE
31.25	**33 Epson Ink Only Brown Spot Run2 19July2009
30.93	**33 Epson Ink Only Brown Spot Run1 19July2009
30.55	63 Epson Ink Only Green Spot AVERAGE
30.22	**63 Epson Ink Only Green Spot Run2 19July2009
29.81	**90 Epson Ink Only Run3 19July2009
29.76	**33 Epson Ink Only Black Spot Run3 19July2009
29.55	**63 Epson Ink Only Green Spot Run3 19July2009
29.34	63 Epson Ink Only AVERAGE
29.02	**90 Epson Ink Only Run2 19July2009
28.83	90 Epson Ink Only AVERAGE
28.46	**120 Epson Ink Only Run2 19July2009
28.02	120 Epson Ink Only AVERAGE
27.82	**120 Epson Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Epson 63
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
33.79	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
33.06	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
33.03	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
32.87	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
32.79	33 Epson Ink Only AVERAGE Slide Subtracted
32.50	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
31.62	30 Epson Ink Only AVERAGE Slide Subtracted
31.42	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
31.28	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
31.17	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
31.10	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
31.05	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
30.69	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
30.43	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
30.08	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
29.69	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
29.34	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
29.28	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
29.20	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
29.14	63 Epson Ink Only AVERAGE Slide Subtracted

Epson 66 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #66 Epson Black Inkjet Ink (T026) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
32.26	**13 Xerox Ink Only Run2 19July2009
27.32	**24 Xerox Ink Only Run2 19July2009
24.60	24 Xerox Ink Only AVERAGE
23.91	24 Xerox Ink Only R1R2 AVERAGE
22.88	**13 Xerox Ink Only Run3 19July2009
21.53	**24 Xerox Ink Only Run4 19July2009
19.64	**24 Xerox Ink Only Run3 19July2009
18.66	**156 Epson Ink Only Run4 19July2009
17.37	**13 Xerox Ink Only Run4 19July2009
16.41	**312 Canon Ink Only Run1 19July2009
16.30	312 Canon Ink Only AVERAGE
16.17	**24 Xerox Ink Only Run1 19July2009
15.82	**312 Canon Ink Only Run4 19July2009
15.06	**312 Canon Ink Only Run2 19July2009
15.01	**13 Xerox Ink Only Run1 19July2009
14.68	13 Xerox Ink Only AVERAGE
14.36	**04 Okidata Ink Only Black Spot Run2 19July2009
14.16	04 Okidata Ink Only AVERAGE
14.09	**312 Canon Ink Only Run3 19July2009
14.00	04 Okidata Ink Only Black Spot AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #66 Epson Black Inkjet Ink (T026) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
27.60	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
23.99	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
22.14	**24 Xerox Ink Only Run2 19July2009 Slide Subtracted
21.73	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
21.45	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
20.41	156 Epson Ink Only AVERAGE Slide Subtracted
19.64	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
19.59	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
19.11	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
18.87	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
18.84	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
18.02	24 Xerox Ink Only AVERAGE Slide Subtracted
17.99	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
17.47	312 Canon Ink Only AVERAGE Slide Subtracted
17.07	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
16.67	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
15.85	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
15.23	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
14.26	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
13.92	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted

Epson 66 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**66 Epson Black Ink (T026) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
20.70	**04 Okidata Ink Only Brown Spot Run4 19July2009
17.60	**04 Okidata Ink Only Brown Spot Run3 19July2009
14.25	**04 Okidata Ink Only Brown Spot Run2 19July2009
10.32	**244 Xerox Ink Only Run3 19July2009
9.84	**244 Xerox Ink Only Run2 19July2009
6.83	**33 Epson Ink Only Black Spot Run1 19July2009
6.74	**348 Canon Ink Only Run2 19July2009
6.66	**04 Okidata Ink Only Brown Spot Run1 19July2009
6.61	**04 Okidata Ink Only Black Spot Run1 19July2009
6.44	348 Canon Ink Only AVERAGE
6.38	**04 Okidata Ink Only Black Spot Run3 19July2009
6.38	04 Okidata Ink Only Black Spot AVERAGE
6.38	**223 Canon Ink Only Run3 19July2009
6.32	**306 Canon Ink Only Run3 19July2009
6.31	**223 Canon Ink Only Run2 19July2009
6.30	**348 Canon Ink Only Run1 19July2009
6.26	**348 Canon Ink Only Run3 19July2009
6.22	306 Canon Ink Only AVERAGE
6.22	33 Epson Ink Only Black Spot AVERAGE
6.17	**327 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**66 Epson Black Ink (T026) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
21.51	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
18.67	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
16.72	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
10.34	**244 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
10.25	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
8.83	**318a Canon Clear Ink Only Run1 19July2009 Blank Slide Subtracted
8.06	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
7.31	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
7.22	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
6.90	348 Canon Ink Only AVERAGE Slide Subtracted
6.85	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
6.83	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
6.74	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
6.69	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
6.64	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
6.62	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
6.50	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
6.45	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
6.44	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
6.42	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Epson 66 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**66 Epson Black Ink (T026) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
45.18	**33 Epson Ink Only Black Spot Run2 19July2009
45.07	33 Epson Ink Only AVERAGE
44.64	**33 Epson Ink Only Black Spot Run1 19July2009
44.59	**63 Epson Ink Only Green Spot Run1 19July2009
44.29	33 Epson Ink Only Black Spot AVERAGE
43.96	63 Epson Ink Only Green Spot AVERAGE
43.95	**33 Epson Ink Only Brown Spot Run2 19July2009
43.91	**33 Epson Ink Only Brown Spot Run3 19July2009
43.86	33 Epson Ink Only Brown Spot AVERAGE
43.64	**90 Epson Ink Only Run2 19July2009
43.61	**90 Epson Ink Only Run3 19July2009
43.59	**63 Epson Ink Only Green Spot Run2 19July2009
43.58	**33 Epson Ink Only Brown Spot Run1 19July2009
43.44	**120 Epson Ink Only Run2 19July2009
43.23	90 Epson Ink Only AVERAGE
43.12	**63 Epson Ink Only Green Spot Run3 19July2009
43.11	63 Epson Ink Only AVERAGE
42.74	120 Epson Ink Only AVERAGE
42.68	**120 Epson Ink Only Run3 19July2009
42.12	**90 Epson Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**66 Epson Black Ink (T026) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
45.15	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
45.07	33 Epson Ink Only AVERAGE Slide Subtracted
44.60	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
44.59	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
44.27	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
44.00	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
43.95	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
43.90	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
43.86	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
43.64	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
43.59	**90 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
43.57	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
43.56	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
43.44	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
43.22	90 Epson Ink Only AVERAGE Slide Subtracted
43.19	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
43.18	63 Epson Ink Only AVERAGE Slide Subtracted
42.74	120 Epson Ink Only AVERAGE Slide Subtracted
42.66	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
42.17	**90 Epson Ink Only Run1 19July2009 Blank Slide Subtracted

Epson 66 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**66 Epson Black (T026) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
50.65	**66 Epson Ink Only Run2 19July2009
50.53	66 Epson Ink Only AVERAGE
50.52	**66 Epson Ink Only Run3 19July2009
50.11	**66 Epson Ink Only Run1 19July2009
49.37	**63 Epson Ink Only Green Spot Run1 19July2009
49.04	**33 Epson Ink Only Black Spot Run2 19July2009
48.94	**33 Epson Ink Only Black Spot Run1 19July2009
48.80	33 Epson Ink Only AVERAGE
48.31	33 Epson Ink Only Black Spot AVERAGE
48.25	63 Epson Ink Only Green Spot AVERAGE
47.84	63 Epson Ink Only AVERAGE
47.83	**120 Epson Ink Only Run2 19July2009
47.55	**63 Epson Ink Only Green Spot Run2 19July2009
47.52	**120 Epson Ink Only Run3 19July2009
47.30	120 Epson Ink Only AVERAGE
47.25	**33 Epson Ink Only Brown Spot Run1 19July2009
47.06	**63 Epson Ink Only Purple Spot Run3 19July2009
47.03	**63 Epson Ink Only Green Spot Run3 19July2009
46.82	**33 Epson Ink Only Brown Spot Run2 19July2009
46.53	33 Epson Ink Only Brown Spot AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**66 Epson Black (T026) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
50.08	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
49.99	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
49.96	66 Epson Ink Only AVERAGE Slide Subtracted
49.52	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
49.34	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
49.08	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
49.00	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
48.80	33 Epson Ink Only AVERAGE Slide Subtracted
48.34	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
48.15	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
47.68	63 Epson Ink Only AVERAGE Slide Subtracted
47.44	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
47.36	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
47.04	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
46.99	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
46.81	120 Epson Ink Only AVERAGE Slide Subtracted
46.81	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
46.74	**63 Epson Ink Only Purple Spot Run3 19July2009 Blank Slide Subtracted
46.64	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
46.35	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted

Epson 66 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**66 Epson Black Ink (T026) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
45.35	**33 Epson Ink Only Brown Spot Run2 19July2009
45.14	33 Epson Ink Only Brown Spot AVERAGE
45.04	**33 Epson Ink Only Brown Spot Run1 19July2009
45.00	**90 Epson Ink Only Run2 19July2009
44.92	**33 Epson Ink Only Brown Spot Run3 19July2009
44.40	**90 Epson Ink Only Run3 19July2009
44.26	90 Epson Ink Only AVERAGE
43.54	**120 Epson Ink Only Run3 19July2009
43.50	**120 Epson Ink Only Run2 19July2009
43.40	33 Epson Ink Only AVERAGE
43.24	**66 Epson Ink Only Run1 19July2009
43.08	120 Epson Ink Only AVERAGE
43.05	**90 Epson Ink Only Run1 19July2009
42.94	66 Epson Ink Only AVERAGE
42.75	**66 Epson Ink Only Run2 19July2009
42.67	**93 Epson Ink Only Run3 19July2009
42.59	**66 Epson Ink Only Run3 19July2009
42.42	**123 Epson Ink Only Run2 19July2009
42.33	123 Epson Ink Only AVERAGE
42.22	93 Epson Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**66 Epson Black Ink (T026) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
45.22	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
45.00	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
44.87	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
44.78	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
44.60	**90 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
44.05	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
43.93	90 Epson Ink Only AVERAGE Slide Subtracted
43.40	33 Epson Ink Only AVERAGE Slide Subtracted
43.15	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
43.15	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
42.79	**90 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
42.79	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
42.73	120 Epson Ink Only AVERAGE Slide Subtracted
42.52	66 Epson Ink Only AVERAGE Slide Subtracted
42.46	**93 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
42.34	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
42.21	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
42.18	**123 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
42.14	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
42.11	123 Epson Ink Only AVERAGE Slide Subtracted

Epson 66 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Epson 66
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
51.17	33 Epson Ink Only AVERAGE
51.04	**33 Epson Ink Only Black Spot Run1 19July2009
50.81	**33 Epson Ink Only Black Spot Run2 19July2009
50.28	33 Epson Ink Only Black Spot AVERAGE
50.13	**33 Epson Ink Only Brown Spot Run2 19July2009
49.92	**33 Epson Ink Only Brown Spot Run1 19July2009
49.82	33 Epson Ink Only Brown Spot AVERAGE
49.33	**33 Epson Ink Only Brown Spot Run3 19July2009
49.28	**63 Epson Ink Only Green Spot Run1 19July2009
48.39	63 Epson Ink Only Green Spot AVERAGE
48.02	**63 Epson Ink Only Green Spot Run2 19July2009
47.52	63 Epson Ink Only AVERAGE
47.47	**120 Epson Ink Only Run2 19July2009
47.35	66 Epson Ink Only AVERAGE
47.34	**66 Epson Ink Only Run2 19July2009
47.25	**66 Epson Ink Only Run3 19July2009
47.16	**66 Epson Ink Only Run1 19July2009
47.13	**120 Epson Ink Only Run3 19July2009
47.12	**63 Epson Ink Only Green Spot Run3 19July2009
46.96	**90 Epson Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Epson 66
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
51.15	33 Epson Ink Only AVERAGE Slide Subtracted
51.15	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
50.89	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
50.34	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
49.87	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
49.59	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
49.53	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
49.23	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
49.06	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
48.22	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
47.83	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
47.25	63 Epson Ink Only AVERAGE Slide Subtracted
46.78	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
46.76	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
46.66	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
46.60	66 Epson Ink Only AVERAGE Slide Subtracted
46.59	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
46.54	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
46.41	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
46.37	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 84 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #84 Epson Black Inkjet Ink (T0321) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
22.58	**13 Xerox Ink Only Run2 19July2009
19.00	**24 Xerox Ink Only Run2 19July2009
17.99	04 Okidata Ink Only AVERAGE
17.93	**04 Okidata Ink Only Black Spot Run2 19July2009
17.61	04 Okidata Ink Only Black Spot AVERAGE
17.37	**04 Okidata Ink Only Black Spot Run1 19July2009
17.32	**04 Okidata Ink Only Black Spot Run3 19July2009
16.80	24 Xerox Ink Only AVERAGE
16.57	24 Xerox Ink Only R1R2 AVERAGE
15.64	**04 Okidata Ink Only Brown Spot Run6 19July2009
15.51	**312 Canon Ink Only Run4 19July2009
15.37	**04 Okidata Ink Only Brown Spot Run5 19July2009
14.41	**04 Okidata Ink Only Brown Spot Run7 19July2009
13.95	312 Canon Ink Only AVERAGE
13.78	**13 Xerox Ink Only Run3 19July2009
13.67	**24 Xerox Ink Only Run4 19July2009
13.33	**312 Canon Ink Only Run1 19July2009
13.15	**24 Xerox Ink Only Run3 19July2009
12.94	**13 Xerox Ink Only Run1 19July2009
12.84	**205 HP Ink Only Run4 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #84 Epson Black Inkjet Ink (T0321) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
18.47	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
17.78	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
17.49	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
17.25	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
17.23	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
17.11	04 Okidata Ink Only AVERAGE Slide Subtracted
16.51	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
16.08	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
15.05	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
14.96	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
14.67	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
14.31	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
14.22	**24 Xerox Ink Only Run2 19July2009 Slide Subtracted
14.03	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
13.70	312 Canon Ink Only AVERAGE Slide Subtracted
13.02	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
12.40	156 Epson Ink Only AVERAGE Slide Subtracted
12.36	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
12.24	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
12.22	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted

Epson 84 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**84 Epson Black Ink (T0321) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
32.23	**04 Okidata Ink Only Brown Spot Run4 19July2009
30.94	**13 Xerox Ink Only Run2 19July2009
28.52	**04 Okidata Ink Only Brown Spot Run3 19July2009
25.52	**04 Okidata Ink Only Brown Spot Run2 19July2009
24.24	**04 Okidata Ink Only Brown Spot Run1 19July2009
23.68	**156 Epson Ink Only Run4 19July2009
23.04	**205 HP Ink Only Run2 19July2009
22.60	205 HP Ink Only AVERAGE
22.43	**205 HP Ink Only Run3 19July2009
22.31	**205 HP Ink Only Run4 19July2009
21.76	**24 Xerox Ink Only Run2 19July2009
20.14	**312 Canon Ink Only Run4 19July2009
19.81	04 Okidata Ink Only Brown Spot AVERAGE
19.68	24 Xerox Ink Only AVERAGE
18.62	24 Xerox Ink Only R1R2 AVERAGE
18.35	04 Okidata Ink Only AVERAGE
18.04	**24 Xerox Ink Only Run3 19July2009
17.53	**24 Xerox Ink Only Run4 19July2009
17.53	**13 Xerox Ink Only Run3 19July2009
17.18	312 Canon Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**84 Epson Black Ink (T0321) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
33.04	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
32.18	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
31.33	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
30.86	156 Epson Ink Only AVERAGE Slide Subtracted
30.57	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
29.61	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
28.88	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
26.35	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
25.57	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
24.22	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
23.51	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
22.04	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
22.00	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
21.65	205 HP Ink Only AVERAGE Slide Subtracted
21.47	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
21.39	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
19.17	04 Okidata Ink Only AVERAGE Slide Subtracted
18.15	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
17.52	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
16.98	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted

Epson 84 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**84 Epson Black Ink (T0321) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
20.26	**04 Okidata Ink Only Brown Spot Run4 19July2009
17.69	**04 Okidata Ink Only Brown Spot Run3 19July2009
14.84	**156 Epson Ink Only Run4 19July2009
14.57	**04 Okidata Ink Only Brown Spot Run2 19July2009
12.07	**13 Xerox Ink Only Run2 19July2009
11.95	**156 Epson Ink Only Run1 19July2009
11.58	**04 Okidata Ink Only Black Spot Run1 19July2009
11.58	156 Epson Ink Only AVERAGE
11.29	**156 Epson Ink Only Run5 19July2009
11.26	**156 Epson Ink Only Run2 19July2009
11.19	04 Okidata Ink Only Black Spot AVERAGE
11.11	**04 Okidata Ink Only Black Spot Run2 19July2009
10.60	**04 Okidata Ink Only Black Spot Run3 19July2009
10.05	**13 Xerox Ink Only Run3 19July2009
9.65	**244 Xerox Ink Only Run2 19July2009
8.89	04 Okidata Ink Only AVERAGE
8.67	**244 Xerox Ink Only Run3 19July2009
8.51	**33 Epson Ink Only Black Spot Run1 19July2009
8.41	**318a Canon Clear Ink Only Run2 19July2009
8.24	**156 Epson Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**84 Epson Black Ink (T0321) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
21.08	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
18.79	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
18.77	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
18.09	156 Epson Ink Only AVERAGE Slide Subtracted
17.73	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
17.22	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
16.50	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
16.34	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
15.67	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
11.59	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
11.20	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
11.11	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
10.75	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
10.60	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
9.95	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
9.67	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted
9.62	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
9.08	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
9.00	244 Xerox Ink Only AVERAGE Slide Subtracted
8.96	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted

Epson 84 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**84 Epson Black (T0321) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
30.61	**205 HP Ink Only Run4 19July2009
30.32	205 HP Ink Only AVERAGE
30.29	**205 HP Ink Only Run3 19July2009
29.96	**205 HP Ink Only Run2 19July2009
26.18	**13 Xerox Ink Only Run2 19July2009
23.23	**312 Canon Ink Only Run4 19July2009
22.18	**205 HP Ink Only Run1 19July2009
20.06	04 Okidata Ink Only AVERAGE
19.05	**04 Okidata Ink Only Brown Spot Run1 19July2009
18.74	**04 Okidata Ink Only Black Spot Run2 19July2009
18.36	04 Okidata Ink Only Black Spot AVERAGE
18.22	**04 Okidata Ink Only Black Spot Run1 19July2009
17.96	312 Canon Ink Only AVERAGE
17.81	**04 Okidata Ink Only Black Spot Run3 19July2009
17.56	**84 Epson Ink Only Run3 19July2009
17.39	**84 Epson Ink Only Run4 19July2009
17.02	04 Okidata Ink Only Brown Spot AVERAGE
16.15	**04 Okidata Ink Only Brown Spot Run4 19July2009
16.13	**24 Xerox Ink Only Run3 19July2009
15.94	**312 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**84 Epson Black (T0321) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
29.19	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
28.56	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
27.80	205 HP Ink Only AVERAGE Slide Subtracted
26.28	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
25.14	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
22.64	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
21.71	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
21.55	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
21.41	156 Epson Ink Only AVERAGE Slide Subtracted
21.17	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
20.78	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
20.42	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
19.74	04 Okidata Ink Only AVERAGE Slide Subtracted
19.51	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
19.08	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
18.91	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
18.79	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
18.38	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
18.18	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted
18.08	**84 Epson Ink Only Run4 19July2009 Blank Slide Subtracted

Epson 84 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**84 Epson Black Ink (T0321) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
29.47	**205 HP Ink Only Run4 19July2009
29.33	**205 HP Ink Only Run3 19July2009
29.14	205 HP Ink Only AVERAGE
28.53	**205 HP Ink Only Run2 19July2009
21.76	**205 HP Ink Only Run1 19July2009
20.25	**13 Xerox Ink Only Run2 19July2009
18.26	**84 Epson Ink Only Run4 19July2009
17.72	**217 Canon Ink Only Run4 19July2009
17.59	**84 Epson Ink Only Run3 19July2009
16.72	**312 Canon Ink Only Run4 19July2009
16.28	**04 Okidata Ink Only Brown Spot Run1 19July2009
16.22	04 Okidata Ink Only AVERAGE
15.66	**84 Epson Ink Only Run5 19July2009
15.43	84 Epson Ink Only AVERAGE
15.29	**04 Okidata Ink Only Black Spot Run2 19July2009
15.03	**04 Okidata Ink Only Black Spot Run1 19July2009
14.87	04 Okidata Ink Only Black Spot AVERAGE
14.83	**327 Canon Ink Only Run2 19July2009
14.56	327 Canon Ink Only AVERAGE
14.52	**327 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**84 Epson Black Ink (T0321) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
28.07	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
27.64	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
26.73	205 HP Ink Only AVERAGE Slide Subtracted
24.93	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
22.31	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
20.32	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
20.29	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
19.94	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
19.83	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted
18.94	**84 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
18.37	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
18.26	199 HP Ink Only AVERAGE Slide Subtracted
17.58	84 Epson Ink Only AVERAGE Slide Subtracted
17.20	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
17.17	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
17.01	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
16.87	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
16.71	156 Epson Ink Only AVERAGE Slide Subtracted
16.59	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
16.55	**200 HP Ink Only Run7 19July2009 Blank Slide Subtracted

Epson 84 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Epson 84
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
34.75	**205 HP Ink Only Run4 19July2009
34.28	**205 HP Ink Only Run3 19July2009
34.15	205 HP Ink Only AVERAGE
33.28	**205 HP Ink Only Run2 19July2009
25.48	**205 HP Ink Only Run1 19July2009
24.05	04 Okidata Ink Only AVERAGE
22.75	**04 Okidata Ink Only Black Spot Run2 19July2009
22.37	**04 Okidata Ink Only Black Spot Run1 19July2009
22.31	04 Okidata Ink Only Black Spot AVERAGE
21.30	**04 Okidata Ink Only Black Spot Run3 19July2009
20.62	**04 Okidata Ink Only Brown Spot Run1 19July2009
19.81	**04 Okidata Ink Only Brown Spot Run7 19July2009
19.47	04 Okidata Ink Only Brown Spot AVERAGE
19.15	**04 Okidata Ink Only Brown Spot Run6 19July2009
18.55	**13 Xerox Ink Only Run2 19July2009
18.08	**04 Okidata Ink Only Brown Spot Run5 19July2009
16.57	**217 Canon Ink Only Run4 19July2009
16.00	**04 Okidata Ink Only Brown Spot Run4 19July2009
15.83	**04 Okidata Ink Only Brown Spot Run3 19July2009
15.50	**04 Okidata Ink Only Brown Spot Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Epson 84
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
32.57	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
31.68	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
30.59	205 HP Ink Only AVERAGE Slide Subtracted
28.28	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
24.54	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
23.47	04 Okidata Ink Only AVERAGE Slide Subtracted
22.28	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
21.93	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
21.91	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
21.07	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
20.68	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
19.59	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
19.57	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
19.57	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
19.09	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
19.08	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted
18.77	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
18.71	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
17.66	199 HP Ink Only AVERAGE Slide Subtracted
17.33	**200 HP Ink Only Run7 19July2009 Blank Slide Subtracted

Epson 90 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #90 Epson Black Inkjet Ink (T019) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
23.96	**13 Xerox Ink Only Run2 19July2009
22.61	**24 Xerox Ink Only Run2 19July2009
20.38	24 Xerox Ink Only AVERAGE
19.74	24 Xerox Ink Only R1R2 AVERAGE
18.27	**24 Xerox Ink Only Run4 19July2009
18.07	**13 Xerox Ink Only Run3 19July2009
16.18	**24 Xerox Ink Only Run3 19July2009
16.11	**33 Epson Ink Only Black Spot Run1 19July2009
15.87	**33 Epson Ink Only Black Spot Run2 19July2009
15.58	33 Epson Ink Only Black Spot AVERAGE
15.50	33 Epson Ink Only AVERAGE
15.32	**13 Xerox Ink Only Run1 19July2009
15.02	**13 Xerox Ink Only Run4 19July2009
14.81	**312 Canon Ink Only Run1 19July2009
14.79	**22 Kodak Ink Only Run3 19July2009
14.50	**90 Epson Ink Only Run3 19July2009
14.43	**33 Epson Ink Only Brown Spot Run3 19July2009
14.30	**312 Canon Ink Only Run2 19July2009
14.19	**63 Epson Ink Only Green Spot Run1 19July2009
14.13	**33 Epson Ink Only Brown Spot Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #90 Epson Black Inkjet Ink (T019) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
19.47	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
18.41	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
17.42	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
17.03	**24 Xerox Ink Only Run2 19July2009 Slide Subtracted
16.83	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
16.77	22 Kodak Ink Only AVERAGE Slide Subtracted
16.71	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
16.38	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
16.22	312 Canon Ink Only AVERAGE Slide Subtracted
16.18	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
15.91	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
15.86	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
15.79	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
15.61	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
15.59	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
15.49	33 Epson Ink Only AVERAGE Slide Subtracted
15.27	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
15.14	156 Epson Ink Only AVERAGE Slide Subtracted
14.64	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
14.61	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 90 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**90 Epson Black Ink (T019) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
19.99	**04 Okidata Ink Only Brown Spot Run4 19July2009
16.82	**04 Okidata Ink Only Brown Spot Run3 19July2009
16.05	**33 Epson Ink Only Black Spot Run1 19July2009
15.45	33 Epson Ink Only Black Spot AVERAGE
15.44	**33 Epson Ink Only Black Spot Run2 19July2009
14.48	33 Epson Ink Only AVERAGE
14.23	**63 Epson Ink Only Green Spot Run1 19July2009
13.96	**33 Epson Ink Only Black Spot Run3 19July2009
13.70	**04 Okidata Ink Only Brown Spot Run2 19July2009
13.36	63 Epson Ink Only Green Spot AVERAGE
13.17	**348 Canon Ink Only Run2 19July2009
13.00	**223 Canon Ink Only Run3 19July2009
12.98	348 Canon Ink Only AVERAGE
12.98	**384 Canon Ink Only Run2 19July2009
12.89	**348 Canon Ink Only Run1 19July2009
12.84	**348 Canon Ink Only Run3 19July2009
12.83	**63 Epson Ink Only Green Spot Run2 19July2009
12.73	**223 Canon Ink Only Run2 19July2009
12.67	384 Canon Ink Only AVERAGE
12.60	**384 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**90 Epson Black Ink (T019) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
20.85	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
17.93	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
16.60	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
16.06	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
15.46	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
15.45	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
14.48	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
14.48	33 Epson Ink Only AVERAGE Slide Subtracted
14.28	348 Canon Ink Only AVERAGE Slide Subtracted
14.22	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
14.15	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
14.11	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
13.99	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
13.94	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
13.64	384 Canon Ink Only AVERAGE Slide Subtracted
13.61	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
13.42	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
13.34	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
13.23	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
13.23	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 90 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**90 Epson Black Ink (T019) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
45.52	**33 Epson Ink Only Brown Spot Run1 19July2009
45.27	33 Epson Ink Only Brown Spot AVERAGE
45.17	**33 Epson Ink Only Brown Spot Run2 19July2009
45.11	**33 Epson Ink Only Brown Spot Run3 19July2009
44.10	**66 Epson Ink Only Run1 19July2009
43.77	33 Epson Ink Only AVERAGE
43.44	66 Epson Ink Only AVERAGE
43.37	**120 Epson Ink Only Run3 19July2009
43.11	**120 Epson Ink Only Run2 19July2009
43.04	**66 Epson Ink Only Run2 19July2009
42.96	**66 Epson Ink Only Run3 19July2009
42.77	120 Epson Ink Only AVERAGE
42.63	**90 Epson Ink Only Run2 19July2009
42.57	**90 Epson Ink Only Run3 19July2009
42.56	**33 Epson Ink Only Black Spot Run2 19July2009
42.54	**63 Epson Ink Only Green Spot Run1 19July2009
42.34	63 Epson Ink Only Green Spot AVERAGE
42.21	**63 Epson Ink Only Green Spot Run2 19July2009
42.20	63 Epson Ink Only AVERAGE
42.12	90 Epson Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**90 Epson Black Ink (T019) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
45.28	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
45.07	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
44.98	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
44.92	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
43.76	33 Epson Ink Only AVERAGE Slide Subtracted
43.51	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
42.88	66 Epson Ink Only AVERAGE Slide Subtracted
42.81	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
42.61	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
42.60	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
42.51	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
42.48	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
42.43	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
42.25	120 Epson Ink Only AVERAGE Slide Subtracted
42.23	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
42.10	**90 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
42.10	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
42.09	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
42.09	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
42.06	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted

Epson 90 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**90 Epson Black (T019) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
59.35	**63 Epson Ink Only Green Spot Run1 19July2009
59.17	63 Epson Ink Only Green Spot AVERAGE
59.00	**63 Epson Ink Only Green Spot Run2 19July2009
58.99	**120 Epson Ink Only Run2 19July2009
58.97	**120 Epson Ink Only Run3 19July2009
58.94	63 Epson Ink Only AVERAGE
58.87	**33 Epson Ink Only Brown Spot Run2 19July2009
58.78	33 Epson Ink Only AVERAGE
58.73	**63 Epson Ink Only Green Spot Run3 19July2009
58.67	120 Epson Ink Only AVERAGE
58.59	33 Epson Ink Only Brown Spot AVERAGE
58.59	**33 Epson Ink Only Brown Spot Run1 19July2009
58.21	**33 Epson Ink Only Brown Spot Run3 19July2009
58.14	**33 Epson Ink Only Black Spot Run2 19July2009
58.06	**90 Epson Ink Only Run2 19July2009
57.84	90 Epson Ink Only AVERAGE
57.80	**120 Epson Ink Only Run1 19July2009
57.71	**93 Epson Ink Only Run3 19July2009
57.70	**123 Epson Ink Only Run3 19July2009
57.51	**90 Epson Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**90 Epson Black (T019) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
59.28	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
58.91	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
58.77	33 Epson Ink Only AVERAGE Slide Subtracted
58.72	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
58.53	63 Epson Ink Only AVERAGE Slide Subtracted
58.49	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
58.26	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
58.19	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
58.18	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
58.12	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
57.97	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
57.85	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
57.83	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
57.61	120 Epson Ink Only AVERAGE Slide Subtracted
57.37	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
57.29	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
57.02	**90 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
57.00	**60 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
56.99	**93 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
56.90	90 Epson Ink Only AVERAGE Slide Subtracted

Epson 90 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**90 Epson Black Ink (T019) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
53.37	33 Epson Ink Only AVERAGE
53.16	**33 Epson Ink Only Black Spot Run2 19July2009
52.65	**63 Epson Ink Only Green Spot Run1 19July2009
52.61	**33 Epson Ink Only Brown Spot Run3 19July2009
52.53	**33 Epson Ink Only Brown Spot Run2 19July2009
52.49	33 Epson Ink Only Brown Spot AVERAGE
52.48	**33 Epson Ink Only Black Spot Run1 19July2009
52.26	33 Epson Ink Only Black Spot AVERAGE
52.15	**33 Epson Ink Only Brown Spot Run1 19July2009
52.07	63 Epson Ink Only Green Spot AVERAGE
51.79	**63 Epson Ink Only Green Spot Run2 19July2009
51.23	**90 Epson Ink Only Run3 19July2009
51.16	**63 Epson Ink Only Green Spot Run3 19July2009
51.10	63 Epson Ink Only AVERAGE
50.70	**90 Epson Ink Only Run2 19July2009
50.49	90 Epson Ink Only AVERAGE
50.33	**120 Epson Ink Only Run2 19July2009
49.63	120 Epson Ink Only AVERAGE
49.56	**120 Epson Ink Only Run3 19July2009
49.18	**90 Epson Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**90 Epson Black Ink (T019) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
53.37	33 Epson Ink Only AVERAGE Slide Subtracted
53.22	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
52.62	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
52.57	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
52.37	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
52.31	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
52.29	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
52.23	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
51.93	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
51.86	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
51.64	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
50.87	63 Epson Ink Only AVERAGE Slide Subtracted
50.85	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
50.63	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
50.04	**90 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
49.91	90 Epson Ink Only AVERAGE Slide Subtracted
49.70	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
49.06	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
48.99	120 Epson Ink Only AVERAGE Slide Subtracted
48.88	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 90 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Epson 90
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
46.78	**33 Epson Ink Only Brown Spot Run1 19July2009
46.75	**33 Epson Ink Only Brown Spot Run2 19July2009
46.67	33 Epson Ink Only Brown Spot AVERAGE
46.43	**33 Epson Ink Only Brown Spot Run3 19July2009
46.31	33 Epson Ink Only AVERAGE
45.74	**63 Epson Ink Only Green Spot Run1 19July2009
45.62	**33 Epson Ink Only Black Spot Run2 19July2009
45.40	**120 Epson Ink Only Run3 19July2009
45.39	**120 Epson Ink Only Run2 19July2009
45.37	63 Epson Ink Only Green Spot AVERAGE
45.16	**63 Epson Ink Only Green Spot Run2 19July2009
45.11	**90 Epson Ink Only Run3 19July2009
45.07	**33 Epson Ink Only Black Spot Run1 19July2009
44.99	**90 Epson Ink Only Run2 19July2009
44.98	120 Epson Ink Only AVERAGE
44.96	63 Epson Ink Only AVERAGE
44.94	33 Epson Ink Only Black Spot AVERAGE
44.75	90 Epson Ink Only AVERAGE
44.74	**63 Epson Ink Only Green Spot Run3 19July2009
44.07	66 Epson Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Epson 90
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
46.38	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
46.33	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
46.29	33 Epson Ink Only AVERAGE Slide Subtracted
46.28	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
46.07	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
45.74	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
45.67	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
45.25	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
45.11	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
45.03	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
44.88	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
44.56	63 Epson Ink Only AVERAGE Slide Subtracted
44.41	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
44.34	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
44.21	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
44.20	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
44.00	**90 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
43.97	120 Epson Ink Only AVERAGE Slide Subtracted
43.84	90 Epson Ink Only AVERAGE Slide Subtracted
43.09	66 Epson Ink Only AVERAGE Slide Subtracted

Epson 93 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #93 Epson Black Inkjet Ink (T028) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
23.79	**33 Epson Ink Only Black Spot Run1 19July2009
23.34	**33 Epson Ink Only Black Spot Run2 19July2009
22.98	33 Epson Ink Only Black Spot AVERAGE
22.56	33 Epson Ink Only AVERAGE
21.28	**63 Epson Ink Only Green Spot Run1 19July2009
20.13	63 Epson Ink Only Green Spot AVERAGE
20.13	**33 Epson Ink Only Black Spot Run3 19July2009
19.90	**33 Epson Ink Only Brown Spot Run3 19July2009
19.89	**33 Epson Ink Only Brown Spot Run2 19July2009
19.71	33 Epson Ink Only Brown Spot AVERAGE
19.65	**63 Epson Ink Only Green Spot Run2 19July2009
19.18	**33 Epson Ink Only Brown Spot Run1 19July2009
19.14	**90 Epson Ink Only Run3 19July2009
18.89	**22 Kodak Ink Only Run3 19July2009
18.79	63 Epson Ink Only AVERAGE
18.76	**63 Epson Ink Only Green Spot Run3 19July2009
18.47	90 Epson Ink Only AVERAGE
18.45	**90 Epson Ink Only Run2 19July2009
18.39	**24 Xerox Ink Only Run2 19July2009
17.87	22 Kodak Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #93 Epson Black Inkjet Ink (T028) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
23.87	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
23.39	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
23.01	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
22.55	33 Epson Ink Only AVERAGE Slide Subtracted
21.82	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
21.52	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
21.26	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
21.15	22 Kodak Ink Only AVERAGE Slide Subtracted
20.72	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
20.51	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
20.45	318a Canon Clear Ink Only AVERAGE Slide Subtracted
20.07	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
20.03	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
19.95	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
19.75	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted
19.75	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
19.74	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
19.55	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
19.54	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
19.45	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted

Epson 93 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**93 Epson Black Ink (T028) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
40.30	**90 Epson Ink Only Run2 19July2009
40.20	90 Epson Ink Only AVERAGE
40.16	**90 Epson Ink Only Run1 19July2009
39.90	**120 Epson Ink Only Run2 19July2009
39.90	**93 Epson Ink Only Run1 19July2009
39.90	**63 Epson Ink Only Purple Spot Run3 19July2009
39.81	**90 Epson Ink Only Run3 19July2009
39.75	**93 Epson Ink Only Run3 19July2009
39.68	93 Epson Ink Only AVERAGE
39.66	33 Epson Ink Only AVERAGE
39.52	**60 Epson Ink Only Run1 19July2009
39.49	**123 Epson Ink Only Run2 19July2009
39.45	**66 Epson Ink Only Run3 19July2009
39.40	120 Epson Ink Only AVERAGE
39.34	**33 Epson Ink Only Black Spot Run2 19July2009
39.34	**120 Epson Ink Only Run3 19July2009
39.32	66 Epson Ink Only AVERAGE
39.31	**66 Epson Ink Only Run2 19July2009
39.26	123 Epson Ink Only AVERAGE
39.25	**93 Epson Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**93 Epson Black Ink (T028) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
39.65	33 Epson Ink Only AVERAGE Slide Subtracted
39.52	**90 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
39.52	**90 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
39.49	90 Epson Ink Only AVERAGE Slide Subtracted
39.43	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
39.36	**93 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
39.28	**63 Epson Ink Only Purple Spot Run3 19July2009 Blank Slide Subtracted
39.20	**93 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
39.14	**60 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
39.14	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
39.13	93 Epson Ink Only AVERAGE Slide Subtracted
39.11	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
39.10	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
38.94	**60 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
38.93	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
38.91	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
38.86	**123 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
38.85	63 Epson Ink Only AVERAGE Slide Subtracted
38.76	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
38.70	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 93 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**93 Epson Black Ink (T028) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
33.85	**33 Epson Ink Only Black Spot Run2 19July2009
33.68	33 Epson Ink Only AVERAGE
33.53	**282 Canon Ink Only Run3 19July2009
33.43	**33 Epson Ink Only Brown Spot Run3 19July2009
33.41	**33 Epson Ink Only Black Spot Run1 19July2009
33.31	**348 Canon Ink Only Run3 19July2009
33.22	**282 Canon Ink Only Run4 19July2009
33.19	**33 Epson Ink Only Brown Spot Run2 19July2009
33.18	**90 Epson Ink Only Run3 19July2009
33.12	33 Epson Ink Only Brown Spot AVERAGE
33.08	**384 Canon Ink Only Run2 19July2009
32.98	33 Epson Ink Only Black Spot AVERAGE
32.82	384 Canon Ink Only AVERAGE
32.79	348 Canon Ink Only AVERAGE
32.76	**384 Canon Ink Only Run1 19July2009
32.70	**90 Epson Ink Only Run2 19July2009
32.67	**282 Canon Ink Only Run2 19July2009
32.59	**348 Canon Ink Only Run2 19July2009
32.54	**33 Epson Ink Only Brown Spot Run1 19July2009
32.43	**384 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**93 Epson Black Ink (T028) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
36.61	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
36.33	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
36.19	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
36.07	282 Canon Ink Only AVERAGE Slide Subtracted
35.85	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
35.14	348 Canon Ink Only AVERAGE Slide Subtracted
34.93	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
34.63	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
34.38	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
34.28	384 Canon Ink Only AVERAGE Slide Subtracted
33.99	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
33.99	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
33.85	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
33.68	33 Epson Ink Only AVERAGE Slide Subtracted
33.41	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
33.36	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
33.30	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
33.13	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
33.05	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
33.00	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 93 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**93 Epson Black (T028) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
55.61	**33 Epson Ink Only Black Spot Run2 19July2009
55.45	33 Epson Ink Only AVERAGE
55.20	**33 Epson Ink Only Black Spot Run1 19July2009
54.81	33 Epson Ink Only Black Spot AVERAGE
54.69	**63 Epson Ink Only Green Spot Run1 19July2009
53.58	63 Epson Ink Only Green Spot AVERAGE
53.39	**33 Epson Ink Only Brown Spot Run2 19July2009
53.12	**63 Epson Ink Only Green Spot Run2 19July2009
53.12	33 Epson Ink Only Brown Spot AVERAGE
53.00	**33 Epson Ink Only Brown Spot Run3 19July2009
52.78	**33 Epson Ink Only Brown Spot Run1 19July2009
52.24	63 Epson Ink Only AVERAGE
52.02	**63 Epson Ink Only Green Spot Run3 19July2009
51.45	**33 Epson Ink Only Black Spot Run3 19July2009
50.84	**120 Epson Ink Only Run2 19July2009
50.63	**90 Epson Ink Only Run2 19July2009
50.43	**90 Epson Ink Only Run3 19July2009
50.35	**120 Epson Ink Only Run3 19July2009
50.31	90 Epson Ink Only AVERAGE
50.30	120 Epson Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**93 Epson Black (T028) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
56.73	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
56.27	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
55.71	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
55.45	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
55.44	33 Epson Ink Only AVERAGE Slide Subtracted
55.40	348 Canon Ink Only AVERAGE Slide Subtracted
55.34	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
55.22	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
55.11	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
54.88	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
54.81	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
54.75	30 Epson Ink Only AVERAGE Slide Subtracted
54.67	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
54.64	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
54.39	384 Canon Ink Only AVERAGE Slide Subtracted
53.79	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
53.36	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
53.32	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
53.07	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
52.89	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted

Epson 93 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**93 Epson Black Ink (T028) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
50.28	**66 Epson Ink Only Run2 19July2009
50.11	**66 Epson Ink Only Run3 19July2009
49.95	66 Epson Ink Only AVERAGE
49.11	**66 Epson Ink Only Run1 19July2009
49.11	**63 Epson Ink Only Green Spot Run1 19July2009
48.43	**33 Epson Ink Only Black Spot Run2 19July2009
48.33	**33 Epson Ink Only Black Spot Run1 19July2009
48.29	33 Epson Ink Only AVERAGE
48.18	63 Epson Ink Only Green Spot AVERAGE
47.94	33 Epson Ink Only Black Spot AVERAGE
47.88	63 Epson Ink Only AVERAGE
47.47	**63 Epson Ink Only Green Spot Run2 19July2009
47.43	**63 Epson Ink Only Purple Spot Run3 19July2009
47.26	**63 Epson Ink Only Green Spot Run3 19July2009
47.19	**120 Epson Ink Only Run3 19July2009
46.65	120 Epson Ink Only AVERAGE
46.64	**120 Epson Ink Only Run2 19July2009
46.35	**33 Epson Ink Only Brown Spot Run1 19July2009
46.17	63 Epson Ink Only Purple Spot AVERAGE
45.95	**60 Epson Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**93 Epson Black Ink (T028) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
49.43	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
49.30	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
49.10	66 Epson Ink Only AVERAGE Slide Subtracted
49.06	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
48.52	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
48.46	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
48.27	33 Epson Ink Only AVERAGE Slide Subtracted
48.27	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
48.01	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
47.99	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
47.57	63 Epson Ink Only AVERAGE Slide Subtracted
47.25	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
46.84	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
46.81	**63 Epson Ink Only Purple Spot Run3 19July2009 Blank Slide Subtracted
46.33	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
45.99	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
45.86	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
45.84	120 Epson Ink Only AVERAGE Slide Subtracted
45.58	63 Epson Ink Only Purple Spot AVERAGE Slide Subtracted
45.57	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted

Epson 93 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Epson 93
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
50.32	**33 Epson Ink Only Black Spot Run1 19July2009
50.01	**33 Epson Ink Only Black Spot Run2 19July2009
49.67	33 Epson Ink Only AVERAGE
49.36	33 Epson Ink Only Black Spot AVERAGE
47.83	**63 Epson Ink Only Green Spot Run1 19July2009
47.10	**33 Epson Ink Only Brown Spot Run2 19July2009
46.81	33 Epson Ink Only Brown Spot AVERAGE
46.75	**33 Epson Ink Only Brown Spot Run1 19July2009
46.50	63 Epson Ink Only Green Spot AVERAGE
46.48	**33 Epson Ink Only Brown Spot Run3 19July2009
45.92	**63 Epson Ink Only Green Spot Run2 19July2009
45.33	63 Epson Ink Only AVERAGE
45.19	**33 Epson Ink Only Black Spot Run3 19July2009
44.78	**63 Epson Ink Only Green Spot Run3 19July2009
44.19	**120 Epson Ink Only Run2 19July2009
43.77	**120 Epson Ink Only Run3 19July2009
43.69	**66 Epson Ink Only Run3 19July2009
43.67	120 Epson Ink Only AVERAGE
43.60	**66 Epson Ink Only Run2 19July2009
43.58	66 Epson Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Epson 93
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
50.48	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
50.13	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
49.65	33 Epson Ink Only AVERAGE Slide Subtracted
49.44	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
47.77	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
47.33	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
46.98	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
46.97	384 Canon Ink Only AVERAGE Slide Subtracted
46.76	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
46.69	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
46.65	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
46.64	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
46.45	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
46.42	348 Canon Ink Only AVERAGE Slide Subtracted
46.32	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
46.30	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
46.29	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
46.26	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
46.14	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
45.96	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 120 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #120 Epson Black Inkjet Ink (S020187) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
25.45	**33 Epson Ink Only Black Spot Run1 19July2009
24.94	**33 Epson Ink Only Black Spot Run2 19July2009
24.66	33 Epson Ink Only Black Spot AVERAGE
24.19	33 Epson Ink Only AVERAGE
22.76	**63 Epson Ink Only Green Spot Run1 19July2009
21.97	**33 Epson Ink Only Black Spot Run3 19July2009
21.66	63 Epson Ink Only Green Spot AVERAGE
21.27	**33 Epson Ink Only Brown Spot Run3 19July2009
21.20	**33 Epson Ink Only Brown Spot Run2 19July2009
21.17	**63 Epson Ink Only Green Spot Run2 19July2009
21.16	**90 Epson Ink Only Run3 19July2009
21.09	33 Epson Ink Only Brown Spot AVERAGE
20.65	**33 Epson Ink Only Brown Spot Run1 19July2009
20.40	**24 Xerox Ink Only Run2 19July2009
20.36	**63 Epson Ink Only Green Spot Run3 19July2009
20.35	63 Epson Ink Only AVERAGE
20.33	**90 Epson Ink Only Run2 19July2009
20.33	90 Epson Ink Only AVERAGE
19.41	**60 Epson Ink Only Run3 19July2009
19.38	**90 Epson Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #120 Epson Black Inkjet Ink (S020187) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
25.48	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
24.97	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
24.67	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
24.19	33 Epson Ink Only AVERAGE Slide Subtracted
22.75	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
21.95	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
21.61	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
21.18	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
21.12	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
21.12	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
21.00	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
20.94	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
20.55	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
20.50	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
20.32	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
20.28	63 Epson Ink Only AVERAGE Slide Subtracted
20.25	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
20.12	90 Epson Ink Only AVERAGE Slide Subtracted
20.10	**90 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
19.69	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Epson 120 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**120 Epson Black Ink (S020187) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
24.71	**63 Epson Ink Only Purple Spot Run2 19July2009
24.46	**33 Epson Ink Only Brown Spot Run3 19July2009
24.30	33 Epson Ink Only Brown Spot AVERAGE
24.26	**33 Epson Ink Only Brown Spot Run2 19July2009
24.13	63 Epson Ink Only Purple Spot AVERAGE
24.10	**33 Epson Ink Only Brown Spot Run1 19July2009
23.91	**90 Epson Ink Only Run3 19July2009
23.87	**63 Epson Ink Only Purple Spot Run1 19July2009
23.85	**04 Okidata Ink Only Brown Spot Run4 19July2009
23.71	**63 Epson Ink Only Purple Spot Run3 19July2009
23.46	**90 Epson Ink Only Run2 19July2009
23.33	90 Epson Ink Only AVERAGE
23.04	**120 Epson Ink Only Run2 19July2009
22.60	63 Epson Ink Only AVERAGE
22.45	**90 Epson Ink Only Run1 19July2009
22.42	120 Epson Ink Only AVERAGE
22.40	33 Epson Ink Only AVERAGE
22.37	**120 Epson Ink Only Run1 19July2009
22.26	**93 Epson Ink Only Run3 19July2009
22.16	**123 Epson Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**120 Epson Black Ink (S020187) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
24.53	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
24.49	**63 Epson Ink Only Purple Spot Run2 19July2009 Blank Slide Subtracted
24.34	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
24.17	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
24.14	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
23.95	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
23.90	63 Epson Ink Only Purple Spot AVERAGE Slide Subtracted
23.63	**63 Epson Ink Only Purple Spot Run1 19July2009 Blank Slide Subtracted
23.61	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
23.47	**63 Epson Ink Only Purple Spot Run3 19July2009 Blank Slide Subtracted
23.12	**90 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
23.03	90 Epson Ink Only AVERAGE Slide Subtracted
22.72	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
22.49	63 Epson Ink Only AVERAGE Slide Subtracted
22.39	33 Epson Ink Only AVERAGE Slide Subtracted
22.20	**90 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
22.10	120 Epson Ink Only AVERAGE Slide Subtracted
22.07	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
22.05	**120 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
22.04	**93 Epson Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 120 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**120 Epson Black Ink (S020187) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
43.02	**33 Epson Ink Only Brown Spot Run3 19July2009
43.00	33 Epson Ink Only Brown Spot AVERAGE
42.97	**33 Epson Ink Only Brown Spot Run1 19July2009
42.94	**33 Epson Ink Only Brown Spot Run2 19July2009
41.42	**90 Epson Ink Only Run3 19July2009
41.27	33 Epson Ink Only AVERAGE
41.26	**120 Epson Ink Only Run2 19July2009
40.86	**90 Epson Ink Only Run2 19July2009
40.65	90 Epson Ink Only AVERAGE
40.55	120 Epson Ink Only AVERAGE
40.24	**120 Epson Ink Only Run3 19July2009
40.19	**33 Epson Ink Only Black Spot Run2 19July2009
39.97	**120 Epson Ink Only Run1 19July2009
39.68	**63 Epson Ink Only Green Spot Run2 19July2009
39.68	63 Epson Ink Only AVERAGE
39.62	**63 Epson Ink Only Purple Spot Run2 19July2009
39.55	33 Epson Ink Only Black Spot AVERAGE
39.49	63 Epson Ink Only Green Spot AVERAGE
39.48	**63 Epson Ink Only Purple Spot Run1 19July2009
39.47	**33 Epson Ink Only Black Spot Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**120 Epson Black Ink (S020187) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
42.86	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
42.83	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
42.78	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
42.77	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
41.27	33 Epson Ink Only AVERAGE Slide Subtracted
41.01	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
40.84	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
40.41	**90 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
40.25	90 Epson Ink Only AVERAGE Slide Subtracted
40.23	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
40.12	120 Epson Ink Only AVERAGE Slide Subtracted
39.77	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
39.59	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
39.57	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
39.55	**120 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
39.54	63 Epson Ink Only AVERAGE Slide Subtracted
39.52	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
39.40	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
39.38	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
39.36	**63 Epson Ink Only Purple Spot Run2 19July2009 Blank Slide Subtracted

Epson 120 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**120 Epson Black (S020187) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
50.55	**33 Epson Ink Only Brown Spot Run2 19July2009
50.06	33 Epson Ink Only Brown Spot AVERAGE
49.84	**33 Epson Ink Only Brown Spot Run1 19July2009
49.73	33 Epson Ink Only AVERAGE
49.63	**33 Epson Ink Only Brown Spot Run3 19July2009
49.51	**120 Epson Ink Only Run2 19July2009
49.37	**120 Epson Ink Only Run3 19July2009
49.10	120 Epson Ink Only AVERAGE
49.00	**33 Epson Ink Only Black Spot Run2 19July2009
48.94	**63 Epson Ink Only Green Spot Run1 19July2009
48.52	**33 Epson Ink Only Black Spot Run1 19July2009
48.46	63 Epson Ink Only Green Spot AVERAGE
48.40	**90 Epson Ink Only Run2 19July2009
48.31	**63 Epson Ink Only Green Spot Run2 19July2009
48.29	33 Epson Ink Only Black Spot AVERAGE
48.19	**120 Epson Ink Only Run1 19July2009
48.04	63 Epson Ink Only AVERAGE
48.02	90 Epson Ink Only AVERAGE
47.91	66 Epson Ink Only AVERAGE
47.88	**66 Epson Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**120 Epson Black (S020187) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
50.28	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
50.21	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
50.00	384 Canon Ink Only AVERAGE Slide Subtracted
49.79	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
49.78	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
49.72	33 Epson Ink Only AVERAGE Slide Subtracted
49.70	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
49.57	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
49.43	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
49.32	348 Canon Ink Only AVERAGE Slide Subtracted
49.30	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
49.10	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
49.00	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
48.88	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
48.81	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
48.67	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
48.62	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
48.40	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
48.36	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
48.26	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Epson 120 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**120 Epson Black Ink (S020187) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
56.03	**33 Epson Ink Only Black Spot Run2 19July2009
55.90	**63 Epson Ink Only Green Spot Run1 19July2009
55.82	33 Epson Ink Only AVERAGE
55.50	**33 Epson Ink Only Black Spot Run1 19July2009
55.24	33 Epson Ink Only Black Spot AVERAGE
55.01	63 Epson Ink Only Green Spot AVERAGE
54.54	**63 Epson Ink Only Green Spot Run2 19July2009
53.81	**63 Epson Ink Only Green Spot Run3 19July2009
53.80	63 Epson Ink Only AVERAGE
53.48	**33 Epson Ink Only Brown Spot Run2 19July2009
53.29	33 Epson Ink Only Brown Spot AVERAGE
53.21	**33 Epson Ink Only Brown Spot Run3 19July2009
53.01	**33 Epson Ink Only Brown Spot Run1 19July2009
52.16	**33 Epson Ink Only Black Spot Run3 19July2009
51.96	**120 Epson Ink Only Run2 19July2009
51.60	**90 Epson Ink Only Run2 19July2009
51.44	120 Epson Ink Only AVERAGE
51.43	90 Epson Ink Only AVERAGE
51.41	**120 Epson Ink Only Run3 19July2009
51.38	**90 Epson Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**120 Epson Black Ink (S020187) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
56.09	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
55.86	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
55.81	33 Epson Ink Only AVERAGE Slide Subtracted
55.59	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
55.28	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
54.87	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
54.39	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
53.57	63 Epson Ink Only AVERAGE Slide Subtracted
53.50	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
53.25	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
53.04	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
52.97	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
52.73	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
52.08	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
51.81	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
51.65	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
51.49	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
51.35	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
50.96	**90 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
50.85	90 Epson Ink Only AVERAGE Slide Subtracted

Epson 120 11July2008 Run 2

Neat Ink Library

Spectrum: Subtraction Result:***120 Epson Black Ink (S020187) Run2 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
30.44	**33 Epson Ink Only Black Spot Run2 19July2009
30.30	**33 Epson Ink Only Black Spot Run1 19July2009
30.24	33 Epson Ink Only AVERAGE
30.13	**63 Epson Ink Only Green Spot Run1 19July2009
30.10	33 Epson Ink Only Black Spot AVERAGE
30.04	**66 Epson Ink Only Run1 19July2009
29.82	66 Epson Ink Only AVERAGE
29.76	63 Epson Ink Only Green Spot AVERAGE
29.68	**66 Epson Ink Only Run3 19July2009
29.58	**63 Epson Ink Only Green Spot Run2 19July2009
29.56	**66 Epson Ink Only Run2 19July2009
29.41	63 Epson Ink Only AVERAGE
29.21	**63 Epson Ink Only Green Spot Run3 19July2009
29.01	**90 Epson Ink Only Run2 19July2009
28.87	**90 Epson Ink Only Run3 19July2009
28.77	**120 Epson Ink Only Run3 19July2009
28.67	90 Epson Ink Only AVERAGE
28.50	**33 Epson Ink Only Black Spot Run3 19July2009
28.47	**33 Epson Ink Only Brown Spot Run1 19July2009
28.37	33 Epson Ink Only Brown Spot AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:***120 Epson Black Ink (S020187) Run2 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
30.43	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
30.28	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
30.24	33 Epson Ink Only AVERAGE Slide Subtracted
30.13	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
30.09	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
29.88	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
29.77	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
29.68	66 Epson Ink Only AVERAGE Slide Subtracted
29.60	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
29.57	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
29.43	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
29.43	63 Epson Ink Only AVERAGE Slide Subtracted
29.22	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
28.92	**90 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
28.79	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
28.70	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
28.61	90 Epson Ink Only AVERAGE Slide Subtracted
28.51	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
28.45	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
28.36	**63 Epson Ink Only Purple Spot Run3 19July2009 Blank Slide Subtracted

Epson 120 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result:*AVERAGED Epson 120
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
32.06	**33 Epson Ink Only Black Spot Run2 19July2009
31.94	**63 Epson Ink Only Green Spot Run1 19July2009
31.72	33 Epson Ink Only AVERAGE
31.70	**33 Epson Ink Only Black Spot Run1 19July2009
31.62	63 Epson Ink Only Green Spot AVERAGE
31.56	33 Epson Ink Only Black Spot AVERAGE
31.51	**90 Epson Ink Only Run3 19July2009
31.44	**63 Epson Ink Only Green Spot Run2 19July2009
31.43	**90 Epson Ink Only Run2 19July2009
31.36	90 Epson Ink Only AVERAGE
31.31	63 Epson Ink Only AVERAGE
31.14	**63 Epson Ink Only Green Spot Run3 19July2009
30.91	**123 Epson Ink Only Run1 19July2009
30.90	**90 Epson Ink Only Run1 19July2009
30.54	**93 Epson Ink Only Run3 19July2009
30.46	**60 Epson Ink Only Run3 19July2009
30.28	**120 Epson Ink Only Run3 19July2009
30.24	123 Epson Ink Only AVERAGE
30.14	**93 Epson Ink Only Run1 19July2009
30.06	93 Epson Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:*AVERAGED Epson 120
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
32.11	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
31.91	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
31.77	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
31.71	33 Epson Ink Only AVERAGE Slide Subtracted
31.59	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
31.51	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
31.32	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
31.13	63 Epson Ink Only AVERAGE Slide Subtracted
31.08	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
30.96	**90 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
30.94	90 Epson Ink Only AVERAGE Slide Subtracted
30.91	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
30.61	**123 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
30.53	**90 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
30.29	**60 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
30.22	**93 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
29.90	123 Epson Ink Only AVERAGE Slide Subtracted
29.84	**93 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
29.79	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
29.78	60 Epson Ink Only AVERAGE Slide Subtracted

Epson 123 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #123 Epson Black Inkjet Ink (T017) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
12.07	**04 Okidata Ink Only Black Spot Run2 19July2009
11.88	**04 Okidata Ink Only Black Spot Run1 19July2009
11.85	04 Okidata Ink Only Black Spot AVERAGE
11.41	**04 Okidata Ink Only Brown Spot Run4 19July2009
11.34	**205 HP Ink Only Run4 19July2009
11.33	**04 Okidata Ink Only Black Spot Run3 19July2009
11.28	04 Okidata Ink Only AVERAGE
11.21	**205 HP Ink Only Run3 19July2009
11.12	**244 Xerox Ink Only Run5 19July2009
11.09	205 HP Ink Only AVERAGE
11.00	244 Xerox Ink Only AVERAGE
10.99	**244 Xerox Ink Only Run4 19July2009
10.65	**205 HP Ink Only Run2 19July2009
10.43	**13 Xerox Ink Only Run1 19July2009
10.37	**04 Okidata Ink Only Brown Spot Run6 19July2009
10.30	**244 Xerox Ink Only Run1 19July2009
10.30	**04 Okidata Ink Only Brown Spot Run5 19July2009
10.09	**492 Canon Ink Only Run1 19July2009
9.90	**04 Okidata Ink Only Brown Spot Run7 19July2009
9.87	**244 Xerox Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #123 Epson Black Inkjet Ink (T017) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
12.49	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
11.82	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
11.66	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
11.64	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
11.41	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
11.21	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
10.69	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
10.22	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
10.20	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
9.98	04 Okidata Ink Only AVERAGE Slide Subtracted
9.85	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
9.79	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
9.77	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
9.46	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
8.86	205 HP Ink Only AVERAGE Slide Subtracted
8.20	**244 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
8.00	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
7.83	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
7.80	244 Xerox Ink Only AVERAGE Slide Subtracted
7.68	492 Canon Ink Only AVERAGE Slide Subtracted

Epson 123 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**123 Epson Black Ink (T017) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
25.04	**04 Okidata Ink Only Brown Spot Run4 19July2009
21.59	**04 Okidata Ink Only Brown Spot Run3 19July2009
17.30	**04 Okidata Ink Only Brown Spot Run2 19July2009
12.01	**33 Epson Ink Only Black Spot Run1 19July2009
11.51	33 Epson Ink Only Black Spot AVERAGE
11.42	**33 Epson Ink Only Black Spot Run2 19July2009
10.91	**63 Epson Ink Only Green Spot Run1 19July2009
10.71	33 Epson Ink Only AVERAGE
10.54	**223 Canon Ink Only Run3 19July2009
10.50	**223 Canon Ink Only Run2 19July2009
10.46	**384 Canon Ink Only Run2 19July2009
10.44	**33 Epson Ink Only Black Spot Run3 19July2009
10.33	**348 Canon Ink Only Run2 19July2009
10.32	223 Canon Ink Only AVERAGE
10.31	**348 Canon Ink Only Run1 19July2009
10.25	**384 Canon Ink Only Run3 19July2009
10.24	384 Canon Ink Only AVERAGE
10.17	348 Canon Ink Only AVERAGE
10.11	**306 Canon Ink Only Run3 19July2009
10.09	63 Epson Ink Only Green Spot AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**123 Epson Black Ink (T017) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
26.05	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
22.94	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
20.52	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
12.02	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
11.52	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
11.42	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
11.23	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
11.19	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
11.13	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11.12	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
11.05	348 Canon Ink Only AVERAGE Slide Subtracted
10.92	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
10.91	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
10.91	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
10.87	384 Canon Ink Only AVERAGE Slide Subtracted
10.71	33 Epson Ink Only AVERAGE Slide Subtracted
10.70	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
10.63	223 Canon Ink Only AVERAGE Slide Subtracted
10.61	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
10.51	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Epson 123 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**123 Epson Black Ink (T017) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
47.18	33 Epson Ink Only AVERAGE
46.84	**33 Epson Ink Only Black Spot Run1 19July2009
46.60	**33 Epson Ink Only Black Spot Run2 19July2009
46.39	**33 Epson Ink Only Brown Spot Run1 19July2009
46.31	33 Epson Ink Only Black Spot AVERAGE
46.08	33 Epson Ink Only Brown Spot AVERAGE
46.05	**33 Epson Ink Only Brown Spot Run2 19July2009
45.78	**33 Epson Ink Only Brown Spot Run3 19July2009
45.21	**63 Epson Ink Only Green Spot Run1 19July2009
44.49	63 Epson Ink Only Green Spot AVERAGE
44.24	**66 Epson Ink Only Run1 19July2009
44.23	**120 Epson Ink Only Run2 19July2009
44.05	**63 Epson Ink Only Green Spot Run2 19July2009
43.82	**33 Epson Ink Only Black Spot Run3 19July2009
43.78	63 Epson Ink Only AVERAGE
43.78	**120 Epson Ink Only Run3 19July2009
43.69	66 Epson Ink Only AVERAGE
43.60	120 Epson Ink Only AVERAGE
43.58	**63 Epson Ink Only Green Spot Run3 19July2009
43.42	**66 Epson Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**123 Epson Black Ink (T017) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
47.17	33 Epson Ink Only AVERAGE Slide Subtracted
46.91	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
46.64	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
46.35	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
46.16	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
45.88	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
45.87	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
45.59	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
45.19	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
44.38	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
43.93	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
43.77	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
43.74	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
43.67	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
43.62	63 Epson Ink Only AVERAGE Slide Subtracted
43.35	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
43.25	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
43.15	66 Epson Ink Only AVERAGE Slide Subtracted
43.10	120 Epson Ink Only AVERAGE Slide Subtracted
42.88	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted

Epson 123 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**123 Epson Black (T017) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
47.15	**63 Epson Ink Only Green Spot Run1 19July2009
46.87	**33 Epson Ink Only Black Spot Run2 19July2009
46.78	33 Epson Ink Only AVERAGE
46.78	63 Epson Ink Only Green Spot AVERAGE
46.57	**63 Epson Ink Only Green Spot Run2 19July2009
46.36	63 Epson Ink Only AVERAGE
46.17	**63 Epson Ink Only Green Spot Run3 19July2009
46.15	33 Epson Ink Only Black Spot AVERAGE
46.13	**33 Epson Ink Only Black Spot Run1 19July2009
46.01	**120 Epson Ink Only Run2 19July2009
45.87	**120 Epson Ink Only Run3 19July2009
45.79	120 Epson Ink Only AVERAGE
45.28	**120 Epson Ink Only Run1 19July2009
45.23	**33 Epson Ink Only Brown Spot Run2 19July2009
45.06	33 Epson Ink Only Brown Spot AVERAGE
44.93	**33 Epson Ink Only Brown Spot Run3 19July2009
44.92	**33 Epson Ink Only Brown Spot Run1 19July2009
44.69	90 Epson Ink Only AVERAGE
44.69	**90 Epson Ink Only Run1 19July2009
44.65	**90 Epson Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**123 Epson Black (T017) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
47.09	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
46.99	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
46.77	33 Epson Ink Only AVERAGE Slide Subtracted
46.54	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
46.42	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
46.30	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
46.29	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
46.23	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
45.98	63 Epson Ink Only AVERAGE Slide Subtracted
45.65	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
45.63	384 Canon Ink Only AVERAGE Slide Subtracted
45.39	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
45.07	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
44.88	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
44.86	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
44.85	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
44.82	120 Epson Ink Only AVERAGE Slide Subtracted
44.75	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
44.72	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
44.69	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted

Epson 123 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**123 Epson Black Ink (T017) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
50.29	**33 Epson Ink Only Black Spot Run2 19July2009
49.95	33 Epson Ink Only AVERAGE
49.87	**33 Epson Ink Only Black Spot Run1 19July2009
49.52	33 Epson Ink Only Black Spot AVERAGE
49.48	**63 Epson Ink Only Green Spot Run1 19July2009
48.63	63 Epson Ink Only Green Spot AVERAGE
48.30	**63 Epson Ink Only Green Spot Run2 19July2009
47.60	**33 Epson Ink Only Brown Spot Run2 19July2009
47.51	**33 Epson Ink Only Brown Spot Run3 19July2009
47.40	33 Epson Ink Only Brown Spot AVERAGE
47.38	63 Epson Ink Only AVERAGE
47.38	**63 Epson Ink Only Green Spot Run3 19July2009
46.88	**33 Epson Ink Only Brown Spot Run1 19July2009
46.42	**33 Epson Ink Only Black Spot Run3 19July2009
46.37	**90 Epson Ink Only Run3 19July2009
46.19	**90 Epson Ink Only Run2 19July2009
46.19	90 Epson Ink Only AVERAGE
46.05	**120 Epson Ink Only Run2 19July2009
45.64	**90 Epson Ink Only Run1 19July2009
45.62	120 Epson Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**123 Epson Black Ink (T017) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
50.40	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
50.01	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
49.93	33 Epson Ink Only AVERAGE Slide Subtracted
49.60	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
49.42	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
49.10	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
48.92	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
48.41	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
48.06	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
47.38	30 Epson Ink Only AVERAGE Slide Subtracted
47.28	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
47.27	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
47.19	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
47.06	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
47.04	63 Epson Ink Only AVERAGE Slide Subtracted
46.91	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
46.61	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
46.54	384 Canon Ink Only AVERAGE Slide Subtracted
46.49	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
46.30	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted

Epson 123 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Epson 123
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
40.45	33 Epson Ink Only AVERAGE
40.36	**33 Epson Ink Only Black Spot Run2 19July2009
40.18	**33 Epson Ink Only Black Spot Run1 19July2009
39.86	33 Epson Ink Only Black Spot AVERAGE
39.84	**63 Epson Ink Only Green Spot Run1 19July2009
39.24	63 Epson Ink Only Green Spot AVERAGE
39.16	**33 Epson Ink Only Brown Spot Run1 19July2009
39.15	**33 Epson Ink Only Brown Spot Run2 19July2009
39.07	33 Epson Ink Only Brown Spot AVERAGE
38.92	**63 Epson Ink Only Green Spot Run2 19July2009
38.86	**33 Epson Ink Only Brown Spot Run3 19July2009
38.69	**120 Epson Ink Only Run2 19July2009
38.65	**120 Epson Ink Only Run3 19July2009
38.60	63 Epson Ink Only AVERAGE
38.45	**63 Epson Ink Only Green Spot Run3 19July2009
38.34	120 Epson Ink Only AVERAGE
37.87	**90 Epson Ink Only Run2 19July2009
37.85	**90 Epson Ink Only Run3 19July2009
37.77	90 Epson Ink Only AVERAGE
37.52	**120 Epson Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Epson 123
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
40.49	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
40.43	33 Epson Ink Only AVERAGE Slide Subtracted
40.36	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
39.96	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
39.92	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
39.77	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
39.24	384 Canon Ink Only AVERAGE Slide Subtracted
39.08	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
38.97	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
38.77	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
38.70	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
38.68	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
38.62	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
38.49	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
38.42	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
38.18	63 Epson Ink Only AVERAGE Slide Subtracted
37.88	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
37.69	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
37.58	**120 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
37.36	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted

Epson 156 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #156 Epson Black Inkjet Ink (T015) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
18.09	**492 Canon Ink Only Run2 19July2009
18.04	**205 HP Ink Only Run4 19July2009
18.00	**205 HP Ink Only Run3 19July2009
17.95	**492 Canon Ink Only Run1 19July2009
17.74	205 HP Ink Only AVERAGE
17.11	**205 HP Ink Only Run2 19July2009
15.96	492 Canon Ink Only AVERAGE
14.87	**492 Canon Ink Only Run3 19July2009
14.42	**04 Okidata Ink Only Black Spot Run2 19July2009
14.28	**04 Okidata Ink Only Black Spot Run1 19July2009
14.13	04 Okidata Ink Only Black Spot AVERAGE
14.02	**282 Canon Ink Only Run2 19July2009
13.84	**492 Canon Ink Only Run5 19July2009
13.77	**205 HP Ink Only Run1 19July2009
13.77	**282 Canon Ink Only Run4 19July2009
13.61	282 Canon Ink Only AVERAGE
13.32	**492 Canon Ink Only Run4 19July2009
13.30	**04 Okidata Ink Only Black Spot Run3 19July2009
13.20	04 Okidata Ink Only AVERAGE
13.10	**318 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #156 Epson Black Inkjet Ink (T015) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
18.18	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
18.07	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
16.25	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
16.21	492 Canon Ink Only AVERAGE Slide Subtracted
15.96	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
15.13	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
15.11	205 HP Ink Only AVERAGE Slide Subtracted
14.35	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
14.32	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
14.18	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
14.10	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
13.99	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
13.87	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
13.78	**492 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
13.60	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
13.16	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
12.79	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
12.17	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
12.10	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
11.79	282 Canon Ink Only AVERAGE Slide Subtracted

Epson 156 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**156 Epson Black Ink (T015) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
24.86	**04 Okidata Ink Only Brown Spot Run4 19July2009
21.34	**04 Okidata Ink Only Brown Spot Run3 19July2009
16.78	**04 Okidata Ink Only Brown Spot Run2 19July2009
13.71	**90 Epson Ink Only Run3 19July2009
13.59	**33 Epson Ink Only Brown Spot Run3 19July2009
13.44	**63 Epson Ink Only Purple Spot Run2 19July2009
13.44	**33 Epson Ink Only Brown Spot Run2 19July2009
13.42	33 Epson Ink Only Brown Spot AVERAGE
13.16	**33 Epson Ink Only Brown Spot Run1 19July2009
13.09	**90 Epson Ink Only Run2 19July2009
13.03	63 Epson Ink Only Purple Spot AVERAGE
12.99	**63 Epson Ink Only Purple Spot Run1 19July2009
12.91	90 Epson Ink Only AVERAGE
12.60	**63 Epson Ink Only Purple Spot Run3 19July2009
12.16	**120 Epson Ink Only Run2 19July2009
12.11	**93 Epson Ink Only Run3 19July2009
11.87	**90 Epson Ink Only Run1 19July2009
11.85	33 Epson Ink Only AVERAGE
11.79	**123 Epson Ink Only Run2 19July2009
11.77	93 Epson Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**156 Epson Black Ink (T015) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
25.58	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
22.28	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
17.72	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
14.24	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
13.49	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
13.48	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
13.34	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
13.32	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
13.27	156 Epson Ink Only AVERAGE Slide Subtracted
13.26	**63 Epson Ink Only Purple Spot Run2 19July2009 Blank Slide Subtracted
13.05	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
12.84	63 Epson Ink Only Purple Spot AVERAGE Slide Subtracted
12.84	**90 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
12.80	**63 Epson Ink Only Purple Spot Run1 19July2009 Blank Slide Subtracted
12.80	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
12.68	90 Epson Ink Only AVERAGE Slide Subtracted
12.40	**63 Epson Ink Only Purple Spot Run3 19July2009 Blank Slide Subtracted
11.95	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
11.93	**93 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
11.92	**120 Epson Ink Only Run2 19July2009 Blank Slide Subtracted

Epson 156 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:***156 Epson Black Ink (T015) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
18.21	**04 Okidata Ink Only Brown Spot Run3 19July2009
17.50	**04 Okidata Ink Only Brown Spot Run4 19July2009
17.37	**33 Epson Ink Only Black Spot Run1 19July2009
17.35	**33 Epson Ink Only Black Spot Run2 19July2009
17.35	**492 Canon Ink Only Run4 19July2009
17.13	**90 Epson Ink Only Run3 19July2009
17.13	33 Epson Ink Only Black Spot AVERAGE
16.97	33 Epson Ink Only AVERAGE
16.71	**63 Epson Ink Only Purple Spot Run2 19July2009
16.66	**90 Epson Ink Only Run2 19July2009
16.46	90 Epson Ink Only AVERAGE
16.35	**04 Okidata Ink Only Brown Spot Run2 19July2009
16.20	**492 Canon Ink Only Run2 19July2009
16.18	63 Epson Ink Only Purple Spot AVERAGE
16.02	63 Epson Ink Only AVERAGE
15.96	**63 Epson Ink Only Green Spot Run1 19July2009
15.94	**63 Epson Ink Only Purple Spot Run3 19July2009
15.92	492 Canon Ink Only AVERAGE
15.89	**63 Epson Ink Only Green Spot Run2 19July2009
15.87	**33 Epson Ink Only Black Spot Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:***156 Epson Black Ink (T015) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
19.33	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
19.27	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
18.20	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
17.38	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
17.36	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
17.13	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
17.11	**492 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
17.01	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
16.97	33 Epson Ink Only AVERAGE Slide Subtracted
16.65	**63 Epson Ink Only Purple Spot Run2 19July2009 Blank Slide Subtracted
16.54	**90 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
16.36	90 Epson Ink Only AVERAGE Slide Subtracted
16.13	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
16.12	63 Epson Ink Only Purple Spot AVERAGE Slide Subtracted
15.99	63 Epson Ink Only AVERAGE Slide Subtracted
15.96	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
15.88	**63 Epson Ink Only Purple Spot Run3 19July2009 Blank Slide Subtracted
15.87	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
15.87	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
15.86	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted

Epson 156 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**156 Epson Black (T015) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
30.65	**33 Epson Ink Only Black Spot Run1 19July2009
30.23	**33 Epson Ink Only Black Spot Run2 19July2009
29.67	33 Epson Ink Only Black Spot AVERAGE
29.47	**223 Canon Ink Only Run3 19July2009
28.97	**384 Canon Ink Only Run2 19July2009
28.72	33 Epson Ink Only AVERAGE
28.52	384 Canon Ink Only AVERAGE
28.44	**217 Canon Ink Only Run2 19July2009
28.38	**63 Epson Ink Only Green Spot Run1 19July2009
28.34	**384 Canon Ink Only Run1 19July2009
28.32	223 Canon Ink Only AVERAGE
28.17	**223 Canon Ink Only Run2 19July2009
28.07	**384 Canon Ink Only Run3 19July2009
27.88	217 Canon Ink Only AVERAGE
27.80	**217 Canon Ink Only Run3 19July2009
27.35	**217 Canon Ink Only Run1 19July2009
27.25	**348 Canon Ink Only Run1 19July2009
27.24	63 Epson Ink Only Green Spot AVERAGE
26.75	**223 Canon Ink Only Run1 19July2009
26.70	**63 Epson Ink Only Green Spot Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**156 Epson Black (T015) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
32.52	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
32.01	384 Canon Ink Only AVERAGE Slide Subtracted
31.65	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
31.63	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
31.15	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
31.03	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
30.95	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
30.90	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
30.75	223 Canon Ink Only AVERAGE Slide Subtracted
30.72	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
30.33	348 Canon Ink Only AVERAGE Slide Subtracted
30.28	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
30.22	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
30.16	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
30.03	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
29.90	217 Canon Ink Only AVERAGE Slide Subtracted
29.71	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
29.63	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
29.38	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
29.12	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Epson 156 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**156 Epson Black Ink (T015) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
38.97	**33 Epson Ink Only Black Spot Run1 19July2009
38.61	**33 Epson Ink Only Black Spot Run2 19July2009
38.01	33 Epson Ink Only Black Spot AVERAGE
37.60	33 Epson Ink Only AVERAGE
35.90	**63 Epson Ink Only Green Spot Run1 19July2009
34.82	63 Epson Ink Only Green Spot AVERAGE
34.54	**63 Epson Ink Only Green Spot Run2 19July2009
34.16	**33 Epson Ink Only Black Spot Run3 19July2009
34.04	**33 Epson Ink Only Brown Spot Run2 19July2009
33.79	**33 Epson Ink Only Brown Spot Run3 19July2009
33.62	33 Epson Ink Only Brown Spot AVERAGE
33.27	**90 Epson Ink Only Run3 19July2009
33.23	63 Epson Ink Only AVERAGE
33.22	**63 Epson Ink Only Green Spot Run3 19July2009
33.17	**90 Epson Ink Only Run2 19July2009
32.90	90 Epson Ink Only AVERAGE
32.78	**33 Epson Ink Only Brown Spot Run1 19July2009
32.66	**348 Canon Ink Only Run3 19July2009
32.02	**90 Epson Ink Only Run1 19July2009
31.94	348 Canon Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**156 Epson Black Ink (T015) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
39.10	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
38.93	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
38.70	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
38.41	348 Canon Ink Only AVERAGE Slide Subtracted
38.33	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
38.08	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
37.67	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
37.59	33 Epson Ink Only AVERAGE Slide Subtracted
37.50	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
37.32	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
37.23	384 Canon Ink Only AVERAGE Slide Subtracted
36.78	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
36.62	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
36.14	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
36.13	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
35.95	318a Canon Clear Ink Only AVERAGE Slide Subtracted
35.90	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
35.85	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
35.71	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
35.65	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Epson 156 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Epson 156
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
34.61	**33 Epson Ink Only Black Spot Run1 19July2009
33.77	**33 Epson Ink Only Black Spot Run2 19July2009
33.45	33 Epson Ink Only Black Spot AVERAGE
33.13	33 Epson Ink Only AVERAGE
30.82	**63 Epson Ink Only Green Spot Run1 19July2009
29.96	**33 Epson Ink Only Brown Spot Run2 19July2009
29.88	**223 Canon Ink Only Run3 19July2009
29.78	**33 Epson Ink Only Black Spot Run3 19July2009
29.76	**33 Epson Ink Only Brown Spot Run3 19July2009
29.75	33 Epson Ink Only Brown Spot AVERAGE
29.74	63 Epson Ink Only Green Spot AVERAGE
29.41	**63 Epson Ink Only Green Spot Run2 19July2009
29.39	**33 Epson Ink Only Brown Spot Run1 19July2009
29.05	**348 Canon Ink Only Run3 19July2009
29.00	**348 Canon Ink Only Run2 19July2009
28.80	348 Canon Ink Only AVERAGE
28.70	63 Epson Ink Only AVERAGE
28.65	**384 Canon Ink Only Run3 19July2009
28.49	**90 Epson Ink Only Run2 19July2009
28.36	**90 Epson Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Epson 156
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
34.71	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
33.91	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
33.84	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
33.84	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
33.71	348 Canon Ink Only AVERAGE Slide Subtracted
33.50	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
33.22	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
33.13	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
33.12	33 Epson Ink Only AVERAGE Slide Subtracted
32.93	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
32.62	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
32.55	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
32.50	384 Canon Ink Only AVERAGE Slide Subtracted
32.29	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
32.20	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
32.05	282 Canon Ink Only AVERAGE Slide Subtracted
31.77	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
31.67	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
31.61	223 Canon Ink Only AVERAGE Slide Subtracted
31.11	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Hewlett Packard 198 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #198 Hewlett Packard Black Inkjet Ink (#29) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
27.83	**205 HP Ink Only Run3 19July2009
27.77	**205 HP Ink Only Run4 19July2009
27.75	205 HP Ink Only AVERAGE
27.56	**205 HP Ink Only Run2 19July2009
24.23	04 Okidata Ink Only AVERAGE
24.11	**04 Okidata Ink Only Black Spot Run2 19July2009
23.63	04 Okidata Ink Only Black Spot AVERAGE
23.63	**04 Okidata Ink Only Black Spot Run1 19July2009
23.22	**223 Canon Ink Only Run3 19July2009
23.09	**217 Canon Ink Only Run3 19July2009
22.93	217 Canon Ink Only AVERAGE
22.92	**217 Canon Ink Only Run1 19July2009
22.75	**217 Canon Ink Only Run2 19July2009
22.66	**04 Okidata Ink Only Black Spot Run3 19July2009
22.21	223 Canon Ink Only AVERAGE
22.16	**318 Canon Ink Only Run1 19July2009
21.86	**223 Canon Ink Only Run1 19July2009
21.86	**318 Canon Ink Only Run2 19July2009
21.81	318 Canon Ink Only AVERAGE
21.76	**13 Xerox Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #198 Hewlett Packard Black Inkjet Ink (#29) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
27.59	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
27.47	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
26.87	205 HP Ink Only AVERAGE Slide Subtracted
25.79	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
23.90	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
23.46	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
23.44	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
23.32	04 Okidata Ink Only AVERAGE Slide Subtracted
23.23	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
22.56	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
21.74	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
21.48	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
21.24	217 Canon Ink Only AVERAGE Slide Subtracted
21.24	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
21.18	282 Canon Ink Only AVERAGE Slide Subtracted
21.04	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
21.00	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
20.89	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20.51	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
20.45	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted

Hewlett Packard 198 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**198 HP Black Ink (29) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
27.28	**201 HP Ink Only Run4 19July2009
26.93	04 Okidata Ink Only AVERAGE
26.63	**201 HP Ink Only Run5 19July2009
26.57	**201 HP Ink Only Run6 19July2009
26.28	**04 Okidata Ink Only Black Spot Run2 19July2009
26.23	**04 Okidata Ink Only Black Spot Run1 19July2009
26.09	04 Okidata Ink Only Black Spot AVERAGE
25.31	**04 Okidata Ink Only Black Spot Run3 19July2009
24.81	**200 HP Ink Only Run5 19July2009
23.57	200 HP Ink Only AVERAGE
23.52	**198 HP Ink Only Run5 19July2009
23.36	**198 HP Ink Only Run6 19July2009
22.97	**200 HP Ink Only Run7 19July2009
22.91	**199 HP Ink Only Run5 19July2009
22.74	**200 HP Ink Only Run6 19July2009
22.62	**200 HP Ink Only Run4 19July2009
22.49	**201 HP Ink Only Run3 19July2009
22.31	198 HP Ink Only AVERAGE
22.22	199 HP Ink Only AVERAGE
22.13	201 HP Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**198 HP Black Ink (29) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
30.83	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
30.15	199 HP Ink Only AVERAGE Slide Subtracted
30.11	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
29.93	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted
29.55	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
28.95	**198 HP Ink Only Run3 19July2009 Blank Slide Subtracted
27.27	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
27.13	**201 HP Ink Only Run6 19July2009 Blank Slide Subtracted
26.99	**201 HP Ink Only Run5 19July2009 Blank Slide Subtracted
26.77	04 Okidata Ink Only AVERAGE Slide Subtracted
26.57	**200 HP Ink Only Run6 19July2009 Blank Slide Subtracted
26.54	**200 HP Ink Only Run7 19July2009 Blank Slide Subtracted
26.28	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
26.23	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
26.19	**198 HP Ink Only Run2 19July2009 Blank Slide Subtracted
26.09	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
26.07	**201 HP Ink Only Run4 19July2009 Blank Slide Subtracted
25.89	**200 HP Ink Only Run5 19July2009 Blank Slide Subtracted
25.32	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
24.46	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted

Hewlett Packard 198 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**198 HP Black Ink #29 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
32.61	**13 Xerox Ink Only Run2 19July2009
28.96	04 Okidata Ink Only AVERAGE
27.53	**04 Okidata Ink Only Black Spot Run2 19July2009
26.87	04 Okidata Ink Only Black Spot AVERAGE
26.43	**04 Okidata Ink Only Black Spot Run1 19July2009
26.25	**04 Okidata Ink Only Black Spot Run3 19July2009
26.23	**04 Okidata Ink Only Brown Spot Run1 19July2009
26.12	**156 Epson Ink Only Run4 19July2009
24.66	**205 HP Ink Only Run2 19July2009
24.32	205 HP Ink Only AVERAGE
24.16	**205 HP Ink Only Run3 19July2009
24.10	**205 HP Ink Only Run4 19July2009
24.10	**312 Canon Ink Only Run4 19July2009
23.45	04 Okidata Ink Only Brown Spot AVERAGE
23.08	**04 Okidata Ink Only Brown Spot Run6 19July2009
21.77	**04 Okidata Ink Only Brown Spot Run7 19July2009
21.70	**04 Okidata Ink Only Brown Spot Run5 19July2009
21.10	**24 Xerox Ink Only Run2 19July2009
20.93	**04 Okidata Ink Only Brown Spot Run4 19July2009
20.10	**217 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**198 HP Black Ink #29 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
32.38	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
31.05	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
30.73	156 Epson Ink Only AVERAGE Slide Subtracted
30.01	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
30.00	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
28.99	04 Okidata Ink Only AVERAGE Slide Subtracted
28.28	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
27.47	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
26.82	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
26.70	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
26.38	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
26.23	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
26.17	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
25.29	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
25.11	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
25.10	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
25.10	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
24.91	205 HP Ink Only AVERAGE Slide Subtracted
24.76	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
24.52	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted

Hewlett Packard 198 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**198 HP Black (#29) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
45.20	**205 HP Ink Only Run4 19July2009
44.99	**205 HP Ink Only Run3 19July2009
44.91	205 HP Ink Only AVERAGE
44.40	**205 HP Ink Only Run2 19July2009
35.21	**223 Canon Ink Only Run3 19July2009
34.37	**217 Canon Ink Only Run3 19July2009
34.35	217 Canon Ink Only AVERAGE
34.34	**217 Canon Ink Only Run1 19July2009
34.29	**217 Canon Ink Only Run2 19July2009
33.96	**348 Canon Ink Only Run2 19July2009
33.79	**282 Canon Ink Only Run4 19July2009
33.57	**282 Canon Ink Only Run3 19July2009
33.46	348 Canon Ink Only AVERAGE
33.40	**282 Canon Ink Only Run2 19July2009
33.29	**348 Canon Ink Only Run3 19July2009
33.21	223 Canon Ink Only AVERAGE
33.00	**348 Canon Ink Only Run1 19July2009
32.99	282 Canon Ink Only AVERAGE
32.26	**318 Canon Ink Only Run2 19July2009
32.18	**318 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**198 HP Black (#29) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
45.69	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
45.23	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
44.43	205 HP Ink Only AVERAGE Slide Subtracted
42.57	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
39.06	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
34.96	199 HP Ink Only AVERAGE Slide Subtracted
34.94	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
34.60	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted
34.52	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
34.37	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
34.27	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
34.23	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
34.09	282 Canon Ink Only AVERAGE Slide Subtracted
33.91	**199 HP Ink Only Run1 19July2009 Blank Slide Subtracted
33.63	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
33.53	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
33.21	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
32.96	348 Canon Ink Only AVERAGE Slide Subtracted
32.43	217 Canon Ink Only AVERAGE Slide Subtracted
32.42	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Hewlett Packard 198 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**198 HP Black Ink (#29) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
44.18	**205 HP Ink Only Run4 19July2009
44.04	**205 HP Ink Only Run3 19July2009
43.99	205 HP Ink Only AVERAGE
43.60	**205 HP Ink Only Run2 19July2009
34.17	**223 Canon Ink Only Run3 19July2009
33.11	**217 Canon Ink Only Run3 19July2009
33.11	217 Canon Ink Only AVERAGE
33.09	**217 Canon Ink Only Run2 19July2009
33.08	**217 Canon Ink Only Run1 19July2009
32.37	223 Canon Ink Only AVERAGE
32.24	**348 Canon Ink Only Run2 19July2009
31.95	**318 Canon Ink Only Run1 19July2009
31.88	**282 Canon Ink Only Run4 19July2009
31.80	348 Canon Ink Only AVERAGE
31.78	**318 Canon Ink Only Run2 19July2009
31.70	**282 Canon Ink Only Run2 19July2009
31.69	**348 Canon Ink Only Run1 19July2009
31.63	318 Canon Ink Only AVERAGE
31.55	**282 Canon Ink Only Run3 19July2009
31.34	**348 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**198 HP Black Ink (#29) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
44.43	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
44.03	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
43.21	205 HP Ink Only AVERAGE Slide Subtracted
41.50	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
37.47	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
34.34	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
34.11	199 HP Ink Only AVERAGE Slide Subtracted
34.03	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
33.91	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted
33.23	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
32.24	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
32.14	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
31.90	282 Canon Ink Only AVERAGE Slide Subtracted
31.87	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
31.47	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
31.19	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
30.98	04 Okidata Ink Only AVERAGE Slide Subtracted
30.96	348 Canon Ink Only AVERAGE Slide Subtracted
30.94	**198 HP Ink Only Run3 19July2009 Blank Slide Subtracted
30.92	217 Canon Ink Only AVERAGE Slide Subtracted

Hewlett Packard 198 11July2008 Run 2

Neat Ink Library

Spectrum: Subtraction Result:**198 HP Black Ink #29 11July2008 Run2
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
31.66	**205 HP Ink Only Run2 19July2009
31.64	205 HP Ink Only AVERAGE
31.59	**205 HP Ink Only Run4 19July2009
31.58	**205 HP Ink Only Run3 19July2009
27.00	04 Okidata Ink Only AVERAGE
25.63	**04 Okidata Ink Only Black Spot Run2 19July2009
25.56	**13 Xerox Ink Only Run2 19July2009
25.20	04 Okidata Ink Only Black Spot AVERAGE
25.00	**04 Okidata Ink Only Black Spot Run1 19July2009
24.77	**217 Canon Ink Only Run3 19July2009
24.67	217 Canon Ink Only AVERAGE
24.65	**217 Canon Ink Only Run1 19July2009
24.60	**223 Canon Ink Only Run3 19July2009
24.59	**04 Okidata Ink Only Black Spot Run3 19July2009
24.55	**217 Canon Ink Only Run2 19July2009
23.71	**327 Canon Ink Only Run2 19July2009
23.63	**327 Canon Ink Only Run1 19July2009
23.45	327 Canon Ink Only AVERAGE
23.42	223 Canon Ink Only AVERAGE
23.29	**318 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**198 HP Black Ink #29 11July2008 Run2
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
31.62	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
31.42	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
30.92	205 HP Ink Only AVERAGE Slide Subtracted
29.97	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
29.26	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
28.00	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted
27.93	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
27.65	199 HP Ink Only AVERAGE Slide Subtracted
27.09	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
26.87	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
26.56	04 Okidata Ink Only AVERAGE Slide Subtracted
26.13	**198 HP Ink Only Run3 19July2009 Blank Slide Subtracted
25.42	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
25.02	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
24.96	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
24.80	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
24.49	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
24.16	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
23.80	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
23.67	**201 HP Ink Only Run6 19July2009 Blank Slide Subtracted

Hewlett Packard 198 14Dec2008 Run 2

Neat Ink Library

Spectrum: Subtraction Result:**198 HP Black Ink (#29) Run2 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
33.38	**205 HP Ink Only Run4 19July2009
33.03	205 HP Ink Only AVERAGE
32.97	**205 HP Ink Only Run3 19July2009
32.62	**205 HP Ink Only Run2 19July2009
31.48	04 Okidata Ink Only AVERAGE
30.16	**04 Okidata Ink Only Black Spot Run2 19July2009
29.55	**04 Okidata Ink Only Black Spot Run1 19July2009
29.50	04 Okidata Ink Only Black Spot AVERAGE
28.09	**04 Okidata Ink Only Black Spot Run3 19July2009
27.05	**04 Okidata Ink Only Brown Spot Run1 19July2009
24.54	04 Okidata Ink Only Brown Spot AVERAGE
23.48	**04 Okidata Ink Only Brown Spot Run7 19July2009
23.38	**04 Okidata Ink Only Brown Spot Run6 19July2009
23.37	**04 Okidata Ink Only Brown Spot Run4 19July2009
22.24	**205 HP Ink Only Run1 19July2009
21.82	**04 Okidata Ink Only Brown Spot Run3 19July2009
21.54	**201 HP Ink Only Run4 19July2009
21.30	**04 Okidata Ink Only Brown Spot Run5 19July2009
20.31	**201 HP Ink Only Run6 19July2009
20.22	**201 HP Ink Only Run5 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**198 HP Black Ink (#29) Run2 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
34.05	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
33.47	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
32.94	205 HP Ink Only AVERAGE Slide Subtracted
31.69	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
31.51	04 Okidata Ink Only AVERAGE Slide Subtracted
30.84	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
30.39	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted
30.03	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
30.00	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
29.41	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
29.37	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
29.27	199 HP Ink Only AVERAGE Slide Subtracted
28.43	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
28.07	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
28.03	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
27.02	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
26.10	**200 HP Ink Only Run7 19July2009 Blank Slide Subtracted
25.77	**200 HP Ink Only Run6 19July2009 Blank Slide Subtracted
25.26	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
25.09	**198 HP Ink Only Run3 19July2009 Blank Slide Subtracted

Hewlett Packard 198 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED HP 198
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
24.19	04 Okidata Ink Only AVERAGE
22.59	**04 Okidata Ink Only Black Spot Run2 19July2009
22.31	**04 Okidata Ink Only Brown Spot Run1 19July2009
22.18	**205 HP Ink Only Run4 19July2009
22.07	04 Okidata Ink Only Black Spot AVERAGE
22.05	**205 HP Ink Only Run3 19July2009
22.03	205 HP Ink Only AVERAGE
21.87	**04 Okidata Ink Only Black Spot Run1 19July2009
21.80	**205 HP Ink Only Run2 19July2009
21.52	**04 Okidata Ink Only Brown Spot Run6 19July2009
21.35	**04 Okidata Ink Only Black Spot Run3 19July2009
20.89	**04 Okidata Ink Only Brown Spot Run7 19July2009
20.74	04 Okidata Ink Only Brown Spot AVERAGE
20.62	**04 Okidata Ink Only Brown Spot Run5 19July2009
20.35	**13 Xerox Ink Only Run2 19July2009
18.83	**312 Canon Ink Only Run4 19July2009
17.68	**217 Canon Ink Only Run1 19July2009
17.61	**217 Canon Ink Only Run3 19July2009
17.59	217 Canon Ink Only AVERAGE
17.46	**217 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED HP 198
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
23.99	04 Okidata Ink Only AVERAGE Slide Subtracted
22.91	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
22.81	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
22.70	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
22.54	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
22.51	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
22.43	205 HP Ink Only AVERAGE Slide Subtracted
22.27	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
22.01	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
21.80	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
21.59	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
21.58	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
21.32	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
20.89	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
20.63	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
20.45	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
20.34	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
19.81	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted
19.72	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
19.60	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted

Hewlett Packard 199 12Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #199 Hewlett Packard Black Inkjet Ink (#56 C6656AN) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
24.94	**205 HP Ink Only Run3 19July2009
24.89	**205 HP Ink Only Run4 19July2009
24.77	205 HP Ink Only AVERAGE
24.42	**205 HP Ink Only Run2 19July2009
22.70	**04 Okidata Ink Only Black Spot Run2 19July2009
22.42	04 Okidata Ink Only AVERAGE
22.26	04 Okidata Ink Only Black Spot AVERAGE
22.24	**04 Okidata Ink Only Black Spot Run1 19July2009
21.37	**04 Okidata Ink Only Black Spot Run3 19July2009
21.21	**13 Xerox Ink Only Run2 19July2009
20.46	**223 Canon Ink Only Run3 19July2009
20.29	**217 Canon Ink Only Run3 19July2009
20.14	217 Canon Ink Only AVERAGE
20.06	**217 Canon Ink Only Run2 19July2009
20.03	**217 Canon Ink Only Run1 19July2009
19.81	**318 Canon Ink Only Run1 19July2009
19.72	223 Canon Ink Only AVERAGE
19.60	**223 Canon Ink Only Run1 19July2009
19.47	318 Canon Ink Only AVERAGE
19.43	**318 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #199 Hewlett Packard Black Inkjet Ink (#56 C6656AN) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
24.19	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
24.03	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
23.32	205 HP Ink Only AVERAGE Slide Subtracted
22.46	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
22.06	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
22.05	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
22.02	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
21.32	04 Okidata Ink Only AVERAGE Slide Subtracted
21.26	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
19.71	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
18.83	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
18.71	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
18.41	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
18.36	282 Canon Ink Only AVERAGE Slide Subtracted
18.28	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
18.08	217 Canon Ink Only AVERAGE Slide Subtracted
18.00	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
17.90	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
17.75	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
17.75	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Hewlett Packard 199 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**199 HP Black Ink (56 C6656AN) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
37.37	**04 Okidata Ink Only Brown Spot Run4 19July2009
33.07	**04 Okidata Ink Only Brown Spot Run3 19July2009
28.70	**04 Okidata Ink Only Brown Spot Run2 19July2009
25.43	**13 Xerox Ink Only Run2 19July2009
24.53	**04 Okidata Ink Only Brown Spot Run1 19July2009
24.19	**156 Epson Ink Only Run4 19July2009
19.85	04 Okidata Ink Only Brown Spot AVERAGE
18.06	**24 Xerox Ink Only Run2 19July2009
17.70	**156 Epson Ink Only Run2 19July2009
17.18	04 Okidata Ink Only AVERAGE
17.17	156 Epson Ink Only AVERAGE
16.87	24 Xerox Ink Only AVERAGE
16.41	**24 Xerox Ink Only Run4 19July2009
16.34	**156 Epson Ink Only Run5 19July2009
16.05	**205 HP Ink Only Run2 19July2009
15.94	**24 Xerox Ink Only Run3 19July2009
15.87	**13 Xerox Ink Only Run3 19July2009
15.61	24 Xerox Ink Only R1R2 AVERAGE
15.55	205 HP Ink Only AVERAGE
15.41	**205 HP Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**199 HP Black Ink (56 C6656AN) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
38.48	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
34.58	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
32.10	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
31.45	156 Epson Ink Only AVERAGE Slide Subtracted
31.32	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
30.89	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
30.19	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
29.75	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
24.80	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
24.50	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
22.84	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
21.08	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
18.93	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
18.36	04 Okidata Ink Only AVERAGE Slide Subtracted
18.33	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
16.91	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted
15.89	199 HP Ink Only AVERAGE Slide Subtracted
15.46	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
15.35	**198 HP Ink Only Run3 19July2009 Blank Slide Subtracted
15.27	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted

Hewlett Packard 199 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**199 HP Black Ink #56 (C6656AN) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
29.76	**13 Xerox Ink Only Run2 19July2009
25.02	**156 Epson Ink Only Run4 19July2009
24.75	04 Okidata Ink Only AVERAGE
24.01	**24 Xerox Ink Only Run2 19July2009
23.17	**04 Okidata Ink Only Black Spot Run2 19July2009
22.98	**04 Okidata Ink Only Black Spot Run3 19July2009
22.80	04 Okidata Ink Only Black Spot AVERAGE
22.22	**04 Okidata Ink Only Black Spot Run1 19July2009
21.92	**04 Okidata Ink Only Brown Spot Run1 19July2009
21.92	**312 Canon Ink Only Run4 19July2009
21.11	24 Xerox Ink Only AVERAGE
21.09	**04 Okidata Ink Only Brown Spot Run6 19July2009
20.85	312 Canon Ink Only AVERAGE
20.51	04 Okidata Ink Only Brown Spot AVERAGE
20.34	24 Xerox Ink Only R1R2 AVERAGE
20.34	**312 Canon Ink Only Run1 19July2009
20.25	**04 Okidata Ink Only Brown Spot Run5 19July2009
19.20	**13 Xerox Ink Only Run3 19July2009
19.04	**04 Okidata Ink Only Brown Spot Run7 19July2009
18.48	**24 Xerox Ink Only Run4 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**199 HP Black Ink #56 (C6656AN) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
30.74	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
28.48	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
27.91	156 Epson Ink Only AVERAGE Slide Subtracted
27.14	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
26.86	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
25.95	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
24.68	04 Okidata Ink Only AVERAGE Slide Subtracted
23.13	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
23.09	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
22.96	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
22.80	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
22.78	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
22.20	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
22.18	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
21.88	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
20.99	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
20.50	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
20.34	312 Canon Ink Only AVERAGE Slide Subtracted
20.19	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
20.04	**24 Xerox Ink Only Run2 19July2009 Slide Subtracted

Hewlett Packard 199 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**199 HP Black (#56 C6656AN) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
40.68	**205 HP Ink Only Run4 19July2009
40.39	**205 HP Ink Only Run3 19July2009
40.27	205 HP Ink Only AVERAGE
39.58	**205 HP Ink Only Run2 19July2009
31.91	**282 Canon Ink Only Run4 19July2009
31.67	**282 Canon Ink Only Run2 19July2009
31.62	**282 Canon Ink Only Run3 19July2009
31.46	282 Canon Ink Only AVERAGE
31.22	**223 Canon Ink Only Run3 19July2009
30.92	**217 Canon Ink Only Run3 19July2009
30.81	217 Canon Ink Only AVERAGE
30.79	**217 Canon Ink Only Run2 19July2009
30.66	**217 Canon Ink Only Run1 19July2009
30.64	**348 Canon Ink Only Run2 19July2009
30.55	04 Okidata Ink Only AVERAGE
30.36	**205 HP Ink Only Run1 19July2009
30.32	348 Canon Ink Only AVERAGE
30.12	**348 Canon Ink Only Run1 19July2009
30.07	**348 Canon Ink Only Run3 19July2009
29.92	223 Canon Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**199 HP Black (#56 C6656AN) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
39.15	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
38.76	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
38.48	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
38.30	199 HP Ink Only AVERAGE Slide Subtracted
37.73	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted
37.50	205 HP Ink Only AVERAGE Slide Subtracted
37.31	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
36.71	**198 HP Ink Only Run3 19July2009 Blank Slide Subtracted
36.51	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
35.37	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
35.18	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
34.48	**199 HP Ink Only Run1 19July2009 Blank Slide Subtracted
34.45	**201 HP Ink Only Run6 19July2009 Blank Slide Subtracted
34.40	**198 HP Ink Only Run2 19July2009 Blank Slide Subtracted
33.65	**200 HP Ink Only Run7 19July2009 Blank Slide Subtracted
33.61	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
33.53	**200 HP Ink Only Run6 19July2009 Blank Slide Subtracted
33.34	**201 HP Ink Only Run5 19July2009 Blank Slide Subtracted
32.88	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted
32.72	**201 HP Ink Only Run4 19July2009 Blank Slide Subtracted

Hewlett Packard 199 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**199 HP Black Ink (#56 C6656AN) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
42.81	**205 HP Ink Only Run4 19July2009
42.70	**205 HP Ink Only Run3 19July2009
42.68	205 HP Ink Only AVERAGE
42.39	**205 HP Ink Only Run2 19July2009
35.57	**223 Canon Ink Only Run3 19July2009
34.48	**217 Canon Ink Only Run3 19July2009
34.46	217 Canon Ink Only AVERAGE
34.44	**217 Canon Ink Only Run1 19July2009
34.41	**217 Canon Ink Only Run2 19July2009
33.79	223 Canon Ink Only AVERAGE
33.63	**348 Canon Ink Only Run2 19July2009
33.25	348 Canon Ink Only AVERAGE
33.23	**348 Canon Ink Only Run1 19July2009
33.07	**318 Canon Ink Only Run1 19July2009
33.01	**282 Canon Ink Only Run4 19July2009
33.00	**318 Canon Ink Only Run2 19July2009
32.84	**282 Canon Ink Only Run2 19July2009
32.82	318 Canon Ink Only AVERAGE
32.76	**348 Canon Ink Only Run3 19July2009
32.65	**282 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**199 HP Black Ink (#56 C6656AN) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
43.13	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
42.79	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
42.07	205 HP Ink Only AVERAGE Slide Subtracted
40.49	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
37.13	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
37.03	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
36.83	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted
36.72	199 HP Ink Only AVERAGE Slide Subtracted
36.54	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
35.95	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
33.66	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
33.60	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
33.30	282 Canon Ink Only AVERAGE Slide Subtracted
33.25	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
33.23	**198 HP Ink Only Run3 19July2009 Blank Slide Subtracted
33.17	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
32.78	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
32.73	348 Canon Ink Only AVERAGE Slide Subtracted
32.64	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
32.53	217 Canon Ink Only AVERAGE Slide Subtracted

Hewlett Packard 199 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED HP 199
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
23.29	04 Okidata Ink Only AVERAGE
21.68	**04 Okidata Ink Only Black Spot Run2 19July2009
21.25	04 Okidata Ink Only Black Spot AVERAGE
21.21	**04 Okidata Ink Only Brown Spot Run6 19July2009
21.01	**04 Okidata Ink Only Black Spot Run1 19July2009
20.89	**04 Okidata Ink Only Brown Spot Run1 19July2009
20.76	**04 Okidata Ink Only Black Spot Run3 19July2009
20.63	**04 Okidata Ink Only Brown Spot Run5 19July2009
20.43	**04 Okidata Ink Only Brown Spot Run7 19July2009
19.96	04 Okidata Ink Only Brown Spot AVERAGE
19.67	**13 Xerox Ink Only Run2 19July2009
18.74	**205 HP Ink Only Run4 19July2009
18.64	**205 HP Ink Only Run3 19July2009
18.59	205 HP Ink Only AVERAGE
18.33	**205 HP Ink Only Run2 19July2009
17.50	**312 Canon Ink Only Run4 19July2009
16.14	**217 Canon Ink Only Run1 19July2009
16.14	**217 Canon Ink Only Run3 19July2009
16.10	217 Canon Ink Only AVERAGE
15.98	**217 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED HP 199
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
22.99	04 Okidata Ink Only AVERAGE Slide Subtracted
22.40	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
22.15	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
21.59	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
21.17	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
21.06	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
20.92	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
20.86	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
20.72	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
20.14	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
19.60	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
19.25	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
19.06	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted
19.04	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
18.83	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
18.79	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
18.58	205 HP Ink Only AVERAGE Slide Subtracted
18.40	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
18.25	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
17.70	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted

Hewlett Packard 200 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #200 Hewlett Packard Black Inkjet Ink (#27 C8727AN) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
21.43	**04 Okidata Ink Only Black Spot Run2 19July2009
21.36	**205 HP Ink Only Run4 19July2009
21.34	**205 HP Ink Only Run3 19July2009
21.24	205 HP Ink Only AVERAGE
21.11	**04 Okidata Ink Only Black Spot Run1 19July2009
21.01	04 Okidata Ink Only Black Spot AVERAGE
20.94	**205 HP Ink Only Run2 19July2009
20.90	04 Okidata Ink Only AVERAGE
19.95	**04 Okidata Ink Only Black Spot Run3 19July2009
19.15	**223 Canon Ink Only Run3 19July2009
18.88	**217 Canon Ink Only Run3 19July2009
18.73	217 Canon Ink Only AVERAGE
18.70	**217 Canon Ink Only Run1 19July2009
18.56	**217 Canon Ink Only Run2 19July2009
18.46	223 Canon Ink Only AVERAGE
18.37	**282 Canon Ink Only Run2 19July2009
18.31	**223 Canon Ink Only Run1 19July2009
18.26	**318 Canon Ink Only Run2 19July2009
18.24	**282 Canon Ink Only Run4 19July2009
18.21	**318 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #200 Hewlett Packard Black Inkjet Ink (#27 C8727AN) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
21.25	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
21.00	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
20.94	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
20.85	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
20.82	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
20.27	205 HP Ink Only AVERAGE Slide Subtracted
19.87	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
19.83	04 Okidata Ink Only AVERAGE Slide Subtracted
19.25	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
18.39	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
18.22	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
17.95	282 Canon Ink Only AVERAGE Slide Subtracted
17.52	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
17.23	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
17.21	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
17.19	217 Canon Ink Only AVERAGE Slide Subtracted
17.16	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
17.10	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
17.06	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
17.03	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Hewlett Packard 200 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**200 HP Black Ink (27 C8727AN) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
39.61	**205 HP Ink Only Run4 19July2009
39.47	**205 HP Ink Only Run3 19July2009
39.29	205 HP Ink Only AVERAGE
38.64	**205 HP Ink Only Run2 19July2009
30.71	**205 HP Ink Only Run1 19July2009
27.77	**282 Canon Ink Only Run2 19July2009
27.73	**282 Canon Ink Only Run4 19July2009
27.71	282 Canon Ink Only AVERAGE
27.49	**282 Canon Ink Only Run3 19July2009
27.30	**217 Canon Ink Only Run2 19July2009
27.26	**217 Canon Ink Only Run3 19July2009
27.18	217 Canon Ink Only AVERAGE
26.94	**217 Canon Ink Only Run1 19July2009
26.87	04 Okidata Ink Only AVERAGE
26.81	**282 Canon Ink Only Run1 19July2009
26.69	**04 Okidata Ink Only Brown Spot Run4 19July2009
26.64	**223 Canon Ink Only Run3 19July2009
26.27	**327 Canon Ink Only Run1 19July2009
26.18	327 Canon Ink Only AVERAGE
26.15	**318 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**200 HP Black Ink (27 C8727AN) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
37.33	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
36.76	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
36.63	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
36.37	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted
35.70	205 HP Ink Only AVERAGE Slide Subtracted
35.58	199 HP Ink Only AVERAGE Slide Subtracted
35.22	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
35.10	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
35.00	**198 HP Ink Only Run3 19July2009 Blank Slide Subtracted
34.24	**200 HP Ink Only Run6 19July2009 Blank Slide Subtracted
34.11	**200 HP Ink Only Run7 19July2009 Blank Slide Subtracted
33.35	**201 HP Ink Only Run6 19July2009 Blank Slide Subtracted
33.25	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
33.24	**198 HP Ink Only Run2 19July2009 Blank Slide Subtracted
32.80	**201 HP Ink Only Run4 19July2009 Blank Slide Subtracted
32.59	**200 HP Ink Only Run5 19July2009 Blank Slide Subtracted
32.30	**201 HP Ink Only Run5 19July2009 Blank Slide Subtracted
32.20	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted
31.46	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
31.25	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted

Hewlett Packard 200 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**200 HP Black Ink #27 (C8727AN) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
35.87	**13 Xerox Ink Only Run2 19July2009
29.64	**156 Epson Ink Only Run4 19July2009
26.72	**312 Canon Ink Only Run4 19July2009
26.49	**24 Xerox Ink Only Run2 19July2009
26.35	04 Okidata Ink Only AVERAGE
24.98	312 Canon Ink Only AVERAGE
24.84	**04 Okidata Ink Only Black Spot Run2 19July2009
24.41	**04 Okidata Ink Only Black Spot Run3 19July2009
24.39	04 Okidata Ink Only Black Spot AVERAGE
23.96	**312 Canon Ink Only Run1 19July2009
23.86	**04 Okidata Ink Only Brown Spot Run1 19July2009
23.80	**04 Okidata Ink Only Black Spot Run1 19July2009
23.40	24 Xerox Ink Only AVERAGE
23.02	**13 Xerox Ink Only Run3 19July2009
22.66	24 Xerox Ink Only R1R2 AVERAGE
21.51	04 Okidata Ink Only Brown Spot AVERAGE
21.47	**04 Okidata Ink Only Brown Spot Run6 19July2009
21.41	**156 Epson Ink Only Run2 19July2009
20.82	**312 Canon Ink Only Run2 19July2009
20.77	**04 Okidata Ink Only Brown Spot Run5 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**200 HP Black Ink #27 (C8727AN) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
35.91	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
33.97	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
33.29	156 Epson Ink Only AVERAGE Slide Subtracted
31.87	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
31.85	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
31.62	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
27.69	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
26.36	04 Okidata Ink Only AVERAGE Slide Subtracted
24.82	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
24.65	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
24.41	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
24.38	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
24.19	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
23.80	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
23.80	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
23.68	312 Canon Ink Only AVERAGE Slide Subtracted
23.06	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
22.78	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
22.68	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
22.51	**24 Xerox Ink Only Run2 19July2009 Slide Subtracted

Hewlett Packard 200 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**200 HP Black (#27 C8727AN) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
38.43	**205 HP Ink Only Run4 19July2009
38.17	205 HP Ink Only AVERAGE
38.16	**205 HP Ink Only Run3 19July2009
37.80	**205 HP Ink Only Run2 19July2009
31.12	04 Okidata Ink Only AVERAGE
29.38	**223 Canon Ink Only Run3 19July2009
29.36	**217 Canon Ink Only Run3 19July2009
29.33	**04 Okidata Ink Only Black Spot Run2 19July2009
29.25	217 Canon Ink Only AVERAGE
29.22	**217 Canon Ink Only Run1 19July2009
29.13	**217 Canon Ink Only Run2 19July2009
28.83	**04 Okidata Ink Only Black Spot Run1 19July2009
28.76	04 Okidata Ink Only Black Spot AVERAGE
28.58	**282 Canon Ink Only Run4 19July2009
28.52	**282 Canon Ink Only Run2 19July2009
28.26	**282 Canon Ink Only Run3 19July2009
28.19	**205 HP Ink Only Run1 19July2009
28.16	**348 Canon Ink Only Run2 19July2009
28.13	282 Canon Ink Only AVERAGE
28.10	223 Canon Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**200 HP Black (#27 C8727AN) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
37.59	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
37.00	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
36.28	205 HP Ink Only AVERAGE Slide Subtracted
35.94	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
35.67	199 HP Ink Only AVERAGE Slide Subtracted
35.52	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
35.47	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted
34.50	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
34.38	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
34.06	**198 HP Ink Only Run3 19July2009 Blank Slide Subtracted
32.25	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
31.59	**198 HP Ink Only Run2 19July2009 Blank Slide Subtracted
31.58	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
31.20	**201 HP Ink Only Run6 19July2009 Blank Slide Subtracted
31.10	**199 HP Ink Only Run1 19July2009 Blank Slide Subtracted
31.01	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
30.91	**200 HP Ink Only Run7 19July2009 Blank Slide Subtracted
30.90	04 Okidata Ink Only AVERAGE Slide Subtracted
30.73	**200 HP Ink Only Run6 19July2009 Blank Slide Subtracted
30.08	**201 HP Ink Only Run5 19July2009 Blank Slide Subtracted

Hewlett Packard 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**200 HP Black Ink (#27 C8727AN) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
44.82	**205 HP Ink Only Run4 19July2009
44.73	**205 HP Ink Only Run3 19July2009
44.71	205 HP Ink Only AVERAGE
44.46	**205 HP Ink Only Run2 19July2009
36.45	**223 Canon Ink Only Run3 19July2009
35.45	**217 Canon Ink Only Run3 19July2009
35.44	217 Canon Ink Only AVERAGE
35.43	**217 Canon Ink Only Run1 19July2009
35.41	**217 Canon Ink Only Run2 19July2009
34.78	223 Canon Ink Only AVERAGE
34.64	**348 Canon Ink Only Run2 19July2009
34.36	**282 Canon Ink Only Run4 19July2009
34.29	**282 Canon Ink Only Run2 19July2009
34.26	**348 Canon Ink Only Run1 19July2009
34.26	348 Canon Ink Only AVERAGE
34.13	**318 Canon Ink Only Run1 19July2009
33.98	**282 Canon Ink Only Run3 19July2009
33.88	**318 Canon Ink Only Run2 19July2009
33.75	318 Canon Ink Only AVERAGE
33.73	**348 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**200 HP Black Ink (#27 C8727AN) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
44.47	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
44.07	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
43.27	205 HP Ink Only AVERAGE Slide Subtracted
41.50	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
37.95	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
35.36	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
35.12	199 HP Ink Only AVERAGE Slide Subtracted
35.06	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted
35.03	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
34.33	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
34.29	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
34.15	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
33.93	282 Canon Ink Only AVERAGE Slide Subtracted
33.92	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
33.30	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
33.16	04 Okidata Ink Only AVERAGE Slide Subtracted
32.84	348 Canon Ink Only AVERAGE Slide Subtracted
32.80	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
32.80	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
32.58	217 Canon Ink Only AVERAGE Slide Subtracted

Hewlett Packard 200 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED HP 200
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
24.53	04 Okidata Ink Only AVERAGE
23.07	**04 Okidata Ink Only Brown Spot Run1 19July2009
22.65	**04 Okidata Ink Only Black Spot Run2 19July2009
22.16	04 Okidata Ink Only Black Spot AVERAGE
22.15	**04 Okidata Ink Only Brown Spot Run6 19July2009
22.09	**13 Xerox Ink Only Run2 19July2009
21.89	**04 Okidata Ink Only Black Spot Run1 19July2009
21.69	04 Okidata Ink Only Brown Spot AVERAGE
21.62	**04 Okidata Ink Only Black Spot Run3 19July2009
21.56	**04 Okidata Ink Only Brown Spot Run5 19July2009
21.24	**04 Okidata Ink Only Brown Spot Run7 19July2009
19.63	**205 HP Ink Only Run4 19July2009
19.55	205 HP Ink Only AVERAGE
19.52	**205 HP Ink Only Run3 19July2009
19.50	**312 Canon Ink Only Run4 19July2009
19.43	**205 HP Ink Only Run2 19July2009
17.97	**04 Okidata Ink Only Brown Spot Run4 19July2009
17.01	**04 Okidata Ink Only Brown Spot Run2 19July2009
16.91	**156 Epson Ink Only Run4 19July2009
16.83	**217 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED HP 200
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
24.37	04 Okidata Ink Only AVERAGE Slide Subtracted
23.58	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
23.16	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
23.03	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
22.56	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
22.09	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
21.92	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
21.83	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
21.81	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
21.58	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
21.52	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
21.52	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
21.03	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
20.51	156 Epson Ink Only AVERAGE Slide Subtracted
20.45	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
20.41	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
20.30	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted
20.11	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
20.02	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
19.83	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted

Hewlett Packard 201 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #201 Hewlett Packard Black Inkjet Ink (#45 19434E) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
25.75	**205 HP Ink Only Run3 19July2009
25.74	**205 HP Ink Only Run4 19July2009
25.59	205 HP Ink Only AVERAGE
25.18	**205 HP Ink Only Run2 19July2009
22.73	**223 Canon Ink Only Run3 19July2009
22.47	**04 Okidata Ink Only Black Spot Run2 19July2009
22.12	**04 Okidata Ink Only Black Spot Run1 19July2009
22.04	**217 Canon Ink Only Run3 19July2009
21.99	04 Okidata Ink Only Black Spot AVERAGE
21.90	217 Canon Ink Only AVERAGE
21.86	**217 Canon Ink Only Run1 19July2009
21.78	**217 Canon Ink Only Run2 19July2009
21.76	04 Okidata Ink Only AVERAGE
21.74	223 Canon Ink Only AVERAGE
21.66	**318 Canon Ink Only Run1 19July2009
21.59	**318 Canon Ink Only Run2 19July2009
21.58	**282 Canon Ink Only Run2 19July2009
21.55	318 Canon Ink Only AVERAGE
21.45	**282 Canon Ink Only Run4 19July2009
21.38	**223 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #201 Hewlett Packard Black Inkjet Ink (#45 19434E) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
25.12	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
24.93	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
24.23	205 HP Ink Only AVERAGE Slide Subtracted
22.88	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
22.23	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
21.90	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
21.78	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
21.32	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
21.18	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
20.85	282 Canon Ink Only AVERAGE Slide Subtracted
20.79	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
20.66	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
20.61	04 Okidata Ink Only AVERAGE Slide Subtracted
20.45	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
20.20	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
19.84	217 Canon Ink Only AVERAGE Slide Subtracted
19.83	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
19.81	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
19.78	348 Canon Ink Only AVERAGE Slide Subtracted
19.71	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Hewlett Packard 201 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**201 HP Black Ink (45 19434E) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
25.27	**201 HP Ink Only Run4 19July2009
24.61	**201 HP Ink Only Run5 19July2009
24.24	**201 HP Ink Only Run6 19July2009
23.39	**04 Okidata Ink Only Black Spot Run1 19July2009
23.15	**04 Okidata Ink Only Black Spot Run2 19July2009
23.10	04 Okidata Ink Only Black Spot AVERAGE
23.09	04 Okidata Ink Only AVERAGE
22.41	**200 HP Ink Only Run5 19July2009
22.33	**04 Okidata Ink Only Black Spot Run3 19July2009
22.30	**198 HP Ink Only Run6 19July2009
21.85	**198 HP Ink Only Run5 19July2009
21.70	**201 HP Ink Only Run3 19July2009
21.28	198 HP Ink Only AVERAGE
21.20	200 HP Ink Only AVERAGE
20.91	201 HP Ink Only AVERAGE
20.27	**200 HP Ink Only Run4 19July2009
19.97	**200 HP Ink Only Run7 19July2009
19.86	**199 HP Ink Only Run5 19July2009
19.51	**199 HP Ink Only Run6 19July2009
19.47	**200 HP Ink Only Run6 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**201 HP Black Ink (45 19434E) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
29.45	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
28.93	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted
28.85	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
28.59	199 HP Ink Only AVERAGE Slide Subtracted
28.18	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
26.94	**201 HP Ink Only Run5 19July2009 Blank Slide Subtracted
26.81	**201 HP Ink Only Run6 19July2009 Blank Slide Subtracted
26.56	**198 HP Ink Only Run3 19July2009 Blank Slide Subtracted
25.81	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
25.78	**201 HP Ink Only Run4 19July2009 Blank Slide Subtracted
25.46	**200 HP Ink Only Run5 19July2009 Blank Slide Subtracted
25.45	**200 HP Ink Only Run7 19July2009 Blank Slide Subtracted
25.21	**200 HP Ink Only Run6 19July2009 Blank Slide Subtracted
24.08	**198 HP Ink Only Run2 19July2009 Blank Slide Subtracted
23.59	**198 HP Ink Only Run6 19July2009 Blank Slide Subtracted
23.40	198 HP Ink Only AVERAGE Slide Subtracted
23.30	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
23.29	200 HP Ink Only AVERAGE Slide Subtracted
23.24	**198 HP Ink Only Run5 19July2009 Blank Slide Subtracted
23.05	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted

Hewlett Packard 201 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**201 HP Black Ink #45 (19434E) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
30.84	**205 HP Ink Only Run2 19July2009
30.71	205 HP Ink Only AVERAGE
30.67	**205 HP Ink Only Run3 19July2009
30.56	**205 HP Ink Only Run4 19July2009
30.02	04 Okidata Ink Only AVERAGE
28.99	**04 Okidata Ink Only Black Spot Run2 19July2009
28.73	**13 Xerox Ink Only Run2 19July2009
28.36	04 Okidata Ink Only Black Spot AVERAGE
28.16	**04 Okidata Ink Only Black Spot Run1 19July2009
27.42	**04 Okidata Ink Only Black Spot Run3 19July2009
25.39	**04 Okidata Ink Only Brown Spot Run1 19July2009
25.29	**217 Canon Ink Only Run3 19July2009
25.26	**217 Canon Ink Only Run2 19July2009
25.26	217 Canon Ink Only AVERAGE
25.18	**217 Canon Ink Only Run1 19July2009
24.89	**223 Canon Ink Only Run3 19July2009
23.76	223 Canon Ink Only AVERAGE
23.74	**327 Canon Ink Only Run2 19July2009
23.53	**327 Canon Ink Only Run1 19July2009
23.37	**318 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**201 HP Black Ink #45 (19434E) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
31.28	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
30.71	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
30.65	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
30.17	205 HP Ink Only AVERAGE Slide Subtracted
29.83	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
29.82	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted
29.77	04 Okidata Ink Only AVERAGE Slide Subtracted
29.38	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
29.36	199 HP Ink Only AVERAGE Slide Subtracted
29.17	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
28.79	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
28.76	156 Epson Ink Only AVERAGE Slide Subtracted
28.63	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
28.59	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
28.58	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
28.21	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
28.20	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
27.99	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
27.69	**198 HP Ink Only Run3 19July2009 Blank Slide Subtracted
27.34	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted

Hewlett Packard 201 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**201 HP Black (#45 19434E) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
44.12	**205 HP Ink Only Run4 19July2009
44.05	**205 HP Ink Only Run3 19July2009
43.97	205 HP Ink Only AVERAGE
43.63	**205 HP Ink Only Run2 19July2009
36.65	**223 Canon Ink Only Run3 19July2009
35.67	217 Canon Ink Only AVERAGE
35.67	**217 Canon Ink Only Run2 19July2009
35.65	**217 Canon Ink Only Run3 19July2009
35.65	**217 Canon Ink Only Run1 19July2009
35.14	**348 Canon Ink Only Run2 19July2009
34.81	223 Canon Ink Only AVERAGE
34.66	348 Canon Ink Only AVERAGE
34.65	**282 Canon Ink Only Run4 19July2009
34.44	**348 Canon Ink Only Run1 19July2009
34.39	**282 Canon Ink Only Run2 19July2009
34.30	**282 Canon Ink Only Run3 19July2009
34.27	**348 Canon Ink Only Run3 19July2009
33.97	**318 Canon Ink Only Run1 19July2009
33.86	282 Canon Ink Only AVERAGE
33.79	**318 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**201 HP Black (#45 19434E) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
44.10	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
43.75	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
42.97	205 HP Ink Only AVERAGE Slide Subtracted
41.16	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
38.09	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
36.65	199 HP Ink Only AVERAGE Slide Subtracted
36.58	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
36.50	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted
36.40	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
35.50	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
35.02	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
34.84	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
34.64	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
34.55	282 Canon Ink Only AVERAGE Slide Subtracted
34.28	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
33.79	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
33.73	348 Canon Ink Only AVERAGE Slide Subtracted
33.40	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
33.28	**199 HP Ink Only Run1 19July2009 Blank Slide Subtracted
33.23	217 Canon Ink Only AVERAGE Slide Subtracted

Hewlett Packard 201 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**201 HP Black Ink (#45 19434E) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
37.83	**205 HP Ink Only Run4 19July2009
37.65	**205 HP Ink Only Run3 19July2009
37.60	205 HP Ink Only AVERAGE
37.19	**205 HP Ink Only Run2 19July2009
33.98	04 Okidata Ink Only AVERAGE
32.48	**04 Okidata Ink Only Black Spot Run2 19July2009
31.85	**04 Okidata Ink Only Black Spot Run1 19July2009
31.67	04 Okidata Ink Only Black Spot AVERAGE
29.77	**04 Okidata Ink Only Black Spot Run3 19July2009
29.77	**04 Okidata Ink Only Brown Spot Run1 19July2009
27.41	**205 HP Ink Only Run1 19July2009
27.27	217 Canon Ink Only AVERAGE
27.26	**217 Canon Ink Only Run3 19July2009
27.26	**217 Canon Ink Only Run2 19July2009
27.25	**217 Canon Ink Only Run1 19July2009
27.03	04 Okidata Ink Only Brown Spot AVERAGE
26.85	**223 Canon Ink Only Run3 19July2009
26.14	**04 Okidata Ink Only Brown Spot Run7 19July2009
25.84	**04 Okidata Ink Only Brown Spot Run6 19July2009
25.70	**327 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**201 HP Black Ink (#45 19434E) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
37.59	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
37.16	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
36.47	205 HP Ink Only AVERAGE Slide Subtracted
34.99	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
34.77	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
34.59	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted
33.94	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
33.85	04 Okidata Ink Only AVERAGE Slide Subtracted
33.73	199 HP Ink Only AVERAGE Slide Subtracted
32.75	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
32.26	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
32.20	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
31.59	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
31.43	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
29.76	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
29.64	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
29.52	**200 HP Ink Only Run7 19July2009 Blank Slide Subtracted
29.10	**200 HP Ink Only Run6 19July2009 Blank Slide Subtracted
28.89	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
28.87	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted

Hewlett Packard 201 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED HP 201
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
25.29	04 Okidata Ink Only AVERAGE
23.63	**04 Okidata Ink Only Black Spot Run2 19July2009
23.55	**04 Okidata Ink Only Brown Spot Run1 19July2009
23.07	04 Okidata Ink Only Black Spot AVERAGE
22.89	**04 Okidata Ink Only Black Spot Run1 19July2009
22.23	**04 Okidata Ink Only Black Spot Run3 19July2009
22.09	**205 HP Ink Only Run4 19July2009
22.04	**205 HP Ink Only Run3 19July2009
22.01	205 HP Ink Only AVERAGE
22.00	**04 Okidata Ink Only Brown Spot Run6 19July2009
21.84	**205 HP Ink Only Run2 19July2009
21.80	**13 Xerox Ink Only Run2 19July2009
21.70	04 Okidata Ink Only Brown Spot AVERAGE
21.31	**04 Okidata Ink Only Brown Spot Run7 19July2009
21.13	**04 Okidata Ink Only Brown Spot Run5 19July2009
19.23	**312 Canon Ink Only Run4 19July2009
19.05	**217 Canon Ink Only Run1 19July2009
18.99	217 Canon Ink Only AVERAGE
18.96	**217 Canon Ink Only Run3 19July2009
18.92	**217 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED HP 201
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
25.14	04 Okidata Ink Only AVERAGE Slide Subtracted
23.53	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
23.51	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
23.10	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
22.99	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
22.98	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
22.92	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
22.80	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
22.58	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
22.44	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
22.19	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
22.18	205 HP Ink Only AVERAGE Slide Subtracted
22.04	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted
21.97	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
21.74	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
21.55	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
21.48	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
21.31	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
21.19	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
20.91	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted

Hewlett Packard 205 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #205 Hewlett Packard Black Inkjet Ink (3-in-1, #58 C6658AN) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
13.85	**04 Okidata Ink Only Brown Spot Run4 19July2009
12.57	**13 Xerox Ink Only Run2 19July2009
11.87	**04 Okidata Ink Only Black Spot Run2 19July2009
11.82	**24 Xerox Ink Only Run2 19July2009
11.73	**04 Okidata Ink Only Brown Spot Run3 19July2009
11.71	**04 Okidata Ink Only Black Spot Run1 19July2009
11.67	04 Okidata Ink Only Black Spot AVERAGE
11.49	**244 Xerox Ink Only Run2 19July2009
11.30	**492 Canon Ink Only Run1 19July2009
11.19	**04 Okidata Ink Only Black Spot Run3 19July2009
10.96	**244 Xerox Ink Only Run5 19July2009
10.89	**492 Canon Ink Only Run2 19July2009
10.86	24 Xerox Ink Only AVERAGE
10.83	**244 Xerox Ink Only Run4 19July2009
10.72	04 Okidata Ink Only AVERAGE
10.68	244 Xerox Ink Only AVERAGE
10.60	24 Xerox Ink Only R1R2 AVERAGE
10.25	**13 Xerox Ink Only Run1 19July2009
9.88	**63 Epson Ink Only Purple Spot Run2 19July2009
9.68	**244 Xerox Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #205 Hewlett Packard Black Inkjet Ink (3-in-1, #58 C6658AN) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
14.86	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
13.08	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
12.53	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
11.69	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
11.55	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
11.53	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
11.36	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11.11	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
10.94	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
10.09	**63 Epson Ink Only Purple Spot Run2 19July2009 Blank Slide Subtracted
9.77	**63 Epson Ink Only Purple Spot Run3 19July2009 Blank Slide Subtracted
9.52	63 Epson Ink Only Purple Spot AVERAGE Slide Subtracted
9.42	04 Okidata Ink Only AVERAGE Slide Subtracted
9.35	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
9.29	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
9.22	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
9.16	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
9.15	**93 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
9.11	**244 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
8.98	**60 Epson Ink Only Run2 19July2009 Blank Slide Subtracted

Hewlett Packard 205 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:***205 HP Black Ink (58 C6658AN) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
22.84	**63 Epson Ink Only Purple Spot Run2 19July2009
22.07	**63 Epson Ink Only Purple Spot Run3 19July2009
21.89	63 Epson Ink Only Purple Spot AVERAGE
20.82	**223 Canon Ink Only Run3 19July2009
20.76	**63 Epson Ink Only Purple Spot Run1 19July2009
19.15	223 Canon Ink Only AVERAGE
18.81	63 Epson Ink Only AVERAGE
18.76	**348 Canon Ink Only Run3 19July2009
18.65	**348 Canon Ink Only Run2 19July2009
18.57	**384 Canon Ink Only Run3 19July2009
18.56	348 Canon Ink Only AVERAGE
18.32	**223 Canon Ink Only Run2 19July2009
18.19	**348 Canon Ink Only Run1 19July2009
18.19	**205 HP Ink Only Run3 19July2009
18.09	**217 Canon Ink Only Run1 19July2009
18.09	205 HP Ink Only AVERAGE
18.04	**205 HP Ink Only Run4 19July2009
18.00	**205 HP Ink Only Run2 19July2009
17.99	384 Canon Ink Only AVERAGE
17.95	217 Canon Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:***205 HP Black Ink (58 C6658AN) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
22.60	**63 Epson Ink Only Purple Spot Run2 19July2009 Blank Slide Subtracted
22.19	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
21.81	**63 Epson Ink Only Purple Spot Run3 19July2009 Blank Slide Subtracted
21.72	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
21.67	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
21.64	63 Epson Ink Only Purple Spot AVERAGE Slide Subtracted
21.58	348 Canon Ink Only AVERAGE Slide Subtracted
21.36	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
21.20	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
21.16	223 Canon Ink Only AVERAGE Slide Subtracted
20.83	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
20.79	205 HP Ink Only AVERAGE Slide Subtracted
20.67	384 Canon Ink Only AVERAGE Slide Subtracted
20.58	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
20.57	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20.55	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
20.55	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20.51	**63 Epson Ink Only Purple Spot Run1 19July2009 Blank Slide Subtracted
20.48	**318 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
20.45	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Hewlett Packard 205 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**205 HP Black Ink #58 (C6658AN) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
25.66	**22 Kodak Ink Only Run3 19July2009
24.55	24 Xerox Ink Only AVERAGE
24.34	22 Kodak Ink Only AVERAGE
23.84	**22 Kodak Ink Only Run2 19July2009
23.66	**24 Xerox Ink Only Run2 19July2009
23.17	24 Xerox Ink Only R1R2 AVERAGE
23.15	**22 Kodak Ink Only Run1 19July2009
22.90	**13 Xerox Ink Only Run4 19July2009
22.42	**24 Xerox Ink Only Run3 19July2009
22.23	**24 Xerox Ink Only Run4 19July2009
21.78	**282 Canon Ink Only Run3 19July2009
21.51	**13 Xerox Ink Only Run3 19July2009
21.41	**282 Canon Ink Only Run4 19July2009
21.34	**13 Xerox Ink Only Run2 19July2009
21.32	**312 Canon Ink Only Run1 19July2009
21.29	282 Canon Ink Only AVERAGE
21.23	**282 Canon Ink Only Run2 19July2009
21.10	**33 Epson Ink Only Brown Spot Run3 19July2009
20.92	13 Xerox Ink Only AVERAGE
20.57	**24 Xerox Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**205 HP Black Ink #58 (C6658AN) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
27.61	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
27.21	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
25.99	22 Kodak Ink Only AVERAGE Slide Subtracted
25.53	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
24.92	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
24.86	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
24.69	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
24.42	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
24.34	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
23.62	282 Canon Ink Only AVERAGE Slide Subtracted
23.61	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
23.32	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
23.24	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
21.81	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
21.81	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
21.07	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
20.98	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
20.92	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20.92	**24 Xerox Ink Only Run2 19July2009 Slide Subtracted
20.87	348 Canon Ink Only AVERAGE Slide Subtracted

Hewlett Packard 205 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**205 HP Black (#58 C6658AN) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
39.77	**33 Epson Ink Only Black Spot Run1 19July2009
38.57	**33 Epson Ink Only Black Spot Run2 19July2009
38.33	33 Epson Ink Only Black Spot AVERAGE
38.29	33 Epson Ink Only AVERAGE
37.35	**63 Epson Ink Only Green Spot Run1 19July2009
36.28	**205 HP Ink Only Run2 19July2009
35.93	**33 Epson Ink Only Brown Spot Run2 19July2009
35.72	**33 Epson Ink Only Brown Spot Run1 19July2009
35.38	**217 Canon Ink Only Run1 19July2009
35.32	33 Epson Ink Only Brown Spot AVERAGE
35.26	63 Epson Ink Only Green Spot AVERAGE
35.10	**217 Canon Ink Only Run2 19July2009
35.05	217 Canon Ink Only AVERAGE
34.87	205 HP Ink Only AVERAGE
34.62	**217 Canon Ink Only Run3 19July2009
34.45	**205 HP Ink Only Run3 19July2009
34.32	**33 Epson Ink Only Brown Spot Run3 19July2009
34.21	**63 Epson Ink Only Green Spot Run2 19July2009
34.18	**223 Canon Ink Only Run3 19July2009
34.14	**66 Epson Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**205 HP Black (#58 C6658AN) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
46.02	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
43.92	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
42.73	205 HP Ink Only AVERAGE Slide Subtracted
41.56	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
41.14	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
41.13	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
40.85	217 Canon Ink Only AVERAGE Slide Subtracted
40.74	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
40.61	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
40.49	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
40.43	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
40.11	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
40.04	30 Epson Ink Only AVERAGE Slide Subtracted
40.01	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
39.94	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
39.87	348 Canon Ink Only AVERAGE Slide Subtracted
39.81	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
39.81	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
39.69	384 Canon Ink Only AVERAGE Slide Subtracted
39.57	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted

Hewlett Packard 205 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**205 HP Black Ink (#58 C6658AN) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
43.65	**217 Canon Ink Only Run2 19July2009
43.25	217 Canon Ink Only AVERAGE
43.03	**217 Canon Ink Only Run1 19July2009
43.03	**217 Canon Ink Only Run3 19July2009
40.13	**223 Canon Ink Only Run3 19July2009
39.51	**348 Canon Ink Only Run2 19July2009
39.27	**348 Canon Ink Only Run1 19July2009
39.22	348 Canon Ink Only AVERAGE
39.16	**223 Canon Ink Only Run2 19July2009
39.12	**33 Epson Ink Only Black Spot Run1 19July2009
38.86	223 Canon Ink Only AVERAGE
38.77	**384 Canon Ink Only Run3 19July2009
38.74	**348 Canon Ink Only Run3 19July2009
38.52	**282 Canon Ink Only Run3 19July2009
38.32	**282 Canon Ink Only Run4 19July2009
37.99	384 Canon Ink Only AVERAGE
37.87	**384 Canon Ink Only Run2 19July2009
37.73	**282 Canon Ink Only Run2 19July2009
37.58	**33 Epson Ink Only Black Spot Run2 19July2009
37.14	**522 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**205 HP Black Ink (#58 C6658AN) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
46.90	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
46.43	217 Canon Ink Only AVERAGE Slide Subtracted
46.15	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
46.04	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
44.81	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
44.52	348 Canon Ink Only AVERAGE Slide Subtracted
44.49	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
44.17	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
44.09	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
43.99	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
43.93	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
43.56	282 Canon Ink Only AVERAGE Slide Subtracted
43.42	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
42.73	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
42.45	384 Canon Ink Only AVERAGE Slide Subtracted
42.37	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
42.05	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
41.95	223 Canon Ink Only AVERAGE Slide Subtracted
41.27	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
41.03	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted

Hewlett Packard 205 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED HP 205
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
41.36	**33 Epson Ink Only Black Spot Run1 19July2009
39.81	**33 Epson Ink Only Black Spot Run2 19July2009
39.44	33 Epson Ink Only Black Spot AVERAGE
39.03	33 Epson Ink Only AVERAGE
38.18	**217 Canon Ink Only Run1 19July2009
38.15	**217 Canon Ink Only Run2 19July2009
38.08	217 Canon Ink Only AVERAGE
37.86	**217 Canon Ink Only Run3 19July2009
36.97	**348 Canon Ink Only Run2 19July2009
36.69	**223 Canon Ink Only Run3 19July2009
36.59	348 Canon Ink Only AVERAGE
36.49	**348 Canon Ink Only Run3 19July2009
36.18	**348 Canon Ink Only Run1 19July2009
35.81	**63 Epson Ink Only Green Spot Run1 19July2009
35.34	**33 Epson Ink Only Brown Spot Run2 19July2009
35.33	**223 Canon Ink Only Run2 19July2009
35.22	223 Canon Ink Only AVERAGE
35.10	**384 Canon Ink Only Run3 19July2009
35.01	**282 Canon Ink Only Run3 19July2009
34.97	33 Epson Ink Only Brown Spot AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED HP 205
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
42.69	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
42.31	348 Canon Ink Only AVERAGE Slide Subtracted
42.07	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
41.87	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
41.86	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
41.71	217 Canon Ink Only AVERAGE Slide Subtracted
41.68	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
41.46	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
41.45	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
40.76	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
40.61	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
40.52	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
40.25	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
40.13	282 Canon Ink Only AVERAGE Slide Subtracted
39.88	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
39.71	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
39.63	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
39.49	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
39.44	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
39.38	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted

Canon 217 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #217 Canon Black Inkjet Ink (BCI-6Bk) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
19.52	**24 Xerox Ink Only Run2 19July2009
18.98	**13 Xerox Ink Only Run2 19July2009
17.69	24 Xerox Ink Only AVERAGE
17.28	24 Xerox Ink Only R1R2 AVERAGE
16.91	**04 Okidata Ink Only Brown Spot Run4 19July2009
15.85	**24 Xerox Ink Only Run4 19July2009
14.94	**04 Okidata Ink Only Brown Spot Run3 19July2009
14.57	**13 Xerox Ink Only Run4 19July2009
14.00	**13 Xerox Ink Only Run3 19July2009
13.88	**244 Xerox Ink Only Run2 19July2009
13.67	**13 Xerox Ink Only Run1 19July2009
13.37	**24 Xerox Ink Only Run3 19July2009
13.28	13 Xerox Ink Only AVERAGE
12.45	**13 Xerox Ink Only Run5 19July2009
12.07	**24 Xerox Ink Only Run1 19July2009
11.75	244 Xerox Ink Only AVERAGE
11.73	**244 Xerox Ink Only Run5 19July2009
11.68	**244 Xerox Ink Only Run4 19July2009
11.19	**244 Xerox Ink Only Run1 19July2009
11.00	**13 Xerox Ink Only Run6 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #217 Canon Black Inkjet Ink (BCI-6Bk) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
17.95	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
16.36	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
15.41	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
14.87	**24 Xerox Ink Only Run2 19July2009 Slide Subtracted
14.79	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
14.36	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
12.81	**199 HP Ink Only Run1 19July2009 Blank Slide Subtracted
12.43	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
12.39	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
12.35	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
12.27	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
12.18	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
11.98	24 Xerox Ink Only AVERAGE Slide Subtracted
11.96	22 Kodak Ink Only AVERAGE Slide Subtracted
11.84	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
11.41	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
11.36	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
11.28	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
11.08	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11.01	244 Xerox Ink Only AVERAGE Slide Subtracted

Canon 217 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**217 Canon Black Ink (BCI-6BK) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
27.73	**04 Okidata Ink Only Brown Spot Run4 19July2009
24.26	**04 Okidata Ink Only Brown Spot Run3 19July2009
19.00	**04 Okidata Ink Only Brown Spot Run2 19July2009
13.84	**156 Epson Ink Only Run4 19July2009
10.49	**282 Canon Ink Only Run3 19July2009
10.49	**282 Canon Ink Only Run4 19July2009
10.28	282 Canon Ink Only AVERAGE
10.24	**04 Okidata Ink Only Brown Spot Run1 19July2009
10.22	**282 Canon Ink Only Run2 19July2009
9.86	**306 Canon Ink Only Run3 19July2009
9.85	**13 Xerox Ink Only Run3 19July2009
9.76	**348 Canon Ink Only Run3 19July2009
9.55	**84 Epson Ink Only Run1 19July2009
9.50	156 Epson Ink Only AVERAGE
9.43	**217 Canon Ink Only Run1 19July2009
9.42	**156 Epson Ink Only Run2 19July2009
9.29	**24 Xerox Ink Only Run3 19July2009
9.25	**217 Canon Ink Only Run4 19July2009
9.24	**223 Canon Ink Only Run3 19July2009
9.22	**282 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**217 Canon Black Ink (BCI-6BK) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
28.56	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
25.36	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
20.19	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
18.57	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
18.34	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
18.28	156 Epson Ink Only AVERAGE Slide Subtracted
17.33	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
16.70	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
15.65	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
14.42	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
13.95	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
12.87	282 Canon Ink Only AVERAGE Slide Subtracted
12.65	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
12.64	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
12.60	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
12.32	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
11.75	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
11.24	217 Canon Ink Only AVERAGE Slide Subtracted
11.15	348 Canon Ink Only AVERAGE Slide Subtracted
11.09	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 217 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**217 Canon Black Ink (BCI-6BK) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
48.18	**217 Canon Ink Only Run2 19July2009
48.17	**223 Canon Ink Only Run3 19July2009
48.13	**217 Canon Ink Only Run1 19July2009
48.10	217 Canon Ink Only AVERAGE
47.94	**217 Canon Ink Only Run3 19July2009
47.24	**282 Canon Ink Only Run3 19July2009
47.08	**282 Canon Ink Only Run4 19July2009
46.78	**282 Canon Ink Only Run2 19July2009
46.40	223 Canon Ink Only AVERAGE
46.15	**223 Canon Ink Only Run2 19July2009
45.76	282 Canon Ink Only AVERAGE
45.73	**348 Canon Ink Only Run2 19July2009
45.45	348 Canon Ink Only AVERAGE
45.44	**348 Canon Ink Only Run3 19July2009
45.40	**384 Canon Ink Only Run3 19July2009
45.22	384 Canon Ink Only AVERAGE
45.11	**384 Canon Ink Only Run2 19July2009
45.00	**348 Canon Ink Only Run1 19July2009
44.88	**384 Canon Ink Only Run1 19July2009
44.03	**223 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**217 Canon Black Ink (BCI-6BK) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
53.96	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
53.41	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
53.38	282 Canon Ink Only AVERAGE Slide Subtracted
53.35	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
52.15	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
51.69	217 Canon Ink Only AVERAGE Slide Subtracted
51.23	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
51.19	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
50.94	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
50.94	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
50.91	348 Canon Ink Only AVERAGE Slide Subtracted
50.90	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
50.86	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
50.27	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
50.06	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
49.81	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
49.70	384 Canon Ink Only AVERAGE Slide Subtracted
49.66	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
49.59	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
49.33	223 Canon Ink Only AVERAGE Slide Subtracted

Canon 217 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**217 Canon Black (BCI-6BK) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
42.77	**217 Canon Ink Only Run2 19July2009
42.34	217 Canon Ink Only AVERAGE
42.11	**217 Canon Ink Only Run3 19July2009
42.08	**217 Canon Ink Only Run1 19July2009
39.82	**282 Canon Ink Only Run3 19July2009
39.72	**282 Canon Ink Only Run4 19July2009
39.37	**282 Canon Ink Only Run2 19July2009
39.06	**223 Canon Ink Only Run3 19July2009
38.79	**384 Canon Ink Only Run1 19July2009
38.72	**223 Canon Ink Only Run2 19July2009
38.44	**384 Canon Ink Only Run2 19July2009
38.43	282 Canon Ink Only AVERAGE
38.34	223 Canon Ink Only AVERAGE
38.34	384 Canon Ink Only AVERAGE
37.55	**384 Canon Ink Only Run3 19July2009
36.64	**223 Canon Ink Only Run1 19July2009
36.39	**522 Canon Ink Only Run1 19July2009
36.12	**348 Canon Ink Only Run1 19July2009
35.97	522 Canon Ink Only AVERAGE
35.94	**522 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**217 Canon Black (BCI-6BK) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
47.51	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
47.49	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
47.37	217 Canon Ink Only AVERAGE Slide Subtracted
46.96	282 Canon Ink Only AVERAGE Slide Subtracted
46.83	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
46.80	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
46.69	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
46.54	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
45.96	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
45.37	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
44.77	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
44.69	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
44.55	384 Canon Ink Only AVERAGE Slide Subtracted
43.93	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
43.87	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
43.01	223 Canon Ink Only AVERAGE Slide Subtracted
42.81	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
42.64	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
42.35	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
42.22	348 Canon Ink Only AVERAGE Slide Subtracted

Canon 217 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**217 Canon Black Ink (BCI-6Bk) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
52.87	**282 Canon Ink Only Run3 19July2009
52.05	**282 Canon Ink Only Run4 19July2009
50.80	**282 Canon Ink Only Run2 19July2009
50.51	282 Canon Ink Only AVERAGE
47.87	**223 Canon Ink Only Run3 19July2009
47.61	**217 Canon Ink Only Run2 19July2009
47.48	**217 Canon Ink Only Run1 19July2009
47.46	217 Canon Ink Only AVERAGE
47.37	**348 Canon Ink Only Run3 19July2009
47.21	**217 Canon Ink Only Run3 19July2009
46.54	**348 Canon Ink Only Run2 19July2009
46.32	348 Canon Ink Only AVERAGE
46.06	223 Canon Ink Only AVERAGE
45.86	**223 Canon Ink Only Run2 19July2009
45.17	**384 Canon Ink Only Run2 19July2009
45.10	384 Canon Ink Only AVERAGE
45.04	**384 Canon Ink Only Run3 19July2009
44.84	**348 Canon Ink Only Run1 19July2009
44.82	**384 Canon Ink Only Run1 19July2009
43.57	**223 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**217 Canon Black Ink (BCI-6Bk) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
60.49	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
59.81	282 Canon Ink Only AVERAGE Slide Subtracted
59.74	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
59.49	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
57.68	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
53.98	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
53.45	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
53.16	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
52.94	348 Canon Ink Only AVERAGE Slide Subtracted
52.16	217 Canon Ink Only AVERAGE Slide Subtracted
51.71	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
51.32	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
51.30	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
51.17	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
50.93	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
50.91	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
50.79	384 Canon Ink Only AVERAGE Slide Subtracted
50.47	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
50.46	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
50.20	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Canon 217 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Canon 217
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
44.32	**282 Canon Ink Only Run3 19July2009
43.47	**217 Canon Ink Only Run2 19July2009
43.38	**282 Canon Ink Only Run4 19July2009
43.28	217 Canon Ink Only AVERAGE
43.16	**217 Canon Ink Only Run3 19July2009
43.16	**217 Canon Ink Only Run1 19July2009
42.26	**282 Canon Ink Only Run2 19July2009
41.88	**223 Canon Ink Only Run3 19July2009
41.82	282 Canon Ink Only AVERAGE
40.29	**223 Canon Ink Only Run2 19July2009
40.27	223 Canon Ink Only AVERAGE
39.92	**348 Canon Ink Only Run2 19July2009
39.89	**348 Canon Ink Only Run3 19July2009
39.62	348 Canon Ink Only AVERAGE
39.25	**384 Canon Ink Only Run3 19July2009
39.23	384 Canon Ink Only AVERAGE
39.18	**384 Canon Ink Only Run2 19July2009
39.03	**384 Canon Ink Only Run1 19July2009
38.90	**348 Canon Ink Only Run1 19July2009
37.84	**223 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Canon 217
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
52.13	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
51.27	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
51.24	282 Canon Ink Only AVERAGE Slide Subtracted
51.17	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
48.75	217 Canon Ink Only AVERAGE Slide Subtracted
48.69	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
48.26	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
48.23	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
48.09	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
47.26	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
47.00	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
46.98	348 Canon Ink Only AVERAGE Slide Subtracted
46.79	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
46.32	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
46.20	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
46.06	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
46.01	384 Canon Ink Only AVERAGE Slide Subtracted
45.99	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
45.59	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
45.55	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Canon 223 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #223 Canon Black Inkjet Ink (BCI-10) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
19.13	**04 Okidata Ink Only Brown Spot Run4 19July2009
16.88	**04 Okidata Ink Only Brown Spot Run3 19July2009
12.81	**492 Canon Ink Only Run1 19July2009
12.78	**492 Canon Ink Only Run2 19July2009
12.10	**205 HP Ink Only Run4 19July2009
12.09	**205 HP Ink Only Run3 19July2009
12.01	**04 Okidata Ink Only Brown Spot Run2 19July2009
11.85	205 HP Ink Only AVERAGE
11.56	492 Canon Ink Only AVERAGE
11.31	**205 HP Ink Only Run2 19July2009
10.74	**156 Epson Ink Only Run1 19July2009
10.66	**492 Canon Ink Only Run3 19July2009
10.35	**492 Canon Ink Only Run5 19July2009
10.31	**04 Okidata Ink Only Black Spot Run2 19July2009
10.20	**04 Okidata Ink Only Black Spot Run1 19July2009
9.97	04 Okidata Ink Only Black Spot AVERAGE
9.82	**492 Canon Ink Only Run4 19July2009
9.52	**282 Canon Ink Only Run2 19July2009
9.45	**63 Epson Ink Only Purple Spot Run2 19July2009
9.44	**282 Canon Ink Only Run4 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #223 Canon Black Inkjet Ink (BCI-10) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
20.32	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
18.50	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
17.43	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
12.85	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
12.81	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
11.67	492 Canon Ink Only AVERAGE Slide Subtracted
11.35	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
11.21	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
10.77	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
10.60	205 HP Ink Only AVERAGE Slide Subtracted
10.50	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
10.15	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
10.05	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
10.02	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
10.02	**492 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
9.83	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
9.63	**63 Epson Ink Only Purple Spot Run2 19July2009 Blank Slide Subtracted
9.57	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
8.98	63 Epson Ink Only Purple Spot AVERAGE Slide Subtracted
8.87	**63 Epson Ink Only Purple Spot Run3 19July2009 Blank Slide Subtracted

Canon 223 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**223 Canon Black Ink (BCI-10) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
28.40	**04 Okidata Ink Only Brown Spot Run4 19July2009
25.06	**04 Okidata Ink Only Brown Spot Run3 19July2009
19.62	**04 Okidata Ink Only Brown Spot Run2 19July2009
12.75	**156 Epson Ink Only Run4 19July2009
10.56	**04 Okidata Ink Only Brown Spot Run1 19July2009
9.49	**24 Xerox Ink Only Run3 19July2009
9.10	156 Epson Ink Only AVERAGE
8.96	**156 Epson Ink Only Run2 19July2009
8.80	**24 Xerox Ink Only Run2 19July2009
8.56	24 Xerox Ink Only AVERAGE
8.44	**156 Epson Ink Only Run5 19July2009
8.27	**156 Epson Ink Only Run1 19July2009
8.01	**13 Xerox Ink Only Run3 19July2009
8.00	**282 Canon Ink Only Run4 19July2009
7.84	24 Xerox Ink Only R1R2 AVERAGE
7.80	**282 Canon Ink Only Run2 19July2009
7.78	**282 Canon Ink Only Run3 19July2009
7.78	282 Canon Ink Only AVERAGE
7.75	**13 Xerox Ink Only Run2 19July2009
7.69	04 Okidata Ink Only Brown Spot AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**223 Canon Black Ink (BCI-10) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
29.37	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
26.37	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
21.87	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
16.27	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
16.21	156 Epson Ink Only AVERAGE Slide Subtracted
16.15	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
15.99	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
14.75	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
12.88	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
12.46	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
11.51	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
10.55	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
10.24	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
9.50	282 Canon Ink Only AVERAGE Slide Subtracted
9.43	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
9.42	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
9.25	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
9.16	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
8.57	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
8.20	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Canon 223 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**223 Canon Black Ink (BCI-10) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
38.33	**282 Canon Ink Only Run3 19July2009
37.96	**282 Canon Ink Only Run4 19July2009
37.60	**282 Canon Ink Only Run2 19July2009
37.38	282 Canon Ink Only AVERAGE
36.91	**223 Canon Ink Only Run3 19July2009
36.80	**348 Canon Ink Only Run3 19July2009
36.43	**217 Canon Ink Only Run1 19July2009
36.29	348 Canon Ink Only AVERAGE
36.24	**348 Canon Ink Only Run2 19July2009
36.22	217 Canon Ink Only AVERAGE
36.18	**217 Canon Ink Only Run2 19July2009
36.00	**217 Canon Ink Only Run3 19July2009
35.74	223 Canon Ink Only AVERAGE
35.70	**384 Canon Ink Only Run2 19July2009
35.69	**384 Canon Ink Only Run1 19July2009
35.68	**348 Canon Ink Only Run1 19July2009
35.64	384 Canon Ink Only AVERAGE
35.44	**223 Canon Ink Only Run2 19July2009
35.30	**384 Canon Ink Only Run3 19July2009
34.27	**223 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**223 Canon Black Ink (BCI-10) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
43.40	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
41.40	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
41.30	282 Canon Ink Only AVERAGE Slide Subtracted
41.14	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
41.06	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
40.88	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
39.11	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
38.33	348 Canon Ink Only AVERAGE Slide Subtracted
38.28	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
37.32	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
37.28	217 Canon Ink Only AVERAGE Slide Subtracted
36.75	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
36.59	384 Canon Ink Only AVERAGE Slide Subtracted
36.43	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
36.41	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
36.36	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
36.29	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
36.16	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
36.05	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
35.67	223 Canon Ink Only AVERAGE Slide Subtracted

Canon 223 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**223 Canon Black (BCI-10) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
54.24	**282 Canon Ink Only Run3 19July2009
53.92	**348 Canon Ink Only Run3 19July2009
53.69	**282 Canon Ink Only Run4 19July2009
53.38	**223 Canon Ink Only Run3 19July2009
53.33	**348 Canon Ink Only Run2 19July2009
52.93	348 Canon Ink Only AVERAGE
52.41	**282 Canon Ink Only Run2 19July2009
52.30	282 Canon Ink Only AVERAGE
51.31	**348 Canon Ink Only Run1 19July2009
50.84	223 Canon Ink Only AVERAGE
50.13	**384 Canon Ink Only Run3 19July2009
49.91	**217 Canon Ink Only Run3 19July2009
49.82	217 Canon Ink Only AVERAGE
49.78	**217 Canon Ink Only Run2 19July2009
49.71	**217 Canon Ink Only Run1 19July2009
49.68	**223 Canon Ink Only Run2 19July2009
49.11	384 Canon Ink Only AVERAGE
48.68	**384 Canon Ink Only Run2 19July2009
48.49	**223 Canon Ink Only Run1 19July2009
48.24	**384 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**223 Canon Black (BCI-10) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
57.62	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
57.07	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
56.62	282 Canon Ink Only AVERAGE Slide Subtracted
56.27	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
56.20	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
55.23	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
54.76	348 Canon Ink Only AVERAGE Slide Subtracted
53.09	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
52.40	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
51.29	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
50.34	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
49.54	223 Canon Ink Only AVERAGE Slide Subtracted
49.08	384 Canon Ink Only AVERAGE Slide Subtracted
48.84	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
48.77	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
48.75	217 Canon Ink Only AVERAGE Slide Subtracted
48.75	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
48.72	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
48.55	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
48.43	**318 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Canon 223 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**223 Canon Black Ink (BCI-10) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
49.63	**223 Canon Ink Only Run3 19July2009
49.22	**348 Canon Ink Only Run3 19July2009
48.57	**282 Canon Ink Only Run3 19July2009
48.24	**348 Canon Ink Only Run2 19July2009
48.21	348 Canon Ink Only AVERAGE
47.88	**282 Canon Ink Only Run4 19July2009
47.49	223 Canon Ink Only AVERAGE
47.13	**223 Canon Ink Only Run2 19July2009
46.96	**348 Canon Ink Only Run1 19July2009
46.83	**384 Canon Ink Only Run2 19July2009
46.69	384 Canon Ink Only AVERAGE
46.66	**217 Canon Ink Only Run2 19July2009
46.63	**217 Canon Ink Only Run1 19July2009
46.53	217 Canon Ink Only AVERAGE
46.52	**384 Canon Ink Only Run1 19July2009
46.43	**384 Canon Ink Only Run3 19July2009
46.30	**282 Canon Ink Only Run2 19July2009
46.24	**217 Canon Ink Only Run3 19July2009
46.13	282 Canon Ink Only AVERAGE
44.77	**223 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**223 Canon Black Ink (BCI-10) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
56.38	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
56.13	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
55.52	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
55.44	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
55.43	348 Canon Ink Only AVERAGE Slide Subtracted
55.30	282 Canon Ink Only AVERAGE Slide Subtracted
54.89	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
54.06	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
53.17	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
52.96	384 Canon Ink Only AVERAGE Slide Subtracted
52.88	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
52.62	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
52.56	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
52.52	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
52.47	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
52.24	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
52.02	223 Canon Ink Only AVERAGE Slide Subtracted
51.31	217 Canon Ink Only AVERAGE Slide Subtracted
51.26	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
51.17	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 223 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Canon 223
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
54.91	**223 Canon Ink Only Run3 19July2009
53.17	**348 Canon Ink Only Run3 19July2009
52.62	**348 Canon Ink Only Run2 19July2009
52.50	348 Canon Ink Only AVERAGE
52.36	**282 Canon Ink Only Run3 19July2009
52.06	223 Canon Ink Only AVERAGE
51.63	**282 Canon Ink Only Run4 19July2009
51.51	**348 Canon Ink Only Run1 19July2009
51.07	**217 Canon Ink Only Run1 19July2009
51.03	**223 Canon Ink Only Run2 19July2009
50.97	217 Canon Ink Only AVERAGE
50.91	**217 Canon Ink Only Run2 19July2009
50.85	**217 Canon Ink Only Run3 19July2009
50.77	**384 Canon Ink Only Run3 19July2009
50.50	**282 Canon Ink Only Run2 19July2009
50.30	384 Canon Ink Only AVERAGE
50.15	**384 Canon Ink Only Run2 19July2009
49.93	282 Canon Ink Only AVERAGE
49.70	**384 Canon Ink Only Run1 19July2009
49.18	**223 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Canon 223
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
59.92	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
59.62	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
59.35	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
59.25	348 Canon Ink Only AVERAGE Slide Subtracted
58.97	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
58.79	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
58.79	282 Canon Ink Only AVERAGE Slide Subtracted
58.04	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
57.18	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
56.54	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
55.86	384 Canon Ink Only AVERAGE Slide Subtracted
55.86	223 Canon Ink Only AVERAGE Slide Subtracted
55.77	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
55.39	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
55.26	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
54.98	217 Canon Ink Only AVERAGE Slide Subtracted
54.88	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
54.73	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
54.63	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
54.53	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Xerox 244 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #244 Xerox Black Inkjet Ink (4 colors in box, M-Series) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
24.49	**205 HP Ink Only Run4 19July2009
24.25	**205 HP Ink Only Run3 19July2009
23.94	205 HP Ink Only AVERAGE
23.19	**282 Canon Ink Only Run4 19July2009
23.04	**282 Canon Ink Only Run3 19July2009
22.96	**282 Canon Ink Only Run2 19July2009
22.95	**205 HP Ink Only Run2 19July2009
22.75	**492 Canon Ink Only Run5 19July2009
22.72	282 Canon Ink Only AVERAGE
21.85	**348 Canon Ink Only Run3 19July2009
21.65	492 Canon Ink Only AVERAGE
21.46	**348 Canon Ink Only Run2 19July2009
21.39	348 Canon Ink Only AVERAGE
21.21	**492 Canon Ink Only Run4 19July2009
21.11	**223 Canon Ink Only Run3 19July2009
20.77	**348 Canon Ink Only Run1 19July2009
20.55	**318 Canon Ink Only Run3 19July2009
20.48	**492 Canon Ink Only Run2 19July2009
20.47	**217 Canon Ink Only Run3 19July2009
20.36	**217 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #244 Xerox Black Inkjet Ink (4 colors in box, M-Series) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
23.63	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
23.16	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
22.94	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
22.94	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
22.79	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
22.69	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
22.62	282 Canon Ink Only AVERAGE Slide Subtracted
22.32	205 HP Ink Only AVERAGE Slide Subtracted
21.79	492 Canon Ink Only AVERAGE Slide Subtracted
21.46	**492 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
20.90	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
20.90	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
20.53	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20.34	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
20.13	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20.03	348 Canon Ink Only AVERAGE Slide Subtracted
19.98	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
19.22	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
19.21	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
18.91	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Xerox 244 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**244 Xerox Black Ink (M-Series) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
25.03	**04 Okidata Ink Only Brown Spot Run1 19July2009
22.69	04 Okidata Ink Only AVERAGE
22.20	04 Okidata Ink Only Brown Spot AVERAGE
21.96	**04 Okidata Ink Only Brown Spot Run6 19July2009
21.66	**04 Okidata Ink Only Brown Spot Run7 19July2009
21.47	**217 Canon Ink Only Run1 19July2009
21.32	**84 Epson Ink Only Run4 19July2009
21.12	217 Canon Ink Only AVERAGE
20.94	**217 Canon Ink Only Run2 19July2009
20.91	**217 Canon Ink Only Run3 19July2009
20.77	**205 HP Ink Only Run4 19July2009
20.73	**312 Canon Ink Only Run4 19July2009
20.71	**223 Canon Ink Only Run3 19July2009
20.70	205 HP Ink Only AVERAGE
20.67	**205 HP Ink Only Run2 19July2009
20.59	**205 HP Ink Only Run3 19July2009
20.40	**04 Okidata Ink Only Black Spot Run2 19July2009
20.28	**84 Epson Ink Only Run3 19July2009
20.17	**04 Okidata Ink Only Black Spot Run1 19July2009
19.82	04 Okidata Ink Only Black Spot AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**244 Xerox Black Ink (M-Series) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
24.95	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
24.61	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
23.58	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
23.18	205 HP Ink Only AVERAGE Slide Subtracted
23.14	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
23.05	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
23.00	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
23.00	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
22.95	04 Okidata Ink Only AVERAGE Slide Subtracted
22.88	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
22.83	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
22.79	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
22.73	217 Canon Ink Only AVERAGE Slide Subtracted
22.56	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
22.48	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
21.69	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
21.40	**84 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
21.14	**327 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
21.13	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
21.03	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Xerox 244 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**244 Xerox Black Ink (M-Series) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
32.88	**205 HP Ink Only Run2 19July2009
32.84	205 HP Ink Only AVERAGE
32.81	**205 HP Ink Only Run3 19July2009
32.75	**205 HP Ink Only Run4 19July2009
27.71	**223 Canon Ink Only Run3 19July2009
27.50	**217 Canon Ink Only Run3 19July2009
27.43	217 Canon Ink Only AVERAGE
27.43	**217 Canon Ink Only Run1 19July2009
27.33	**217 Canon Ink Only Run2 19July2009
27.16	**04 Okidata Ink Only Brown Spot Run1 19July2009
26.73	04 Okidata Ink Only AVERAGE
26.05	223 Canon Ink Only AVERAGE
26.03	**318 Canon Ink Only Run1 19July2009
26.01	**13 Xerox Ink Only Run2 19July2009
25.63	**327 Canon Ink Only Run2 19July2009
25.60	**327 Canon Ink Only Run1 19July2009
25.43	**318 Canon Ink Only Run2 19July2009
25.35	318 Canon Ink Only AVERAGE
25.33	327 Canon Ink Only AVERAGE
25.09	**04 Okidata Ink Only Black Spot Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**244 Xerox Black Ink (M-Series) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
34.30	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
34.29	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
33.90	205 HP Ink Only AVERAGE Slide Subtracted
33.25	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
29.92	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
27.35	217 Canon Ink Only AVERAGE Slide Subtracted
27.34	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
27.21	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
27.20	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
27.11	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
26.95	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
26.66	04 Okidata Ink Only AVERAGE Slide Subtracted
26.50	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
26.18	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
26.16	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
25.93	327 Canon Ink Only AVERAGE Slide Subtracted
25.82	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
25.81	318 Canon Ink Only AVERAGE Slide Subtracted
25.75	223 Canon Ink Only AVERAGE Slide Subtracted
25.58	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Xerox 244 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**244 Xerox Black (M-Series) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
29.24	**13 Xerox Ink Only Run2 19July2009
29.16	205 HP Ink Only AVERAGE
29.16	**205 HP Ink Only Run3 19July2009
29.14	**205 HP Ink Only Run4 19July2009
29.10	**205 HP Ink Only Run2 19July2009
25.39	**04 Okidata Ink Only Brown Spot Run1 19July2009
24.84	04 Okidata Ink Only AVERAGE
23.94	**04 Okidata Ink Only Brown Spot Run4 19July2009
23.28	**04 Okidata Ink Only Black Spot Run2 19July2009
22.67	**04 Okidata Ink Only Black Spot Run1 19July2009
22.58	04 Okidata Ink Only Black Spot AVERAGE
21.69	**04 Okidata Ink Only Brown Spot Run3 19July2009
21.54	04 Okidata Ink Only Brown Spot AVERAGE
21.40	**312 Canon Ink Only Run4 19July2009
21.09	**04 Okidata Ink Only Black Spot Run3 19July2009
20.36	**205 HP Ink Only Run1 19July2009
20.36	**04 Okidata Ink Only Brown Spot Run2 19July2009
19.19	**156 Epson Ink Only Run4 19July2009
18.82	**04 Okidata Ink Only Brown Spot Run6 19July2009
18.79	**04 Okidata Ink Only Brown Spot Run7 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**244 Xerox Black (M-Series) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
29.70	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
29.59	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
29.16	205 HP Ink Only AVERAGE Slide Subtracted
28.28	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
26.23	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
25.82	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
25.37	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
25.35	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
25.29	156 Epson Ink Only AVERAGE Slide Subtracted
25.10	04 Okidata Ink Only AVERAGE Slide Subtracted
24.51	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
24.44	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
23.92	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
23.70	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
23.14	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
23.06	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
22.58	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
22.54	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
22.49	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
22.46	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted

Xerox 244 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**244 Xerox Black Ink (M-Series) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
34.24	**205 HP Ink Only Run4 19July2009
34.12	205 HP Ink Only AVERAGE
34.09	**205 HP Ink Only Run3 19July2009
33.91	**205 HP Ink Only Run2 19July2009
29.50	04 Okidata Ink Only AVERAGE
28.31	**04 Okidata Ink Only Black Spot Run2 19July2009
27.51	**04 Okidata Ink Only Black Spot Run1 19July2009
27.37	04 Okidata Ink Only Black Spot AVERAGE
27.01	**04 Okidata Ink Only Brown Spot Run1 19July2009
25.36	**04 Okidata Ink Only Black Spot Run3 19July2009
25.05	**217 Canon Ink Only Run3 19July2009
24.97	**217 Canon Ink Only Run1 19July2009
24.96	217 Canon Ink Only AVERAGE
24.88	**223 Canon Ink Only Run3 19July2009
24.84	**217 Canon Ink Only Run2 19July2009
23.86	04 Okidata Ink Only Brown Spot AVERAGE
23.23	223 Canon Ink Only AVERAGE
22.98	**348 Canon Ink Only Run2 19July2009
22.88	**348 Canon Ink Only Run1 19July2009
22.85	**04 Okidata Ink Only Brown Spot Run7 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**244 Xerox Black Ink (M-Series) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
35.82	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
35.58	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
35.13	205 HP Ink Only AVERAGE Slide Subtracted
34.23	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
30.66	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
29.69	04 Okidata Ink Only AVERAGE Slide Subtracted
28.24	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
27.45	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
27.32	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
26.96	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
25.33	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
24.92	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
24.75	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
24.70	217 Canon Ink Only AVERAGE Slide Subtracted
24.61	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
24.56	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
24.04	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
23.86	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
23.75	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
23.63	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted

Xerox 244 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Xerox 244
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
21.92	**312 Canon Ink Only Run4 19July2009
21.61	**13 Xerox Ink Only Run2 19July2009
20.64	**04 Okidata Ink Only Brown Spot Run1 19July2009
19.81	04 Okidata Ink Only AVERAGE
19.03	**04 Okidata Ink Only Brown Spot Run6 19July2009
18.92	312 Canon Ink Only AVERAGE
18.62	04 Okidata Ink Only Brown Spot AVERAGE
18.18	**04 Okidata Ink Only Brown Spot Run7 19July2009
18.12	**04 Okidata Ink Only Black Spot Run2 19July2009
18.06	**04 Okidata Ink Only Brown Spot Run5 19July2009
17.55	04 Okidata Ink Only Black Spot AVERAGE
17.37	**04 Okidata Ink Only Black Spot Run1 19July2009
16.77	**04 Okidata Ink Only Black Spot Run3 19July2009
16.43	**312 Canon Ink Only Run1 19July2009
15.86	**156 Epson Ink Only Run4 19July2009
15.02	**205 HP Ink Only Run4 19July2009
15.00	**312 Canon Ink Only Run2 19July2009
14.97	205 HP Ink Only AVERAGE
14.97	**205 HP Ink Only Run3 19July2009
14.90	**04 Okidata Ink Only Brown Spot Run4 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Xerox 244
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
22.53	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
22.31	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
20.58	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
20.30	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
19.83	04 Okidata Ink Only AVERAGE Slide Subtracted
19.61	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
19.04	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
18.69	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
18.40	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
18.17	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
18.00	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
17.60	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
17.55	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
17.42	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
16.80	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
16.79	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
16.43	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
16.41	156 Epson Ink Only AVERAGE Slide Subtracted
16.40	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
16.37	205 HP Ink Only AVERAGE Slide Subtracted

Canon 282 12Nov2007 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**Sample #282 Canon Black Inkjet Ink (BC-02) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
20.38	**04 Okidata Ink Only Brown Spot Run4 19July2009
17.65	**04 Okidata Ink Only Brown Spot Run3 19July2009
12.55	**04 Okidata Ink Only Brown Spot Run2 19July2009
11.73	**24 Xerox Ink Only Run2 19July2009
10.78	24 Xerox Ink Only AVERAGE
10.65	**244 Xerox Ink Only Run2 19July2009
10.64	24 Xerox Ink Only R1R2 AVERAGE
10.59	**13 Xerox Ink Only Run1 19July2009
10.54	**244 Xerox Ink Only Run5 19July2009
10.42	244 Xerox Ink Only AVERAGE
10.22	**244 Xerox Ink Only Run4 19July2009
9.96	**13 Xerox Ink Only Run2 19July2009
9.93	**244 Xerox Ink Only Run1 19July2009
9.46	**24 Xerox Ink Only Run4 19July2009
9.31	**13 Xerox Ink Only Run4 19July2009
9.00	**156 Epson Ink Only Run1 19July2009
8.66	**200 HP Ink Only Run1 19July2009
8.63	13 Xerox Ink Only AVERAGE
8.55	**13 Xerox Ink Only Run5 19July2009
8.47	**200 HP Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**Sample #282 Canon Black Inkjet Ink (BC-02) 12Nov2007
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
21.59	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
19.28	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
17.86	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
10.09	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
9.22	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
9.19	**199 HP Ink Only Run1 19July2009 Blank Slide Subtracted
9.12	244 Xerox Ink Only AVERAGE Slide Subtracted
8.85	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
8.81	**244 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
8.77	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
8.13	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
8.00	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
7.98	**24 Xerox Ink Only Run2 19July2009 Slide Subtracted
7.76	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
7.67	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
7.51	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
7.29	22 Kodak Ink Only AVERAGE Slide Subtracted
7.27	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
7.19	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
7.04	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 282 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**282 Canon Black Ink (BC-02) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
18.17	**217 Canon Ink Only Run2 19July2009
18.14	**217 Canon Ink Only Run3 19July2009
18.01	217 Canon Ink Only AVERAGE
17.84	**223 Canon Ink Only Run3 19July2009
17.68	**217 Canon Ink Only Run1 19July2009
17.49	**306 Canon Ink Only Run3 19July2009
17.44	**348 Canon Ink Only Run2 19July2009
17.32	**348 Canon Ink Only Run3 19July2009
17.20	**282 Canon Ink Only Run3 19July2009
17.16	348 Canon Ink Only AVERAGE
17.08	**282 Canon Ink Only Run4 19July2009
16.88	223 Canon Ink Only AVERAGE
16.82	306 Canon Ink Only AVERAGE
16.63	**348 Canon Ink Only Run1 19July2009
16.47	**223 Canon Ink Only Run2 19July2009
16.43	**282 Canon Ink Only Run2 19July2009
16.43	282 Canon Ink Only AVERAGE
16.37	**306 Canon Ink Only Run2 19July2009
16.31	**306 Canon Ink Only Run1 19July2009
16.17	**244 Xerox Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**282 Canon Black Ink (BC-02) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
21.60	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
19.78	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
19.77	217 Canon Ink Only AVERAGE Slide Subtracted
19.68	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
19.64	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
19.60	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
19.58	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
19.50	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
19.48	348 Canon Ink Only AVERAGE Slide Subtracted
19.46	282 Canon Ink Only AVERAGE Slide Subtracted
19.25	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
18.98	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
18.89	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
18.69	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
18.60	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
18.24	223 Canon Ink Only AVERAGE Slide Subtracted
18.04	306 Canon Ink Only AVERAGE Slide Subtracted
18.02	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
17.82	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
17.79	**306 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 282 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**282 Canon Black Ink (BC-02) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
32.42	**282 Canon Ink Only Run3 19July2009
32.14	**282 Canon Ink Only Run4 19July2009
31.57	**282 Canon Ink Only Run2 19July2009
31.39	282 Canon Ink Only AVERAGE
29.57	**217 Canon Ink Only Run1 19July2009
29.31	217 Canon Ink Only AVERAGE
29.19	**217 Canon Ink Only Run2 19July2009
29.13	**217 Canon Ink Only Run3 19July2009
28.48	**348 Canon Ink Only Run3 19July2009
28.21	**348 Canon Ink Only Run2 19July2009
28.11	**223 Canon Ink Only Run3 19July2009
27.81	348 Canon Ink Only AVERAGE
26.84	**384 Canon Ink Only Run3 19July2009
26.77	223 Canon Ink Only AVERAGE
26.71	384 Canon Ink Only AVERAGE
26.69	**282 Canon Ink Only Run1 19July2009
26.63	**348 Canon Ink Only Run1 19July2009
26.61	**384 Canon Ink Only Run1 19July2009
26.52	**384 Canon Ink Only Run2 19July2009
26.37	**223 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**282 Canon Black Ink (BC-02) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
35.65	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
35.43	282 Canon Ink Only AVERAGE Slide Subtracted
35.40	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
35.27	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
34.45	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
32.51	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
30.89	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
30.60	217 Canon Ink Only AVERAGE Slide Subtracted
30.50	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
30.26	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
30.07	348 Canon Ink Only AVERAGE Slide Subtracted
29.99	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
29.88	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
28.60	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
28.42	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
28.18	384 Canon Ink Only AVERAGE Slide Subtracted
28.15	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
28.05	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
27.90	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
27.42	223 Canon Ink Only AVERAGE Slide Subtracted

Canon 282 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**282 Canon Black (BC-02) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
33.14	**217 Canon Ink Only Run3 19July2009
33.00	217 Canon Ink Only AVERAGE
32.95	**217 Canon Ink Only Run1 19July2009
32.86	**217 Canon Ink Only Run2 19July2009
32.42	**282 Canon Ink Only Run3 19July2009
32.23	**282 Canon Ink Only Run4 19July2009
31.27	**282 Canon Ink Only Run2 19July2009
31.05	**223 Canon Ink Only Run3 19July2009
30.99	282 Canon Ink Only AVERAGE
29.64	**348 Canon Ink Only Run3 19July2009
29.63	223 Canon Ink Only AVERAGE
29.52	**348 Canon Ink Only Run2 19July2009
29.28	**223 Canon Ink Only Run2 19July2009
29.24	348 Canon Ink Only AVERAGE
28.72	**384 Canon Ink Only Run1 19July2009
28.71	**384 Canon Ink Only Run3 19July2009
28.65	384 Canon Ink Only AVERAGE
28.48	**522 Canon Ink Only Run1 19July2009
28.44	**348 Canon Ink Only Run1 19July2009
28.42	522 Canon Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**282 Canon Black (BC-02) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
38.72	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
38.63	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
38.62	282 Canon Ink Only AVERAGE Slide Subtracted
38.50	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
37.66	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
37.56	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
37.52	217 Canon Ink Only AVERAGE Slide Subtracted
37.39	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
37.26	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
35.61	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
35.52	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
35.34	348 Canon Ink Only AVERAGE Slide Subtracted
34.64	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
34.58	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
34.40	384 Canon Ink Only AVERAGE Slide Subtracted
34.38	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
34.28	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
34.25	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
34.15	223 Canon Ink Only AVERAGE Slide Subtracted
34.11	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 282 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**282 Canon Black Ink (BC-02) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
36.09	**217 Canon Ink Only Run2 19July2009
36.02	**217 Canon Ink Only Run1 19July2009
36.01	217 Canon Ink Only AVERAGE
35.89	**217 Canon Ink Only Run3 19July2009
35.88	**223 Canon Ink Only Run3 19July2009
33.89	223 Canon Ink Only AVERAGE
33.47	**223 Canon Ink Only Run2 19July2009
32.56	**384 Canon Ink Only Run1 19July2009
32.39	384 Canon Ink Only AVERAGE
32.34	**384 Canon Ink Only Run2 19July2009
32.06	**384 Canon Ink Only Run3 19July2009
31.54	**223 Canon Ink Only Run1 19July2009
30.65	**348 Canon Ink Only Run1 19July2009
30.17	**348 Canon Ink Only Run2 19July2009
30.04	348 Canon Ink Only AVERAGE
29.17	**348 Canon Ink Only Run3 19July2009
28.97	**522 Canon Ink Only Run1 19July2009
28.93	**282 Canon Ink Only Run3 19July2009
28.72	**282 Canon Ink Only Run4 19July2009
28.49	**306 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**282 Canon Black Ink (BC-02) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
45.47	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
45.29	217 Canon Ink Only AVERAGE Slide Subtracted
45.06	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
45.04	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
43.80	384 Canon Ink Only AVERAGE Slide Subtracted
43.79	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
43.79	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
43.71	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
43.61	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
43.54	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
43.53	223 Canon Ink Only AVERAGE Slide Subtracted
43.02	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
42.42	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
42.39	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
42.05	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
41.59	30 Epson Ink Only AVERAGE Slide Subtracted
41.17	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
41.10	348 Canon Ink Only AVERAGE Slide Subtracted
40.79	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
40.56	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted

Canon 282 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Canon 282
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
40.69	**282 Canon Ink Only Run3 19July2009
39.87	**282 Canon Ink Only Run4 19July2009
38.63	**282 Canon Ink Only Run2 19July2009
38.39	282 Canon Ink Only AVERAGE
37.51	**217 Canon Ink Only Run3 19July2009
37.46	**217 Canon Ink Only Run1 19July2009
37.44	217 Canon Ink Only AVERAGE
37.30	**217 Canon Ink Only Run2 19July2009
36.21	**223 Canon Ink Only Run3 19July2009
36.02	**348 Canon Ink Only Run3 19July2009
35.17	**348 Canon Ink Only Run2 19July2009
35.02	348 Canon Ink Only AVERAGE
34.40	223 Canon Ink Only AVERAGE
33.91	**384 Canon Ink Only Run1 19July2009
33.81	**223 Canon Ink Only Run2 19July2009
33.73	384 Canon Ink Only AVERAGE
33.71	**348 Canon Ink Only Run1 19July2009
33.55	**384 Canon Ink Only Run3 19July2009
33.53	**384 Canon Ink Only Run2 19July2009
33.06	24 Xerox Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Canon 282
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
48.19	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
47.45	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
47.43	282 Canon Ink Only AVERAGE Slide Subtracted
47.17	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
45.18	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
42.87	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
42.63	217 Canon Ink Only AVERAGE Slide Subtracted
42.48	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
42.41	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
42.32	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
42.18	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
42.06	348 Canon Ink Only AVERAGE Slide Subtracted
40.81	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
40.28	384 Canon Ink Only AVERAGE Slide Subtracted
40.25	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
40.23	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
40.09	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
39.97	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
39.52	223 Canon Ink Only AVERAGE Slide Subtracted
39.43	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 306 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**306 Canon Black Ink (BC-20) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
21.27	**04 Okidata Ink Only Brown Spot Run4 19July2009
17.79	**04 Okidata Ink Only Brown Spot Run3 19July2009
13.41	**04 Okidata Ink Only Brown Spot Run2 19July2009
12.13	**244 Xerox Ink Only Run4 19July2009
11.27	**33 Epson Ink Only Brown Spot Run1 19July2009
11.24	**33 Epson Ink Only Brown Spot Run3 19July2009
11.18	33 Epson Ink Only Brown Spot AVERAGE
11.04	**33 Epson Ink Only Brown Spot Run2 19July2009
10.92	**13 Xerox Ink Only Run6 19July2009
10.65	13 Xerox Ink Only AVERAGE
10.61	**66 Epson Ink Only Run1 19July2009
10.61	244 Xerox Ink Only AVERAGE
10.55	**244 Xerox Ink Only Run5 19July2009
10.53	66 Epson Ink Only AVERAGE
10.51	**66 Epson Ink Only Run2 19July2009
10.41	**13 Xerox Ink Only Run5 19July2009
10.41	**66 Epson Ink Only Run3 19July2009
10.33	**63 Epson Ink Only Purple Spot Run2 19July2009
10.29	**90 Epson Ink Only Run3 19July2009
10.05	63 Epson Ink Only Purple Spot AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**306 Canon Black Ink (BC-20) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
22.04	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
18.78	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
15.21	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
13.03	**244 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
12.20	244 Xerox Ink Only AVERAGE Slide Subtracted
11.91	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
11.21	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
11.19	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
11.13	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
11.00	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
10.86	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
10.47	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
10.40	66 Epson Ink Only AVERAGE Slide Subtracted
10.38	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
10.37	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
10.29	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
10.26	**63 Epson Ink Only Purple Spot Run2 19July2009 Blank Slide Subtracted
10.18	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
9.97	63 Epson Ink Only Purple Spot AVERAGE Slide Subtracted
9.89	**63 Epson Ink Only Purple Spot Run1 19July2009 Blank Slide Subtracted

Canon 306 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**306 Canon Black Ink (BC-20) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
15.26	**205 HP Ink Only Run3 19July2009
15.25	**205 HP Ink Only Run4 19July2009
15.11	205 HP Ink Only AVERAGE
14.77	**205 HP Ink Only Run2 19July2009
12.93	**306 Canon Ink Only Run1 19July2009
12.72	**306 Canon Ink Only Run2 19July2009
12.67	306 Canon Ink Only AVERAGE
12.41	**384 Canon Ink Only Run2 19July2009
12.26	**306 Canon Ink Only Run3 19July2009
12.22	**384 Canon Ink Only Run1 19July2009
12.06	**244 Xerox Ink Only Run2 19July2009
11.90	**223 Canon Ink Only Run3 19July2009
11.89	384 Canon Ink Only AVERAGE
11.72	**348 Canon Ink Only Run1 19July2009
11.68	**348 Canon Ink Only Run3 19July2009
11.67	348 Canon Ink Only AVERAGE
11.59	**402 Canon Ink Only Run3 19July2009
11.55	**348 Canon Ink Only Run2 19July2009
11.53	**327 Canon Ink Only Run2 19July2009
11.40	**244 Xerox Ink Only Run5 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**306 Canon Black Ink (BC-20) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
15.78	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
15.74	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
15.34	205 HP Ink Only AVERAGE Slide Subtracted
14.79	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
14.65	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
13.62	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
13.27	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
13.24	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
13.10	**244 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
13.08	244 Xerox Ink Only AVERAGE Slide Subtracted
12.69	306 Canon Ink Only AVERAGE Slide Subtracted
12.63	**306 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
12.47	**306 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
12.40	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
12.29	**306 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
12.08	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
12.08	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11.96	348 Canon Ink Only AVERAGE Slide Subtracted
11.87	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11.84	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 306 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**306 Canon Black (BC-20) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
36.00	**306 Canon Ink Only Run3 19July2009
35.61	**384 Canon Ink Only Run1 19July2009
35.60	**223 Canon Ink Only Run3 19July2009
35.58	**348 Canon Ink Only Run3 19July2009
34.98	**384 Canon Ink Only Run2 19July2009
34.78	**282 Canon Ink Only Run3 19July2009
34.76	384 Canon Ink Only AVERAGE
34.59	306 Canon Ink Only AVERAGE
34.44	348 Canon Ink Only AVERAGE
34.32	223 Canon Ink Only AVERAGE
34.24	24 Xerox Ink Only AVERAGE
34.15	**223 Canon Ink Only Run2 19July2009
33.90	**348 Canon Ink Only Run2 19July2009
33.72	**33 Epson Ink Only Brown Spot Run3 19July2009
33.68	**282 Canon Ink Only Run4 19July2009
33.68	**306 Canon Ink Only Run1 19July2009
33.68	**348 Canon Ink Only Run1 19July2009
33.67	**33 Epson Ink Only Brown Spot Run2 19July2009
33.65	**24 Xerox Ink Only Run2 19July2009
33.51	**306 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**306 Canon Black (BC-20) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
41.85	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
41.36	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
41.21	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
40.96	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
40.83	348 Canon Ink Only AVERAGE Slide Subtracted
40.69	384 Canon Ink Only AVERAGE Slide Subtracted
40.31	282 Canon Ink Only AVERAGE Slide Subtracted
40.22	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
40.13	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
40.11	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
40.03	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
39.47	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
39.13	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
38.83	223 Canon Ink Only AVERAGE Slide Subtracted
38.83	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
38.58	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
38.39	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
38.33	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
38.21	306 Canon Ink Only AVERAGE Slide Subtracted
38.17	22 Kodak Ink Only AVERAGE Slide Subtracted

Canon 306 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**306 Canon Black Ink (BC-20) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
42.09	**348 Canon Ink Only Run3 19July2009
41.52	**306 Canon Ink Only Run3 19July2009
41.09	**384 Canon Ink Only Run1 19July2009
41.00	**223 Canon Ink Only Run3 19July2009
40.97	348 Canon Ink Only AVERAGE
40.59	**348 Canon Ink Only Run2 19July2009
40.59	**384 Canon Ink Only Run2 19July2009
40.53	**282 Canon Ink Only Run3 19July2009
40.45	384 Canon Ink Only AVERAGE
40.11	306 Canon Ink Only AVERAGE
40.05	**348 Canon Ink Only Run1 19July2009
39.87	223 Canon Ink Only AVERAGE
39.60	**223 Canon Ink Only Run2 19July2009
39.46	**282 Canon Ink Only Run4 19July2009
39.42	**384 Canon Ink Only Run3 19July2009
39.12	**306 Canon Ink Only Run1 19July2009
39.02	**306 Canon Ink Only Run2 19July2009
38.49	282 Canon Ink Only AVERAGE
38.36	**223 Canon Ink Only Run1 19July2009
38.35	**282 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**306 Canon Black Ink (BC-20) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
46.82	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
45.64	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
45.59	348 Canon Ink Only AVERAGE Slide Subtracted
45.17	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
44.71	282 Canon Ink Only AVERAGE Slide Subtracted
44.56	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
44.53	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
44.43	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
44.34	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
44.13	384 Canon Ink Only AVERAGE Slide Subtracted
44.08	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
43.23	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
43.20	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
42.39	306 Canon Ink Only AVERAGE Slide Subtracted
42.31	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
42.20	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
42.15	223 Canon Ink Only AVERAGE Slide Subtracted
41.87	**306 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
41.71	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
41.48	**306 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 306 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Canon 306
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
35.37	**348 Canon Ink Only Run3 19July2009
34.72	**24 Xerox Ink Only Run2 19July2009
34.51	**282 Canon Ink Only Run3 19July2009
34.38	**13 Xerox Ink Only Run4 19July2009
34.24	348 Canon Ink Only AVERAGE
34.15	**348 Canon Ink Only Run2 19July2009
34.09	24 Xerox Ink Only AVERAGE
33.79	**223 Canon Ink Only Run3 19July2009
33.67	**282 Canon Ink Only Run4 19July2009
33.65	**384 Canon Ink Only Run1 19July2009
33.60	24 Xerox Ink Only R1R2 AVERAGE
33.39	**384 Canon Ink Only Run2 19July2009
33.16	384 Canon Ink Only AVERAGE
33.05	**348 Canon Ink Only Run1 19July2009
32.61	282 Canon Ink Only AVERAGE
32.50	223 Canon Ink Only AVERAGE
32.40	**223 Canon Ink Only Run2 19July2009
32.40	**282 Canon Ink Only Run2 19July2009
32.23	**384 Canon Ink Only Run3 19July2009
32.14	13 Xerox Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Canon 306
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
39.11	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
38.63	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
37.84	348 Canon Ink Only AVERAGE Slide Subtracted
37.78	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
37.73	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
37.60	282 Canon Ink Only AVERAGE Slide Subtracted
36.98	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
36.39	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
36.21	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
36.19	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
35.91	384 Canon Ink Only AVERAGE Slide Subtracted
35.41	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
35.05	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
34.57	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
34.36	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
34.12	223 Canon Ink Only AVERAGE Slide Subtracted
33.11	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
32.95	306 Canon Ink Only AVERAGE Slide Subtracted
32.94	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
32.75	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted

Canon 312 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**312 Canon Black Ink (BC-23) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
25.70	**04 Okidata Ink Only Brown Spot Run4 19July2009
22.34	**04 Okidata Ink Only Brown Spot Run3 19July2009
21.83	**13 Xerox Ink Only Run2 19July2009
21.20	**24 Xerox Ink Only Run2 19July2009
19.95	**04 Okidata Ink Only Brown Spot Run2 19July2009
19.44	24 Xerox Ink Only AVERAGE
18.71	**24 Xerox Ink Only Run4 19July2009
18.26	24 Xerox Ink Only R1R2 AVERAGE
18.11	**04 Okidata Ink Only Brown Spot Run1 19July2009
17.77	**13 Xerox Ink Only Run6 19July2009
17.24	**156 Epson Ink Only Run4 19July2009
17.13	**24 Xerox Ink Only Run3 19July2009
16.40	13 Xerox Ink Only AVERAGE
16.35	**13 Xerox Ink Only Run4 19July2009
14.75	**13 Xerox Ink Only Run5 19July2009
13.70	04 Okidata Ink Only Brown Spot AVERAGE
13.57	**312 Canon Ink Only Run4 19July2009
13.05	**327 Canon Ink Only Run2 19July2009
12.95	**13 Xerox Ink Only Run3 19July2009
12.86	**217 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**312 Canon Black Ink (BC-23) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
26.76	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
23.76	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
23.76	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
21.06	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
20.45	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
20.22	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
19.99	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
19.53	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
19.18	156 Epson Ink Only AVERAGE Slide Subtracted
18.76	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
18.48	**24 Xerox Ink Only Run2 19July2009 Slide Subtracted
18.06	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
17.57	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
16.26	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
16.22	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
16.19	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
15.20	24 Xerox Ink Only AVERAGE Slide Subtracted
14.58	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
14.42	13 Xerox Ink Only AVERAGE Slide Subtracted
14.40	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted

Canon 312 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**312 Canon Black Ink (BC-23) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
31.38	**13 Xerox Ink Only Run2 19July2009
25.56	**312 Canon Ink Only Run4 19July2009
23.35	312 Canon Ink Only AVERAGE
22.55	**04 Okidata Ink Only Brown Spot Run1 19July2009
21.99	**24 Xerox Ink Only Run2 19July2009
21.45	04 Okidata Ink Only AVERAGE
21.39	**312 Canon Ink Only Run1 19July2009
20.91	**04 Okidata Ink Only Brown Spot Run6 19July2009
20.52	**156 Epson Ink Only Run4 19July2009
20.08	04 Okidata Ink Only Brown Spot AVERAGE
19.95	24 Xerox Ink Only AVERAGE
19.90	**04 Okidata Ink Only Brown Spot Run5 19July2009
19.66	**04 Okidata Ink Only Black Spot Run2 19July2009
19.64	**04 Okidata Ink Only Brown Spot Run7 19July2009
19.55	**312 Canon Ink Only Run2 19July2009
19.03	04 Okidata Ink Only Black Spot AVERAGE
18.79	24 Xerox Ink Only R1R2 AVERAGE
18.78	**04 Okidata Ink Only Black Spot Run1 19July2009
18.24	**24 Xerox Ink Only Run4 19July2009
18.23	**04 Okidata Ink Only Black Spot Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**312 Canon Black Ink (BC-23) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
26.78	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
26.74	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
26.28	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
25.63	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
24.15	156 Epson Ink Only AVERAGE Slide Subtracted
23.27	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
22.52	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
22.29	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
22.26	312 Canon Ink Only AVERAGE Slide Subtracted
22.19	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
21.91	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
21.82	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
21.44	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
21.15	04 Okidata Ink Only AVERAGE Slide Subtracted
20.50	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20.23	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
19.56	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
19.39	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
18.95	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
18.69	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted

Canon 312 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**312 Canon Black (BC-23) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
38.09	**205 HP Ink Only Run4 19July2009
37.98	**205 HP Ink Only Run3 19July2009
37.93	205 HP Ink Only AVERAGE
37.59	**205 HP Ink Only Run2 19July2009
27.65	**04 Okidata Ink Only Brown Spot Run1 19July2009
27.58	**223 Canon Ink Only Run3 19July2009
27.28	04 Okidata Ink Only AVERAGE
27.17	**217 Canon Ink Only Run1 19July2009
27.13	217 Canon Ink Only AVERAGE
27.11	**217 Canon Ink Only Run3 19July2009
27.08	**217 Canon Ink Only Run2 19July2009
26.54	**205 HP Ink Only Run1 19July2009
26.19	**318 Canon Ink Only Run1 19July2009
26.15	**348 Canon Ink Only Run2 19July2009
25.87	**318 Canon Ink Only Run2 19July2009
25.84	223 Canon Ink Only AVERAGE
25.84	**348 Canon Ink Only Run1 19July2009
25.75	348 Canon Ink Only AVERAGE
25.74	318 Canon Ink Only AVERAGE
25.65	**04 Okidata Ink Only Black Spot Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**312 Canon Black (BC-23) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
38.50	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
38.19	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
37.50	205 HP Ink Only AVERAGE Slide Subtracted
36.06	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
32.75	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
27.63	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
27.30	04 Okidata Ink Only AVERAGE Slide Subtracted
25.59	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
25.43	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
25.39	217 Canon Ink Only AVERAGE Slide Subtracted
25.24	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
25.23	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
25.21	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
25.19	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
25.13	348 Canon Ink Only AVERAGE Slide Subtracted
25.03	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
24.86	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
24.77	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
24.66	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
24.47	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Canon 312 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**312 Canon Black Ink (BC-23) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
30.99	**205 HP Ink Only Run4 19July2009
30.69	205 HP Ink Only AVERAGE
30.66	**205 HP Ink Only Run3 19July2009
30.32	**205 HP Ink Only Run2 19July2009
25.56	04 Okidata Ink Only AVERAGE
24.66	**04 Okidata Ink Only Brown Spot Run1 19July2009
24.13	**04 Okidata Ink Only Black Spot Run2 19July2009
23.28	**04 Okidata Ink Only Black Spot Run1 19July2009
23.22	04 Okidata Ink Only Black Spot AVERAGE
22.25	04 Okidata Ink Only Brown Spot AVERAGE
21.51	**04 Okidata Ink Only Brown Spot Run7 19July2009
21.47	**04 Okidata Ink Only Brown Spot Run6 19July2009
21.43	**04 Okidata Ink Only Black Spot Run3 19July2009
20.98	**205 HP Ink Only Run1 19July2009
20.65	**04 Okidata Ink Only Brown Spot Run4 19July2009
20.19	**312 Canon Ink Only Run4 19July2009
19.46	**04 Okidata Ink Only Brown Spot Run3 19July2009
19.13	**84 Epson Ink Only Run3 19July2009
18.88	**04 Okidata Ink Only Brown Spot Run5 19July2009
18.67	**84 Epson Ink Only Run4 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**312 Canon Black Ink (BC-23) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
31.39	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
30.89	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
30.36	205 HP Ink Only AVERAGE Slide Subtracted
29.16	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
25.94	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
25.55	04 Okidata Ink Only AVERAGE Slide Subtracted
24.63	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
23.95	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
23.12	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
23.07	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
22.83	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
22.18	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
22.01	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
21.42	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
21.35	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
21.01	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
20.02	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
19.82	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
19.10	**84 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
18.71	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted

Canon 312 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Canon 312
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
21.62	**312 Canon Ink Only Run4 19July2009
20.84	**13 Xerox Ink Only Run2 19July2009
19.73	**04 Okidata Ink Only Brown Spot Run1 19July2009
19.07	312 Canon Ink Only AVERAGE
18.74	**04 Okidata Ink Only Brown Spot Run6 19July2009
18.34	04 Okidata Ink Only AVERAGE
18.11	04 Okidata Ink Only Brown Spot AVERAGE
17.94	**04 Okidata Ink Only Brown Spot Run5 19July2009
17.87	**04 Okidata Ink Only Brown Spot Run7 19July2009
16.79	**312 Canon Ink Only Run1 19July2009
16.54	**04 Okidata Ink Only Black Spot Run2 19July2009
15.97	04 Okidata Ink Only Black Spot AVERAGE
15.77	**04 Okidata Ink Only Black Spot Run1 19July2009
15.54	**312 Canon Ink Only Run2 19July2009
15.22	**04 Okidata Ink Only Black Spot Run3 19July2009
14.69	**24 Xerox Ink Only Run2 19July2009
14.23	**84 Epson Ink Only Run3 19July2009
14.07	**04 Okidata Ink Only Brown Spot Run4 19July2009
14.07	**04 Okidata Ink Only Brown Spot Run2 19July2009
13.76	**84 Epson Ink Only Run4 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Canon 312
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
22.40	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
20.89	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
19.79	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
19.69	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
18.58	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
18.29	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
18.25	04 Okidata Ink Only AVERAGE Slide Subtracted
17.92	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
17.29	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
16.93	312 Canon Ink Only AVERAGE Slide Subtracted
16.72	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
16.53	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
16.25	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
16.14	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
16.13	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
16.10	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
15.96	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
15.76	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
15.22	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
14.69	156 Epson Ink Only AVERAGE Slide Subtracted

Canon 318 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**318 Canon Black Ink (BC-60) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
22.10	**04 Okidata Ink Only Brown Spot Run4 19July2009
20.49	**04 Okidata Ink Only Brown Spot Run3 19July2009
18.18	**244 Xerox Ink Only Run4 19July2009
17.98	**244 Xerox Ink Only Run5 19July2009
17.34	**04 Okidata Ink Only Brown Spot Run2 19July2009
16.74	244 Xerox Ink Only AVERAGE
14.62	**66 Epson Ink Only Run1 19July2009
13.79	66 Epson Ink Only AVERAGE
13.72	**66 Epson Ink Only Run2 19July2009
13.32	**244 Xerox Ink Only Run1 19July2009
13.31	**13 Xerox Ink Only Run6 19July2009
13.00	**66 Epson Ink Only Run3 19July2009
12.73	**200 HP Ink Only Run4 19July2009
12.55	**13 Xerox Ink Only Run2 19July2009
12.39	**200 HP Ink Only Run3 19July2009
12.15	**156 Epson Ink Only Run4 19July2009
11.87	**33 Epson Ink Only Brown Spot Run1 19July2009
11.86	200 HP Ink Only AVERAGE
11.84	**13 Xerox Ink Only Run5 19July2009
11.61	13 Xerox Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**318 Canon Black Ink (BC-60) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
27.81	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
27.15	244 Xerox Ink Only AVERAGE Slide Subtracted
27.05	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
25.25	**244 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
22.38	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
22.23	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
21.85	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
20.72	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
20.49	156 Epson Ink Only AVERAGE Slide Subtracted
19.19	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
19.18	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
18.24	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
17.41	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
17.39	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
16.29	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
16.07	**200 HP Ink Only Run4 19July2009 Blank Slide Subtracted
15.90	**198 HP Ink Only Run5 19July2009 Blank Slide Subtracted
15.72	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
15.67	200 HP Ink Only AVERAGE Slide Subtracted
15.55	**200 HP Ink Only Run5 19July2009 Blank Slide Subtracted

Canon 318 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**318 Canon Black Ink (BC-60) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
33.48	**223 Canon Ink Only Run3 19July2009
32.69	**348 Canon Ink Only Run3 19July2009
32.61	**348 Canon Ink Only Run2 19July2009
32.38	348 Canon Ink Only AVERAGE
32.13	**282 Canon Ink Only Run3 19July2009
32.12	**282 Canon Ink Only Run4 19July2009
32.10	223 Canon Ink Only AVERAGE
31.98	**384 Canon Ink Only Run2 19July2009
31.74	**223 Canon Ink Only Run2 19July2009
31.74	384 Canon Ink Only AVERAGE
31.72	**348 Canon Ink Only Run1 19July2009
31.57	**384 Canon Ink Only Run1 19July2009
31.47	**384 Canon Ink Only Run3 19July2009
31.46	**282 Canon Ink Only Run2 19July2009
31.45	**217 Canon Ink Only Run2 19July2009
31.34	217 Canon Ink Only AVERAGE
31.28	**217 Canon Ink Only Run3 19July2009
31.25	**217 Canon Ink Only Run1 19July2009
31.18	282 Canon Ink Only AVERAGE
30.47	**223 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**318 Canon Black Ink (BC-60) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
36.29	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
36.16	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
36.16	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
36.09	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
36.08	282 Canon Ink Only AVERAGE Slide Subtracted
36.02	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
35.93	348 Canon Ink Only AVERAGE Slide Subtracted
35.14	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
35.07	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
34.82	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
34.51	384 Canon Ink Only AVERAGE Slide Subtracted
34.35	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
34.34	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
34.12	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
33.81	223 Canon Ink Only AVERAGE Slide Subtracted
33.79	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
33.20	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
33.19	217 Canon Ink Only AVERAGE Slide Subtracted
33.00	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
32.96	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Canon 318 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**318 Canon Black (BC-60) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
53.08	**223 Canon Ink Only Run3 19July2009
52.61	**348 Canon Ink Only Run3 19July2009
51.76	**348 Canon Ink Only Run2 19July2009
51.73	348 Canon Ink Only AVERAGE
51.70	**282 Canon Ink Only Run3 19July2009
51.02	223 Canon Ink Only AVERAGE
50.96	**282 Canon Ink Only Run4 19July2009
50.68	**223 Canon Ink Only Run2 19July2009
50.62	**348 Canon Ink Only Run1 19July2009
50.27	**384 Canon Ink Only Run3 19July2009
50.21	384 Canon Ink Only AVERAGE
50.18	**384 Canon Ink Only Run2 19July2009
50.09	**217 Canon Ink Only Run1 19July2009
49.89	217 Canon Ink Only AVERAGE
49.88	**217 Canon Ink Only Run2 19July2009
49.86	**384 Canon Ink Only Run1 19July2009
49.77	**282 Canon Ink Only Run2 19July2009
49.64	**217 Canon Ink Only Run3 19July2009
49.25	282 Canon Ink Only AVERAGE
48.34	**223 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**318 Canon Black (BC-60) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
59.60	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
59.16	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
58.74	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
58.74	348 Canon Ink Only AVERAGE Slide Subtracted
58.50	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
58.33	282 Canon Ink Only AVERAGE Slide Subtracted
58.28	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
57.43	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
56.38	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
56.15	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
56.11	384 Canon Ink Only AVERAGE Slide Subtracted
55.63	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
55.41	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
55.37	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
55.11	223 Canon Ink Only AVERAGE Slide Subtracted
54.97	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
54.11	217 Canon Ink Only AVERAGE Slide Subtracted
53.98	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
53.93	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
53.92	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Canon 318 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**318 Canon Black Ink (BC-60) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
24.97	**13 Xerox Ink Only Run4 19July2009
24.23	24 Xerox Ink Only AVERAGE
24.15	**24 Xerox Ink Only Run2 19July2009
24.00	24 Xerox Ink Only R1R2 AVERAGE
23.63	13 Xerox Ink Only AVERAGE
22.77	**13 Xerox Ink Only Run5 19July2009
21.92	**24 Xerox Ink Only Run1 19July2009
21.05	**282 Canon Ink Only Run3 19July2009
20.85	**13 Xerox Ink Only Run3 19July2009
20.56	**282 Canon Ink Only Run4 19July2009
20.33	**24 Xerox Ink Only Run3 19July2009
20.33	**312 Canon Ink Only Run1 19July2009
20.26	282 Canon Ink Only AVERAGE
20.21	**282 Canon Ink Only Run2 19July2009
20.13	**13 Xerox Ink Only Run6 19July2009
19.43	**348 Canon Ink Only Run3 19July2009
19.08	**384 Canon Ink Only Run2 19July2009
19.01	**223 Canon Ink Only Run3 19July2009
18.99	312 Canon Ink Only AVERAGE
18.96	**348 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**318 Canon Black Ink (BC-60) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
23.52	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
23.43	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
23.31	282 Canon Ink Only AVERAGE Slide Subtracted
23.03	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
23.01	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
21.49	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
21.36	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
21.34	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
21.11	312 Canon Ink Only AVERAGE Slide Subtracted
21.05	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
20.96	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
20.95	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20.84	348 Canon Ink Only AVERAGE Slide Subtracted
20.67	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20.42	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
20.37	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
20.36	384 Canon Ink Only AVERAGE Slide Subtracted
20.29	**24 Xerox Ink Only Run2 19July2009 Slide Subtracted
20.09	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
19.94	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Canon 318 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Canon 318
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
39.38	**223 Canon Ink Only Run3 19July2009
38.56	**282 Canon Ink Only Run3 19July2009
38.22	**348 Canon Ink Only Run3 19July2009
37.81	348 Canon Ink Only AVERAGE
37.75	**384 Canon Ink Only Run2 19July2009
37.75	**348 Canon Ink Only Run2 19July2009
37.67	**282 Canon Ink Only Run4 19July2009
37.61	384 Canon Ink Only AVERAGE
37.57	223 Canon Ink Only AVERAGE
37.43	**384 Canon Ink Only Run1 19July2009
37.41	**384 Canon Ink Only Run3 19July2009
37.30	**348 Canon Ink Only Run1 19July2009
37.18	**223 Canon Ink Only Run2 19July2009
36.94	**282 Canon Ink Only Run2 19July2009
36.57	282 Canon Ink Only AVERAGE
36.49	**217 Canon Ink Only Run1 19July2009
36.30	217 Canon Ink Only AVERAGE
36.29	**217 Canon Ink Only Run2 19July2009
36.08	**217 Canon Ink Only Run3 19July2009
35.38	**223 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Canon 318
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
44.21	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
43.46	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
43.44	282 Canon Ink Only AVERAGE Slide Subtracted
43.38	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
43.35	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
43.08	348 Canon Ink Only AVERAGE Slide Subtracted
43.00	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
42.48	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
42.35	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
42.15	384 Canon Ink Only AVERAGE Slide Subtracted
42.09	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
41.71	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
41.39	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
41.10	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
40.79	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
40.73	223 Canon Ink Only AVERAGE Slide Subtracted
39.65	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
39.50	217 Canon Ink Only AVERAGE Slide Subtracted
39.44	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
39.44	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 318a 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**318a Canon Clear Fluid (BC-60) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
29.78	**24 Xerox Ink Only Run2 19July2009
29.51	**13 Xerox Ink Only Run2 19July2009
29.45	24 Xerox Ink Only AVERAGE
28.58	**13 Xerox Ink Only Run3 19July2009
28.51	24 Xerox Ink Only R1R2 AVERAGE
28.13	**156 Epson Ink Only Run4 19July2009
25.31	**24 Xerox Ink Only Run4 19July2009
24.56	**24 Xerox Ink Only Run3 19July2009
24.15	**24 Xerox Ink Only Run1 19July2009
23.26	**04 Okidata Ink Only Brown Spot Run4 19July2009
20.38	**13 Xerox Ink Only Run4 19July2009
20.09	**04 Okidata Ink Only Brown Spot Run1 19July2009
19.75	**318a Canon Clear Ink Only Run4 19July2009
19.53	**04 Okidata Ink Only Brown Spot Run3 19July2009
19.25	156 Epson Ink Only AVERAGE
19.24	**156 Epson Ink Only Run5 19July2009
19.17	04 Okidata Ink Only AVERAGE
18.72	**156 Epson Ink Only Run2 19July2009
18.56	**244 Xerox Ink Only Run2 19July2009
18.29	318a Canon Clear Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**318a Canon Clear Fluid (BC-60) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
32.74	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
30.15	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
28.35	156 Epson Ink Only AVERAGE Slide Subtracted
28.05	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
27.61	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
26.86	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
26.57	**24 Xerox Ink Only Run2 19July2009 Slide Subtracted
26.36	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
25.68	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
25.64	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
24.39	24 Xerox Ink Only AVERAGE Slide Subtracted
24.34	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
24.16	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
22.73	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
21.65	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
20.94	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
20.06	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
20.03	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
19.82	318a Canon Clear Ink Only AVERAGE Slide Subtracted
19.80	04 Okidata Ink Only AVERAGE Slide Subtracted

Canon 318a 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**318a Canon Clear (BC-60) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
31.14	**223 Canon Ink Only Run3 19July2009
29.39	**217 Canon Ink Only Run1 19July2009
29.25	223 Canon Ink Only AVERAGE
29.01	**217 Canon Ink Only Run3 19July2009
29.00	217 Canon Ink Only AVERAGE
28.57	**217 Canon Ink Only Run2 19July2009
28.37	**223 Canon Ink Only Run2 19July2009
28.25	**327 Canon Ink Only Run1 19July2009
28.18	**318 Canon Ink Only Run2 19July2009
27.77	327 Canon Ink Only AVERAGE
27.73	**327 Canon Ink Only Run2 19July2009
27.60	**223 Canon Ink Only Run1 19July2009
27.58	318 Canon Ink Only AVERAGE
27.37	**306 Canon Ink Only Run3 19July2009
27.30	**318 Canon Ink Only Run1 19July2009
27.27	**327 Canon Ink Only Run3 19July2009
27.19	**318 Canon Ink Only Run3 19July2009
26.90	**384 Canon Ink Only Run3 19July2009
26.77	**348 Canon Ink Only Run2 19July2009
26.52	306 Canon Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**318a Canon Clear (BC-60) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
37.99	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
37.49	327 Canon Ink Only AVERAGE Slide Subtracted
37.33	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
37.06	**327 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
37.03	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
36.67	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
36.57	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
36.43	318 Canon Ink Only AVERAGE Slide Subtracted
36.31	223 Canon Ink Only AVERAGE Slide Subtracted
36.10	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
35.97	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
35.95	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
35.70	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
35.62	**318 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
35.49	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
35.47	30 Epson Ink Only AVERAGE Slide Subtracted
35.44	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
35.42	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
35.40	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
35.25	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 318a 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**318a Canon Clear Fluid (BC-60) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
25.99	**223 Canon Ink Only Run3 19July2009
25.63	**223 Canon Ink Only Run2 19July2009
25.20	223 Canon Ink Only AVERAGE
25.18	**217 Canon Ink Only Run2 19July2009
25.03	**217 Canon Ink Only Run1 19July2009
25.00	**327 Canon Ink Only Run1 19July2009
24.99	217 Canon Ink Only AVERAGE
24.77	**327 Canon Ink Only Run2 19July2009
24.72	**217 Canon Ink Only Run3 19July2009
24.71	327 Canon Ink Only AVERAGE
24.57	**348 Canon Ink Only Run2 19July2009
24.33	**327 Canon Ink Only Run3 19July2009
24.23	**384 Canon Ink Only Run3 19July2009
24.15	348 Canon Ink Only AVERAGE
24.13	**318 Canon Ink Only Run1 19July2009
24.13	**318 Canon Ink Only Run2 19July2009
24.06	318 Canon Ink Only AVERAGE
23.98	**348 Canon Ink Only Run1 19July2009
23.89	**318 Canon Ink Only Run3 19July2009
23.82	**348 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**318a Canon Clear Fluid (BC-60) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
31.89	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
31.61	327 Canon Ink Only AVERAGE Slide Subtracted
31.57	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
31.29	**327 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
30.90	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
30.66	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
30.66	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
30.32	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
30.30	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
30.29	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
30.29	318 Canon Ink Only AVERAGE Slide Subtracted
30.25	348 Canon Ink Only AVERAGE Slide Subtracted
30.03	223 Canon Ink Only AVERAGE Slide Subtracted
29.90	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
29.84	**318 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
29.68	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
29.58	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
29.54	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
29.53	384 Canon Ink Only AVERAGE Slide Subtracted
29.37	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Canon 318a AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Canon 318a
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
42.95	**223 Canon Ink Only Run3 19July2009
41.35	223 Canon Ink Only AVERAGE
41.23	**223 Canon Ink Only Run2 19July2009
40.82	**217 Canon Ink Only Run1 19July2009
40.61	**217 Canon Ink Only Run2 19July2009
40.55	217 Canon Ink Only AVERAGE
40.52	**348 Canon Ink Only Run2 19July2009
40.30	**318 Canon Ink Only Run2 19July2009
40.18	**217 Canon Ink Only Run3 19July2009
40.12	**327 Canon Ink Only Run1 19July2009
40.05	348 Canon Ink Only AVERAGE
40.03	318 Canon Ink Only AVERAGE
39.94	**384 Canon Ink Only Run3 19July2009
39.93	**318 Canon Ink Only Run1 19July2009
39.91	**306 Canon Ink Only Run3 19July2009
39.85	**348 Canon Ink Only Run1 19July2009
39.77	**318 Canon Ink Only Run3 19July2009
39.69	327 Canon Ink Only AVERAGE
39.64	**348 Canon Ink Only Run3 19July2009
39.63	**327 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Canon 318a
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
48.22	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
48.07	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
47.82	327 Canon Ink Only AVERAGE Slide Subtracted
47.62	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
47.61	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
47.61	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
47.61	348 Canon Ink Only AVERAGE Slide Subtracted
47.53	**327 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
47.52	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
47.40	318 Canon Ink Only AVERAGE Slide Subtracted
47.21	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
47.12	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
46.88	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
46.86	**318 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
46.80	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
46.74	223 Canon Ink Only AVERAGE Slide Subtracted
46.26	384 Canon Ink Only AVERAGE Slide Subtracted
45.94	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
45.91	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
45.86	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Canon 327 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**327 Canon Black Ink (BC-22e) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
19.39	**04 Okidata Ink Only Brown Spot Run4 19July2009
18.31	**04 Okidata Ink Only Brown Spot Run3 19July2009
17.28	**22 Kodak Ink Only Run1 19July2009
16.90	22 Kodak Ink Only AVERAGE
16.79	**22 Kodak Ink Only Run3 19July2009
16.78	**244 Xerox Ink Only Run4 19July2009
16.54	**244 Xerox Ink Only Run5 19July2009
16.51	**22 Kodak Ink Only Run2 19July2009
15.83	244 Xerox Ink Only AVERAGE
15.54	**13 Xerox Ink Only Run6 19July2009
14.94	**13 Xerox Ink Only Run5 19July2009
14.86	13 Xerox Ink Only AVERAGE
14.08	**205 HP Ink Only Run2 19July2009
13.91	**04 Okidata Ink Only Brown Spot Run2 19July2009
13.67	205 HP Ink Only AVERAGE
13.61	**205 HP Ink Only Run4 19July2009
13.42	**244 Xerox Ink Only Run1 19July2009
13.42	**13 Xerox Ink Only Run4 19July2009
13.30	**205 HP Ink Only Run3 19July2009
13.16	04 Okidata Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**327 Canon Black Ink (BC-22e) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
23.94	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
23.76	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
23.57	244 Xerox Ink Only AVERAGE Slide Subtracted
21.87	**244 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
19.68	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
18.78	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
18.05	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
17.27	**199 HP Ink Only Run1 19July2009 Blank Slide Subtracted
16.96	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
16.69	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
16.44	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
16.39	22 Kodak Ink Only AVERAGE Slide Subtracted
16.37	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
16.31	199 HP Ink Only AVERAGE Slide Subtracted
16.16	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
16.15	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
16.12	13 Xerox Ink Only AVERAGE Slide Subtracted
15.99	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
15.90	**201 HP Ink Only Run6 19July2009 Blank Slide Subtracted
15.89	**200 HP Ink Only Run5 19July2009 Blank Slide Subtracted

Canon 327 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**327 Canon Black Ink (BC-22e) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
32.50	**217 Canon Ink Only Run2 19July2009
32.25	217 Canon Ink Only AVERAGE
32.22	**217 Canon Ink Only Run1 19July2009
31.99	**217 Canon Ink Only Run3 19July2009
31.22	**223 Canon Ink Only Run3 19July2009
31.13	**348 Canon Ink Only Run3 19July2009
31.05	348 Canon Ink Only AVERAGE
31.02	**348 Canon Ink Only Run2 19July2009
30.89	**348 Canon Ink Only Run1 19July2009
30.28	223 Canon Ink Only AVERAGE
30.05	**282 Canon Ink Only Run3 19July2009
30.04	**282 Canon Ink Only Run4 19July2009
29.99	**223 Canon Ink Only Run2 19July2009
29.95	**384 Canon Ink Only Run2 19July2009
29.87	384 Canon Ink Only AVERAGE
29.76	**384 Canon Ink Only Run3 19July2009
29.72	**384 Canon Ink Only Run1 19July2009
29.31	**282 Canon Ink Only Run2 19July2009
29.19	282 Canon Ink Only AVERAGE
29.15	**318 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**327 Canon Black Ink (BC-22e) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
35.81	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
33.15	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
33.07	217 Canon Ink Only AVERAGE Slide Subtracted
32.90	348 Canon Ink Only AVERAGE Slide Subtracted
32.86	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
32.73	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
32.52	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
32.48	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
32.43	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
32.33	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
32.28	282 Canon Ink Only AVERAGE Slide Subtracted
32.15	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
32.09	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
30.95	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
30.92	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
30.76	384 Canon Ink Only AVERAGE Slide Subtracted
30.76	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
30.66	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
30.39	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
30.31	223 Canon Ink Only AVERAGE Slide Subtracted

Canon 327 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**327 Canon Black (BC-22e) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
52.22	**223 Canon Ink Only Run3 19July2009
50.14	**348 Canon Ink Only Run2 19July2009
50.08	348 Canon Ink Only AVERAGE
50.00	**348 Canon Ink Only Run3 19July2009
49.91	**348 Canon Ink Only Run1 19July2009
49.54	223 Canon Ink Only AVERAGE
49.54	**217 Canon Ink Only Run2 19July2009
49.51	**217 Canon Ink Only Run3 19July2009
49.44	217 Canon Ink Only AVERAGE
49.21	**217 Canon Ink Only Run1 19July2009
48.34	**223 Canon Ink Only Run2 19July2009
48.17	**384 Canon Ink Only Run3 19July2009
47.77	384 Canon Ink Only AVERAGE
47.63	**384 Canon Ink Only Run2 19July2009
47.21	**384 Canon Ink Only Run1 19July2009
47.08	**223 Canon Ink Only Run1 19July2009
46.97	**282 Canon Ink Only Run4 19July2009
46.83	**282 Canon Ink Only Run3 19July2009
46.10	**318 Canon Ink Only Run3 19July2009
45.98	**318 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**327 Canon Black (BC-22e) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
56.54	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
56.50	348 Canon Ink Only AVERAGE Slide Subtracted
56.36	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
56.18	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
54.37	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
53.72	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
53.64	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
53.54	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
53.44	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
53.19	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
53.14	223 Canon Ink Only AVERAGE Slide Subtracted
53.03	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
53.03	384 Canon Ink Only AVERAGE Slide Subtracted
53.02	282 Canon Ink Only AVERAGE Slide Subtracted
52.96	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
52.91	217 Canon Ink Only AVERAGE Slide Subtracted
52.60	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
52.47	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
52.12	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
52.08	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Canon 327 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**327 Canon Black Ink (BC-22e) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
44.34	**223 Canon Ink Only Run3 19July2009
43.02	**348 Canon Ink Only Run2 19July2009
42.91	**348 Canon Ink Only Run3 19July2009
42.64	348 Canon Ink Only AVERAGE
42.61	223 Canon Ink Only AVERAGE
42.15	**217 Canon Ink Only Run3 19July2009
42.09	**217 Canon Ink Only Run1 19July2009
42.02	217 Canon Ink Only AVERAGE
41.82	**348 Canon Ink Only Run1 19July2009
41.81	**282 Canon Ink Only Run3 19July2009
41.76	**217 Canon Ink Only Run2 19July2009
41.53	**223 Canon Ink Only Run2 19July2009
41.49	**318 Canon Ink Only Run2 19July2009
41.37	**318 Canon Ink Only Run3 19July2009
41.29	**282 Canon Ink Only Run4 19July2009
41.28	**223 Canon Ink Only Run1 19July2009
41.28	**384 Canon Ink Only Run3 19July2009
41.18	318 Canon Ink Only AVERAGE
40.53	**318 Canon Ink Only Run1 19July2009
40.41	**282 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**327 Canon Black Ink (BC-22e) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
45.26	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
45.09	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
44.80	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
44.67	348 Canon Ink Only AVERAGE Slide Subtracted
44.28	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
44.17	282 Canon Ink Only AVERAGE Slide Subtracted
43.77	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
43.34	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
43.14	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
42.32	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
42.27	**318 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
42.18	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
42.17	223 Canon Ink Only AVERAGE Slide Subtracted
42.11	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
41.96	318 Canon Ink Only AVERAGE Slide Subtracted
41.86	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
41.72	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
41.63	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
41.60	217 Canon Ink Only AVERAGE Slide Subtracted
41.51	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 327 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Canon 327
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
28.92	**282 Canon Ink Only Run3 19July2009
28.06	**348 Canon Ink Only Run3 19July2009
28.03	**282 Canon Ink Only Run4 19July2009
27.81	**223 Canon Ink Only Run3 19July2009
27.74	**348 Canon Ink Only Run2 19July2009
27.72	348 Canon Ink Only AVERAGE
27.55	282 Canon Ink Only AVERAGE
27.43	**282 Canon Ink Only Run2 19July2009
27.26	**348 Canon Ink Only Run1 19July2009
26.82	223 Canon Ink Only AVERAGE
26.82	**217 Canon Ink Only Run3 19July2009
26.76	**217 Canon Ink Only Run1 19July2009
26.68	217 Canon Ink Only AVERAGE
26.51	**384 Canon Ink Only Run3 19July2009
26.43	**217 Canon Ink Only Run2 19July2009
26.14	384 Canon Ink Only AVERAGE
26.12	**223 Canon Ink Only Run2 19July2009
26.12	**223 Canon Ink Only Run1 19July2009
26.05	**384 Canon Ink Only Run1 19July2009
25.71	**384 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Canon 327
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
30.42	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
29.47	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
29.47	282 Canon Ink Only AVERAGE Slide Subtracted
29.04	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
28.93	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
28.34	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
28.31	348 Canon Ink Only AVERAGE Slide Subtracted
27.59	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
27.44	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
26.38	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
26.21	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
25.91	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
25.81	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
25.76	223 Canon Ink Only AVERAGE Slide Subtracted
25.72	384 Canon Ink Only AVERAGE Slide Subtracted
25.70	217 Canon Ink Only AVERAGE Slide Subtracted
25.53	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
25.46	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
25.44	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
25.35	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 348 27June2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**348 Canon Black Ink (BCI-21) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
32.05	**04 Okidata Ink Only Brown Spot Run4 19July2009
28.20	**04 Okidata Ink Only Brown Spot Run3 19July2009
22.37	**04 Okidata Ink Only Brown Spot Run2 19July2009
16.25	**156 Epson Ink Only Run4 19July2009
13.10	**04 Okidata Ink Only Brown Spot Run1 19July2009
11.92	**156 Epson Ink Only Run2 19July2009
11.86	**156 Epson Ink Only Run1 19July2009
11.72	156 Epson Ink Only AVERAGE
11.33	**156 Epson Ink Only Run5 19July2009
10.23	04 Okidata Ink Only Brown Spot AVERAGE
9.48	**13 Xerox Ink Only Run2 19July2009
8.76	**13 Xerox Ink Only Run3 19July2009
7.57	**244 Xerox Ink Only Run5 19July2009
7.38	**156 Epson Ink Only Run3 19July2009
6.65	244 Xerox Ink Only AVERAGE
6.56	**200 HP Ink Only Run4 19July2009
6.56	**24 Xerox Ink Only Run3 19July2009
6.42	**244 Xerox Ink Only Run4 19July2009
6.17	200 HP Ink Only AVERAGE
6.05	**312 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**348 Canon Black Ink (BCI-21) 27June2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
33.16	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
29.70	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
25.06	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
21.06	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
20.50	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
20.40	156 Epson Ink Only AVERAGE Slide Subtracted
19.13	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
17.82	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
17.26	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
15.76	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
13.08	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
10.47	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
10.12	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
9.71	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
9.64	244 Xerox Ink Only AVERAGE Slide Subtracted
9.05	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
8.30	**244 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
7.74	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
7.64	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
7.61	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Canon 348 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:***348 Canon Black Ink (BCI-21) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
23.73	**223 Canon Ink Only Run3 19July2009
23.06	**282 Canon Ink Only Run3 19July2009
22.28	**282 Canon Ink Only Run4 19July2009
22.18	**348 Canon Ink Only Run3 19July2009
22.13	223 Canon Ink Only AVERAGE
21.91	**282 Canon Ink Only Run2 19July2009
21.78	282 Canon Ink Only AVERAGE
21.72	348 Canon Ink Only AVERAGE
21.67	**348 Canon Ink Only Run2 19July2009
21.59	**384 Canon Ink Only Run3 19July2009
21.50	**522 Canon Ink Only Run3 19July2009
21.44	**217 Canon Ink Only Run3 19July2009
21.26	384 Canon Ink Only AVERAGE
21.22	217 Canon Ink Only AVERAGE
21.21	**348 Canon Ink Only Run1 19July2009
21.21	522 Canon Ink Only AVERAGE
21.20	**384 Canon Ink Only Run1 19July2009
21.15	**522 Canon Ink Only Run2 19July2009
21.10	**223 Canon Ink Only Run1 19July2009
21.10	**217 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:***348 Canon Black Ink (BCI-21) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
26.56	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
26.00	282 Canon Ink Only AVERAGE Slide Subtracted
25.87	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
25.77	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
25.38	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
25.05	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
24.97	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
24.94	348 Canon Ink Only AVERAGE Slide Subtracted
24.88	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
24.50	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
24.38	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
24.15	223 Canon Ink Only AVERAGE Slide Subtracted
24.06	384 Canon Ink Only AVERAGE Slide Subtracted
23.86	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
23.81	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
23.67	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
23.51	**318 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
23.39	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
23.39	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
23.36	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 348 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**348 Canon Black (BCI-21) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
60.49	**217 Canon Ink Only Run1 19July2009
60.36	**217 Canon Ink Only Run3 19July2009
60.36	217 Canon Ink Only AVERAGE
60.30	**223 Canon Ink Only Run3 19July2009
60.14	**217 Canon Ink Only Run2 19July2009
58.10	223 Canon Ink Only AVERAGE
57.21	**223 Canon Ink Only Run2 19July2009
55.79	**223 Canon Ink Only Run1 19July2009
54.96	**384 Canon Ink Only Run3 19July2009
54.61	384 Canon Ink Only AVERAGE
54.47	**384 Canon Ink Only Run1 19July2009
54.12	**348 Canon Ink Only Run2 19July2009
54.07	**384 Canon Ink Only Run2 19July2009
53.88	**348 Canon Ink Only Run1 19July2009
53.76	348 Canon Ink Only AVERAGE
53.32	**282 Canon Ink Only Run4 19July2009
53.07	**348 Canon Ink Only Run3 19July2009
53.04	**282 Canon Ink Only Run3 19July2009
52.64	**282 Canon Ink Only Run2 19July2009
51.92	**318 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**348 Canon Black (BCI-21) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
67.78	217 Canon Ink Only AVERAGE Slide Subtracted
67.57	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
67.56	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
67.53	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
65.61	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
65.55	223 Canon Ink Only AVERAGE Slide Subtracted
65.45	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
65.33	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
64.84	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
64.48	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
64.39	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
64.36	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
64.24	384 Canon Ink Only AVERAGE Slide Subtracted
64.05	348 Canon Ink Only AVERAGE Slide Subtracted
63.87	282 Canon Ink Only AVERAGE Slide Subtracted
63.74	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
63.72	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
63.72	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
63.20	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
62.92	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Canon 348 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**348 Canon Black Ink (BCI-21) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
42.00	**223 Canon Ink Only Run3 19July2009
40.56	223 Canon Ink Only AVERAGE
40.32	**384 Canon Ink Only Run1 19July2009
39.98	**217 Canon Ink Only Run1 19July2009
39.88	**223 Canon Ink Only Run2 19July2009
39.84	384 Canon Ink Only AVERAGE
39.83	**217 Canon Ink Only Run3 19July2009
39.78	217 Canon Ink Only AVERAGE
39.74	**384 Canon Ink Only Run2 19July2009
39.64	**282 Canon Ink Only Run3 19July2009
39.47	**217 Canon Ink Only Run2 19July2009
39.31	**282 Canon Ink Only Run4 19July2009
39.21	**384 Canon Ink Only Run3 19July2009
39.16	**223 Canon Ink Only Run1 19July2009
38.82	**348 Canon Ink Only Run1 19July2009
38.77	348 Canon Ink Only AVERAGE
38.70	**348 Canon Ink Only Run3 19July2009
38.65	**282 Canon Ink Only Run2 19July2009
38.64	**348 Canon Ink Only Run2 19July2009
37.98	282 Canon Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**348 Canon Black Ink (BCI-21) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
46.85	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
46.74	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
46.61	282 Canon Ink Only AVERAGE Slide Subtracted
46.56	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
46.53	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
46.32	384 Canon Ink Only AVERAGE Slide Subtracted
46.25	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
45.89	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
45.82	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
45.75	348 Canon Ink Only AVERAGE Slide Subtracted
45.57	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
45.48	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
45.46	223 Canon Ink Only AVERAGE Slide Subtracted
45.44	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
45.44	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
45.30	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
44.89	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
44.69	217 Canon Ink Only AVERAGE Slide Subtracted
44.55	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
44.52	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Canon 348 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Canon 348
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
48.25	**282 Canon Ink Only Run3 19July2009
47.96	**223 Canon Ink Only Run3 19July2009
47.64	**282 Canon Ink Only Run4 19July2009
46.98	**282 Canon Ink Only Run2 19July2009
46.97	**217 Canon Ink Only Run3 19July2009
46.96	**217 Canon Ink Only Run1 19July2009
46.80	217 Canon Ink Only AVERAGE
46.40	282 Canon Ink Only AVERAGE
46.39	**217 Canon Ink Only Run2 19July2009
45.86	**348 Canon Ink Only Run3 19July2009
45.77	**348 Canon Ink Only Run2 19July2009
45.76	223 Canon Ink Only AVERAGE
45.49	348 Canon Ink Only AVERAGE
44.71	**223 Canon Ink Only Run2 19July2009
44.64	**348 Canon Ink Only Run1 19July2009
44.51	**384 Canon Ink Only Run3 19July2009
43.93	384 Canon Ink Only AVERAGE
43.76	**223 Canon Ink Only Run1 19July2009
43.60	**384 Canon Ink Only Run1 19July2009
43.44	**384 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Canon 348
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
54.18	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
53.79	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
53.71	282 Canon Ink Only AVERAGE Slide Subtracted
53.63	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
51.39	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
50.99	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
50.84	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
50.55	348 Canon Ink Only AVERAGE Slide Subtracted
49.49	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
49.45	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
49.42	217 Canon Ink Only AVERAGE Slide Subtracted
49.37	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
49.24	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
49.00	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
48.67	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
48.26	223 Canon Ink Only AVERAGE Slide Subtracted
47.89	384 Canon Ink Only AVERAGE Slide Subtracted
47.68	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
47.47	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
47.45	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 384 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**384 Canon Black Ink (BCI-11) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
20.72	**66 Epson Ink Only Run1 19July2009
20.53	**22 Kodak Ink Only Run1 19July2009
19.96	66 Epson Ink Only AVERAGE
19.92	**66 Epson Ink Only Run2 19July2009
19.75	**22 Kodak Ink Only Run3 19July2009
19.69	22 Kodak Ink Only AVERAGE
19.18	**66 Epson Ink Only Run3 19July2009
19.12	**156 Epson Ink Only Run4 19July2009
18.58	**22 Kodak Ink Only Run2 19July2009
18.11	**223 Canon Ink Only Run3 19July2009
17.68	223 Canon Ink Only AVERAGE
17.46	**384 Canon Ink Only Run1 19July2009
17.45	**223 Canon Ink Only Run2 19July2009
17.23	**223 Canon Ink Only Run1 19July2009
16.91	384 Canon Ink Only AVERAGE
16.76	**384 Canon Ink Only Run2 19July2009
16.65	**33 Epson Ink Only Brown Spot Run1 19July2009
16.61	**120 Epson Ink Only Run3 19July2009
16.43	**13 Xerox Ink Only Run2 19July2009
16.41	**384 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**384 Canon Black Ink (BCI-11) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
25.79	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
24.19	22 Kodak Ink Only AVERAGE Slide Subtracted
23.66	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
23.19	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
22.84	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
22.75	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
21.98	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
21.86	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
21.59	30 Epson Ink Only AVERAGE Slide Subtracted
21.55	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
21.51	384 Canon Ink Only AVERAGE Slide Subtracted
21.47	223 Canon Ink Only AVERAGE Slide Subtracted
21.35	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
21.05	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
21.04	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
20.62	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
20.56	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
20.54	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20.49	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
20.23	327 Canon Ink Only AVERAGE Slide Subtracted

Canon 384 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**384 Canon Black (BCI-11) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
36.87	**22 Kodak Ink Only Run3 19July2009
35.94	**282 Canon Ink Only Run3 19July2009
35.83	22 Kodak Ink Only AVERAGE
35.76	**282 Canon Ink Only Run4 19July2009
35.18	**22 Kodak Ink Only Run1 19July2009
34.99	**22 Kodak Ink Only Run2 19July2009
34.82	**282 Canon Ink Only Run2 19July2009
34.41	282 Canon Ink Only AVERAGE
33.02	**384 Canon Ink Only Run1 19July2009
33.01	**33 Epson Ink Only Brown Spot Run3 19July2009
32.97	**223 Canon Ink Only Run3 19July2009
32.75	33 Epson Ink Only Brown Spot AVERAGE
32.71	**33 Epson Ink Only Brown Spot Run2 19July2009
32.38	**33 Epson Ink Only Brown Spot Run1 19July2009
32.22	**384 Canon Ink Only Run2 19July2009
32.10	384 Canon Ink Only AVERAGE
31.97	**217 Canon Ink Only Run3 19July2009
31.74	217 Canon Ink Only AVERAGE
31.64	**217 Canon Ink Only Run2 19July2009
31.63	223 Canon Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**384 Canon Black (BCI-11) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
41.34	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
41.25	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
41.21	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
41.02	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
40.99	282 Canon Ink Only AVERAGE Slide Subtracted
40.72	22 Kodak Ink Only AVERAGE Slide Subtracted
40.55	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
39.77	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
38.71	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
37.09	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
36.51	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
36.35	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
36.34	384 Canon Ink Only AVERAGE Slide Subtracted
35.98	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
35.71	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
35.50	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
35.50	348 Canon Ink Only AVERAGE Slide Subtracted
35.48	30 Epson Ink Only AVERAGE Slide Subtracted
35.16	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
35.14	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Canon 384 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**384 Canon Black Ink (BCI-11) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
31.44	**217 Canon Ink Only Run3 19July2009
31.25	217 Canon Ink Only AVERAGE
31.14	**217 Canon Ink Only Run1 19July2009
31.12	**217 Canon Ink Only Run2 19July2009
29.71	**223 Canon Ink Only Run3 19July2009
29.09	**223 Canon Ink Only Run2 19July2009
28.92	223 Canon Ink Only AVERAGE
28.87	**384 Canon Ink Only Run1 19July2009
28.31	384 Canon Ink Only AVERAGE
28.20	**384 Canon Ink Only Run2 19July2009
27.93	**282 Canon Ink Only Run3 19July2009
27.69	**384 Canon Ink Only Run3 19July2009
27.64	**282 Canon Ink Only Run4 19July2009
27.47	**223 Canon Ink Only Run1 19July2009
27.35	**348 Canon Ink Only Run2 19July2009
27.32	348 Canon Ink Only AVERAGE
27.27	**348 Canon Ink Only Run3 19July2009
27.24	**348 Canon Ink Only Run1 19July2009
26.94	**522 Canon Ink Only Run3 19July2009
26.92	**22 Kodak Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**384 Canon Black Ink (BCI-11) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
37.70	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
37.52	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
37.47	217 Canon Ink Only AVERAGE Slide Subtracted
37.28	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
36.65	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
36.24	384 Canon Ink Only AVERAGE Slide Subtracted
36.15	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
36.11	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
35.71	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
35.51	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
35.45	223 Canon Ink Only AVERAGE Slide Subtracted
35.41	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
35.38	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
35.27	282 Canon Ink Only AVERAGE Slide Subtracted
35.24	348 Canon Ink Only AVERAGE Slide Subtracted
35.24	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
35.22	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
35.21	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
34.78	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
34.73	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Canon 384 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Canon 384
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
41.23	**22 Kodak Ink Only Run3 19July2009
40.44	22 Kodak Ink Only AVERAGE
39.86	**22 Kodak Ink Only Run1 19July2009
39.79	**22 Kodak Ink Only Run2 19July2009
35.47	**384 Canon Ink Only Run1 19July2009
34.89	**223 Canon Ink Only Run3 19July2009
34.74	**217 Canon Ink Only Run1 19July2009
34.68	**217 Canon Ink Only Run3 19July2009
34.64	217 Canon Ink Only AVERAGE
34.48	**384 Canon Ink Only Run2 19July2009
34.44	**217 Canon Ink Only Run2 19July2009
34.30	384 Canon Ink Only AVERAGE
34.15	**223 Canon Ink Only Run2 19July2009
34.00	223 Canon Ink Only AVERAGE
33.66	**282 Canon Ink Only Run3 19July2009
33.45	**282 Canon Ink Only Run4 19July2009
32.84	**348 Canon Ink Only Run1 19July2009
32.72	**384 Canon Ink Only Run3 19July2009
32.70	**348 Canon Ink Only Run3 19July2009
32.66	348 Canon Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Canon 384
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
49.14	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
48.59	22 Kodak Ink Only AVERAGE Slide Subtracted
48.37	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
47.66	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
44.95	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
43.35	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
43.33	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
42.78	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
42.74	30 Epson Ink Only AVERAGE Slide Subtracted
42.54	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
42.46	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
42.34	384 Canon Ink Only AVERAGE Slide Subtracted
41.61	217 Canon Ink Only AVERAGE Slide Subtracted
41.54	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
41.53	282 Canon Ink Only AVERAGE Slide Subtracted
41.48	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
41.31	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
41.26	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
41.17	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
41.10	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Canon 402 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**402 Canon Black Ink (BCI-12) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
40.67	**223 Canon Ink Only Run3 19July2009
40.17	**348 Canon Ink Only Run3 19July2009
40.15	**348 Canon Ink Only Run2 19July2009
39.75	348 Canon Ink Only AVERAGE
39.16	**217 Canon Ink Only Run1 19July2009
39.13	223 Canon Ink Only AVERAGE
39.00	**217 Canon Ink Only Run3 19July2009
38.95	217 Canon Ink Only AVERAGE
38.76	**348 Canon Ink Only Run1 19July2009
38.63	**217 Canon Ink Only Run2 19July2009
38.51	**223 Canon Ink Only Run2 19July2009
38.11	**384 Canon Ink Only Run3 19July2009
38.04	**282 Canon Ink Only Run3 19July2009
37.58	**318 Canon Ink Only Run3 19July2009
37.54	**223 Canon Ink Only Run1 19July2009
37.35	384 Canon Ink Only AVERAGE
37.14	**318 Canon Ink Only Run2 19July2009
37.14	**282 Canon Ink Only Run4 19July2009
37.00	**384 Canon Ink Only Run1 19July2009
36.96	318 Canon Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**402 Canon Black Ink (BCI-12) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
43.00	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
42.78	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
42.34	348 Canon Ink Only AVERAGE Slide Subtracted
41.31	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
40.93	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
40.59	282 Canon Ink Only AVERAGE Slide Subtracted
40.37	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
40.19	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
40.16	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
39.64	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
39.47	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
39.41	223 Canon Ink Only AVERAGE Slide Subtracted
39.39	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
39.34	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
39.32	217 Canon Ink Only AVERAGE Slide Subtracted
39.12	**318 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
39.12	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
39.07	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
38.70	384 Canon Ink Only AVERAGE Slide Subtracted
38.62	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Canon 402 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**402 Canon Black (BCI-12) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
43.63	**223 Canon Ink Only Run3 19July2009
42.00	**217 Canon Ink Only Run2 19July2009
41.74	217 Canon Ink Only AVERAGE
41.63	223 Canon Ink Only AVERAGE
41.61	**217 Canon Ink Only Run1 19July2009
41.54	**217 Canon Ink Only Run3 19July2009
41.01	**223 Canon Ink Only Run2 19July2009
39.45	**384 Canon Ink Only Run3 19July2009
39.42	**223 Canon Ink Only Run1 19July2009
39.21	384 Canon Ink Only AVERAGE
39.09	**384 Canon Ink Only Run1 19July2009
38.95	**348 Canon Ink Only Run2 19July2009
38.88	**384 Canon Ink Only Run2 19July2009
38.87	**348 Canon Ink Only Run3 19July2009
38.83	**306 Canon Ink Only Run3 19July2009
38.79	348 Canon Ink Only AVERAGE
38.71	**318 Canon Ink Only Run2 19July2009
38.54	**318 Canon Ink Only Run3 19July2009
38.52	318 Canon Ink Only AVERAGE
38.49	**327 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**402 Canon Black (BCI-12) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
47.59	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
47.45	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
47.15	223 Canon Ink Only AVERAGE Slide Subtracted
47.10	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
46.83	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
46.77	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
46.72	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
46.70	217 Canon Ink Only AVERAGE Slide Subtracted
46.63	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
46.49	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
46.43	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
46.39	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
46.35	348 Canon Ink Only AVERAGE Slide Subtracted
46.31	384 Canon Ink Only AVERAGE Slide Subtracted
46.23	327 Canon Ink Only AVERAGE Slide Subtracted
46.15	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
46.07	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
46.07	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
45.98	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
45.92	318 Canon Ink Only AVERAGE Slide Subtracted

Canon 402 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**402 Canon Black Ink (BCI-12) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
44.35	**223 Canon Ink Only Run3 19July2009
42.27	223 Canon Ink Only AVERAGE
41.82	**223 Canon Ink Only Run2 19July2009
41.72	**217 Canon Ink Only Run2 19July2009
41.51	217 Canon Ink Only AVERAGE
41.49	**217 Canon Ink Only Run3 19July2009
41.25	**217 Canon Ink Only Run1 19July2009
40.72	**384 Canon Ink Only Run3 19July2009
40.06	**348 Canon Ink Only Run2 19July2009
40.04	384 Canon Ink Only AVERAGE
39.87	**348 Canon Ink Only Run1 19July2009
39.78	**384 Canon Ink Only Run2 19July2009
39.77	**223 Canon Ink Only Run1 19July2009
39.71	348 Canon Ink Only AVERAGE
39.46	**327 Canon Ink Only Run1 19July2009
39.38	**384 Canon Ink Only Run1 19July2009
39.05	**348 Canon Ink Only Run3 19July2009
39.04	**327 Canon Ink Only Run2 19July2009
38.90	**318 Canon Ink Only Run2 19July2009
38.80	**318 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**402 Canon Black Ink (BCI-12) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
48.39	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
48.18	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
48.04	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
47.90	223 Canon Ink Only AVERAGE Slide Subtracted
47.80	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
47.79	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
47.78	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
47.45	348 Canon Ink Only AVERAGE Slide Subtracted
47.29	384 Canon Ink Only AVERAGE Slide Subtracted
47.27	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
47.26	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
47.09	327 Canon Ink Only AVERAGE Slide Subtracted
47.05	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
46.91	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
46.88	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
46.69	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
46.51	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
46.44	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
46.42	217 Canon Ink Only AVERAGE Slide Subtracted
46.38	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 402 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Canon 402
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
49.06	**223 Canon Ink Only Run3 19July2009
46.73	223 Canon Ink Only AVERAGE
46.12	**217 Canon Ink Only Run2 19July2009
46.01	217 Canon Ink Only AVERAGE
45.99	**223 Canon Ink Only Run2 19July2009
45.96	**217 Canon Ink Only Run1 19July2009
45.88	**217 Canon Ink Only Run3 19July2009
44.84	**348 Canon Ink Only Run2 19July2009
44.68	**384 Canon Ink Only Run3 19July2009
44.51	348 Canon Ink Only AVERAGE
44.27	**348 Canon Ink Only Run1 19July2009
44.25	**348 Canon Ink Only Run3 19July2009
44.19	**223 Canon Ink Only Run1 19July2009
44.05	384 Canon Ink Only AVERAGE
43.75	**384 Canon Ink Only Run2 19July2009
43.72	**327 Canon Ink Only Run1 19July2009
43.48	**384 Canon Ink Only Run1 19July2009
43.46	**318 Canon Ink Only Run2 19July2009
43.37	**327 Canon Ink Only Run2 19July2009
43.35	318 Canon Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Canon 402
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
52.39	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
52.15	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
51.82	348 Canon Ink Only AVERAGE Slide Subtracted
51.63	223 Canon Ink Only AVERAGE Slide Subtracted
51.60	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
51.48	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
51.45	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
51.34	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
51.30	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
50.99	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
50.85	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
50.79	327 Canon Ink Only AVERAGE Slide Subtracted
50.61	384 Canon Ink Only AVERAGE Slide Subtracted
50.60	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
50.59	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
50.57	217 Canon Ink Only AVERAGE Slide Subtracted
50.55	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
50.51	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
50.34	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
50.24	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 492 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**492 Canon Black Ink (BCI-3eBK) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
28.98	205 HP Ink Only AVERAGE
28.96	**205 HP Ink Only Run4 19July2009
28.96	**205 HP Ink Only Run3 19July2009
28.94	**205 HP Ink Only Run2 19July2009
25.27	**13 Xerox Ink Only Run2 19July2009
24.95	**04 Okidata Ink Only Brown Spot Run1 19July2009
24.78	04 Okidata Ink Only AVERAGE
23.94	**223 Canon Ink Only Run3 19July2009
23.91	**217 Canon Ink Only Run3 19July2009
23.84	**217 Canon Ink Only Run1 19July2009
23.82	217 Canon Ink Only AVERAGE
23.68	**217 Canon Ink Only Run2 19July2009
23.25	**04 Okidata Ink Only Black Spot Run2 19July2009
22.82	**318 Canon Ink Only Run1 19July2009
22.49	223 Canon Ink Only AVERAGE
22.44	**04 Okidata Ink Only Black Spot Run1 19July2009
22.42	04 Okidata Ink Only Black Spot AVERAGE
22.31	**318 Canon Ink Only Run2 19July2009
22.21	**04 Okidata Ink Only Brown Spot Run6 19July2009
22.19	318 Canon Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result:**492 Canon Black Ink (BCI-3eBK) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
29.78	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
29.67	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
29.24	205 HP Ink Only AVERAGE Slide Subtracted
28.51	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
25.43	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
24.91	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
24.59	04 Okidata Ink Only AVERAGE Slide Subtracted
23.16	217 Canon Ink Only AVERAGE Slide Subtracted
23.15	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
23.14	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
23.14	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
23.13	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
23.02	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
22.92	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
22.69	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
22.47	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
22.43	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
22.34	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
22.33	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
21.89	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 492 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**492 Canon Black (BCI-3eBK) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
37.28	**205 HP Ink Only Run4 19July2009
37.15	**205 HP Ink Only Run3 19July2009
37.01	205 HP Ink Only AVERAGE
36.47	**205 HP Ink Only Run2 19July2009
28.68	**223 Canon Ink Only Run3 19July2009
28.59	**217 Canon Ink Only Run2 19July2009
28.58	217 Canon Ink Only AVERAGE
28.56	**217 Canon Ink Only Run1 19July2009
28.54	**217 Canon Ink Only Run3 19July2009
27.45	**348 Canon Ink Only Run2 19July2009
27.03	348 Canon Ink Only AVERAGE
26.99	**04 Okidata Ink Only Brown Spot Run1 19July2009
26.94	**348 Canon Ink Only Run1 19July2009
26.91	**318 Canon Ink Only Run1 19July2009
26.84	223 Canon Ink Only AVERAGE
26.66	**318 Canon Ink Only Run2 19July2009
26.61	**348 Canon Ink Only Run3 19July2009
26.58	318 Canon Ink Only AVERAGE
26.18	**282 Canon Ink Only Run4 19July2009
26.15	**205 HP Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**492 Canon Black (BCI-3eBK) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
37.52	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
37.18	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
36.41	205 HP Ink Only AVERAGE Slide Subtracted
34.73	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
31.85	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
26.98	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
26.86	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
26.78	217 Canon Ink Only AVERAGE Slide Subtracted
26.60	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
26.54	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
26.53	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
26.45	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
26.38	348 Canon Ink Only AVERAGE Slide Subtracted
26.29	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
26.29	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
26.21	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
26.20	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
25.95	282 Canon Ink Only AVERAGE Slide Subtracted
25.80	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
25.80	04 Okidata Ink Only AVERAGE Slide Subtracted

Canon 492 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**492 Canon Black Ink (BCI-3eBk) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
39.07	**205 HP Ink Only Run4 19July2009
38.98	**205 HP Ink Only Run3 19July2009
38.78	205 HP Ink Only AVERAGE
38.16	**205 HP Ink Only Run2 19July2009
29.31	**223 Canon Ink Only Run3 19July2009
28.74	**217 Canon Ink Only Run2 19July2009
28.62	217 Canon Ink Only AVERAGE
28.59	**217 Canon Ink Only Run1 19July2009
28.50	**217 Canon Ink Only Run3 19July2009
28.07	**348 Canon Ink Only Run2 19July2009
27.70	348 Canon Ink Only AVERAGE
27.58	**348 Canon Ink Only Run1 19July2009
27.36	223 Canon Ink Only AVERAGE
27.34	**348 Canon Ink Only Run3 19July2009
27.13	**318 Canon Ink Only Run1 19July2009
26.95	**282 Canon Ink Only Run4 19July2009
26.94	**205 HP Ink Only Run1 19July2009
26.79	**318 Canon Ink Only Run2 19July2009
26.78	318 Canon Ink Only AVERAGE
26.76	**282 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**492 Canon Black Ink (BCI-3eBk) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
39.26	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
38.94	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
38.00	205 HP Ink Only AVERAGE Slide Subtracted
36.24	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
32.50	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
27.31	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
27.11	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
26.90	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
26.90	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
26.89	348 Canon Ink Only AVERAGE Slide Subtracted
26.82	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
26.66	217 Canon Ink Only AVERAGE Slide Subtracted
26.65	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
26.58	282 Canon Ink Only AVERAGE Slide Subtracted
26.54	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
26.36	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
26.30	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
26.25	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
25.93	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
25.11	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted

Canon 492 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Canon 492
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
38.44	**205 HP Ink Only Run4 19July2009
38.33	**205 HP Ink Only Run3 19July2009
38.16	205 HP Ink Only AVERAGE
37.57	**205 HP Ink Only Run2 19July2009
29.19	**223 Canon Ink Only Run3 19July2009
28.85	**217 Canon Ink Only Run2 19July2009
28.78	217 Canon Ink Only AVERAGE
28.75	**217 Canon Ink Only Run1 19July2009
28.70	**217 Canon Ink Only Run3 19July2009
27.95	**348 Canon Ink Only Run2 19July2009
27.55	348 Canon Ink Only AVERAGE
27.44	**348 Canon Ink Only Run1 19July2009
27.28	223 Canon Ink Only AVERAGE
27.19	**318 Canon Ink Only Run1 19July2009
27.15	**348 Canon Ink Only Run3 19July2009
26.89	**318 Canon Ink Only Run2 19July2009
26.85	318 Canon Ink Only AVERAGE
26.74	**282 Canon Ink Only Run4 19July2009
26.72	**205 HP Ink Only Run1 19July2009
26.57	**282 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Canon 492
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
38.66	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
38.32	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
37.46	205 HP Ink Only AVERAGE Slide Subtracted
35.73	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
32.39	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
27.26	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
26.95	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
26.89	217 Canon Ink Only AVERAGE Slide Subtracted
26.81	348 Canon Ink Only AVERAGE Slide Subtracted
26.77	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
26.77	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
26.73	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
26.68	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
26.60	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
26.60	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
26.58	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
26.44	282 Canon Ink Only AVERAGE Slide Subtracted
26.20	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
26.17	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
25.97	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted

Canon 522 11July2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**522 Canon Black Ink (BCI-3ePBK) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
46.66	**217 Canon Ink Only Run2 19July2009
46.65	**217 Canon Ink Only Run3 19July2009
46.53	217 Canon Ink Only AVERAGE
46.20	**217 Canon Ink Only Run1 19July2009
44.88	**223 Canon Ink Only Run3 19July2009
43.69	**282 Canon Ink Only Run3 19July2009
43.41	**282 Canon Ink Only Run4 19July2009
43.29	223 Canon Ink Only AVERAGE
42.83	**223 Canon Ink Only Run2 19July2009
41.93	**348 Canon Ink Only Run2 19July2009
41.77	282 Canon Ink Only AVERAGE
41.71	**348 Canon Ink Only Run3 19July2009
41.69	**282 Canon Ink Only Run2 19July2009
41.50	348 Canon Ink Only AVERAGE
41.40	**223 Canon Ink Only Run1 19July2009
41.38	**522 Canon Ink Only Run1 19July2009
41.23	522 Canon Ink Only AVERAGE
41.16	**522 Canon Ink Only Run3 19July2009
40.92	**522 Canon Ink Only Run2 19July2009
40.70	**348 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**522 Canon Black Ink (BCI-3ePBK) 11July2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
53.09	217 Canon Ink Only AVERAGE Slide Subtracted
53.00	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
52.82	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
52.32	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
52.22	282 Canon Ink Only AVERAGE Slide Subtracted
52.21	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
52.19	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
52.08	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
51.55	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
50.50	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
50.49	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
50.07	348 Canon Ink Only AVERAGE Slide Subtracted
49.94	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
49.81	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
49.65	223 Canon Ink Only AVERAGE Slide Subtracted
49.53	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
49.42	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
49.41	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
48.78	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
48.42	384 Canon Ink Only AVERAGE Slide Subtracted

Canon 522 28Nov2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**522 Canon Photo Black (BCI-3ePBK) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
57.63	**223 Canon Ink Only Run3 19July2009
56.71	**217 Canon Ink Only Run3 19July2009
56.45	217 Canon Ink Only AVERAGE
56.41	**217 Canon Ink Only Run1 19July2009
56.16	**217 Canon Ink Only Run2 19July2009
55.37	223 Canon Ink Only AVERAGE
54.94	**282 Canon Ink Only Run3 19July2009
54.47	**223 Canon Ink Only Run2 19July2009
54.39	**282 Canon Ink Only Run4 19July2009
53.90	**348 Canon Ink Only Run3 19July2009
53.57	**348 Canon Ink Only Run2 19July2009
53.48	348 Canon Ink Only AVERAGE
53.17	**282 Canon Ink Only Run2 19July2009
53.07	**384 Canon Ink Only Run3 19July2009
53.04	**223 Canon Ink Only Run1 19July2009
52.74	**348 Canon Ink Only Run1 19July2009
52.45	282 Canon Ink Only AVERAGE
52.45	384 Canon Ink Only AVERAGE
52.18	**384 Canon Ink Only Run1 19July2009
52.02	**318 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**522 Canon Photo Black (BCI-3ePBK) Run1 28Nov2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
63.70	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
63.28	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
63.22	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
63.11	282 Canon Ink Only AVERAGE Slide Subtracted
62.08	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
61.98	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
61.88	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
61.81	348 Canon Ink Only AVERAGE Slide Subtracted
61.58	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
61.56	217 Canon Ink Only AVERAGE Slide Subtracted
61.52	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
61.23	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
61.03	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
60.78	223 Canon Ink Only AVERAGE Slide Subtracted
60.67	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
60.56	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
60.22	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
59.80	384 Canon Ink Only AVERAGE Slide Subtracted
59.77	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
59.49	**318 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Canon 522 14Dec2008 Run 1

Neat Ink Library

Spectrum: Subtraction Result:**522 Canon Black Ink (BCI-3ePBk) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
57.41	**217 Canon Ink Only Run3 19July2009
57.36	217 Canon Ink Only AVERAGE
57.34	**217 Canon Ink Only Run2 19July2009
57.25	**217 Canon Ink Only Run1 19July2009
56.94	**223 Canon Ink Only Run3 19July2009
55.34	223 Canon Ink Only AVERAGE
55.06	**223 Canon Ink Only Run2 19July2009
53.31	**384 Canon Ink Only Run3 19July2009
53.12	**223 Canon Ink Only Run1 19July2009
52.67	384 Canon Ink Only AVERAGE
52.36	**384 Canon Ink Only Run1 19July2009
52.16	**282 Canon Ink Only Run3 19July2009
52.06	**348 Canon Ink Only Run2 19July2009
52.05	**384 Canon Ink Only Run2 19July2009
52.02	**522 Canon Ink Only Run1 19July2009
51.97	**282 Canon Ink Only Run4 19July2009
51.74	522 Canon Ink Only AVERAGE
51.70	348 Canon Ink Only AVERAGE
51.49	**522 Canon Ink Only Run2 19July2009
51.42	**348 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Spectrum: Subtraction Result:**522 Canon Black Ink (BCI-3ePBk) Run1 14Dec2008
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
63.12	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
63.02	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
62.69	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
62.62	217 Canon Ink Only AVERAGE Slide Subtracted
61.52	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
61.42	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
61.30	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
61.09	223 Canon Ink Only AVERAGE Slide Subtracted
60.99	282 Canon Ink Only AVERAGE Slide Subtracted
60.91	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
60.88	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
60.84	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
60.68	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
60.57	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
60.41	384 Canon Ink Only AVERAGE Slide Subtracted
60.22	348 Canon Ink Only AVERAGE Slide Subtracted
59.96	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
59.81	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
59.73	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
59.68	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Canon 522 AVERAGE

Neat Ink Library

Spectrum: Subtraction Result: AVERAGED Canon 522
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
61.83	**217 Canon Ink Only Run2 19July2009
61.70	217 Canon Ink Only AVERAGE
61.62	**217 Canon Ink Only Run3 19July2009
61.58	**217 Canon Ink Only Run1 19July2009
61.52	**223 Canon Ink Only Run3 19July2009
59.50	223 Canon Ink Only AVERAGE
59.07	**223 Canon Ink Only Run2 19July2009
57.27	**282 Canon Ink Only Run3 19July2009
57.24	**282 Canon Ink Only Run4 19July2009
56.88	**384 Canon Ink Only Run3 19July2009
56.87	**223 Canon Ink Only Run1 19July2009
56.75	**348 Canon Ink Only Run2 19July2009
56.42	384 Canon Ink Only AVERAGE
56.37	348 Canon Ink Only AVERAGE
56.35	**348 Canon Ink Only Run3 19July2009
56.09	**282 Canon Ink Only Run2 19July2009
56.04	**384 Canon Ink Only Run2 19July2009
56.01	**384 Canon Ink Only Run1 19July2009
55.79	**348 Canon Ink Only Run1 19July2009
55.35	282 Canon Ink Only AVERAGE

Slide Subtracted Library

Spectrum: Subtraction Result: AVERAGED Canon 522
Region: 3999.84-651.85
Search type: Correlation
Hit List:

Match	Compound name
67.76	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
67.70	217 Canon Ink Only AVERAGE Slide Subtracted
67.36	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
67.15	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
66.82	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
66.72	282 Canon Ink Only AVERAGE Slide Subtracted
66.72	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
66.56	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
65.70	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
65.67	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
65.45	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
65.38	223 Canon Ink Only AVERAGE Slide Subtracted
65.30	348 Canon Ink Only AVERAGE Slide Subtracted
65.21	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
65.11	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
65.06	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
64.69	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
64.64	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
64.39	384 Canon Ink Only AVERAGE Slide Subtracted
64.06	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

THE CHARACTERIZATION OF BLACK INKJET COMPUTER PRINTER INKS USING PYROLYSIS GAS CHROMATOGRAPHY-MASS SPECTROMETRY (Py-GC-MS), HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC), THIN LAYER CHROMATOGRAPHY (TLC) AND ATTENUATED TOTAL REFLECTION FOURIER TRANSFORM INFRARED SPECTROSCOPY (ATR FT-IR)

by

Michelle Margaret Boileau

VOLUME FOUR

A dissertation submitted to the Graduate Faculty in Criminal Justice in partial fulfillment of the requirements for the degree of Doctor of Philosophy,

The City University of New York.

2012

APPENDIX I:

Spectral ID Library Results – ATR FT-IR Data

ATR Library Results – Spectral ID/GRAMS

Okidata 04 12Nov2007 Run 1

Neat Ink Library

Unknown Spectrum: 04 OKIDATA 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.7967595	312 Canon Ink Only AVERAGE
2	.7982465	**312 Canon Ink Only Run1 19July2009
3	.8055305	**156 Epson Ink Only Run4 19July2009
4	.808475	**312 Canon Ink Only Run4 19July2009
5	.8128802	**312 Canon Ink Only Run2 19July2009
6	.8558326	**156 Epson Ink Only Run5 19July2009
7	.8569354	**312 Canon Ink Only Run3 19July2009
8	.858715	**22 Kodak Ink Only Run1 19July2009
9	.8587598	156 Epson Ink Only AVERAGE
10	.8638586	**156 Epson Ink Only Run2 19July2009
11	.8724917	**205 HP Ink Only Run2 19July2009
12	.8730525	**156 Epson Ink Only Run3 19July2009
13	.8754509	**205 HP Ink Only Run1 19July2009
14	.8756545	**30 Epson Ink Only Run4 19July2009
15	.8787294	**04 Okidata Ink Only Brown Spot Run5 19July2009
16	.8797437	**04 Okidata Ink Only Brown Spot Run2 19July2009
17	.8818398	**30 Epson Ink Only Run3 19July2009
18	.8834424	**30 Epson Ink Only Run2 19July2009
19	.884602	**384 Canon Ink Only Run1 19July2009
20	.8847326	30 Epson Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 04 OKIDATA 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.5867046	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
2	.7103516	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
3	.7220168	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
4	.7255019	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
5	.7330598	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
6	.7860765	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
7	.8198975	312 Canon Ink Only AVERAGE Slide Subtracted
8	.8204129	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
9	.8228497	156 Epson Ink Only AVERAGE Slide Subtracted
10	.8301495	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11	.8354877	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
12	.844769	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
13	.8497431	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
14	.860267	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
15	.8674797	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
16	.8747769	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
17	.8841017	**244 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
18	.893693	24 Xerox Ink Only AVERAGE Slide Subtracted
19	.903724	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
20	.9162354	**199 HP Ink Only Run1 19July2009 Blank Slide Subtracted

Okidata 04 17Jan2008 Run 1

Neat Ink Library

Unknown Spectrum: 04 OKIDATA 20080117.SPC

Hit #	Hit Quality	Memo Library Index
1	.6078272	**24 Xerox Ink Only Run1 19July2009
2	.6101922	**13 Xerox Ink Only Run6 19July2009
3	.6246073	24 Xerox Ink Only R1R2 AVERAGE
4	.6314607	13 Xerox Ink Only AVERAGE
5	.6356288	**13 Xerox Ink Only Run4 19July2009
6	.639714	**24 Xerox Ink Only Run2 19July2009
7	.6397155	**84 Epson Ink Only Run3 19July2009
8	.6442456	**13 Xerox Ink Only Run5 19July2009
9	.6496138	24 Xerox Ink Only AVERAGE
10	.6549706	**13 Xerox Ink Only Run3 19July2009
11	.6881236	**13 Xerox Ink Only Run1 19July2009
12	.6912316	**201 HP Ink Only Run1 19July2009
13	.7048935	**201 HP Ink Only Run2 19July2009
14	.7055098	**13 Xerox Ink Only Run2 19July2009
15	.706502	**201 HP Ink Only Run3 19July2009
16	.7086517	**198 HP Ink Only Run4 19July2009
17	.7192783	**200 HP Ink Only Run3 19July2009
18	.7233425	**17 Kodak Ink Only Run1 19July2009
19	.7241959	17 Kodak Ink Only AVERAGE
20	.7245398	198 HP Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 04 OKIDATA 20080117.SPC

Hit #	Hit Quality	Memo Library Index
1	.6307603	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.6759413	13 Xerox Ink Only AVERAGE Slide Subtracted
3	.6891485	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
4	.6964989	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
5	.7195132	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
6	.7440087	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
7	.7522723	24 Xerox Ink Only AVERAGE Slide Subtracted
8	.7587149	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
9	.7614493	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
10	.7722511	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
11	.7827062	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
12	.7899343	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
13	.8024019	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
14	.8293946	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
15	.8348708	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
16	.8431456	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
17	.8437355	198 HP Ink Only AVERAGE Slide Subtracted
18	.8491292	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
19	.849789	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
20	.850732	**201 HP Ink Only Run3 19July2009 Blank Slide Subtracted

Okidata 04 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 04 OKIDATA 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.2791221	30 Epson Ink Only AVERAGE
2	.2833777	**30 Epson Ink Only Run2 19July2009
3	.2856566	**30 Epson Ink Only Run3 19July2009
4	.3043739	**30 Epson Ink Only Run1 19July2009
5	.3055681	22 Kodak Ink Only AVERAGE
6	.305861	205 HP Ink Only AVERAGE
7	.315119	**217 Canon Ink Only Run4 19July2009
8	.3214954	**22 Kodak Ink Only Run2 19July2009
9	.3218346	**22 Kodak Ink Only Run3 19July2009
10	.3222746	**205 HP Ink Only Run3 19July2009
11	.3327538	**200 HP Ink Only Run1 19July2009
12	.3400092	**205 HP Ink Only Run4 19July2009
13	.3439026	**17 Kodak Ink Only Run3 19July2009
14	.3441368	**282 Canon Ink Only Run1 19July2009
15	.3505659	**199 HP Ink Only Run1 19July2009
16	.35057	**201 HP Ink Only Run1 19July2009
17	.3541659	**17 Kodak Ink Only Run2 19July2009
18	.3557708	201 HP Ink Only AVERAGE
19	.3565507	**244 Xerox Ink Only Run1 19July2009
20	.3567969	**199 HP Ink Only Run4 19July2009

Slide Subtracted Library

Unknown Spectrum: 04 OKIDATA 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.8982397	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.9037244	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
3	.9056678	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
4	.9085853	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
5	.9091191	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
6	.9098251	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
7	.9123005	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
8	.9126855	492 Canon Ink Only AVERAGE Slide Subtracted
9	.9130919	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
10	.9134353	04 Okidata Ink Only AVERAGE Slide Subtracted
11	.9140173	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
12	.9145396	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
13	.9153799	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
14	.916041	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
15	.9171586	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
16	.9176643	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
17	.9176814	205 HP Ink Only AVERAGE Slide Subtracted
18	.9179083	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
19	.9184178	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
20	.9187711	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted

Okidata 04 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 04 OKIDATA 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.5682712	**13 Xerox Ink Only Run2 19July2009
2	.597079	**30 Epson Ink Only Run1 19July2009
3	.6023093	205 HP Ink Only AVERAGE
4	.626922	**205 HP Ink Only Run3 19July2009
5	.6356335	**201 HP Ink Only Run1 19July2009
6	.6380788	**201 HP Ink Only Run2 19July2009
7	.646339	**205 HP Ink Only Run4 19July2009
8	.647014	22 Kodak Ink Only AVERAGE
9	.6473578	**201 HP Ink Only Run3 19July2009
10	.6514149	**201 HP Ink Only Run5 19July2009
11	.652145	**198 HP Ink Only Run4 19July2009
12	.6532515	**201 HP Ink Only Run4 19July2009
13	.6546354	**201 HP Ink Only Run6 19July2009
14	.6550078	201 HP Ink Only AVERAGE
15	.6582696	17 Kodak Ink Only AVERAGE
16	.6599705	**17 Kodak Ink Only Run2 19July2009
17	.6650968	**17 Kodak Ink Only Run3 19July2009
18	.6657451	198 HP Ink Only AVERAGE
19	.66739	**17 Kodak Ink Only Run1 19July2009
20	.6689084	**198 HP Ink Only Run5 19July2009

Slide Subtracted Library

Unknown Spectrum: 04 OKIDATA 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.8128102	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
2	.8384646	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
3	.8398991	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
4	.8496806	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
5	.8608996	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
6	.8710676	205 HP Ink Only AVERAGE Slide Subtracted
7	.8773791	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
8	.8798317	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
9	.8882107	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
10	.8883062	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
11	.8910869	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
12	.8927226	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
13	.8934806	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
14	.8958307	30 Epson Ink Only AVERAGE Slide Subtracted
15	.9053358	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
16	.9055977	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
17	.9061334	04 Okidata Ink Only AVERAGE Slide Subtracted
18	.9093605	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
19	.909503	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
20	.9101217	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted

Okidata 04 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 04 OKIDATA 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.6985038	**492 Canon Ink Only Run4 19July2009
2	.7075561	**04 Okidata Ink Only Brown Spot Run1 19July2009
3	.7181749	**66 Epson Ink Only Run2 19July2009
4	.7224616	**66 Epson Ink Only Run1 19July2009
5	.7227397	66 Epson Ink Only AVERAGE
6	.7231162	**312 Canon Ink Only Run1 19July2009
7	.7289439	**63 Epson Ink Only Purple Spot Run3 19July2009
8	.729027	**66 Epson Ink Only Run3 19July2009
9	.7331923	**63 Epson Ink Only Purple Spot Run1 19July2009
10	.7336709	**04 Okidata Ink Only Brown Spot Run7 19July2009
11	.7349957	63 Epson Ink Only Purple Spot AVERAGE
12	.7377084	**492 Canon Ink Only Run3 19July2009
13	.7397302	**90 Epson Ink Only Run3 19July2009
14	.743064	**492 Canon Ink Only Run2 19July2009
15	.7434033	**63 Epson Ink Only Purple Spot Run2 19July2009
16	.7439516	**312 Canon Ink Only Run2 19July2009
17	.7451489	**90 Epson Ink Only Run2 19July2009
18	.7453169	**33 Epson Ink Only Brown Spot Run1 19July2009
19	.7458135	492 Canon Ink Only AVERAGE
20	.7504611	90 Epson Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 04 OKIDATA 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.6467839	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
2	.6526875	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
3	.6718327	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
4	.6817126	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
5	.7009821	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
6	.7126099	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
7	.7174581	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
8	.7224361	**492 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
9	.7228146	312 Canon Ink Only AVERAGE Slide Subtracted
10	.7349869	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
11	.7363772	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
12	.739349	66 Epson Ink Only AVERAGE Slide Subtracted
13	.7395056	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
14	.7399369	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
15	.7410888	**63 Epson Ink Only Purple Spot Run3 19July2009 Blank Slide Subtracted
16	.7442357	**63 Epson Ink Only Purple Spot Run1 19July2009 Blank Slide Subtracted
17	.7446012	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
18	.7463893	63 Epson Ink Only Purple Spot AVERAGE Slide Subtracted
19	.747985	492 Canon Ink Only AVERAGE Slide Subtracted
20	.7514448	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted

Okidata 04 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 04 OKIDATA 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.5896736	**13 Xerox Ink Only Run2 19July2009
2	.6597882	**201 HP Ink Only Run1 19July2009
3	.6711072	**201 HP Ink Only Run2 19July2009
4	.6764889	**13 Xerox Ink Only Run3 19July2009
5	.6807469	**200 HP Ink Only Run3 19July2009
6	.6858776	**17 Kodak Ink Only Run2 19July2009
7	.6883376	201 HP Ink Only AVERAGE
8	.6949252	205 HP Ink Only AVERAGE
9	.6951516	17 Kodak Ink Only AVERAGE
10	.6978104	**201 HP Ink Only Run3 19July2009
11	.6983377	**17 Kodak Ink Only Run3 19July2009
12	.7036421	**198 HP Ink Only Run4 19July2009
13	.7062705	**30 Epson Ink Only Run1 19July2009
14	.7092273	**17 Kodak Ink Only Run1 19July2009
15	.7102574	**205 HP Ink Only Run3 19July2009
16	.7214086	198 HP Ink Only AVERAGE
17	.7224498	**84 Epson Ink Only Run3 19July2009
18	.7241713	**205 HP Ink Only Run4 19July2009
19	.7259469	**201 HP Ink Only Run4 19July2009
20	.7263677	**30 Epson Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 04 OKIDATA 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.7652912	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
2	.7759509	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
3	.7804421	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
4	.7933776	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
5	.8313519	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
6	.8331225	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
7	.8385748	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
8	.8387924	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
9	.8435091	**201 HP Ink Only Run2 19July2009 Blank Slide Subtracted
10	.8440182	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
11	.8453153	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
12	.8494542	17 Kodak Ink Only AVERAGE Slide Subtracted
13	.8500755	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
14	.8530045	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
15	.8550048	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
16	.855023	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
17	.8613493	201 HP Ink Only AVERAGE Slide Subtracted
18	.8636765	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
19	.8651047	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
20	.8682511	04 Okidata Ink Only AVERAGE Slide Subtracted

Okidata 04 17Jan2008 Run 2

Neat Ink Library

Unknown Spectrum: 04 OKIDATA RUN2 20080117.SPC

Hit #	Hit Quality	Memo Library Index
1	.8507689	**84 Epson Ink Only Run3 19July2009
2	.8558884	**156 Epson Ink Only Run4 19July2009
3	.8740404	**384 Canon Ink Only Run1 19July2009
4	.8756315	**04 Okidata Ink Only Brown Spot Run2 19July2009
5	.8778185	**223 Canon Ink Only Run1 19July2009
6	.8791395	**306 Canon Ink Only Run2 19July2009
7	.87981	384 Canon Ink Only AVERAGE
8	.8804488	**306 Canon Ink Only Run1 19July2009
9	.8806015	**384 Canon Ink Only Run2 19July2009
10	.8806707	**327 Canon Ink Only Run3 19July2009
11	.8808083	**327 Canon Ink Only Run1 19July2009
12	.8808438	**223 Canon Ink Only Run2 19July2009
13	.8809624	327 Canon Ink Only AVERAGE
14	.8812122	**156 Epson Ink Only Run5 19July2009
15	.8812413	156 Epson Ink Only AVERAGE
16	.881577	**327 Canon Ink Only Run2 19July2009
17	.8819166	223 Canon Ink Only AVERAGE
18	.8832659	**156 Epson Ink Only Run2 19July2009
19	.8875989	**384 Canon Ink Only Run3 19July2009
20	.8883216	**223 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 04 OKIDATA RUN2 20080117.SPC

Hit #	Hit Quality	Memo Library Index
1	.771455	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8495697	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
3	.8573797	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
4	.8731257	**244 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
5	.8988066	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
6	.9009994	**84 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
7	.9036933	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
8	.9043951	**84 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
9	.9047466	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
10	.9268913	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
11	.9281602	**84 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
12	.9337051	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
13	.9345934	**63 Epson Ink Only Purple Spot Run3 19July2009 Blank Slide Subtracted
14	.9356898	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
15	.9387381	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
16	.9402857	156 Epson Ink Only AVERAGE Slide Subtracted
17	.9429023	63 Epson Ink Only Purple Spot AVERAGE Slide Subtracted
18	.9432213	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
19	.9448382	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
20	.9450715	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted

Okidata 04 11July2008 Run 2

Neat Ink Library

Unknown Spectrum: 04 OKIDATA RUN2 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.3753242	**04 Okidata Ink Only Black Spot Run1 19July2009
2	.3754925	**04 Okidata Ink Only Black Spot Run2 19July2009
3	.3896997	04 Okidata Ink Only Black Spot AVERAGE
4	.4429649	**04 Okidata Ink Only Black Spot Run3 19July2009
5	.4511876	04 Okidata Ink Only AVERAGE
6	.4774116	**33 Epson Ink Only Black Spot Run1 19July2009
7	.4909172	205 HP Ink Only AVERAGE
8	.4912107	**205 HP Ink Only Run4 19July2009
9	.4917924	**205 HP Ink Only Run3 19July2009
10	.4951366	**33 Epson Ink Only Black Spot Run2 19July2009
11	.5011119	33 Epson Ink Only Black Spot AVERAGE
12	.5155464	**63 Epson Ink Only Green Spot Run1 19July2009
13	.5324976	348 Canon Ink Only AVERAGE
14	.5327731	33 Epson Ink Only AVERAGE
15	.535944	**348 Canon Ink Only Run2 19July2009
16	.5385149	**223 Canon Ink Only Run3 19July2009
17	.5586484	**33 Epson Ink Only Black Spot Run3 19July2009
18	.5603661	63 Epson Ink Only Green Spot AVERAGE
19	.5655913	**63 Epson Ink Only Green Spot Run2 19July2009
20	.5659404	**282 Canon Ink Only Run4 19July2009

Slide Subtracted Library

Unknown Spectrum: 04 OKIDATA RUN2 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.415174	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
2	.416633	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
3	.4254457	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
4	.4272712	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.4514561	205 HP Ink Only AVERAGE Slide Subtracted
6	.457054	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
7	.4606814	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
8	.4706685	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
9	.4717233	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
10	.4774436	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
11	.4807616	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
12	.4865531	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
13	.4876865	30 Epson Ink Only AVERAGE Slide Subtracted
14	.4946052	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
15	.5024863	04 Okidata Ink Only AVERAGE Slide Subtracted
16	.5030861	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
17	.5060462	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
18	.5061012	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
19	.5082827	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
20	.5092131	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted

Okidata 04 28Nov2008 Run 2

Neat Ink Library

Unknown Spectrum: 04 OKIDATA RUN2 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.8486841	**04 Okidata Ink Only Black Spot Run1 19July2009
2	.8504881	**04 Okidata Ink Only Black Spot Run2 19July2009
3	.8516982	04 Okidata Ink Only Black Spot AVERAGE
4	.8612543	**33 Epson Ink Only Brown Spot Run2 19July2009
5	.8614725	**33 Epson Ink Only Brown Spot Run1 19July2009
6	.8618623	**04 Okidata Ink Only Black Spot Run3 19July2009
7	.8627563	**63 Epson Ink Only Green Spot Run1 19July2009
8	.8633337	33 Epson Ink Only Brown Spot AVERAGE
9	.8656913	**63 Epson Ink Only Purple Spot Run1 19July2009
10	.8660493	63 Epson Ink Only AVERAGE
11	.8668992	63 Epson Ink Only Green Spot AVERAGE
12	.8678142	**90 Epson Ink Only Run3 19July2009
13	.8678179	**33 Epson Ink Only Brown Spot Run3 19July2009
14	.8683341	63 Epson Ink Only Purple Spot AVERAGE
15	.868451	**63 Epson Ink Only Green Spot Run2 19July2009
16	.8687014	**63 Epson Ink Only Purple Spot Run2 19July2009
17	.8703299	**120 Epson Ink Only Run3 19July2009
18	.8705683	**120 Epson Ink Only Run2 19July2009
19	.8709493	120 Epson Ink Only AVERAGE
20	.8712547	**120 Epson Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 04 OKIDATA RUN2 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.7865603	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
2	.7871681	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
3	.7873491	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
4	.7904558	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
5	.7955237	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
6	.7974299	384 Canon Ink Only AVERAGE Slide Subtracted
7	.8002182	223 Canon Ink Only AVERAGE Slide Subtracted
8	.8011501	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
9	.8020931	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
10	.8027277	217 Canon Ink Only AVERAGE Slide Subtracted
11	.8054912	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
12	.8127908	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
13	.8148001	**522 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
14	.8155386	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
15	.816632	**306 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
16	.8167301	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
17	.817704	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
18	.8177082	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
19	.8178126	**306 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20	.8193297	**522 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Okidata 04 14Dec2008 Run 2

Neat Ink Library

Unknown Spectrum: 04 OKIDATA RUN2 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.6456048	**13 Xerox Ink Only Run2 19July2009
2	.6483485	205 HP Ink Only AVERAGE
3	.6575231	**205 HP Ink Only Run3 19July2009
4	.6682545	**205 HP Ink Only Run4 19July2009
5	.6831852	**30 Epson Ink Only Run3 19July2009
6	.6848378	**201 HP Ink Only Run1 19July2009
7	.6887013	**200 HP Ink Only Run3 19July2009
8	.6955868	30 Epson Ink Only AVERAGE
9	.6980494	**205 HP Ink Only Run2 19July2009
10	.6981691	**201 HP Ink Only Run2 19July2009
11	.6992891	**30 Epson Ink Only Run1 19July2009
12	.7025198	**30 Epson Ink Only Run2 19July2009
13	.7036567	**17 Kodak Ink Only Run2 19July2009
14	.7090453	**17 Kodak Ink Only Run3 19July2009
15	.7113124	17 Kodak Ink Only AVERAGE
16	.7115213	201 HP Ink Only AVERAGE
17	.7195265	**13 Xerox Ink Only Run3 19July2009
18	.7220317	**17 Kodak Ink Only Run1 19July2009
19	.7239727	348 Canon Ink Only AVERAGE
20	.7268597	**84 Epson Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 04 OKIDATA RUN2 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.7919699	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
2	.7970455	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
3	.8088003	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
4	.8381559	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
5	.8511851	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
6	.8548338	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
7	.8605679	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
8	.8617179	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
9	.8656464	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
10	.870451	04 Okidata Ink Only AVERAGE Slide Subtracted
11	.8723457	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
12	.8754393	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
13	.8795624	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
14	.8803008	205 HP Ink Only AVERAGE Slide Subtracted
15	.8854054	33 Epson Ink Only AVERAGE Slide Subtracted
16	.8927736	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
17	.8968039	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
18	.8997605	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
19	.9049786	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
20	.9059544	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted

Okidata 04 12Nov2007 Run 3

Neat Ink Library

Unknown Spectrum: 04 OKIDATA RUN3 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.3766044	**205 HP Ink Only Run4 19July2009
2	.395808	04 Okidata Ink Only AVERAGE
3	.3979522	**205 HP Ink Only Run3 19July2009
4	.4027275	**04 Okidata Ink Only Black Spot Run2 19July2009
5	.412483	**04 Okidata Ink Only Black Spot Run1 19July2009
6	.4159957	04 Okidata Ink Only Black Spot AVERAGE
7	.4228266	205 HP Ink Only AVERAGE
8	.4469071	**33 Epson Ink Only Black Spot Run1 19July2009
9	.4503136	**04 Okidata Ink Only Black Spot Run3 19July2009
10	.4646087	**33 Epson Ink Only Black Spot Run2 19July2009
11	.4676149	33 Epson Ink Only Black Spot AVERAGE
12	.4973503	**63 Epson Ink Only Green Spot Run1 19July2009
13	.5084618	33 Epson Ink Only AVERAGE
14	.5173769	**33 Epson Ink Only Black Spot Run3 19July2009
15	.531991	63 Epson Ink Only Green Spot AVERAGE
16	.5394986	**205 HP Ink Only Run2 19July2009
17	.539532	**63 Epson Ink Only Green Spot Run2 19July2009
18	.5616871	04 Okidata Ink Only Brown Spot AVERAGE
19	.5677977	63 Epson Ink Only AVERAGE
20	.5680991	**04 Okidata Ink Only Brown Spot Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 04 OKIDATA RUN3 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.3905175	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.4120482	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.4541093	04 Okidata Ink Only AVERAGE Slide Subtracted
4	.4592732	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
5	.4623482	205 HP Ink Only AVERAGE Slide Subtracted
6	.4636833	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
7	.4651197	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
8	.4725919	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
9	.4746926	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
10	.4788812	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
11	.4805021	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
12	.4870925	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
13	.5025116	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
14	.5039328	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
15	.506336	33 Epson Ink Only AVERAGE Slide Subtracted
16	.5107232	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
17	.5191757	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
18	.5266975	63 Epson Ink Only AVERAGE Slide Subtracted
19	.5428817	**60 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
20	.5437015	**60 Epson Ink Only Run1 19July2009 Blank Slide Subtracted

Okidata 04 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Okidata 04.SPC

Hit #	Hit Quality	Memo Library Index
1	.4475564	**04 Okidata Ink Only Black Spot Run2 19July2009
2	.4493126	**04 Okidata Ink Only Black Spot Run1 19July2009
3	.469609	04 Okidata Ink Only Black Spot AVERAGE
4	.5365992	**33 Epson Ink Only Black Spot Run1 19July2009
5	.5427759	**04 Okidata Ink Only Black Spot Run3 19July2009
6	.5583923	**33 Epson Ink Only Black Spot Run2 19July2009
7	.5676841	33 Epson Ink Only Black Spot AVERAGE
8	.5742888	**63 Epson Ink Only Green Spot Run1 19July2009
9	.5930996	33 Epson Ink Only AVERAGE
10	.6014656	04 Okidata Ink Only AVERAGE
11	.6210898	63 Epson Ink Only Green Spot AVERAGE
12	.6306899	**63 Epson Ink Only Green Spot Run2 19July2009
13	.639659	**33 Epson Ink Only Black Spot Run3 19July2009
14	.6520142	**33 Epson Ink Only Brown Spot Run2 19July2009
15	.6542985	63 Epson Ink Only AVERAGE
16	.6604878	33 Epson Ink Only Brown Spot AVERAGE
17	.6638897	**33 Epson Ink Only Brown Spot Run3 19July2009
18	.6674678	**60 Epson Ink Only Run3 19July2009
19	.6691641	**33 Epson Ink Only Brown Spot Run1 19July2009
20	.6692662	**63 Epson Ink Only Green Spot Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Okidata 04.SPC

Hit #	Hit Quality	Memo Library Index
1	.4502168	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
2	.4533032	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
3	.4741616	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
4	.5354403	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
5	.5441926	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
6	.5551401	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
7	.5672247	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
8	.5692018	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
9	.5927676	33 Epson Ink Only AVERAGE Slide Subtracted
10	.5951838	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
11	.5965309	04 Okidata Ink Only AVERAGE Slide Subtracted
12	.6186109	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
13	.6288902	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
14	.63538	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
15	.6378565	205 HP Ink Only AVERAGE Slide Subtracted
16	.64152	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
17	.6419538	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
18	.6491731	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
19	.6498127	63 Epson Ink Only AVERAGE Slide Subtracted
20	.6520505	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted

Xerox 13 12Nov2007 Run 1

Neat Ink Library

Unknown Spectrum: 13 XEROX 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.0892303	**201 HP Ink Only Run1 19July2009
2	.1091383	**13 Xerox Ink Only Run6 19July2009
3	.1126996	**201 HP Ink Only Run2 19July2009
4	.114428	13 Xerox Ink Only AVERAGE
5	.1178508	**200 HP Ink Only Run3 19July2009
6	.117918	**17 Kodak Ink Only Run1 19July2009
7	.1197335	**13 Xerox Ink Only Run5 19July2009
8	.1220226	17 Kodak Ink Only AVERAGE
9	.1232955	**13 Xerox Ink Only Run4 19July2009
10	.1250385	**17 Kodak Ink Only Run3 19July2009
11	.126092	201 HP Ink Only AVERAGE
12	.1264205	**24 Xerox Ink Only Run1 19July2009
13	.126942	**17 Kodak Ink Only Run2 19July2009
14	.1389828	24 Xerox Ink Only AVERAGE
15	.1412393	**198 HP Ink Only Run4 19July2009
16	.1458971	24 Xerox Ink Only R1R2 AVERAGE
17	.146348	**201 HP Ink Only Run3 19July2009
18	.1468559	**13 Xerox Ink Only Run1 19July2009
19	.1536016	**199 HP Ink Only Run2 19July2009
20	.1556792	198 HP Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 13 XEROX 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.7746945	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.7996598	13 Xerox Ink Only AVERAGE Slide Subtracted
3	.7999699	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
4	.8090157	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
5	.8368173	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
6	.8657126	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
7	.8728628	24 Xerox Ink Only AVERAGE Slide Subtracted
8	.8735064	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
9	.8762401	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
10	.8837554	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
11	.8959363	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
12	.8971096	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
13	.9020554	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
14	.9025702	17 Kodak Ink Only AVERAGE Slide Subtracted
15	.9113332	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
16	.9129048	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
17	.9181191	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
18	.9246933	198 HP Ink Only AVERAGE Slide Subtracted
19	.9280764	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
20	.9296256	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted

Xerox 13 17Jan2008 Run 1

Neat Ink Library

Unknown Spectrum: 13 XEROX 20080117.SPC

Hit #	Hit Quality	Memo Library Index
1	.8923318	**312 Canon Ink Only Run1 19July2009
2	.8980234	312 Canon Ink Only AVERAGE
3	.906739	**312 Canon Ink Only Run2 19July2009
4	.9074024	**312 Canon Ink Only Run4 19July2009
5	.9265346	**13 Xerox Ink Only Run2 19July2009
6	.9289927	**13 Xerox Ink Only Run3 19July2009
7	.9352334	**244 Xerox Ink Only Run3 19July2009
8	.948273	**156 Epson Ink Only Run4 19July2009
9	.9663343	**312 Canon Ink Only Run3 19July2009
10	.971514	**84 Epson Ink Only Run5 19July2009
11	.9729605	**24 Xerox Ink Only Run2 19July2009
12	.974759	**492 Canon Ink Only Run5 19July2009
13	.9788234	**156 Epson Ink Only Run5 19July2009
14	.9789398	**282 Canon Ink Only Run3 19July2009
15	.9793701	156 Epson Ink Only AVERAGE
16	.9801045	**402 Canon Ink Only Run2 19July2009
17	.9804243	**156 Epson Ink Only Run2 19July2009
18	.9806846	402 Canon Ink Only AVERAGE
19	.9807041	**282 Canon Ink Only Run4 19July2009
20	.980716	**402 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 13 XEROX 20080117.SPC

Hit #	Hit Quality	Memo Library Index
1	.5279957	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
2	.6570265	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
3	.6748562	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
4	.7004681	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
5	.7312705	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
6	.8270943	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
7	.8403047	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
8	.851202	156 Epson Ink Only AVERAGE Slide Subtracted
9	.8774171	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
10	.877528	312 Canon Ink Only AVERAGE Slide Subtracted
11	.8807868	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
12	.8829172	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
13	.8849352	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
14	.8917722	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
15	.8959579	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
16	.9013356	24 Xerox Ink Only AVERAGE Slide Subtracted
17	.9037393	**199 HP Ink Only Run1 19July2009 Blank Slide Subtracted
18	.9062672	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
19	.9221464	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
20	.9235964	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted

Xerox 13 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 13 XEROX 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.1187804	**198 HP Ink Only Run4 19July2009
2	.1236206	**198 HP Ink Only Run5 19July2009
3	.1249668	**199 HP Ink Only Run2 19July2009
4	.1258149	198 HP Ink Only AVERAGE
5	.1260087	**201 HP Ink Only Run3 19July2009
6	.1275015	**200 HP Ink Only Run2 19July2009
7	.1325767	**198 HP Ink Only Run6 19July2009
8	.1419595	**198 HP Ink Only Run1 19July2009
9	.1429422	**198 HP Ink Only Run2 19July2009
10	.1431016	**199 HP Ink Only Run3 19July2009
11	.1442689	**201 HP Ink Only Run6 19July2009
12	.1453018	**201 HP Ink Only Run1 19July2009
13	.14659	**201 HP Ink Only Run2 19July2009
14	.1469142	**13 Xerox Ink Only Run1 19July2009
15	.1472912	**198 HP Ink Only Run3 19July2009
16	.1507834	**201 HP Ink Only Run5 19July2009
17	.1508771	**200 HP Ink Only Run5 19July2009
18	.1536919	**17 Kodak Ink Only Run1 19July2009
19	.1561315	**24 Xerox Ink Only Run4 19July2009
20	.1566783	**13 Xerox Ink Only Run5 19July2009

Slide Subtracted Library

Unknown Spectrum: 13 XEROX 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.8092539	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.8483867	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
3	.8484627	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.8576102	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
5	.8916308	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
6	.8949031	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
7	.8995536	17 Kodak Ink Only AVERAGE Slide Subtracted
8	.9024678	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
9	.9037704	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
10	.9048881	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
11	.905456	198 HP Ink Only AVERAGE Slide Subtracted
12	.9066648	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
13	.9099102	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
14	.9185871	24 Xerox Ink Only AVERAGE Slide Subtracted
15	.9199175	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
16	.9199879	201 HP Ink Only AVERAGE Slide Subtracted
17	.9216327	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
18	.9224645	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
19	.923939	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
20	.9243427	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted

Xerox 13 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 13 XEROX 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.2776037	205 HP Ink Only AVERAGE
2	.2795477	**30 Epson Ink Only Run2 19July2009
3	.280355	30 Epson Ink Only AVERAGE
4	.2823373	**30 Epson Ink Only Run3 19July2009
5	.2990568	**17 Kodak Ink Only Run3 19July2009
6	.3015735	**205 HP Ink Only Run3 19July2009
7	.3120009	**205 HP Ink Only Run2 19July2009
8	.313876	**17 Kodak Ink Only Run2 19July2009
9	.3149908	201 HP Ink Only AVERAGE
10	.315361	**201 HP Ink Only Run1 19July2009
11	.3156324	200 HP Ink Only AVERAGE
12	.3217001	17 Kodak Ink Only AVERAGE
13	.3227874	**205 HP Ink Only Run4 19July2009
14	.3294924	**17 Kodak Ink Only Run1 19July2009
15	.3300435	**201 HP Ink Only Run2 19July2009
16	.3396866	**30 Epson Ink Only Run1 19July2009
17	.3434277	**200 HP Ink Only Run3 19July2009
18	.3472627	**318a Canon Clear Ink Only Run3 19July2009
19	.349326	**200 HP Ink Only Run1 19July2009
20	.3493993	**199 HP Ink Only Run4 19July2009

Slide Subtracted Library

Unknown Spectrum: 13 XEROX 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.8691438	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.8739861	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.8835012	205 HP Ink Only AVERAGE Slide Subtracted
4	.8927097	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.9158376	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
6	.9169129	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
7	.9204309	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
8	.9254135	492 Canon Ink Only AVERAGE Slide Subtracted
9	.9258205	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
10	.9267999	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
11	.9272294	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
12	.9340156	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
13	.9357593	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
14	.9358701	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
15	.9366707	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
16	.937296	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
17	.9396991	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
18	.9402059	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
19	.94087	04 Okidata Ink Only AVERAGE Slide Subtracted
20	.9409406	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted

Xerox 13 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 13 XEROX 20081128.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.1653132	**200 HP Ink Only Run2 19July2009		
2	.1684473	**199 HP Ink Only Run2 19July2009		
3	.1783428	**198 HP Ink Only Run5 19July2009		
4	.1808916	**198 HP Ink Only Run4 19July2009		
5	.1829714	**198 HP Ink Only Run2 19July2009		
6	.182976	**198 HP Ink Only Run1 19July2009		
7	.1831611	198 HP Ink Only AVERAGE		
8	.1832558	**199 HP Ink Only Run3 19July2009		
9	.1848549	**198 HP Ink Only Run3 19July2009		
10	.1864246	**198 HP Ink Only Run6 19July2009		
11	.1899309	**201 HP Ink Only Run3 19July2009		
12	.193272	**13 Xerox Ink Only Run1 19July2009		
13	.1994776	**201 HP Ink Only Run6 19July2009		
14	.2036496	**200 HP Ink Only Run5 19July2009		
15	.2041156	**201 HP Ink Only Run1 19July2009		
16	.2054459	**201 HP Ink Only Run5 19July2009		
17	.2078031	**200 HP Ink Only Run7 19July2009		
18	.2090526	**200 HP Ink Only Run6 19July2009		
19	.2091732	**201 HP Ink Only Run2 19July2009		
20	.2107539	**17 Kodak Ink Only Run1 19July2009		

Slide Subtracted Library

Unknown Spectrum: 13 XEROX 20081128.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.8189121	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted		
2	.8510879	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted		
3	.8568994	13 Xerox Ink Only AVERAGE Slide Subtracted		
4	.859603	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted		
5	.8631746	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted		
6	.8810766	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted		
7	.8955038	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted		
8	.8978618	17 Kodak Ink Only AVERAGE Slide Subtracted		
9	.898272	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted		
10	.899013	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted		
11	.9028457	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted		
12	.9034058	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted		
13	.9060597	198 HP Ink Only AVERAGE Slide Subtracted		
14	.9063412	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted		
15	.9117823	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted		
16	.9149523	24 Xerox Ink Only AVERAGE Slide Subtracted		
17	.9170961	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3		
18	.9192745	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted		
19	.9202721	201 HP Ink Only AVERAGE Slide Subtracted		
20	.9215006	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted		

Xerox 13 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 13 XEROX 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.1955288	**84 Epson Ink Only Run3 19July2009
2	.2751907	**201 HP Ink Only Run1 19July2009
3	.2785441	**244 Xerox Ink Only Run2 19July2009
4	.2846834	**200 HP Ink Only Run1 19July2009
5	.2862637	201 HP Ink Only AVERAGE
6	.2883177	**13 Xerox Ink Only Run6 19July2009
7	.2936483	**200 HP Ink Only Run3 19July2009
8	.2947179	200 HP Ink Only AVERAGE
9	.2951473	**17 Kodak Ink Only Run1 19July2009
10	.2963471	**244 Xerox Ink Only Run1 19July2009
11	.2991419	**201 HP Ink Only Run2 19July2009
12	.2995149	**17 Kodak Ink Only Run3 19July2009
13	.3012423	**17 Kodak Ink Only Run2 19July2009
14	.3026135	**199 HP Ink Only Run1 19July2009
15	.3033245	17 Kodak Ink Only AVERAGE
16	.3050055	**199 HP Ink Only Run2 19July2009
17	.3139727	13 Xerox Ink Only AVERAGE
18	.3180087	**198 HP Ink Only Run1 19July2009
19	.3202177	**198 HP Ink Only Run2 19July2009
20	.3203769	**244 Xerox Ink Only Run4 19July2009

Slide Subtracted Library

Unknown Spectrum: 13 XEROX 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.7014734	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8588161	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.8703752	84 Epson Ink Only AVERAGE Slide Subtracted
4	.8883094	13 Xerox Ink Only AVERAGE Slide Subtracted
5	.8951495	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
6	.8984827	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
7	.9160022	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
8	.9397879	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.9408927	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
10	.9439743	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
11	.9504642	**84 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
12	.9512206	**84 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
13	.9519138	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
14	.9525047	**402 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
15	.952979	**402 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
16	.9530391	402 Canon Ink Only AVERAGE Slide Subtracted
17	.953802	**402 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
18	.9545352	**522 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
19	.9555886	522 Canon Ink Only AVERAGE Slide Subtracted
20	.9559273	**84 Epson Ink Only Run1 19July2009 Blank Slide Subtracted

Xerox 13 17Jan2008 Run 2

Neat Ink Library

Unknown Spectrum: 13 XEROX RUN2 20080117.SPC

Hit #	Hit Quality	Memo Library Index
1	.9022259	**312 Canon Ink Only Run1 19July2009
2	.9078165	312 Canon Ink Only AVERAGE
3	.9149781	**312 Canon Ink Only Run4 19July2009
4	.917581	**312 Canon Ink Only Run2 19July2009
5	.9176732	**13 Xerox Ink Only Run2 19July2009
6	.9181253	**13 Xerox Ink Only Run3 19July2009
7	.9238829	**244 Xerox Ink Only Run3 19July2009
8	.9565902	**156 Epson Ink Only Run4 19July2009
9	.9605315	**84 Epson Ink Only Run5 19July2009
10	.9663012	**24 Xerox Ink Only Run2 19July2009
11	.9719111	84 Epson Ink Only AVERAGE
12	.9733791	**312 Canon Ink Only Run3 19July2009
13	.9740463	**84 Epson Ink Only Run4 19July2009
14	.9766667	**402 Canon Ink Only Run2 19July2009
15	.9768537	**522 Canon Ink Only Run3 19July2009
16	.9769337	**84 Epson Ink Only Run2 19July2009
17	.9771568	**492 Canon Ink Only Run5 19July2009
18	.9773091	**522 Canon Ink Only Run2 19July2009
19	.9773356	522 Canon Ink Only AVERAGE
20	.9774888	**402 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 13 XEROX RUN2 20080117.SPC

Hit #	Hit Quality	Memo Library Index
1	.5282592	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
2	.6550742	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
3	.6681092	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
4	.7176372	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
5	.7252688	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
6	.8288161	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
7	.8451616	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
8	.8671629	156 Epson Ink Only AVERAGE Slide Subtracted
9	.8700764	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
10	.8884413	312 Canon Ink Only AVERAGE Slide Subtracted
11	.8896111	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
12	.8911639	24 Xerox Ink Only AVERAGE Slide Subtracted
13	.8914962	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
14	.8933529	**199 HP Ink Only Run1 19July2009 Blank Slide Subtracted
15	.8974575	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
16	.8974628	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
17	.9060213	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
18	.913559	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
19	.9159755	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
20	.9168646	**244 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted

Xerox 13 28Nov2008 Run 2

Neat Ink Library

Unknown Spectrum: 13 XEROX RUN2 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.1405181	**199 HP Ink Only Run2 19July2009
2	.1417778	**200 HP Ink Only Run2 19July2009
3	.1425745	**198 HP Ink Only Run4 19July2009
4	.1478975	**198 HP Ink Only Run5 19July2009
5	.1492591	198 HP Ink Only AVERAGE
6	.1497491	**13 Xerox Ink Only Run1 19July2009
7	.1513522	**201 HP Ink Only Run3 19July2009
8	.1542943	**198 HP Ink Only Run6 19July2009
9	.1616187	**201 HP Ink Only Run1 19July2009
10	.1619752	**198 HP Ink Only Run1 19July2009
11	.162241	**198 HP Ink Only Run2 19July2009
12	.1639582	**199 HP Ink Only Run3 19July2009
13	.1657304	**13 Xerox Ink Only Run5 19July2009
14	.1660247	**198 HP Ink Only Run3 19July2009
15	.1683069	**201 HP Ink Only Run2 19July2009
16	.1691639	13 Xerox Ink Only AVERAGE
17	.1715726	**13 Xerox Ink Only Run4 19July2009
18	.1717567	24 Xerox Ink Only AVERAGE
19	.1733503	**17 Kodak Ink Only Run1 19July2009
20	.176939	**201 HP Ink Only Run6 19July2009

Slide Subtracted Library

Unknown Spectrum: 13 XEROX RUN2 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.7655314	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.8073232	13 Xerox Ink Only AVERAGE Slide Subtracted
3	.8100722	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
4	.8152807	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
5	.8295152	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
6	.8499128	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
7	.8611668	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
8	.865957	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
9	.8676471	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
10	.8694597	17 Kodak Ink Only AVERAGE Slide Subtracted
11	.8706177	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
12	.8733082	24 Xerox Ink Only AVERAGE Slide Subtracted
13	.8744524	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
14	.8766463	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
15	.8783941	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
16	.8789989	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
17	.8806276	198 HP Ink Only AVERAGE Slide Subtracted
18	.8830381	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
19	.883862	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
20	.8984507	201 HP Ink Only AVERAGE Slide Subtracted

Xerox 13 28Nov2008 Run 3

Neat Ink Library

Unknown Spectrum: 13 XEROX RUN3 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.2245172	**84 Epson Ink Only Run3 19July2009
2	.3470114	**244 Xerox Ink Only Run2 19July2009
3	.3476442	**13 Xerox Ink Only Run6 19July2009
4	.3613563	**201 HP Ink Only Run1 19July2009
5	.3738286	13 Xerox Ink Only AVERAGE
6	.3794554	**200 HP Ink Only Run3 19July2009
7	.3839055	**17 Kodak Ink Only Run1 19July2009
8	.3848653	**13 Xerox Ink Only Run5 19July2009
9	.3861562	201 HP Ink Only AVERAGE
10	.3885542	**13 Xerox Ink Only Run4 19July2009
11	.3888365	**201 HP Ink Only Run2 19July2009
12	.3906427	**199 HP Ink Only Run2 19July2009
13	.3928952	17 Kodak Ink Only AVERAGE
14	.3932087	**17 Kodak Ink Only Run2 19July2009
15	.3953387	**17 Kodak Ink Only Run3 19July2009
16	.4032429	**200 HP Ink Only Run1 19July2009
17	.4043154	**13 Xerox Ink Only Run1 19July2009
18	.407247	**244 Xerox Ink Only Run1 19July2009
19	.4073822	**200 HP Ink Only Run2 19July2009
20	.4089907	**198 HP Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 13 XEROX RUN3 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.6524763	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8238201	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.8322338	84 Epson Ink Only AVERAGE Slide Subtracted
4	.8583882	13 Xerox Ink Only AVERAGE Slide Subtracted
5	.8670903	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
6	.8704704	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
7	.9047322	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
8	.9132565	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
9	.9173341	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
10	.9173908	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
11	.9198776	**306 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
12	.9264461	**84 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
13	.9302495	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
14	.9318225	**402 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
15	.9326033	402 Canon Ink Only AVERAGE Slide Subtracted
16	.932717	**402 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
17	.9331611	306 Canon Ink Only AVERAGE Slide Subtracted
18	.9332547	**84 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
19	.9335766	**402 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
20	.9337945	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted

Xerox 13 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Xerox 13.SPC

Hit #	Hit Quality	Memo Library Index
1	.297261	**30 Epson Ink Only Run2 19July2009
2	.2990243	30 Epson Ink Only AVERAGE
3	.3044033	**30 Epson Ink Only Run3 19July2009
4	.3054623	**17 Kodak Ink Only Run3 19July2009
5	.3067752	200 HP Ink Only AVERAGE
6	.3127923	205 HP Ink Only AVERAGE
7	.3136785	201 HP Ink Only AVERAGE
8	.316815	**201 HP Ink Only Run1 19July2009
9	.3178387	**17 Kodak Ink Only Run2 19July2009
10	.3270219	17 Kodak Ink Only AVERAGE
11	.3315044	**200 HP Ink Only Run1 19July2009
12	.3324535	**199 HP Ink Only Run4 19July2009
13	.3325734	**201 HP Ink Only Run2 19July2009
14	.3326582	**17 Kodak Ink Only Run1 19July2009
15	.3367512	**205 HP Ink Only Run3 19July2009
16	.3367628	**205 HP Ink Only Run2 19July2009
17	.3406242	**200 HP Ink Only Run3 19July2009
18	.3526432	**318a Canon Clear Ink Only Run3 19July2009
19	.3550424	**30 Epson Ink Only Run1 19July2009
20	.3569347	**205 HP Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Xerox 13.SPC

Hit #	Hit Quality	Memo Library Index
1	.8978657	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.9025971	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.911091	205 HP Ink Only AVERAGE Slide Subtracted
4	.9202961	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.9214683	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
6	.938104	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
7	.9391244	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
8	.9399958	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
9	.9401491	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
10	.9455773	492 Canon Ink Only AVERAGE Slide Subtracted
11	.9456177	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
12	.9464672	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
13	.9469686	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
14	.9515267	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
15	.9524373	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
16	.9527116	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
17	.9544127	04 Okidata Ink Only AVERAGE Slide Subtracted
18	.9549728	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
19	.9555841	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
20	.9565651	22 Kodak Ink Only AVERAGE Slide Subtracted

Kodak 17 12Nov2007 Run 1

Neat Ink Library

Unknown Spectrum: 17 KODAK 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.0799878	**201 HP Ink Only Run1 19July2009
2	.099819	**201 HP Ink Only Run2 19July2009
3	.1060856	**17 Kodak Ink Only Run1 19July2009
4	.1090651	17 Kodak Ink Only AVERAGE
5	.1119903	201 HP Ink Only AVERAGE
6	.1129107	**200 HP Ink Only Run3 19July2009
7	.1133448	**17 Kodak Ink Only Run2 19July2009
8	.1138038	**17 Kodak Ink Only Run3 19July2009
9	.1224735	**13 Xerox Ink Only Run6 19July2009
10	.1240105	13 Xerox Ink Only AVERAGE
11	.126283	**198 HP Ink Only Run4 19July2009
12	.1274425	**13 Xerox Ink Only Run5 19July2009
13	.1301209	**201 HP Ink Only Run3 19July2009
14	.1318532	**13 Xerox Ink Only Run4 19July2009
15	.1358102	**13 Xerox Ink Only Run2 19July2009
16	.1379907	**199 HP Ink Only Run2 19July2009
17	.1386146	198 HP Ink Only AVERAGE
18	.1463612	**198 HP Ink Only Run6 19July2009
19	.146906	**13 Xerox Ink Only Run1 19July2009
20	.1473265	24 Xerox Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 17 KODAK 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.8056633	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.8301452	13 Xerox Ink Only AVERAGE Slide Subtracted
3	.8305585	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
4	.8376758	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
5	.8576892	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
6	.8940325	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
7	.8950498	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
8	.9006703	24 Xerox Ink Only AVERAGE Slide Subtracted
9	.9019437	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
10	.9022275	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
11	.9047382	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
12	.9077246	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
13	.9086325	17 Kodak Ink Only AVERAGE Slide Subtracted
14	.9095493	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
15	.9223449	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
16	.9242883	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
17	.9291016	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
18	.9295585	198 HP Ink Only AVERAGE Slide Subtracted
19	.9296879	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
20	.9351422	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted

Kodak 17 17Jan2008 Run 1

Neat Ink Library

Unknown Spectrum: 17 KODAK 20080117.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.103254	**198 HP Ink Only Run4 19July2009		
2	.1116185	**201 HP Ink Only Run3 19July2009		
3	.1136765	198 HP Ink Only AVERAGE		
4	.1136954	**199 HP Ink Only Run2 19July2009		
5	.113963	**13 Xerox Ink Only Run1 19July2009		
6	.1155642	**198 HP Ink Only Run5 19July2009		
7	.1180798	**13 Xerox Ink Only Run5 19July2009		
8	.1206023	24 Xerox Ink Only AVERAGE		
9	.120943	**198 HP Ink Only Run6 19July2009		
10	.1210234	**200 HP Ink Only Run2 19July2009		
11	.1222326	13 Xerox Ink Only AVERAGE		
12	.1243122	**13 Xerox Ink Only Run4 19July2009		
13	.1243691	**201 HP Ink Only Run1 19July2009		
14	.1288702	**201 HP Ink Only Run2 19July2009		
15	.135523	**13 Xerox Ink Only Run6 19July2009		
16	.1356548	**198 HP Ink Only Run1 19July2009		
17	.1359913	**24 Xerox Ink Only Run1 19July2009		
18	.1360278	**17 Kodak Ink Only Run1 19July2009		
19	.1371669	**198 HP Ink Only Run2 19July2009		
20	.1386164	24 Xerox Ink Only R1R2 AVERAGE		

Slide Subtracted Library

Unknown Spectrum: 17 KODAK 20080117.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.7711874	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted		
2	.8090516	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted		
3	.8097818	13 Xerox Ink Only AVERAGE Slide Subtracted		
4	.8188187	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted		
5	.8675381	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted		
6	.8782822	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted		
7	.8797337	24 Xerox Ink Only AVERAGE Slide Subtracted		
8	.8814048	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted		
9	.8827385	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3		
10	.8866138	17 Kodak Ink Only AVERAGE Slide Subtracted		
11	.888288	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted		
12	.8883873	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted		
13	.8884274	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted		
14	.8884524	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted		
15	.8946515	198 HP Ink Only AVERAGE Slide Subtracted		
16	.8982068	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted		
17	.9048992	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted		
18	.9089287	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted		
19	.9091793	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted		
20	.9106359	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted		

Kodak 17 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 17 KODAK 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.1294714	**198 HP Ink Only Run4 19July2009
2	.1368036	**198 HP Ink Only Run5 19July2009
3	.1372526	**201 HP Ink Only Run3 19July2009
4	.1386019	198 HP Ink Only AVERAGE
5	.1411952	**199 HP Ink Only Run2 19July2009
6	.1436417	**13 Xerox Ink Only Run1 19July2009
7	.1458294	**198 HP Ink Only Run6 19July2009
8	.1463752	**200 HP Ink Only Run2 19July2009
9	.1534215	**13 Xerox Ink Only Run5 19July2009
10	.1563274	24 Xerox Ink Only AVERAGE
11	.1568908	13 Xerox Ink Only AVERAGE
12	.1581892	**201 HP Ink Only Run1 19July2009
13	.1596695	**13 Xerox Ink Only Run4 19July2009
14	.1615599	**201 HP Ink Only Run2 19July2009
15	.1639164	**198 HP Ink Only Run1 19July2009
16	.1649235	**198 HP Ink Only Run2 19July2009
17	.1660359	**199 HP Ink Only Run3 19July2009
18	.1661162	**201 HP Ink Only Run6 19July2009
19	.1671858	**13 Xerox Ink Only Run6 19July2009
20	.1675276	**17 Kodak Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 17 KODAK 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.7650539	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.8102994	13 Xerox Ink Only AVERAGE Slide Subtracted
3	.8113396	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
4	.8212892	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
5	.8622112	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
6	.8635017	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
7	.867813	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
8	.8715975	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.8760363	17 Kodak Ink Only AVERAGE Slide Subtracted
10	.877459	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
11	.8789884	198 HP Ink Only AVERAGE Slide Subtracted
12	.883809	24 Xerox Ink Only AVERAGE Slide Subtracted
13	.8863169	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
14	.891171	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
15	.8921539	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
16	.8927498	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
17	.8941255	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
18	.8974922	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
19	.899985	201 HP Ink Only AVERAGE Slide Subtracted
20	.9002535	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted

Kodak 17 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 17 KODAK 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.1300552	**201 HP Ink Only Run1 19July2009
2	.1492931	**17 Kodak Ink Only Run3 19July2009
3	.1502763	201 HP Ink Only AVERAGE
4	.1516964	**17 Kodak Ink Only Run1 19July2009
5	.1535191	**201 HP Ink Only Run2 19July2009
6	.1553558	17 Kodak Ink Only AVERAGE
7	.1557131	**17 Kodak Ink Only Run2 19July2009
8	.157896	**200 HP Ink Only Run3 19July2009
9	.1811159	200 HP Ink Only AVERAGE
10	.187315	**199 HP Ink Only Run2 19July2009
11	.1880904	**200 HP Ink Only Run1 19July2009
12	.190962	**13 Xerox Ink Only Run6 19July2009
13	.1919746	**198 HP Ink Only Run4 19July2009
14	.1949019	**244 Xerox Ink Only Run1 19July2009
15	.1970633	**201 HP Ink Only Run3 19July2009
16	.1976113	**198 HP Ink Only Run1 19July2009
17	.1996176	198 HP Ink Only AVERAGE
18	.2003796	**198 HP Ink Only Run2 19July2009
19	.2021573	13 Xerox Ink Only AVERAGE
20	.2056793	**198 HP Ink Only Run6 19July2009

Slide Subtracted Library

Unknown Spectrum: 17 KODAK 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.8356459	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8718476	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.8941233	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.8957803	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
5	.902074	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
6	.9257776	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
7	.9433411	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
8	.9459528	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
9	.9474994	17 Kodak Ink Only AVERAGE Slide Subtracted
10	.9479807	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
11	.9536893	24 Xerox Ink Only AVERAGE Slide Subtracted
12	.9546503	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
13	.9547339	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
14	.958171	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
15	.9584816	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
16	.9592685	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
17	.9636714	84 Epson Ink Only AVERAGE Slide Subtracted
18	.9646865	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
19	.9662682	198 HP Ink Only AVERAGE Slide Subtracted
20	.9673723	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted

Kodak 17 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 17 KODAK 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.1956698	**84 Epson Ink Only Run3 19July2009
2	.3419739	**13 Xerox Ink Only Run6 19July2009
3	.3443971	**201 HP Ink Only Run1 19July2009
4	.3670669	201 HP Ink Only AVERAGE
5	.3735331	**200 HP Ink Only Run3 19July2009
6	.3744349	**201 HP Ink Only Run2 19July2009
7	.376306	**17 Kodak Ink Only Run1 19July2009
8	.3782327	**17 Kodak Ink Only Run2 19July2009
9	.3795527	**17 Kodak Ink Only Run3 19July2009
10	.3806285	13 Xerox Ink Only AVERAGE
11	.3817303	17 Kodak Ink Only AVERAGE
12	.385997	**244 Xerox Ink Only Run2 19July2009
13	.3935019	200 HP Ink Only AVERAGE
14	.396383	**13 Xerox Ink Only Run5 19July2009
15	.3993324	**13 Xerox Ink Only Run4 19July2009
16	.4085246	**199 HP Ink Only Run2 19July2009
17	.4132443	**201 HP Ink Only Run3 19July2009
18	.4147339	**198 HP Ink Only Run4 19July2009
19	.4158337	**200 HP Ink Only Run1 19July2009
20	.4214724	198 HP Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 17 KODAK 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.5986834	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.7883731	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.8329223	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.8454301	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
5	.850458	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
6	.8576097	84 Epson Ink Only AVERAGE Slide Subtracted
7	.8775654	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
8	.8903109	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
9	.9055427	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
10	.90724	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
11	.9077956	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
12	.9093392	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
13	.9098231	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
14	.9131908	17 Kodak Ink Only AVERAGE Slide Subtracted
15	.9152307	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
16	.9223554	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
17	.9258598	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted
18	.9261782	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
19	.9268301	198 HP Ink Only AVERAGE Slide Subtracted
20	.9303738	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted

Kodak 17 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 17 KODAK 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.1568953	**84 Epson Ink Only Run3 19July2009
2	.1571416	**201 HP Ink Only Run1 19July2009
3	.1697527	**13 Xerox Ink Only Run6 19July2009
4	.1806203	**200 HP Ink Only Run3 19July2009
5	.1834404	**201 HP Ink Only Run2 19July2009
6	.1852608	**17 Kodak Ink Only Run1 19July2009
7	.1853313	201 HP Ink Only AVERAGE
8	.1905703	13 Xerox Ink Only AVERAGE
9	.1914601	**17 Kodak Ink Only Run2 19July2009
10	.192127	17 Kodak Ink Only AVERAGE
11	.1968011	**17 Kodak Ink Only Run3 19July2009
12	.1984484	**244 Xerox Ink Only Run2 19July2009
13	.2009451	**13 Xerox Ink Only Run5 19July2009
14	.2041618	**13 Xerox Ink Only Run4 19July2009
15	.2076262	**199 HP Ink Only Run2 19July2009
16	.2153167	**198 HP Ink Only Run4 19July2009
17	.2184606	**201 HP Ink Only Run3 19July2009
18	.2203089	**13 Xerox Ink Only Run1 19July2009
19	.223126	198 HP Ink Only AVERAGE
20	.2270952	200 HP Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 17 KODAK 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.6929203	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.7758166	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.8120477	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.8200272	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
5	.8235644	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
6	.877848	84 Epson Ink Only AVERAGE Slide Subtracted
7	.8806701	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
8	.8851251	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.8959597	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
10	.8971891	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
11	.8996173	24 Xerox Ink Only AVERAGE Slide Subtracted
12	.9011645	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
13	.9012738	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
14	.9017807	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
15	.9040022	17 Kodak Ink Only AVERAGE Slide Subtracted
16	.9045189	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
17	.9069849	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
18	.9094068	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
19	.9132589	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
20	.9160422	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted

Kodak 17 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Kodak 17.SPC

Hit #	Hit Quality	Memo Library Index
1	.157947	**84 Epson Ink Only Run3 19July2009
2	.2501003	**201 HP Ink Only Run1 19July2009
3	.2541979	**13 Xerox Ink Only Run6 19July2009
4	.2747513	201 HP Ink Only AVERAGE
5	.2765037	**200 HP Ink Only Run3 19July2009
6	.2800815	**201 HP Ink Only Run2 19July2009
7	.2814446	**17 Kodak Ink Only Run1 19July2009
8	.2849416	**17 Kodak Ink Only Run2 19July2009
9	.2866182	**17 Kodak Ink Only Run3 19July2009
10	.2868838	13 Xerox Ink Only AVERAGE
11	.2877663	17 Kodak Ink Only AVERAGE
12	.29035	**244 Xerox Ink Only Run2 19July2009
13	.3011025	**13 Xerox Ink Only Run5 19July2009
14	.3041915	**13 Xerox Ink Only Run4 19July2009
15	.3045566	200 HP Ink Only AVERAGE
16	.3123582	**199 HP Ink Only Run2 19July2009
17	.3202781	**198 HP Ink Only Run4 19July2009
18	.3208398	**201 HP Ink Only Run3 19July2009
19	.3234833	**200 HP Ink Only Run1 19July2009
20	.3275672	198 HP Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: AVERAGE Kodak 17.SPC

Hit #	Hit Quality	Memo Library Index
1	.6330513	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.7828392	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.8231466	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.8338283	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
5	.8381285	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
6	.8616408	84 Epson Ink Only AVERAGE Slide Subtracted
7	.8840899	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
8	.89227	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
9	.8946851	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
10	.9049543	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
11	.9084181	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
12	.9113874	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
13	.9114456	17 Kodak Ink Only AVERAGE Slide Subtracted
14	.9129726	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
15	.9144611	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
16	.9177402	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
17	.9184235	24 Xerox Ink Only AVERAGE Slide Subtracted
18	.919391	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
19	.922998	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
20	.9230326	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted

Kodak 22 12Nov2007 Run 1

Neat Ink Library

Unknown Spectrum: 22 KODAK 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.2348924	**13 Xerox Ink Only Run2 19July2009
2	.278181	**201 HP Ink Only Run1 19July2009
3	.2910738	**201 HP Ink Only Run2 19July2009
4	.3033999	17 Kodak Ink Only AVERAGE
5	.3049619	**17 Kodak Ink Only Run2 19July2009
6	.3067765	**17 Kodak Ink Only Run3 19July2009
7	.3124021	**17 Kodak Ink Only Run1 19July2009
8	.3165004	201 HP Ink Only AVERAGE
9	.3208661	**201 HP Ink Only Run3 19July2009
10	.3226045	**200 HP Ink Only Run3 19July2009
11	.3244255	**198 HP Ink Only Run4 19July2009
12	.3323837	**30 Epson Ink Only Run1 19July2009
13	.345405	**24 Xerox Ink Only Run1 19July2009
14	.3461434	198 HP Ink Only AVERAGE
15	.3554133	24 Xerox Ink Only AVERAGE
16	.3587673	**198 HP Ink Only Run6 19July2009
17	.360262	**13 Xerox Ink Only Run4 19July2009
18	.3611716	24 Xerox Ink Only R1R2 AVERAGE
19	.3623956	**13 Xerox Ink Only Run5 19July2009
20	.3631602	13 Xerox Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 22 KODAK 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.8065336	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8114145	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
3	.820833	17 Kodak Ink Only AVERAGE Slide Subtracted
4	.8225287	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
5	.826629	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
6	.8302312	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
7	.8305398	13 Xerox Ink Only AVERAGE Slide Subtracted
8	.8322117	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
9	.8347506	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
10	.837051	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted
11	.8374406	318a Canon Clear Ink Only AVERAGE Slide Subtracted
12	.8416457	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
13	.8544226	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
14	.854597	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
15	.8551949	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
16	.8570647	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
17	.8608835	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
18	.867056	**201 HP Ink Only Run2 19July2009 Blank Slide Subtracted
19	.8695561	198 HP Ink Only AVERAGE Slide Subtracted
20	.8728734	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted

Kodak 22 17Jan2008 Run 1

Neat Ink Library

Unknown Spectrum: 22 KODAK 20080117.SPC

Hit #	Hit Quality	Memo Library Index
1	.3683625	**205 HP Ink Only Run4 19July2009
2	.375585	**205 HP Ink Only Run3 19July2009
3	.3861059	205 HP Ink Only AVERAGE
4	.4962144	**22 Kodak Ink Only Run3 19July2009
5	.5053784	**205 HP Ink Only Run2 19July2009
6	.5098122	**22 Kodak Ink Only Run2 19July2009
7	.5109969	22 Kodak Ink Only AVERAGE
8	.527572	**30 Epson Ink Only Run3 19July2009
9	.5400172	30 Epson Ink Only AVERAGE
10	.5504482	**30 Epson Ink Only Run2 19July2009
11	.5515085	**312 Canon Ink Only Run3 19July2009
12	.5564014	**348 Canon Ink Only Run2 19July2009
13	.5577963	348 Canon Ink Only AVERAGE
14	.5597949	**282 Canon Ink Only Run2 19July2009
15	.5624681	282 Canon Ink Only AVERAGE
16	.5647328	**318a Canon Clear Ink Only Run4 19July2009
17	.5679777	318a Canon Clear Ink Only AVERAGE
18	.5686792	**318a Canon Clear Ink Only Run2 19July2009
19	.5703243	**318a Canon Clear Ink Only Run3 19July2009
20	.5707403	**30 Epson Ink Only Run4 19July2009

Slide Subtracted Library

Unknown Spectrum: 22 KODAK 20080117.SPC

Hit #	Hit Quality	Memo Library Index
1	.6829085	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.7010788	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.7374519	205 HP Ink Only AVERAGE Slide Subtracted
4	.7480286	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
5	.7593814	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
6	.759789	04 Okidata Ink Only AVERAGE Slide Subtracted
7	.7601001	492 Canon Ink Only AVERAGE Slide Subtracted
8	.7610977	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
9	.7626876	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
10	.762984	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
11	.7656873	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
12	.7658728	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
13	.7713311	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
14	.7722604	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
15	.772474	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
16	.7725464	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
17	.7743088	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
18	.7745478	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
19	.7756066	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20	.7758141	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted

Kodak 22 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 22 KODAK 20080627.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.8257279	205 HP Ink Only AVERAGE		
2	.8278969	**22 Kodak Ink Only Run3 19July2009		
3	.8292409	22 Kodak Ink Only AVERAGE		
4	.8332718	**205 HP Ink Only Run3 19July2009		
5	.835619	**22 Kodak Ink Only Run2 19July2009		
6	.8374322	**205 HP Ink Only Run4 19July2009		
7	.8382117	**205 HP Ink Only Run2 19July2009		
8	.8445852	**04 Okidata Ink Only Black Spot Run1 19July2009		
9	.8458463	**04 Okidata Ink Only Black Spot Run2 19July2009		
10	.8490532	**22 Kodak Ink Only Run1 19July2009		
11	.8529064	04 Okidata Ink Only Black Spot AVERAGE		
12	.8597063	**33 Epson Ink Only Black Spot Run1 19July2009		
13	.863933	**30 Epson Ink Only Run3 19July2009		
14	.8678286	**33 Epson Ink Only Black Spot Run2 19July2009		
15	.8691195	**30 Epson Ink Only Run2 19July2009		
16	.870504	30 Epson Ink Only AVERAGE		
17	.8720247	33 Epson Ink Only Black Spot AVERAGE		
18	.874676	04 Okidata Ink Only AVERAGE		
19	.877422	**04 Okidata Ink Only Black Spot Run3 19July2009		
20	.8827676	**384 Canon Ink Only Run3 19July2009		

Slide Subtracted Library

Unknown Spectrum: 22 KODAK 20080627.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.8352172	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted		
2	.8476627	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted		
3	.8519775	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted		
4	.85342	22 Kodak Ink Only AVERAGE Slide Subtracted		
5	.8574254	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted		
6	.8618355	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted		
7	.8638806	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted		
8	.8679752	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted		
9	.8683394	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted		
10	.8719393	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted		
11	.8723028	**244 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted		
12	.872953	205 HP Ink Only AVERAGE Slide Subtracted		
13	.8755243	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted		
14	.8818119	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted		
15	.8824273	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted		
16	.8841385	33 Epson Ink Only AVERAGE Slide Subtracted		
17	.8845906	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted		
18	.8861521	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted		
19	.887542	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted		
20	.8952917	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted		

Kodak 22 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 22 KODAK 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.8773798	**205 HP Ink Only Run2 19July2009
2	.8937492	205 HP Ink Only AVERAGE
3	.8961385	**205 HP Ink Only Run4 19July2009
4	.8961684	**205 HP Ink Only Run3 19July2009
5	.9275557	**84 Epson Ink Only Run3 19July2009
6	.9282846	**22 Kodak Ink Only Run1 19July2009
7	.9342855	**30 Epson Ink Only Run4 19July2009
8	.9352373	**04 Okidata Ink Only Black Spot Run2 19July2009
9	.935536	**30 Epson Ink Only Run3 19July2009
10	.9364824	**04 Okidata Ink Only Black Spot Run1 19July2009
11	.9382089	**17 Kodak Ink Only Run3 19July2009
12	.9400099	**13 Xerox Ink Only Run2 19July2009
13	.9418525	30 Epson Ink Only AVERAGE
14	.9426465	**205 HP Ink Only Run1 19July2009
15	.9427181	**33 Epson Ink Only Black Spot Run1 19July2009
16	.9432061	**17 Kodak Ink Only Run2 19July2009
17	.9441567	04 Okidata Ink Only Black Spot AVERAGE
18	.9441679	**201 HP Ink Only Run1 19July2009
19	.9441726	**30 Epson Ink Only Run2 19July2009
20	.9447646	**22 Kodak Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 22 KODAK 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.889419	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
2	.8962596	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.8974567	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
4	.8990773	205 HP Ink Only AVERAGE Slide Subtracted
5	.9374772	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
6	.9446321	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
7	.9449337	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
8	.9467128	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
9	.9470684	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
10	.9475051	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
11	.9482032	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
12	.9513341	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
13	.9518172	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
14	.9522022	17 Kodak Ink Only AVERAGE Slide Subtracted
15	.9526731	**318a Canon Clear Ink Only Run1 19July2009 Blank Slide Subtracted
16	.9531396	22 Kodak Ink Only AVERAGE Slide Subtracted
17	.9537609	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
18	.9543388	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
19	.9562257	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
20	.9572797	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted

Kodak 22 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 22 KODAK 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.7971643	**13 Xerox Ink Only Run2 19July2009
2	.8016489	**13 Xerox Ink Only Run3 19July2009
3	.8329095	**24 Xerox Ink Only Run1 19July2009
4	.8397315	24 Xerox Ink Only R1R2 AVERAGE
5	.8453698	**24 Xerox Ink Only Run2 19July2009
6	.8636876	24 Xerox Ink Only AVERAGE
7	.8832802	**13 Xerox Ink Only Run4 19July2009
8	.8857655	**223 Canon Ink Only Run3 19July2009
9	.8919887	**348 Canon Ink Only Run2 19July2009
10	.8920744	13 Xerox Ink Only AVERAGE
11	.8922444	348 Canon Ink Only AVERAGE
12	.8951464	**217 Canon Ink Only Run1 19July2009
13	.8955297	**318 Canon Ink Only Run2 19July2009
14	.8956689	**217 Canon Ink Only Run3 19July2009
15	.8958453	217 Canon Ink Only AVERAGE
16	.896227	**13 Xerox Ink Only Run6 19July2009
17	.896451	318 Canon Ink Only AVERAGE
18	.8966214	**201 HP Ink Only Run1 19July2009
19	.8968222	**318 Canon Ink Only Run3 19July2009
20	.8968545	**217 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: 22 KODAK 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.6200202	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
2	.6774891	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
3	.6793074	24 Xerox Ink Only AVERAGE Slide Subtracted
4	.6808256	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
5	.6832395	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
6	.6836317	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
7	.7375786	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
8	.7557349	13 Xerox Ink Only AVERAGE Slide Subtracted
9	.7581711	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
10	.7674659	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
11	.7676406	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
12	.7690703	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
13	.7788154	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
14	.7803381	17 Kodak Ink Only AVERAGE Slide Subtracted
15	.7807439	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
16	.7837225	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
17	.7875155	**201 HP Ink Only Run2 19July2009 Blank Slide Subtracted
18	.7878969	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
19	.8014551	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
20	.8263961	**201 HP Ink Only Run3 19July2009 Blank Slide Subtracted

Kodak 22 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 22 KODAK 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.6266825	**84 Epson Ink Only Run3 19July2009
2	.6365942	**244 Xerox Ink Only Run2 19July2009
3	.693599	**244 Xerox Ink Only Run4 19July2009
4	.6953858	**84 Epson Ink Only Run2 19July2009
5	.7054175	**84 Epson Ink Only Run5 19July2009
6	.7061266	**199 HP Ink Only Run1 19July2009
7	.7074662	84 Epson Ink Only AVERAGE
8	.7089733	**84 Epson Ink Only Run1 19July2009
9	.7137556	**24 Xerox Ink Only Run4 19July2009
10	.7138119	**244 Xerox Ink Only Run1 19July2009
11	.7172596	**200 HP Ink Only Run1 19July2009
12	.7205023	**13 Xerox Ink Only Run1 19July2009
13	.7234888	**200 HP Ink Only Run2 19July2009
14	.7244866	**24 Xerox Ink Only Run3 19July2009
15	.7274259	**199 HP Ink Only Run2 19July2009
16	.7330523	**199 HP Ink Only Run3 19July2009
17	.7331619	**13 Xerox Ink Only Run3 19July2009
18	.7332161	**13 Xerox Ink Only Run6 19July2009
19	.7347595	**198 HP Ink Only Run1 19July2009
20	.7356204	**198 HP Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: 22 KODAK 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.7542862	84 Epson Ink Only AVERAGE Slide Subtracted
2	.786942	**84 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
3	.7883118	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
4	.800506	**84 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
5	.8087345	**84 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
6	.813447	**244 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
7	.842642	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
8	.9255638	**402 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
9	.927918	402 Canon Ink Only AVERAGE Slide Subtracted
10	.9280049	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
11	.9282685	**402 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
12	.9299141	**402 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
13	.9307964	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
14	.9309782	327 Canon Ink Only AVERAGE Slide Subtracted
15	.9310628	**327 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
16	.9318637	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
17	.9361914	**306 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
18	.936606	**306 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
19	.9384031	306 Canon Ink Only AVERAGE Slide Subtracted
20	.9385893	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Kodak 22 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Kodak 22.SPC

Hit #	Hit Quality	Memo Library Index
1	.542214	**84 Epson Ink Only Run3 19July2009
2	.6108561	**13 Xerox Ink Only Run3 19July2009
3	.6154819	**13 Xerox Ink Only Run6 19July2009
4	.6257855	**24 Xerox Ink Only Run1 19July2009
5	.6284953	24 Xerox Ink Only R1R2 AVERAGE
6	.630342	**24 Xerox Ink Only Run2 19July2009
7	.6448066	13 Xerox Ink Only AVERAGE
8	.6461404	**13 Xerox Ink Only Run4 19July2009
9	.6556307	24 Xerox Ink Only AVERAGE
10	.6658091	**13 Xerox Ink Only Run5 19July2009
11	.6791398	**244 Xerox Ink Only Run2 19July2009
12	.7194746	**13 Xerox Ink Only Run1 19July2009
13	.7234437	**13 Xerox Ink Only Run2 19July2009
14	.7587037	**24 Xerox Ink Only Run4 19July2009
15	.7656372	**201 HP Ink Only Run1 19July2009
16	.7758088	**200 HP Ink Only Run3 19July2009
17	.7792403	**84 Epson Ink Only Run5 19July2009
18	.7864035	**201 HP Ink Only Run2 19July2009
19	.7904754	**198 HP Ink Only Run4 19July2009
20	.792436	**84 Epson Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Kodak 22.SPC

Hit #	Hit Quality	Memo Library Index
1	.5621082	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.5780717	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
3	.5956216	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.6088617	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
5	.6203744	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
6	.6239642	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
7	.6567444	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
8	.6622649	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
9	.6633521	24 Xerox Ink Only AVERAGE Slide Subtracted
10	.6730893	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
11	.6834497	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
12	.7145808	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
13	.7192879	84 Epson Ink Only AVERAGE Slide Subtracted
14	.7218756	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
15	.7994668	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
16	.8187435	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
17	.8221808	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
18	.8274637	**199 HP Ink Only Run1 19July2009 Blank Slide Subtracted
19	.8301455	244 Xerox Ink Only AVERAGE Slide Subtracted
20	.8331932	**84 Epson Ink Only Run1 19July2009 Blank Slide Subtracted

Xerox 24 12Nov2007 Run 1

Neat Ink Library

Unknown Spectrum: 24 XEROX 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.1150539	**201 HP Ink Only Run1 19July2009
2	.1403599	**17 Kodak Ink Only Run3 19July2009
3	.1420822	**201 HP Ink Only Run2 19July2009
4	.1435083	201 HP Ink Only AVERAGE
5	.1458815	**200 HP Ink Only Run3 19July2009
6	.1473096	**17 Kodak Ink Only Run1 19July2009
7	.149203	17 Kodak Ink Only AVERAGE
8	.1493771	**17 Kodak Ink Only Run2 19July2009
9	.1671646	**13 Xerox Ink Only Run6 19July2009
10	.1762948	13 Xerox Ink Only AVERAGE
11	.1828088	**13 Xerox Ink Only Run5 19July2009
12	.1848212	**13 Xerox Ink Only Run2 19July2009
13	.1860433	200 HP Ink Only AVERAGE
14	.1870171	**13 Xerox Ink Only Run4 19July2009
15	.1903717	**198 HP Ink Only Run4 19July2009
16	.1926588	**201 HP Ink Only Run3 19July2009
17	.2039285	**199 HP Ink Only Run2 19July2009
18	.2039296	198 HP Ink Only AVERAGE
19	.2067325	**24 Xerox Ink Only Run1 19July2009
20	.2094029	**244 Xerox Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 24 XEROX 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.8236531	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.8306689	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
3	.8418261	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.8423132	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
5	.8493601	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
6	.8979262	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
7	.9103971	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
8	.9114963	24 Xerox Ink Only AVERAGE Slide Subtracted
9	.9117392	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
10	.9120409	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
11	.9130396	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
12	.9178146	17 Kodak Ink Only AVERAGE Slide Subtracted
13	.9184928	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
14	.9191388	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
15	.9279751	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
16	.9358408	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
17	.9384182	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
18	.9393455	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
19	.9436908	198 HP Ink Only AVERAGE Slide Subtracted
20	.9437038	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted

Xerox 24 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 24 XEROX 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.1231342	**199 HP Ink Only Run2 19July2009
2	.1239337	**198 HP Ink Only Run4 19July2009
3	.1244889	**200 HP Ink Only Run2 19July2009
4	.1255101	**198 HP Ink Only Run5 19July2009
5	.1292879	198 HP Ink Only AVERAGE
6	.1335498	**201 HP Ink Only Run3 19July2009
7	.1337573	**13 Xerox Ink Only Run1 19July2009
8	.1344497	**198 HP Ink Only Run6 19July2009
9	.1420006	**198 HP Ink Only Run1 19July2009
10	.1424521	**199 HP Ink Only Run3 19July2009
11	.1433457	**198 HP Ink Only Run2 19July2009
12	.1470586	**198 HP Ink Only Run3 19July2009
13	.1519102	**201 HP Ink Only Run6 19July2009
14	.1539156	**13 Xerox Ink Only Run5 19July2009
15	.1553468	**24 Xerox Ink Only Run4 19July2009
16	.1561573	**200 HP Ink Only Run5 19July2009
17	.1575378	24 Xerox Ink Only AVERAGE
18	.1593564	**201 HP Ink Only Run1 19July2009
19	.159492	**201 HP Ink Only Run5 19July2009
20	.1598217	13 Xerox Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 24 XEROX 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.8054695	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.8448743	13 Xerox Ink Only AVERAGE Slide Subtracted
3	.8449053	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
4	.8532596	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
5	.8925563	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
6	.8928473	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
7	.8995786	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
8	.9019556	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.9065934	17 Kodak Ink Only AVERAGE Slide Subtracted
10	.9078844	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
11	.9079819	198 HP Ink Only AVERAGE Slide Subtracted
12	.9103951	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
13	.9107066	24 Xerox Ink Only AVERAGE Slide Subtracted
14	.9122307	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
15	.9124616	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
16	.915681	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
17	.9196821	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
18	.9212457	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
19	.9261033	201 HP Ink Only AVERAGE Slide Subtracted
20	.9263706	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted

Xerox 24 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 24 XEROX 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.1250813	**199 HP Ink Only Run2 19July2009
2	.1268788	**200 HP Ink Only Run2 19July2009
3	.1309054	**198 HP Ink Only Run4 19July2009
4	.1317126	**13 Xerox Ink Only Run1 19July2009
5	.1331464	**198 HP Ink Only Run5 19July2009
6	.1366708	198 HP Ink Only AVERAGE
7	.1407855	**201 HP Ink Only Run3 19July2009
8	.1419708	**198 HP Ink Only Run6 19July2009
9	.1424903	**198 HP Ink Only Run1 19July2009
10	.1441028	**198 HP Ink Only Run2 19July2009
11	.145159	**199 HP Ink Only Run3 19July2009
12	.148702	**198 HP Ink Only Run3 19July2009
13	.1566793	24 Xerox Ink Only AVERAGE
14	.1569514	**13 Xerox Ink Only Run5 19July2009
15	.1590951	**201 HP Ink Only Run6 19July2009
16	.1623742	**24 Xerox Ink Only Run4 19July2009
17	.1630401	13 Xerox Ink Only AVERAGE
18	.1647588	**201 HP Ink Only Run1 19July2009
19	.1648123	**13 Xerox Ink Only Run4 19July2009
20	.1651696	**200 HP Ink Only Run5 19July2009

Slide Subtracted Library

Unknown Spectrum: 24 XEROX 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.8092641	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.8481011	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
3	.8481263	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.8561907	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
5	.8903118	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
6	.8992432	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
7	.904825	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
8	.9054365	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.9088853	24 Xerox Ink Only AVERAGE Slide Subtracted
10	.9111055	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
11	.911648	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
12	.9119281	17 Kodak Ink Only AVERAGE Slide Subtracted
13	.9125592	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
14	.9138767	198 HP Ink Only AVERAGE Slide Subtracted
15	.9145441	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
16	.9188153	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
17	.9211944	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
18	.9242346	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
19	.929977	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
20	.9321828	201 HP Ink Only AVERAGE Slide Subtracted

Xerox 24 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 24 XEROX 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.1659688	**201 HP Ink Only Run1 19July2009
2	.1753816	**13 Xerox Ink Only Run6 19July2009
3	.1754109	**199 HP Ink Only Run2 19July2009
4	.1787822	13 Xerox Ink Only AVERAGE
5	.181708	**201 HP Ink Only Run2 19July2009
6	.1821657	**13 Xerox Ink Only Run5 19July2009
7	.1824833	**198 HP Ink Only Run4 19July2009
8	.1846369	**200 HP Ink Only Run2 19July2009
9	.1852819	**13 Xerox Ink Only Run4 19July2009
10	.1874193	**201 HP Ink Only Run3 19July2009
11	.1880612	**17 Kodak Ink Only Run1 19July2009
12	.1881038	**13 Xerox Ink Only Run1 19July2009
13	.1896376	198 HP Ink Only AVERAGE
14	.1924628	**200 HP Ink Only Run3 19July2009
15	.1941785	**198 HP Ink Only Run5 19July2009
16	.1945188	17 Kodak Ink Only AVERAGE
17	.1955716	**198 HP Ink Only Run6 19July2009
18	.1966314	**198 HP Ink Only Run1 19July2009
19	.1976	**198 HP Ink Only Run2 19July2009
20	.1986188	**244 Xerox Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: 24 XEROX 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.7546592	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.764133	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.8039185	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.8097227	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
5	.8129543	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
6	.8627127	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
7	.8723927	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
8	.8857228	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.8861171	24 Xerox Ink Only AVERAGE Slide Subtracted
10	.8868428	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
11	.8874328	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
12	.88758	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
13	.8882693	17 Kodak Ink Only AVERAGE Slide Subtracted
14	.8889892	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
15	.8919652	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
16	.8923461	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
17	.8933372	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
18	.8958252	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
19	.8967336	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
20	.8986633	84 Epson Ink Only AVERAGE Slide Subtracted

Xerox 24 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 24 XEROX 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.2175701	**84 Epson Ink Only Run3 19July2009
2	.2372698	**201 HP Ink Only Run1 19July2009
3	.2503763	201 HP Ink Only AVERAGE
4	.254353	**17 Kodak Ink Only Run1 19July2009
5	.2577392	**201 HP Ink Only Run2 19July2009
6	.2596045	**17 Kodak Ink Only Run2 19July2009
7	.2607126	**200 HP Ink Only Run3 19July2009
8	.2607851	17 Kodak Ink Only AVERAGE
9	.2609351	**17 Kodak Ink Only Run3 19July2009
10	.2666512	**199 HP Ink Only Run2 19July2009
11	.2674128	**13 Xerox Ink Only Run6 19July2009
12	.2724946	200 HP Ink Only AVERAGE
13	.2731837	**200 HP Ink Only Run1 19July2009
14	.2741989	**244 Xerox Ink Only Run2 19July2009
15	.2779006	**198 HP Ink Only Run1 19July2009
16	.2795417	**198 HP Ink Only Run2 19July2009
17	.282112	**199 HP Ink Only Run3 19July2009
18	.2831728	**198 HP Ink Only Run3 19July2009
19	.2833771	**200 HP Ink Only Run2 19July2009
20	.285646	**244 Xerox Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 24 XEROX 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.7328965	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8535792	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.8853674	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.8912531	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
5	.896127	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
6	.9032844	84 Epson Ink Only AVERAGE Slide Subtracted
7	.9246876	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
8	.9302891	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.9406354	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
10	.9416577	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
11	.9416645	17 Kodak Ink Only AVERAGE Slide Subtracted
12	.9418049	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
13	.9424985	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
14	.9495022	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
15	.9556133	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
16	.9557381	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
17	.9559264	198 HP Ink Only AVERAGE Slide Subtracted
18	.9560158	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
19	.9584818	24 Xerox Ink Only AVERAGE Slide Subtracted
20	.9590786	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3

Xerox 24 27June2008 Run 2

Neat Ink Library

Unknown Spectrum: 24 XEROX RUN2 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.2176941	**17 Kodak Ink Only Run3 19July2009
2	.2189071	200 HP Ink Only AVERAGE
3	.2216413	**201 HP Ink Only Run1 19July2009
4	.2229506	201 HP Ink Only AVERAGE
5	.2312353	**17 Kodak Ink Only Run2 19July2009
6	.2333888	**200 HP Ink Only Run1 19July2009
7	.2377451	17 Kodak Ink Only AVERAGE
8	.2395871	**17 Kodak Ink Only Run1 19July2009
9	.2419812	**201 HP Ink Only Run2 19July2009
10	.2441838	**200 HP Ink Only Run3 19July2009
11	.244472	**199 HP Ink Only Run4 19July2009
12	.2621624	**199 HP Ink Only Run1 19July2009
13	.2634811	**244 Xerox Ink Only Run1 19July2009
14	.2946783	**198 HP Ink Only Run1 19July2009
15	.2960214	**198 HP Ink Only Run4 19July2009
16	.2963753	**198 HP Ink Only Run2 19July2009
17	.296725	**199 HP Ink Only Run2 19July2009
18	.2981597	**30 Epson Ink Only Run2 19July2009
19	.2992072	**201 HP Ink Only Run3 19July2009
20	.2992938	**198 HP Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 24 XEROX RUN2 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.867425	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.9485152	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.9536453	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
4	.9607743	13 Xerox Ink Only AVERAGE Slide Subtracted
5	.9611156	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
6	.9631914	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
7	.9658055	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
8	.9660222	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
9	.9661378	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
10	.9678296	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
11	.969489	17 Kodak Ink Only AVERAGE Slide Subtracted
12	.970409	205 HP Ink Only AVERAGE Slide Subtracted
13	.9706159	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
14	.9711285	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
15	.9717333	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
16	.9722666	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
17	.9722786	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
18	.9735857	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
19	.974776	492 Canon Ink Only AVERAGE Slide Subtracted
20	.9751267	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Xerox 24 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Xerox 24.SPC

Hit #	Hit Quality	Memo Library Index
1	.2642751	**17 Kodak Ink Only Run3 19July2009
2	.2676545	**201 HP Ink Only Run1 19July2009
3	.2702043	201 HP Ink Only AVERAGE
4	.2748792	200 HP Ink Only AVERAGE
5	.2756837	**17 Kodak Ink Only Run2 19July2009
6	.2839854	17 Kodak Ink Only AVERAGE
7	.2858241	**201 HP Ink Only Run2 19July2009
8	.2885366	**17 Kodak Ink Only Run1 19July2009
9	.2911326	**30 Epson Ink Only Run2 19July2009
10	.2943103	30 Epson Ink Only AVERAGE
11	.2958431	**200 HP Ink Only Run3 19July2009
12	.3017538	**30 Epson Ink Only Run3 19July2009
13	.303598	**200 HP Ink Only Run1 19July2009
14	.3127418	**199 HP Ink Only Run4 19July2009
15	.3270829	205 HP Ink Only AVERAGE
16	.3286037	**30 Epson Ink Only Run1 19July2009
17	.3350837	**199 HP Ink Only Run1 19July2009
18	.3389553	**244 Xerox Ink Only Run1 19July2009
19	.344551	**201 HP Ink Only Run3 19July2009
20	.3452969	**198 HP Ink Only Run4 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Xerox 24.SPC

Hit #	Hit Quality	Memo Library Index
1	.8948365	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.919499	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
3	.9225331	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
4	.9285862	205 HP Ink Only AVERAGE Slide Subtracted
5	.9317331	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
6	.9520987	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
7	.9525318	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
8	.9537002	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
9	.9537351	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
10	.954106	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11	.9557808	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
12	.9565067	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
13	.9573342	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
14	.957472	17 Kodak Ink Only AVERAGE Slide Subtracted
15	.9583163	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
16	.9583364	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
17	.959016	492 Canon Ink Only AVERAGE Slide Subtracted
18	.9590198	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
19	.9590638	318a Canon Clear Ink Only AVERAGE Slide Subtracted
20	.9602301	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 30 12Nov2007 Run 1

Neat Ink Library

Unknown Spectrum: 30 EPSON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.0938624	**24 Xerox Ink Only Run1 19July2009
2	.1156769	24 Xerox Ink Only R1R2 AVERAGE
3	.1258937	**13 Xerox Ink Only Run6 19July2009
4	.1268865	13 Xerox Ink Only AVERAGE
5	.1279313	24 Xerox Ink Only AVERAGE
6	.1280818	**13 Xerox Ink Only Run4 19July2009
7	.1343379	**13 Xerox Ink Only Run5 19July2009
8	.1376973	**24 Xerox Ink Only Run2 19July2009
9	.1409221	**13 Xerox Ink Only Run2 19July2009
10	.1429894	**201 HP Ink Only Run1 19July2009
11	.1619596	**201 HP Ink Only Run2 19July2009
12	.1644234	**13 Xerox Ink Only Run3 19July2009
13	.1794657	**201 HP Ink Only Run3 19July2009
14	.1796829	**198 HP Ink Only Run4 19July2009
15	.1822822	**13 Xerox Ink Only Run1 19July2009
16	.185643	**17 Kodak Ink Only Run1 19July2009
17	.1864768	17 Kodak Ink Only AVERAGE
18	.1875159	**200 HP Ink Only Run3 19July2009
19	.1946964	201 HP Ink Only AVERAGE
20	.1949173	**17 Kodak Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: 30 EPSON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.6436439	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.6735654	13 Xerox Ink Only AVERAGE Slide Subtracted
3	.6750128	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
4	.6829798	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
5	.7483902	24 Xerox Ink Only AVERAGE Slide Subtracted
6	.7486244	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
7	.7537032	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
8	.7539138	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
9	.767372	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
10	.8099294	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
11	.8207687	17 Kodak Ink Only AVERAGE Slide Subtracted
12	.8215462	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
13	.8236392	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
14	.8259771	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
15	.8340469	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
16	.836992	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
17	.8385361	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
18	.8394555	198 HP Ink Only AVERAGE Slide Subtracted
19	.8406226	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
20	.8410786	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 30 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 30 EPSON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.5794335	**04 Okidata Ink Only Brown Spot Run2 19July2009
2	.6087278	**327 Canon Ink Only Run1 19July2009
3	.6091658	**327 Canon Ink Only Run2 19July2009
4	.6105613	327 Canon Ink Only AVERAGE
5	.6134775	**327 Canon Ink Only Run3 19July2009
6	.6183805	**04 Okidata Ink Only Brown Spot Run5 19July2009
7	.6217543	**30 Epson Ink Only Run2 19July2009
8	.6225595	**384 Canon Ink Only Run1 19July2009
9	.6228442	**223 Canon Ink Only Run1 19July2009
10	.6261253	**318 Canon Ink Only Run1 19July2009
11	.6292005	384 Canon Ink Only AVERAGE
12	.6307908	**318a Canon Clear Ink Only Run1 19July2009
13	.6317666	**384 Canon Ink Only Run2 19July2009
14	.6317948	**223 Canon Ink Only Run2 19July2009
15	.6334866	**318 Canon Ink Only Run2 19July2009
16	.6341528	30 Epson Ink Only AVERAGE
17	.6354828	318 Canon Ink Only AVERAGE
18	.6361612	**384 Canon Ink Only Run3 19July2009
19	.6394398	**318a Canon Clear Ink Only Run3 19July2009
20	.6394631	223 Canon Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 30 EPSON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.8788009	**84 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
2	.8789455	**84 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
3	.9008913	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
4	.9141109	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
5	.9294026	**84 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
6	.9395438	**244 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
7	.9429612	**402 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
8	.9452137	402 Canon Ink Only AVERAGE Slide Subtracted
9	.9457598	**402 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
10	.9469197	**402 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
11	.9506142	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
12	.950835	**522 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
13	.9510892	**522 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
14	.9512373	522 Canon Ink Only AVERAGE Slide Subtracted
15	.9520733	**522 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
16	.9520823	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
17	.9550039	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
18	.9550095	327 Canon Ink Only AVERAGE Slide Subtracted
19	.9551291	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
20	.9551362	**327 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 30 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 30 EPSON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.4274484	205 HP Ink Only AVERAGE
2	.4407682	**205 HP Ink Only Run3 19July2009
3	.4496001	**205 HP Ink Only Run4 19July2009
4	.4858326	**205 HP Ink Only Run2 19July2009
5	.5287527	**30 Epson Ink Only Run3 19July2009
6	.544606	**30 Epson Ink Only Run2 19July2009
7	.5483519	30 Epson Ink Only AVERAGE
8	.5589792	22 Kodak Ink Only AVERAGE
9	.5589874	348 Canon Ink Only AVERAGE
10	.5636773	**348 Canon Ink Only Run2 19July2009
11	.5644217	**22 Kodak Ink Only Run3 19July2009
12	.5655327	**384 Canon Ink Only Run3 19July2009
13	.5761161	**22 Kodak Ink Only Run2 19July2009
14	.5823692	**318 Canon Ink Only Run1 19July2009
15	.5854749	**318 Canon Ink Only Run2 19July2009
16	.5859628	**30 Epson Ink Only Run4 19July2009
17	.5871685	**327 Canon Ink Only Run1 19July2009
18	.5877904	318 Canon Ink Only AVERAGE
19	.5894336	**223 Canon Ink Only Run3 19July2009
20	.5910799	**384 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 30 EPSON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.6035655	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
2	.6324387	205 HP Ink Only AVERAGE Slide Subtracted
3	.6340875	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
4	.6428835	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
5	.6723405	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
6	.6730813	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
7	.6798943	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
8	.6921376	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
9	.6971157	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
10	.703353	30 Epson Ink Only AVERAGE Slide Subtracted
11	.7041085	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
12	.7046283	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
13	.7089697	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
14	.7094578	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
15	.7127236	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
16	.7242211	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
17	.727011	04 Okidata Ink Only AVERAGE Slide Subtracted
18	.7311634	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
19	.7324932	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
20	.735679	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted

Epson 30 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 30 EPSON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.6951149	**156 Epson Ink Only Run4 19July2009
2	.7126963	**156 Epson Ink Only Run5 19July2009
3	.7136274	**199 HP Ink Only Run5 19July2009
4	.7164526	199 HP Ink Only AVERAGE
5	.7165048	**199 HP Ink Only Run6 19July2009
6	.7218643	156 Epson Ink Only AVERAGE
7	.7270538	**156 Epson Ink Only Run3 19July2009
8	.729177	**156 Epson Ink Only Run2 19July2009
9	.7570624	**312 Canon Ink Only Run4 19July2009
10	.7583287	312 Canon Ink Only AVERAGE
11	.7713889	**199 HP Ink Only Run4 19July2009
12	.7719268	**156 Epson Ink Only Run1 19July2009
13	.7735357	**312 Canon Ink Only Run2 19July2009
14	.7805853	244 Xerox Ink Only AVERAGE
15	.783401	**205 HP Ink Only Run1 19July2009
16	.7834593	**244 Xerox Ink Only Run5 19July2009
17	.7903079	**312 Canon Ink Only Run1 19July2009
18	.7972741	**200 HP Ink Only Run4 19July2009
19	.7998421	**318a Canon Clear Ink Only Run1 19July2009
20	.8032883	**199 HP Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 30 EPSON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.5985364	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
2	.6715381	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
3	.7165477	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
4	.7299197	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
5	.7406368	24 Xerox Ink Only AVERAGE Slide Subtracted
6	.7663321	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
7	.7678392	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
8	.7709731	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
9	.7779251	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
10	.7784913	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
11	.7799051	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
12	.7852077	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
13	.7928598	13 Xerox Ink Only AVERAGE Slide Subtracted
14	.7955351	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
15	.8018581	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
16	.8021196	**201 HP Ink Only Run2 19July2009 Blank Slide Subtracted
17	.809709	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
18	.8099943	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
19	.8201597	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
20	.8231403	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted

Epson 30 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 30 EPSON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.8584469	**200 HP Ink Only Run4 19July2009
2	.8746654	244 Xerox Ink Only AVERAGE
3	.8756269	**199 HP Ink Only Run5 19July2009
4	.8756695	**244 Xerox Ink Only Run5 19July2009
5	.8799599	199 HP Ink Only AVERAGE
6	.8816031	**199 HP Ink Only Run6 19July2009
7	.9016148	**156 Epson Ink Only Run4 19July2009
8	.9032639	**156 Epson Ink Only Run1 19July2009
9	.9074125	156 Epson Ink Only AVERAGE
10	.9082121	**156 Epson Ink Only Run2 19July2009
11	.9089178	**156 Epson Ink Only Run5 19July2009
12	.9103388	**156 Epson Ink Only Run3 19July2009
13	.9330865	**199 HP Ink Only Run4 19July2009
14	.934995	**244 Xerox Ink Only Run4 19July2009
15	.9350063	**120 Epson Ink Only Run2 19July2009
16	.9351056	200 HP Ink Only AVERAGE
17	.9352465	**120 Epson Ink Only Run3 19July2009
18	.9369173	**205 HP Ink Only Run1 19July2009
19	.9369327	120 Epson Ink Only AVERAGE
20	.9376422	**199 HP Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 30 EPSON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.7621933	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
2	.8193193	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
3	.879214	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
4	.8939888	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
5	.9122667	30 Epson Ink Only AVERAGE Slide Subtracted
6	.9198495	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
7	.9227421	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
8	.9227965	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
9	.9345754	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
10	.9372154	**522 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11	.9372279	384 Canon Ink Only AVERAGE Slide Subtracted
12	.9401057	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted
13	.9402476	318a Canon Clear Ink Only AVERAGE Slide Subtracted
14	.9414375	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
15	.9419783	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
16	.9421009	223 Canon Ink Only AVERAGE Slide Subtracted
17	.942154	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
18	.9422018	**522 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
19	.9422403	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
20	.9428701	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 30 11July2008 Run 2

Neat Ink Library

Unknown Spectrum: 30 EPSON RUN2 20080711.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.4118169	**30 Epson Ink Only Run1 19July2009		
2	.4183913	**13 Xerox Ink Only Run2 19July2009		
3	.4216659	**201 HP Ink Only Run3 19July2009		
4	.425809	**201 HP Ink Only Run4 19July2009		
5	.4325356	**198 HP Ink Only Run4 19July2009		
6	.435048	**201 HP Ink Only Run5 19July2009		
7	.4368601	**201 HP Ink Only Run2 19July2009		
8	.442324	**201 HP Ink Only Run6 19July2009		
9	.4448815	**198 HP Ink Only Run5 19July2009		
10	.4452164	**201 HP Ink Only Run1 19July2009		
11	.4470293	198 HP Ink Only AVERAGE		
12	.4508728	22 Kodak Ink Only AVERAGE		
13	.4575718	**200 HP Ink Only Run5 19July2009		
14	.4596849	**198 HP Ink Only Run6 19July2009		
15	.4615708	**17 Kodak Ink Only Run2 19July2009		
16	.4622496	17 Kodak Ink Only AVERAGE		
17	.4678302	201 HP Ink Only AVERAGE		
18	.4680807	205 HP Ink Only AVERAGE		
19	.4693068	**200 HP Ink Only Run6 19July2009		
20	.4717665	**200 HP Ink Only Run7 19July2009		

Slide Subtracted Library

Unknown Spectrum: 30 EPSON RUN2 20080711.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.7715988	201 HP Ink Only AVERAGE Slide Subtracted		
2	.7772058	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted		
3	.7795458	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted		
4	.7952688	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted		
5	.7953861	17 Kodak Ink Only AVERAGE Slide Subtracted		
6	.7963415	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted		
7	.8017123	198 HP Ink Only AVERAGE Slide Subtracted		
8	.802816	**201 HP Ink Only Run3 19July2009 Blank Slide Subtracted		
9	.8040155	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted		
10	.8074051	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted		
11	.8082837	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted		
12	.8135399	**201 HP Ink Only Run2 19July2009 Blank Slide Subtracted		
13	.8216063	**198 HP Ink Only Run5 19July2009 Blank Slide Subtracted		
14	.8218583	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted		
15	.8259608	**200 HP Ink Only Run5 19July2009 Blank Slide Subtracted		
16	.8275187	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted		
17	.8280307	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted		
18	.8316773	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted		
19	.8320666	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted		
20	.8358094	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted		

Epson 30 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Epson 30.SPC

Hit #	Hit Quality	Memo Library Index
1	.7970027	**13 Xerox Ink Only Run2 19July2009
2	.8070794	**04 Okidata Ink Only Black Spot Run2 19July2009
3	.8083002	**04 Okidata Ink Only Black Spot Run1 19July2009
4	.8219194	04 Okidata Ink Only Black Spot AVERAGE
5	.8570791	**33 Epson Ink Only Black Spot Run1 19July2009
6	.8678426	**04 Okidata Ink Only Black Spot Run3 19July2009
7	.8720567	**33 Epson Ink Only Black Spot Run2 19July2009
8	.8720932	**24 Xerox Ink Only Run4 19July2009
9	.8723521	**30 Epson Ink Only Run1 19July2009
10	.877935	33 Epson Ink Only Black Spot AVERAGE
11	.879396	**63 Epson Ink Only Green Spot Run1 19July2009
12	.8820775	22 Kodak Ink Only AVERAGE
13	.8834736	205 HP Ink Only AVERAGE
14	.8869718	**24 Xerox Ink Only Run3 19July2009
15	.8876198	**201 HP Ink Only Run4 19July2009
16	.8909453	**13 Xerox Ink Only Run3 19July2009
17	.8913879	33 Epson Ink Only AVERAGE
18	.8920393	**201 HP Ink Only Run5 19July2009
19	.8923713	**22 Kodak Ink Only Run3 19July2009
20	.8936514	**205 HP Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Epson 30.SPC

Hit #	Hit Quality	Memo Library Index
1	.7755634	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
2	.8044221	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
3	.8155646	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
4	.8178302	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
5	.8308891	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
6	.8593821	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
7	.8664536	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
8	.8710439	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
9	.8712108	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
10	.8717623	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
11	.8748318	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
12	.8786898	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
13	.8876947	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
14	.8891717	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
15	.889309	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
16	.8903578	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
17	.8909552	33 Epson Ink Only AVERAGE Slide Subtracted
18	.8940948	30 Epson Ink Only AVERAGE Slide Subtracted
19	.8945056	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
20	.8961328	201 HP Ink Only AVERAGE Slide Subtracted

Epson 33 12Nov2007 Run 1

Neat Ink Library

Unknown Spectrum: 33 EPSON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.1191381	**13 Xerox Ink Only Run2 19July2009
2	.1221691	**201 HP Ink Only Run1 19July2009
3	.1279645	**24 Xerox Ink Only Run1 19July2009
4	.1349502	**201 HP Ink Only Run2 19July2009
5	.1458251	24 Xerox Ink Only AVERAGE
6	.1465638	24 Xerox Ink Only R1R2 AVERAGE
7	.1513045	**198 HP Ink Only Run4 19July2009
8	.151847	**201 HP Ink Only Run3 19July2009
9	.1536113	**13 Xerox Ink Only Run4 19July2009
10	.1538013	17 Kodak Ink Only AVERAGE
11	.1546458	13 Xerox Ink Only AVERAGE
12	.155193	**13 Xerox Ink Only Run5 19July2009
13	.1569811	**17 Kodak Ink Only Run1 19July2009
14	.160708	**17 Kodak Ink Only Run2 19July2009
15	.1624199	**200 HP Ink Only Run3 19July2009
16	.1665312	**13 Xerox Ink Only Run6 19July2009
17	.1668816	**24 Xerox Ink Only Run2 19July2009
18	.1675394	201 HP Ink Only AVERAGE
19	.1681912	**17 Kodak Ink Only Run3 19July2009
20	.1724751	198 HP Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 33 EPSON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.7378448	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.7562527	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
3	.7590641	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.7635013	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
5	.8171868	24 Xerox Ink Only AVERAGE Slide Subtracted
6	.8176244	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
7	.8178511	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
8	.82071	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
9	.8304289	17 Kodak Ink Only AVERAGE Slide Subtracted
10	.8332797	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
11	.8365064	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
12	.8385714	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
13	.8485341	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
14	.8574434	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
15	.8576429	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
16	.8578091	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
17	.8601782	198 HP Ink Only AVERAGE Slide Subtracted
18	.8683116	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
19	.8695513	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
20	.8732724	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted

Epson 33 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 33 EPSON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.5940475	**04 Okidata Ink Only Black Spot Run1 19July2009
2	.5981216	**04 Okidata Ink Only Black Spot Run2 19July2009
3	.6013568	04 Okidata Ink Only Black Spot AVERAGE
4	.6051127	**33 Epson Ink Only Black Spot Run1 19July2009
5	.6079801	**33 Epson Ink Only Black Spot Run2 19July2009
6	.6118013	04 Okidata Ink Only AVERAGE
7	.6148488	33 Epson Ink Only Black Spot AVERAGE
8	.6228295	**04 Okidata Ink Only Black Spot Run3 19July2009
9	.6358004	**63 Epson Ink Only Green Spot Run1 19July2009
10	.6358837	33 Epson Ink Only AVERAGE
11	.6380283	**205 HP Ink Only Run4 19July2009
12	.6480666	**205 HP Ink Only Run3 19July2009
13	.6512957	**33 Epson Ink Only Black Spot Run3 19July2009
14	.6580521	205 HP Ink Only AVERAGE
15	.6598531	63 Epson Ink Only Green Spot AVERAGE
16	.6631606	**63 Epson Ink Only Green Spot Run2 19July2009
17	.6856013	63 Epson Ink Only AVERAGE
18	.6876817	**60 Epson Ink Only Run3 19July2009
19	.6879345	**63 Epson Ink Only Green Spot Run3 19July2009
20	.6907545	**33 Epson Ink Only Brown Spot Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: 33 EPSON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.6154448	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
2	.6194378	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
3	.6224954	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
4	.623566	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
5	.6237018	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
6	.6280518	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
7	.6294538	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
8	.6295982	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
9	.6299086	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
10	.6342397	33 Epson Ink Only AVERAGE Slide Subtracted
11	.6365764	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
12	.6419377	205 HP Ink Only AVERAGE Slide Subtracted
13	.6427867	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
14	.6431491	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
15	.6438206	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
16	.6445754	04 Okidata Ink Only AVERAGE Slide Subtracted
17	.6464465	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
18	.6585205	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
19	.6616481	63 Epson Ink Only AVERAGE Slide Subtracted
20	.6677111	**244 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted

Epson 33 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 33 EPSON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.2804477	**205 HP Ink Only Run2 19July2009
2	.316983	**223 Canon Ink Only Run3 19July2009
3	.3185624	**384 Canon Ink Only Run1 19July2009
4	.3211931	**384 Canon Ink Only Run3 19July2009
5	.321766	205 HP Ink Only AVERAGE
6	.321871	223 Canon Ink Only AVERAGE
7	.3239133	**384 Canon Ink Only Run2 19July2009
8	.3240857	384 Canon Ink Only AVERAGE
9	.3265187	**223 Canon Ink Only Run2 19July2009
10	.3268954	**306 Canon Ink Only Run1 19July2009
11	.3275899	**306 Canon Ink Only Run2 19July2009
12	.3331986	**223 Canon Ink Only Run1 19July2009
13	.3335309	**205 HP Ink Only Run3 19July2009
14	.33463	**348 Canon Ink Only Run1 19July2009
15	.3366753	**318 Canon Ink Only Run1 19July2009
16	.3369492	**318 Canon Ink Only Run2 19July2009
17	.337955	318 Canon Ink Only AVERAGE
18	.3409396	**205 HP Ink Only Run4 19July2009
19	.341494	**318 Canon Ink Only Run3 19July2009
20	.3443112	**327 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 33 EPSON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.5520044	205 HP Ink Only AVERAGE Slide Subtracted
2	.5582445	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.5614026	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
4	.5687212	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.5700032	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
6	.591104	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
7	.6003045	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
8	.6065336	22 Kodak Ink Only AVERAGE Slide Subtracted
9	.6074806	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
10	.6100072	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
11	.6101383	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
12	.6186675	30 Epson Ink Only AVERAGE Slide Subtracted
13	.6337337	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
14	.6569093	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
15	.6700824	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
16	.6718854	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
17	.6749629	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
18	.6765943	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
19	.677843	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
20	.6824492	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Epson 33 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 33 EPSON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.93707	**199 HP Ink Only Run5 19July2009
2	.9392182	199 HP Ink Only AVERAGE
3	.9401715	**199 HP Ink Only Run6 19July2009
4	.9592816	**199 HP Ink Only Run4 19July2009
5	.9637008	244 Xerox Ink Only AVERAGE
6	.9644242	**244 Xerox Ink Only Run5 19July2009
7	.9653804	**156 Epson Ink Only Run3 19July2009
8	.9655216	**156 Epson Ink Only Run5 19July2009
9	.9667704	**199 HP Ink Only Run1 19July2009
10	.9672016	**120 Epson Ink Only Run2 19July2009
11	.9672294	**120 Epson Ink Only Run3 19July2009
12	.9677839	120 Epson Ink Only AVERAGE
13	.9678133	**33 Epson Ink Only Brown Spot Run2 19July2009
14	.9681444	156 Epson Ink Only AVERAGE
15	.9681898	**33 Epson Ink Only Brown Spot Run1 19July2009
16	.9688067	**120 Epson Ink Only Run1 19July2009
17	.9689606	33 Epson Ink Only Brown Spot AVERAGE
18	.9693016	**156 Epson Ink Only Run2 19July2009
19	.9706327	**84 Epson Ink Only Run3 19July2009
20	.9706823	**63 Epson Ink Only Purple Spot Run2 19July2009

Slide Subtracted Library

Unknown Spectrum33 EPSON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.7180732	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
2	.7272203	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
3	.7295631	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
4	.7310292	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
5	.7357054	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
6	.7475342	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
7	.755175	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted
8	.7595992	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
9	.7599189	**198 HP Ink Only Run2 19July2009 Blank Slide Subtracted
10	.7637927	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
11	.7702873	13 Xerox Ink Only AVERAGE Slide Subtracted
12	.7761276	24 Xerox Ink Only AVERAGE Slide Subtracted
13	.7787712	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
14	.7809254	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
15	.7873554	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
16	.7909931	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
17	.7926909	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
18	.794668	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
19	.7952088	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
20	.7986257	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted

Epson 33 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 33 EPSON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.6633021	**384 Canon Ink Only Run1 19July2009
2	.6697645	**223 Canon Ink Only Run3 19July2009
3	.6738738	223 Canon Ink Only AVERAGE
4	.6748277	**384 Canon Ink Only Run2 19July2009
5	.6760612	**223 Canon Ink Only Run2 19July2009
6	.6761161	384 Canon Ink Only AVERAGE
7	.6771664	**306 Canon Ink Only Run1 19July2009
8	.68131	**223 Canon Ink Only Run1 19July2009
9	.6820262	**306 Canon Ink Only Run2 19July2009
10	.6839745	**217 Canon Ink Only Run1 19July2009
11	.6850049	217 Canon Ink Only AVERAGE
12	.685899	**217 Canon Ink Only Run2 19July2009
13	.685991	**217 Canon Ink Only Run3 19July2009
14	.6945998	**384 Canon Ink Only Run3 19July2009
15	.6957568	**348 Canon Ink Only Run1 19July2009
16	.7022156	**327 Canon Ink Only Run1 19July2009
17	.7029011	**327 Canon Ink Only Run2 19July2009
18	.7047377	327 Canon Ink Only AVERAGE
19	.708178	**327 Canon Ink Only Run3 19July2009
20	.7096601	**318 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 33 EPSON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.7677397	**318a Canon Clear Ink Only Run1 19July2009 Blank Slide Subtracted
2	.7964165	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
3	.8044336	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
4	.8078753	30 Epson Ink Only AVERAGE Slide Subtracted
5	.8090294	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
6	.81234	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
7	.8136109	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
8	.8142943	384 Canon Ink Only AVERAGE Slide Subtracted
9	.8170061	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
10	.8209987	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11	.8217055	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
12	.8220357	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
13	.823718	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
14	.8238813	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
15	.8240222	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
16	.8242306	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
17	.8247999	223 Canon Ink Only AVERAGE Slide Subtracted
18	.8260348	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
19	.8276019	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20	.8281959	**306 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Epson 33 11July2008 Run 2

Neat Ink Library

Unknown Spectrum: 33 EPSON RUN2 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.2400893	**30 Epson Ink Only Run4 19July2009
2	.2419639	**205 HP Ink Only Run2 19July2009
3	.2520407	**205 HP Ink Only Run1 19July2009
4	.2578891	**30 Epson Ink Only Run3 19July2009
5	.2659317	30 Epson Ink Only AVERAGE
6	.2667029	**22 Kodak Ink Only Run1 19July2009
7	.2733749	**30 Epson Ink Only Run2 19July2009
8	.3100238	**318a Canon Clear Ink Only Run2 19July2009
9	.3104836	**318a Canon Clear Ink Only Run3 19July2009
10	.3112243	318a Canon Clear Ink Only AVERAGE
11	.3139366	**318a Canon Clear Ink Only Run4 19July2009
12	.3161571	205 HP Ink Only AVERAGE
13	.3213403	**205 HP Ink Only Run3 19July2009
14	.3287169	**205 HP Ink Only Run4 19July2009
15	.3384244	**217 Canon Ink Only Run4 19July2009
16	.360654	**199 HP Ink Only Run6 19July2009
17	.3615747	**348 Canon Ink Only Run1 19July2009
18	.3619283	**04 Okidata Ink Only Brown Spot Run2 19July2009
19	.3627816	199 HP Ink Only AVERAGE
20	.3651753	**200 HP Ink Only Run4 19July2009

Slide Subtracted Library

Unknown Spectrum: 33 EPSON RUN2 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.8129516	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.828417	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.830933	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
4	.8380083	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
5	.8464455	492 Canon Ink Only AVERAGE Slide Subtracted
6	.847973	205 HP Ink Only AVERAGE Slide Subtracted
7	.8483571	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
8	.8504859	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
9	.8549158	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
10	.855525	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11	.8624804	**492 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
12	.8647793	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
13	.866187	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
14	.8704885	22 Kodak Ink Only AVERAGE Slide Subtracted
15	.8732123	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
16	.8736004	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
17	.8749413	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
18	.8751964	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
19	.8765338	**306 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
20	.8808413	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted

Epson 33 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Epson 33.SPC

Hit #	Hit Quality	Memo Library Index
1	.214494	**205 HP Ink Only Run2 19July2009
2	.2918447	**30 Epson Ink Only Run4 19July2009
3	.2982238	**30 Epson Ink Only Run3 19July2009
4	.299302	**22 Kodak Ink Only Run1 19July2009
5	.3081721	**318a Canon Clear Ink Only Run3 19July2009
6	.3113628	**30 Epson Ink Only Run2 19July2009
7	.3133788	**318a Canon Clear Ink Only Run2 19July2009
8	.3134286	318a Canon Clear Ink Only AVERAGE
9	.3160627	205 HP Ink Only AVERAGE
10	.3172446	30 Epson Ink Only AVERAGE
11	.3189978	**318a Canon Clear Ink Only Run4 19July2009
12	.324214	**04 Okidata Ink Only Brown Spot Run2 19July2009
13	.3317484	**205 HP Ink Only Run3 19July2009
14	.3396304	**384 Canon Ink Only Run1 19July2009
15	.3430276	**04 Okidata Ink Only Brown Spot Run5 19July2009
16	.3444391	**205 HP Ink Only Run4 19July2009
17	.3471033	384 Canon Ink Only AVERAGE
18	.3471828	**384 Canon Ink Only Run2 19July2009
19	.3587144	**348 Canon Ink Only Run1 19July2009
20	.3603501	**384 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Epson 33.SPC

Hit #	Hit Quality	Memo Library Index
1	.6717132	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.6723527	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.6737613	205 HP Ink Only AVERAGE Slide Subtracted
4	.6972752	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.7042801	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
6	.7043507	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
7	.7129149	22 Kodak Ink Only AVERAGE Slide Subtracted
8	.713616	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
9	.7249418	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
10	.7452426	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
11	.7564253	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
12	.7624764	30 Epson Ink Only AVERAGE Slide Subtracted
13	.7728982	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
14	.7826837	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
15	.7830348	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
16	.7844971	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
17	.7876783	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
18	.787719	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
19	.7899554	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
20	.79074	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted

Epson 60 12Nov2007 Run 1

Neat Ink Library

Unknown Spectrum: 60 EPSON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.1114409	**13 Xerox Ink Only Run2 19July2009
2	.162718	**201 HP Ink Only Run1 19July2009
3	.1669332	**24 Xerox Ink Only Run1 19July2009
4	.1774345	**201 HP Ink Only Run2 19July2009
5	.1812692	24 Xerox Ink Only R1R2 AVERAGE
6	.1817888	24 Xerox Ink Only AVERAGE
7	.1920663	**13 Xerox Ink Only Run4 19July2009
8	.1966539	13 Xerox Ink Only AVERAGE
9	.197883	**24 Xerox Ink Only Run2 19July2009
10	.1979802	**201 HP Ink Only Run3 19July2009
11	.1982555	17 Kodak Ink Only AVERAGE
12	.1983285	**13 Xerox Ink Only Run3 19July2009
13	.1986871	**13 Xerox Ink Only Run5 19July2009
14	.1997791	**198 HP Ink Only Run4 19July2009
15	.2029778	**17 Kodak Ink Only Run1 19July2009
16	.2041843	**17 Kodak Ink Only Run2 19July2009
17	.209074	**200 HP Ink Only Run3 19July2009
18	.2103042	**13 Xerox Ink Only Run6 19July2009
19	.2110588	201 HP Ink Only AVERAGE
20	.2111416	**17 Kodak Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 60 EPSON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.7257475	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.7389988	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
3	.7413513	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.7420542	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
5	.791648	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
6	.7961017	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
7	.796389	24 Xerox Ink Only AVERAGE Slide Subtracted
8	.7978134	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
9	.8011227	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
10	.8097402	17 Kodak Ink Only AVERAGE Slide Subtracted
11	.8097998	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
12	.8169452	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
13	.8301293	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
14	.8340098	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
15	.8360505	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
16	.8378881	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
17	.8411369	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
18	.84552	198 HP Ink Only AVERAGE Slide Subtracted
19	.8537508	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
20	.8539252	**201 HP Ink Only Run2 19July2009 Blank Slide Subtracted

Epson 60 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 60 EPSON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.8467849	**84 Epson Ink Only Run1 19July2009
2	.8472032	**84 Epson Ink Only Run2 19July2009
3	.8715236	84 Epson Ink Only AVERAGE
4	.8823733	**84 Epson Ink Only Run5 19July2009
5	.9090003	**84 Epson Ink Only Run4 19July2009
6	.9183776	**244 Xerox Ink Only Run3 19July2009
7	.9399635	**522 Canon Ink Only Run1 19July2009
8	.9415654	**492 Canon Ink Only Run4 19July2009
9	.9418892	**522 Canon Ink Only Run2 19July2009
10	.9427691	522 Canon Ink Only AVERAGE
11	.9463065	**522 Canon Ink Only Run3 19July2009
12	.9476563	**312 Canon Ink Only Run2 19July2009
13	.9491179	**402 Canon Ink Only Run1 19July2009
14	.9526552	**402 Canon Ink Only Run2 19July2009
15	.9527429	**223 Canon Ink Only Run3 19July2009
16	.9530625	402 Canon Ink Only AVERAGE
17	.9533257	**312 Canon Ink Only Run1 19July2009
18	.9534128	**327 Canon Ink Only Run1 19July2009
19	.9534494	**327 Canon Ink Only Run2 19July2009
20	.9535766	**492 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 60 EPSON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.8028564	**84 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
2	.8035047	**84 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
3	.8543261	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
4	.8911743	**84 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
5	.9059844	**244 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
6	.9166	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
7	.916796	84 Epson Ink Only AVERAGE Slide Subtracted
8	.9302927	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
9	.9325257	312 Canon Ink Only AVERAGE Slide Subtracted
10	.9510208	**492 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
11	.9511468	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
12	.9523301	**244 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
13	.9547232	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
14	.9549384	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
15	.9561266	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
16	.957004	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
17	.9575791	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
18	.9578237	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
19	.9604126	**522 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
20	.9605843	492 Canon Ink Only AVERAGE Slide Subtracted

Epson 60 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 60 EPSON 20080711.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.4732526	205 HP Ink Only AVERAGE		
2	.4945476	**205 HP Ink Only Run3 19July2009		
3	.5088412	**205 HP Ink Only Run4 19July2009		
4	.5474611	**205 HP Ink Only Run2 19July2009		
5	.5530053	22 Kodak Ink Only AVERAGE		
6	.5637261	348 Canon Ink Only AVERAGE		
7	.5682304	**348 Canon Ink Only Run2 19July2009		
8	.5696986	**22 Kodak Ink Only Run3 19July2009		
9	.5723695	**13 Xerox Ink Only Run2 19July2009		
10	.572782	**384 Canon Ink Only Run3 19July2009		
11	.5730743	**30 Epson Ink Only Run3 19July2009		
12	.5749241	**22 Kodak Ink Only Run2 19July2009		
13	.578334	**30 Epson Ink Only Run2 19July2009		
14	.5800499	**30 Epson Ink Only Run1 19July2009		
15	.5827626	**318 Canon Ink Only Run1 19July2009		
16	.5841031	30 Epson Ink Only AVERAGE		
17	.5854198	**318 Canon Ink Only Run2 19July2009		
18	.5885029	318 Canon Ink Only AVERAGE		
19	.5932277	**327 Canon Ink Only Run1 19July2009		
20	.597867	327 Canon Ink Only AVERAGE		

Slide Subtracted Library

Unknown Spectrum: 60 EPSON 20080711.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.6357471	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted		
2	.6911395	205 HP Ink Only AVERAGE Slide Subtracted		
3	.706529	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted		
4	.7202399	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted		
5	.7351448	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted		
6	.7356526	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted		
7	.7358181	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted		
8	.7361509	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted		
9	.737307	30 Epson Ink Only AVERAGE Slide Subtracted		
10	.7459855	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted		
11	.7562816	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted		
12	.7580857	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted		
13	.7674513	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted		
14	.7737106	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted		
15	.7811484	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted		
16	.7825503	22 Kodak Ink Only AVERAGE Slide Subtracted		
17	.7997194	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted		
18	.8013451	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted		
19	.8030695	384 Canon Ink Only AVERAGE Slide Subtracted		
20	.8031875	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted		

Epson 60 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 60 EPSON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.8860596	**84 Epson Ink Only Run1 19July2009
2	.88722	**84 Epson Ink Only Run2 19July2009
3	.8986204	84 Epson Ink Only AVERAGE
4	.9077964	**84 Epson Ink Only Run5 19July2009
5	.9127941	**244 Xerox Ink Only Run3 19July2009
6	.9181731	**84 Epson Ink Only Run4 19July2009
7	.9645563	**312 Canon Ink Only Run1 19July2009
8	.9655958	**312 Canon Ink Only Run4 19July2009
9	.9750167	312 Canon Ink Only AVERAGE
10	.9761717	**84 Epson Ink Only Run3 19July2009
11	.9892773	**205 HP Ink Only Run4 19July2009
12	.9905105	**205 HP Ink Only Run3 19July2009
13	.99115	205 HP Ink Only AVERAGE
14	.9912853	**312 Canon Ink Only Run2 19July2009
15	.9922417	**205 HP Ink Only Run2 19July2009
16	.9922739	**244 Xerox Ink Only Run2 19July2009
17	.992682	**66 Epson Ink Only Run2 19July2009
18	.9927464	**33 Epson Ink Only Brown Spot Run1 19July2009
19	.9936869	66 Epson Ink Only AVERAGE
20	.9937038	33 Epson Ink Only Brown Spot AVERAGE

Slide Subtracted Library

Unknown Spectrum: 60 EPSON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.8653807	**84 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
2	.8674586	**84 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
3	.8722774	84 Epson Ink Only AVERAGE Slide Subtracted
4	.89541	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
5	.8997382	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
6	.9062266	**244 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
7	.909308	**84 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
8	.9347838	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
9	.9359961	244 Xerox Ink Only AVERAGE Slide Subtracted
10	.9367555	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
11	.9373906	**244 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
12	.9387995	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
13	.9424894	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
14	.9427473	156 Epson Ink Only AVERAGE Slide Subtracted
15	.943666	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
16	.9458037	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
17	.9465715	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
18	.9476938	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
19	.9538159	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
20	.9544003	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Epson 60 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 60 EPSON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.8398297	**199 HP Ink Only Run5 19July2009
2	.8416846	199 HP Ink Only AVERAGE
3	.8430795	**199 HP Ink Only Run6 19July2009
4	.8540504	244 Xerox Ink Only AVERAGE
5	.8546088	**244 Xerox Ink Only Run5 19July2009
6	.8728639	**200 HP Ink Only Run4 19July2009
7	.8779184	**156 Epson Ink Only Run3 19July2009
8	.8789474	**199 HP Ink Only Run4 19July2009
9	.8797796	**199 HP Ink Only Run1 19July2009
10	.8808496	**156 Epson Ink Only Run5 19July2009
11	.8831226	156 Epson Ink Only AVERAGE
12	.8840166	**205 HP Ink Only Run1 19July2009
13	.8875544	**156 Epson Ink Only Run2 19July2009
14	.8903178	**200 HP Ink Only Run1 19July2009
15	.8919438	**156 Epson Ink Only Run1 19July2009
16	.8924555	**156 Epson Ink Only Run4 19July2009
17	.897482	**244 Xerox Ink Only Run4 19July2009
18	.9019883	**244 Xerox Ink Only Run1 19July2009
19	.9150549	200 HP Ink Only AVERAGE
20	.9156576	**217 Canon Ink Only Run4 19July2009

Slide Subtracted Library

Unknown Spectrum: 60 EPSON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.7417194	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
2	.7732655	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
3	.7949677	**198 HP Ink Only Run2 19July2009 Blank Slide Subtracted
4	.7981447	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted
5	.8158927	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
6	.823999	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
7	.826525	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
8	.8321223	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
9	.8417681	**198 HP Ink Only Run3 19July2009 Blank Slide Subtracted
10	.8523446	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
11	.8607073	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
12	.8631406	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
13	.8632789	156 Epson Ink Only AVERAGE Slide Subtracted
14	.8704061	198 HP Ink Only AVERAGE Slide Subtracted
15	.8723876	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
16	.8729898	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
17	.875123	199 HP Ink Only AVERAGE Slide Subtracted
18	.8804511	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
19	.8829359	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
20	.8874086	**201 HP Ink Only Run6 19July2009 Blank Slide Subtracted

Epson 60 11July2008 Run 2

Neat Ink Library

Unknown Spectrum: 60 EPSON RUN2 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.7036934	**13 Xerox Ink Only Run2 19July2009
2	.7355451	**201 HP Ink Only Run1 19July2009
3	.7377881	**201 HP Ink Only Run3 19July2009
4	.7385281	**13 Xerox Ink Only Run6 19July2009
5	.7413865	**201 HP Ink Only Run2 19July2009
6	.7448251	**13 Xerox Ink Only Run3 19July2009
7	.7452191	**198 HP Ink Only Run4 19July2009
8	.7464178	**13 Xerox Ink Only Run4 19July2009
9	.747592	13 Xerox Ink Only AVERAGE
10	.7506266	**24 Xerox Ink Only Run1 19July2009
11	.7527433	24 Xerox Ink Only R1R2 AVERAGE
12	.7553296	**13 Xerox Ink Only Run5 19July2009
13	.7559059	24 Xerox Ink Only AVERAGE
14	.7576796	**24 Xerox Ink Only Run2 19July2009
15	.75808	**17 Kodak Ink Only Run2 19July2009
16	.7594299	198 HP Ink Only AVERAGE
17	.7594804	201 HP Ink Only AVERAGE
18	.7602581	17 Kodak Ink Only AVERAGE
19	.7626655	**201 HP Ink Only Run4 19July2009
20	.7634293	**198 HP Ink Only Run5 19July2009

Slide Subtracted Library

Unknown Spectrum: 60 EPSON RUN2 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.7515597	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.7608377	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
3	.7645587	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
4	.7650993	201 HP Ink Only AVERAGE Slide Subtracted
5	.7691793	**201 HP Ink Only Run3 19July2009 Blank Slide Subtracted
6	.7722591	198 HP Ink Only AVERAGE Slide Subtracted
7	.774703	**201 HP Ink Only Run2 19July2009 Blank Slide Subtracted
8	.7796066	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
9	.7845238	17 Kodak Ink Only AVERAGE Slide Subtracted
10	.7870227	13 Xerox Ink Only AVERAGE Slide Subtracted
11	.791235	**198 HP Ink Only Run5 19July2009 Blank Slide Subtracted
12	.7958794	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
13	.7961306	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
14	.7982184	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
15	.7985083	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
16	.8011537	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
17	.8019207	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
18	.805179	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
19	.8129204	**198 HP Ink Only Run6 19July2009 Blank Slide Subtracted
20	.81569	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 60 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Epson 60.SPC

Hit #	Hit Quality	Memo Library Index
1	.4331098	205 HP Ink Only AVERAGE
2	.4391463	**13 Xerox Ink Only Run2 19July2009
3	.4445538	**30 Epson Ink Only Run1 19July2009
4	.4472635	**201 HP Ink Only Run2 19July2009
5	.4482742	**201 HP Ink Only Run1 19July2009
6	.4487667	**17 Kodak Ink Only Run2 19July2009
7	.4514233	17 Kodak Ink Only AVERAGE
8	.4544145	**201 HP Ink Only Run3 19July2009
9	.455468	**205 HP Ink Only Run3 19July2009
10	.4595263	**198 HP Ink Only Run4 19July2009
11	.4622382	**17 Kodak Ink Only Run3 19July2009
12	.4669617	**201 HP Ink Only Run4 19July2009
13	.467095	**17 Kodak Ink Only Run1 19July2009
14	.4690115	201 HP Ink Only AVERAGE
15	.4712196	**201 HP Ink Only Run5 19July2009
16	.4732138	22 Kodak Ink Only AVERAGE
17	.4735074	198 HP Ink Only AVERAGE
18	.4737193	**205 HP Ink Only Run4 19July2009
19	.4768625	**201 HP Ink Only Run6 19July2009
20	.477169	**198 HP Ink Only Run5 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Epson 60.SPC

Hit #	Hit Quality	Memo Library Index
1	.7941187	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
2	.8083823	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
3	.8100913	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
4	.8157185	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
5	.8196515	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
6	.8200904	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
7	.8302426	17 Kodak Ink Only AVERAGE Slide Subtracted
8	.83106	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
9	.8335546	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
10	.835458	205 HP Ink Only AVERAGE Slide Subtracted
11	.837093	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
12	.8385523	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
13	.8399212	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
14	.8501208	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
15	.850467	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
16	.8521453	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
17	.8543863	318a Canon Clear Ink Only AVERAGE Slide Subtracted
18	.8551957	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted
19	.8561324	201 HP Ink Only AVERAGE Slide Subtracted
20	.8562635	33 Epson Ink Only AVERAGE Slide Subtracted

Epson 63 12Nov2007 Run 1

Neat Ink Library

Unknown Spectrum: 63 EPSON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.2708621	**201 HP Ink Only Run1 19July2009
2	.2857241	**17 Kodak Ink Only Run3 19July2009
3	.295547	**201 HP Ink Only Run2 19July2009
4	.2983439	201 HP Ink Only AVERAGE
5	.3008095	**17 Kodak Ink Only Run2 19July2009
6	.3031614	**13 Xerox Ink Only Run2 19July2009
7	.3058993	17 Kodak Ink Only AVERAGE
8	.3147773	**17 Kodak Ink Only Run1 19July2009
9	.3149547	**200 HP Ink Only Run3 19July2009
10	.3218509	**30 Epson Ink Only Run2 19July2009
11	.3239683	**30 Epson Ink Only Run3 19July2009
12	.3263288	30 Epson Ink Only AVERAGE
13	.3339558	205 HP Ink Only AVERAGE
14	.3491907	200 HP Ink Only AVERAGE
15	.3568423	**318a Canon Clear Ink Only Run3 19July2009
16	.359594	**201 HP Ink Only Run3 19July2009
17	.3603123	**30 Epson Ink Only Run1 19July2009
18	.3630259	318a Canon Clear Ink Only AVERAGE
19	.3630788	**318a Canon Clear Ink Only Run2 19July2009
20	.363776	**205 HP Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 63 EPSON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.8382748	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8397073	318a Canon Clear Ink Only AVERAGE Slide Subtracted
3	.8404644	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
4	.8413605	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted
5	.8420578	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
6	.8462763	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
7	.8464238	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
8	.848703	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
9	.8497118	13 Xerox Ink Only AVERAGE Slide Subtracted
10	.8549319	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
11	.8572451	17 Kodak Ink Only AVERAGE Slide Subtracted
12	.8596206	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
13	.8599911	205 HP Ink Only AVERAGE Slide Subtracted
14	.8608571	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
15	.8656793	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
16	.8757445	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
17	.8768378	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
18	.8837119	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
19	.8874178	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
20	.8876015	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted

Epson 63 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 63 EPSON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.2796658	**205 HP Ink Only Run4 19July2009
2	.2837268	**205 HP Ink Only Run3 19July2009
3	.2856115	205 HP Ink Only AVERAGE
4	.3244007	**205 HP Ink Only Run2 19July2009
5	.359134	348 Canon Ink Only AVERAGE
6	.360072	**348 Canon Ink Only Run2 19July2009
7	.3688043	**223 Canon Ink Only Run3 19July2009
8	.3746119	**384 Canon Ink Only Run3 19July2009
9	.3758684	**348 Canon Ink Only Run3 19July2009
10	.3827596	**318 Canon Ink Only Run3 19July2009
11	.3842033	**318 Canon Ink Only Run2 19July2009
12	.3847535	318 Canon Ink Only AVERAGE
13	.3874154	223 Canon Ink Only AVERAGE
14	.3892362	**318 Canon Ink Only Run1 19July2009
15	.390579	**348 Canon Ink Only Run1 19July2009
16	.3940235	**306 Canon Ink Only Run2 19July2009
17	.3944908	**306 Canon Ink Only Run1 19July2009
18	.397552	**223 Canon Ink Only Run2 19July2009
19	.3990763	**384 Canon Ink Only Run2 19July2009
20	.3993903	384 Canon Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 63 EPSON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.417705	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.4214827	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.436188	205 HP Ink Only AVERAGE Slide Subtracted
4	.4715703	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.5393024	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
6	.5470364	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
7	.5558163	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
8	.5723785	30 Epson Ink Only AVERAGE Slide Subtracted
9	.579365	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
10	.589214	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
11	.5969934	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
12	.5976782	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
13	.5984604	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
14	.6054593	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
15	.6081288	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
16	.6082721	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
17	.6095174	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
18	.6138543	22 Kodak Ink Only AVERAGE Slide Subtracted
19	.615489	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
20	.6181612	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 63 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 63 EPSON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.4968959	**30 Epson Ink Only Run1 19July2009
2	.5211372	205 HP Ink Only AVERAGE
3	.5236001	22 Kodak Ink Only AVERAGE
4	.5258331	**13 Xerox Ink Only Run2 19July2009
5	.5399955	**201 HP Ink Only Run1 19July2009
6	.5438635	**201 HP Ink Only Run2 19July2009
7	.5474893	**205 HP Ink Only Run3 19July2009
8	.550464	**201 HP Ink Only Run3 19July2009
9	.5506561	**198 HP Ink Only Run4 19July2009
10	.5537634	**22 Kodak Ink Only Run3 19July2009
11	.5544912	17 Kodak Ink Only AVERAGE
12	.5548137	**22 Kodak Ink Only Run2 19July2009
13	.5579908	**17 Kodak Ink Only Run2 19July2009
14	.5617083	**17 Kodak Ink Only Run1 19July2009
15	.5635623	**201 HP Ink Only Run5 19July2009
16	.5639241	**201 HP Ink Only Run6 19July2009
17	.5645943	198 HP Ink Only AVERAGE
18	.5653216	201 HP Ink Only AVERAGE
19	.5655317	**17 Kodak Ink Only Run3 19July2009
20	.5677202	**205 HP Ink Only Run4 19July2009

Slide Subtracted Library

Unknown Spectrum: 63 EPSON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.8125198	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
2	.8607298	205 HP Ink Only AVERAGE Slide Subtracted
3	.8683052	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
4	.8749876	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
5	.8769267	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
6	.8775529	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
7	.8824902	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
8	.885784	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
9	.8884218	17 Kodak Ink Only AVERAGE Slide Subtracted
10	.8896479	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
11	.8915413	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
12	.8921347	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
13	.8922772	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
14	.8925136	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
15	.8926603	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
16	.8932066	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
17	.8949929	30 Epson Ink Only AVERAGE Slide Subtracted
18	.8966247	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
19	.8975897	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
20	.8986512	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted

Epson 63 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 63 EPSON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.8489355	**63 Epson Ink Only Green Spot Run1 19July2009
2	.8532625	**223 Canon Ink Only Run3 19July2009
3	.8557764	**63 Epson Ink Only Green Spot Run2 19July2009
4	.8560747	**33 Epson Ink Only Black Spot Run1 19July2009
5	.8564689	63 Epson Ink Only Green Spot AVERAGE
6	.8587407	**33 Epson Ink Only Black Spot Run2 19July2009
7	.8588707	33 Epson Ink Only Black Spot AVERAGE
8	.8594769	33 Epson Ink Only AVERAGE
9	.8629034	63 Epson Ink Only AVERAGE
10	.8643776	**33 Epson Ink Only Brown Spot Run1 19July2009
11	.8647074	**33 Epson Ink Only Brown Spot Run2 19July2009
12	.8658759	**522 Canon Ink Only Run1 19July2009
13	.8662229	**306 Canon Ink Only Run1 19July2009
14	.8664111	**33 Epson Ink Only Black Spot Run3 19July2009
15	.8665716	33 Epson Ink Only Brown Spot AVERAGE
16	.8666058	306 Canon Ink Only AVERAGE
17	.8673968	**63 Epson Ink Only Green Spot Run3 19July2009
18	.8677416	348 Canon Ink Only AVERAGE
19	.8693873	**306 Canon Ink Only Run2 19July2009
20	.8697914	**348 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: 63 EPSON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.709543	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
2	.7274811	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
3	.7359917	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
4	.7367197	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
5	.7432978	384 Canon Ink Only AVERAGE Slide Subtracted
6	.7447384	30 Epson Ink Only AVERAGE Slide Subtracted
7	.7460722	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
8	.7498125	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
9	.7500114	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
10	.7515152	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
11	.7531514	223 Canon Ink Only AVERAGE Slide Subtracted
12	.754742	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
13	.7563328	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
14	.7582135	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
15	.75832	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
16	.7603146	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
17	.7606843	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
18	.7640205	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
19	.764349	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
20	.7652186	**306 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Epson 63 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 63 EPSON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.5304719	**384 Canon Ink Only Run1 19July2009
2	.5381996	**223 Canon Ink Only Run2 19July2009
3	.5399559	223 Canon Ink Only AVERAGE
4	.5401865	**384 Canon Ink Only Run2 19July2009
5	.540345	384 Canon Ink Only AVERAGE
6	.5410157	**223 Canon Ink Only Run3 19July2009
7	.5487574	**223 Canon Ink Only Run1 19July2009
8	.555067	**217 Canon Ink Only Run2 19July2009
9	.5557614	**306 Canon Ink Only Run1 19July2009
10	.5564795	217 Canon Ink Only AVERAGE
11	.5567034	**384 Canon Ink Only Run3 19July2009
12	.5571002	**217 Canon Ink Only Run1 19July2009
13	.5577909	**217 Canon Ink Only Run3 19July2009
14	.5578034	**306 Canon Ink Only Run2 19July2009
15	.5599318	**348 Canon Ink Only Run1 19July2009
16	.5634942	**318 Canon Ink Only Run1 19July2009
17	.564115	**327 Canon Ink Only Run1 19July2009
18	.564606	**327 Canon Ink Only Run2 19July2009
19	.5659701	**205 HP Ink Only Run2 19July2009
20	.5669178	**318 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: 63 EPSON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.766398	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.7695749	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
3	.774087	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
4	.7747296	30 Epson Ink Only AVERAGE Slide Subtracted
5	.7805456	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
6	.7837546	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
7	.7893533	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
8	.7945279	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.810411	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
10	.8110332	205 HP Ink Only AVERAGE Slide Subtracted
11	.8115481	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
12	.8121445	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
13	.8125208	384 Canon Ink Only AVERAGE Slide Subtracted
14	.8128415	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
15	.8141018	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
16	.8156165	22 Kodak Ink Only AVERAGE Slide Subtracted
17	.8160575	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
18	.8164933	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
19	.81832	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
20	.818347	223 Canon Ink Only AVERAGE Slide Subtracted

Epson 63 11July2008 Run 2

Neat Ink Library

Unknown Spectrum: 63 EPSON RUN2 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.5636704	**33 Epson Ink Only Black Spot Run1 19July2009
2	.5780259	**33 Epson Ink Only Black Spot Run2 19July2009
3	.5860177	33 Epson Ink Only Black Spot AVERAGE
4	.5937279	**04 Okidata Ink Only Black Spot Run2 19July2009
5	.5940904	**04 Okidata Ink Only Black Spot Run1 19July2009
6	.5991419	**63 Epson Ink Only Green Spot Run1 19July2009
7	.6016961	33 Epson Ink Only AVERAGE
8	.6038365	04 Okidata Ink Only Black Spot AVERAGE
9	.6298152	63 Epson Ink Only Green Spot AVERAGE
10	.6340716	**63 Epson Ink Only Green Spot Run2 19July2009
11	.6413095	**33 Epson Ink Only Black Spot Run3 19July2009
12	.6416618	**04 Okidata Ink Only Black Spot Run3 19July2009
13	.6420665	**33 Epson Ink Only Brown Spot Run2 19July2009
14	.64951	**33 Epson Ink Only Brown Spot Run3 19July2009
15	.649786	33 Epson Ink Only Brown Spot AVERAGE
16	.6572325	63 Epson Ink Only AVERAGE
17	.6631199	**33 Epson Ink Only Brown Spot Run1 19July2009
18	.6635993	**63 Epson Ink Only Green Spot Run3 19July2009
19	.6695617	**60 Epson Ink Only Run3 19July2009
20	.6782123	**60 Epson Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 63 EPSON RUN2 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.537308	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
2	.5557255	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
3	.5711128	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
4	.5814742	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
5	.5819507	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
6	.5838606	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
7	.5848647	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
8	.5958914	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
9	.5977938	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
10	.602114	33 Epson Ink Only AVERAGE Slide Subtracted
11	.6023371	205 HP Ink Only AVERAGE Slide Subtracted
12	.6157828	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
13	.6199034	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
14	.6333658	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
15	.634402	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
16	.6361547	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
17	.636766	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
18	.6371524	30 Epson Ink Only AVERAGE Slide Subtracted
19	.6384505	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
20	.6398399	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted

Epson 63 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Epson 63.SPC

Hit #	Hit Quality	Memo Library Index
1	.4794929	205 HP Ink Only AVERAGE
2	.4935716	**205 HP Ink Only Run3 19July2009
3	.5026389	**205 HP Ink Only Run4 19July2009
4	.5144405	**205 HP Ink Only Run2 19July2009
5	.5820514	**30 Epson Ink Only Run3 19July2009
6	.5848853	22 Kodak Ink Only AVERAGE
7	.5870773	**22 Kodak Ink Only Run3 19July2009
8	.5995407	**30 Epson Ink Only Run2 19July2009
9	.5998889	**22 Kodak Ink Only Run2 19July2009
10	.6030879	30 Epson Ink Only AVERAGE
11	.6173133	**22 Kodak Ink Only Run1 19July2009
12	.6294863	**30 Epson Ink Only Run4 19July2009
13	.6467426	**384 Canon Ink Only Run3 19July2009
14	.6485551	348 Canon Ink Only AVERAGE
15	.6504706	**04 Okidata Ink Only Black Spot Run2 19July2009
16	.651996	**318a Canon Clear Ink Only Run3 19July2009
17	.6537744	**348 Canon Ink Only Run2 19July2009
18	.6546094	**04 Okidata Ink Only Black Spot Run1 19July2009
19	.6560842	318a Canon Clear Ink Only AVERAGE
20	.6574094	**318a Canon Clear Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Epson 63.SPC

Hit #	Hit Quality	Memo Library Index
1	.5975597	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
2	.6368595	205 HP Ink Only AVERAGE Slide Subtracted
3	.641179	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
4	.6527089	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
5	.6891356	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
6	.6898513	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
7	.7003549	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
8	.7020238	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
9	.7046177	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
10	.7059801	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
11	.7096659	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
12	.7104409	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
13	.7105347	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
14	.7200986	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
15	.7209888	30 Epson Ink Only AVERAGE Slide Subtracted
16	.7222946	22 Kodak Ink Only AVERAGE Slide Subtracted
17	.7265148	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
18	.7275428	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
19	.7288938	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
20	.7353685	33 Epson Ink Only AVERAGE Slide Subtracted

Epson 66 12Nov2007 Run 1

Neat Ink Library

Unknown Spectrum: 66 EPSON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.2151487	**201 HP Ink Only Run1 19July2009
2	.2249243	**17 Kodak Ink Only Run3 19July2009
3	.2385036	**201 HP Ink Only Run2 19July2009
4	.2394762	201 HP Ink Only AVERAGE
5	.2413447	**17 Kodak Ink Only Run2 19July2009
6	.2459029	17 Kodak Ink Only AVERAGE
7	.2523711	**200 HP Ink Only Run3 19July2009
8	.2535038	**17 Kodak Ink Only Run1 19July2009
9	.2711742	**13 Xerox Ink Only Run2 19July2009
10	.2742707	**30 Epson Ink Only Run2 19July2009
11	.2772861	30 Epson Ink Only AVERAGE
12	.2783518	**30 Epson Ink Only Run3 19July2009
13	.2827834	200 HP Ink Only AVERAGE
14	.3000836	205 HP Ink Only AVERAGE
15	.3033085	**201 HP Ink Only Run3 19July2009
16	.3050667	**30 Epson Ink Only Run1 19July2009
17	.3062214	**198 HP Ink Only Run4 19July2009
18	.3186213	**318a Canon Clear Ink Only Run3 19July2009
19	.3212503	**13 Xerox Ink Only Run6 19July2009
20	.3217696	**24 Xerox Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: EPSON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.8576564	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.863437	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
3	.8654367	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.8706191	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
5	.8712707	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
6	.8745649	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
7	.8747224	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
8	.8750495	318a Canon Clear Ink Only AVERAGE Slide Subtracted
9	.8767478	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted
10	.879217	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
11	.8797474	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
12	.8809965	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
13	.8813348	17 Kodak Ink Only AVERAGE Slide Subtracted
14	.8841276	205 HP Ink Only AVERAGE Slide Subtracted
15	.8874599	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
16	.8885883	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
17	.8981641	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
18	.8999881	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
19	.9022649	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
20	.9027635	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 66 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 66 EPSON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.1840789	**205 HP Ink Only Run2 19July2009
2	.1884678	**205 HP Ink Only Run4 19July2009
3	.1885744	205 HP Ink Only AVERAGE
4	.1892887	**205 HP Ink Only Run3 19July2009
5	.2519996	**384 Canon Ink Only Run3 19July2009
6	.2571037	348 Canon Ink Only AVERAGE
7	.2581725	**348 Canon Ink Only Run2 19July2009
8	.2601125	**348 Canon Ink Only Run3 19July2009
9	.2606771	**348 Canon Ink Only Run1 19July2009
10	.2614281	**318 Canon Ink Only Run2 19July2009
11	.2615145	**318 Canon Ink Only Run3 19July2009
12	.2616827	318 Canon Ink Only AVERAGE
13	.2636668	**318 Canon Ink Only Run1 19July2009
14	.2679877	**384 Canon Ink Only Run2 19July2009
15	.2684737	384 Canon Ink Only AVERAGE
16	.270499	**223 Canon Ink Only Run3 19July2009
17	.2711534	**384 Canon Ink Only Run1 19July2009
18	.2712717	223 Canon Ink Only AVERAGE
19	.2745648	**30 Epson Ink Only Run3 19July2009
20	.2762565	**223 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: 66 EPSON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.464544	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.4740139	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.4888116	205 HP Ink Only AVERAGE Slide Subtracted
4	.5453078	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
5	.5483441	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
6	.5796912	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
7	.602764	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
8	.6035421	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
9	.617537	22 Kodak Ink Only AVERAGE Slide Subtracted
10	.6277425	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
11	.6294672	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
12	.6349475	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
13	.6404083	30 Epson Ink Only AVERAGE Slide Subtracted
14	.6416618	**306 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
15	.64373	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
16	.6443871	282 Canon Ink Only AVERAGE Slide Subtracted
17	.647015	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
18	.6506405	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
19	.6510602	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
20	.652348	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted

Epson 66 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 66 EPSON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.397019	306 Canon Ink Only AVERAGE
2	.4044574	**492 Canon Ink Only Run5 19July2009
3	.4323882	**306 Canon Ink Only Run3 19July2009
4	.4329714	**492 Canon Ink Only Run1 19July2009
5	.4449104	492 Canon Ink Only AVERAGE
6	.4476093	**402 Canon Ink Only Run3 19July2009
7	.4481329	**492 Canon Ink Only Run2 19July2009
8	.4503912	**223 Canon Ink Only Run3 19July2009
9	.4519051	**402 Canon Ink Only Run2 19July2009
10	.4526775	402 Canon Ink Only AVERAGE
11	.4553128	**348 Canon Ink Only Run3 19July2009
12	.4608285	**492 Canon Ink Only Run3 19July2009
13	.4632797	**402 Canon Ink Only Run1 19July2009
14	.4658933	**306 Canon Ink Only Run1 19July2009
15	.4679958	**306 Canon Ink Only Run2 19July2009
16	.4707974	522 Canon Ink Only AVERAGE
17	.4709774	**522 Canon Ink Only Run1 19July2009
18	.4715247	**522 Canon Ink Only Run3 19July2009
19	.4715531	**522 Canon Ink Only Run2 19July2009
20	.4806473	223 Canon Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 66 EPSON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.3506719	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
2	.352275	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
3	.3617278	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
4	.3698597	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
5	.376315	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
6	.3854703	22 Kodak Ink Only AVERAGE Slide Subtracted
7	.3890655	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
8	.3974104	205 HP Ink Only AVERAGE Slide Subtracted
9	.4035712	492 Canon Ink Only AVERAGE Slide Subtracted
10	.4215381	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11	.4217569	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
12	.4311511	**492 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
13	.4384548	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
14	.4533653	**306 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
15	.4549372	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
16	.455143	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
17	.4559188	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
18	.4611298	282 Canon Ink Only AVERAGE Slide Subtracted
19	.46152	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
20	.4656672	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Epson 66 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 66 EPSON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.9217664	**223 Canon Ink Only Run3 19July2009
2	.9263625	**13 Xerox Ink Only Run2 19July2009
3	.9277646	**13 Xerox Ink Only Run3 19July2009
4	.9291207	**306 Canon Ink Only Run1 19July2009
5	.9294757	223 Canon Ink Only AVERAGE
6	.9295729	**217 Canon Ink Only Run1 19July2009
7	.930419	217 Canon Ink Only AVERAGE
8	.9304546	**384 Canon Ink Only Run1 19July2009
9	.9307128	**217 Canon Ink Only Run3 19July2009
10	.9311054	**217 Canon Ink Only Run2 19July2009
11	.9315171	**306 Canon Ink Only Run2 19July2009
12	.9316861	**223 Canon Ink Only Run2 19July2009
13	.9324455	**84 Epson Ink Only Run3 19July2009
14	.9330651	**522 Canon Ink Only Run1 19July2009
15	.9342699	**384 Canon Ink Only Run2 19July2009
16	.9345055	**384 Canon Ink Only Run3 19July2009
17	.9349226	384 Canon Ink Only AVERAGE
18	.9366936	**223 Canon Ink Only Run1 19July2009
19	.9371144	348 Canon Ink Only AVERAGE
20	.9375836	306 Canon Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 66 EPSON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.8700292	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
2	.8709936	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
3	.8841983	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
4	.8842552	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
5	.8888031	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
6	.8905443	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
7	.8906109	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
8	.8960826	384 Canon Ink Only AVERAGE Slide Subtracted
9	.8976822	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
10	.8979887	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
11	.8989574	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
12	.9011237	223 Canon Ink Only AVERAGE Slide Subtracted
13	.9011573	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
14	.901471	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
15	.9018665	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
16	.9020072	30 Epson Ink Only AVERAGE Slide Subtracted
17	.9023235	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
18	.902527	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
19	.9044935	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
20	.9047615	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted

Epson 66 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 66 EPSON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.9561365	**84 Epson Ink Only Run3 19July2009
2	.9649457	**13 Xerox Ink Only Run6 19July2009
3	.9766859	**13 Xerox Ink Only Run1 19July2009
4	.977281	13 Xerox Ink Only AVERAGE
5	.9795415	**24 Xerox Ink Only Run1 19July2009
6	.9807462	**13 Xerox Ink Only Run4 19July2009
7	.980953	**13 Xerox Ink Only Run5 19July2009
8	.9822339	24 Xerox Ink Only R1R2 AVERAGE
9	.9822372	**306 Canon Ink Only Run3 19July2009
10	.9850187	**24 Xerox Ink Only Run2 19July2009
11	.9867668	24 Xerox Ink Only AVERAGE
12	.9875196	**201 HP Ink Only Run3 19July2009
13	.9877898	**199 HP Ink Only Run2 19July2009
14	.9878784	**492 Canon Ink Only Run4 19July2009
15	.988174	**492 Canon Ink Only Run3 19July2009
16	.9882004	**198 HP Ink Only Run5 19July2009
17	.9885856	**30 Epson Ink Only Run1 19July2009
18	.9888608	**198 HP Ink Only Run4 19July2009
19	.9894975	**201 HP Ink Only Run1 19July2009
20	.9896182	198 HP Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 66 EPSON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.806161	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8173252	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
3	.8226891	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
4	.8306702	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted
5	.8312763	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
6	.8340575	156 Epson Ink Only AVERAGE Slide Subtracted
7	.836753	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
8	.8410822	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
9	.8437328	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
10	.8541673	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
11	.8581831	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
12	.8584007	**198 HP Ink Only Run2 19July2009 Blank Slide Subtracted
13	.864598	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
14	.8658832	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
15	.8761273	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
16	.8780717	**198 HP Ink Only Run3 19July2009 Blank Slide Subtracted
17	.8971226	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
18	.900622	198 HP Ink Only AVERAGE Slide Subtracted
19	.9057558	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
20	.9085596	13 Xerox Ink Only AVERAGE Slide Subtracted

Epson 66 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Epson 66.SPC

Hit #	Hit Quality	Memo Library Index
1	.8261912	**84 Epson Ink Only Run3 19July2009
2	.8415484	**13 Xerox Ink Only Run6 19July2009
3	.8567299	**24 Xerox Ink Only Run1 19July2009
4	.8670137	24 Xerox Ink Only R1R2 AVERAGE
5	.8728599	13 Xerox Ink Only AVERAGE
6	.8755483	**24 Xerox Ink Only Run2 19July2009
7	.8778785	**13 Xerox Ink Only Run4 19July2009
8	.8823876	**13 Xerox Ink Only Run3 19July2009
9	.8880945	**13 Xerox Ink Only Run5 19July2009
10	.8908063	24 Xerox Ink Only AVERAGE
11	.9129508	**13 Xerox Ink Only Run1 19July2009
12	.9239219	**492 Canon Ink Only Run3 19July2009
13	.9272377	**13 Xerox Ink Only Run2 19July2009
14	.9282762	492 Canon Ink Only AVERAGE
15	.929368	**492 Canon Ink Only Run4 19July2009
16	.9308621	**201 HP Ink Only Run1 19July2009
17	.9312199	**492 Canon Ink Only Run5 19July2009
18	.9345137	**04 Okidata Ink Only Brown Spot Run1 19July2009
19	.9377153	**244 Xerox Ink Only Run2 19July2009
20	.9395375	**492 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Epson 66.SPC

Hit #	Hit Quality	Memo Library Index
1	.5260859	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.5500583	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
3	.6035206	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.640076	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
5	.6402152	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
6	.6790894	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
7	.6906672	24 Xerox Ink Only AVERAGE Slide Subtracted
8	.6966239	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
9	.6978613	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
10	.6984198	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
11	.7032899	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
12	.7033842	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
13	.7083715	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
14	.7363186	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
15	.7630735	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted
16	.778669	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
17	.7893675	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
18	.798214	198 HP Ink Only AVERAGE Slide Subtracted
19	.7984107	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
20	.8024628	**198 HP Ink Only Run2 19July2009 Blank Slide Subtracted

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Neat Ink Library

Unknown Spectrum: 84 EPSON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.1899641	**201 HP Ink Only Run1 19July2009
2	.1945296	**17 Kodak Ink Only Run3 19July2009
3	.2093838	201 HP Ink Only AVERAGE
4	.2099486	**17 Kodak Ink Only Run2 19July2009
5	.2128182	**201 HP Ink Only Run2 19July2009
6	.2157211	17 Kodak Ink Only AVERAGE
7	.2192262	**200 HP Ink Only Run3 19July2009
8	.2229122	**17 Kodak Ink Only Run1 19July2009
9	.2375753	**13 Xerox Ink Only Run2 19July2009
10	.2386437	200 HP Ink Only AVERAGE
11	.2523673	**30 Epson Ink Only Run2 19July2009
12	.2536224	30 Epson Ink Only AVERAGE
13	.2565873	**30 Epson Ink Only Run3 19July2009
14	.274001	205 HP Ink Only AVERAGE
15	.278087	**201 HP Ink Only Run3 19July2009
16	.2794308	**198 HP Ink Only Run4 19July2009
17	.2803785	**30 Epson Ink Only Run1 19July2009
18	.2952472	**318a Canon Clear Ink Only Run3 19July2009
19	.2956655	198 HP Ink Only AVERAGE
20	.3003798	**318a Canon Clear Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: 84 EPSON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.8861484	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.8892143	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.8936729	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
4	.8947825	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
5	.8959437	205 HP Ink Only AVERAGE Slide Subtracted
6	.8964164	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
7	.8972304	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
8	.8989959	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
9	.8990265	13 Xerox Ink Only AVERAGE Slide Subtracted
10	.8999318	318a Canon Clear Ink Only AVERAGE Slide Subtracted
11	.9002305	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
12	.9010682	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
13	.9013623	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted
14	.9022405	17 Kodak Ink Only AVERAGE Slide Subtracted
15	.9063025	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
16	.9091549	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
17	.9158624	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
18	.9172751	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
19	.9175558	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
20	.9177501	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted

Epson 84 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 84 EPSON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.3534625	**04 Okidata Ink Only Brown Spot Run2 19July2009
2	.3663497	**318a Canon Clear Ink Only Run3 19July2009
3	.3700993	**84 Epson Ink Only Run3 19July2009
4	.3732143	**200 HP Ink Only Run4 19July2009
5	.3747773	318a Canon Clear Ink Only AVERAGE
6	.3774779	**318a Canon Clear Ink Only Run2 19July2009
7	.3793925	**04 Okidata Ink Only Brown Spot Run5 19July2009
8	.3805853	**318a Canon Clear Ink Only Run4 19July2009
9	.3812526	**156 Epson Ink Only Run3 19July2009
10	.385179	**199 HP Ink Only Run6 19July2009
11	.3876009	**156 Epson Ink Only Run5 19July2009
12	.3879832	199 HP Ink Only AVERAGE
13	.388089	**205 HP Ink Only Run2 19July2009
14	.3917703	156 Epson Ink Only AVERAGE
15	.3941943	**30 Epson Ink Only Run2 19July2009
16	.3942874	**199 HP Ink Only Run5 19July2009
17	.3982509	**22 Kodak Ink Only Run1 19July2009
18	.4010416	30 Epson Ink Only AVERAGE
19	.4038336	**30 Epson Ink Only Run3 19July2009
20	.4038482	**156 Epson Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 84 EPSON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.7615908	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.9423292	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
3	.9440453	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
4	.9442504	205 HP Ink Only AVERAGE Slide Subtracted
5	.9448103	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
6	.9470968	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
7	.9477299	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
8	.9490039	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
9	.9497501	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
10	.9517322	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
11	.9540296	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
12	.9541514	22 Kodak Ink Only AVERAGE Slide Subtracted
13	.9567567	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
14	.9572979	156 Epson Ink Only AVERAGE Slide Subtracted
15	.9622067	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
16	.9622763	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
17	.9631979	312 Canon Ink Only AVERAGE Slide Subtracted
18	.9635258	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
19	.9639199	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20	.9653234	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

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Neat Ink Library

Unknown Spectrum: 84 EPSON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.2196127	205 HP Ink Only AVERAGE
2	.2354976	**205 HP Ink Only Run3 19July2009
3	.2491086	**205 HP Ink Only Run4 19July2009
4	.2989086	**30 Epson Ink Only Run3 19July2009
5	.3094022	**30 Epson Ink Only Run2 19July2009
6	.3101862	30 Epson Ink Only AVERAGE
7	.3233305	**205 HP Ink Only Run2 19July2009
8	.3401715	22 Kodak Ink Only AVERAGE
9	.3482599	**30 Epson Ink Only Run1 19July2009
10	.353641	**22 Kodak Ink Only Run3 19July2009
11	.3611335	**22 Kodak Ink Only Run2 19July2009
12	.3644672	348 Canon Ink Only AVERAGE
13	.3676249	**348 Canon Ink Only Run2 19July2009
14	.3867174	**30 Epson Ink Only Run4 19July2009
15	.3904419	**384 Canon Ink Only Run3 19July2009
16	.394051	**282 Canon Ink Only Run1 19July2009
17	.3956591	**318 Canon Ink Only Run1 19July2009
18	.4030713	**327 Canon Ink Only Run1 19July2009
19	.4042386	**318 Canon Ink Only Run2 19July2009
20	.4070749	327 Canon Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 84 EPSON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.7192444	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.7226543	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.7354105	205 HP Ink Only AVERAGE Slide Subtracted
4	.7427039	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.7858017	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
6	.7860348	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
7	.7885829	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
8	.7985721	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
9	.7994468	04 Okidata Ink Only AVERAGE Slide Subtracted
10	.7999536	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
11	.8066596	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
12	.8086454	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
13	.8114913	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
14	.8168603	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
15	.8181299	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
16	.825174	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
17	.8252966	33 Epson Ink Only AVERAGE Slide Subtracted
18	.8261986	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
19	.826272	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
20	.8272349	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted

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Neat Ink Library

Unknown Spectrum: 84 EPSON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.4309312	**84 Epson Ink Only Run3 19July2009
2	.6299049	**13 Xerox Ink Only Run6 19July2009
3	.6453393	**201 HP Ink Only Run1 19July2009
4	.6644663	201 HP Ink Only AVERAGE
5	.6644711	**17 Kodak Ink Only Run3 19July2009
6	.6658078	**17 Kodak Ink Only Run1 19July2009
7	.6678299	**17 Kodak Ink Only Run2 19July2009
8	.672093	17 Kodak Ink Only AVERAGE
9	.6725367	**200 HP Ink Only Run3 19July2009
10	.6750486	200 HP Ink Only AVERAGE
11	.6756015	**201 HP Ink Only Run2 19July2009
12	.6776683	13 Xerox Ink Only AVERAGE
13	.6806491	**04 Okidata Ink Only Brown Spot Run2 19July2009
14	.6869322	**318a Canon Clear Ink Only Run3 19July2009
15	.6921573	**156 Epson Ink Only Run1 19July2009
16	.693144	**156 Epson Ink Only Run2 19July2009
17	.6940039	318a Canon Clear Ink Only AVERAGE
18	.6940505	**244 Xerox Ink Only Run2 19July2009
19	.6949284	**04 Okidata Ink Only Brown Spot Run5 19July2009
20	.6950262	**13 Xerox Ink Only Run5 19July2009

Slide Subtracted Library

Unknown Spectrum: 84 EPSON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.5848179	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8185971	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.8251504	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
4	.8354406	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
5	.8473061	156 Epson Ink Only AVERAGE Slide Subtracted
6	.8534224	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
7	.8665981	13 Xerox Ink Only AVERAGE Slide Subtracted
8	.8689724	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.8751495	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted
10	.8812354	84 Epson Ink Only AVERAGE Slide Subtracted
11	.8821756	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
12	.8865287	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
13	.8883018	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
14	.8892082	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
15	.8898214	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
16	.8953526	**198 HP Ink Only Run2 19July2009 Blank Slide Subtracted
17	.8996496	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
18	.9031866	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
19	.9046543	**198 HP Ink Only Run3 19July2009 Blank Slide Subtracted
20	.9056677	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted

Epson 84 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 84 EPSON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.4660456	**84 Epson Ink Only Run3 19July2009
2	.6764013	**13 Xerox Ink Only Run6 19July2009
3	.71202	**201 HP Ink Only Run1 19July2009
4	.7216206	**04 Okidata Ink Only Brown Spot Run2 19July2009
5	.7270072	13 Xerox Ink Only AVERAGE
6	.729497	201 HP Ink Only AVERAGE
7	.7347965	**17 Kodak Ink Only Run3 19July2009
8	.7365788	**156 Epson Ink Only Run1 19July2009
9	.737168	**04 Okidata Ink Only Brown Spot Run5 19July2009
10	.7379203	**17 Kodak Ink Only Run1 19July2009
11	.7391311	**318a Canon Clear Ink Only Run3 19July2009
12	.7393762	**17 Kodak Ink Only Run2 19July2009
13	.74005	200 HP Ink Only AVERAGE
14	.7405782	**200 HP Ink Only Run3 19July2009
15	.7409218	**156 Epson Ink Only Run2 19July2009
16	.7414714	**201 HP Ink Only Run2 19July2009
17	.7436386	17 Kodak Ink Only AVERAGE
18	.7458529	**13 Xerox Ink Only Run5 19July2009
19	.745918	**13 Xerox Ink Only Run4 19July2009
20	.7465524	318a Canon Clear Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 84 EPSON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.5444132	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.7912014	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.8377695	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
4	.8425243	13 Xerox Ink Only AVERAGE Slide Subtracted
5	.8436208	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
6	.8494116	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
7	.8519926	156 Epson Ink Only AVERAGE Slide Subtracted
8	.856294	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.8605272	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted
10	.8611549	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
11	.8682573	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
12	.8695462	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
13	.8723278	**198 HP Ink Only Run2 19July2009 Blank Slide Subtracted
14	.8763027	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
15	.8770537	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
16	.8790368	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
17	.8839507	84 Epson Ink Only AVERAGE Slide Subtracted
18	.892288	**198 HP Ink Only Run3 19July2009 Blank Slide Subtracted
19	.9086915	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
20	.9096069	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted

Epson 84 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Epson 84.SPC

Hit #	Hit Quality	Memo Library Index
1	.2087168	**84 Epson Ink Only Run3 19July2009
2	.252663	**13 Xerox Ink Only Run6 19July2009
3	.2962533	13 Xerox Ink Only AVERAGE
4	.3135091	**13 Xerox Ink Only Run4 19July2009
5	.3165112	**13 Xerox Ink Only Run5 19July2009
6	.326413	**201 HP Ink Only Run1 19July2009
7	.333619	**24 Xerox Ink Only Run1 19July2009
8	.3523526	24 Xerox Ink Only R1R2 AVERAGE
9	.3580804	24 Xerox Ink Only AVERAGE
10	.3585637	**17 Kodak Ink Only Run1 19July2009
11	.3594923	**201 HP Ink Only Run2 19July2009
12	.3606242	**244 Xerox Ink Only Run2 19July2009
13	.3609446	**13 Xerox Ink Only Run1 19July2009
14	.3637702	**200 HP Ink Only Run3 19July2009
15	.3679648	17 Kodak Ink Only AVERAGE
16	.3686713	**24 Xerox Ink Only Run2 19July2009
17	.3696236	201 HP Ink Only AVERAGE
18	.370985	**17 Kodak Ink Only Run2 19July2009
19	.3714335	**13 Xerox Ink Only Run3 19July2009
20	.3765712	**17 Kodak Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Epson 84.SPC

Hit #	Hit Quality	Memo Library Index
1	.6038591	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.6313107	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.6950822	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.7119414	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
5	.7234619	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
6	.76006	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
7	.791365	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
8	.8101096	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.8245159	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
10	.8262748	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
11	.8283034	24 Xerox Ink Only AVERAGE Slide Subtracted
12	.8318127	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
13	.8382807	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
14	.8412339	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
15	.8513313	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
16	.8515851	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
17	.8524239	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted
18	.8562467	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
19	.8628389	17 Kodak Ink Only AVERAGE Slide Subtracted
20	.8629043	198 HP Ink Only AVERAGE Slide Subtracted

Epson 90 12Nov2007 Run 1

Neat Ink Library

Unknown Spectrum: 90 EPSON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.2787576	205 HP Ink Only AVERAGE
2	.302267	**205 HP Ink Only Run3 19July2009
3	.3157307	**30 Epson Ink Only Run3 19July2009
4	.3206633	**205 HP Ink Only Run4 19July2009
5	.3237505	**30 Epson Ink Only Run2 19July2009
6	.3257551	30 Epson Ink Only AVERAGE
7	.3320972	**201 HP Ink Only Run1 19July2009
8	.3339351	**205 HP Ink Only Run2 19July2009
9	.3368886	**17 Kodak Ink Only Run3 19July2009
10	.3478521	**13 Xerox Ink Only Run2 19July2009
11	.3510256	**17 Kodak Ink Only Run2 19July2009
12	.3511498	**201 HP Ink Only Run2 19July2009
13	.3549146	201 HP Ink Only AVERAGE
14	.3579069	17 Kodak Ink Only AVERAGE
15	.3635322	22 Kodak Ink Only AVERAGE
16	.36661	**318a Canon Clear Ink Only Run3 19July2009
17	.3709836	**318a Canon Clear Ink Only Run2 19July2009
18	.3712552	**200 HP Ink Only Run3 19July2009
19	.3712565	318a Canon Clear Ink Only AVERAGE
20	.371316	**17 Kodak Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 90 EPSON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.7631927	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
2	.7681391	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.7685179	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
4	.7716523	205 HP Ink Only AVERAGE Slide Subtracted
5	.7876776	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
6	.7879314	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
7	.7879637	318a Canon Clear Ink Only AVERAGE Slide Subtracted
8	.7894164	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted
9	.8225346	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
10	.8347945	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
11	.8352942	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
12	.8353457	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
13	.8364954	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
14	.8395329	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
15	.8406817	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
16	.8431483	30 Epson Ink Only AVERAGE Slide Subtracted
17	.8461692	22 Kodak Ink Only AVERAGE Slide Subtracted
18	.8479819	17 Kodak Ink Only AVERAGE Slide Subtracted
19	.8501551	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
20	.8587478	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted

Epson 90 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 90 EPSON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.2917638	**223 Canon Ink Only Run3 19July2009
2	.2987005	**205 HP Ink Only Run4 19July2009
3	.3069253	**205 HP Ink Only Run3 19July2009
4	.3075113	**205 HP Ink Only Run2 19July2009
5	.313135	**348 Canon Ink Only Run3 19July2009
6	.3132697	205 HP Ink Only AVERAGE
7	.3155793	306 Canon Ink Only AVERAGE
8	.3178774	**306 Canon Ink Only Run1 19July2009
9	.3180675	**306 Canon Ink Only Run2 19July2009
10	.3204118	223 Canon Ink Only AVERAGE
11	.3330895	**348 Canon Ink Only Run1 19July2009
12	.3346503	**223 Canon Ink Only Run2 19July2009
13	.3346907	348 Canon Ink Only AVERAGE
14	.3349603	**348 Canon Ink Only Run2 19July2009
15	.3353315	**318 Canon Ink Only Run3 19July2009
16	.3361591	**384 Canon Ink Only Run3 19July2009
17	.3400319	**384 Canon Ink Only Run2 19July2009
18	.3409507	384 Canon Ink Only AVERAGE
19	.3417214	**384 Canon Ink Only Run1 19July2009
20	.3441825	318 Canon Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 90 EPSON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.3375345	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.3425303	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.3531223	205 HP Ink Only AVERAGE Slide Subtracted
4	.4112121	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.4217802	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
6	.4392444	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
7	.4630405	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
8	.4687136	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
9	.4852315	30 Epson Ink Only AVERAGE Slide Subtracted
10	.4905742	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
11	.4945797	22 Kodak Ink Only AVERAGE Slide Subtracted
12	.4978943	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
13	.4981544	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
14	.5050692	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
15	.5085183	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
16	.5085469	282 Canon Ink Only AVERAGE Slide Subtracted
17	.5111778	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
18	.5146573	348 Canon Ink Only AVERAGE Slide Subtracted
19	.5157029	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
20	.517849	**306 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 90 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 90 EPSON 20080711.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.4297986	205 HP Ink Only AVERAGE		
2	.4461084	**205 HP Ink Only Run3 19July2009		
3	.4574336	22 Kodak Ink Only AVERAGE		
4	.4583424	**205 HP Ink Only Run4 19July2009		
5	.4610647	**22 Kodak Ink Only Run3 19July2009		
6	.4737537	**22 Kodak Ink Only Run2 19July2009		
7	.4954009	**30 Epson Ink Only Run3 19July2009		
8	.5098278	**30 Epson Ink Only Run2 19July2009		
9	.509845	348 Canon Ink Only AVERAGE		
10	.5100703	**205 HP Ink Only Run2 19July2009		
11	.5124581	30 Epson Ink Only AVERAGE		
12	.5141963	**348 Canon Ink Only Run2 19July2009		
13	.5293016	**384 Canon Ink Only Run3 19July2009		
14	.538793	**30 Epson Ink Only Run1 19July2009		
15	.549414	**318 Canon Ink Only Run1 19July2009		
16	.5514436	**22 Kodak Ink Only Run1 19July2009		
17	.5525402	**318 Canon Ink Only Run2 19July2009		
18	.5550531	318 Canon Ink Only AVERAGE		
19	.555699	**327 Canon Ink Only Run1 19July2009		
20	.5572586	**13 Xerox Ink Only Run2 19July2009		

Slide Subtracted Library

Unknown Spectrum: 90 EPSON 20080711.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.6786663	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted		
2	.6892486	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted		
3	.6958077	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted		
4	.7065247	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted		
5	.7066762	205 HP Ink Only AVERAGE Slide Subtracted		
6	.7070559	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted		
7	.7098333	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted		
8	.7153488	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted		
9	.716835	22 Kodak Ink Only AVERAGE Slide Subtracted		
10	.7177991	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted		
11	.7179461	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted		
12	.7180526	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted		
13	.7180621	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted		
14	.719712	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted		
15	.7219489	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted		
16	.723063	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted		
17	.7319734	30 Epson Ink Only AVERAGE Slide Subtracted		
18	.7322268	33 Epson Ink Only AVERAGE Slide Subtracted		
19	.7330117	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted		
20	.7381483	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted		

Epson 90 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 90 EPSON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.9431632	**199 HP Ink Only Run5 19July2009
2	.9439567	199 HP Ink Only AVERAGE
3	.9443248	**199 HP Ink Only Run6 19July2009
4	.945939	**04 Okidata Ink Only Brown Spot Run7 19July2009
5	.9485092	**04 Okidata Ink Only Brown Spot Run6 19July2009
6	.9495386	**199 HP Ink Only Run4 19July2009
7	.9541017	**04 Okidata Ink Only Brown Spot Run4 19July2009
8	.9565813	**205 HP Ink Only Run1 19July2009
9	.9574984	**04 Okidata Ink Only Brown Spot Run3 19July2009
10	.9604385	**199 HP Ink Only Run1 19July2009
11	.9630979	04 Okidata Ink Only Brown Spot AVERAGE
12	.9640971	**84 Epson Ink Only Run3 19July2009
13	.9642789	**156 Epson Ink Only Run3 19July2009
14	.9643291	**84 Epson Ink Only Run2 19July2009
15	.9659095	**84 Epson Ink Only Run1 19July2009
16	.9662573	**156 Epson Ink Only Run5 19July2009
17	.966639	**84 Epson Ink Only Run5 19July2009
18	.9670993	**200 HP Ink Only Run1 19July2009
19	.9688417	**205 HP Ink Only Run4 19July2009
20	.9689039	**200 HP Ink Only Run6 19July2009

Slide Subtracted Library

Unknown Spectrum: 90 EPSON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.7255597	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
2	.7277764	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
3	.738813	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
4	.7530009	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
5	.7542484	24 Xerox Ink Only AVERAGE Slide Subtracted
6	.7563179	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
7	.7596716	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
8	.7622557	13 Xerox Ink Only AVERAGE Slide Subtracted
9	.7646403	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
10	.7754804	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
11	.776507	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
12	.7766206	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
13	.7844471	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
14	.7849987	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
15	.7880185	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
16	.7894448	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
17	.7930082	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
18	.8041449	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
19	.8141903	**198 HP Ink Only Run2 19July2009 Blank Slide Subtracted
20	.8199077	244 Xerox Ink Only AVERAGE Slide Subtracted

Epson 90 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 90 EPSON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.7801447	**33 Epson Ink Only Black Spot Run1 19July2009
2	.7991004	**33 Epson Ink Only Black Spot Run2 19July2009
3	.8033432	33 Epson Ink Only Black Spot AVERAGE
4	.8148506	**04 Okidata Ink Only Black Spot Run2 19July2009
5	.8163391	**04 Okidata Ink Only Black Spot Run1 19July2009
6	.8174461	**63 Epson Ink Only Green Spot Run1 19July2009
7	.8196778	205 HP Ink Only AVERAGE
8	.8210098	348 Canon Ink Only AVERAGE
9	.8245279	**348 Canon Ink Only Run2 19July2009
10	.8247084	04 Okidata Ink Only Black Spot AVERAGE
11	.8253141	33 Epson Ink Only AVERAGE
12	.8268414	**205 HP Ink Only Run3 19July2009
13	.8285621	22 Kodak Ink Only AVERAGE
14	.8299416	**223 Canon Ink Only Run3 19July2009
15	.8306002	**22 Kodak Ink Only Run3 19July2009
16	.8329737	**205 HP Ink Only Run4 19July2009
17	.8331427	**384 Canon Ink Only Run3 19July2009
18	.8371323	**13 Xerox Ink Only Run2 19July2009
19	.8378367	**22 Kodak Ink Only Run2 19July2009
20	.8404608	**84 Epson Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 90 EPSON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.786227	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
2	.7943338	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
3	.8018538	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
4	.8048167	30 Epson Ink Only AVERAGE Slide Subtracted
5	.8059347	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
6	.8096086	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
7	.8101842	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
8	.8106228	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.812727	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
10	.8181629	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
11	.8205776	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
12	.8213761	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
13	.8215668	318a Canon Clear Ink Only AVERAGE Slide Subtracted
14	.8220437	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
15	.824634	33 Epson Ink Only AVERAGE Slide Subtracted
16	.8248237	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted
17	.8281074	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
18	.8302501	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
19	.8334819	17 Kodak Ink Only AVERAGE Slide Subtracted
20	.8352709	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 90 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Epson 90.SPC

Hit #	Hit Quality	Memo Library Index
1	.2994745	**24 Xerox Ink Only Run1 19July2009
2	.3235041	24 Xerox Ink Only R1R2 AVERAGE
3	.3471115	**24 Xerox Ink Only Run2 19July2009
4	.3547461	**13 Xerox Ink Only Run3 19July2009
5	.3590716	**13 Xerox Ink Only Run6 19July2009
6	.359456	24 Xerox Ink Only AVERAGE
7	.3706489	**13 Xerox Ink Only Run4 19July2009
8	.3724245	13 Xerox Ink Only AVERAGE
9	.3874357	**13 Xerox Ink Only Run5 19July2009
10	.4064758	**13 Xerox Ink Only Run2 19July2009
11	.4447475	**201 HP Ink Only Run1 19July2009
12	.4454426	**13 Xerox Ink Only Run1 19July2009
13	.4673433	**201 HP Ink Only Run2 19July2009
14	.4725013	**198 HP Ink Only Run4 19July2009
15	.4739661	**201 HP Ink Only Run3 19July2009
16	.4753353	**200 HP Ink Only Run3 19July2009
17	.4799874	**17 Kodak Ink Only Run1 19July2009
18	.4818205	17 Kodak Ink Only AVERAGE
19	.4892137	**17 Kodak Ink Only Run2 19July2009
20	.4936225	**244 Xerox Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Epson 90.SPC

Hit #	Hit Quality	Memo Library Index
1	.5043511	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.5451143	13 Xerox Ink Only AVERAGE Slide Subtracted
3	.5570408	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
4	.5589671	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
5	.5882	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
6	.5953601	24 Xerox Ink Only AVERAGE Slide Subtracted
7	.6005123	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
8	.6034125	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
9	.6236782	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
10	.7176565	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
11	.7186029	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
12	.7275751	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
13	.735633	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
14	.7388496	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
15	.7398695	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
16	.7400745	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
17	.7429838	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
18	.7461435	17 Kodak Ink Only AVERAGE Slide Subtracted
19	.7527618	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
20	.7554675	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 93 12Nov2007 Run 1

Neat Ink Library

Unknown Spectrum: 93 EPSON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.3390186	205 HP Ink Only AVERAGE
2	.3568915	**205 HP Ink Only Run3 19July2009
3	.3695889	**205 HP Ink Only Run4 19July2009
4	.4336338	**13 Xerox Ink Only Run2 19July2009
5	.447252	22 Kodak Ink Only AVERAGE
6	.4528049	**30 Epson Ink Only Run3 19July2009
7	.4550422	**205 HP Ink Only Run2 19July2009
8	.4568858	**201 HP Ink Only Run1 19July2009
9	.4610053	**22 Kodak Ink Only Run3 19July2009
10	.4621939	**17 Kodak Ink Only Run3 19July2009
11	.4631024	**30 Epson Ink Only Run1 19July2009
12	.463439	**201 HP Ink Only Run2 19July2009
13	.4644592	**17 Kodak Ink Only Run2 19July2009
14	.4662139	348 Canon Ink Only AVERAGE
15	.467513	**30 Epson Ink Only Run2 19July2009
16	.4680603	**348 Canon Ink Only Run2 19July2009
17	.4683125	30 Epson Ink Only AVERAGE
18	.4691767	17 Kodak Ink Only AVERAGE
19	.4720803	**22 Kodak Ink Only Run2 19July2009
20	.4809143	201 HP Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 93 EPSON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.6684555	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
2	.6943231	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.6980374	205 HP Ink Only AVERAGE Slide Subtracted
4	.6992081	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
5	.7067429	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
6	.708073	318a Canon Clear Ink Only AVERAGE Slide Subtracted
7	.708407	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted
8	.7104594	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
9	.7659571	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
10	.7752871	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
11	.7771935	30 Epson Ink Only AVERAGE Slide Subtracted
12	.7776613	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
13	.7800827	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
14	.7844531	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
15	.7846256	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
16	.7846831	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
17	.7889473	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
18	.7908926	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
19	.7920576	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
20	.7923593	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted

Epson 93 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 93 EPSON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.8773355	**244 Xerox Ink Only Run3 19July2009
2	.8960414	**312 Canon Ink Only Run4 19July2009
3	.9101549	312 Canon Ink Only AVERAGE
4	.9246249	**312 Canon Ink Only Run2 19July2009
5	.9281814	**312 Canon Ink Only Run1 19July2009
6	.9289855	**318a Canon Clear Ink Only Run1 19July2009
7	.929773	**402 Canon Ink Only Run3 19July2009
8	.9311012	402 Canon Ink Only AVERAGE
9	.9317191	**402 Canon Ink Only Run2 19July2009
10	.9322072	**402 Canon Ink Only Run1 19July2009
11	.9399844	**306 Canon Ink Only Run3 19July2009
12	.9416428	**492 Canon Ink Only Run3 19July2009
13	.94433	492 Canon Ink Only AVERAGE
14	.9457418	**522 Canon Ink Only Run3 19July2009
15	.9461871	**492 Canon Ink Only Run4 19July2009
16	.9465001	**84 Epson Ink Only Run4 19July2009
17	.9488053	**492 Canon Ink Only Run1 19July2009
18	.9492775	522 Canon Ink Only AVERAGE
19	.949816	**522 Canon Ink Only Run2 19July2009
20	.9506538	**492 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: 93 EPSON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.7080182	**200 HP Ink Only Run5 19July2009 Blank Slide Subtracted
2	.7143903	**200 HP Ink Only Run7 19July2009 Blank Slide Subtracted
3	.7160743	**200 HP Ink Only Run6 19July2009 Blank Slide Subtracted
4	.7229342	**201 HP Ink Only Run4 19July2009 Blank Slide Subtracted
5	.7392112	**201 HP Ink Only Run6 19July2009 Blank Slide Subtracted
6	.7418296	200 HP Ink Only AVERAGE Slide Subtracted
7	.7442502	**201 HP Ink Only Run5 19July2009 Blank Slide Subtracted
8	.7447558	**199 HP Ink Only Run6 19July2009 Blank Slide Subtracted
9	.747427	**199 HP Ink Only Run4 19July2009 Blank Slide Subtracted
10	.7490882	**198 HP Ink Only Run5 19July2009 Blank Slide Subtracted
11	.7504175	**199 HP Ink Only Run5 19July2009 Blank Slide Subtracted
12	.7599838	201 HP Ink Only AVERAGE Slide Subtracted
13	.7753912	**198 HP Ink Only Run6 19July2009 Blank Slide Subtracted
14	.7826401	**201 HP Ink Only Run3 19July2009 Blank Slide Subtracted
15	.7851854	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
16	.7876651	199 HP Ink Only AVERAGE Slide Subtracted
17	.7910042	198 HP Ink Only AVERAGE Slide Subtracted
18	.7948218	**200 HP Ink Only Run4 19July2009 Blank Slide Subtracted
19	.8098841	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
20	.8150069	**201 HP Ink Only Run2 19July2009 Blank Slide Subtracted

Epson 93 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 93 EPSON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.4143421	**223 Canon Ink Only Run3 19July2009
2	.4359003	306 Canon Ink Only AVERAGE
3	.4368793	**306 Canon Ink Only Run1 19July2009
4	.439425	**306 Canon Ink Only Run2 19July2009
5	.4446213	223 Canon Ink Only AVERAGE
6	.4551122	**384 Canon Ink Only Run1 19July2009
7	.4576195	**205 HP Ink Only Run2 19July2009
8	.4593848	**223 Canon Ink Only Run2 19July2009
9	.4615412	**384 Canon Ink Only Run2 19July2009
10	.4617988	384 Canon Ink Only AVERAGE
11	.4642265	**348 Canon Ink Only Run3 19July2009
12	.4660032	**348 Canon Ink Only Run1 19July2009
13	.4673364	**217 Canon Ink Only Run1 19July2009
14	.4697104	**217 Canon Ink Only Run3 19July2009
15	.4697733	217 Canon Ink Only AVERAGE
16	.4703439	**223 Canon Ink Only Run1 19July2009
17	.4723141	**217 Canon Ink Only Run2 19July2009
18	.4783405	**318 Canon Ink Only Run3 19July2009
19	.4800431	**384 Canon Ink Only Run3 19July2009
20	.4867638	402 Canon Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 93 EPSON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.438288	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
2	.442887	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
3	.4466666	22 Kodak Ink Only AVERAGE Slide Subtracted
4	.4490668	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
5	.4546727	205 HP Ink Only AVERAGE Slide Subtracted
6	.4638972	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
7	.4656894	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
8	.4659079	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
9	.4792908	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
10	.494192	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
11	.5037698	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
12	.5085248	30 Epson Ink Only AVERAGE Slide Subtracted
13	.5255563	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
14	.5292646	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
15	.5544284	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
16	.5559494	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
17	.5563321	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
18	.5580775	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
19	.559257	282 Canon Ink Only AVERAGE Slide Subtracted
20	.5600505	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 93 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 93 EPSON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.5771964	**244 Xerox Ink Only Run5 19July2009
2	.5861354	244 Xerox Ink Only AVERAGE
3	.6303664	**244 Xerox Ink Only Run4 19July2009
4	.6356754	**199 HP Ink Only Run1 19July2009
5	.6394348	199 HP Ink Only AVERAGE
6	.6395182	**199 HP Ink Only Run5 19July2009
7	.6412043	**199 HP Ink Only Run6 19July2009
8	.6525193	**244 Xerox Ink Only Run2 19July2009
9	.6584781	**200 HP Ink Only Run1 19July2009
10	.6586761	**244 Xerox Ink Only Run1 19July2009
11	.6666261	**156 Epson Ink Only Run1 19July2009
12	.6678792	**156 Epson Ink Only Run2 19July2009
13	.6692051	**199 HP Ink Only Run4 19July2009
14	.6766223	156 Epson Ink Only AVERAGE
15	.6768644	**156 Epson Ink Only Run3 19July2009
16	.6797484	**156 Epson Ink Only Run5 19July2009
17	.6938844	**84 Epson Ink Only Run3 19July2009
18	.6993792	**156 Epson Ink Only Run4 19July2009
19	.727329	**200 HP Ink Only Run4 19July2009
20	.7328503	**84 Epson Ink Only Run4 19July2009

Slide Subtracted Library

Unknown Spectrum: 93 EPSON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.6963429	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
2	.7028116	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
3	.7032052	30 Epson Ink Only AVERAGE Slide Subtracted
4	.7069679	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
5	.7095832	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
6	.711769	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
7	.7149265	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
8	.7203324	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
9	.7212711	384 Canon Ink Only AVERAGE Slide Subtracted
10	.7227484	**306 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11	.7247202	**306 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
12	.725662	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
13	.7278344	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
14	.7291352	223 Canon Ink Only AVERAGE Slide Subtracted
15	.7308639	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
16	.7314979	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
17	.7328818	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
18	.7380623	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
19	.7442898	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
20	.7467574	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Epson 93 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 93 EPSON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.8428994	**84 Epson Ink Only Run3 19July2009
2	.8915094	**13 Xerox Ink Only Run3 19July2009
3	.899713	**13 Xerox Ink Only Run2 19July2009
4	.9013268	**13 Xerox Ink Only Run6 19July2009
5	.9158593	13 Xerox Ink Only AVERAGE
6	.9164306	**13 Xerox Ink Only Run4 19July2009
7	.9206427	**24 Xerox Ink Only Run2 19July2009
8	.9224507	24 Xerox Ink Only R1R2 AVERAGE
9	.9233841	**201 HP Ink Only Run1 19July2009
10	.9244109	24 Xerox Ink Only AVERAGE
11	.9250295	**13 Xerox Ink Only Run5 19July2009
12	.9253911	**24 Xerox Ink Only Run1 19July2009
13	.9285747	**244 Xerox Ink Only Run2 19July2009
14	.9325755	**200 HP Ink Only Run3 19July2009
15	.9332315	**13 Xerox Ink Only Run1 19July2009
16	.9337466	**24 Xerox Ink Only Run4 19July2009
17	.9348781	**201 HP Ink Only Run2 19July2009
18	.9367904	**17 Kodak Ink Only Run1 19July2009
19	.9373205	201 HP Ink Only AVERAGE
20	.9388236	**17 Kodak Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: 93 EPSON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.8064464	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8443339	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
3	.8485333	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
4	.8558839	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.8690664	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
6	.869239	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
7	.8757987	13 Xerox Ink Only AVERAGE Slide Subtracted
8	.8793588	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.8814114	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
10	.8873559	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted
11	.8885541	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
12	.88999	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
13	.8918726	**199 HP Ink Only Run1 19July2009 Blank Slide Subtracted
14	.8932915	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
15	.8943031	**198 HP Ink Only Run2 19July2009 Blank Slide Subtracted
16	.902	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
17	.9057278	84 Epson Ink Only AVERAGE Slide Subtracted
18	.9070835	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
19	.9074248	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
20	.9080121	**198 HP Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 93 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Epson 93.SPC

Hit #	Hit Quality	Memo Library Index
1	.8912275	**04 Okidata Ink Only Brown Spot Run7 19July2009
2	.8929266	**04 Okidata Ink Only Brown Spot Run6 19July2009
3	.8979052	**04 Okidata Ink Only Brown Spot Run3 19July2009
4	.89878	**04 Okidata Ink Only Brown Spot Run4 19July2009
5	.9036338	04 Okidata Ink Only Brown Spot AVERAGE
6	.9066426	**318a Canon Clear Ink Only Run1 19July2009
7	.910549	**312 Canon Ink Only Run4 19July2009
8	.9137643	**205 HP Ink Only Run1 19July2009
9	.9200572	312 Canon Ink Only AVERAGE
10	.9213724	**205 HP Ink Only Run4 19July2009
11	.9259999	**205 HP Ink Only Run3 19July2009
12	.9262074	199 HP Ink Only AVERAGE
13	.9262289	**199 HP Ink Only Run6 19July2009
14	.9268253	**199 HP Ink Only Run5 19July2009
15	.9286788	**156 Epson Ink Only Run3 19July2009
16	.9296188	**156 Epson Ink Only Run5 19July2009
17	.9297456	**217 Canon Ink Only Run4 19July2009
18	.9300445	**312 Canon Ink Only Run1 19July2009
19	.9323285	**199 HP Ink Only Run4 19July2009
20	.9328189	205 HP Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: AVERAGE Epson 93.SPC

Hit #	Hit Quality	Memo Library Index
1	.7487954	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
2	.751346	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.7543176	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
4	.7665483	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
5	.7674305	24 Xerox Ink Only AVERAGE Slide Subtracted
6	.7690011	13 Xerox Ink Only AVERAGE Slide Subtracted
7	.7783134	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
8	.7797517	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
9	.79024	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
10	.7936491	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
11	.7979	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
12	.7994677	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
13	.7999918	**201 HP Ink Only Run2 19July2009 Blank Slide Subtracted
14	.8018096	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
15	.8056192	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
16	.8129182	**201 HP Ink Only Run3 19July2009 Blank Slide Subtracted
17	.8149825	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
18	.8211195	**198 HP Ink Only Run6 19July2009 Blank Slide Subtracted
19	.8248159	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
20	.8261487	**198 HP Ink Only Run2 19July2009 Blank Slide Subtracted

Epson 120 12Nov2007 Run 1

Neat Ink Library

Unknown Spectrum: 120 EPSON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.2562544	205 HP Ink Only AVERAGE
2	.2688117	**205 HP Ink Only Run3 19July2009
3	.277761	**205 HP Ink Only Run4 19July2009
4	.3041937	**205 HP Ink Only Run2 19July2009
5	.3261222	**30 Epson Ink Only Run3 19July2009
6	.3448852	30 Epson Ink Only AVERAGE
7	.3455873	**30 Epson Ink Only Run2 19July2009
8	.3515809	348 Canon Ink Only AVERAGE
9	.3528043	**348 Canon Ink Only Run2 19July2009
10	.3618415	**318 Canon Ink Only Run1 19July2009
11	.3618731	**384 Canon Ink Only Run3 19July2009
12	.3647865	**318 Canon Ink Only Run2 19July2009
13	.3671238	318 Canon Ink Only AVERAGE
14	.3731151	**327 Canon Ink Only Run1 19July2009
15	.3756403	327 Canon Ink Only AVERAGE
16	.3768546	**327 Canon Ink Only Run3 19July2009
17	.376861	**318 Canon Ink Only Run3 19July2009
18	.377645	**318a Canon Clear Ink Only Run3 19July2009
19	.3789681	**327 Canon Ink Only Run2 19July2009
20	.3792919	**30 Epson Ink Only Run4 19July2009

Slide Subtracted Library

Unknown Spectrum: 120 EPSON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.6463946	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.6495832	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.6598112	205 HP Ink Only AVERAGE Slide Subtracted
4	.671824	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.7244	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
6	.7276294	318a Canon Clear Ink Only AVERAGE Slide Subtracted
7	.7289906	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted
8	.7299678	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
9	.7306485	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
10	.7433324	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
11	.744387	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
12	.748337	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
13	.7488418	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
14	.7596525	30 Epson Ink Only AVERAGE Slide Subtracted
15	.7609618	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
16	.7614077	22 Kodak Ink Only AVERAGE Slide Subtracted
17	.766376	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
18	.7675745	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
19	.7684528	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
20	.7684785	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted

Epson 120 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 120 EPSON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.7578978	**33 Epson Ink Only Black Spot Run1 19July2009
2	.7674604	**33 Epson Ink Only Black Spot Run2 19July2009
3	.7712771	33 Epson Ink Only Black Spot AVERAGE
4	.7829193	**04 Okidata Ink Only Black Spot Run1 19July2009
5	.7837791	**04 Okidata Ink Only Black Spot Run2 19July2009
6	.7853178	33 Epson Ink Only AVERAGE
7	.7867579	**63 Epson Ink Only Green Spot Run1 19July2009
8	.7896515	04 Okidata Ink Only Black Spot AVERAGE
9	.8018511	**33 Epson Ink Only Black Spot Run3 19July2009
10	.8093675	63 Epson Ink Only Green Spot AVERAGE
11	.8120654	**04 Okidata Ink Only Black Spot Run3 19July2009
12	.8121968	**63 Epson Ink Only Green Spot Run2 19July2009
13	.8134645	04 Okidata Ink Only AVERAGE
14	.8182586	**22 Kodak Ink Only Run3 19July2009
15	.8194211	205 HP Ink Only AVERAGE
16	.8202974	**33 Epson Ink Only Brown Spot Run2 19July2009
17	.823491	22 Kodak Ink Only AVERAGE
18	.8238683	33 Epson Ink Only Brown Spot AVERAGE
19	.8245891	**33 Epson Ink Only Brown Spot Run3 19July2009
20	.8255849	**205 HP Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 120 EPSON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.7389106	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
2	.7611271	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
3	.7646605	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
4	.7666782	22 Kodak Ink Only AVERAGE Slide Subtracted
5	.7703407	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
6	.7722444	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
7	.7737572	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
8	.7758048	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.7827767	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
10	.7846724	33 Epson Ink Only AVERAGE Slide Subtracted
11	.7965587	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
12	.7979064	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
13	.798507	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
14	.8016948	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
15	.802091	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
16	.8043923	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
17	.8057488	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
18	.8069735	205 HP Ink Only AVERAGE Slide Subtracted
19	.8124145	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
20	.814143	30 Epson Ink Only AVERAGE Slide Subtracted

Epson 120 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 120 EPSON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.4946592	205 HP Ink Only AVERAGE
2	.5080943	**205 HP Ink Only Run3 19July2009
3	.5163577	**22 Kodak Ink Only Run3 19July2009
4	.5167971	**205 HP Ink Only Run4 19July2009
5	.5178473	22 Kodak Ink Only AVERAGE
6	.5215104	348 Canon Ink Only AVERAGE
7	.5252334	**348 Canon Ink Only Run2 19July2009
8	.529411	**22 Kodak Ink Only Run2 19July2009
9	.5458546	**384 Canon Ink Only Run3 19July2009
10	.5621571	**223 Canon Ink Only Run3 19July2009
11	.562431	**318 Canon Ink Only Run2 19July2009
12	.5631778	**318 Canon Ink Only Run1 19July2009
13	.5637499	**30 Epson Ink Only Run3 19July2009
14	.564313	318 Canon Ink Only AVERAGE
15	.5695229	**318 Canon Ink Only Run3 19July2009
16	.5699381	**327 Canon Ink Only Run1 19July2009
17	.5702763	**205 HP Ink Only Run2 19July2009
18	.5731524	**282 Canon Ink Only Run2 19July2009
19	.5735879	327 Canon Ink Only AVERAGE
20	.5754213	**306 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 120 EPSON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.6235035	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
2	.6287481	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
3	.6291555	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
4	.6438628	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
5	.6485403	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
6	.6523565	22 Kodak Ink Only AVERAGE Slide Subtracted
7	.6536065	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
8	.6587806	30 Epson Ink Only AVERAGE Slide Subtracted
9	.6613329	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
10	.6614211	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
11	.6627303	205 HP Ink Only AVERAGE Slide Subtracted
12	.6628372	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
13	.6645581	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
14	.6672211	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
15	.6727163	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
16	.6747556	33 Epson Ink Only AVERAGE Slide Subtracted
17	.6832522	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
18	.6846473	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
19	.6893567	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
20	.6899722	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted

Epson 120 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 120 EPSON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.5200368	**199 HP Ink Only Run6 19July2009
2	.5201095	199 HP Ink Only AVERAGE
3	.521714	**199 HP Ink Only Run5 19July2009
4	.5328039	**205 HP Ink Only Run1 19July2009
5	.5627525	**199 HP Ink Only Run4 19July2009
6	.5704378	**156 Epson Ink Only Run3 19July2009
7	.5824794	**156 Epson Ink Only Run5 19July2009
8	.5874215	**199 HP Ink Only Run1 19July2009
9	.5949373	244 Xerox Ink Only AVERAGE
10	.5951054	156 Epson Ink Only AVERAGE
11	.5954058	**200 HP Ink Only Run1 19July2009
12	.5994271	**244 Xerox Ink Only Run5 19July2009
13	.6123033	**156 Epson Ink Only Run2 19July2009
14	.6138965	**200 HP Ink Only Run4 19July2009
15	.6153315	**205 HP Ink Only Run2 19July2009
16	.6164818	**30 Epson Ink Only Run4 19July2009
17	.6243058	30 Epson Ink Only AVERAGE
18	.6259993	**205 HP Ink Only Run4 19July2009
19	.6269538	**217 Canon Ink Only Run4 19July2009
20	.6297492	**205 HP Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 120 EPSON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.8117909	**198 HP Ink Only Run2 19July2009 Blank Slide Subtracted
2	.8130004	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
3	.8205817	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
4	.8214632	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
5	.8322528	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted
6	.8404071	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
7	.851076	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
8	.8522679	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
9	.8570278	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
10	.8613387	**198 HP Ink Only Run3 19July2009 Blank Slide Subtracted
11	.8721753	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
12	.875966	199 HP Ink Only AVERAGE Slide Subtracted
13	.8810928	24 Xerox Ink Only AVERAGE Slide Subtracted
14	.8818207	198 HP Ink Only AVERAGE Slide Subtracted
15	.8834093	244 Xerox Ink Only AVERAGE Slide Subtracted
16	.8837451	**201 HP Ink Only Run3 19July2009 Blank Slide Subtracted
17	.8850871	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
18	.886022	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
19	.886937	**201 HP Ink Only Run2 19July2009 Blank Slide Subtracted
20	.888408	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted

Epson 120 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 120 EPSON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.5353944	**33 Epson Ink Only Black Spot Run1 19July2009
2	.546714	**33 Epson Ink Only Black Spot Run2 19July2009
3	.5498295	33 Epson Ink Only Black Spot AVERAGE
4	.5730435	33 Epson Ink Only AVERAGE
5	.5817761	**63 Epson Ink Only Green Spot Run1 19July2009
6	.5913442	**33 Epson Ink Only Black Spot Run3 19July2009
7	.6090039	63 Epson Ink Only Green Spot AVERAGE
8	.6152052	**63 Epson Ink Only Green Spot Run2 19July2009
9	.6390364	63 Epson Ink Only AVERAGE
10	.6436742	**04 Okidata Ink Only Black Spot Run2 19July2009
11	.6447073	**63 Epson Ink Only Green Spot Run3 19July2009
12	.6457179	**33 Epson Ink Only Brown Spot Run2 19July2009
13	.6467795	**04 Okidata Ink Only Black Spot Run1 19July2009
14	.6502731	04 Okidata Ink Only Black Spot AVERAGE
15	.6511834	33 Epson Ink Only Brown Spot AVERAGE
16	.6528192	**33 Epson Ink Only Brown Spot Run3 19July2009
17	.6569599	**33 Epson Ink Only Brown Spot Run1 19July2009
18	.659149	04 Okidata Ink Only AVERAGE
19	.6697636	**04 Okidata Ink Only Black Spot Run3 19July2009
20	.6705929	**60 Epson Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 120 EPSON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.5436008	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
2	.5511869	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
3	.5534289	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
4	.5720166	33 Epson Ink Only AVERAGE Slide Subtracted
5	.5799454	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
6	.5862457	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
7	.5976018	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
8	.5998974	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
9	.6049824	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
10	.6128058	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
11	.6168972	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
12	.6219708	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
13	.624378	22 Kodak Ink Only AVERAGE Slide Subtracted
14	.6248583	63 Epson Ink Only AVERAGE Slide Subtracted
15	.627165	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
16	.6283041	205 HP Ink Only AVERAGE Slide Subtracted
17	.6348659	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
18	.640127	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
19	.6425365	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
20	.6438985	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted

Epson 120 11July2008 Run 2

Neat Ink Library

Unknown Spectrum: 120 EPSON RUN2 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.4371202	**492 Canon Ink Only Run2 19July2009
2	.44448	**492 Canon Ink Only Run4 19July2009
3	.4526279	**492 Canon Ink Only Run1 19July2009
4	.4591691	**492 Canon Ink Only Run3 19July2009
5	.4681146	492 Canon Ink Only AVERAGE
6	.472719	**04 Okidata Ink Only Brown Spot Run7 19July2009
7	.4886899	**312 Canon Ink Only Run2 19July2009
8	.5014677	**04 Okidata Ink Only Brown Spot Run6 19July2009
9	.503503	**04 Okidata Ink Only Brown Spot Run1 19July2009
10	.5073552	**492 Canon Ink Only Run5 19July2009
11	.5217165	**04 Okidata Ink Only Brown Spot Run3 19July2009
12	.5289321	**04 Okidata Ink Only Brown Spot Run4 19July2009
13	.531924	**312 Canon Ink Only Run1 19July2009
14	.5435364	**66 Epson Ink Only Run1 19July2009
15	.5622622	66 Epson Ink Only AVERAGE
16	.5655204	04 Okidata Ink Only Brown Spot AVERAGE
17	.5669758	**66 Epson Ink Only Run2 19July2009
18	.5779542	312 Canon Ink Only AVERAGE
19	.5784391	**66 Epson Ink Only Run3 19July2009
20	.5992809	**306 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 120 EPSON RUN2 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.4221213	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
2	.4251456	**492 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
3	.4298873	492 Canon Ink Only AVERAGE Slide Subtracted
4	.4365721	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
5	.4421316	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
6	.44659	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
7	.4496546	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
8	.4501287	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
9	.4605107	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
10	.4661056	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
11	.469072	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
12	.4894221	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
13	.5027299	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
14	.5160837	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
15	.5224327	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
16	.534632	66 Epson Ink Only AVERAGE Slide Subtracted
17	.5353559	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
18	.5419339	312 Canon Ink Only AVERAGE Slide Subtracted
19	.5478334	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
20	.5679862	**63 Epson Ink Only Purple Spot Run3 19July2009 Blank Slide Subtracted

Epson 120 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Epson 120.SPC

Hit #	Hit Quality	Memo Library Index
1	.6800777	**24 Xerox Ink Only Run1 19July2009
2	.7076173	24 Xerox Ink Only R1R2 AVERAGE
3	.7314941	**24 Xerox Ink Only Run2 19July2009
4	.7417976	**13 Xerox Ink Only Run3 19July2009
5	.745656	24 Xerox Ink Only AVERAGE
6	.7550319	**13 Xerox Ink Only Run6 19July2009
7	.7618102	**13 Xerox Ink Only Run4 19July2009
8	.7635154	13 Xerox Ink Only AVERAGE
9	.7717908	**13 Xerox Ink Only Run5 19July2009
10	.7892586	**13 Xerox Ink Only Run2 19July2009
11	.797133	**201 HP Ink Only Run1 19July2009
12	.799311	**13 Xerox Ink Only Run1 19July2009
13	.8070737	**312 Canon Ink Only Run3 19July2009
14	.8080657	**200 HP Ink Only Run3 19July2009
15	.8098908	**201 HP Ink Only Run3 19July2009
16	.8110636	**201 HP Ink Only Run2 19July2009
17	.811877	**198 HP Ink Only Run4 19July2009
18	.8137046	**17 Kodak Ink Only Run1 19July2009
19	.8139656	17 Kodak Ink Only AVERAGE
20	.8176382	**17 Kodak Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Epson 120.SPC

Hit #	Hit Quality	Memo Library Index
1	.5978996	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
2	.6263538	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
3	.6300202	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
4	.6356893	24 Xerox Ink Only AVERAGE Slide Subtracted
5	.6371738	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
6	.6509238	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
7	.6563008	13 Xerox Ink Only AVERAGE Slide Subtracted
8	.6640357	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
9	.6695209	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
10	.6748617	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
11	.6750304	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
12	.6771306	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
13	.6811532	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
14	.6879993	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
15	.6931403	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
16	.6977025	156 Epson Ink Only AVERAGE Slide Subtracted
17	.7154186	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
18	.7167558	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
19	.7192853	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
20	.7270043	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted

Epson 123 12Nov2007 Run 1

Neat Ink Library

Unknown Spectrum: 123 EPSON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.1231631	**13 Xerox Ink Only Run2 19July2009
2	.1521387	**201 HP Ink Only Run1 19July2009
3	.1621844	**201 HP Ink Only Run2 19July2009
4	.1814907	17 Kodak Ink Only AVERAGE
5	.1831494	**201 HP Ink Only Run3 19July2009
6	.1862219	**17 Kodak Ink Only Run2 19July2009
7	.1865997	**198 HP Ink Only Run4 19July2009
8	.1876762	**17 Kodak Ink Only Run1 19July2009
9	.1921406	**24 Xerox Ink Only Run1 19July2009
10	.1924409	201 HP Ink Only AVERAGE
11	.1925866	**17 Kodak Ink Only Run3 19July2009
12	.2018716	**200 HP Ink Only Run3 19July2009
13	.2023421	24 Xerox Ink Only AVERAGE
14	.2035092	**30 Epson Ink Only Run1 19July2009
15	.2077063	24 Xerox Ink Only R1R2 AVERAGE
16	.2080824	198 HP Ink Only AVERAGE
17	.2107921	**13 Xerox Ink Only Run4 19July2009
18	.2123527	**13 Xerox Ink Only Run5 19July2009
19	.2131744	13 Xerox Ink Only AVERAGE
20	.2205913	**198 HP Ink Only Run6 19July2009

Slide Subtracted Library

Unknown Spectrum: 123 EPSON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.7767488	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.789431	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
3	.792853	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.7947409	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
5	.8128125	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
6	.8266168	17 Kodak Ink Only AVERAGE Slide Subtracted
7	.8267276	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
8	.835714	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
9	.8443509	24 Xerox Ink Only AVERAGE Slide Subtracted
10	.8461614	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
11	.8463985	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
12	.8568167	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
13	.8577486	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
14	.8579594	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
15	.8613154	198 HP Ink Only AVERAGE Slide Subtracted
16	.8659732	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
17	.867381	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
18	.8704721	201 HP Ink Only AVERAGE Slide Subtracted
19	.8709354	**201 HP Ink Only Run3 19July2009 Blank Slide Subtracted
20	.8716914	**201 HP Ink Only Run2 19July2009 Blank Slide Subtracted

Epson 123 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 123 EPSON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.2650133	**205 HP Ink Only Run4 19July2009
2	.2746382	**205 HP Ink Only Run3 19July2009
3	.2828073	205 HP Ink Only AVERAGE
4	.2901574	**205 HP Ink Only Run2 19July2009
5	.3385514	**223 Canon Ink Only Run3 19July2009
6	.3431948	**348 Canon Ink Only Run3 19July2009
7	.3575875	348 Canon Ink Only AVERAGE
8	.3583481	**348 Canon Ink Only Run2 19July2009
9	.3600436	223 Canon Ink Only AVERAGE
10	.3610117	**306 Canon Ink Only Run1 19July2009
11	.3611706	**306 Canon Ink Only Run2 19July2009
12	.3615957	**348 Canon Ink Only Run1 19July2009
13	.3635607	**384 Canon Ink Only Run3 19July2009
14	.3655117	306 Canon Ink Only AVERAGE
15	.367628	**318 Canon Ink Only Run3 19July2009
16	.3708659	**384 Canon Ink Only Run2 19July2009
17	.3718719	384 Canon Ink Only AVERAGE
18	.372267	**223 Canon Ink Only Run2 19July2009
19	.3731802	**384 Canon Ink Only Run1 19July2009
20	.3736552	318 Canon Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 123 EPSON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.3378845	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.3465361	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.3641214	205 HP Ink Only AVERAGE Slide Subtracted
4	.4308447	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.4505484	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
6	.4843102	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
7	.4894931	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
8	.5136791	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
9	.5167831	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
10	.5243498	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
11	.526047	22 Kodak Ink Only AVERAGE Slide Subtracted
12	.5270573	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
13	.5299855	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
14	.5304789	30 Epson Ink Only AVERAGE Slide Subtracted
15	.5346124	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
16	.5450956	04 Okidata Ink Only AVERAGE Slide Subtracted
17	.5515638	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
18	.5521924	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
19	.5524769	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
20	.5531608	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted

Epson 123 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 123 EPSON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.3201165	**223 Canon Ink Only Run3 19July2009
2	.3416314	223 Canon Ink Only AVERAGE
3	.3431677	**306 Canon Ink Only Run1 19July2009
4	.3450968	**306 Canon Ink Only Run2 19July2009
5	.3501068	**384 Canon Ink Only Run1 19July2009
6	.3517811	**223 Canon Ink Only Run2 19July2009
7	.3549205	**384 Canon Ink Only Run3 19July2009
8	.3584084	**384 Canon Ink Only Run2 19July2009
9	.3586053	384 Canon Ink Only AVERAGE
10	.3651932	**223 Canon Ink Only Run1 19July2009
11	.3681532	**217 Canon Ink Only Run1 19July2009
12	.369758	217 Canon Ink Only AVERAGE
13	.3700245	**217 Canon Ink Only Run3 19July2009
14	.3707275	**348 Canon Ink Only Run1 19July2009
15	.3713507	**217 Canon Ink Only Run2 19July2009
16	.3720654	**318 Canon Ink Only Run2 19July2009
17	.3722698	**318 Canon Ink Only Run3 19July2009
18	.3730305	318 Canon Ink Only AVERAGE
19	.3768557	**318 Canon Ink Only Run1 19July2009
20	.3770023	348 Canon Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 123 EPSON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.5216128	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
2	.5258112	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
3	.5307444	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
4	.5350632	30 Epson Ink Only AVERAGE Slide Subtracted
5	.536248	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
6	.5457625	22 Kodak Ink Only AVERAGE Slide Subtracted
7	.5477666	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
8	.5505451	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.5529089	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
10	.5564923	205 HP Ink Only AVERAGE Slide Subtracted
11	.5702808	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
12	.5733048	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
13	.5761012	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
14	.5791243	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
15	.5986727	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
16	.6001915	348 Canon Ink Only AVERAGE Slide Subtracted
17	.6048324	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
18	.6055321	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
19	.6152111	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20	.6155378	384 Canon Ink Only AVERAGE Slide Subtracted

Epson 123 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 123 EPSON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.743372	**33 Epson Ink Only Black Spot Run1 19July2009
2	.7606754	33 Epson Ink Only Black Spot AVERAGE
3	.7609937	**33 Epson Ink Only Black Spot Run2 19July2009
4	.7674575	**63 Epson Ink Only Green Spot Run1 19July2009
5	.7736333	**04 Okidata Ink Only Black Spot Run2 19July2009
6	.7770511	**04 Okidata Ink Only Black Spot Run1 19July2009
7	.7820566	04 Okidata Ink Only Black Spot AVERAGE
8	.7884594	33 Epson Ink Only AVERAGE
9	.7912858	**223 Canon Ink Only Run3 19July2009
10	.7930632	**33 Epson Ink Only Black Spot Run3 19July2009
11	.7960129	63 Epson Ink Only Green Spot AVERAGE
12	.7986396	348 Canon Ink Only AVERAGE
13	.7998107	**348 Canon Ink Only Run2 19July2009
14	.800616	**63 Epson Ink Only Green Spot Run2 19July2009
15	.8009265	**13 Xerox Ink Only Run2 19July2009
16	.8068875	**04 Okidata Ink Only Black Spot Run3 19July2009
17	.815146	**306 Canon Ink Only Run1 19July2009
18	.8153899	306 Canon Ink Only AVERAGE
19	.8156217	**217 Canon Ink Only Run1 19July2009
20	.8157908	223 Canon Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 123 EPSON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.6927353	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
2	.7116572	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
3	.7240347	30 Epson Ink Only AVERAGE Slide Subtracted
4	.7251237	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
5	.726194	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
6	.7294905	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
7	.7343381	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
8	.7372798	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
9	.7373824	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
10	.7374003	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
11	.7402503	384 Canon Ink Only AVERAGE Slide Subtracted
12	.7404395	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
13	.7411451	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
14	.7412206	223 Canon Ink Only AVERAGE Slide Subtracted
15	.7414548	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
16	.7415312	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
17	.7422398	17 Kodak Ink Only AVERAGE Slide Subtracted
18	.7429107	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
19	.7433335	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
20	.7449132	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted

Epson 123 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 123 EPSON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.853556	**33 Epson Ink Only Black Spot Run1 19July2009
2	.8670433	**33 Epson Ink Only Black Spot Run2 19July2009
3	.8674926	33 Epson Ink Only Black Spot AVERAGE
4	.8776457	**63 Epson Ink Only Green Spot Run1 19July2009
5	.8851518	33 Epson Ink Only AVERAGE
6	.8935735	**04 Okidata Ink Only Black Spot Run2 19July2009
7	.894522	**33 Epson Ink Only Black Spot Run3 19July2009
8	.895391	63 Epson Ink Only Green Spot AVERAGE
9	.8972147	**04 Okidata Ink Only Black Spot Run1 19July2009
10	.8992487	**63 Epson Ink Only Green Spot Run2 19July2009
11	.9013858	04 Okidata Ink Only Black Spot AVERAGE
12	.9083984	63 Epson Ink Only AVERAGE
13	.9156788	**63 Epson Ink Only Green Spot Run3 19July2009
14	.9193053	**04 Okidata Ink Only Black Spot Run3 19July2009
15	.9247028	**33 Epson Ink Only Brown Spot Run2 19July2009
16	.9247432	**306 Canon Ink Only Run3 19July2009
17	.9266629	**223 Canon Ink Only Run3 19July2009
18	.9276917	**60 Epson Ink Only Run1 19July2009
19	.9281114	33 Epson Ink Only Brown Spot AVERAGE
20	.9289955	**60 Epson Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 123 EPSON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.7888044	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.7982848	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
3	.7997996	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
4	.8005525	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
5	.8021949	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
6	.8034713	30 Epson Ink Only AVERAGE Slide Subtracted
7	.8048023	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
8	.8052129	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
9	.8052346	223 Canon Ink Only AVERAGE Slide Subtracted
10	.805276	384 Canon Ink Only AVERAGE Slide Subtracted
11	.8069763	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
12	.8093693	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
13	.8103173	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
14	.8108312	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
15	.810986	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
16	.812145	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
17	.8143222	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
18	.8145083	**201 HP Ink Only Run2 19July2009 Blank Slide Subtracted
19	.8169594	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
20	.8175505	217 Canon Ink Only AVERAGE Slide Subtracted

Epson 123 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Epson 123.SPC

Hit #	Hit Quality	Memo Library Index
1	.3089666	**24 Xerox Ink Only Run1 19July2009
2	.3278625	24 Xerox Ink Only R1R2 AVERAGE
3	.3496513	**24 Xerox Ink Only Run2 19July2009
4	.3590623	24 Xerox Ink Only AVERAGE
5	.3718448	**13 Xerox Ink Only Run3 19July2009
6	.3795873	**13 Xerox Ink Only Run4 19July2009
7	.3836209	**13 Xerox Ink Only Run6 19July2009
8	.3851533	13 Xerox Ink Only AVERAGE
9	.3851629	**13 Xerox Ink Only Run2 19July2009
10	.3949703	**13 Xerox Ink Only Run5 19July2009
11	.4398629	**201 HP Ink Only Run1 19July2009
12	.4438859	**13 Xerox Ink Only Run1 19July2009
13	.4494346	**201 HP Ink Only Run3 19July2009
14	.4513403	**198 HP Ink Only Run4 19July2009
15	.4536943	**201 HP Ink Only Run2 19July2009
16	.4716563	17 Kodak Ink Only AVERAGE
17	.4725745	**17 Kodak Ink Only Run1 19July2009
18	.475402	**200 HP Ink Only Run3 19July2009
19	.4765477	198 HP Ink Only AVERAGE
20	.4795132	**17 Kodak Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Epson 123.SPC

Hit #	Hit Quality	Memo Library Index
1	.5433771	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.5788915	13 Xerox Ink Only AVERAGE Slide Subtracted
3	.5859267	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
4	.5878604	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
5	.6132671	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
6	.6155728	24 Xerox Ink Only AVERAGE Slide Subtracted
7	.6223859	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
8	.6318029	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
9	.6418096	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
10	.7112359	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
11	.7135351	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
12	.715341	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
13	.7205956	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
14	.721835	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
15	.7226084	17 Kodak Ink Only AVERAGE Slide Subtracted
16	.7275777	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
17	.7292954	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
18	.7313212	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
19	.738466	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
20	.7419072	198 HP Ink Only AVERAGE Slide Subtracted

Epson 156 12Nov2007 Run 1

Neat Ink Library

Unknown Spectrum: 156 EPSON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.1324023	**24 Xerox Ink Only Run1 19July2009
2	.1403797	**13 Xerox Ink Only Run2 19July2009
3	.1507634	24 Xerox Ink Only R1R2 AVERAGE
4	.1586896	**13 Xerox Ink Only Run4 19July2009
5	.159382	13 Xerox Ink Only AVERAGE
6	.1599273	**13 Xerox Ink Only Run6 19July2009
7	.1611322	24 Xerox Ink Only AVERAGE
8	.1667914	**201 HP Ink Only Run1 19July2009
9	.1669236	**13 Xerox Ink Only Run5 19July2009
10	.1701341	**24 Xerox Ink Only Run2 19July2009
11	.1826431	**13 Xerox Ink Only Run3 19July2009
12	.1843762	**201 HP Ink Only Run2 19July2009
13	.2030231	**201 HP Ink Only Run3 19July2009
14	.2068366	**198 HP Ink Only Run4 19July2009
15	.212575	17 Kodak Ink Only AVERAGE
16	.2143817	**17 Kodak Ink Only Run1 19July2009
17	.2178368	201 HP Ink Only AVERAGE
18	.2184729	**200 HP Ink Only Run3 19July2009
19	.2194632	**17 Kodak Ink Only Run2 19July2009
20	.2257709	**13 Xerox Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 156 EPSON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.639524	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.6665733	13 Xerox Ink Only AVERAGE Slide Subtracted
3	.6679583	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
4	.6741286	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
5	.7461081	24 Xerox Ink Only AVERAGE Slide Subtracted
6	.7492045	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
7	.7498962	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
8	.762852	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
9	.7632445	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
10	.7908444	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
11	.799857	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
12	.8026813	17 Kodak Ink Only AVERAGE Slide Subtracted
13	.8059998	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
14	.8161582	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
15	.818544	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
16	.8190915	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
17	.8194624	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
18	.819584	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
19	.8235119	198 HP Ink Only AVERAGE Slide Subtracted
20	.8292091	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted

Epson 156 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 156 EPSON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.772796	**244 Xerox Ink Only Run3 19July2009
2	.8393317	**84 Epson Ink Only Run4 19July2009
3	.8556995	84 Epson Ink Only AVERAGE
4	.8610514	**84 Epson Ink Only Run2 19July2009
5	.8647857	**84 Epson Ink Only Run5 19July2009
6	.8698581	**84 Epson Ink Only Run1 19July2009
7	.9207535	205 HP Ink Only AVERAGE
8	.9276925	**205 HP Ink Only Run3 19July2009
9	.9280537	22 Kodak Ink Only AVERAGE
10	.9285038	**04 Okidata Ink Only Black Spot Run1 19July2009
11	.928768	**205 HP Ink Only Run2 19July2009
12	.9297411	**04 Okidata Ink Only Black Spot Run2 19July2009
13	.9299789	**33 Epson Ink Only Black Spot Run1 19July2009
14	.9311324	**205 HP Ink Only Run4 19July2009
15	.9312798	04 Okidata Ink Only Black Spot AVERAGE
16	.9315274	**22 Kodak Ink Only Run3 19July2009
17	.93331	**22 Kodak Ink Only Run2 19July2009
18	.933314	**33 Epson Ink Only Black Spot Run2 19July2009
19	.9348989	33 Epson Ink Only Black Spot AVERAGE
20	.9392166	**04 Okidata Ink Only Black Spot Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 156 EPSON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.7576844	**244 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8037211	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
3	.8107358	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
4	.8222231	**84 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
5	.8349405	**84 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
6	.8441064	**84 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
7	.8453753	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
8	.8495077	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.8506451	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
10	.8795008	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
11	.8816755	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
12	.8874429	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
13	.8881425	30 Epson Ink Only AVERAGE Slide Subtracted
14	.8882534	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
15	.8894266	**201 HP Ink Only Run6 19July2009 Blank Slide Subtracted
16	.8915567	22 Kodak Ink Only AVERAGE Slide Subtracted
17	.8923439	205 HP Ink Only AVERAGE Slide Subtracted
18	.893787	**201 HP Ink Only Run5 19July2009 Blank Slide Subtracted
19	.8958576	84 Epson Ink Only AVERAGE Slide Subtracted
20	.8970914	**201 HP Ink Only Run4 19July2009 Blank Slide Subtracted

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Neat Ink Library

Unknown Spectrum: 156 EPSON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.7676646	**84 Epson Ink Only Run2 19July2009
2	.7687657	**84 Epson Ink Only Run1 19July2009
3	.7898741	84 Epson Ink Only AVERAGE
4	.79829	**84 Epson Ink Only Run5 19July2009
5	.8330898	**84 Epson Ink Only Run4 19July2009
6	.8646203	**244 Xerox Ink Only Run3 19July2009
7	.9081795	**24 Xerox Ink Only Run1 19July2009
8	.9125126	**04 Okidata Ink Only Black Spot Run2 19July2009
9	.9144647	**04 Okidata Ink Only Black Spot Run1 19July2009
10	.9147925	**156 Epson Ink Only Run4 19July2009
11	.9172118	04 Okidata Ink Only Black Spot AVERAGE
12	.918443	24 Xerox Ink Only R1R2 AVERAGE
13	.9210035	**244 Xerox Ink Only Run2 19July2009
14	.9246575	**24 Xerox Ink Only Run2 19July2009
15	.9280468	**04 Okidata Ink Only Black Spot Run3 19July2009
16	.9313047	**156 Epson Ink Only Run1 19July2009
17	.931749	**13 Xerox Ink Only Run6 19July2009
18	.9355906	**244 Xerox Ink Only Run4 19July2009
19	.9361693	24 Xerox Ink Only AVERAGE
20	.9380051	13 Xerox Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 156 EPSON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.7296542	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
2	.7653738	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
3	.7762147	**84 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
4	.7770625	**84 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
5	.7828092	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
6	.7844819	**244 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
7	.7943225	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
8	.8024254	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
9	.805972	156 Epson Ink Only AVERAGE Slide Subtracted
10	.8103623	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
11	.8114441	84 Epson Ink Only AVERAGE Slide Subtracted
12	.8127009	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
13	.8167199	244 Xerox Ink Only AVERAGE Slide Subtracted
14	.8398073	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
15	.8419397	**84 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
16	.8575202	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
17	.8713154	24 Xerox Ink Only AVERAGE Slide Subtracted
18	.873018	**199 HP Ink Only Run1 19July2009 Blank Slide Subtracted
19	.8739435	**244 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
20	.8750781	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted

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Neat Ink Library

Unknown Spectrum: 156 EPSON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.8925967	**84 Epson Ink Only Run2 19July2009
2	.9017255	**84 Epson Ink Only Run5 19July2009
3	.9049037	**84 Epson Ink Only Run1 19July2009
4	.9061664	84 Epson Ink Only AVERAGE
5	.9090489	**244 Xerox Ink Only Run3 19July2009
6	.931395	**13 Xerox Ink Only Run3 19July2009
7	.9337755	**84 Epson Ink Only Run4 19July2009
8	.9362991	**492 Canon Ink Only Run2 19July2009
9	.94176	**312 Canon Ink Only Run1 19July2009
10	.9419811	**492 Canon Ink Only Run1 19July2009
11	.948972	312 Canon Ink Only AVERAGE
12	.9493718	**24 Xerox Ink Only Run2 19July2009
13	.9495054	**13 Xerox Ink Only Run2 19July2009
14	.9512894	24 Xerox Ink Only R1R2 AVERAGE
15	.9528037	**24 Xerox Ink Only Run1 19July2009
16	.9530007	492 Canon Ink Only AVERAGE
17	.9532701	**492 Canon Ink Only Run4 19July2009
18	.9543844	**312 Canon Ink Only Run2 19July2009
19	.9550062	**312 Canon Ink Only Run4 19July2009
20	.9550391	**492 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 156 EPSON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.8823649	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
2	.8871715	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
3	.8949695	**84 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
4	.8977835	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
5	.8999404	**199 HP Ink Only Run1 19July2009 Blank Slide Subtracted
6	.9032379	**244 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
7	.9039776	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
8	.9059187	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
9	.9076325	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
10	.9077764	24 Xerox Ink Only AVERAGE Slide Subtracted
11	.9078966	**84 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
12	.912462	**244 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
13	.9134293	84 Epson Ink Only AVERAGE Slide Subtracted
14	.9173964	244 Xerox Ink Only AVERAGE Slide Subtracted
15	.9186112	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
16	.9210789	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
17	.9235493	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
18	.9235598	**24 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
19	.92663	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
20	.9345136	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted

Epson 156 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 156 EPSON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.7791848	**217 Canon Ink Only Run4 19July2009
2	.7846948	**205 HP Ink Only Run1 19July2009
3	.79264	**199 HP Ink Only Run6 19July2009
4	.7932743	199 HP Ink Only AVERAGE
5	.7934529	**30 Epson Ink Only Run4 19July2009
6	.7961804	244 Xerox Ink Only AVERAGE
7	.7968164	**199 HP Ink Only Run5 19July2009
8	.7981189	30 Epson Ink Only AVERAGE
9	.7981988	**244 Xerox Ink Only Run5 19July2009
10	.8003043	**199 HP Ink Only Run1 19July2009
11	.8022852	**30 Epson Ink Only Run3 19July2009
12	.8033236	**30 Epson Ink Only Run2 19July2009
13	.8061823	**200 HP Ink Only Run1 19July2009
14	.8075503	**318a Canon Clear Ink Only Run1 19July2009
15	.8093373	**199 HP Ink Only Run4 19July2009
16	.8189569	**244 Xerox Ink Only Run1 19July2009
17	.8193122	**156 Epson Ink Only Run3 19July2009
18	.8230546	282 Canon Ink Only AVERAGE
19	.82415	**205 HP Ink Only Run2 19July2009
20	.8251916	**282 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: 156 EPSON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.849178	**198 HP Ink Only Run2 19July2009 Blank Slide Subtracted
2	.8654729	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
3	.8681285	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
4	.8683049	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted
5	.8687952	156 Epson Ink Only AVERAGE Slide Subtracted
6	.8731351	**198 HP Ink Only Run3 19July2009 Blank Slide Subtracted
7	.8733934	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
8	.88292	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
9	.8873877	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
10	.8886508	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
11	.8904395	199 HP Ink Only AVERAGE Slide Subtracted
12	.8965751	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
13	.8991069	198 HP Ink Only AVERAGE Slide Subtracted
14	.9013896	**198 HP Ink Only Run6 19July2009 Blank Slide Subtracted
15	.9016484	**198 HP Ink Only Run5 19July2009 Blank Slide Subtracted
16	.914896	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
17	.9161208	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
18	.9167086	**201 HP Ink Only Run6 19July2009 Blank Slide Subtracted
19	.9198286	**201 HP Ink Only Run3 19July2009 Blank Slide Subtracted
20	.9199078	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted

Epson 156 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Epson 156.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.7270975	**205 HP Ink Only Run4 19July2009		
2	.7275193	**282 Canon Ink Only Run3 19July2009		
3	.7290044	306 Canon Ink Only AVERAGE		
4	.7305086	**282 Canon Ink Only Run4 19July2009		
5	.735773	**205 HP Ink Only Run3 19July2009		
6	.7402352	**348 Canon Ink Only Run3 19July2009		
7	.7411055	**306 Canon Ink Only Run3 19July2009		
8	.7429756	**522 Canon Ink Only Run3 19July2009		
9	.7434766	**282 Canon Ink Only Run2 19July2009		
10	.7445078	**402 Canon Ink Only Run3 19July2009		
11	.7451626	402 Canon Ink Only AVERAGE		
12	.7453709	282 Canon Ink Only AVERAGE		
13	.7454478	**402 Canon Ink Only Run2 19July2009		
14	.7456346	**522 Canon Ink Only Run2 19July2009		
15	.7459922	205 HP Ink Only AVERAGE		
16	.7461572	522 Canon Ink Only AVERAGE		
17	.7464931	04 Okidata Ink Only AVERAGE		
18	.7473617	**402 Canon Ink Only Run1 19July2009		
19	.7493144	**522 Canon Ink Only Run1 19July2009		
20	.7529597	**205 HP Ink Only Run2 19July2009		

Slide Subtracted Library

Unknown Spectrum: AVERAGE Epson 156.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.7407913	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted		
2	.747214	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted		
3	.7511031	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted		
4	.7523596	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted		
5	.7545598	**306 Canon Ink Only Run3 19July2009 Blank Slide Subtracted		
6	.7634894	205 HP Ink Only AVERAGE Slide Subtracted		
7	.7748775	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted		
8	.7777119	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted		
9	.7788171	282 Canon Ink Only AVERAGE Slide Subtracted		
10	.77928	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted		
11	.7794961	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted		
12	.780372	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted		
13	.7805625	**244 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted		
14	.7805718	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted		
15	.7824602	04 Okidata Ink Only AVERAGE Slide Subtracted		
16	.7835	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted		
17	.7838784	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted		
18	.7941008	244 Xerox Ink Only AVERAGE Slide Subtracted		
19	.7966789	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted		
20	.8006663	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted		

Hewlett Packard 198 12Nov2007 Run 1

Neat Ink Library

Unknown Spectrum: 198 HP 20071112.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.1489491	**201 HP Ink Only Run1 19July2009		
2	.1671799	201 HP Ink Only AVERAGE		
3	.1718363	**17 Kodak Ink Only Run3 19July2009		
4	.1767648	**201 HP Ink Only Run2 19July2009		
5	.1838703	**200 HP Ink Only Run3 19July2009		
6	.1852347	**17 Kodak Ink Only Run2 19July2009		
7	.1908001	17 Kodak Ink Only AVERAGE		
8	.1935407	**17 Kodak Ink Only Run1 19July2009		
9	.1964584	200 HP Ink Only AVERAGE		
10	.2236998	**13 Xerox Ink Only Run2 19July2009		
11	.2320209	**13 Xerox Ink Only Run6 19July2009		
12	.2402745	**201 HP Ink Only Run3 19July2009		
13	.2437185	**198 HP Ink Only Run4 19July2009		
14	.246195	13 Xerox Ink Only AVERAGE		
15	.2467759	**200 HP Ink Only Run1 19July2009		
16	.2525671	**244 Xerox Ink Only Run1 19July2009		
17	.254936	**13 Xerox Ink Only Run5 19July2009		
18	.2575343	198 HP Ink Only AVERAGE		
19	.2580492	**13 Xerox Ink Only Run4 19July2009		
20	.2665632	**198 HP Ink Only Run6 19July2009		

Slide Subtracted Library

Unknown Spectrum: 198 HP 20071112.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.8353302	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted		
2	.8474963	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted		
3	.8616779	13 Xerox Ink Only AVERAGE Slide Subtracted		
4	.8629715	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted		
5	.8683845	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted		
6	.892449	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted		
7	.9097627	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted		
8	.9154292	17 Kodak Ink Only AVERAGE Slide Subtracted		
9	.9187588	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted		
10	.9233268	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted		
11	.9264419	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted		
12	.9287014	24 Xerox Ink Only AVERAGE Slide Subtracted		
13	.9291426	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3		
14	.9309822	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted		
15	.9311926	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted		
16	.9330173	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted		
17	.9361978	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted		
18	.9381139	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted		
19	.9402425	198 HP Ink Only AVERAGE Slide Subtracted		
20	.9431657	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted		

Hewlett Packard 198 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 198 HP 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.4157714	**244 Xerox Ink Only Run4 19July2009
2	.4380804	**199 HP Ink Only Run1 19July2009
3	.4464572	**244 Xerox Ink Only Run1 19July2009
4	.4495642	**156 Epson Ink Only Run5 19July2009
5	.4541013	156 Epson Ink Only AVERAGE
6	.4563627	**156 Epson Ink Only Run3 19July2009
7	.4575474	244 Xerox Ink Only AVERAGE
8	.4581108	**156 Epson Ink Only Run4 19July2009
9	.45965	**156 Epson Ink Only Run2 19July2009
10	.4604977	**199 HP Ink Only Run4 19July2009
11	.4610093	**200 HP Ink Only Run1 19July2009
12	.461929	**312 Canon Ink Only Run3 19July2009
13	.4633114	**244 Xerox Ink Only Run5 19July2009
14	.4678626	200 HP Ink Only AVERAGE
15	.4733281	**244 Xerox Ink Only Run2 19July2009
16	.4744894	**156 Epson Ink Only Run1 19July2009
17	.4816786	**200 HP Ink Only Run3 19July2009
18	.4822915	**199 HP Ink Only Run5 19July2009
19	.487074	199 HP Ink Only AVERAGE
20	.4884887	**199 HP Ink Only Run6 19July2009

Slide Subtracted Library

Unknown Spectrum: 198 HP 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.8212629	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
2	.840663	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
3	.8452786	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
4	.8530009	**84 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
5	.8531812	**84 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
6	.853548	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
7	.855437	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
8	.856788	312 Canon Ink Only AVERAGE Slide Subtracted
9	.8573498	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
10	.8631343	492 Canon Ink Only AVERAGE Slide Subtracted
11	.8645031	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
12	.8662346	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
13	.8747993	**84 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
14	.8791465	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
15	.8832655	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
16	.8858353	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
17	.8866075	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
18	.8885921	84 Epson Ink Only AVERAGE Slide Subtracted
19	.8919709	**492 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
20	.8942772	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted

Hewlett Packard 198 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 198 HP 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.2039028	200 HP Ink Only AVERAGE
2	.2088031	201 HP Ink Only AVERAGE
3	.2121976	**17 Kodak Ink Only Run3 19July2009
4	.2166785	**201 HP Ink Only Run1 19July2009
5	.221956	**30 Epson Ink Only Run2 19July2009
6	.2242596	30 Epson Ink Only AVERAGE
7	.2264847	**17 Kodak Ink Only Run2 19July2009
8	.2316458	**30 Epson Ink Only Run3 19July2009
9	.232888	**201 HP Ink Only Run2 19July2009
10	.2365635	17 Kodak Ink Only AVERAGE
11	.2386972	**199 HP Ink Only Run4 19July2009
12	.2421006	**200 HP Ink Only Run1 19July2009
13	.2429382	**17 Kodak Ink Only Run1 19July2009
14	.2459677	**200 HP Ink Only Run3 19July2009
15	.27458	205 HP Ink Only AVERAGE
16	.2772884	**199 HP Ink Only Run1 19July2009
17	.2791343	**244 Xerox Ink Only Run1 19July2009
18	.2807452	**30 Epson Ink Only Run1 19July2009
19	.2840122	**318a Canon Clear Ink Only Run3 19July2009
20	.2895644	318a Canon Clear Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 198 HP 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.9130669	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.9136559	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
3	.9177558	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
4	.9242257	205 HP Ink Only AVERAGE Slide Subtracted
5	.9317593	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
6	.9368643	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
7	.9389157	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
8	.9390244	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
9	.9415063	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
10	.9450207	492 Canon Ink Only AVERAGE Slide Subtracted
11	.945199	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
12	.9461869	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
13	.9490445	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
14	.9526392	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
15	.9542652	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
16	.9564239	22 Kodak Ink Only AVERAGE Slide Subtracted
17	.9577637	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
18	.9584538	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
19	.9587474	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
20	.9595815	312 Canon Ink Only AVERAGE Slide Subtracted

Hewlett Packard 198 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 198 HP 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.176459	**84 Epson Ink Only Run3 19July2009
2	.2107418	**201 HP Ink Only Run1 19July2009
3	.2211514	201 HP Ink Only AVERAGE
4	.2347085	**201 HP Ink Only Run2 19July2009
5	.2377961	**13 Xerox Ink Only Run6 19July2009
6	.2405806	**200 HP Ink Only Run3 19July2009
7	.2427736	200 HP Ink Only AVERAGE
8	.2466044	**17 Kodak Ink Only Run1 19July2009
9	.2475468	**17 Kodak Ink Only Run3 19July2009
10	.2478721	**17 Kodak Ink Only Run2 19July2009
11	.2518779	17 Kodak Ink Only AVERAGE
12	.2568528	**200 HP Ink Only Run1 19July2009
13	.264656	**199 HP Ink Only Run2 19July2009
14	.2653249	**244 Xerox Ink Only Run2 19July2009
15	.2659483	13 Xerox Ink Only AVERAGE
16	.2683911	**244 Xerox Ink Only Run1 19July2009
17	.2758076	**201 HP Ink Only Run3 19July2009
18	.2775409	**13 Xerox Ink Only Run5 19July2009
19	.2778462	**198 HP Ink Only Run4 19July2009
20	.2799561	**198 HP Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 198 HP 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.6957156	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8259112	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.8593222	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.8674673	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
5	.8710665	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
6	.8987456	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
7	.9045482	84 Epson Ink Only AVERAGE Slide Subtracted
8	.9111702	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.9264342	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
10	.9283344	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
11	.9345808	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
12	.9350239	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
13	.9353336	17 Kodak Ink Only AVERAGE Slide Subtracted
14	.9360807	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
15	.9397143	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
16	.9428324	198 HP Ink Only AVERAGE Slide Subtracted
17	.9439062	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
18	.9442024	24 Xerox Ink Only AVERAGE Slide Subtracted
19	.9443458	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
20	.9456817	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted

Hewlett Packard 198 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 198 HP 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.18542	**84 Epson Ink Only Run3 19July2009
2	.1924247	**201 HP Ink Only Run1 19July2009
3	.2003946	201 HP Ink Only AVERAGE
4	.2129499	**201 HP Ink Only Run2 19July2009
5	.2224793	**200 HP Ink Only Run3 19July2009
6	.2258007	200 HP Ink Only AVERAGE
7	.2267431	**17 Kodak Ink Only Run2 19July2009
8	.2290526	**17 Kodak Ink Only Run3 19July2009
9	.2308469	**17 Kodak Ink Only Run1 19July2009
10	.2325374	17 Kodak Ink Only AVERAGE
11	.2357963	**13 Xerox Ink Only Run6 19July2009
12	.2523762	**201 HP Ink Only Run3 19July2009
13	.2534523	**199 HP Ink Only Run2 19July2009
14	.2552307	**200 HP Ink Only Run1 19July2009
15	.2554257	**198 HP Ink Only Run4 19July2009
16	.258649	**201 HP Ink Only Run6 19July2009
17	.259915	198 HP Ink Only AVERAGE
18	.2627666	13 Xerox Ink Only AVERAGE
19	.2634585	**201 HP Ink Only Run5 19July2009
20	.2661878	**198 HP Ink Only Run6 19July2009

Slide Subtracted Library

Unknown Spectrum: 198 HP 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.7069776	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8278031	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.8625547	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.8704875	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
5	.8744665	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
6	.8953341	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
7	.906168	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
8	.9179236	84 Epson Ink Only AVERAGE Slide Subtracted
9	.9184376	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
10	.9243712	17 Kodak Ink Only AVERAGE Slide Subtracted
11	.9244647	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
12	.9262291	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
13	.9321735	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
14	.9334477	198 HP Ink Only AVERAGE Slide Subtracted
15	.9346666	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
16	.9356025	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
17	.9371538	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
18	.9373196	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
19	.9422842	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
20	.9424619	201 HP Ink Only AVERAGE Slide Subtracted

Hewlett Packard 198 11July2008 Run 2

Neat Ink Library

Unknown Spectrum: 198 HP RUN2 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.2092379	201 HP Ink Only AVERAGE
2	.2136532	**201 HP Ink Only Run1 19July2009
3	.2153753	200 HP Ink Only AVERAGE
4	.2198098	**17 Kodak Ink Only Run3 19July2009
5	.2325504	**201 HP Ink Only Run2 19July2009
6	.233759	**17 Kodak Ink Only Run2 19July2009
7	.2421546	**30 Epson Ink Only Run2 19July2009
8	.243887	17 Kodak Ink Only AVERAGE
9	.246611	30 Epson Ink Only AVERAGE
10	.2505057	**17 Kodak Ink Only Run1 19July2009
11	.2526748	**200 HP Ink Only Run3 19July2009
12	.2537053	**30 Epson Ink Only Run3 19July2009
13	.2603636	**199 HP Ink Only Run4 19July2009
14	.2613344	**200 HP Ink Only Run1 19July2009
15	.294244	**244 Xerox Ink Only Run1 19July2009
16	.2956325	**201 HP Ink Only Run3 19July2009
17	.2975369	**30 Epson Ink Only Run1 19July2009
18	.2981985	**201 HP Ink Only Run6 19July2009
19	.2986623	**199 HP Ink Only Run1 19July2009
20	.2995217	**201 HP Ink Only Run5 19July2009

Slide Subtracted Library

Unknown Spectrum: 198 HP RUN2 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.8789736	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.9260436	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
3	.9278573	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
4	.931493	205 HP Ink Only AVERAGE Slide Subtracted
5	.9317729	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
6	.9338694	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
7	.937837	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
8	.9464718	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
9	.9472253	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
10	.9506075	13 Xerox Ink Only AVERAGE Slide Subtracted
11	.9510419	17 Kodak Ink Only AVERAGE Slide Subtracted
12	.9515546	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
13	.952522	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
14	.9547206	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
15	.9560539	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
16	.9566215	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
17	.9573154	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
18	.9577081	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
19	.9580498	318a Canon Clear Ink Only AVERAGE Slide Subtracted
20	.9591563	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted

Hewlett Packard 198 14Dec2008 Run 2

Neat Ink Library

Unknown Spectrum: 198 HP RUN2 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.240467	**84 Epson Ink Only Run3 19July2009
2	.2414147	**201 HP Ink Only Run1 19July2009
3	.2463162	201 HP Ink Only AVERAGE
4	.2549567	**199 HP Ink Only Run2 19July2009
5	.2551203	200 HP Ink Only AVERAGE
6	.2554556	**200 HP Ink Only Run3 19July2009
7	.256393	**17 Kodak Ink Only Run1 19July2009
8	.2586687	**200 HP Ink Only Run1 19July2009
9	.2591857	**201 HP Ink Only Run2 19July2009
10	.261624	**17 Kodak Ink Only Run2 19July2009
11	.261907	**244 Xerox Ink Only Run2 19July2009
12	.2639583	17 Kodak Ink Only AVERAGE
13	.2662095	**17 Kodak Ink Only Run3 19July2009
14	.2665186	**199 HP Ink Only Run3 19July2009
15	.2671842	**244 Xerox Ink Only Run1 19July2009
16	.2674378	**198 HP Ink Only Run1 19July2009
17	.2684179	**198 HP Ink Only Run2 19July2009
18	.2708412	**198 HP Ink Only Run3 19July2009
19	.2711659	**200 HP Ink Only Run2 19July2009
20	.2750829	**199 HP Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 198 HP RUN2 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.7591194	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.869386	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.8940198	84 Epson Ink Only AVERAGE Slide Subtracted
4	.9001713	13 Xerox Ink Only AVERAGE Slide Subtracted
5	.9060376	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
6	.909844	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
7	.9216589	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
8	.9283711	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.9457356	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
10	.9483896	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
11	.9496758	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
12	.9500816	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
13	.9513956	17 Kodak Ink Only AVERAGE Slide Subtracted
14	.9525995	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
15	.9535538	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
16	.9542232	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
17	.9569328	198 HP Ink Only AVERAGE Slide Subtracted
18	.9572434	**84 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
19	.95926	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
20	.9604284	**84 Epson Ink Only Run1 19July2009 Blank Slide Subtracted

Hewlett Packard 198 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE HP 198.SPC

Hit #	Hit Quality	Memo Library Index
1	.2750221	**30 Epson Ink Only Run2 19July2009
2	.2779544	30 Epson Ink Only AVERAGE
3	.2794125	**30 Epson Ink Only Run3 19July2009
4	.292113	205 HP Ink Only AVERAGE
5	.2935435	201 HP Ink Only AVERAGE
6	.295135	200 HP Ink Only AVERAGE
7	.296248	**17 Kodak Ink Only Run3 19July2009
8	.2999977	**201 HP Ink Only Run1 19July2009
9	.3066945	**17 Kodak Ink Only Run2 19July2009
10	.3120119	**205 HP Ink Only Run2 19July2009
11	.3136349	**201 HP Ink Only Run2 19July2009
12	.3183516	17 Kodak Ink Only AVERAGE
13	.3183939	**205 HP Ink Only Run3 19July2009
14	.3271183	**17 Kodak Ink Only Run1 19July2009
15	.3315601	**200 HP Ink Only Run3 19July2009
16	.3315973	**318a Canon Clear Ink Only Run3 19July2009
17	.3369812	**199 HP Ink Only Run4 19July2009
18	.3372886	318a Canon Clear Ink Only AVERAGE
19	.3377226	**318a Canon Clear Ink Only Run2 19July2009
20	.3419877	**318a Canon Clear Ink Only Run4 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE HP 198.SPC

Hit #	Hit Quality	Memo Library Index
1	.8780705	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.8811265	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.8880044	205 HP Ink Only AVERAGE Slide Subtracted
4	.8925839	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.9189177	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
6	.9202479	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
7	.9267683	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
8	.9269588	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
9	.9342113	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
10	.9349087	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
11	.9351215	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
12	.9357279	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
13	.9366145	22 Kodak Ink Only AVERAGE Slide Subtracted
14	.9372306	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
15	.9375132	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
16	.9386453	318a Canon Clear Ink Only AVERAGE Slide Subtracted
17	.9387778	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
18	.9390837	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
19	.9394174	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20	.9398596	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted

Hewlett Packard 199 12Nov2007 Run 1

Neat Ink Library

Unknown Spectrum: 199 HP 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.1626045	**201 HP Ink Only Run1 19July2009
2	.1849789	201 HP Ink Only AVERAGE
3	.1889899	**17 Kodak Ink Only Run3 19July2009
4	.1925779	**201 HP Ink Only Run2 19July2009
5	.1999509	**200 HP Ink Only Run3 19July2009
6	.2035367	**17 Kodak Ink Only Run2 19July2009
7	.20906	17 Kodak Ink Only AVERAGE
8	.2121503	**17 Kodak Ink Only Run1 19July2009
9	.2201166	200 HP Ink Only AVERAGE
10	.2285281	**13 Xerox Ink Only Run2 19July2009
11	.2325637	**13 Xerox Ink Only Run6 19July2009
12	.2493419	13 Xerox Ink Only AVERAGE
13	.2587091	**201 HP Ink Only Run3 19July2009
14	.2601897	**13 Xerox Ink Only Run5 19July2009
15	.2607565	**13 Xerox Ink Only Run4 19July2009
16	.2634033	**198 HP Ink Only Run4 19July2009
17	.2708184	**24 Xerox Ink Only Run1 19July2009
18	.277711	**200 HP Ink Only Run1 19July2009
19	.2780685	**244 Xerox Ink Only Run1 19July2009
20	.2799377	198 HP Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 199 HP 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.8175508	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.8267436	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
3	.8312914	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.833098	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
5	.8387659	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
6	.8841121	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
7	.8930412	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
8	.8974819	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
9	.8991851	17 Kodak Ink Only AVERAGE Slide Subtracted
10	.9023255	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
11	.9023672	24 Xerox Ink Only AVERAGE Slide Subtracted
12	.90355	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
13	.9062385	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
14	.9084024	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
15	.9127576	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
16	.9134318	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
17	.915889	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
18	.921511	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
19	.9264966	198 HP Ink Only AVERAGE Slide Subtracted
20	.9276187	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted

Hewlett Packard 199 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 199 HP 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.3554031	**200 HP Ink Only Run4 19July2009
2	.3747505	**199 HP Ink Only Run6 19July2009
3	.3749212	**205 HP Ink Only Run2 19July2009
4	.3767932	199 HP Ink Only AVERAGE
5	.3799905	**156 Epson Ink Only Run3 19July2009
6	.3802925	**199 HP Ink Only Run5 19July2009
7	.3814817	**04 Okidata Ink Only Brown Spot Run2 19July2009
8	.3842285	**156 Epson Ink Only Run5 19July2009
9	.3875379	**318a Canon Clear Ink Only Run3 19July2009
10	.388765	156 Epson Ink Only AVERAGE
11	.3938411	**205 HP Ink Only Run1 19July2009
12	.3941667	318a Canon Clear Ink Only AVERAGE
13	.3943797	**22 Kodak Ink Only Run1 19July2009
14	.3964403	**318a Canon Clear Ink Only Run2 19July2009
15	.3969489	**04 Okidata Ink Only Brown Spot Run5 19July2009
16	.3982437	**318a Canon Clear Ink Only Run4 19July2009
17	.4023355	**156 Epson Ink Only Run2 19July2009
18	.406272	**156 Epson Ink Only Run1 19July2009
19	.4069354	200 HP Ink Only AVERAGE
20	.4129469	**156 Epson Ink Only Run4 19July2009

Slide Subtracted Library

Unknown Spectrum: 199 HP 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.8488145	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.9227141	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
3	.9265568	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
4	.9295164	205 HP Ink Only AVERAGE Slide Subtracted
5	.937111	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
6	.9377499	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
7	.9394091	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
8	.9398128	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
9	.9415659	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
10	.9424988	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
11	.9437107	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
12	.9443384	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
13	.9453101	22 Kodak Ink Only AVERAGE Slide Subtracted
14	.945839	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
15	.9476177	312 Canon Ink Only AVERAGE Slide Subtracted
16	.9476743	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
17	.9500846	492 Canon Ink Only AVERAGE Slide Subtracted
18	.9524278	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
19	.9526632	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20	.9556124	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted

Hewlett Packard 199 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 199 HP 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.1879839	205 HP Ink Only AVERAGE
2	.2037168	**30 Epson Ink Only Run3 19July2009
3	.2054742	30 Epson Ink Only AVERAGE
4	.2070954	**30 Epson Ink Only Run2 19July2009
5	.2097292	**205 HP Ink Only Run3 19July2009
6	.2293167	**205 HP Ink Only Run4 19July2009
7	.243553	**17 Kodak Ink Only Run3 19July2009
8	.2450747	**205 HP Ink Only Run2 19July2009
9	.2506276	201 HP Ink Only AVERAGE
10	.2519296	200 HP Ink Only AVERAGE
11	.2568515	**17 Kodak Ink Only Run2 19July2009
12	.2597388	**201 HP Ink Only Run1 19July2009
13	.2669714	22 Kodak Ink Only AVERAGE
14	.2672935	17 Kodak Ink Only AVERAGE
15	.2673889	**201 HP Ink Only Run2 19July2009
16	.2742708	**30 Epson Ink Only Run1 19July2009
17	.2795548	**17 Kodak Ink Only Run1 19July2009
18	.283894	**30 Epson Ink Only Run4 19July2009
19	.2852812	**200 HP Ink Only Run3 19July2009
20	.2859214	**22 Kodak Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 199 HP 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.8268868	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.8341587	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.8472117	205 HP Ink Only AVERAGE Slide Subtracted
4	.8645479	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.8805061	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
6	.883029	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
7	.8914812	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
8	.8937771	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
9	.89509	492 Canon Ink Only AVERAGE Slide Subtracted
10	.8955873	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11	.8957864	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
12	.8966429	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
13	.8969172	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
14	.8971215	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
15	.8976059	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
16	.8992507	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
17	.8994444	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
18	.9003728	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
19	.9007019	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
20	.9014366	04 Okidata Ink Only AVERAGE Slide Subtracted

Hewlett Packard 199 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 199 HP 20081128.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.1466526	**201 HP Ink Only Run3 19July2009		
2	.1495384	**201 HP Ink Only Run1 19July2009		
3	.149891	**198 HP Ink Only Run4 19July2009		
4	.155627	**201 HP Ink Only Run2 19July2009		
5	.1562108	**198 HP Ink Only Run5 19July2009		
6	.1571112	198 HP Ink Only AVERAGE		
7	.1636916	**201 HP Ink Only Run6 19July2009		
8	.1650533	**198 HP Ink Only Run6 19July2009		
9	.1665143	**201 HP Ink Only Run5 19July2009		
10	.1676214	**199 HP Ink Only Run2 19July2009		
11	.1722967	**201 HP Ink Only Run4 19July2009		
12	.1757514	**200 HP Ink Only Run2 19July2009		
13	.1759056	**200 HP Ink Only Run5 19July2009		
14	.1795935	201 HP Ink Only AVERAGE		
15	.1814051	**17 Kodak Ink Only Run1 19July2009		
16	.1819708	17 Kodak Ink Only AVERAGE		
17	.1855295	**17 Kodak Ink Only Run2 19July2009		
18	.1867187	**13 Xerox Ink Only Run6 19July2009		
19	.1870441	**198 HP Ink Only Run2 19July2009		
20	.1880739	**199 HP Ink Only Run3 19July2009		

Slide Subtracted Library

Unknown Spectrum: 199 HP 20081128.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.7431355	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted		
2	.7914795	13 Xerox Ink Only AVERAGE Slide Subtracted		
3	.7981662	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted		
4	.7982043	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted		
5	.8023218	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted		
6	.8082213	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted		
7	.8347975	198 HP Ink Only AVERAGE Slide Subtracted		
8	.834953	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted		
9	.8379506	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted		
10	.8410799	17 Kodak Ink Only AVERAGE Slide Subtracted		
11	.8443125	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted		
12	.8452276	201 HP Ink Only AVERAGE Slide Subtracted		
13	.8458093	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted		
14	.8493099	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted		
15	.8532519	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted		
16	.8616924	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted		
17	.8644145	**201 HP Ink Only Run3 19July2009 Blank Slide Subtracted		
18	.8677061	**198 HP Ink Only Run5 19July2009 Blank Slide Subtracted		
19	.8705254	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted		
20	.8711498	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted		

Hewlett Packard 199 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 199 HP 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.1329849	**201 HP Ink Only Run3 19July2009
2	.1336284	**198 HP Ink Only Run5 19July2009
3	.1340341	**198 HP Ink Only Run4 19July2009
4	.135847	**201 HP Ink Only Run6 19July2009
5	.1373619	198 HP Ink Only AVERAGE
6	.1383196	**201 HP Ink Only Run5 19July2009
7	.1405305	**199 HP Ink Only Run2 19July2009
8	.1433687	**200 HP Ink Only Run2 19July2009
9	.1436979	**198 HP Ink Only Run6 19July2009
10	.1459588	**200 HP Ink Only Run5 19July2009
11	.1467255	**201 HP Ink Only Run4 19July2009
12	.1473528	**201 HP Ink Only Run2 19July2009
13	.1474844	**201 HP Ink Only Run1 19July2009
14	.1534745	**199 HP Ink Only Run3 19July2009
15	.1548754	**198 HP Ink Only Run2 19July2009
16	.1565011	**200 HP Ink Only Run7 19July2009
17	.1565101	**198 HP Ink Only Run1 19July2009
18	.1567891	**200 HP Ink Only Run6 19July2009
19	.1587946	**198 HP Ink Only Run3 19July2009
20	.1682925	201 HP Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 199 HP 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.7917632	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.8320081	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
3	.8361652	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.8408575	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
5	.845942	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
6	.849548	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
7	.8709585	198 HP Ink Only AVERAGE Slide Subtracted
8	.8726375	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
9	.8744069	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
10	.8762441	17 Kodak Ink Only AVERAGE Slide Subtracted
11	.8782852	201 HP Ink Only AVERAGE Slide Subtracted
12	.8814774	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
13	.8830606	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
14	.8870531	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
15	.8894925	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
16	.8959872	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
17	.8971107	**201 HP Ink Only Run3 19July2009 Blank Slide Subtracted
18	.8973126	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
19	.8976978	**198 HP Ink Only Run5 19July2009 Blank Slide Subtracted
20	.9045802	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted

Hewlett Packard 199 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE HP 199.SPC

Hit #	Hit Quality	Memo Library Index
1	.2714039	205 HP Ink Only AVERAGE
2	.281144	**30 Epson Ink Only Run3 19July2009
3	.2824024	**30 Epson Ink Only Run2 19July2009
4	.2843446	30 Epson Ink Only AVERAGE
5	.2899481	**205 HP Ink Only Run2 19July2009
6	.2944996	**205 HP Ink Only Run3 19July2009
7	.3150813	**205 HP Ink Only Run4 19July2009
8	.3316311	201 HP Ink Only AVERAGE
9	.3327105	200 HP Ink Only AVERAGE
10	.3329063	**17 Kodak Ink Only Run3 19July2009
11	.3387927	**318a Canon Clear Ink Only Run3 19July2009
12	.3397358	**201 HP Ink Only Run1 19July2009
13	.3432144	**17 Kodak Ink Only Run2 19July2009
14	.3438593	318a Canon Clear Ink Only AVERAGE
15	.3439314	**318a Canon Clear Ink Only Run2 19July2009
16	.3471279	**30 Epson Ink Only Run4 19July2009
17	.348229	**318a Canon Clear Ink Only Run4 19July2009
18	.3509651	**201 HP Ink Only Run2 19July2009
19	.3552622	22 Kodak Ink Only AVERAGE
20	.3562106	**22 Kodak Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE HP 199.SPC

Hit #	Hit Quality	Memo Library Index
1	.8339943	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.8377448	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.8461747	205 HP Ink Only AVERAGE Slide Subtracted
4	.8543691	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.8870097	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
6	.8945522	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
7	.8975591	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
8	.9064276	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
9	.9073491	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
10	.9075898	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
11	.9081516	22 Kodak Ink Only AVERAGE Slide Subtracted
12	.9082117	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
13	.9107302	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
14	.9111104	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
15	.9118884	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
16	.9126106	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
17	.9145018	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
18	.9152204	04 Okidata Ink Only AVERAGE Slide Subtracted
19	.9153317	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
20	.9186215	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted

Hewlett Packard 200 12Nov2007 Run 1

Neat Ink Library

Unknown Spectrum: 200 HP 20071112.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.1098991	**201 HP Ink Only Run1 19July2009		
2	.1363124	**201 HP Ink Only Run2 19July2009		
3	.1394472	201 HP Ink Only AVERAGE		
4	.1403557	**17 Kodak Ink Only Run3 19July2009		
5	.1422523	**200 HP Ink Only Run3 19July2009		
6	.1504319	**17 Kodak Ink Only Run2 19July2009		
7	.1512712	17 Kodak Ink Only AVERAGE		
8	.1517001	**17 Kodak Ink Only Run1 19July2009		
9	.1537243	**13 Xerox Ink Only Run2 19July2009		
10	.1602594	**13 Xerox Ink Only Run6 19July2009		
11	.1660056	13 Xerox Ink Only AVERAGE		
12	.1720274	**24 Xerox Ink Only Run1 19July2009		
13	.1730813	**13 Xerox Ink Only Run4 19July2009		
14	.173663	**13 Xerox Ink Only Run5 19July2009		
15	.1889647	200 HP Ink Only AVERAGE		
16	.1898664	24 Xerox Ink Only AVERAGE		
17	.1906416	**201 HP Ink Only Run3 19July2009		
18	.1910813	**198 HP Ink Only Run4 19July2009		
19	.1947585	24 Xerox Ink Only R1R2 AVERAGE		
20	.2082879	198 HP Ink Only AVERAGE		

Slide Subtracted Library

Unknown Spectrum: 200 HP 20071112.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.7953643	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted		
2	.8070028	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted		
3	.8073861	13 Xerox Ink Only AVERAGE Slide Subtracted		
4	.8123403	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted		
5	.8502926	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted		
6	.8716487	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted		
7	.8724664	24 Xerox Ink Only AVERAGE Slide Subtracted		
8	.8742224	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3		
9	.8764768	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted		
10	.8825378	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted		
11	.8838671	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted		
12	.8914709	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted		
13	.8984141	17 Kodak Ink Only AVERAGE Slide Subtracted		
14	.9003791	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted		
15	.904544	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted		
16	.9056675	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted		
17	.9183951	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted		
18	.9214492	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted		
19	.9223385	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted		
20	.9259672	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted		

Hewlett Packard 200 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 200 HP 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.2622628	**84 Epson Ink Only Run3 19July2009
2	.2678413	**201 HP Ink Only Run1 19July2009
3	.2689126	201 HP Ink Only AVERAGE
4	.2815043	200 HP Ink Only AVERAGE
5	.2821628	**200 HP Ink Only Run3 19July2009
6	.2825204	**13 Xerox Ink Only Run6 19July2009
7	.285464	**201 HP Ink Only Run2 19July2009
8	.2996418	**17 Kodak Ink Only Run2 19July2009
9	.3077514	17 Kodak Ink Only AVERAGE
10	.3078741	**17 Kodak Ink Only Run3 19July2009
11	.3083329	**17 Kodak Ink Only Run1 19July2009
12	.3103735	**201 HP Ink Only Run3 19July2009
13	.3127154	**198 HP Ink Only Run4 19July2009
14	.3130445	**201 HP Ink Only Run4 19July2009
15	.3133914	13 Xerox Ink Only AVERAGE
16	.3149426	198 HP Ink Only AVERAGE
17	.3156673	**201 HP Ink Only Run6 19July2009
18	.3180839	**201 HP Ink Only Run5 19July2009
19	.3186996	**200 HP Ink Only Run5 19July2009
20	.3201516	**198 HP Ink Only Run6 19July2009

Slide Subtracted Library

Unknown Spectrum: 200 HP 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.7557446	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8172749	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.8256226	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
4	.8560713	13 Xerox Ink Only AVERAGE Slide Subtracted
5	.8654048	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
6	.8703824	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
7	.8893909	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
8	.8988292	**402 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
9	.8993817	402 Canon Ink Only AVERAGE Slide Subtracted
10	.8999183	**402 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
11	.8999256	**402 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
12	.9102425	**522 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
13	.9106864	522 Canon Ink Only AVERAGE Slide Subtracted
14	.9111978	**522 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
15	.9112222	**522 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
16	.9173723	306 Canon Ink Only AVERAGE Slide Subtracted
17	.9216908	**198 HP Ink Only Run5 19July2009 Blank Slide Subtracted
18	.9218761	**200 HP Ink Only Run4 19July2009 Blank Slide Subtracted
19	.9221885	**306 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
20	.9230545	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted

Hewlett Packard 200 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 200 HP 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.2095245	**30 Epson Ink Only Run2 19July2009
2	.209689	**30 Epson Ink Only Run3 19July2009
3	.2105634	30 Epson Ink Only AVERAGE
4	.2165235	205 HP Ink Only AVERAGE
5	.2380686	**205 HP Ink Only Run2 19July2009
6	.2398636	**205 HP Ink Only Run3 19July2009
7	.2604865	**205 HP Ink Only Run4 19July2009
8	.2699417	200 HP Ink Only AVERAGE
9	.2733346	**318a Canon Clear Ink Only Run3 19July2009
10	.2748305	**17 Kodak Ink Only Run3 19July2009
11	.2768462	**30 Epson Ink Only Run4 19July2009
12	.2776045	318a Canon Clear Ink Only AVERAGE
13	.2785267	**318a Canon Clear Ink Only Run2 19July2009
14	.2788576	201 HP Ink Only AVERAGE
15	.2795393	**205 HP Ink Only Run1 19July2009
16	.2807152	**318a Canon Clear Ink Only Run4 19July2009
17	.2899344	**17 Kodak Ink Only Run2 19July2009
18	.2902747	22 Kodak Ink Only AVERAGE
19	.2910971	**22 Kodak Ink Only Run1 19July2009
20	.2916795	**201 HP Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 200 HP 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.8369204	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.843228	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.8532999	205 HP Ink Only AVERAGE Slide Subtracted
4	.8701109	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.8758931	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
6	.8822279	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
7	.8861859	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
8	.8888893	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
9	.8911735	492 Canon Ink Only AVERAGE Slide Subtracted
10	.8920212	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
11	.8924097	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
12	.8937172	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
13	.9074325	22 Kodak Ink Only AVERAGE Slide Subtracted
14	.907573	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
15	.909088	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
16	.9098192	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
17	.9113556	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
18	.9122983	04 Okidata Ink Only AVERAGE Slide Subtracted
19	.9126027	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
20	.9135948	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted

Hewlett Packard 200 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 200 HP 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.1635422	**201 HP Ink Only Run1 19July2009
2	.1772768	201 HP Ink Only AVERAGE
3	.1831331	**201 HP Ink Only Run2 19July2009
4	.1957904	**200 HP Ink Only Run3 19July2009
5	.1993918	**84 Epson Ink Only Run3 19July2009
6	.2005537	**17 Kodak Ink Only Run2 19July2009
7	.2055355	**17 Kodak Ink Only Run1 19July2009
8	.2056568	17 Kodak Ink Only AVERAGE
9	.2065484	**17 Kodak Ink Only Run3 19July2009
10	.2164104	200 HP Ink Only AVERAGE
11	.2180879	**13 Xerox Ink Only Run6 19July2009
12	.2196231	**201 HP Ink Only Run3 19July2009
13	.2235519	**198 HP Ink Only Run4 19July2009
14	.2302442	198 HP Ink Only AVERAGE
15	.2310133	**201 HP Ink Only Run6 19July2009
16	.2315582	**199 HP Ink Only Run2 19July2009
17	.2345024	**201 HP Ink Only Run5 19July2009
18	.2375564	**198 HP Ink Only Run6 19July2009
19	.2390279	13 Xerox Ink Only AVERAGE
20	.2417018	**201 HP Ink Only Run4 19July2009

Slide Subtracted Library

Unknown Spectrum: 200 HP 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.7194398	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8098506	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.8447037	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.852261	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
5	.8555461	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
6	.8819031	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
7	.8852493	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
8	.8963083	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
9	.9008058	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
10	.9015147	17 Kodak Ink Only AVERAGE Slide Subtracted
11	.90474	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
12	.9114413	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
13	.9131953	198 HP Ink Only AVERAGE Slide Subtracted
14	.914558	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
15	.9179544	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
16	.9181921	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
17	.9201045	201 HP Ink Only AVERAGE Slide Subtracted
18	.9221016	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
19	.9226018	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
20	.9258079	84 Epson Ink Only AVERAGE Slide Subtracted

Hewlett Packard 200 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 200 HP 20081214.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.1414382	**201 HP Ink Only Run1 19July2009		
2	.1431423	**201 HP Ink Only Run3 19July2009		
3	.1450921	**198 HP Ink Only Run4 19July2009		
4	.1487736	**201 HP Ink Only Run2 19July2009		
5	.1515755	198 HP Ink Only AVERAGE		
6	.1518365	**198 HP Ink Only Run5 19July2009		
7	.1550554	**199 HP Ink Only Run2 19July2009		
8	.1586863	**201 HP Ink Only Run6 19July2009		
9	.1589956	**198 HP Ink Only Run6 19July2009		
10	.1628765	**201 HP Ink Only Run5 19July2009		
11	.1642334	**200 HP Ink Only Run2 19July2009		
12	.1673068	**13 Xerox Ink Only Run6 19July2009		
13	.169615	201 HP Ink Only AVERAGE		
14	.1707275	**200 HP Ink Only Run5 19July2009		
15	.1708449	**201 HP Ink Only Run4 19July2009		
16	.1731006	**17 Kodak Ink Only Run1 19July2009		
17	.1735056	13 Xerox Ink Only AVERAGE		
18	.1751307	17 Kodak Ink Only AVERAGE		
19	.1754993	**198 HP Ink Only Run2 19July2009		
20	.1762608	**199 HP Ink Only Run3 19July2009		

Slide Subtracted Library

Unknown Spectrum: 200 HP 20081214.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.7452849	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted		
2	.7820883	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted		
3	.7950359	13 Xerox Ink Only AVERAGE Slide Subtracted		
4	.8020401	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted		
5	.8076404	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted		
6	.8220614	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted		
7	.8487632	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted		
8	.8538092	198 HP Ink Only AVERAGE Slide Subtracted		
9	.8566134	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted		
10	.8593887	17 Kodak Ink Only AVERAGE Slide Subtracted		
11	.8621706	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted		
12	.8624809	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted		
13	.8627586	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted		
14	.8661206	201 HP Ink Only AVERAGE Slide Subtracted		
15	.8673656	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted		
16	.871912	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted		
17	.8785375	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted		
18	.8824466	**201 HP Ink Only Run3 19July2009 Blank Slide Subtracted		
19	.8842287	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted		
20	.8846537	**198 HP Ink Only Run5 19July2009 Blank Slide Subtracted		

Hewlett Packard 200 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE HP 200.SPC

Hit #	Hit Quality	Memo Library Index
1	.2716864	205 HP Ink Only AVERAGE
2	.2760244	**30 Epson Ink Only Run3 19July2009
3	.2765687	**30 Epson Ink Only Run2 19July2009
4	.2788093	30 Epson Ink Only AVERAGE
5	.2836888	**205 HP Ink Only Run2 19July2009
6	.295555	**205 HP Ink Only Run3 19July2009
7	.3167057	**205 HP Ink Only Run4 19July2009
8	.328645	200 HP Ink Only AVERAGE
9	.3309303	201 HP Ink Only AVERAGE
10	.3334165	**17 Kodak Ink Only Run3 19July2009
11	.3367604	**318a Canon Clear Ink Only Run3 19July2009
12	.3406815	**30 Epson Ink Only Run4 19July2009
13	.3420346	318a Canon Clear Ink Only AVERAGE
14	.3421434	**201 HP Ink Only Run1 19July2009
15	.342427	**318a Canon Clear Ink Only Run2 19July2009
16	.344566	**17 Kodak Ink Only Run2 19July2009
17	.3463916	**318a Canon Clear Ink Only Run4 19July2009
18	.348403	**205 HP Ink Only Run1 19July2009
19	.3503775	**22 Kodak Ink Only Run1 19July2009
20	.352895	**201 HP Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE HP 200.SPC

Hit #	Hit Quality	Memo Library Index
1	.8391752	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.8428106	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.8509256	205 HP Ink Only AVERAGE Slide Subtracted
4	.858945	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.8921447	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
6	.8977099	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
7	.9023054	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
8	.9086101	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
9	.9094736	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
10	.9104841	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
11	.9107711	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
12	.9123537	22 Kodak Ink Only AVERAGE Slide Subtracted
13	.9141169	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
14	.9151314	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
15	.9152294	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
16	.9157434	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
17	.9180418	04 Okidata Ink Only AVERAGE Slide Subtracted
18	.9185958	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
19	.9189277	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
20	.9247559	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted

Hewlett Packard 201 12Nov2007 Run 1

Neat Ink Library

Unknown Spectrum: 201 HP 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.1212286	**201 HP Ink Only Run1 19July2009
2	.1215589	**13 Xerox Ink Only Run6 19July2009
3	.1372848	13 Xerox Ink Only AVERAGE
4	.1438267	**24 Xerox Ink Only Run1 19July2009
5	.1461434	**13 Xerox Ink Only Run4 19July2009
6	.149793	**13 Xerox Ink Only Run5 19July2009
7	.1504494	**201 HP Ink Only Run2 19July2009
8	.1576377	201 HP Ink Only AVERAGE
9	.16086	**200 HP Ink Only Run3 19July2009
10	.1636888	**13 Xerox Ink Only Run2 19July2009
11	.1665508	**17 Kodak Ink Only Run3 19July2009
12	.1674735	24 Xerox Ink Only R1R2 AVERAGE
13	.1702388	24 Xerox Ink Only AVERAGE
14	.1703168	**17 Kodak Ink Only Run1 19July2009
15	.1724876	17 Kodak Ink Only AVERAGE
16	.1740144	**17 Kodak Ink Only Run2 19July2009
17	.1855601	**24 Xerox Ink Only Run2 19July2009
18	.1947465	**13 Xerox Ink Only Run3 19July2009
19	.1989247	**201 HP Ink Only Run3 19July2009
20	.2005204	**198 HP Ink Only Run4 19July2009

Slide Subtracted Library

Unknown Spectrum: 201 HP 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.7198305	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.741959	13 Xerox Ink Only AVERAGE Slide Subtracted
3	.7452758	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
4	.751853	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
5	.7899362	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
6	.8276129	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
7	.827651	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
8	.8282225	24 Xerox Ink Only AVERAGE Slide Subtracted
9	.8309928	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
10	.8402332	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
11	.8485421	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
12	.878985	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
13	.8847302	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
14	.8853946	17 Kodak Ink Only AVERAGE Slide Subtracted
15	.8880515	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
16	.8906034	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
17	.8906232	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
18	.8911483	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
19	.8955636	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
20	.9034783	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted

Hewlett Packard 201 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 201 HP 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.4162039	**318a Canon Clear Ink Only Run4 19July2009
2	.4182691	318a Canon Clear Ink Only AVERAGE
3	.4187995	**318a Canon Clear Ink Only Run2 19July2009
4	.4195395	**318a Canon Clear Ink Only Run3 19July2009
5	.4560063	**200 HP Ink Only Run4 19July2009
6	.4678642	**205 HP Ink Only Run1 19July2009
7	.4680817	**205 HP Ink Only Run2 19July2009
8	.4719694	**22 Kodak Ink Only Run1 19July2009
9	.4844615	**156 Epson Ink Only Run5 19July2009
10	.488783	**156 Epson Ink Only Run3 19July2009
11	.4914455	156 Epson Ink Only AVERAGE
12	.4976561	**205 HP Ink Only Run4 19July2009
13	.4994214	**205 HP Ink Only Run3 19July2009
14	.499715	**30 Epson Ink Only Run4 19July2009
15	.5002782	**04 Okidata Ink Only Brown Spot Run5 19July2009
16	.5007033	**156 Epson Ink Only Run2 19July2009
17	.5007367	**156 Epson Ink Only Run4 19July2009
18	.5031938	205 HP Ink Only AVERAGE
19	.5166153	**30 Epson Ink Only Run3 19July2009
20	.5167972	**199 HP Ink Only Run5 19July2009

Slide Subtracted Library

Unknown Spectrum: 201 HP 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.6843215	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
2	.6956335	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
3	.6978936	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
4	.6982175	492 Canon Ink Only AVERAGE Slide Subtracted
5	.7005379	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
6	.7220616	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
7	.7319036	**492 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
8	.7422764	312 Canon Ink Only AVERAGE Slide Subtracted
9	.7697137	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
10	.7886598	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11	.7935323	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
12	.7972321	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
13	.7975091	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
14	.7988607	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
15	.8002069	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
16	.8071469	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
17	.8261018	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
18	.8319268	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
19	.832469	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
20	.8331669	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted

Hewlett Packard 201 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 201 HP 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.2333716	201 HP Ink Only AVERAGE
2	.2354192	200 HP Ink Only AVERAGE
3	.2420169	**201 HP Ink Only Run1 19July2009
4	.2476663	**17 Kodak Ink Only Run3 19July2009
5	.2554812	**30 Epson Ink Only Run2 19July2009
6	.2602974	**201 HP Ink Only Run2 19July2009
7	.2606566	30 Epson Ink Only AVERAGE
8	.2617634	**17 Kodak Ink Only Run2 19July2009
9	.2665939	**30 Epson Ink Only Run3 19July2009
10	.2731912	17 Kodak Ink Only AVERAGE
11	.2783318	**199 HP Ink Only Run4 19July2009
12	.2804984	**17 Kodak Ink Only Run1 19July2009
13	.283137	**200 HP Ink Only Run3 19July2009
14	.2857108	**200 HP Ink Only Run1 19July2009
15	.3154784	**318a Canon Clear Ink Only Run3 19July2009
16	.3162243	**04 Okidata Ink Only Brown Spot Run2 19July2009
17	.31935	**205 HP Ink Only Run2 19July2009
18	.3205054	**200 HP Ink Only Run4 19July2009
19	.3214374	205 HP Ink Only AVERAGE
20	.3216355	**201 HP Ink Only Run6 19July2009

Slide Subtracted Library

Unknown Spectrum: 201 HP 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.8775315	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.9209444	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
3	.9224758	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
4	.9250034	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.9252282	205 HP Ink Only AVERAGE Slide Subtracted
6	.9391236	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
7	.9417228	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
8	.9430763	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
9	.9470873	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
10	.9473602	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
11	.9486802	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
12	.9528564	17 Kodak Ink Only AVERAGE Slide Subtracted
13	.9547363	22 Kodak Ink Only AVERAGE Slide Subtracted
14	.9563505	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
15	.9569809	13 Xerox Ink Only AVERAGE Slide Subtracted
16	.9580194	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
17	.9585422	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
18	.9586348	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
19	.9592236	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
20	.9593641	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted

Hewlett Packard 201 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 201 HP 20081128.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.1853939	**84 Epson Ink Only Run3 19July2009		
2	.2087976	**201 HP Ink Only Run1 19July2009		
3	.2187871	201 HP Ink Only AVERAGE		
4	.2318663	**201 HP Ink Only Run2 19July2009		
5	.2454325	**200 HP Ink Only Run3 19July2009		
6	.2479053	200 HP Ink Only AVERAGE		
7	.2480316	**13 Xerox Ink Only Run6 19July2009		
8	.2497206	**17 Kodak Ink Only Run2 19July2009		
9	.250111	**17 Kodak Ink Only Run3 19July2009		
10	.2532168	**17 Kodak Ink Only Run1 19July2009		
11	.2551785	17 Kodak Ink Only AVERAGE		
12	.2749095	**201 HP Ink Only Run3 19July2009		
13	.2786382	13 Xerox Ink Only AVERAGE		
14	.2800533	**200 HP Ink Only Run1 19July2009		
15	.2802697	**199 HP Ink Only Run2 19July2009		
16	.2802799	**198 HP Ink Only Run4 19July2009		
17	.2823437	**201 HP Ink Only Run6 19July2009		
18	.2859783	198 HP Ink Only AVERAGE		
19	.2868859	**201 HP Ink Only Run5 19July2009		
20	.2911512	**13 Xerox Ink Only Run5 19July2009		

Slide Subtracted Library

Unknown Spectrum: 201 HP 20081128.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.6869659	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted		
2	.8138893	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted		
3	.8505217	13 Xerox Ink Only AVERAGE Slide Subtracted		
4	.8595825	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted		
5	.8637319	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted		
6	.891088	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted		
7	.8938994	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted		
8	.9129809	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted		
9	.9183834	17 Kodak Ink Only AVERAGE Slide Subtracted		
10	.9184623	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted		
11	.9195532	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted		
12	.9217025	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted		
13	.9228423	84 Epson Ink Only AVERAGE Slide Subtracted		
14	.9247946	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted		
15	.9251746	198 HP Ink Only AVERAGE Slide Subtracted		
16	.925623	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted		
17	.9269383	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted		
18	.9313406	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted		
19	.9335783	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted		
20	.934186	201 HP Ink Only AVERAGE Slide Subtracted		

Hewlett Packard 201 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 201 HP 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.1826318	**84 Epson Ink Only Run3 19July2009
2	.3588147	200 HP Ink Only AVERAGE
3	.3675945	**201 HP Ink Only Run1 19July2009
4	.3731398	**200 HP Ink Only Run1 19July2009
5	.3743941	201 HP Ink Only AVERAGE
6	.3756081	**13 Xerox Ink Only Run6 19July2009
7	.3864202	**200 HP Ink Only Run3 19July2009
8	.3869463	**244 Xerox Ink Only Run1 19July2009
9	.3933018	**244 Xerox Ink Only Run5 19July2009
10	.3941618	**17 Kodak Ink Only Run3 19July2009
11	.3976028	**199 HP Ink Only Run4 19July2009
12	.3987212	**244 Xerox Ink Only Run2 19July2009
13	.3993869	**199 HP Ink Only Run1 19July2009
14	.4023314	**201 HP Ink Only Run2 19July2009
15	.4025483	244 Xerox Ink Only AVERAGE
16	.4031838	**156 Epson Ink Only Run1 19July2009
17	.4051119	**17 Kodak Ink Only Run2 19July2009
18	.407799	**17 Kodak Ink Only Run1 19July2009
19	.4088572	**200 HP Ink Only Run4 19July2009
20	.413915	17 Kodak Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 201 HP 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.5969433	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8430196	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.8506696	84 Epson Ink Only AVERAGE Slide Subtracted
4	.8731723	13 Xerox Ink Only AVERAGE Slide Subtracted
5	.8838682	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
6	.8876865	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
7	.9064559	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
8	.9247271	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.9285308	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
10	.9354135	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
11	.9375184	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
12	.9413567	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
13	.9429686	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
14	.9463157	**199 HP Ink Only Run1 19July2009 Blank Slide Subtracted
15	.9493426	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
16	.9499218	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
17	.9503139	**84 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
18	.9513443	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
19	.9520248	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
20	.9539095	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted

Hewlett Packard 201 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE HP 201.SPC

Hit #	Hit Quality	Memo Library Index
1	.2948642	**30 Epson Ink Only Run2 19July2009
2	.2980103	**30 Epson Ink Only Run3 19July2009
3	.2987856	30 Epson Ink Only AVERAGE
4	.3090363	205 HP Ink Only AVERAGE
5	.3118434	**205 HP Ink Only Run2 19July2009
6	.3300854	201 HP Ink Only AVERAGE
7	.330648	200 HP Ink Only AVERAGE
8	.3356271	**205 HP Ink Only Run3 19July2009
9	.3363551	**17 Kodak Ink Only Run3 19July2009
10	.3392665	**201 HP Ink Only Run1 19July2009
11	.3474926	**17 Kodak Ink Only Run2 19July2009
12	.3479087	**318a Canon Clear Ink Only Run3 19July2009
13	.3526975	**201 HP Ink Only Run2 19July2009
14	.3540337	318a Canon Clear Ink Only AVERAGE
15	.3547183	**318a Canon Clear Ink Only Run2 19July2009
16	.3589141	**205 HP Ink Only Run4 19July2009
17	.3589427	**318a Canon Clear Ink Only Run4 19July2009
18	.3600571	17 Kodak Ink Only AVERAGE
19	.3639553	**30 Epson Ink Only Run4 19July2009
20	.3698651	**17 Kodak Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE HP 201.SPC

Hit #	Hit Quality	Memo Library Index
1	.8663337	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.8683383	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.873739	205 HP Ink Only AVERAGE Slide Subtracted
4	.8758699	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.9106697	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
6	.9141817	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
7	.9159572	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
8	.9186123	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
9	.9266455	22 Kodak Ink Only AVERAGE Slide Subtracted
10	.9273446	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
11	.9282092	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
12	.9289071	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
13	.9290596	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
14	.9311549	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
15	.93245	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
16	.9331325	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
17	.9333766	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
18	.9335454	318a Canon Clear Ink Only AVERAGE Slide Subtracted
19	.9340478	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
20	.934935	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted

Hewlett Packard 205 12Nov2007 Run 1

Neat Ink Library

Unknown Spectrum: 205 HP 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.119936	**13 Xerox Ink Only Run2 19July2009
2	.1341085	**201 HP Ink Only Run1 19July2009
3	.1437272	**201 HP Ink Only Run2 19July2009
4	.1604406	**201 HP Ink Only Run3 19July2009
5	.1607635	**24 Xerox Ink Only Run1 19July2009
6	.1631556	**198 HP Ink Only Run4 19July2009
7	.1672035	17 Kodak Ink Only AVERAGE
8	.1706011	24 Xerox Ink Only AVERAGE
9	.1723216	**17 Kodak Ink Only Run1 19July2009
10	.1730047	**17 Kodak Ink Only Run2 19July2009
11	.1736857	**13 Xerox Ink Only Run4 19July2009
12	.1745211	13 Xerox Ink Only AVERAGE
13	.1751338	**13 Xerox Ink Only Run5 19July2009
14	.1752458	201 HP Ink Only AVERAGE
15	.1758374	24 Xerox Ink Only R1R2 AVERAGE
16	.181047	**17 Kodak Ink Only Run3 19July2009
17	.1839499	**200 HP Ink Only Run3 19July2009
18	.1846503	198 HP Ink Only AVERAGE
19	.1855599	**13 Xerox Ink Only Run6 19July2009
20	.1935464	**24 Xerox Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: 205 HP 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.7479629	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.7682309	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
3	.7703651	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.774888	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
5	.8189632	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
6	.8322924	17 Kodak Ink Only AVERAGE Slide Subtracted
7	.8342442	24 Xerox Ink Only AVERAGE Slide Subtracted
8	.8366004	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
9	.8369797	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
10	.8404024	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
11	.8405752	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
12	.8478547	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
13	.8573042	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
14	.8575339	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
15	.857857	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
16	.860963	198 HP Ink Only AVERAGE Slide Subtracted
17	.8656957	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
18	.8671098	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
19	.870167	201 HP Ink Only AVERAGE Slide Subtracted
20	.8704897	**201 HP Ink Only Run3 19July2009 Blank Slide Subtracted

Hewlett Packard 205 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 205 HP 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.5336226	**84 Epson Ink Only Run3 19July2009
2	.665866	**04 Okidata Ink Only Brown Spot Run2 19July2009
3	.6864407	**199 HP Ink Only Run6 19July2009
4	.686674	**244 Xerox Ink Only Run5 19July2009
5	.6877007	199 HP Ink Only AVERAGE
6	.6925066	**156 Epson Ink Only Run1 19July2009
7	.6940598	244 Xerox Ink Only AVERAGE
8	.6942254	**13 Xerox Ink Only Run6 19July2009
9	.6949864	**199 HP Ink Only Run5 19July2009
10	.6967446	**200 HP Ink Only Run1 19July2009
11	.6986449	**156 Epson Ink Only Run2 19July2009
12	.6992112	**156 Epson Ink Only Run3 19July2009
13	.7039911	156 Epson Ink Only AVERAGE
14	.7062305	**04 Okidata Ink Only Brown Spot Run5 19July2009
15	.7070106	**156 Epson Ink Only Run5 19July2009
16	.7093236	**199 HP Ink Only Run4 19July2009
17	.7140489	**318a Canon Clear Ink Only Run3 19July2009
18	.7190104	201 HP Ink Only AVERAGE
19	.7198313	**244 Xerox Ink Only Run1 19July2009
20	.7211851	**199 HP Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 205 HP 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.7435486	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.9024967	**63 Epson Ink Only Purple Spot Run3 19July2009 Blank Slide Subtracted
3	.9044185	**63 Epson Ink Only Purple Spot Run1 19July2009 Blank Slide Subtracted
4	.9058209	63 Epson Ink Only Purple Spot AVERAGE Slide Subtracted
5	.910552	**60 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
6	.9109942	**63 Epson Ink Only Purple Spot Run2 19July2009 Blank Slide Subtracted
7	.9125127	60 Epson Ink Only AVERAGE Slide Subtracted
8	.9135017	**60 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
9	.9137516	**60 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
10	.9171298	63 Epson Ink Only AVERAGE Slide Subtracted
11	.9190529	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
12	.9198429	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
13	.9215151	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
14	.9221475	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
15	.9228554	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
16	.9230517	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
17	.9243841	66 Epson Ink Only AVERAGE Slide Subtracted
18	.9244168	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
19	.9246449	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
20	.9248531	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted

Hewlett Packard 205 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 205 HP 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.3388522	**30 Epson Ink Only Run1 19July2009
2	.360463	22 Kodak Ink Only AVERAGE
3	.3907387	**22 Kodak Ink Only Run2 19July2009
4	.3924346	**22 Kodak Ink Only Run3 19July2009
5	.4058105	**282 Canon Ink Only Run1 19July2009
6	.4216692	**201 HP Ink Only Run5 19July2009
7	.4219304	**201 HP Ink Only Run6 19July2009
8	.4248345	**198 HP Ink Only Run4 19July2009
9	.4265176	**201 HP Ink Only Run3 19July2009
10	.4301293	**198 HP Ink Only Run5 19July2009
11	.4309955	**312 Canon Ink Only Run3 19July2009
12	.4323493	198 HP Ink Only AVERAGE
13	.4327301	**201 HP Ink Only Run1 19July2009
14	.433132	**201 HP Ink Only Run4 19July2009
15	.4351506	**200 HP Ink Only Run5 19July2009
16	.4352711	**198 HP Ink Only Run2 19July2009
17	.4354416	**201 HP Ink Only Run2 19July2009
18	.4361818	**200 HP Ink Only Run6 19July2009
19	.4364762	**200 HP Ink Only Run2 19July2009
20	.437625	**198 HP Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 205 HP 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.8695933	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
2	.8704746	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
3	.8731429	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
4	.874218	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
5	.874817	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
6	.8762406	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
7	.8833804	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
8	.8839133	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
9	.8873721	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
10	.890796	**33 Epson Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
11	.8909386	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
12	.892303	33 Epson Ink Only Brown Spot AVERAGE Slide Subtracted
13	.8936349	**33 Epson Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
14	.8937961	04 Okidata Ink Only AVERAGE Slide Subtracted
15	.8969356	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
16	.8975594	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
17	.8994641	22 Kodak Ink Only AVERAGE Slide Subtracted
18	.8996159	205 HP Ink Only AVERAGE Slide Subtracted
19	.8996609	33 Epson Ink Only AVERAGE Slide Subtracted
20	.9003851	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted

Hewlett Packard 205 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 205 HP 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.7909966	**318a Canon Clear Ink Only Run1 19July2009
2	.8018861	**156 Epson Ink Only Run4 19July2009
3	.8032572	**156 Epson Ink Only Run2 19July2009
4	.8039414	**156 Epson Ink Only Run5 19July2009
5	.8066787	156 Epson Ink Only AVERAGE
6	.8100873	**199 HP Ink Only Run5 19July2009
7	.811296	**156 Epson Ink Only Run3 19July2009
8	.8113792	199 HP Ink Only AVERAGE
9	.8120368	**199 HP Ink Only Run6 19July2009
10	.8165739	**244 Xerox Ink Only Run5 19July2009
11	.817119	244 Xerox Ink Only AVERAGE
12	.8237839	**156 Epson Ink Only Run1 19July2009
13	.8513743	**318a Canon Clear Ink Only Run4 19July2009
14	.8533324	**200 HP Ink Only Run4 19July2009
15	.8542356	318a Canon Clear Ink Only AVERAGE
16	.8549176	**318a Canon Clear Ink Only Run2 19July2009
17	.8560338	**318a Canon Clear Ink Only Run3 19July2009
18	.8666207	**199 HP Ink Only Run4 19July2009
19	.8679197	**312 Canon Ink Only Run4 19July2009
20	.8730718	**199 HP Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 205 HP 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.8301862	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
2	.8720405	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
3	.8804712	**201 HP Ink Only Run2 19July2009 Blank Slide Subtracted
4	.8862903	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
5	.8887647	201 HP Ink Only AVERAGE Slide Subtracted
6	.8922386	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
7	.8945847	**201 HP Ink Only Run3 19July2009 Blank Slide Subtracted
8	.9036002	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
9	.9053733	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
10	.9075567	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
11	.9093215	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
12	.9145371	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
13	.915396	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
14	.9161289	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
15	.9170647	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
16	.9178872	24 Xerox Ink Only AVERAGE Slide Subtracted
17	.9202786	198 HP Ink Only AVERAGE Slide Subtracted
18	.9208443	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
19	.9210106	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
20	.9220665	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted

Hewlett Packard 205 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 205 HP 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.9113832	**318a Canon Clear Ink Only Run1 19July2009
2	.9197514	**156 Epson Ink Only Run3 19July2009
3	.919786	**156 Epson Ink Only Run5 19July2009
4	.9214545	156 Epson Ink Only AVERAGE
5	.9217462	**199 HP Ink Only Run6 19July2009
6	.9219919	199 HP Ink Only AVERAGE
7	.9226204	**199 HP Ink Only Run5 19July2009
8	.922642	**156 Epson Ink Only Run2 19July2009
9	.9244614	**156 Epson Ink Only Run4 19July2009
10	.9307448	**199 HP Ink Only Run4 19July2009
11	.931886	**156 Epson Ink Only Run1 19July2009
12	.9378397	244 Xerox Ink Only AVERAGE
13	.9386855	**318a Canon Clear Ink Only Run4 19July2009
14	.9392866	**318a Canon Clear Ink Only Run2 19July2009
15	.9395156	**244 Xerox Ink Only Run5 19July2009
16	.9396584	318a Canon Clear Ink Only AVERAGE
17	.9404154	**318a Canon Clear Ink Only Run3 19July2009
18	.9405581	**199 HP Ink Only Run1 19July2009
19	.9437156	**200 HP Ink Only Run1 19July2009
20	.9468278	**205 HP Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 205 HP 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.919767	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
2	.9217021	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
3	.9428336	**84 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
4	.9428764	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
5	.9444103	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
6	.9446525	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
7	.9459289	84 Epson Ink Only AVERAGE Slide Subtracted
8	.9485254	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
9	.9518886	**84 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
10	.9521909	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
11	.9554279	**201 HP Ink Only Run2 19July2009 Blank Slide Subtracted
12	.95996	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
13	.9619839	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
14	.9623815	24 Xerox Ink Only AVERAGE Slide Subtracted
15	.962564	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
16	.9642008	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
17	.9647044	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
18	.9652599	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
19	.9657441	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
20	.9659082	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Hewlett Packard 205 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE HP 205.SPC

Hit #	Hit Quality	Memo Library Index
1	.6873345	**318a Canon Clear Ink Only Run1 19July2009
2	.7574896	**318a Canon Clear Ink Only Run4 19July2009
3	.7597544	**318a Canon Clear Ink Only Run2 19July2009
4	.7597592	318a Canon Clear Ink Only AVERAGE
5	.761875	**318a Canon Clear Ink Only Run3 19July2009
6	.765612	**156 Epson Ink Only Run2 19July2009
7	.7721632	**156 Epson Ink Only Run5 19July2009
8	.7722944	156 Epson Ink Only AVERAGE
9	.7731187	**156 Epson Ink Only Run4 19July2009
10	.7776014	244 Xerox Ink Only AVERAGE
11	.777988	**156 Epson Ink Only Run3 19July2009
12	.7783689	**156 Epson Ink Only Run1 19July2009
13	.7802656	**244 Xerox Ink Only Run5 19July2009
14	.8004951	**244 Xerox Ink Only Run4 19July2009
15	.8024883	**312 Canon Ink Only Run3 19July2009
16	.8095365	**244 Xerox Ink Only Run1 19July2009
17	.8110399	**199 HP Ink Only Run1 19July2009
18	.8124968	**312 Canon Ink Only Run4 19July2009
19	.81753	199 HP Ink Only AVERAGE
20	.8179308	**199 HP Ink Only Run6 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE HP 205.SPC

Hit #	Hit Quality	Memo Library Index
1	.8694929	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
2	.8743305	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
3	.8793731	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
4	.8843089	492 Canon Ink Only AVERAGE Slide Subtracted
5	.8952021	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
6	.9015974	**312 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
7	.9022582	**318a Canon Clear Ink Only Run1 19July2009 Blank Slide Subtracted
8	.9048224	**492 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
9	.9085999	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
10	.9118842	312 Canon Ink Only AVERAGE Slide Subtracted
11	.9182548	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
12	.927214	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
13	.9356136	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
14	.9396089	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
15	.9420072	**201 HP Ink Only Run5 19July2009 Blank Slide Subtracted
16	.9420947	**201 HP Ink Only Run4 19July2009 Blank Slide Subtracted
17	.9451417	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
18	.9469736	**200 HP Ink Only Run6 19July2009 Blank Slide Subtracted
19	.9481068	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
20	.9486653	**200 HP Ink Only Run7 19July2009 Blank Slide Subtracted

Canon 217 12Nov2007 Run 1

Neat Ink Library

Unknown Spectrum: 217 CANON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.2937981	205 HP Ink Only AVERAGE
2	.3104112	**30 Epson Ink Only Run3 19July2009
3	.3173565	**30 Epson Ink Only Run2 19July2009
4	.3209426	**205 HP Ink Only Run3 19July2009
5	.3210605	30 Epson Ink Only AVERAGE
6	.3390803	**205 HP Ink Only Run2 19July2009
7	.3426141	**205 HP Ink Only Run4 19July2009
8	.3487587	**318 Canon Ink Only Run1 19July2009
9	.3491155	**201 HP Ink Only Run1 19July2009
10	.3541879	**384 Canon Ink Only Run3 19July2009
11	.3554186	**327 Canon Ink Only Run1 19July2009
12	.3561178	**318 Canon Ink Only Run2 19July2009
13	.3561671	348 Canon Ink Only AVERAGE
14	.3586453	**348 Canon Ink Only Run2 19July2009
15	.3588888	**17 Kodak Ink Only Run3 19July2009
16	.3591181	327 Canon Ink Only AVERAGE
17	.3600862	318 Canon Ink Only AVERAGE
18	.362197	**327 Canon Ink Only Run3 19July2009
19	.3624853	**327 Canon Ink Only Run2 19July2009
20	.3634627	**13 Xerox Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: 217 CANON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.7586603	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
2	.7773653	205 HP Ink Only AVERAGE Slide Subtracted
3	.7782284	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
4	.7816827	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
5	.8080699	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
6	.8093532	318a Canon Clear Ink Only AVERAGE Slide Subtracted
7	.8103011	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted
8	.8106836	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
9	.8198172	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
10	.8261166	30 Epson Ink Only AVERAGE Slide Subtracted
11	.8263707	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
12	.8319393	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
13	.8350853	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
14	.8356099	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
15	.8411431	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
16	.8421756	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
17	.8479832	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
18	.849406	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
19	.854713	22 Kodak Ink Only AVERAGE Slide Subtracted
20	.8582005	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 217 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 217 CANON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.7360965	**318a Canon Clear Ink Only Run3 19July2009
2	.7371702	**318a Canon Clear Ink Only Run2 19July2009
3	.7373026	318a Canon Clear Ink Only AVERAGE
4	.7381163	**318a Canon Clear Ink Only Run4 19July2009
5	.74821	**205 HP Ink Only Run2 19July2009
6	.7666736	205 HP Ink Only AVERAGE
7	.7681638	**205 HP Ink Only Run3 19July2009
8	.7694601	**205 HP Ink Only Run4 19July2009
9	.7866408	**30 Epson Ink Only Run3 19July2009
10	.7874461	**30 Epson Ink Only Run4 19July2009
11	.7893425	30 Epson Ink Only AVERAGE
12	.7913496	**30 Epson Ink Only Run2 19July2009
13	.7945094	**205 HP Ink Only Run1 19July2009
14	.7962403	**200 HP Ink Only Run4 19July2009
15	.7975915	**04 Okidata Ink Only Brown Spot Run2 19July2009
16	.8013458	199 HP Ink Only AVERAGE
17	.8015553	**199 HP Ink Only Run6 19July2009
18	.8024159	**199 HP Ink Only Run5 19July2009
19	.8126161	**156 Epson Ink Only Run3 19July2009
20	.8140949	**199 HP Ink Only Run4 19July2009

Slide Subtracted Library

Unknown Spectrum: 217 CANON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.9306925	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.9329389	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
3	.9367643	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
4	.9486495	205 HP Ink Only AVERAGE Slide Subtracted
5	.9495464	244 Xerox Ink Only AVERAGE Slide Subtracted
6	.9501503	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
7	.9573488	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
8	.9587869	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
9	.9596167	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
10	.9610623	04 Okidata Ink Only AVERAGE Slide Subtracted
11	.9620837	**244 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
12	.9622511	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
13	.9623641	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
14	.9626775	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
15	.9628742	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
16	.9634124	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
17	.9635375	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
18	.963764	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
19	.9646296	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
20	.9650766	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted

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Neat Ink Library

Unknown Spectrum: 217 CANON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.6050134	**04 Okidata Ink Only Black Spot Run2 19July2009
2	.6056916	**04 Okidata Ink Only Black Spot Run1 19July2009
3	.6110038	04 Okidata Ink Only Black Spot AVERAGE
4	.6152802	**33 Epson Ink Only Black Spot Run1 19July2009
5	.6170285	**306 Canon Ink Only Run3 19July2009
6	.6239213	**33 Epson Ink Only Black Spot Run2 19July2009
7	.6244239	33 Epson Ink Only Black Spot AVERAGE
8	.6259323	**63 Epson Ink Only Green Spot Run1 19July2009
9	.6337774	**04 Okidata Ink Only Black Spot Run3 19July2009
10	.6447415	33 Epson Ink Only AVERAGE
11	.6479185	63 Epson Ink Only Green Spot AVERAGE
12	.6491424	**33 Epson Ink Only Black Spot Run3 19July2009
13	.6536843	**63 Epson Ink Only Green Spot Run2 19July2009
14	.6698794	63 Epson Ink Only AVERAGE
15	.6726455	**63 Epson Ink Only Green Spot Run3 19July2009
16	.6904792	04 Okidata Ink Only AVERAGE
17	.6984546	**33 Epson Ink Only Brown Spot Run2 19July2009
18	.7015302	**60 Epson Ink Only Run1 19July2009
19	.7035142	**60 Epson Ink Only Run3 19July2009
20	.7037913	33 Epson Ink Only Brown Spot AVERAGE

Slide Subtracted Library

Unknown Spectrum:
217 CANON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.5105588	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
2	.5120128	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
3	.5166904	348 Canon Ink Only AVERAGE Slide Subtracted
4	.5174459	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
5	.522073	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
6	.5227228	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
7	.5240108	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
8	.5243763	384 Canon Ink Only AVERAGE Slide Subtracted
9	.527077	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
10	.5272928	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
11	.5288474	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
12	.5291928	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
13	.5292951	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
14	.5295051	30 Epson Ink Only AVERAGE Slide Subtracted
15	.5304567	223 Canon Ink Only AVERAGE Slide Subtracted
16	.5319126	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
17	.5328535	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
18	.537794	217 Canon Ink Only AVERAGE Slide Subtracted
19	.5403656	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
20	.5434936	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

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Neat Ink Library

Unknown Spectrum: 217 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.8092405	**84 Epson Ink Only Run3 19July2009
2	.8559012	**13 Xerox Ink Only Run3 19July2009
3	.8728502	**13 Xerox Ink Only Run2 19July2009
4	.8811037	**24 Xerox Ink Only Run1 19July2009
5	.8898583	24 Xerox Ink Only R1R2 AVERAGE
6	.8982724	**24 Xerox Ink Only Run2 19July2009
7	.8988222	**13 Xerox Ink Only Run6 19July2009
8	.9067978	24 Xerox Ink Only AVERAGE
9	.9103835	**13 Xerox Ink Only Run4 19July2009
10	.9115859	13 Xerox Ink Only AVERAGE
11	.920875	**13 Xerox Ink Only Run5 19July2009
12	.9231039	**244 Xerox Ink Only Run2 19July2009
13	.9271551	**201 HP Ink Only Run1 19July2009
14	.9275032	**13 Xerox Ink Only Run1 19July2009
15	.9292958	**223 Canon Ink Only Run3 19July2009
16	.9306584	**217 Canon Ink Only Run1 19July2009
17	.931647	217 Canon Ink Only AVERAGE
18	.9321778	**217 Canon Ink Only Run2 19July2009
19	.9322868	**217 Canon Ink Only Run3 19July2009
20	.9365516	**30 Epson Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 217 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.7168809	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.7915657	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.7985671	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
4	.8003783	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
5	.8036906	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
6	.8101305	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
7	.8110642	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
8	.8196813	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.8224429	24 Xerox Ink Only AVERAGE Slide Subtracted
10	.8266072	13 Xerox Ink Only AVERAGE Slide Subtracted
11	.8294525	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
12	.8319422	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
13	.8375428	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
14	.844252	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
15	.8476679	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
16	.8517133	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
17	.8542635	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
18	.8588604	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
19	.8617463	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
20	.8684171	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted

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Neat Ink Library

Unknown Spectrum: 217 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.7979052	**244 Xerox Ink Only Run5 19July2009
2	.801886	244 Xerox Ink Only AVERAGE
3	.8049379	**199 HP Ink Only Run5 19July2009
4	.8071756	199 HP Ink Only AVERAGE
5	.8096936	**199 HP Ink Only Run6 19July2009
6	.8140862	**199 HP Ink Only Run1 19July2009
7	.8178971	**120 Epson Ink Only Run2 19July2009
8	.818199	**90 Epson Ink Only Run3 19July2009
9	.8196979	**90 Epson Ink Only Run2 19July2009
10	.8204134	120 Epson Ink Only AVERAGE
11	.8206216	**120 Epson Ink Only Run3 19July2009
12	.8226085	90 Epson Ink Only AVERAGE
13	.822657	**244 Xerox Ink Only Run4 19July2009
14	.823456	**199 HP Ink Only Run4 19July2009
15	.8238031	**120 Epson Ink Only Run1 19July2009
16	.8297225	**200 HP Ink Only Run1 19July2009
17	.8308667	**200 HP Ink Only Run4 19July2009
18	.831179	**90 Epson Ink Only Run1 19July2009
19	.8331861	**33 Epson Ink Only Brown Spot Run1 19July2009
20	.8332233	**123 Epson Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: 217 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.6817574	**522 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
2	.6835812	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
3	.6840373	**522 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
4	.6840455	522 Canon Ink Only AVERAGE Slide Subtracted
5	.6877158	**522 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
6	.6926576	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
7	.6940072	384 Canon Ink Only AVERAGE Slide Subtracted
8	.6961229	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
9	.697243	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
10	.6978891	217 Canon Ink Only AVERAGE Slide Subtracted
11	.6979632	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
12	.700617	**306 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
13	.7010036	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
14	.7022295	223 Canon Ink Only AVERAGE Slide Subtracted
15	.702333	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
16	.7026259	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
17	.702989	**306 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
18	.7071015	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
19	.7112368	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
20	.7217286	348 Canon Ink Only AVERAGE Slide Subtracted

Canon 217 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Canon 217.SPC

Hit #	Hit Quality	Memo Library Index
1	.917302	**492 Canon Ink Only Run1 19July2009
2	.9187893	**492 Canon Ink Only Run3 19July2009
3	.9191414	**492 Canon Ink Only Run2 19July2009
4	.9244461	492 Canon Ink Only AVERAGE
5	.9247075	**24 Xerox Ink Only Run1 19July2009
6	.9303287	**84 Epson Ink Only Run3 19July2009
7	.9315264	**13 Xerox Ink Only Run6 19July2009
8	.9336026	24 Xerox Ink Only R1R2 AVERAGE
9	.9379475	**492 Canon Ink Only Run5 19July2009
10	.9413195	**24 Xerox Ink Only Run2 19July2009
11	.9429154	**492 Canon Ink Only Run4 19July2009
12	.9460035	**13 Xerox Ink Only Run3 19July2009
13	.9463574	**04 Okidata Ink Only Brown Spot Run7 19July2009
14	.9467537	13 Xerox Ink Only AVERAGE
15	.9482998	**13 Xerox Ink Only Run4 19July2009
16	.9493865	24 Xerox Ink Only AVERAGE
17	.9515532	**04 Okidata Ink Only Brown Spot Run1 19July2009
18	.9543303	**13 Xerox Ink Only Run5 19July2009
19	.9577075	**04 Okidata Ink Only Brown Spot Run6 19July2009
20	.9597849	**13 Xerox Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Canon 217.SPC

Hit #	Hit Quality	Memo Library Index
1	.6867816	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.7388883	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
3	.742276	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.7471092	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
5	.7647717	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
6	.7669621	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
7	.7675114	24 Xerox Ink Only AVERAGE Slide Subtracted
8	.7758477	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
9	.7823946	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
10	.7908829	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
11	.7917507	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
12	.8049601	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
13	.8101771	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
14	.816133	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
15	.8248398	**201 HP Ink Only Run2 19July2009 Blank Slide Subtracted
16	.8311779	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
17	.8335915	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
18	.8352185	**201 HP Ink Only Run3 19July2009 Blank Slide Subtracted
19	.8445539	201 HP Ink Only AVERAGE Slide Subtracted
20	.8578055	198 HP Ink Only AVERAGE Slide Subtracted

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Neat Ink Library

Unknown Spectrum: 223 CANON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.1522084	**13 Xerox Ink Only Run2 19July2009
2	.1562053	**24 Xerox Ink Only Run1 19July2009
3	.1760341	24 Xerox Ink Only R1R2 AVERAGE
4	.1810533	**13 Xerox Ink Only Run6 19July2009
5	.1813204	13 Xerox Ink Only AVERAGE
6	.1816448	**13 Xerox Ink Only Run4 19July2009
7	.1833264	**201 HP Ink Only Run1 19July2009
8	.1852557	24 Xerox Ink Only AVERAGE
9	.1885505	**13 Xerox Ink Only Run5 19July2009
10	.1957446	**24 Xerox Ink Only Run2 19July2009
11	.2016096	**201 HP Ink Only Run2 19July2009
12	.2045371	**13 Xerox Ink Only Run3 19July2009
13	.2257469	**201 HP Ink Only Run3 19July2009
14	.2288937	17 Kodak Ink Only AVERAGE
15	.2300352	**17 Kodak Ink Only Run1 19July2009
16	.2301586	**198 HP Ink Only Run4 19July2009
17	.2324966	201 HP Ink Only AVERAGE
18	.2360494	**17 Kodak Ink Only Run2 19July2009
19	.23951	**17 Kodak Ink Only Run3 19July2009
20	.2398464	**200 HP Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 223 CANON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.6706309	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.6953427	13 Xerox Ink Only AVERAGE Slide Subtracted
3	.6963521	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
4	.7025121	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
5	.7696751	24 Xerox Ink Only AVERAGE Slide Subtracted
6	.7707373	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
7	.773974	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
8	.7863426	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
9	.7912552	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
10	.8105984	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
11	.814577	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
12	.8262777	17 Kodak Ink Only AVERAGE Slide Subtracted
13	.8289665	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
14	.8380135	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
15	.8397128	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
16	.8451939	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
17	.8458328	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
18	.847681	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
19	.8479564	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
20	.8518175	198 HP Ink Only AVERAGE Slide Subtracted

Canon 223 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 223 CANON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.7318864	**205 HP Ink Only Run2 19July2009
2	.7453163	**205 HP Ink Only Run4 19July2009
3	.7465395	205 HP Ink Only AVERAGE
4	.7465466	**205 HP Ink Only Run3 19July2009
5	.767536	**318a Canon Clear Ink Only Run3 19July2009
6	.7681568	**318a Canon Clear Ink Only Run2 19July2009
7	.7686073	318a Canon Clear Ink Only AVERAGE
8	.7695754	**318a Canon Clear Ink Only Run4 19July2009
9	.7964194	**30 Epson Ink Only Run4 19July2009
10	.7970586	**30 Epson Ink Only Run3 19July2009
11	.8064796	30 Epson Ink Only AVERAGE
12	.8065297	**30 Epson Ink Only Run2 19July2009
13	.812812	**04 Okidata Ink Only Brown Spot Run2 19July2009
14	.8238585	**205 HP Ink Only Run1 19July2009
15	.8301418	**22 Kodak Ink Only Run1 19July2009
16	.8319417	**04 Okidata Ink Only Brown Spot Run5 19July2009
17	.8418903	04 Okidata Ink Only AVERAGE
18	.8432925	**348 Canon Ink Only Run1 19July2009
19	.8449727	**04 Okidata Ink Only Black Spot Run2 19July2009
20	.8466951	**384 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 223 CANON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.8164632	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.8201805	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.8317052	205 HP Ink Only AVERAGE Slide Subtracted
4	.8458036	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.8731034	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
6	.8755594	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
7	.8763255	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
8	.8770211	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
9	.879285	318a Canon Clear Ink Only AVERAGE Slide Subtracted
10	.8800354	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted
11	.8809757	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
12	.8819571	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
13	.8825722	04 Okidata Ink Only AVERAGE Slide Subtracted
14	.8836856	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
15	.8875874	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
16	.8878081	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
17	.8994278	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
18	.9012526	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
19	.9014356	33 Epson Ink Only AVERAGE Slide Subtracted
20	.9033061	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted

Canon 223 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 223 CANON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.3754266	**306 Canon Ink Only Run3 19July2009
2	.4130161	**522 Canon Ink Only Run1 19July2009
3	.4283677	522 Canon Ink Only AVERAGE
4	.4334903	**522 Canon Ink Only Run2 19July2009
5	.4388147	**522 Canon Ink Only Run3 19July2009
6	.458676	**402 Canon Ink Only Run2 19July2009
7	.4592587	**402 Canon Ink Only Run3 19July2009
8	.4770851	402 Canon Ink Only AVERAGE
9	.4771104	306 Canon Ink Only AVERAGE
10	.5208372	**402 Canon Ink Only Run1 19July2009
11	.5348692	**223 Canon Ink Only Run3 19July2009
12	.5796337	**306 Canon Ink Only Run1 19July2009
13	.5859604	**306 Canon Ink Only Run2 19July2009
14	.5943796	**217 Canon Ink Only Run1 19July2009
15	.5982994	**492 Canon Ink Only Run5 19July2009
16	.5991783	**217 Canon Ink Only Run3 19July2009
17	.600172	217 Canon Ink Only AVERAGE
18	.6027384	223 Canon Ink Only AVERAGE
19	.6074045	**217 Canon Ink Only Run2 19July2009
20	.6117051	**282 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 223 CANON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.2256163	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
2	.2276558	282 Canon Ink Only AVERAGE Slide Subtracted
3	.2290369	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
4	.2304395	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
5	.2382564	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
6	.2496596	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
7	.2542671	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
8	.2543097	348 Canon Ink Only AVERAGE Slide Subtracted
9	.2573763	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
10	.2726348	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11	.2756714	306 Canon Ink Only AVERAGE Slide Subtracted
12	.2847885	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
13	.2877058	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
14	.2881721	384 Canon Ink Only AVERAGE Slide Subtracted
15	.2930364	**402 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
16	.2931393	217 Canon Ink Only AVERAGE Slide Subtracted
17	.2949869	**318 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
18	.2981516	402 Canon Ink Only AVERAGE Slide Subtracted
19	.298409	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
20	.2985721	**402 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 223 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 223 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.5131422	**84 Epson Ink Only Run3 19July2009
2	.636176	**13 Xerox Ink Only Run6 19July2009
3	.6604642	**200 HP Ink Only Run4 19July2009
4	.6665612	**199 HP Ink Only Run6 19July2009
5	.6671407	199 HP Ink Only AVERAGE
6	.6677434	**244 Xerox Ink Only Run5 19July2009
7	.6686751	201 HP Ink Only AVERAGE
8	.6729422	**199 HP Ink Only Run5 19July2009
9	.6742508	244 Xerox Ink Only AVERAGE
10	.6766065	200 HP Ink Only AVERAGE
11	.6783627	13 Xerox Ink Only AVERAGE
12	.6789595	**201 HP Ink Only Run1 19July2009
13	.6790575	**04 Okidata Ink Only Brown Spot Run2 19July2009
14	.6839203	**200 HP Ink Only Run1 19July2009
15	.6930667	**199 HP Ink Only Run4 19July2009
16	.6935381	**156 Epson Ink Only Run1 19July2009
17	.6944228	**201 HP Ink Only Run2 19July2009
18	.6949854	**13 Xerox Ink Only Run4 19July2009
19	.6958343	**13 Xerox Ink Only Run5 19July2009
20	.6993006	**17 Kodak Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 223 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.6911594	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8399883	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.8610556	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.8719547	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
5	.8721693	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
6	.8772868	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
7	.888473	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
8	.8993579	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
9	.9065711	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
10	.9087431	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
11	.9113579	**63 Epson Ink Only Purple Spot Run3 19July2009 Blank Slide Subtracted
12	.9126149	**63 Epson Ink Only Purple Spot Run1 19July2009 Blank Slide Subtracted
13	.9136801	63 Epson Ink Only Purple Spot AVERAGE Slide Subtracted
14	.9149035	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
15	.9153183	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
16	.9162136	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
17	.9162637	**90 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
18	.9169853	**66 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
19	.9171724	**63 Epson Ink Only Purple Spot Run2 19July2009 Blank Slide Subtracted
20	.9176697	66 Epson Ink Only AVERAGE Slide Subtracted

Canon 223 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 223 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.8170613	**84 Epson Ink Only Run4 19July2009
2	.8587564	**244 Xerox Ink Only Run5 19July2009
3	.8591245	244 Xerox Ink Only AVERAGE
4	.863414	**199 HP Ink Only Run5 19July2009
5	.8660614	199 HP Ink Only AVERAGE
6	.8679639	84 Epson Ink Only AVERAGE
7	.8679695	**04 Okidata Ink Only Black Spot Run1 19July2009
8	.8680382	**199 HP Ink Only Run6 19July2009
9	.8696653	**04 Okidata Ink Only Black Spot Run2 19July2009
10	.8725148	**84 Epson Ink Only Run5 19July2009
11	.872844	04 Okidata Ink Only Black Spot AVERAGE
12	.8869662	**156 Epson Ink Only Run2 19July2009
13	.8879817	**156 Epson Ink Only Run3 19July2009
14	.8880369	**522 Canon Ink Only Run1 19July2009
15	.889114	**04 Okidata Ink Only Black Spot Run3 19July2009
16	.8894868	**156 Epson Ink Only Run5 19July2009
17	.8899702	**306 Canon Ink Only Run3 19July2009
18	.8911799	156 Epson Ink Only AVERAGE
19	.8939872	**84 Epson Ink Only Run2 19July2009
20	.8946785	**84 Epson Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 223 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.5888242	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
2	.591343	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
3	.5915154	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
4	.5916599	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
5	.5919033	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
6	.5936153	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
7	.5957514	223 Canon Ink Only AVERAGE Slide Subtracted
8	.6021582	384 Canon Ink Only AVERAGE Slide Subtracted
9	.6057839	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
10	.6149408	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
11	.6182681	217 Canon Ink Only AVERAGE Slide Subtracted
12	.6228495	**306 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
13	.6229054	**306 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
14	.6270005	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
15	.6273225	**522 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
16	.6329365	**522 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
17	.635094	522 Canon Ink Only AVERAGE Slide Subtracted
18	.641344	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
19	.6423477	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
20	.6437082	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 223 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Canon 223.SPC

Hit #	Hit Quality	Memo Library Index
1	.449366	199 HP Ink Only AVERAGE
2	.4505719	**199 HP Ink Only Run6 19July2009
3	.4506172	**199 HP Ink Only Run5 19July2009
4	.4933181	**199 HP Ink Only Run4 19July2009
5	.4934358	**244 Xerox Ink Only Run5 19July2009
6	.4976572	244 Xerox Ink Only AVERAGE
7	.5109078	**199 HP Ink Only Run1 19July2009
8	.5140437	**200 HP Ink Only Run1 19July2009
9	.5165874	**156 Epson Ink Only Run3 19July2009
10	.5303932	**156 Epson Ink Only Run5 19July2009
11	.5324578	**200 HP Ink Only Run4 19July2009
12	.5358122	156 Epson Ink Only AVERAGE
13	.537478	**156 Epson Ink Only Run2 19July2009
14	.550367	**156 Epson Ink Only Run1 19July2009
15	.5584214	**244 Xerox Ink Only Run1 19July2009
16	.5651523	200 HP Ink Only AVERAGE
17	.5747858	**244 Xerox Ink Only Run4 19July2009
18	.5970398	**156 Epson Ink Only Run4 19July2009
19	.6024042	**84 Epson Ink Only Run3 19July2009
20	.6220774	**205 HP Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Canon 223.SPC

Hit #	Hit Quality	Memo Library Index
1	.8141746	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
2	.8143582	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
3	.8146075	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
4	.8200813	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
5	.8211594	217 Canon Ink Only AVERAGE Slide Subtracted
6	.822473	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
7	.8226376	223 Canon Ink Only AVERAGE Slide Subtracted
8	.8236438	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
9	.8240359	**306 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
10	.8242398	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11	.8245032	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
12	.824837	**306 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
13	.8248616	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
14	.825203	327 Canon Ink Only AVERAGE Slide Subtracted
15	.8252741	**522 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
16	.8256788	**327 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
17	.8274361	384 Canon Ink Only AVERAGE Slide Subtracted
18	.8289621	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
19	.8291727	522 Canon Ink Only AVERAGE Slide Subtracted
20	.8292028	**522 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

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Neat Ink Library

Unknown Spectrum: 244 XEROX 20071112.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.0779816	24 Xerox Ink Only AVERAGE		
2	.0809938	24 Xerox Ink Only R1R2 AVERAGE		
3	.0833141	**24 Xerox Ink Only Run1 19July2009		
4	.0865736	**13 Xerox Ink Only Run4 19July2009		
5	.0882123	**24 Xerox Ink Only Run2 19July2009		
6	.0917026	13 Xerox Ink Only AVERAGE		
7	.0938744	**13 Xerox Ink Only Run5 19July2009		
8	.095534	**13 Xerox Ink Only Run2 19July2009		
9	.1027966	**13 Xerox Ink Only Run3 19July2009		
10	.1054559	**13 Xerox Ink Only Run6 19July2009		
11	.1227242	**13 Xerox Ink Only Run1 19July2009		
12	.1418959	**201 HP Ink Only Run1 19July2009		
13	.1422317	**198 HP Ink Only Run4 19July2009		
14	.1455686	**201 HP Ink Only Run3 19July2009		
15	.1541537	**201 HP Ink Only Run2 19July2009		
16	.1591845	198 HP Ink Only AVERAGE		
17	.1607369	**24 Xerox Ink Only Run4 19July2009		
18	.1611367	**199 HP Ink Only Run2 19July2009		
19	.1671386	**198 HP Ink Only Run5 19July2009		
20	.1685565	**198 HP Ink Only Run6 19July2009		

Slide Subtracted Library

Unknown Spectrum: 244 XEROX 20071112.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.666929	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted		
2	.698348	13 Xerox Ink Only AVERAGE Slide Subtracted		
3	.6988575	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted		
4	.7023996	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted		
5	.7732386	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted		
6	.7745072	24 Xerox Ink Only AVERAGE Slide Subtracted		
7	.7760248	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3		
8	.7788641	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted		
9	.7947087	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted		
10	.8146617	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted		
11	.83538	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted		
12	.8377671	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted		
13	.8385069	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted		
14	.8474579	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted		
15	.8544531	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted		
16	.855853	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted		
17	.8561087	17 Kodak Ink Only AVERAGE Slide Subtracted		
18	.862377	198 HP Ink Only AVERAGE Slide Subtracted		
19	.8628788	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted		
20	.8634568	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted		

Xerox 244 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 244 XEROX 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.4377903	**84 Epson Ink Only Run2 19July2009
2	.4446065	84 Epson Ink Only AVERAGE
3	.4517269	**84 Epson Ink Only Run1 19July2009
4	.456754	**84 Epson Ink Only Run5 19July2009
5	.4747313	**84 Epson Ink Only Run4 19July2009
6	.5508235	**244 Xerox Ink Only Run3 19July2009
7	.654018	**244 Xerox Ink Only Run5 19July2009
8	.6559958	244 Xerox Ink Only AVERAGE
9	.6623136	**244 Xerox Ink Only Run2 19July2009
10	.6738884	**244 Xerox Ink Only Run4 19July2009
11	.6845098	**156 Epson Ink Only Run4 19July2009
12	.6899812	**156 Epson Ink Only Run2 19July2009
13	.6921045	**156 Epson Ink Only Run5 19July2009
14	.6923082	156 Epson Ink Only AVERAGE
15	.6953835	**156 Epson Ink Only Run1 19July2009
16	.7016886	**156 Epson Ink Only Run3 19July2009
17	.7139921	**199 HP Ink Only Run1 19July2009
18	.7194883	**244 Xerox Ink Only Run1 19July2009
19	.7303306	**84 Epson Ink Only Run3 19July2009
20	.7419887	**200 HP Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 244 XEROX 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.5684339	**84 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
2	.5740551	**84 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
3	.5817164	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
4	.5871297	**84 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
5	.6033179	84 Epson Ink Only AVERAGE Slide Subtracted
6	.6296964	**244 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
7	.7152005	**522 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
8	.7207388	**522 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
9	.7233915	522 Canon Ink Only AVERAGE Slide Subtracted
10	.7305252	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
11	.732774	223 Canon Ink Only AVERAGE Slide Subtracted
12	.7328125	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
13	.7342821	**522 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
14	.7360623	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
15	.7361985	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
16	.7398482	**306 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
17	.7420537	**306 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
18	.7444481	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
19	.7445817	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
20	.7453166	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Xerox 244 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 244 XEROX 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.2485877	**201 HP Ink Only Run1 19July2009
2	.2486129	201 HP Ink Only AVERAGE
3	.2506177	**17 Kodak Ink Only Run3 19July2009
4	.2511791	200 HP Ink Only AVERAGE
5	.2630849	**17 Kodak Ink Only Run2 19July2009
6	.2660595	**200 HP Ink Only Run1 19July2009
7	.2689535	**201 HP Ink Only Run2 19July2009
8	.2697044	17 Kodak Ink Only AVERAGE
9	.2712469	**17 Kodak Ink Only Run1 19July2009
10	.2745774	**199 HP Ink Only Run4 19July2009
11	.2820355	**200 HP Ink Only Run3 19July2009
12	.2968095	**199 HP Ink Only Run1 19July2009
13	.2997522	**244 Xerox Ink Only Run1 19July2009
14	.3123485	**30 Epson Ink Only Run2 19July2009
15	.3170841	30 Epson Ink Only AVERAGE
16	.3208533	**201 HP Ink Only Run6 19July2009
17	.3217894	**198 HP Ink Only Run1 19July2009
18	.3231783	**198 HP Ink Only Run2 19July2009
19	.3242796	**201 HP Ink Only Run3 19July2009
20	.3244096	**201 HP Ink Only Run5 19July2009

Slide Subtracted Library

Unknown Spectrum: 244 XEROX 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.8593327	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.943813	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.9460145	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
4	.9585497	13 Xerox Ink Only AVERAGE Slide Subtracted
5	.9599892	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
6	.963065	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
7	.9643467	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
8	.9648898	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
9	.9657206	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
10	.9678949	205 HP Ink Only AVERAGE Slide Subtracted
11	.9682772	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
12	.9688013	17 Kodak Ink Only AVERAGE Slide Subtracted
13	.9713391	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
14	.9763623	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
15	.9768355	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
16	.9777763	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
17	.9786	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
18	.9797558	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
19	.9807239	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
20	.981295	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted

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Neat Ink Library

Unknown Spectrum: 244 XEROX 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.3806658	**84 Epson Ink Only Run3 19July2009
2	.5814137	**13 Xerox Ink Only Run6 19July2009
3	.5950259	**244 Xerox Ink Only Run2 19July2009
4	.6026101	**156 Epson Ink Only Run1 19July2009
5	.6034086	**244 Xerox Ink Only Run5 19July2009
6	.6047313	**156 Epson Ink Only Run2 19July2009
7	.6139626	**156 Epson Ink Only Run4 19July2009
8	.6140049	244 Xerox Ink Only AVERAGE
9	.615097	156 Epson Ink Only AVERAGE
10	.6199605	**156 Epson Ink Only Run5 19July2009
11	.6210997	**200 HP Ink Only Run1 19July2009
12	.6221734	**244 Xerox Ink Only Run1 19July2009
13	.6232231	**244 Xerox Ink Only Run4 19July2009
14	.6260701	13 Xerox Ink Only AVERAGE
15	.6270341	**156 Epson Ink Only Run3 19July2009
16	.6301317	200 HP Ink Only AVERAGE
17	.6319287	**201 HP Ink Only Run1 19July2009
18	.6336375	**199 HP Ink Only Run1 19July2009
19	.6370445	**200 HP Ink Only Run3 19July2009
20	.6416411	**13 Xerox Ink Only Run5 19July2009

Slide Subtracted Library

Unknown Spectrum: 244 XEROX 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.610166	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.7908851	84 Epson Ink Only AVERAGE Slide Subtracted
3	.8511878	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
4	.8857476	13 Xerox Ink Only AVERAGE Slide Subtracted
5	.8884864	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
6	.8931908	**306 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
7	.8938474	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
8	.8963332	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
9	.8969823	**84 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
10	.8975022	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
11	.9047722	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
12	.911144	**522 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
13	.9125956	**84 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
14	.9130024	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
15	.913874	156 Epson Ink Only AVERAGE Slide Subtracted
16	.9142744	522 Canon Ink Only AVERAGE Slide Subtracted
17	.9144212	**522 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
18	.9150274	**84 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
19	.9165202	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
20	.9167514	306 Canon Ink Only AVERAGE Slide Subtracted

Xerox 244 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 244 XEROX 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.1916931	**84 Epson Ink Only Run3 19July2009
2	.2732864	**244 Xerox Ink Only Run2 19July2009
3	.2923585	**13 Xerox Ink Only Run6 19July2009
4	.2942121	**201 HP Ink Only Run1 19July2009
5	.3087877	**17 Kodak Ink Only Run1 19July2009
6	.3098806	**200 HP Ink Only Run3 19July2009
7	.312008	**200 HP Ink Only Run1 19July2009
8	.312725	201 HP Ink Only AVERAGE
9	.3145507	**244 Xerox Ink Only Run1 19July2009
10	.3177179	**199 HP Ink Only Run2 19July2009
11	.3181195	**17 Kodak Ink Only Run3 19July2009
12	.3181483	13 Xerox Ink Only AVERAGE
13	.3186242	17 Kodak Ink Only AVERAGE
14	.3186339	**17 Kodak Ink Only Run2 19July2009
15	.3194525	**201 HP Ink Only Run2 19July2009
16	.3273712	200 HP Ink Only AVERAGE
17	.3276166	**13 Xerox Ink Only Run5 19July2009
18	.3286693	**199 HP Ink Only Run1 19July2009
19	.3321368	**244 Xerox Ink Only Run4 19July2009
20	.3336563	**198 HP Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 244 XEROX 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.6822792	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8432993	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.8458496	84 Epson Ink Only AVERAGE Slide Subtracted
4	.8756253	13 Xerox Ink Only AVERAGE Slide Subtracted
5	.8825482	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
6	.8874032	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
7	.9247193	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
8	.9247538	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
9	.9308137	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
10	.9312577	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
11	.9338338	**84 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
12	.9350051	**84 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
13	.9388531	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
14	.9406151	**84 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
15	.941093	**244 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
16	.9469568	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
17	.9470071	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
18	.9492577	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
19	.9500051	24 Xerox Ink Only AVERAGE Slide Subtracted
20	.950597	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted

Xerox 244 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Xerox 244.SPC

Hit #	Hit Quality	Memo Library Index
1	.3429512	205 HP Ink Only AVERAGE
2	.3500281	**30 Epson Ink Only Run2 19July2009
3	.3521928	**30 Epson Ink Only Run3 19July2009
4	.3524899	30 Epson Ink Only AVERAGE
5	.3627781	**205 HP Ink Only Run2 19July2009
6	.3640239	**205 HP Ink Only Run3 19July2009
7	.3830752	**205 HP Ink Only Run4 19July2009
8	.3923099	**17 Kodak Ink Only Run3 19July2009
9	.3954099	**318a Canon Clear Ink Only Run3 19July2009
10	.4001731	318a Canon Clear Ink Only AVERAGE
11	.400299	200 HP Ink Only AVERAGE
12	.4010131	**318a Canon Clear Ink Only Run2 19July2009
13	.4020636	**17 Kodak Ink Only Run2 19July2009
14	.4035226	201 HP Ink Only AVERAGE
15	.4036107	**318a Canon Clear Ink Only Run4 19July2009
16	.4072933	**201 HP Ink Only Run1 19July2009
17	.4120665	17 Kodak Ink Only AVERAGE
18	.4146574	**30 Epson Ink Only Run4 19July2009
19	.4164796	**205 HP Ink Only Run1 19July2009
20	.4195505	**201 HP Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Xerox 244.SPC

Hit #	Hit Quality	Memo Library Index
1	.8648557	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.8687201	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.8773612	205 HP Ink Only AVERAGE Slide Subtracted
4	.8850573	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.9187173	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
6	.9215229	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
7	.9222671	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
8	.9234286	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
9	.9246677	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
10	.9262185	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
11	.9270512	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
12	.9279253	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
13	.9287503	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
14	.9303877	492 Canon Ink Only AVERAGE Slide Subtracted
15	.9327058	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
16	.9327284	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
17	.9341421	04 Okidata Ink Only AVERAGE Slide Subtracted
18	.9348959	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
19	.9352362	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
20	.9358556	22 Kodak Ink Only AVERAGE Slide Subtracted

Canon 282 12Nov2007 Run 1

Neat Ink Library

Unknown Spectrum: 282 CANON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.2156364	**13 Xerox Ink Only Run2 19July2009
2	.2417149	**201 HP Ink Only Run1 19July2009
3	.2532738	**201 HP Ink Only Run2 19July2009
4	.2761496	17 Kodak Ink Only AVERAGE
5	.2770731	**17 Kodak Ink Only Run2 19July2009
6	.2782318	**17 Kodak Ink Only Run3 19July2009
7	.2786759	201 HP Ink Only AVERAGE
8	.2861751	**201 HP Ink Only Run3 19July2009
9	.2870059	**17 Kodak Ink Only Run1 19July2009
10	.2935891	**198 HP Ink Only Run4 19July2009
11	.2981563	**200 HP Ink Only Run3 19July2009
12	.2990081	**30 Epson Ink Only Run1 19July2009
13	.3058179	**24 Xerox Ink Only Run1 19July2009
14	.3179415	198 HP Ink Only AVERAGE
15	.3201365	**13 Xerox Ink Only Run4 19July2009
16	.3203223	13 Xerox Ink Only AVERAGE
17	.3218965	**13 Xerox Ink Only Run5 19July2009
18	.3226942	24 Xerox Ink Only AVERAGE
19	.3265164	24 Xerox Ink Only R1R2 AVERAGE
20	.3277391	**13 Xerox Ink Only Run6 19July2009

Slide Subtracted Library

Unknown Spectrum: 282 CANON 20071112.SPC

Hit #	Hit Quality	Memo Library Index
1	.7915946	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.8030679	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
3	.8036246	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
4	.806046	13 Xerox Ink Only AVERAGE Slide Subtracted
5	.809192	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
6	.8166984	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
7	.8185592	17 Kodak Ink Only AVERAGE Slide Subtracted
8	.8323478	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
9	.8451465	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
10	.8492373	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted
11	.852998	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
12	.8554583	**201 HP Ink Only Run2 19July2009 Blank Slide Subtracted
13	.8565825	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
14	.8583214	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
15	.8597955	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted
16	.8600745	318a Canon Clear Ink Only AVERAGE Slide Subtracted
17	.8608752	201 HP Ink Only AVERAGE Slide Subtracted
18	.8618658	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
19	.8622516	**201 HP Ink Only Run3 19July2009 Blank Slide Subtracted
20	.8623396	24 Xerox Ink Only AVERAGE Slide Subtracted

Canon 282 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 282 CANON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.2462735	**522 Canon Ink Only Run1 19July2009
2	.2570253	522 Canon Ink Only AVERAGE
3	.2588311	**522 Canon Ink Only Run2 19July2009
4	.2667538	**522 Canon Ink Only Run3 19July2009
5	.2729576	**402 Canon Ink Only Run2 19July2009
6	.2779695	**402 Canon Ink Only Run3 19July2009
7	.2839648	402 Canon Ink Only AVERAGE
8	.2870002	**223 Canon Ink Only Run3 19July2009
9	.298227	306 Canon Ink Only AVERAGE
10	.3086155	**402 Canon Ink Only Run1 19July2009
11	.3235359	**306 Canon Ink Only Run1 19July2009
12	.3292893	**306 Canon Ink Only Run2 19July2009
13	.3478288	223 Canon Ink Only AVERAGE
14	.3495925	**217 Canon Ink Only Run1 19July2009
15	.3538503	**217 Canon Ink Only Run3 19July2009
16	.3549802	217 Canon Ink Only AVERAGE
17	.3615853	**217 Canon Ink Only Run2 19July2009
18	.3729975	**223 Canon Ink Only Run2 19July2009
19	.3960028	**223 Canon Ink Only Run1 19July2009
20	.3990533	**384 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 282 CANON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.2823127	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
2	.3021017	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
3	.3043461	348 Canon Ink Only AVERAGE Slide Subtracted
4	.3064586	**318 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
5	.3085161	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
6	.3098694	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
7	.3125053	318 Canon Ink Only AVERAGE Slide Subtracted
8	.3140031	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
9	.3140724	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
10	.3144856	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
11	.3176574	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
12	.3178693	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
13	.3182169	**306 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
14	.3190758	282 Canon Ink Only AVERAGE Slide Subtracted
15	.3198334	306 Canon Ink Only AVERAGE Slide Subtracted
16	.3203034	217 Canon Ink Only AVERAGE Slide Subtracted
17	.3226973	**306 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
18	.3244577	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
19	.3247614	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20	.326028	384 Canon Ink Only AVERAGE Slide Subtracted

Canon 282 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 282 CANON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.3745132	**282 Canon Ink Only Run4 19July2009
2	.3746926	**282 Canon Ink Only Run3 19July2009
3	.3760705	**348 Canon Ink Only Run3 19July2009
4	.3854293	**348 Canon Ink Only Run2 19July2009
5	.3856506	348 Canon Ink Only AVERAGE
6	.388957	**282 Canon Ink Only Run2 19July2009
7	.3928532	282 Canon Ink Only AVERAGE
8	.3971738	**384 Canon Ink Only Run3 19July2009
9	.4033747	**348 Canon Ink Only Run1 19July2009
10	.4083354	**384 Canon Ink Only Run2 19July2009
11	.4100544	**223 Canon Ink Only Run3 19July2009
12	.4100774	384 Canon Ink Only AVERAGE
13	.4101641	**318 Canon Ink Only Run3 19July2009
14	.4121099	223 Canon Ink Only AVERAGE
15	.4122701	**384 Canon Ink Only Run1 19July2009
16	.4153918	318 Canon Ink Only AVERAGE
17	.4157928	**318 Canon Ink Only Run2 19July2009
18	.4161994	**223 Canon Ink Only Run2 19July2009
19	.4168199	**205 HP Ink Only Run4 19July2009
20	.4193089	**223 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 282 CANON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.6251402	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
2	.6258934	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
3	.6284522	**306 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
4	.6341376	282 Canon Ink Only AVERAGE Slide Subtracted
5	.6357348	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
6	.6358454	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
7	.6392384	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
8	.6454018	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
9	.6472325	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
10	.6560752	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11	.6607357	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
12	.6627792	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
13	.6627871	205 HP Ink Only AVERAGE Slide Subtracted
14	.6703861	22 Kodak Ink Only AVERAGE Slide Subtracted
15	.6709909	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
16	.6729033	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
17	.6823487	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
18	.6917607	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
19	.6919196	492 Canon Ink Only AVERAGE Slide Subtracted
20	.6980179	348 Canon Ink Only AVERAGE Slide Subtracted

Canon 282 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 282 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.7378131	**84 Epson Ink Only Run3 19July2009
2	.8152996	**24 Xerox Ink Only Run1 19July2009
3	.8168072	**13 Xerox Ink Only Run6 19July2009
4	.8279437	**13 Xerox Ink Only Run3 19July2009
5	.8307294	24 Xerox Ink Only R1R2 AVERAGE
6	.8379718	**13 Xerox Ink Only Run2 19July2009
7	.8437463	13 Xerox Ink Only AVERAGE
8	.8448129	**24 Xerox Ink Only Run2 19July2009
9	.8479887	**13 Xerox Ink Only Run4 19July2009
10	.8501074	24 Xerox Ink Only AVERAGE
11	.8560873	**201 HP Ink Only Run1 19July2009
12	.8574719	**13 Xerox Ink Only Run5 19July2009
13	.8611123	**13 Xerox Ink Only Run1 19July2009
14	.8744944	**201 HP Ink Only Run2 19July2009
15	.8799383	**200 HP Ink Only Run3 19July2009
16	.8811787	**201 HP Ink Only Run3 19July2009
17	.8834219	**30 Epson Ink Only Run1 19July2009
18	.8842413	**244 Xerox Ink Only Run2 19July2009
19	.8842846	**198 HP Ink Only Run4 19July2009
20	.8862637	**17 Kodak Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: 282 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.6973609	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.7303379	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.7631176	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
4	.7969776	13 Xerox Ink Only AVERAGE Slide Subtracted
5	.7979384	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
6	.8009897	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
7	.8060286	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
8	.816811	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
9	.8213679	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
10	.8218472	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
11	.8238726	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
12	.8261753	24 Xerox Ink Only AVERAGE Slide Subtracted
13	.835952	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
14	.841863	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
15	.8495493	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
16	.8536546	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
17	.8556086	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted
18	.8562952	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
19	.8601788	**201 HP Ink Only Run2 19July2009 Blank Slide Subtracted
20	.8648703	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted

Canon 282 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 282 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.7777219	**199 HP Ink Only Run5 19July2009
2	.7783225	199 HP Ink Only AVERAGE
3	.7786099	**199 HP Ink Only Run6 19July2009
4	.7834138	**156 Epson Ink Only Run5 19July2009
5	.7852708	**156 Epson Ink Only Run3 19July2009
6	.7916549	156 Epson Ink Only AVERAGE
7	.7979476	**156 Epson Ink Only Run2 19July2009
8	.8003393	**199 HP Ink Only Run4 19July2009
9	.8008493	**156 Epson Ink Only Run4 19July2009
10	.8037553	**205 HP Ink Only Run1 19July2009
11	.8099513	**312 Canon Ink Only Run4 19July2009
12	.8167291	312 Canon Ink Only AVERAGE
13	.8190125	**199 HP Ink Only Run1 19July2009
14	.8230348	**312 Canon Ink Only Run2 19July2009
15	.8246084	244 Xerox Ink Only AVERAGE
16	.8266476	**318a Canon Clear Ink Only Run1 19July2009
17	.8268098	**156 Epson Ink Only Run1 19July2009
18	.8294463	**244 Xerox Ink Only Run5 19July2009
19	.8316301	**200 HP Ink Only Run1 19July2009
20	.8452319	**318a Canon Clear Ink Only Run4 19July2009

Slide Subtracted Library

Unknown Spectrum: 282 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.8170405	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8295105	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
3	.8341765	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
4	.8362256	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
5	.8430001	24 Xerox Ink Only AVERAGE Slide Subtracted
6	.8447437	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
7	.8462737	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
8	.8474758	**201 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.8485197	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
10	.8547453	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
11	.8579475	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
12	.8580364	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
13	.8593009	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
14	.8670826	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
15	.8701683	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
16	.8723771	13 Xerox Ink Only AVERAGE Slide Subtracted
17	.8737738	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
18	.8746691	**201 HP Ink Only Run3 19July2009 Blank Slide Subtracted
19	.8749448	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
20	.8754228	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 282 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Canon 282.SPC

Hit #	Hit Quality	Memo Library Index
1	.931263	**492 Canon Ink Only Run3 19July2009
2	.9314389	**492 Canon Ink Only Run1 19July2009
3	.9323808	**492 Canon Ink Only Run2 19July2009
4	.9347262	**84 Epson Ink Only Run3 19July2009
5	.9358077	492 Canon Ink Only AVERAGE
6	.9371337	**04 Okidata Ink Only Brown Spot Run7 19July2009
7	.9412332	**04 Okidata Ink Only Brown Spot Run1 19July2009
8	.9422631	**04 Okidata Ink Only Brown Spot Run6 19July2009
9	.9435292	**492 Canon Ink Only Run5 19July2009
10	.9450091	**04 Okidata Ink Only Brown Spot Run4 19July2009
11	.9476808	**04 Okidata Ink Only Brown Spot Run3 19July2009
12	.9536312	**492 Canon Ink Only Run4 19July2009
13	.9557363	**24 Xerox Ink Only Run1 19July2009
14	.9568193	04 Okidata Ink Only Brown Spot AVERAGE
15	.9621832	**13 Xerox Ink Only Run6 19July2009
16	.9643823	**205 HP Ink Only Run1 19July2009
17	.96654	**205 HP Ink Only Run4 19July2009
18	.9667133	24 Xerox Ink Only R1R2 AVERAGE
19	.9673576	**199 HP Ink Only Run5 19July2009
20	.9686528	199 HP Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: AVERAGE Canon 282.SPC

Hit #	Hit Quality	Memo Library Index
1	.6827068	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.7104298	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
3	.7172838	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
4	.7298362	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
5	.7316464	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
6	.7369539	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
7	.7407097	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
8	.7533183	13 Xerox Ink Only AVERAGE Slide Subtracted
9	.7656689	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
10	.7780607	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
11	.7806966	24 Xerox Ink Only AVERAGE Slide Subtracted
12	.7865093	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
13	.7934482	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
14	.7973461	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
15	.8029662	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
16	.8048995	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted
17	.8199632	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
18	.8210698	244 Xerox Ink Only AVERAGE Slide Subtracted
19	.8242257	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
20	.8256526	156 Epson Ink Only AVERAGE Slide Subtracted

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Neat Ink Library

Unknown Spectrum: 306 CANON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.7914996	**04 Okidata Ink Only Brown Spot Run2 19July2009
2	.8008032	**04 Okidata Ink Only Brown Spot Run5 19July2009
3	.8150206	**384 Canon Ink Only Run1 19July2009
4	.8200855	**205 HP Ink Only Run2 19July2009
5	.8249391	384 Canon Ink Only AVERAGE
6	.8250148	**22 Kodak Ink Only Run1 19July2009
7	.8251553	**384 Canon Ink Only Run2 19July2009
8	.8260051	**30 Epson Ink Only Run2 19July2009
9	.8274148	223 Canon Ink Only AVERAGE
10	.8274201	**223 Canon Ink Only Run1 19July2009
11	.8277653	**223 Canon Ink Only Run2 19July2009
12	.8297744	**223 Canon Ink Only Run3 19July2009
13	.8317577	**30 Epson Ink Only Run3 19July2009
14	.833599	30 Epson Ink Only AVERAGE
15	.8339365	**384 Canon Ink Only Run3 19July2009
16	.8355292	**306 Canon Ink Only Run1 19July2009
17	.8367748	**306 Canon Ink Only Run2 19July2009
18	.8404227	**217 Canon Ink Only Run2 19July2009
19	.8406769	**217 Canon Ink Only Run1 19July2009
20	.8407522	217 Canon Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 306 CANON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.8785287	**244 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
2	.8822822	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
3	.8836714	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
4	.9028469	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
5	.9043177	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
6	.9083517	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
7	.9151832	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
8	.9197078	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.9219413	30 Epson Ink Only AVERAGE Slide Subtracted
10	.9253823	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
11	.9254764	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
12	.92908	22 Kodak Ink Only AVERAGE Slide Subtracted
13	.93439	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
14	.9348232	**244 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
15	.9358855	244 Xerox Ink Only AVERAGE Slide Subtracted
16	.9361055	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
17	.9374278	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
18	.9401971	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
19	.9412706	384 Canon Ink Only AVERAGE Slide Subtracted
20	.9417542	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

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Neat Ink Library

Unknown Spectrum: 306 CANON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.2141667	205 HP Ink Only AVERAGE
2	.2259869	**205 HP Ink Only Run3 19July2009
3	.2363521	**205 HP Ink Only Run4 19July2009
4	.2938122	348 Canon Ink Only AVERAGE
5	.2949961	**348 Canon Ink Only Run2 19July2009
6	.2979231	**30 Epson Ink Only Run3 19July2009
7	.311413	30 Epson Ink Only AVERAGE
8	.3146271	**30 Epson Ink Only Run2 19July2009
9	.3287005	**282 Canon Ink Only Run2 19July2009
10	.3336979	22 Kodak Ink Only AVERAGE
11	.3337911	**384 Canon Ink Only Run3 19July2009
12	.3342868	282 Canon Ink Only AVERAGE
13	.3352686	**205 HP Ink Only Run2 19July2009
14	.3410183	**282 Canon Ink Only Run1 19July2009
15	.3412843	**22 Kodak Ink Only Run3 19July2009
16	.3417189	**318 Canon Ink Only Run1 19July2009
17	.3461322	**318 Canon Ink Only Run2 19July2009
18	.3466258	**30 Epson Ink Only Run1 19July2009
19	.3491355	318 Canon Ink Only AVERAGE
20	.3528466	**22 Kodak Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: 306 CANON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.6914208	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.6965587	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.7130213	205 HP Ink Only AVERAGE Slide Subtracted
4	.7250503	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.7741347	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
6	.7762508	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
7	.7778298	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
8	.7884309	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
9	.7906837	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
10	.7908824	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
11	.7911075	04 Okidata Ink Only AVERAGE Slide Subtracted
12	.7934745	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
13	.795094	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
14	.7978351	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
15	.7994654	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
16	.8004959	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
17	.8026447	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
18	.8027852	30 Epson Ink Only AVERAGE Slide Subtracted
19	.8042085	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20	.8054985	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted

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Neat Ink Library

Unknown Spectrum: 306 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.9282953	**84 Epson Ink Only Run4 19July2009
2	.931734	**522 Canon Ink Only Run1 19July2009
3	.9377676	**199 HP Ink Only Run5 19July2009
4	.9404052	199 HP Ink Only AVERAGE
5	.941936	**199 HP Ink Only Run6 19July2009
6	.9423852	84 Epson Ink Only AVERAGE
7	.9436302	522 Canon Ink Only AVERAGE
8	.9439385	**24 Xerox Ink Only Run1 19July2009
9	.9444455	**522 Canon Ink Only Run2 19July2009
10	.9471635	**84 Epson Ink Only Run5 19July2009
11	.9479612	**84 Epson Ink Only Run2 19July2009
12	.9500664	**84 Epson Ink Only Run1 19July2009
13	.9502735	**223 Canon Ink Only Run3 19July2009
14	.9504235	**244 Xerox Ink Only Run3 19July2009
15	.9520494	244 Xerox Ink Only AVERAGE
16	.952196	**522 Canon Ink Only Run3 19July2009
17	.9525584	**244 Xerox Ink Only Run5 19July2009
18	.9536141	**13 Xerox Ink Only Run6 19July2009
19	.9544489	24 Xerox Ink Only R1R2 AVERAGE
20	.9555593	**402 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: 306 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.5177621	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
2	.5752049	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
3	.6145546	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted
4	.6221983	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
5	.6274508	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
6	.642769	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
7	.6560734	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
8	.6597116	318a Canon Clear Ink Only AVERAGE Slide Subtracted
9	.6613362	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted
10	.6700492	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
11	.6755905	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
12	.6852506	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
13	.6870074	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
14	.689364	**198 HP Ink Only Run2 19July2009 Blank Slide Subtracted
15	.6925157	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
16	.6933389	198 HP Ink Only AVERAGE Slide Subtracted
17	.706758	201 HP Ink Only AVERAGE Slide Subtracted
18	.7072798	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
19	.7072994	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
20	.7091249	**201 HP Ink Only Run2 19July2009 Blank Slide Subtracted

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Neat Ink Library

Unknown Spectrum: 306 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.9012395	**199 HP Ink Only Run5 19July2009
2	.9042972	199 HP Ink Only AVERAGE
3	.9059454	**199 HP Ink Only Run6 19July2009
4	.9261727	**200 HP Ink Only Run4 19July2009
5	.926641	**522 Canon Ink Only Run1 19July2009
6	.9294954	244 Xerox Ink Only AVERAGE
7	.9305412	**244 Xerox Ink Only Run5 19July2009
8	.9381062	522 Canon Ink Only AVERAGE
9	.9397563	**522 Canon Ink Only Run2 19July2009
10	.9399514	**199 HP Ink Only Run4 19July2009
11	.9466797	**522 Canon Ink Only Run3 19July2009
12	.9487407	**199 HP Ink Only Run1 19July2009
13	.9491714	**402 Canon Ink Only Run2 19July2009
14	.9520685	**402 Canon Ink Only Run3 19July2009
15	.9554273	**156 Epson Ink Only Run3 19July2009
16	.9554883	402 Canon Ink Only AVERAGE
17	.9578694	**205 HP Ink Only Run1 19July2009
18	.9601502	**200 HP Ink Only Run1 19July2009
19	.960591	**244 Xerox Ink Only Run4 19July2009
20	.960806	**156 Epson Ink Only Run5 19July2009

Slide Subtracted Library

Unknown Spectrum: 306 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.6539652	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
2	.66476	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
3	.6960156	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
4	.7194996	156 Epson Ink Only AVERAGE Slide Subtracted
5	.7212542	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
6	.7257641	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
7	.727607	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
8	.735541	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
9	.7362984	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
10	.7364132	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11	.7369578	223 Canon Ink Only AVERAGE Slide Subtracted
12	.7370525	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
13	.7385888	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
14	.73941	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
15	.7396832	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
16	.7398331	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
17	.7404077	327 Canon Ink Only AVERAGE Slide Subtracted
18	.7436385	**327 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
19	.7445775	384 Canon Ink Only AVERAGE Slide Subtracted
20	.7451367	**306 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Canon 306 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Canon 306.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.8268506	**84 Epson Ink Only Run3 19July2009		
2	.8807778	**223 Canon Ink Only Run3 19July2009		
3	.885211	**522 Canon Ink Only Run1 19July2009		
4	.8876469	**217 Canon Ink Only Run1 19July2009		
5	.8888952	**306 Canon Ink Only Run1 19July2009		
6	.8894907	223 Canon Ink Only AVERAGE		
7	.8894956	217 Canon Ink Only AVERAGE		
8	.8899652	**217 Canon Ink Only Run3 19July2009		
9	.8899727	**522 Canon Ink Only Run2 19July2009		
10	.8903101	522 Canon Ink Only AVERAGE		
11	.8909136	**327 Canon Ink Only Run1 19July2009		
12	.8911691	**217 Canon Ink Only Run2 19July2009		
13	.8913323	**306 Canon Ink Only Run2 19July2009		
14	.8922341	**384 Canon Ink Only Run1 19July2009		
15	.8924946	**223 Canon Ink Only Run2 19July2009		
16	.8927045	327 Canon Ink Only AVERAGE		
17	.8930212	**327 Canon Ink Only Run2 19July2009		
18	.8947806	**327 Canon Ink Only Run3 19July2009		
19	.8952584	**522 Canon Ink Only Run3 19July2009		
20	.8958093	**384 Canon Ink Only Run3 19July2009		

Slide Subtracted Library

Unknown Spectrum: AVERAGE Canon 306.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.7870365	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted		
2	.8633373	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted		
3	.8671921	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted		
4	.8739005	156 Epson Ink Only AVERAGE Slide Subtracted		
5	.8772482	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted		
6	.8774505	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted		
7	.8803062	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted		
8	.8823615	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted		
9	.8823722	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted		
10	.8824064	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted		
11	.8839054	223 Canon Ink Only AVERAGE Slide Subtracted		
12	.8840549	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted		
13	.884602	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted		
14	.8860925	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted		
15	.8868441	384 Canon Ink Only AVERAGE Slide Subtracted		
16	.8893883	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted		
17	.8918204	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted		
18	.8931292	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted		
19	.8936779	**306 Canon Ink Only Run1 19July2009 Blank Slide Subtracted		
20	.8941324	**522 Canon Ink Only Run1 19July2009 Blank Slide Subtracted		

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Neat Ink Library

Unknown Spectrum: 312 CANON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.2381008	**198 HP Ink Only Run4 19July2009
2	.2390592	**201 HP Ink Only Run1 19July2009
3	.2448234	**201 HP Ink Only Run2 19July2009
4	.245017	198 HP Ink Only AVERAGE
5	.2463431	**199 HP Ink Only Run2 19July2009
6	.2480603	**201 HP Ink Only Run3 19July2009
7	.2482513	**200 HP Ink Only Run2 19July2009
8	.2483184	**198 HP Ink Only Run5 19July2009
9	.2488642	17 Kodak Ink Only AVERAGE
10	.2495373	**17 Kodak Ink Only Run1 19July2009
11	.2526992	**198 HP Ink Only Run6 19July2009
12	.2537796	**17 Kodak Ink Only Run2 19July2009
13	.2542345	**201 HP Ink Only Run6 19July2009
14	.2576178	**199 HP Ink Only Run3 19July2009
15	.2578319	**201 HP Ink Only Run5 19July2009
16	.2586868	**198 HP Ink Only Run1 19July2009
17	.2587483	**200 HP Ink Only Run5 19July2009
18	.2598378	**198 HP Ink Only Run2 19July2009
19	.2620162	201 HP Ink Only AVERAGE
20	.2623506	**198 HP Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 312 CANON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.8620833	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8698453	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.9018554	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.903437	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
5	.9105582	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
6	.9215193	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
7	.9236054	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
8	.9300098	17 Kodak Ink Only AVERAGE Slide Subtracted
9	.9346158	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
10	.9353577	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
11	.9426678	**318a Canon Clear Ink Only Run1 19July2009 Blank Slide Subtracted
12	.9461298	198 HP Ink Only AVERAGE Slide Subtracted
13	.9484156	**402 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
14	.9484838	**402 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
15	.9485288	402 Canon Ink Only AVERAGE Slide Subtracted
16	.949176	**402 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
17	.9498837	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
18	.9511145	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
19	.9515591	201 HP Ink Only AVERAGE Slide Subtracted
20	.9516791	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted

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Neat Ink Library

Unknown Spectrum: 312 CANON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.356481	**30 Epson Ink Only Run2 19July2009
2	.3619134	30 Epson Ink Only AVERAGE
3	.3626786	**30 Epson Ink Only Run3 19July2009
4	.3748919	**205 HP Ink Only Run2 19July2009
5	.3810994	205 HP Ink Only AVERAGE
6	.3828065	**17 Kodak Ink Only Run3 19July2009
7	.3870304	**318a Canon Clear Ink Only Run3 19July2009
8	.3924849	**201 HP Ink Only Run1 19July2009
9	.3934034	318a Canon Clear Ink Only AVERAGE
10	.3947171	201 HP Ink Only AVERAGE
11	.3950413	**318a Canon Clear Ink Only Run2 19July2009
12	.3975805	**17 Kodak Ink Only Run2 19July2009
13	.3978165	**318a Canon Clear Ink Only Run4 19July2009
14	.3995126	200 HP Ink Only AVERAGE
15	.406137	17 Kodak Ink Only AVERAGE
16	.4080304	**205 HP Ink Only Run3 19July2009
17	.4099737	**04 Okidata Ink Only Brown Spot Run2 19July2009
18	.41225	**201 HP Ink Only Run2 19July2009
19	.4123906	**17 Kodak Ink Only Run1 19July2009
20	.4236628	**30 Epson Ink Only Run4 19July2009

Slide Subtracted Library

Unknown Spectrum: 312 CANON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.8878255	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.8887522	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.8896854	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
4	.8899018	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.8921191	205 HP Ink Only AVERAGE Slide Subtracted
6	.9279533	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
7	.928462	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
8	.9287003	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
9	.929343	318a Canon Clear Ink Only AVERAGE Slide Subtracted
10	.9318539	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted
11	.9342365	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
12	.9362196	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
13	.9363105	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
14	.9378147	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
15	.9391713	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
16	.9440109	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
17	.9449816	22 Kodak Ink Only AVERAGE Slide Subtracted
18	.945068	492 Canon Ink Only AVERAGE Slide Subtracted
19	.9456908	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
20	.947607	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

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Neat Ink Library

Unknown Spectrum: 312 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.1714729	**84 Epson Ink Only Run3 19July2009
2	.2654031	**13 Xerox Ink Only Run6 19July2009
3	.2828791	**201 HP Ink Only Run1 19July2009
4	.2970031	13 Xerox Ink Only AVERAGE
5	.2978298	**244 Xerox Ink Only Run2 19July2009
6	.3102397	**17 Kodak Ink Only Run1 19July2009
7	.3105186	**13 Xerox Ink Only Run5 19July2009
8	.3105542	**200 HP Ink Only Run3 19July2009
9	.3127312	**201 HP Ink Only Run2 19July2009
10	.3135725	**13 Xerox Ink Only Run4 19July2009
11	.3141715	201 HP Ink Only AVERAGE
12	.3190651	17 Kodak Ink Only AVERAGE
13	.3194191	**17 Kodak Ink Only Run2 19July2009
14	.3237845	**17 Kodak Ink Only Run3 19July2009
15	.3259584	**199 HP Ink Only Run2 19July2009
16	.3315378	**13 Xerox Ink Only Run1 19July2009
17	.3429277	**198 HP Ink Only Run4 19July2009
18	.3457596	**201 HP Ink Only Run3 19July2009
19	.3463524	**200 HP Ink Only Run2 19July2009
20	.3477199	**198 HP Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 312 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.6286418	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.7704992	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.8147749	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.8259022	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
5	.8308597	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
6	.8495461	84 Epson Ink Only AVERAGE Slide Subtracted
7	.8777295	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
8	.8794039	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.9053939	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
10	.9071313	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
11	.9075461	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
12	.9081635	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
13	.9083458	24 Xerox Ink Only AVERAGE Slide Subtracted
14	.9105916	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
15	.9115856	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
16	.9117195	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
17	.9164194	17 Kodak Ink Only AVERAGE Slide Subtracted
18	.9164786	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
19	.9178715	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
20	.9181067	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted

Canon 312 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 312 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.2081066	**84 Epson Ink Only Run3 19July2009
2	.2501947	**244 Xerox Ink Only Run2 19July2009
3	.2537079	**13 Xerox Ink Only Run6 19July2009
4	.2568069	**201 HP Ink Only Run1 19July2009
5	.2699925	**17 Kodak Ink Only Run1 19July2009
6	.2716931	13 Xerox Ink Only AVERAGE
7	.2743929	**200 HP Ink Only Run3 19July2009
8	.2779884	**199 HP Ink Only Run2 19July2009
9	.2794591	**13 Xerox Ink Only Run5 19July2009
10	.2802608	17 Kodak Ink Only AVERAGE
11	.282786	**201 HP Ink Only Run2 19July2009
12	.2832033	**17 Kodak Ink Only Run2 19July2009
13	.2847613	**13 Xerox Ink Only Run4 19July2009
14	.2864385	**13 Xerox Ink Only Run1 19July2009
15	.2894129	**17 Kodak Ink Only Run3 19July2009
16	.2899175	201 HP Ink Only AVERAGE
17	.2929608	**200 HP Ink Only Run2 19July2009
18	.2970302	**198 HP Ink Only Run1 19July2009
19	.2996052	**198 HP Ink Only Run2 19July2009
20	.3010778	**198 HP Ink Only Run4 19July2009

Slide Subtracted Library

Unknown Spectrum: 312 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.6989481	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8051315	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.8409635	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.8478446	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
5	.8509642	84 Epson Ink Only AVERAGE Slide Subtracted
6	.8523412	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
7	.8953278	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
8	.9044093	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.9164639	24 Xerox Ink Only AVERAGE Slide Subtracted
10	.9178696	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
11	.9186042	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
12	.9199759	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
13	.9204037	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
14	.9212405	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
15	.9232894	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
16	.9245548	17 Kodak Ink Only AVERAGE Slide Subtracted
17	.9253066	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
18	.9254308	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
19	.9254559	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
20	.9255803	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted

Canon 312 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Canon 312.SPC

Hit #	Hit Quality	Memo Library Index
1	.3557956	205 HP Ink Only AVERAGE
2	.363723	**30 Epson Ink Only Run2 19July2009
3	.366055	**30 Epson Ink Only Run3 19July2009
4	.3674098	30 Epson Ink Only AVERAGE
5	.3698521	**205 HP Ink Only Run2 19July2009
6	.3782339	**205 HP Ink Only Run3 19July2009
7	.3979221	**205 HP Ink Only Run4 19July2009
8	.4038859	**318a Canon Clear Ink Only Run3 19July2009
9	.4063395	**17 Kodak Ink Only Run3 19July2009
10	.4091533	318a Canon Clear Ink Only AVERAGE
11	.4099988	**318a Canon Clear Ink Only Run2 19July2009
12	.4130543	**318a Canon Clear Ink Only Run4 19July2009
13	.4164836	**17 Kodak Ink Only Run2 19July2009
14	.4180588	**201 HP Ink Only Run1 19July2009
15	.4198505	201 HP Ink Only AVERAGE
16	.4238621	200 HP Ink Only AVERAGE
17	.4259599	17 Kodak Ink Only AVERAGE
18	.4280259	**30 Epson Ink Only Run4 19July2009
19	.4331484	**17 Kodak Ink Only Run1 19July2009
20	.4334058	**201 HP Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Canon 312.SPC

Hit #	Hit Quality	Memo Library Index
1	.8578796	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.8601413	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.8667606	205 HP Ink Only AVERAGE Slide Subtracted
4	.869319	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.913547	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
6	.9146874	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
7	.9193802	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
8	.9196759	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
9	.9209813	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
10	.921047	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
11	.9210836	318a Canon Clear Ink Only AVERAGE Slide Subtracted
12	.9216171	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
13	.9216669	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
14	.9226812	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
15	.9232465	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted
16	.9267038	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
17	.9277116	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
18	.9285329	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
19	.9288597	492 Canon Ink Only AVERAGE Slide Subtracted
20	.9297595	22 Kodak Ink Only AVERAGE Slide Subtracted

Canon 318 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 318 CANON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.3106852	**30 Epson Ink Only Run1 19July2009
2	.367962	205 HP Ink Only AVERAGE
3	.3837704	**201 HP Ink Only Run5 19July2009
4	.3838055	**200 HP Ink Only Run6 19July2009
5	.3851691	**13 Xerox Ink Only Run2 19July2009
6	.3860138	**205 HP Ink Only Run3 19July2009
7	.3868702	**200 HP Ink Only Run7 19July2009
8	.3887859	**201 HP Ink Only Run6 19July2009
9	.3949982	**200 HP Ink Only Run5 19July2009
10	.396084	**201 HP Ink Only Run4 19July2009
11	.3962999	**198 HP Ink Only Run2 19July2009
12	.3965039	**198 HP Ink Only Run3 19July2009
13	.3972992	**198 HP Ink Only Run1 19July2009
14	.4004566	**199 HP Ink Only Run3 19July2009
15	.4023958	**200 HP Ink Only Run2 19July2009
16	.4024673	**205 HP Ink Only Run4 19July2009
17	.4030025	**198 HP Ink Only Run5 19July2009
18	.4045403	22 Kodak Ink Only AVERAGE
19	.4052314	**198 HP Ink Only Run4 19July2009
20	.407126	198 HP Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 318 CANON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.849011	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
2	.8501448	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
3	.8554186	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
4	.8731921	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
5	.8801162	04 Okidata Ink Only AVERAGE Slide Subtracted
6	.8874333	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
7	.8878005	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
8	.8890966	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
9	.8900766	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
10	.892872	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
11	.8948956	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
12	.898027	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
13	.9019976	205 HP Ink Only AVERAGE Slide Subtracted
14	.9054729	33 Epson Ink Only AVERAGE Slide Subtracted
15	.9060135	63 Epson Ink Only Green Spot AVERAGE Slide Subtracted
16	.9092827	**63 Epson Ink Only Green Spot Run2 19July2009 Blank Slide Subtracted
17	.9093007	**244 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
18	.9146512	**63 Epson Ink Only Green Spot Run3 19July2009 Blank Slide Subtracted
19	.9162832	63 Epson Ink Only AVERAGE Slide Subtracted
20	.9185688	**33 Epson Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted

Canon 318 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 318 CANON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.3557314	348 Canon Ink Only AVERAGE
2	.3569588	**348 Canon Ink Only Run2 19July2009
3	.3865021	**384 Canon Ink Only Run3 19July2009
4	.390285	**282 Canon Ink Only Run2 19July2009
5	.395615	282 Canon Ink Only AVERAGE
6	.3974718	**318 Canon Ink Only Run2 19July2009
7	.3980485	**318 Canon Ink Only Run1 19July2009
8	.400404	318 Canon Ink Only AVERAGE
9	.4053161	**327 Canon Ink Only Run1 19July2009
10	.4078438	327 Canon Ink Only AVERAGE
11	.4084358	**318 Canon Ink Only Run3 19July2009
12	.4094769	**282 Canon Ink Only Run4 19July2009
13	.4101357	**327 Canon Ink Only Run3 19July2009
14	.411092	**327 Canon Ink Only Run2 19July2009
15	.4152537	**282 Canon Ink Only Run3 19July2009
16	.4192851	**282 Canon Ink Only Run1 19July2009
17	.4377435	**223 Canon Ink Only Run3 19July2009
18	.4388632	223 Canon Ink Only AVERAGE
19	.4399731	**223 Canon Ink Only Run2 19July2009
20	.4412323	**217 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 318 CANON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.7314595	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
2	.7341187	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
3	.7368697	282 Canon Ink Only AVERAGE Slide Subtracted
4	.7388107	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
5	.7390236	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
6	.7397155	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
7	.7406629	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
8	.7451187	348 Canon Ink Only AVERAGE Slide Subtracted
9	.7491156	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
10	.7499737	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
11	.7499973	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
12	.7508425	384 Canon Ink Only AVERAGE Slide Subtracted
13	.7514071	223 Canon Ink Only AVERAGE Slide Subtracted
14	.751425	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
15	.7527236	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
16	.7543491	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
17	.7579492	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
18	.7584628	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
19	.7585672	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
20	.7588651	217 Canon Ink Only AVERAGE Slide Subtracted

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Neat Ink Library

Unknown Spectrum: 318 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.6957508	**306 Canon Ink Only Run3 19July2009
2	.7747025	**492 Canon Ink Only Run4 19July2009
3	.7932505	**492 Canon Ink Only Run5 19July2009
4	.8021137	**522 Canon Ink Only Run1 19July2009
5	.80545	**120 Epson Ink Only Run2 19July2009
6	.8065528	120 Epson Ink Only AVERAGE
7	.8069001	**120 Epson Ink Only Run1 19July2009
8	.8081486	**120 Epson Ink Only Run3 19July2009
9	.8091244	**90 Epson Ink Only Run2 19July2009
10	.8109107	**90 Epson Ink Only Run3 19July2009
11	.811246	90 Epson Ink Only AVERAGE
12	.8122634	**123 Epson Ink Only Run1 19July2009
13	.8149066	**90 Epson Ink Only Run1 19July2009
14	.8150082	**123 Epson Ink Only Run2 19July2009
15	.8154173	**63 Epson Ink Only Green Spot Run3 19July2009
16	.8168506	123 Epson Ink Only AVERAGE
17	.8175218	**63 Epson Ink Only Green Spot Run2 19July2009
18	.8176014	522 Canon Ink Only AVERAGE
19	.8185064	**63 Epson Ink Only Purple Spot Run2 19July2009
20	.8190742	**63 Epson Ink Only Purple Spot Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 318 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.4509023	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
2	.4576824	**306 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
3	.4587378	384 Canon Ink Only AVERAGE Slide Subtracted
4	.4587845	**306 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
5	.4595608	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
6	.4621989	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
7	.4625237	223 Canon Ink Only AVERAGE Slide Subtracted
8	.4625984	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
9	.463287	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
10	.4656487	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11	.4674369	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
12	.4676065	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
13	.4692571	217 Canon Ink Only AVERAGE Slide Subtracted
14	.4698575	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
15	.4737648	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
16	.4764835	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
17	.4766929	**522 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
18	.4779167	327 Canon Ink Only AVERAGE Slide Subtracted
19	.478394	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20	.4786668	**327 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Canon 318 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 318 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.3198276	**312 Canon Ink Only Run3 19July2009
2	.3249195	**30 Epson Ink Only Run1 19July2009
3	.3336842	**282 Canon Ink Only Run1 19July2009
4	.3714188	**201 HP Ink Only Run1 19July2009
5	.3731713	**13 Xerox Ink Only Run2 19July2009
6	.3857454	**200 HP Ink Only Run3 19July2009
7	.3862956	**201 HP Ink Only Run2 19July2009
8	.3871765	**17 Kodak Ink Only Run1 19July2009
9	.3884483	17 Kodak Ink Only AVERAGE
10	.3909107	**17 Kodak Ink Only Run2 19July2009
11	.397567	**198 HP Ink Only Run4 19July2009
12	.4033283	**24 Xerox Ink Only Run1 19July2009
13	.4037988	**201 HP Ink Only Run3 19July2009
14	.4044708	22 Kodak Ink Only AVERAGE
15	.406456	**17 Kodak Ink Only Run3 19July2009
16	.4076556	**200 HP Ink Only Run2 19July2009
17	.4090117	**199 HP Ink Only Run2 19July2009
18	.4096241	198 HP Ink Only AVERAGE
19	.4147316	**198 HP Ink Only Run6 19July2009
20	.4150315	201 HP Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 318 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.8515071	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8647425	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
3	.8653997	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
4	.8684758	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
5	.8769438	312 Canon Ink Only AVERAGE Slide Subtracted
6	.8796546	**04 Okidata Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
7	.880322	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
8	.8809545	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
9	.8841382	04 Okidata Ink Only AVERAGE Slide Subtracted
10	.8844213	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
11	.8892568	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
12	.89056	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
13	.8942465	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
14	.8950237	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
15	.89548	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
16	.8965352	17 Kodak Ink Only AVERAGE Slide Subtracted
17	.8975144	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
18	.8983546	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
19	.8992063	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
20	.9002763	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted

Canon 318 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Canon 318.SPC

Hit #	Hit Quality	Memo Library Index
1	.742815	**24 Xerox Ink Only Run1 19July2009
2	.7664167	24 Xerox Ink Only R1R2 AVERAGE
3	.7854545	**24 Xerox Ink Only Run2 19July2009
4	.7921636	**13 Xerox Ink Only Run6 19July2009
5	.7928776	24 Xerox Ink Only AVERAGE
6	.8004087	**13 Xerox Ink Only Run3 19July2009
7	.8048043	13 Xerox Ink Only AVERAGE
8	.8053119	**312 Canon Ink Only Run3 19July2009
9	.8067224	**13 Xerox Ink Only Run4 19July2009
10	.807415	348 Canon Ink Only AVERAGE
11	.8075677	**348 Canon Ink Only Run2 19July2009
12	.8129017	**13 Xerox Ink Only Run5 19July2009
13	.813668	**13 Xerox Ink Only Run2 19July2009
14	.8191058	**282 Canon Ink Only Run1 19July2009
15	.819841	**318 Canon Ink Only Run2 19July2009
16	.8204478	**84 Epson Ink Only Run3 19July2009
17	.8209215	**384 Canon Ink Only Run3 19July2009
18	.8210926	**327 Canon Ink Only Run1 19July2009
19	.8214269	**318 Canon Ink Only Run1 19July2009
20	.8215423	318 Canon Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: AVERAGE Canon 318.SPC

Hit #	Hit Quality	Memo Library Index
1	.7612827	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
2	.7823368	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.7899205	24 Xerox Ink Only AVERAGE Slide Subtracted
4	.8010843	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
5	.8014265	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
6	.8075142	13 Xerox Ink Only AVERAGE Slide Subtracted
7	.8163577	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
8	.8188676	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
9	.8204849	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
10	.8557243	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11	.856689	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
12	.8568067	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
13	.8574876	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
14	.8575643	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
15	.8630826	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
16	.865343	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
17	.8697231	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
18	.8713126	156 Epson Ink Only AVERAGE Slide Subtracted
19	.873091	217 Canon Ink Only AVERAGE Slide Subtracted
20	.8733884	223 Canon Ink Only AVERAGE Slide Subtracted

Canon 318a 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 318A CANON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.4928651	**318a Canon Clear Ink Only Run3 19July2009
2	.4981576	318a Canon Clear Ink Only AVERAGE
3	.500733	**318a Canon Clear Ink Only Run4 19July2009
4	.5009133	**318a Canon Clear Ink Only Run2 19July2009
5	.5584045	**200 HP Ink Only Run4 19July2009
6	.5654112	**04 Okidata Ink Only Brown Spot Run2 19July2009
7	.5683827	**04 Okidata Ink Only Brown Spot Run5 19July2009
8	.5708456	**156 Epson Ink Only Run1 19July2009
9	.5748565	**156 Epson Ink Only Run4 19July2009
10	.5784329	**156 Epson Ink Only Run2 19July2009
11	.582487	156 Epson Ink Only AVERAGE
12	.5875234	**156 Epson Ink Only Run5 19July2009
13	.5916352	**156 Epson Ink Only Run3 19July2009
14	.6039407	**17 Kodak Ink Only Run3 19July2009
15	.6053352	**30 Epson Ink Only Run2 19July2009
16	.6065506	**30 Epson Ink Only Run3 19July2009
17	.6067105	**30 Epson Ink Only Run4 19July2009
18	.6070565	200 HP Ink Only AVERAGE
19	.6092094	30 Epson Ink Only AVERAGE
20	.6159667	**22 Kodak Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 318A CANON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.8745335	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8799704	156 Epson Ink Only AVERAGE Slide Subtracted
3	.8815746	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
4	.8832171	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
5	.8862555	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
6	.892938	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
7	.8987362	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
8	.9041057	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
9	.9077913	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
10	.9078835	318a Canon Clear Ink Only AVERAGE Slide Subtracted
11	.9120861	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted
12	.9197447	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
13	.9287164	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
14	.9319462	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
15	.9361292	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
16	.9364562	17 Kodak Ink Only AVERAGE Slide Subtracted
17	.9373966	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
18	.9399216	13 Xerox Ink Only AVERAGE Slide Subtracted
19	.9431682	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
20	.9449019	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted

Canon 318a 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 318A CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.4539453	**199 HP Ink Only Run6 19July2009
2	.4546342	199 HP Ink Only AVERAGE
3	.4613552	**199 HP Ink Only Run5 19July2009
4	.4661686	**205 HP Ink Only Run1 19July2009
5	.474664	**156 Epson Ink Only Run3 19July2009
6	.4851515	**156 Epson Ink Only Run5 19July2009
7	.4951338	156 Epson Ink Only AVERAGE
8	.4956795	244 Xerox Ink Only AVERAGE
9	.4987202	**244 Xerox Ink Only Run5 19July2009
10	.501399	**199 HP Ink Only Run4 19July2009
11	.5045487	**199 HP Ink Only Run1 19July2009
12	.5047912	**200 HP Ink Only Run1 19July2009
13	.5193759	**156 Epson Ink Only Run2 19July2009
14	.5283122	**156 Epson Ink Only Run1 19July2009
15	.531065	**156 Epson Ink Only Run4 19July2009
16	.5484647	**244 Xerox Ink Only Run1 19July2009
17	.5547581	**217 Canon Ink Only Run4 19July2009
18	.5738865	**22 Kodak Ink Only Run1 19July2009
19	.5739254	**200 HP Ink Only Run4 19July2009
20	.5741651	30 Epson Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 318A CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.8547374	**198 HP Ink Only Run2 19July2009 Blank Slide Subtracted
2	.8574241	**199 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.8654948	199 HP Ink Only AVERAGE Slide Subtracted
4	.8711554	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
5	.876415	**198 HP Ink Only Run3 19July2009 Blank Slide Subtracted
6	.8774257	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
7	.8795599	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted
8	.8867989	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
9	.8874468	**201 HP Ink Only Run3 19July2009 Blank Slide Subtracted
10	.8899093	**201 HP Ink Only Run6 19July2009 Blank Slide Subtracted
11	.8901371	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
12	.8902271	**201 HP Ink Only Run2 19July2009 Blank Slide Subtracted
13	.8934605	201 HP Ink Only AVERAGE Slide Subtracted
14	.8939064	200 HP Ink Only AVERAGE Slide Subtracted
15	.8939802	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
16	.8939974	**201 HP Ink Only Run5 19July2009 Blank Slide Subtracted
17	.8940493	**198 HP Ink Only Run6 19July2009 Blank Slide Subtracted
18	.8950196	198 HP Ink Only AVERAGE Slide Subtracted
19	.8973481	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
20	.8991576	**198 HP Ink Only Run5 19July2009 Blank Slide Subtracted

Canon 318a 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 318A CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.4076679	**327 Canon Ink Only Run1 19July2009
2	.4111	327 Canon Ink Only AVERAGE
3	.4117411	**327 Canon Ink Only Run2 19July2009
4	.4154195	**327 Canon Ink Only Run3 19July2009
5	.4257853	**318 Canon Ink Only Run1 19July2009
6	.4301126	**318 Canon Ink Only Run2 19July2009
7	.4329625	318 Canon Ink Only AVERAGE
8	.4436953	**384 Canon Ink Only Run3 19July2009
9	.4440214	**318 Canon Ink Only Run3 19July2009
10	.4602158	348 Canon Ink Only AVERAGE
11	.4603469	**223 Canon Ink Only Run2 19July2009
12	.4626841	**348 Canon Ink Only Run2 19July2009
13	.4634024	223 Canon Ink Only AVERAGE
14	.4675446	**217 Canon Ink Only Run2 19July2009
15	.4675477	**223 Canon Ink Only Run1 19July2009
16	.4686363	217 Canon Ink Only AVERAGE
17	.4691857	**217 Canon Ink Only Run1 19July2009
18	.4698083	**217 Canon Ink Only Run3 19July2009
19	.4714034	**223 Canon Ink Only Run3 19July2009
20	.4715894	**384 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 318A CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.7831729	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
2	.7851835	318a Canon Clear Ink Only AVERAGE Slide Subtracted
3	.7862509	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
4	.7870017	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted
5	.8020554	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
6	.8048572	**327 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
7	.8049241	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
8	.8054057	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
9	.8055016	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
10	.8056809	327 Canon Ink Only AVERAGE Slide Subtracted
11	.8057317	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
12	.8061911	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
13	.8078576	318 Canon Ink Only AVERAGE Slide Subtracted
14	.8081793	**318 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
15	.8087781	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
16	.8092192	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
17	.8108569	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
18	.8124321	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
19	.8135842	223 Canon Ink Only AVERAGE Slide Subtracted
20	.8194652	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted

Canon 318a AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Canon 318a.SPC

Hit #	Hit Quality	Memo Library Index
1	.8637463	**306 Canon Ink Only Run3 19July2009
2	.9070584	**522 Canon Ink Only Run1 19July2009
3	.9112818	**402 Canon Ink Only Run2 19July2009
4	.9113781	**402 Canon Ink Only Run3 19July2009
5	.9179995	522 Canon Ink Only AVERAGE
6	.9190838	402 Canon Ink Only AVERAGE
7	.9204983	**522 Canon Ink Only Run2 19July2009
8	.9240869	**120 Epson Ink Only Run3 19July2009
9	.925232	**120 Epson Ink Only Run2 19July2009
10	.9255425	**522 Canon Ink Only Run3 19July2009
11	.9260481	120 Epson Ink Only AVERAGE
12	.9260954	**492 Canon Ink Only Run4 19July2009
13	.9287068	**120 Epson Ink Only Run1 19July2009
14	.9307645	**123 Epson Ink Only Run1 19July2009
15	.9309379	**90 Epson Ink Only Run2 19July2009
16	.932111	306 Canon Ink Only AVERAGE
17	.9344526	**492 Canon Ink Only Run1 19July2009
18	.9346493	90 Epson Ink Only AVERAGE
19	.934689	123 Epson Ink Only AVERAGE
20	.9348931	**123 Epson Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Canon 318a.SPC

Hit #	Hit Quality	Memo Library Index
1	.5118781	**318a Canon Clear Ink Only Run1 19July2009 Blank Slide Subtracted
2	.6351909	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
3	.6353992	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted
4	.6360967	318a Canon Clear Ink Only AVERAGE Slide Subtracted
5	.6386318	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
6	.7222354	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
7	.7233719	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
8	.7240122	327 Canon Ink Only AVERAGE Slide Subtracted
9	.7246326	**327 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
10	.747463	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11	.7499237	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
12	.7509381	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
13	.7567462	**306 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
14	.7575471	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
15	.7579238	223 Canon Ink Only AVERAGE Slide Subtracted
16	.7584206	**402 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
17	.7587814	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
18	.7588759	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
19	.7590052	402 Canon Ink Only AVERAGE Slide Subtracted
20	.7593656	**402 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Canon 327 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 327 CANON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.7817574	**402 Canon Ink Only Run3 19July2009
2	.7822663	402 Canon Ink Only AVERAGE
3	.7828373	**402 Canon Ink Only Run2 19July2009
4	.7840934	**402 Canon Ink Only Run1 19July2009
5	.7984996	306 Canon Ink Only AVERAGE
6	.8010747	**282 Canon Ink Only Run3 19July2009
7	.804242	**522 Canon Ink Only Run3 19July2009
8	.8055608	**282 Canon Ink Only Run4 19July2009
9	.8095292	**348 Canon Ink Only Run3 19July2009
10	.8111575	**306 Canon Ink Only Run3 19July2009
11	.8114058	**522 Canon Ink Only Run2 19July2009
12	.8119731	522 Canon Ink Only AVERAGE
13	.8120736	282 Canon Ink Only AVERAGE
14	.8142825	**282 Canon Ink Only Run2 19July2009
15	.8178047	**306 Canon Ink Only Run2 19July2009
16	.8182653	**306 Canon Ink Only Run1 19July2009
17	.8185636	**318 Canon Ink Only Run3 19July2009
18	.8196149	**522 Canon Ink Only Run1 19July2009
19	.8231205	318 Canon Ink Only AVERAGE
20	.8237643	**348 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: 327 CANON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.8222811	**306 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8370448	**217 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
3	.8466446	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
4	.8517573	84 Epson Ink Only AVERAGE Slide Subtracted
5	.8568807	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
6	.8574101	282 Canon Ink Only AVERAGE Slide Subtracted
7	.8577023	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
8	.8589544	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
9	.8624257	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
10	.8645862	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
11	.8663022	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
12	.8670665	**84 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
13	.8676477	**402 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
14	.8705033	**402 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
15	.8710281	402 Canon Ink Only AVERAGE Slide Subtracted
16	.8729054	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
17	.8753422	492 Canon Ink Only AVERAGE Slide Subtracted
18	.8762126	**402 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
19	.87703	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
20	.8773246	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Canon 327 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 327 CANON 20080711.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.339148	**348 Canon Ink Only Run2 19July2009		
2	.3413618	348 Canon Ink Only AVERAGE		
3	.3605075	**282 Canon Ink Only Run2 19July2009		
4	.3638682	282 Canon Ink Only AVERAGE		
5	.369967	**282 Canon Ink Only Run4 19July2009		
6	.3769618	**282 Canon Ink Only Run3 19July2009		
7	.3943381	**318 Canon Ink Only Run2 19July2009		
8	.3959178	318 Canon Ink Only AVERAGE		
9	.3960583	**318 Canon Ink Only Run1 19July2009		
10	.3974403	**384 Canon Ink Only Run3 19July2009		
11	.3999005	**318 Canon Ink Only Run3 19July2009		
12	.4023477	**348 Canon Ink Only Run3 19July2009		
13	.4034739	**327 Canon Ink Only Run1 19July2009		
14	.4036106	**327 Canon Ink Only Run3 19July2009		
15	.4042152	327 Canon Ink Only AVERAGE		
16	.4080097	**327 Canon Ink Only Run2 19July2009		
17	.4145446	**282 Canon Ink Only Run1 19July2009		
18	.4232273	205 HP Ink Only AVERAGE		
19	.4255614	**205 HP Ink Only Run3 19July2009		
20	.4291105	**205 HP Ink Only Run4 19July2009		

Slide Subtracted Library

Unknown Spectrum: 327 CANON 20080711.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.7218521	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted		
2	.7323858	**306 Canon Ink Only Run3 19July2009 Blank Slide Subtracted		
3	.7332084	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted		
4	.7332749	282 Canon Ink Only AVERAGE Slide Subtracted		
5	.7378753	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted		
6	.7423209	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted		
7	.7463648	492 Canon Ink Only AVERAGE Slide Subtracted		
8	.7471962	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted		
9	.74949	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted		
10	.7523545	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted		
11	.7554477	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted		
12	.759689	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted		
13	.7607649	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted		
14	.7631304	348 Canon Ink Only AVERAGE Slide Subtracted		
15	.7643826	**282 Canon Ink Only Run1 19July2009 Blank Slide Subtracted		
16	.7662712	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted		
17	.7702653	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted		
18	.7713926	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted		
19	.7725091	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted		
20	.7750526	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted		

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Neat Ink Library

Unknown Spectrum: C327 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.6265515	**205 HP Ink Only Run1 19July2009
2	.6378098	**04 Okidata Ink Only Brown Spot Run2 19July2009
3	.6402227	**22 Kodak Ink Only Run1 19July2009
4	.6571026	**04 Okidata Ink Only Brown Spot Run5 19July2009
5	.6853518	**205 HP Ink Only Run2 19July2009
6	.6943838	**30 Epson Ink Only Run2 19July2009
7	.6981126	**22 Kodak Ink Only Run2 19July2009
8	.6988222	**30 Epson Ink Only Run4 19July2009
9	.7012231	30 Epson Ink Only AVERAGE
10	.7046283	**199 HP Ink Only Run6 19July2009
11	.7058731	**22 Kodak Ink Only Run3 19July2009
12	.7065632	199 HP Ink Only AVERAGE
13	.7100589	22 Kodak Ink Only AVERAGE
14	.7100996	**30 Epson Ink Only Run3 19July2009
15	.710532	**217 Canon Ink Only Run4 19July2009
16	.7116402	**199 HP Ink Only Run5 19July2009
17	.7128273	**318a Canon Clear Ink Only Run1 19July2009
18	.7136536	**156 Epson Ink Only Run3 19July2009
19	.7244341	205 HP Ink Only AVERAGE
20	.725188	**156 Epson Ink Only Run5 19July2009

Slide Subtracted Library

Unknown Spectrum: 327 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.7622743	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
2	.7857164	**244 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
3	.8105839	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
4	.8121884	**84 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
5	.8249953	**84 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
6	.8441368	84 Epson Ink Only AVERAGE Slide Subtracted
7	.8551505	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
8	.8650671	**244 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
9	.8717824	**84 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
10	.8754001	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
11	.8774183	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
12	.8783493	244 Xerox Ink Only AVERAGE Slide Subtracted
13	.8785495	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
14	.8812507	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
15	.8827641	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
16	.8864533	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
17	.8870851	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
18	.891912	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
19	.89373	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
20	.8940692	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted

Canon 327 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 327 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.3806478	**205 HP Ink Only Run2 19July2009
2	.4362286	**205 HP Ink Only Run1 19July2009
3	.467826	**22 Kodak Ink Only Run1 19July2009
4	.4689102	**200 HP Ink Only Run4 19July2009
5	.4834172	205 HP Ink Only AVERAGE
6	.4862382	**30 Epson Ink Only Run4 19July2009
7	.4915565	**30 Epson Ink Only Run3 19July2009
8	.4933182	**30 Epson Ink Only Run2 19July2009
9	.493407	30 Epson Ink Only AVERAGE
10	.5000408	**205 HP Ink Only Run3 19July2009
11	.5048354	**199 HP Ink Only Run6 19July2009
12	.5060358	**04 Okidata Ink Only Brown Spot Run2 19July2009
13	.5063249	199 HP Ink Only AVERAGE
14	.5109943	**199 HP Ink Only Run5 19July2009
15	.5115172	**205 HP Ink Only Run4 19July2009
16	.5227896	200 HP Ink Only AVERAGE
17	.5272899	**318a Canon Clear Ink Only Run3 19July2009
18	.5277343	**04 Okidata Ink Only Brown Spot Run5 19July2009
19	.5305853	**318a Canon Clear Ink Only Run2 19July2009
20	.5319919	318a Canon Clear Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 327 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.8495424	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.8545427	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.8564814	205 HP Ink Only AVERAGE Slide Subtracted
4	.8733239	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.8733767	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
6	.921913	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
7	.929035	22 Kodak Ink Only AVERAGE Slide Subtracted
8	.9323505	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
9	.9343472	**22 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
10	.9349579	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
11	.9448559	**244 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
12	.9463539	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
13	.9478624	**84 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
14	.9485067	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
15	.9490808	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
16	.9529266	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
17	.9597024	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted
18	.9604247	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
19	.9608717	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
20	.9612116	33 Epson Ink Only AVERAGE Slide Subtracted

Canon 327 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Canon 327.SPC

Hit #	Hit Quality	Memo Library Index
1	.6499784	**205 HP Ink Only Run2 19July2009
2	.6581802	**205 HP Ink Only Run4 19July2009
3	.6629466	**205 HP Ink Only Run3 19July2009
4	.6663	205 HP Ink Only AVERAGE
5	.7154537	**205 HP Ink Only Run1 19July2009
6	.7422997	**22 Kodak Ink Only Run1 19July2009
7	.7494631	**30 Epson Ink Only Run4 19July2009
8	.7574058	**30 Epson Ink Only Run3 19July2009
9	.7654493	30 Epson Ink Only AVERAGE
10	.7684916	**30 Epson Ink Only Run2 19July2009
11	.7708014	**22 Kodak Ink Only Run3 19July2009
12	.7818584	**22 Kodak Ink Only Run2 19July2009
13	.7829082	22 Kodak Ink Only AVERAGE
14	.7926114	**384 Canon Ink Only Run2 19July2009
15	.793382	**348 Canon Ink Only Run1 19July2009
16	.7940626	**384 Canon Ink Only Run3 19July2009
17	.7941982	384 Canon Ink Only AVERAGE
18	.7943347	**217 Canon Ink Only Run4 19July2009
19	.7972441	**384 Canon Ink Only Run1 19July2009
20	.8007836	**348 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Canon 327.SPC

Hit #	Hit Quality	Memo Library Index
1	.751566	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
2	.7607409	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
3	.7693591	205 HP Ink Only AVERAGE Slide Subtracted
4	.7796623	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
5	.8120071	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
6	.8217857	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
7	.8218899	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
8	.8264714	**244 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
9	.8300046	**84 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
10	.833484	**84 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
11	.8346806	**84 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
12	.834847	84 Epson Ink Only AVERAGE Slide Subtracted
13	.8503414	**22 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
14	.8515157	**33 Epson Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
15	.8530262	33 Epson Ink Only Black Spot AVERAGE Slide Subtracted
16	.8538861	**33 Epson Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
17	.8566573	**33 Epson Ink Only Black Spot Run3 19July2009 Blank Slide Subtracted
18	.866556	**22 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted
19	.8683267	22 Kodak Ink Only AVERAGE Slide Subtracted
20	.8703498	**63 Epson Ink Only Green Spot Run1 19July2009 Blank Slide Subtracted

Canon 348 27June2008 Run 1

Neat Ink Library

Unknown Spectrum: 348 CANON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.7495763	**04 Okidata Ink Only Brown Spot Run7 19July2009
2	.7577398	**312 Canon Ink Only Run2 19July2009
3	.7577819	**04 Okidata Ink Only Brown Spot Run6 19July2009
4	.7859847	**492 Canon Ink Only Run2 19July2009
5	.7873948	04 Okidata Ink Only Brown Spot AVERAGE
6	.7943638	**04 Okidata Ink Only Brown Spot Run3 19July2009
7	.7957843	**492 Canon Ink Only Run1 19July2009
8	.7974005	**04 Okidata Ink Only Brown Spot Run1 19July2009
9	.8033375	**312 Canon Ink Only Run1 19July2009
10	.8049976	**04 Okidata Ink Only Brown Spot Run4 19July2009
11	.8078541	**492 Canon Ink Only Run3 19July2009
12	.8084054	312 Canon Ink Only AVERAGE
13	.8106149	492 Canon Ink Only AVERAGE
14	.8167983	**492 Canon Ink Only Run5 19July2009
15	.8177235	**492 Canon Ink Only Run4 19July2009
16	.8718328	**312 Canon Ink Only Run4 19July2009
17	.8777928	**66 Epson Ink Only Run1 19July2009
18	.8805733	04 Okidata Ink Only AVERAGE
19	.8827502	**22 Kodak Ink Only Run3 19July2009
20	.8827736	**312 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 348 CANON 20080627.SPC

Hit #	Hit Quality	Memo Library Index
1	.7548605	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
2	.7606207	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
3	.768362	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
4	.7797078	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
5	.7819218	492 Canon Ink Only AVERAGE Slide Subtracted
6	.7819266	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
7	.7825519	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
8	.7864111	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
9	.790747	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
10	.7951531	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
11	.7970414	**492 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
12	.8028894	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
13	.8073119	312 Canon Ink Only AVERAGE Slide Subtracted
14	.8142961	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
15	.8219875	**312 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
16	.8567134	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
17	.8595845	**66 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
18	.8684894	66 Epson Ink Only AVERAGE Slide Subtracted
19	.8706039	**90 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
20	.8713388	**66 Epson Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 348 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 348 CANON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.9592083	**24 Xerox Ink Only Run1 19July2009
2	.9640884	**199 HP Ink Only Run5 19July2009
3	.9642744	199 HP Ink Only AVERAGE
4	.9646174	**199 HP Ink Only Run6 19July2009
5	.9680939	24 Xerox Ink Only R1R2 AVERAGE
6	.9722202	**306 Canon Ink Only Run3 19July2009
7	.9747484	**244 Xerox Ink Only Run3 19July2009
8	.9749596	**24 Xerox Ink Only Run2 19July2009
9	.9751434	**205 HP Ink Only Run1 19July2009
10	.9780188	**522 Canon Ink Only Run1 19July2009
11	.9787172	**13 Xerox Ink Only Run3 19July2009
12	.979171	**84 Epson Ink Only Run1 19July2009
13	.980726	522 Canon Ink Only AVERAGE
14	.9815319	**522 Canon Ink Only Run2 19July2009
15	.9817371	24 Xerox Ink Only AVERAGE
16	.982223	**522 Canon Ink Only Run3 19July2009
17	.9829844	**199 HP Ink Only Run4 19July2009
18	.9837244	**84 Epson Ink Only Run2 19July2009
19	.9837343	**205 HP Ink Only Run2 19July2009
20	.9838021	**402 Canon Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 348 CANON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.7353735	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
2	.743817	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
3	.7770584	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
4	.7784082	24 Xerox Ink Only AVERAGE Slide Subtracted
5	.7895548	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
6	.7928699	156 Epson Ink Only AVERAGE Slide Subtracted
7	.7930411	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
8	.7946996	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
9	.7950258	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
10	.8103479	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
11	.8279772	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
12	.8298237	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
13	.8359444	244 Xerox Ink Only AVERAGE Slide Subtracted
14	.8479686	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
15	.8485605	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
16	.8490131	13 Xerox Ink Only AVERAGE Slide Subtracted
17	.8501586	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
18	.8508169	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
19	.8529482	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
20	.8715533	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

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Neat Ink Library

Unknown Spectrum: 348 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.59091	**199 HP Ink Only Run5 19July2009
2	.5926416	199 HP Ink Only AVERAGE
3	.5942975	**199 HP Ink Only Run6 19July2009
4	.6175037	**244 Xerox Ink Only Run5 19July2009
5	.6179699	244 Xerox Ink Only AVERAGE
6	.6262877	**156 Epson Ink Only Run3 19July2009
7	.6265591	**156 Epson Ink Only Run5 19July2009
8	.628732	156 Epson Ink Only AVERAGE
9	.6318433	**156 Epson Ink Only Run2 19July2009
10	.632071	**199 HP Ink Only Run4 19July2009
11	.6383119	**199 HP Ink Only Run1 19July2009
12	.6409631	**156 Epson Ink Only Run4 19July2009
13	.6453661	**156 Epson Ink Only Run1 19July2009
14	.6503386	**200 HP Ink Only Run4 19July2009
15	.6546931	**200 HP Ink Only Run1 19July2009
16	.6733369	**244 Xerox Ink Only Run4 19July2009
17	.6762295	**244 Xerox Ink Only Run1 19July2009
18	.7047456	200 HP Ink Only AVERAGE
19	.7494038	**205 HP Ink Only Run1 19July2009
20	.7495671	**198 HP Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: 348 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.6908795	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
2	.6918524	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
3	.6925296	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
4	.6929548	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
5	.692959	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
6	.6959129	**522 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
7	.6960015	223 Canon Ink Only AVERAGE Slide Subtracted
8	.6967427	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
9	.6987675	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
10	.7042735	217 Canon Ink Only AVERAGE Slide Subtracted
11	.7052394	**522 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
12	.7057618	522 Canon Ink Only AVERAGE Slide Subtracted
13	.7062351	384 Canon Ink Only AVERAGE Slide Subtracted
14	.7072317	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
15	.7088324	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
16	.7090667	**306 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
17	.7093653	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
18	.7123302	327 Canon Ink Only AVERAGE Slide Subtracted
19	.7145403	**306 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20	.7167072	**522 Canon Ink Only Run3 19July2009 Blank Slide Subtracted

Canon 348 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 348 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.7486581	**199 HP Ink Only Run5 19July2009
2	.753157	199 HP Ink Only AVERAGE
3	.754823	**199 HP Ink Only Run6 19July2009
4	.7655008	**200 HP Ink Only Run4 19July2009
5	.7755281	**205 HP Ink Only Run1 19July2009
6	.8173355	**156 Epson Ink Only Run3 19July2009
7	.8184599	244 Xerox Ink Only AVERAGE
8	.8194012	**205 HP Ink Only Run2 19July2009
9	.8228002	**244 Xerox Ink Only Run5 19July2009
10	.823507	**156 Epson Ink Only Run5 19July2009
11	.824479	**199 HP Ink Only Run4 19July2009
12	.8310389	156 Epson Ink Only AVERAGE
13	.8310801	**205 HP Ink Only Run4 19July2009
14	.841573	**205 HP Ink Only Run3 19July2009
15	.8424709	**156 Epson Ink Only Run2 19July2009
16	.8459975	**22 Kodak Ink Only Run1 19July2009
17	.8537076	**156 Epson Ink Only Run4 19July2009
18	.8537723	205 HP Ink Only AVERAGE
19	.854236	**199 HP Ink Only Run1 19July2009
20	.8551036	**156 Epson Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 348 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.8248235	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
2	.8328552	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
3	.8444956	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
4	.8550285	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
5	.8555258	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
6	.8566188	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
7	.86137	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
8	.8651729	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
9	.8718245	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
10	.8864664	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted
11	.8893551	**522 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
12	.8901108	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
13	.892123	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
14	.8923293	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
15	.8931719	13 Xerox Ink Only AVERAGE Slide Subtracted
16	.8937647	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
17	.8941996	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
18	.8943407	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
19	.8962317	**522 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20	.8971305	522 Canon Ink Only AVERAGE Slide Subtracted

Canon 348 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Canon 348.SPC

Hit #	Hit Quality	Memo Library Index
1	.6718271	**205 HP Ink Only Run2 19July2009
2	.6726359	**205 HP Ink Only Run1 19July2009
3	.6990122	199 HP Ink Only AVERAGE
4	.69918	**199 HP Ink Only Run6 19July2009
5	.6997548	**199 HP Ink Only Run5 19July2009
6	.7066073	205 HP Ink Only AVERAGE
7	.7110892	**205 HP Ink Only Run3 19July2009
8	.7129204	**205 HP Ink Only Run4 19July2009
9	.7226661	**200 HP Ink Only Run4 19July2009
10	.7239015	**199 HP Ink Only Run4 19July2009
11	.7311789	**22 Kodak Ink Only Run1 19July2009
12	.7486584	200 HP Ink Only AVERAGE
13	.7545925	30 Epson Ink Only AVERAGE
14	.7554868	**30 Epson Ink Only Run2 19July2009
15	.7564345	**30 Epson Ink Only Run4 19July2009
16	.7572443	**04 Okidata Ink Only Brown Spot Run2 19July2009
17	.7579628	**30 Epson Ink Only Run3 19July2009
18	.7633485	**200 HP Ink Only Run1 19July2009
19	.7676036	**156 Epson Ink Only Run3 19July2009
20	.7746415	**199 HP Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Canon 348.SPC

Hit #	Hit Quality	Memo Library Index
1	.8535383	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
2	.8876677	**244 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
3	.8904019	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
4	.8930769	**244 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
5	.8939855	244 Xerox Ink Only AVERAGE Slide Subtracted
6	.9042399	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
7	.9051436	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
8	.9103598	**84 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
9	.915374	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
10	.9157628	**84 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
11	.9166025	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
12	.9211534	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
13	.9242237	**84 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
14	.9286523	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
15	.9309486	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
16	.9314876	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
17	.9335635	156 Epson Ink Only AVERAGE Slide Subtracted
18	.9343964	205 HP Ink Only AVERAGE Slide Subtracted
19	.9371345	**205 HP Ink Only Run1 19July2009 Blank Slide Subtracted
20	.9377238	84 Epson Ink Only AVERAGE Slide Subtracted

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Neat Ink Library

Unknown Spectrum: 384 CANON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.697127	**13 Xerox Ink Only Run2 19July2009
2	.7056419	**84 Epson Ink Only Run3 19July2009
3	.7439365	**13 Xerox Ink Only Run6 19July2009
4	.7534509	**13 Xerox Ink Only Run3 19July2009
5	.7557222	**201 HP Ink Only Run1 19July2009
6	.7591918	**04 Okidata Ink Only Brown Spot Run2 19July2009
7	.7653776	**24 Xerox Ink Only Run1 19July2009
8	.7658004	**04 Okidata Ink Only Brown Spot Run5 19July2009
9	.7660011	13 Xerox Ink Only AVERAGE
10	.7670123	**30 Epson Ink Only Run2 19July2009
11	.7710862	**13 Xerox Ink Only Run4 19July2009
12	.7716323	**30 Epson Ink Only Run1 19July2009
13	.7747214	24 Xerox Ink Only R1R2 AVERAGE
14	.7764846	**30 Epson Ink Only Run3 19July2009
15	.7772382	30 Epson Ink Only AVERAGE
16	.7777013	**201 HP Ink Only Run2 19July2009
17	.7781723	**13 Xerox Ink Only Run5 19July2009
18	.7795068	**327 Canon Ink Only Run1 19July2009
19	.7803252	**17 Kodak Ink Only Run1 19July2009
20	.7819234	**24 Xerox Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: 384 CANON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.8024271	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.8092489	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
3	.8142822	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
4	.8179153	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
5	.8266435	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
6	.8481666	13 Xerox Ink Only AVERAGE Slide Subtracted
7	.8580512	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
8	.8593547	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
9	.8613719	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
10	.8619757	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
11	.8646432	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted
12	.8650715	318a Canon Clear Ink Only AVERAGE Slide Subtracted
13	.8671769	**30 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
14	.8730375	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
15	.8788344	**30 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
16	.8854005	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted
17	.8906142	30 Epson Ink Only AVERAGE Slide Subtracted
18	.8924143	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
19	.8931641	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted
20	.8938479	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted

Canon 384 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 384 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.8399072	**199 HP Ink Only Run5 19July2009
2	.8407861	199 HP Ink Only AVERAGE
3	.8421694	**199 HP Ink Only Run6 19July2009
4	.8805927	**200 HP Ink Only Run4 19July2009
5	.8825449	**199 HP Ink Only Run4 19July2009
6	.896447	**205 HP Ink Only Run1 19July2009
7	.8980293	**244 Xerox Ink Only Run5 19July2009
8	.8982453	244 Xerox Ink Only AVERAGE
9	.9058524	**156 Epson Ink Only Run3 19July2009
10	.9109289	**199 HP Ink Only Run1 19July2009
11	.9140545	**156 Epson Ink Only Run5 19July2009
12	.9142639	**200 HP Ink Only Run1 19July2009
13	.9174721	156 Epson Ink Only AVERAGE
14	.9227479	**156 Epson Ink Only Run2 19July2009
15	.9257208	**156 Epson Ink Only Run1 19July2009
16	.9264587	200 HP Ink Only AVERAGE
17	.927379	**84 Epson Ink Only Run1 19July2009
18	.9277591	**217 Canon Ink Only Run4 19July2009
19	.9314587	63 Epson Ink Only Purple Spot AVERAGE
20	.9322518	**30 Epson Ink Only Run4 19July2009

Slide Subtracted Library

Unknown Spectrum: 384 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.776996	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.7859062	156 Epson Ink Only AVERAGE Slide Subtracted
3	.790325	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted
4	.7924366	**156 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
5	.8061602	**156 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
6	.8306577	**156 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
7	.8315893	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
8	.8341206	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
9	.8362811	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
10	.8416485	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
11	.8435161	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted
12	.848534	**84 Epson Ink Only Run1 19July2009 Blank Slide Subtracted
13	.853561	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
14	.8588671	24 Xerox Ink Only AVERAGE Slide Subtracted
15	.8590351	**84 Epson Ink Only Run2 19July2009 Blank Slide Subtracted
16	.8644063	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
17	.8690678	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
18	.8705084	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
19	.8734394	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
20	.8752465	84 Epson Ink Only AVERAGE Slide Subtracted

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Neat Ink Library

Unknown Spectrum: 384 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.6443928	**84 Epson Ink Only Run3 19July2009
2	.7067943	**13 Xerox Ink Only Run3 19July2009
3	.7134084	**24 Xerox Ink Only Run1 19July2009
4	.7225919	**13 Xerox Ink Only Run6 19July2009
5	.7320499	24 Xerox Ink Only R1R2 AVERAGE
6	.7443915	**13 Xerox Ink Only Run2 19July2009
7	.749998	**24 Xerox Ink Only Run2 19July2009
8	.7502009	13 Xerox Ink Only AVERAGE
9	.7513382	**13 Xerox Ink Only Run4 19July2009
10	.7608469	24 Xerox Ink Only AVERAGE
11	.7678195	**13 Xerox Ink Only Run5 19July2009
12	.7843468	**201 HP Ink Only Run1 19July2009
13	.8069998	**201 HP Ink Only Run2 19July2009
14	.8083113	**13 Xerox Ink Only Run1 19July2009
15	.8166004	**200 HP Ink Only Run3 19July2009
16	.8179544	**201 HP Ink Only Run3 19July2009
17	.8185639	**244 Xerox Ink Only Run2 19July2009
18	.8251912	**198 HP Ink Only Run4 19July2009
19	.8313578	**17 Kodak Ink Only Run2 19July2009
20	.8319442	17 Kodak Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 384 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.5411956	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.5779505	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
3	.6096569	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.631361	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
5	.6411592	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
6	.6494332	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
7	.6512004	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
8	.6557424	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
9	.6628981	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
10	.6762207	24 Xerox Ink Only AVERAGE Slide Subtracted
11	.6807346	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
12	.6853397	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
13	.6957098	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
14	.7060605	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
15	.716392	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
16	.7264938	**201 HP Ink Only Run2 19July2009 Blank Slide Subtracted
17	.7269058	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
18	.7473401	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
19	.752575	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
20	.7636026	**198 HP Ink Only Run4 19July2009 Blank Slide Subtracted

Canon 384 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Canon 384.SPC

Hit #	Hit Quality	Memo Library Index
1	.8801851	**84 Epson Ink Only Run3 19July2009
2	.9002164	**492 Canon Ink Only Run3 19July2009
3	.90557	492 Canon Ink Only AVERAGE
4	.9071335	**492 Canon Ink Only Run1 19July2009
5	.9084711	**492 Canon Ink Only Run2 19July2009
6	.9159304	**492 Canon Ink Only Run5 19July2009
7	.9190156	**492 Canon Ink Only Run4 19July2009
8	.9335712	**13 Xerox Ink Only Run6 19July2009
9	.9360532	**24 Xerox Ink Only Run1 19July2009
10	.9448205	24 Xerox Ink Only R1R2 AVERAGE
11	.9450434	**13 Xerox Ink Only Run3 19July2009
12	.9504431	**04 Okidata Ink Only Brown Spot Run7 19July2009
13	.9509193	13 Xerox Ink Only AVERAGE
14	.9524718	**24 Xerox Ink Only Run2 19July2009
15	.953369	**13 Xerox Ink Only Run4 19July2009
16	.9546999	**312 Canon Ink Only Run2 19July2009
17	.9573779	**13 Xerox Ink Only Run2 19July2009
18	.9575403	24 Xerox Ink Only AVERAGE
19	.9588186	**13 Xerox Ink Only Run5 19July2009
20	.9598866	**04 Okidata Ink Only Brown Spot Run6 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Canon 384.SPC

Hit #	Hit Quality	Memo Library Index
1	.6913847	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.7119357	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
3	.7571239	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
4	.7599341	13 Xerox Ink Only AVERAGE Slide Subtracted
5	.7737041	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
6	.775043	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
7	.7850477	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
8	.7862809	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
9	.7882366	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
10	.7939478	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
11	.8016825	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
12	.807632	24 Xerox Ink Only AVERAGE Slide Subtracted
13	.8154211	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
14	.8205441	**04 Okidata Ink Only Brown Spot Run2 19July2009 Blank Slide Subtracted
15	.8272648	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
16	.8272675	**201 HP Ink Only Run2 19July2009 Blank Slide Subtracted
17	.8319476	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
18	.8484656	201 HP Ink Only AVERAGE Slide Subtracted
19	.8489342	**201 HP Ink Only Run3 19July2009 Blank Slide Subtracted
20	.8493208	**04 Okidata Ink Only Brown Spot Run5 19July2009 Blank Slide Subtracted

Canon 402 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 402 CANON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.5987151	**348 Canon Ink Only Run2 19July2009
2	.5994447	348 Canon Ink Only AVERAGE
3	.6261627	**327 Canon Ink Only Run1 19July2009
4	.6265971	**384 Canon Ink Only Run3 19July2009
5	.626775	**318 Canon Ink Only Run2 19July2009
6	.6268404	**318 Canon Ink Only Run1 19July2009
7	.6270704	**327 Canon Ink Only Run3 19July2009
8	.6270913	327 Canon Ink Only AVERAGE
9	.6288795	318 Canon Ink Only AVERAGE
10	.6300271	**327 Canon Ink Only Run2 19July2009
11	.6329859	**13 Xerox Ink Only Run2 19July2009
12	.6345751	**318 Canon Ink Only Run3 19July2009
13	.6361892	**282 Canon Ink Only Run2 19July2009
14	.6410576	282 Canon Ink Only AVERAGE
15	.6433318	**30 Epson Ink Only Run3 19July2009
16	.6471943	**282 Canon Ink Only Run4 19July2009
17	.6482249	**348 Canon Ink Only Run3 19July2009
18	.6485983	205 HP Ink Only AVERAGE
19	.6507069	**17 Kodak Ink Only Run3 19July2009
20	.6543397	30 Epson Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 402 CANON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.8526837	**318a Canon Clear Ink Only Run4 19July2009 Blank Slide Subtracted
2	.8534943	318a Canon Clear Ink Only AVERAGE Slide Subtracted
3	.8542777	**318a Canon Clear Ink Only Run2 19July2009 Blank Slide Subtracted
4	.8543905	**318a Canon Clear Ink Only Run3 19July2009 Blank Slide Subtracted
5	.8674593	**348 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
6	.8685976	**348 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
7	.8713723	348 Canon Ink Only AVERAGE Slide Subtracted
8	.8721452	**282 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
9	.8758337	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
10	.876761	**282 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
11	.8769695	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
12	.8769915	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
13	.8800678	282 Canon Ink Only AVERAGE Slide Subtracted
14	.8805821	**04 Okidata Ink Only Black Spot Run1 19July2009 Blank Slide Subtracted
15	.8813083	**04 Okidata Ink Only Black Spot Run2 19July2009 Blank Slide Subtracted
16	.8826336	**348 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
17	.8834102	04 Okidata Ink Only Black Spot AVERAGE Slide Subtracted
18	.8840818	**30 Epson Ink Only Run4 19July2009 Blank Slide Subtracted
19	.8846217	**282 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
20	.8854149	**30 Epson Ink Only Run3 19July2009 Blank Slide Subtracted

Canon 402 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 402 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.5791277	**13 Xerox Ink Only Run3 19July2009
2	.589946	**13 Xerox Ink Only Run2 19July2009
3	.5928468	**24 Xerox Ink Only Run1 19July2009
4	.6099714	24 Xerox Ink Only R1R2 AVERAGE
5	.6279156	**24 Xerox Ink Only Run2 19July2009
6	.6375676	24 Xerox Ink Only AVERAGE
7	.6414207	**13 Xerox Ink Only Run6 19July2009
8	.6426608	**13 Xerox Ink Only Run4 19July2009
9	.6478897	13 Xerox Ink Only AVERAGE
10	.6531843	**84 Epson Ink Only Run3 19July2009
11	.6588198	**13 Xerox Ink Only Run5 19July2009
12	.6639028	**201 HP Ink Only Run1 19July2009
13	.6873809	**201 HP Ink Only Run2 19July2009
14	.6947064	**200 HP Ink Only Run3 19July2009
15	.7041218	**201 HP Ink Only Run3 19July2009
16	.7061648	17 Kodak Ink Only AVERAGE
17	.7068029	**17 Kodak Ink Only Run2 19July2009
18	.7068971	**13 Xerox Ink Only Run1 19July2009
19	.7069956	**17 Kodak Ink Only Run1 19July2009
20	.70807	348 Canon Ink Only AVERAGE

Slide Subtracted Library

Unknown Spectrum: 402 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.6339932	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
2	.6588858	13 Xerox Ink Only AVERAGE Slide Subtracted
3	.6626403	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
4	.6705799	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
5	.6722473	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
6	.6836762	24 Xerox Ink Only AVERAGE Slide Subtracted
7	.6861128	**13 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
8	.6910951	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
9	.7082958	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted
10	.7084443	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
11	.716867	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted
12	.7232543	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
13	.730673	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
14	.7383466	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
15	.7445844	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
16	.7493381	**201 HP Ink Only Run2 19July2009 Blank Slide Subtracted
17	.7498712	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
18	.7501326	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
19	.7525434	17 Kodak Ink Only AVERAGE Slide Subtracted
20	.7538039	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted

Canon 402 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 402 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.8110008	**522 Canon Ink Only Run1 19July2009
2	.8114046	**306 Canon Ink Only Run3 19July2009
3	.8199786	522 Canon Ink Only AVERAGE
4	.8211358	**522 Canon Ink Only Run2 19July2009
5	.8228634	**223 Canon Ink Only Run3 19July2009
6	.8262244	**522 Canon Ink Only Run3 19July2009
7	.8329395	**04 Okidata Ink Only Black Spot Run2 19July2009
8	.8355629	306 Canon Ink Only AVERAGE
9	.8361567	**04 Okidata Ink Only Black Spot Run1 19July2009
10	.8398616	**402 Canon Ink Only Run3 19July2009
11	.8411676	**402 Canon Ink Only Run2 19July2009
12	.8412477	04 Okidata Ink Only Black Spot AVERAGE
13	.8435164	348 Canon Ink Only AVERAGE
14	.8438502	**348 Canon Ink Only Run2 19July2009
15	.8453485	**217 Canon Ink Only Run1 19July2009
16	.8471524	**217 Canon Ink Only Run3 19July2009
17	.847339	217 Canon Ink Only AVERAGE
18	.8492654	402 Canon Ink Only AVERAGE
19	.8497277	**217 Canon Ink Only Run2 19July2009
20	.8517778	**306 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 402 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.6393539	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
2	.6413285	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
3	.6425361	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
4	.6492329	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
5	.6513574	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
6	.6540205	223 Canon Ink Only AVERAGE Slide Subtracted
7	.6662354	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
8	.6672299	384 Canon Ink Only AVERAGE Slide Subtracted
9	.6679828	217 Canon Ink Only AVERAGE Slide Subtracted
10	.6701387	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11	.6739984	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
12	.6741959	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
13	.674347	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
14	.6744594	318 Canon Ink Only AVERAGE Slide Subtracted
15	.6759248	327 Canon Ink Only AVERAGE Slide Subtracted
16	.6759845	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
17	.6762482	**327 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
18	.6766855	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
19	.6785482	**318 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
20	.6823686	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 402 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Canon 402.SPC

Hit #	Hit Quality	Memo Library Index
1	.8289906	**522 Canon Ink Only Run1 19July2009
2	.8344861	522 Canon Ink Only AVERAGE
3	.8355429	**522 Canon Ink Only Run2 19July2009
4	.8376619	**522 Canon Ink Only Run3 19July2009
5	.8438189	**223 Canon Ink Only Run3 19July2009
6	.8515591	**217 Canon Ink Only Run1 19July2009
7	.8535668	**217 Canon Ink Only Run3 19July2009
8	.8537888	217 Canon Ink Only AVERAGE
9	.8553733	**348 Canon Ink Only Run2 19July2009
10	.8563161	**217 Canon Ink Only Run2 19July2009
11	.856447	348 Canon Ink Only AVERAGE
12	.8580874	**402 Canon Ink Only Run3 19July2009
13	.8585218	**402 Canon Ink Only Run2 19July2009
14	.8642897	402 Canon Ink Only AVERAGE
15	.8648064	306 Canon Ink Only AVERAGE
16	.8648472	**306 Canon Ink Only Run1 19July2009
17	.8660818	223 Canon Ink Only AVERAGE
18	.8670465	**306 Canon Ink Only Run2 19July2009
19	.8703935	**327 Canon Ink Only Run1 19July2009
20	.8706949	**327 Canon Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Canon 402.SPC

Hit #	Hit Quality	Memo Library Index
1	.7209229	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
2	.7211795	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
3	.7212513	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
4	.7397116	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
5	.7442868	223 Canon Ink Only AVERAGE Slide Subtracted
6	.7448207	217 Canon Ink Only AVERAGE Slide Subtracted
7	.7448879	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
8	.7509521	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
9	.7554532	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
10	.7556886	**327 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
11	.7564571	327 Canon Ink Only AVERAGE Slide Subtracted
12	.7568224	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
13	.7577561	384 Canon Ink Only AVERAGE Slide Subtracted
14	.7604773	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
15	.7616538	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
16	.762561	318 Canon Ink Only AVERAGE Slide Subtracted
17	.7634372	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
18	.7640598	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
19	.7656878	**318 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
20	.7686154	**522 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

Canon 492 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 492 CANON 20080711.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.2417153	**201 HP Ink Only Run1 19July2009		
2	.2499294	**17 Kodak Ink Only Run3 19July2009		
3	.251482	201 HP Ink Only AVERAGE		
4	.2568262	**84 Epson Ink Only Run3 19July2009		
5	.2615063	200 HP Ink Only AVERAGE		
6	.2642852	**17 Kodak Ink Only Run2 19July2009		
7	.266188	**200 HP Ink Only Run1 19July2009		
8	.2667536	**17 Kodak Ink Only Run1 19July2009		
9	.2688783	17 Kodak Ink Only AVERAGE		
10	.2691785	**201 HP Ink Only Run2 19July2009		
11	.2790557	**200 HP Ink Only Run3 19July2009		
12	.2899339	**199 HP Ink Only Run4 19July2009		
13	.2904206	**244 Xerox Ink Only Run1 19July2009		
14	.2974749	**199 HP Ink Only Run1 19July2009		
15	.3112804	**13 Xerox Ink Only Run6 19July2009		
16	.3221216	**199 HP Ink Only Run2 19July2009		
17	.3255803	**198 HP Ink Only Run1 19July2009		
18	.3279015	**198 HP Ink Only Run4 19July2009		
19	.3279684	**201 HP Ink Only Run3 19July2009		
20	.3279697	**198 HP Ink Only Run2 19July2009		

Slide Subtracted Library

Unknown Spectrum: 492 CANON 20080711.SPC

Hit #	Hit Quality	Memo	Library	Index
1	.7993657	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted		
2	.9061108	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted		
3	.9273316	13 Xerox Ink Only AVERAGE Slide Subtracted		
4	.9307481	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted		
5	.9366311	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted		
6	.9375832	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted		
7	.9597532	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted		
8	.9624344	17 Kodak Ink Only AVERAGE Slide Subtracted		
9	.9628113	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted		
10	.966831	**156 Epson Ink Only Run3 19July2009 Blank Slide Subtracted		
11	.9713971	**312 Canon Ink Only Run3 19July2009 Blank Slide Subtracted		
12	.9721518	**17 Kodak Ink Only Run2 19July2009 Blank Slide Subtracted		
13	.9737927	**156 Epson Ink Only Run5 19July2009 Blank Slide Subtracted		
14	.9738241	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted		
15	.9745434	84 Epson Ink Only AVERAGE Slide Subtracted		
16	.9748018	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted		
17	.9750589	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted		
18	.978013	**205 HP Ink Only Run2 19July2009 Blank Slide Subtracted		
19	.9780498	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted		
20	.9783558	156 Epson Ink Only AVERAGE Slide Subtracted		

Canon 492 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 492 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.1874047	**84 Epson Ink Only Run3 19July2009
2	.2798921	**13 Xerox Ink Only Run6 19July2009
3	.3047522	**201 HP Ink Only Run1 19July2009
4	.3139425	13 Xerox Ink Only AVERAGE
5	.3172526	**244 Xerox Ink Only Run2 19July2009
6	.3277971	**13 Xerox Ink Only Run5 19July2009
7	.329887	**17 Kodak Ink Only Run1 19July2009
8	.3313918	201 HP Ink Only AVERAGE
9	.3316288	**13 Xerox Ink Only Run4 19July2009
10	.3322002	**201 HP Ink Only Run2 19July2009
11	.3361117	**200 HP Ink Only Run3 19July2009
12	.3387745	**199 HP Ink Only Run2 19July2009
13	.3391766	17 Kodak Ink Only AVERAGE
14	.3400685	**17 Kodak Ink Only Run2 19July2009
15	.3440877	**17 Kodak Ink Only Run3 19July2009
16	.3449836	**13 Xerox Ink Only Run1 19July2009
17	.3584676	**200 HP Ink Only Run2 19July2009
18	.3587871	**198 HP Ink Only Run1 19July2009
19	.3593093	**198 HP Ink Only Run4 19July2009
20	.3608691	**198 HP Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: 492 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.6376041	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.777699	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.8243416	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.83613	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
5	.8412987	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
6	.8610864	84 Epson Ink Only AVERAGE Slide Subtracted
7	.8836829	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
8	.8859459	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.9064288	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
10	.9107295	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
11	.9139395	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
12	.9201075	24 Xerox Ink Only AVERAGE Slide Subtracted
13	.9209784	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
14	.9209995	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
15	.921831	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
16	.9249222	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
17	.9258	17 Kodak Ink Only AVERAGE Slide Subtracted
18	.9262745	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
19	.9274001	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
20	.9293878	**13 Xerox Ink Only Run3 19July2009 Blank Slide Subtracted

Canon 492 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 492 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.2369616	**84 Epson Ink Only Run3 19July2009
2	.314756	**13 Xerox Ink Only Run6 19July2009
3	.3515636	**201 HP Ink Only Run1 19July2009
4	.3527915	13 Xerox Ink Only AVERAGE
5	.3678737	**13 Xerox Ink Only Run5 19July2009
6	.3709424	**13 Xerox Ink Only Run4 19July2009
7	.3778248	**17 Kodak Ink Only Run1 19July2009
8	.3785098	**201 HP Ink Only Run2 19July2009
9	.3813316	201 HP Ink Only AVERAGE
10	.3817155	**244 Xerox Ink Only Run2 19July2009
11	.3831109	**13 Xerox Ink Only Run1 19July2009
12	.3839153	**199 HP Ink Only Run2 19July2009
13	.3877164	17 Kodak Ink Only AVERAGE
14	.3898705	**17 Kodak Ink Only Run2 19July2009
15	.3909512	**200 HP Ink Only Run3 19July2009
16	.3968438	**17 Kodak Ink Only Run3 19July2009
17	.4004997	**201 HP Ink Only Run3 19July2009
18	.4020045	**198 HP Ink Only Run4 19July2009
19	.4046161	**198 HP Ink Only Run1 19July2009
20	.4055391	**200 HP Ink Only Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: 492 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.6355298	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.7461556	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.8021961	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.8163325	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
5	.8232383	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
6	.8519638	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
7	.854444	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
8	.8754843	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.8809904	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
10	.8837885	84 Epson Ink Only AVERAGE Slide Subtracted
11	.8961497	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted
12	.9019638	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
13	.9072571	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
14	.9077545	24 Xerox Ink Only AVERAGE Slide Subtracted
15	.9089637	17 Kodak Ink Only AVERAGE Slide Subtracted
16	.9093667	198 HP Ink Only AVERAGE Slide Subtracted
17	.9105284	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
18	.9110147	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
19	.9112081	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted
20	.9122823	**201 HP Ink Only Run1 19July2009 Blank Slide Subtracted

Canon 492 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Canon 492.SPC

Hit #	Hit Quality	Memo Library Index
1	.2044837	**84 Epson Ink Only Run3 19July2009
2	.3031687	**13 Xerox Ink Only Run6 19July2009
3	.3414627	**201 HP Ink Only Run1 19July2009
4	.341603	13 Xerox Ink Only AVERAGE
5	.3538697	**244 Xerox Ink Only Run2 19July2009
6	.3570191	**13 Xerox Ink Only Run5 19July2009
7	.3602212	**13 Xerox Ink Only Run4 19July2009
8	.3673187	**17 Kodak Ink Only Run1 19July2009
9	.3692746	201 HP Ink Only AVERAGE
10	.3696953	**201 HP Ink Only Run2 19July2009
11	.3741412	**13 Xerox Ink Only Run1 19July2009
12	.3742536	**199 HP Ink Only Run2 19July2009
13	.3759508	**200 HP Ink Only Run3 19July2009
14	.3775321	17 Kodak Ink Only AVERAGE
15	.3789278	**17 Kodak Ink Only Run2 19July2009
16	.3835227	**17 Kodak Ink Only Run3 19July2009
17	.3952697	**198 HP Ink Only Run1 19July2009
18	.3956258	**200 HP Ink Only Run2 19July2009
19	.3959224	**198 HP Ink Only Run4 19July2009
20	.3963337	**201 HP Ink Only Run3 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Canon 492.SPC

Hit #	Hit Quality	Memo Library Index
1	.6217035	**84 Epson Ink Only Run3 19July2009 Blank Slide Subtracted
2	.7598779	**13 Xerox Ink Only Run6 19July2009 Blank Slide Subtracted
3	.8118173	13 Xerox Ink Only AVERAGE Slide Subtracted
4	.8253794	**13 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
5	.8314662	**13 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
6	.8620416	84 Epson Ink Only AVERAGE Slide Subtracted
7	.8665839	**13 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
8	.8708045	**200 HP Ink Only Run2 19July2009 Blank Slide Subtracted
9	.8954826	**199 HP Ink Only Run2 19July2009 Blank Slide Subtracted
10	.8990212	**200 HP Ink Only Run1 19July2009 Blank Slide Subtracted
11	.9083653	**24 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
12	.9140003	24 Xerox Ink Only AVERAGE Slide Subtracted
13	.9141033	**24 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
14	.915999	**17 Kodak Ink Only Run1 19July2009 Blank Slide Subtracted
15	.9162937	24 Xerox Ink Only AVERAGE Slide Subtracted Includes Run3
16	.9182329	**198 HP Ink Only Run1 19July2009 Blank Slide Subtracted
17	.9209512	**24 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
18	.9223896	17 Kodak Ink Only AVERAGE Slide Subtracted
19	.9230375	**200 HP Ink Only Run3 19July2009 Blank Slide Subtracted
20	.9246321	**17 Kodak Ink Only Run3 19July2009 Blank Slide Subtracted

Canon 522 11July2008 Run 1

Neat Ink Library

Unknown Spectrum: 522 CANON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.4737481	**522 Canon Ink Only Run1 19July2009
2	.4907297	522 Canon Ink Only AVERAGE
3	.4933203	**522 Canon Ink Only Run2 19July2009
4	.504127	**522 Canon Ink Only Run3 19July2009
5	.5153528	**223 Canon Ink Only Run3 19July2009
6	.5480542	**402 Canon Ink Only Run2 19July2009
7	.5539569	**402 Canon Ink Only Run3 19July2009
8	.5562175	**306 Canon Ink Only Run1 19July2009
9	.5605113	402 Canon Ink Only AVERAGE
10	.5636771	**306 Canon Ink Only Run2 19July2009
11	.5650719	306 Canon Ink Only AVERAGE
12	.5655391	**217 Canon Ink Only Run1 19July2009
13	.5708885	**217 Canon Ink Only Run3 19July2009
14	.5716107	217 Canon Ink Only AVERAGE
15	.5761857	223 Canon Ink Only AVERAGE
16	.5786214	**217 Canon Ink Only Run2 19July2009
17	.585352	**402 Canon Ink Only Run1 19July2009
18	.5984869	**223 Canon Ink Only Run2 19July2009
19	.6227502	**384 Canon Ink Only Run1 19July2009
20	.6231353	**223 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 522 CANON 20080711.SPC

Hit #	Hit Quality	Memo Library Index
1	.3364157	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
2	.3376588	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
3	.3378374	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
4	.3416501	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
5	.3436154	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
6	.343686	223 Canon Ink Only AVERAGE Slide Subtracted
7	.3449025	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
8	.3486947	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
9	.3508899	384 Canon Ink Only AVERAGE Slide Subtracted
10	.3529488	217 Canon Ink Only AVERAGE Slide Subtracted
11	.3612765	**306 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
12	.3620618	**306 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
13	.3643852	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
14	.3664821	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
15	.3749512	**318 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
16	.3754913	**318 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
17	.3777966	318 Canon Ink Only AVERAGE Slide Subtracted
18	.3803571	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
19	.3815507	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
20	.3826177	327 Canon Ink Only AVERAGE Slide Subtracted

Canon 522 28Nov2008 Run 1

Neat Ink Library

Unknown Spectrum: 522 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.3965465	**205 HP Ink Only Run1 19July2009
2	.4600717	**199 HP Ink Only Run6 19July2009
3	.4606004	199 HP Ink Only AVERAGE
4	.462505	**199 HP Ink Only Run5 19July2009
5	.468305	**22 Kodak Ink Only Run1 19July2009
6	.475129	**205 HP Ink Only Run2 19July2009
7	.4871499	**156 Epson Ink Only Run3 19July2009
8	.5002767	**318a Canon Clear Ink Only Run2 19July2009
9	.5015265	**156 Epson Ink Only Run5 19July2009
10	.5020115	**318a Canon Clear Ink Only Run4 19July2009
11	.5025448	318a Canon Clear Ink Only AVERAGE
12	.505073	**318a Canon Clear Ink Only Run3 19July2009
13	.5073381	**205 HP Ink Only Run4 19July2009
14	.5099764	**199 HP Ink Only Run4 19July2009
15	.5120417	**205 HP Ink Only Run3 19July2009
16	.5125445	**30 Epson Ink Only Run4 19July2009
17	.5156711	**200 HP Ink Only Run4 19July2009
18	.5158693	156 Epson Ink Only AVERAGE
19	.5163999	205 HP Ink Only AVERAGE
20	.5179481	**04 Okidata Ink Only Brown Spot Run2 19July2009

Slide Subtracted Library

Unknown Spectrum: 522 CANON 20081128.SPC

Hit #	Hit Quality	Memo Library Index
1	.8433325	**492 Canon Ink Only Run5 19July2009 Blank Slide Subtracted
2	.8511667	**492 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
3	.8546677	**492 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
4	.8553911	**492 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
5	.8568098	492 Canon Ink Only AVERAGE Slide Subtracted
6	.8706344	**04 Okidata Ink Only Brown Spot Run4 19July2009 Blank Slide Subtracted
7	.8710675	**04 Okidata Ink Only Brown Spot Run3 19July2009 Blank Slide Subtracted
8	.8731862	**04 Okidata Ink Only Brown Spot Run7 19July2009 Blank Slide Subtracted
9	.8742235	**04 Okidata Ink Only Brown Spot Run6 19July2009 Blank Slide Subtracted
10	.8745475	04 Okidata Ink Only Brown Spot AVERAGE Slide Subtracted
11	.8784552	**244 Xerox Ink Only Run2 19July2009 Blank Slide Subtracted
12	.8844106	**04 Okidata Ink Only Brown Spot Run1 19July2009 Blank Slide Subtracted
13	.8871313	**205 HP Ink Only Run4 19July2009 Blank Slide Subtracted
14	.887801	**492 Canon Ink Only Run4 19July2009 Blank Slide Subtracted
15	.8914511	244 Xerox Ink Only AVERAGE Slide Subtracted
16	.8924689	**244 Xerox Ink Only Run1 19July2009 Blank Slide Subtracted
17	.9008514	**244 Xerox Ink Only Run5 19July2009 Blank Slide Subtracted
18	.9050503	**244 Xerox Ink Only Run4 19July2009 Blank Slide Subtracted
19	.9052796	**205 HP Ink Only Run3 19July2009 Blank Slide Subtracted
20	.9054313	**312 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 522 14Dec2008 Run 1

Neat Ink Library

Unknown Spectrum: 522 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.8638801	**199 HP Ink Only Run5 19July2009
2	.866815	199 HP Ink Only AVERAGE
3	.8675054	**199 HP Ink Only Run6 19July2009
4	.8869976	**200 HP Ink Only Run4 19July2009
5	.8991196	**522 Canon Ink Only Run1 19July2009
6	.9007999	**156 Epson Ink Only Run3 19July2009
7	.9018176	**156 Epson Ink Only Run5 19July2009
8	.9054852	156 Epson Ink Only AVERAGE
9	.9072431	**199 HP Ink Only Run4 19July2009
10	.9094427	522 Canon Ink Only AVERAGE
11	.9107652	**156 Epson Ink Only Run2 19July2009
12	.9117846	**522 Canon Ink Only Run2 19July2009
13	.9120292	**156 Epson Ink Only Run4 19July2009
14	.9129021	244 Xerox Ink Only AVERAGE
15	.9142081	**244 Xerox Ink Only Run5 19July2009
16	.9166182	**522 Canon Ink Only Run3 19July2009
17	.9206676	**306 Canon Ink Only Run3 19July2009
18	.9212925	**156 Epson Ink Only Run1 19July2009
19	.9246925	**199 HP Ink Only Run1 19July2009
20	.9264197	**205 HP Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: 522 CANON 20081214.SPC

Hit #	Hit Quality	Memo Library Index
1	.6631886	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
2	.6633901	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
3	.6651449	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
4	.6748912	**522 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
5	.6801338	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
6	.6807683	**522 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
7	.6815435	522 Canon Ink Only AVERAGE Slide Subtracted
8	.6848115	223 Canon Ink Only AVERAGE Slide Subtracted
9	.6859761	217 Canon Ink Only AVERAGE Slide Subtracted
10	.6877096	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
11	.6879755	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
12	.6890448	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
13	.6894193	**522 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
14	.691107	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
15	.6913273	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
16	.6926453	327 Canon Ink Only AVERAGE Slide Subtracted
17	.6959351	**327 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
18	.7011659	384 Canon Ink Only AVERAGE Slide Subtracted
19	.7066745	**306 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
20	.7103238	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted

Canon 522 AVERAGE

Neat Ink Library

Unknown Spectrum: AVERAGE Canon 522.SPC

Hit #	Hit Quality	Memo Library Index
1	.8057453	**522 Canon Ink Only Run1 19July2009
2	.8175693	522 Canon Ink Only AVERAGE
3	.8206276	**522 Canon Ink Only Run2 19July2009
4	.8226543	**306 Canon Ink Only Run3 19July2009
5	.8248872	**522 Canon Ink Only Run3 19July2009
6	.8663265	**84 Epson Ink Only Run4 19July2009
7	.8678509	**402 Canon Ink Only Run2 19July2009
8	.8712049	**402 Canon Ink Only Run3 19July2009
9	.8782992	**84 Epson Ink Only Run5 19July2009
10	.8808288	84 Epson Ink Only AVERAGE
11	.8811346	402 Canon Ink Only AVERAGE
12	.8898131	**84 Epson Ink Only Run2 19July2009
13	.8944727	**199 HP Ink Only Run5 19July2009
14	.8978471	199 HP Ink Only AVERAGE
15	.898032	306 Canon Ink Only AVERAGE
16	.8992926	**199 HP Ink Only Run6 19July2009
17	.9002479	**84 Epson Ink Only Run1 19July2009
18	.9038388	**223 Canon Ink Only Run3 19July2009
19	.9049189	**200 HP Ink Only Run4 19July2009
20	.9060262	**402 Canon Ink Only Run1 19July2009

Slide Subtracted Library

Unknown Spectrum: AVERAGE Canon 522.SPC

Hit #	Hit Quality	Memo Library Index
1	.5214053	**217 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
2	.5216181	**217 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
3	.5221162	**217 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
4	.5281573	**522 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
5	.5294052	**522 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
6	.5306424	522 Canon Ink Only AVERAGE Slide Subtracted
7	.5345688	**522 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
8	.5419613	**223 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
9	.5467703	223 Canon Ink Only AVERAGE Slide Subtracted
10	.5497428	**223 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
11	.5501352	217 Canon Ink Only AVERAGE Slide Subtracted
12	.5508363	**223 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
13	.5552665	**384 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
14	.5624143	384 Canon Ink Only AVERAGE Slide Subtracted
15	.5770822	**384 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
16	.5787306	**306 Canon Ink Only Run1 19July2009 Blank Slide Subtracted
17	.5803022	**327 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
18	.5807582	**306 Canon Ink Only Run2 19July2009 Blank Slide Subtracted
19	.5808489	**384 Canon Ink Only Run3 19July2009 Blank Slide Subtracted
20	.5818636	**327 Canon Ink Only Run1 19July2009 Blank Slide Subtracted

APPENDIX J:

Spectral ID Library Results – Py-GC-MS Data

Py-GC-MS Library Matches – Spectral ID/GRAMS

Okidata 04 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Okidata04 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9665071	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9716951	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9718302	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9904062	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9909838	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9924418	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9935598	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9942384	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9947193	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9952214	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.99594	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9974394	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9978947	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.998053	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9982512	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9988587	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9988943	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9990616	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9991897	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9994823	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Okidata04 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9642351	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.968873	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9719278	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9893579	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9899687	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9909874	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9924209	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9940635	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9944788	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9960159	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9966877	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9973896	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9979166	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9979351	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9982536	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9986333	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.998722	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9988171	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9991797	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9994123	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Okidata 04 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Okidata04 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9806563	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9909909	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9918464	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9927171	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9935341	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9942291	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9949046	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.995208	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9954631	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9955868	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9956344	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9960251	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9967141	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9967331	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9969413	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9970498	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9971814	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9973358	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
19	.9976637	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9976779	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Okidata04 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.980628	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9903466	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9917079	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9924833	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.992657	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9934295	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9941357	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9949949	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9952721	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9955037	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9955428	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9959323	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9968872	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9969088	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9971871	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9972075	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9975419	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
18	.997646	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.997647	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9977511	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs

Okidata 04 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Okidata04 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9598765	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9666283	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9763687	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9783615	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9789033	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9808509	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9813977	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9820718	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9828432	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9833347	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9835464	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
12	.9841229	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9844615	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9846835	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9849262	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9867092	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9897283	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9898899	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9901171	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9906617	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Okidata04 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9552262	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9633643	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9730431	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9772311	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9778861	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9779642	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9805525	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9807602	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9812354	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9818994	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9822814	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.982369	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.983062	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9831876	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
15	.9839029	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9861122	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9877795	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9885478	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9898595	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9906694	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs

Okidata 04 Ink Sample Run 4

Neat Ink Library

Unknown Spectrum: Okidata04 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.973331	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9809495	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9836762	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9846399	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9849909	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9876427	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9888613	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.988998	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
9	.98957	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9898444	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9901657	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9911102	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
13	.9921337	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9925486	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9927376	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.993794	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9950087	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9955757	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9955778	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9957166	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Okidata04 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9677408	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9762569	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9769914	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.982558	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9840124	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9867524	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9869169	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9874949	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
9	.9883875	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9885582	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9888297	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.989599	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9909425	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9910002	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
15	.9915988	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9921107	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9924948	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9940789	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.994785	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9951562	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Okidata 04 Ink Sample Run 5

Neat Ink Library

Unknown Spectrum: Okidata04 Run5 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.8510159	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9475245	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9667103	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9715987	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9747585	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.97668	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9769242	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9771385	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9788537	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9792458	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
11	.9798853	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9825478	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9837539	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.986302	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9871557	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9875312	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9875739	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9878089	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9881534	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9889837	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Okidata04 Run5 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9421366	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9551316	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9645366	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9658569	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9704769	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.9729779	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9734507	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9761761	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9768805	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9780269	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9787912	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9789293	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9790998	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9792117	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9794624	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9800555	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
17	.9807268	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9813781	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9825801	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9851321	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Okidata 04 Ink Sample Run 6

Neat Ink Library

Unknown Spectrum: Okidata04 Run6 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9830526	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9836101	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9919732	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9925883	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9934257	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9944268	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9947369	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9947863	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9948868	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9953642	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9963081	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9966967	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9967378	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
14	.9970127	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
15	.9970387	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9975194	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9975354	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9976333	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9977543	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9979905	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Okidata04 Run6 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9744345	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9745888	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9765989	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9847285	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9870853	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9872983	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9896985	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9916573	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9918168	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9918193	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9921533	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9928956	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
13	.9930189	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9933228	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9933801	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9937916	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9944795	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9945412	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9959679	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9961587	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Okidata 04 Ink Sample Run 7

Neat Ink Library

Unknown Spectrum: Okidata04 Run7 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9721584	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9731288	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9891006	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9963967	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9967484	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.997447	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9976127	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9980983	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9982069	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9982514	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9983256	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.998575	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
13	.998605	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.998638	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9987061	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9988969	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9989405	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
18	.9991202	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9992005	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9992187	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Okidata04 Run7 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9691688	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9733035	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9846874	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9951516	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9955329	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9959159	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9964896	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9965835	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9970511	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9970557	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9971957	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
12	.9976385	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9977673	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
14	.9978003	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9980056	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9981081	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9985157	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9986334	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
19	.9992707	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9993811	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Okidata 04 Ink Sample Run 8

Neat Ink Library

Unknown Spectrum: Okidata04 Run8 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.8310608	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9571212	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9620935	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9704757	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9717677	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9736876	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9747625	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9758665	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9766212	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
10	.977639	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.978587	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9810813	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9824299	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9830632	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9835662	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9858265	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
17	.9885964	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9893139	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9893213	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9895627	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Okidata04 Run8 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9613267	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9647097	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9687493	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.970177	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.971114	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9718446	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9762669	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9764101	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9775563	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9784671	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
11	.9816725	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9822738	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9824957	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9835895	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9843116	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9854259	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.98663	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9867907	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9871842	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9878094	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs

Xerox 13 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Xerox13 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9964578	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9977401	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9977655	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9979365	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.998183	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9982245	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9982318	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9983359	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9984281	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9986575	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9986718	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9987784	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9989086	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9989704	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
15	.9991266	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9991789	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.999256	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9993069	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9993365	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9994634	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Xerox13 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9966527	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9977998	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9980546	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9982951	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.998302	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9983113	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9984896	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9986315	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9987463	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9988127	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.998848	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9988967	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9989325	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9989434	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
15	.9990774	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.999241	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9992816	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9993324	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9994026	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9994233	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Xerox 13 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Xerox13 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9841169	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9937317	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9941041	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9943303	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9953302	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9954267	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
7	.995529	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9961618	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9963104	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9965335	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9969237	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
12	.9970599	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9974189	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9979359	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9979687	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9980366	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9981281	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9981598	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.998307	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9986247	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Xerox13 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.98129	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9931833	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.993813	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9943767	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9946996	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9950647	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
7	.9960849	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9965121	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9970012	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9972957	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
11	.9973675	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.997726	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9978889	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9980964	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.998114	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9981256	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9982609	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9982632	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9982944	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.998543	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Xerox 13 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Xerox13 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9275485	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9424763	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9569989	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9635537	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9713387	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9792156	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
7	.9805329	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9832959	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9833516	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9835989	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
11	.9836411	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9836422	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.984048	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9848931	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9891987	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9898576	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9903796	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9911295	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9914635	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9915973	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Xerox13 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9069727	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9266871	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9409726	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9637849	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9731744	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9792194	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9807921	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9820952	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9827817	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9832424	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9847577	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9853713	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9857253	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9857979	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
15	.9899038	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9905842	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.991968	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9923463	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9925215	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9936546	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Xerox 13 Ink Sample Run 4

Neat Ink Library

Unknown Spectrum: Xerox13 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9640172	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9714204	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9817299	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9833983	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9883716	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9908207	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9921801	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9925488	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
9	.9931692	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9937271	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9957826	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9965693	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9965924	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9967023	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9968298	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9972859	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9973183	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
18	.9973407	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9978862	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9979276	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Xerox13 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.947596	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9639548	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9713975	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9813232	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9830346	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9886075	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9908379	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9923347	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
9	.9931033	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9936007	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.995945	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9964699	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9965316	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9966123	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9967249	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9972802	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
17	.9972876	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.997312	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9977199	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.997886	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Xerox 13 Ink Sample Run 5

Neat Ink Library

Unknown Spectrum: Xerox13 Run5 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9845129	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.985802	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.988107	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9959719	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9959763	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9960613	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9961021	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9979054	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
9	.998225	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.998229	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9983913	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9984078	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9986086	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.998807	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9988475	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9989364	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9989963	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9990404	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9994109	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9994425	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Xerox13 Run5 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.982874	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9865286	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.992654	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9933168	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9946137	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9951074	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9956407	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9957476	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9969692	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9973105	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.997459	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9976558	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
13	.9978273	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9980749	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9984429	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9985191	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9985405	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9986759	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9986844	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9991035	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Xerox 13 Ink Sample Run 6

Neat Ink Library

Unknown Spectrum: Xerox13 Run6 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.971406	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9763185	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9794145	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9866709	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9879311	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9903483	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9909516	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9915995	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9920033	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9920563	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
11	.992187	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9924951	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9937692	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9945828	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9956289	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9956504	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9957381	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9960944	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9965666	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9971016	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Xerox13 Run6 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9715779	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9756196	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9787056	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9868466	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9893085	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.98932	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9905035	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9912233	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9915396	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9917009	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9919474	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
12	.9931646	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.99375	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9954088	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9957716	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9961566	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9962745	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9968612	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9969351	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9973466	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Xerox 13 Ink Sample Run 7

Neat Ink Library

Unknown Spectrum: Xerox13 Run7 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.965067	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.978713	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9787297	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9816613	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9883431	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9902388	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9918339	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
8	.9921307	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9943644	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.995084	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9951831	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9954265	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9955785	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.996044	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9967536	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9983183	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
17	.998426	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9985065	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9985825	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9986363	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Xerox13 Run7 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9636957	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9761972	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9770956	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9772512	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9901134	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9908941	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9915762	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
8	.9948161	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9951932	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9953698	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.995427	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9955814	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9958944	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9972067	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9980424	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9981319	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
17	.9983026	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9983093	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.998355	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9984341	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Xerox 13 Ink Sample Run 8

Neat Ink Library

Unknown Spectrum: Xerox13 Run8 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9847142	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9962738	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9971154	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
4	.9982501	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9989132	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9991877	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9991952	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9992761	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9992811	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.999288	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9993284	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.99935	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9993721	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9994112	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9994348	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9994591	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9995116	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9995288	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9995367	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9995459	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Xerox13 Run8 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9954403	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9957162	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
3	.9988232	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9988452	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9989051	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9989344	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9990249	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9990548	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9991521	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9992816	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9993315	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9993579	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9993805	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9995354	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9995972	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9996029	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9996275	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9997652	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9997726	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9997985	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Kodak 17 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Kodak17 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9745182	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9943469	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9946505	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9951307	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9971358	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9972954	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.997316	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9975353	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9975941	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9986361	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9987889	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9990193	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9990292	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9990606	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9991691	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9991984	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9992179	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.999241	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
19	.9994441	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9994525	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Kodak17 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9939475	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9940999	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9959532	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9962378	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9976144	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9976333	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9979292	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9981146	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9982232	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9984025	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9985946	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9987619	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9988672	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9990097	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9991394	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9992173	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9993467	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9994693	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9995277	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
20	.9995354	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Kodak 17 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Kodak17 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9962642	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9979082	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9981573	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9982735	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9983779	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9985709	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9988158	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9989263	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9989924	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.999198	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9992061	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9993256	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9993711	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9994128	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9994134	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9994695	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9996579	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9996881	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9997373	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9997504	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Kodak17 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9918587	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.992948	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9932875	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9941558	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9946645	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9955199	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9962123	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9965131	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9970348	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9973987	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9974257	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9977149	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9978032	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9978645	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9982943	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9983485	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9985838	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9986632	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9986809	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9988322	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Kodak 17 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Kodak17 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9943032	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9967741	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9969447	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9970355	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9975511	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9979334	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9979364	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9983163	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.998531	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9986313	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9989285	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9989755	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9990018	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9990038	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9990084	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9990456	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9990712	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9990791	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9991056	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9992635	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Kodak17 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9833513	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9897899	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9902775	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9908116	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9918035	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9922302	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9929321	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9935749	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.993596	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9939513	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9942008	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9942166	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9947156	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9951333	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9954622	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9962623	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9967756	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9968052	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9968513	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.997187	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Kodak 17 Ink Sample Run 4

Neat Ink Library

Unknown Spectrum: Kodak17 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.8332734	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9679831	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9812132	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9815568	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9826943	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9861116	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9875665	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9892535	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9917498	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9919214	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
11	.9926289	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.993444	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9935454	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9939199	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9941581	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9944311	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
17	.9959209	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.996152	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9971794	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.997601	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Kodak17 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9411521	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9463472	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9801309	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9808329	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9818445	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9819092	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9830009	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9859145	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9884446	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9892935	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9907653	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
12	.9919723	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9924123	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9928698	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.994904	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
16	.9952332	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9953054	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9965211	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9967824	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9967959	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Kodak 17 Ink Sample Run 5

Neat Ink Library

Unknown Spectrum: Kodak17 Run5 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9702172	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9752854	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9930962	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9931414	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9939502	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9958466	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9960954	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9966797	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9975848	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
10	.9978464	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9983311	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9984535	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9984626	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9984801	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
15	.9985361	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9987873	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9989138	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9989404	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9989578	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9989936	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Kodak17 Run5 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9782228	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9787007	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.993021	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9938365	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9941697	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9949746	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9952684	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9963046	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9977604	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9980208	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9982412	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
12	.9984127	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9984704	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9985813	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9987178	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
16	.998814	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9988517	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9989364	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9990838	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9993265	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Kodak 17 Ink Sample Run 6

Neat Ink Library

Unknown Spectrum: Kodak17 Run6 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.8491164	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9641479	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9668601	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9785479	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9844918	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9875106	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9891003	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.989575	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9910644	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9910775	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9918136	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
12	.9919273	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9919497	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.992663	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9926847	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9934875	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9947137	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9951439	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9961293	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9963732	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Kodak17 Run6 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9578441	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9778339	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9829569	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9877274	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9887145	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9890334	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9900996	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9906746	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9911615	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9914656	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9931384	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
12	.9932227	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.993745	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9945133	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9952415	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
16	.9952627	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9960927	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9963956	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9963962	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.997	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Kodak 17 Ink Sample Run 7

Neat Ink Library

Unknown Spectrum: Kodak17 Run7 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9880663	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.992163	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9936218	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.996875	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9983988	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9985165	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9985451	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.998556	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9988317	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9989673	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9993035	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9993322	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9994102	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9994743	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9995177	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9995212	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9996641	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9996932	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9997628	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9997861	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Kodak17 Run7 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9736344	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9867158	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9899184	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9945746	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9947729	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9957682	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9962645	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9965898	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.996964	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9976733	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9977959	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9978283	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9979589	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9983034	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9985368	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9986781	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9988054	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9992596	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9992868	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9994378	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Kodak 17 Ink Sample Run 8

Neat Ink Library

Unknown Spectrum: Kodak17 Run8 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9813274	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9877437	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9893683	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9915937	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9934719	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9976798	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9976918	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9978572	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
9	.9979514	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.99801	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9985749	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9987499	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9988266	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9989895	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9991568	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
16	.999184	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
17	.9992509	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9992753	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9993867	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9993948	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Kodak17 Run8 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9911835	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9936894	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9974617	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9977928	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.998191	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
6	.9984559	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9985897	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9986315	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9986451	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9987039	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9990357	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9992375	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9992934	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9994368	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9994524	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9994538	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9995257	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9995753	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9996595	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9996757	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Kodak 22 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Kodak22 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9457342	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9557599	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9725786	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.974123	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9774433	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9830605	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.984804	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9875553	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9889751	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
10	.9934503	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9934743	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.993975	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9939936	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9953343	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9954786	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.995515	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
17	.9956502	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9956701	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9958909	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.996092	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Kodak22 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.931811	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9445472	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.954931	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9707761	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9721703	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9776078	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.982735	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9844462	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9866797	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9880882	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
11	.9926938	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9936749	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9937834	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9950047	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9950975	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9952233	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.99528	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
18	.9956583	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.995685	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9958733	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Kodak 22 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Kodak22 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9933699	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9934566	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9936882	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9938166	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9939111	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9943354	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9954483	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9957106	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9959201	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
10	.9965246	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
11	.9981652	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9982343	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.998413	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9989283	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9989329	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9991503	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9992607	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9996431	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9996538	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9996783	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Kodak22 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9850389	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9892926	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9894329	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9906093	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9906542	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9913747	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9926189	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9928255	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9935546	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
10	.9936149	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
11	.9961714	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.996788	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9975001	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9983412	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9985589	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9987521	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9987932	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9990429	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9991228	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9992267	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Kodak 22 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Kodak22 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9837041	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9909725	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9912345	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9914472	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9944171	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9947068	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9955598	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9962274	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9966835	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.996936	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9969724	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9973794	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9978543	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9978808	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9980378	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9980409	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
17	.998084	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9981583	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9985379	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9986907	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Kodak22 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9871536	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.987599	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9895956	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9925624	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.992635	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9927351	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9933313	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9934951	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9938377	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9938804	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
11	.9940447	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9941754	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9947549	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9947913	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9962955	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
16	.9968167	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9973258	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9974214	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9974912	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9993368	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Kodak 22 Ink Sample Run 4

Neat Ink Library

Unknown Spectrum: Kodak22 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.7100894	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9649604	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9760144	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9799349	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9833523	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.984679	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9870301	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9946337	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9951119	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
10	.9955825	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.99582	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9963641	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9966316	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9967171	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9970481	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9970828	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9972234	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
18	.99764	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9977157	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9979907	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Kodak22 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9336034	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9495831	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9609976	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9613081	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9771858	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9832783	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9839717	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9867494	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9882048	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9890921	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9922619	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9961395	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
13	.9972135	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.997251	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9976193	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.997946	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9981017	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9984938	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.99861	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9987842	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Kodak 22 Ink Sample Run 5

Neat Ink Library

Unknown Spectrum: Kodak22 Run5 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.8123977	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9718523	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9860737	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9940473	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9948207	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.995806	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9958932	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.995956	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9961243	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9966396	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9968379	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
12	.9974495	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9978616	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9981917	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9982551	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.998511	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9986849	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9988495	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9988773	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9989584	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Kodak22 Run5 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9732416	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9837602	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9920572	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9922082	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9943116	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9943579	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9961251	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9961982	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9963354	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
10	.996358	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9967821	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9968671	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9974309	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9976977	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9981897	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9983977	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9984139	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9984527	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9985881	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
20	.9985892	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Kodak 22 Ink Sample Run 6

Neat Ink Library

Unknown Spectrum: Kodak22 Run6 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.7875161	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9830173	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9866487	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9890887	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9913287	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9930918	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9934108	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
8	.9938291	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
9	.9939219	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9953501	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9960257	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9963601	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9965777	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9969811	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9969986	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9971071	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.997563	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9977695	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9978915	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9980636	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Kodak22 Run6 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9551421	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9680524	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9821933	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9864065	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.989313	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.989552	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9903378	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9904152	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9905247	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9908351	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9910086	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9926181	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
13	.9930602	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.993181	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9936374	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9938203	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9945685	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9950355	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9955675	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9956782	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Xerox 24 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Xerox24 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9923237	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9928686	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.993712	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9983509	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9985728	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9985753	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9985995	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.998606	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9987677	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9989758	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9991111	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.999162	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9992094	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9992505	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9993649	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
16	.9995382	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9995801	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9995853	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
19	.9996673	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9996907	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Xerox24 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9919823	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9949534	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9955027	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9982995	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9983169	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9984232	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9985172	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9986299	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9986386	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9986902	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9987115	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9988913	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9990922	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.999105	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9991927	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9993543	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9994538	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9994988	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
19	.9995214	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9996294	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Xerox 24 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Xerox24 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9844385	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9891446	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9942028	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9959717	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9972697	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.997575	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9982161	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.998316	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9983752	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9983808	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9985492	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9986455	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9986533	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9986596	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9990316	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9990531	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.999162	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
18	.9992636	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9994172	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9994284	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Xerox24 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9883776	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9939857	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9969316	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9969389	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9972421	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9976215	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9980313	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9980705	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9980826	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9982615	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9984002	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9985119	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9985915	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9986928	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.998817	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9988576	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
17	.9989722	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9993049	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9994178	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9994493	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Xerox 24 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Xerox24 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.975675	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9949536	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9969647	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9973573	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9978255	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9980299	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9983293	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
8	.9990002	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9992073	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9995499	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9996405	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9996485	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9996592	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9996756	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9997536	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9998231	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9998263	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9998478	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9998487	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9998956	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Xerox24 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9786319	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9873546	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9920647	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9942751	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
5	.9957826	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9963099	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9972398	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9980372	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9982271	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9986002	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9988316	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9988683	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9989727	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9992469	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9994013	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9994991	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9995336	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9995406	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9995662	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9996067	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Xerox 24 Ink Sample Run 4

Neat Ink Library

Unknown Spectrum: Xerox24 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.8751062	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.962896	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9674022	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9776664	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9839731	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9889237	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
7	.9891979	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9896367	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
9	.9896877	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9915777	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9916193	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9917142	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.991967	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9925035	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9926015	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9926109	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9932354	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9951755	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9962241	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9963014	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Xerox24 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9057889	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.953857	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9618705	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9727134	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9855587	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9878684	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9911888	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9913702	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
9	.991872	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.992022	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9920332	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
12	.993888	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9940298	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9942994	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9943165	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9945082	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9948643	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.995685	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9966296	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9978794	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 30 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Epson30 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9903905	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9932978	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9942408	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9943048	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9945486	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9947487	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9950418	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9955347	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9958844	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9959608	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9968418	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9971544	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9972129	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9975206	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9977019	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9978228	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9978295	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9982749	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9982849	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.998443	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson30 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9901674	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9927568	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9937661	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9939691	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9945367	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9953773	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9959174	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9960916	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9962438	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9964986	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9969701	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9969916	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.99717	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9975823	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9976195	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9976914	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9977395	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9983474	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9983798	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9985673	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 30 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Epson30 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9734283	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9822657	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9823146	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9846042	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
5	.9855308	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9881809	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9885219	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.989431	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.989551	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9899774	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9905977	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9926453	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9949094	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9950706	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9957008	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9957817	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9960753	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9961998	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9969826	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9971178	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson30 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9755839	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9831083	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9831991	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9850162	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
5	.9864358	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.987962	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9882833	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9897694	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9901645	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9903037	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9905266	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
12	.9909398	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9942946	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.995195	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9955662	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.99605	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9960543	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9967912	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9969174	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9969659	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 30 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Epson30 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9525646	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9623639	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9810202	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9830493	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
5	.98365	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9840683	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9847035	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9877908	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9880694	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
10	.9888699	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9903476	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.991321	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9935111	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9941877	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9947721	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9947841	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9951131	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9972633	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9972677	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9972864	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson30 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9673722	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9823962	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9844183	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
4	.9847751	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9852639	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9865589	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9892704	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9907448	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.9911174	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9913716	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9916751	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9924212	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9924408	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9939905	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9945828	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9948398	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9949038	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9959894	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9960776	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9966751	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 30 Ink Sample Run 4

Neat Ink Library

Unknown Spectrum: Epson30 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.8497046	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9511974	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9722136	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
4	.9738117	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
5	.9743155	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9766393	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9784282	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9826297	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9827316	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9834556	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9841509	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9848456	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9882286	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9913049	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9913548	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9923146	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9926193	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9937206	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9941702	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9966774	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson30 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9539987	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9712009	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
3	.9715163	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
4	.9749969	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9759271	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9766667	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9784285	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9798281	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9806592	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9821663	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9828155	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9828627	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9876198	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9884588	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9899279	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9909764	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9931601	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9933872	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9936631	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9948751	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 30 Ink Sample Run 5

Neat Ink Library

Unknown Spectrum: Epson30 Run5 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9424518	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9671807	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9727467	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9737551	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9758172	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9765096	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
7	.9765916	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9767447	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
9	.9801729	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9841763	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9873593	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9877712	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9880977	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9884005	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9884478	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.989678	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.991446	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9920904	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9943304	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9944348	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson30 Run5 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9685966	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9689879	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9724958	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9747541	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9752254	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9763359	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
7	.9766533	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
8	.9789	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9846081	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9852635	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9853535	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9853714	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.985429	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9859627	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9884441	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9922048	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9932626	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9933324	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.993345	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9937131	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 30 Ink Sample Run 6

Neat Ink Library

Unknown Spectrum: Epson30 Run6 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9568719	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9880711	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9895479	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9900163	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9918816	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9924049	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9929616	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9934352	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.9939433	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9941677	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.99423	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.994279	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9945202	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.994931	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9950905	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9954612	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
17	.9957295	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9963257	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9964482	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9965842	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson30 Run6 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9698532	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9818888	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9831082	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9835629	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9841692	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9846422	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9856793	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9862724	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9867803	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9874496	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9877163	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
12	.9877462	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9881189	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9881786	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9883025	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9893311	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9897081	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9898893	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
19	.9903152	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9907804	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 30 Ink Sample Run 7

Neat Ink Library

Unknown Spectrum: Epson30 Run7 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9500738	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9597445	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.969132	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9706123	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9713241	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9715987	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
7	.9754084	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9761181	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9761212	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9767911	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
11	.9795322	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9805766	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9828973	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9830576	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9879662	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9897807	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9900235	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9905023	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9907489	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9916642	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson30 Run7 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.938781	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.966683	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9704899	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9767859	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
5	.9772212	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9772984	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9784647	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9784994	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9791346	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9792114	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9798391	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
12	.9801673	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9847507	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9860213	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9883218	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9914505	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9917284	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.992561	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9927675	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.992956	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 30 Ink Sample Run 8

Neat Ink Library

Unknown Spectrum: Epson30 Run8 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9115436	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9554263	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9673364	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9691044	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
5	.9692422	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9702533	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9710867	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9750317	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.975094	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
10	.9752459	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.978403	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9845542	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.987203	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9883575	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9937488	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
16	.9940243	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9940599	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9950768	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9961028	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9961787	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson30 Run8 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9635301	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9680174	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9683997	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9687614	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9697365	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.9698502	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9727216	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9748124	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9748315	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
10	.9759023	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9820151	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9862823	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9911305	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9917022	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9921139	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9931662	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
17	.993333	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9937971	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9942381	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9949318	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 33 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Epson33 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9772984	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9789916	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9840371	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9859312	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9871072	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9879965	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
7	.9901976	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9922381	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.9924844	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9927431	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9936584	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9937933	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9944828	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9949779	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9951806	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9955476	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9956055	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9957334	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9960287	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9965535	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson33 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9773292	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9793818	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9842768	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9861789	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9877278	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9882367	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
7	.9905236	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.992354	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9924922	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
10	.9928093	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9934166	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9935545	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9942378	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9944018	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9952366	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9952389	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9955627	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9958057	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9960457	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9964356	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 33 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Epson33 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9716776	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9817297	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9935423	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9936608	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9961037	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9965316	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9970115	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9971682	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9977409	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
10	.9981914	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9986421	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9987317	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9987695	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9992384	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.999447	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9995995	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9996442	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9996681	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9997003	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9997359	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson33 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9782876	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9923517	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9932275	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9953069	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9957311	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9968022	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9969194	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.997078	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
9	.9976617	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9979481	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9987532	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.999525	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9996312	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9996545	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9996781	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.999685	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9997089	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9997454	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9997502	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9998516	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 33 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Epson33 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9722987	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9767483	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.983885	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9862108	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9878695	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9891715	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9901042	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9901838	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9923679	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
10	.9926148	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9927047	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.993092	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9948313	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9965754	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9965967	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9968157	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9970537	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9973302	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.99759	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9976252	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson33 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9717914	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9756504	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9839692	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9852965	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9862877	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9891626	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9900229	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9900927	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9924073	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9924273	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
11	.9925956	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9930615	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9946976	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9955118	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9961773	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9965037	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9965531	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9971168	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9974046	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9976358	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 33 Ink Sample Run 4

Neat Ink Library

Unknown Spectrum: Epson33 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9616067	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9700496	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.977811	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9836819	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9841154	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9852425	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9869527	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
8	.9885409	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
9	.9886715	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9891828	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9902058	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9911554	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9913822	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9935952	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9938712	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9950768	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9951805	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9953744	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9959837	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9967276	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson33 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9586443	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9680743	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9767048	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9779562	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9825855	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9831144	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9832571	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9866276	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.9875664	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
10	.9880192	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.988461	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9894679	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9906419	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9929087	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9934403	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.994343	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9947924	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9950128	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9951121	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9961174	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 33 Ink Sample Run 5

Neat Ink Library

Unknown Spectrum: Epson33 Run5 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.8934292	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9662774	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9737594	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9739836	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.977967	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9782704	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9782858	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9806392	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
9	.9807796	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
10	.9816496	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9879622	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9914678	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9918461	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9920009	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9928421	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9935325	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9935347	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.995086	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9961984	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.996236	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson33 Run5 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9546729	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9556197	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9590615	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9673958	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.970383	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9708945	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9727045	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9763227	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
9	.9771363	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9781623	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
11	.9848619	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9859125	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9870205	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9902765	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9907748	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9918953	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.992264	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9929385	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9951919	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9964063	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 33 Ink Sample Run 6

Neat Ink Library

Unknown Spectrum: Epson33 Run6 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.919152	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9764386	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
3	.9772147	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9779835	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9788926	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9790581	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9796333	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9815832	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9830427	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.983084	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9845119	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9862952	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9897245	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9932357	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9943921	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9949632	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.995864	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9966408	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9966655	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.996776	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson33 Run6 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9784254	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9792673	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.979605	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9799529	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
5	.9800864	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9808397	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9813334	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9816683	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
9	.9829173	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9851375	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9854413	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9876668	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9895623	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9908645	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9940181	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9954565	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9957	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9964256	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9965524	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9973276	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 60 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Epson60 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9604532	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9707538	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9741184	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9773064	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9805878	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.9835964	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9847301	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9850042	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.9899492	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9907766	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.993101	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9937374	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9937657	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9939193	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9945	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9945353	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9948611	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9953533	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9957909	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9959243	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson60 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9730632	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.976217	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9789273	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9824377	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9831024	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.9877776	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
7	.9880569	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9920952	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9923633	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9926898	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9927321	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9928036	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9931453	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9933291	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9933823	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9947979	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9955309	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9965012	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9965267	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9967263	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 60 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Epson60 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9265663	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9626922	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9649358	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9657678	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9670672	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9677036	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
7	.9691748	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9692544	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
9	.9808809	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9846746	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9861808	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9904281	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9905774	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9919066	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9920475	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9921712	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9930132	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9931843	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.99463	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9950604	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson60 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9581383	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9582649	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9615511	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9625487	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9646628	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9660866	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
7	.9661588	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.976249	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9786733	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9793693	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9846234	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9854332	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9888327	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9894805	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9895171	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9903101	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9936451	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9948053	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9953357	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9958822	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 60 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Epson60 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9671327	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9686468	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9770471	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9802072	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.980637	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.9816405	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9858404	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9862316	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.9866905	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9869295	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9876694	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9882863	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9887202	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9901049	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9901311	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9940321	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9940608	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9943891	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9947452	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.994831	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson60 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9731683	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9787732	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9820457	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9824466	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
5	.9832317	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9852991	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9873027	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9879882	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9881607	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9888947	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9889448	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9890181	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9892375	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
14	.9898565	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9905341	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9915408	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.992957	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9929613	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9937045	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9937163	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 60 Ink Sample Run 4

Neat Ink Library

Unknown Spectrum: Epson60 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.8313974	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9648042	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9744276	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
4	.9745399	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
5	.975272	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9767568	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9772843	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9798682	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9805343	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9812198	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9836757	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9848431	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9884329	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9904189	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9912627	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.991801	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9921492	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9931099	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9942247	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9945192	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson60 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9674458	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9687271	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9712175	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9713243	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9732985	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.9742352	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
7	.9747792	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9789358	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9796385	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9822782	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9835253	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9867838	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9878083	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9883919	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9895862	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9909411	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9918496	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9935082	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9936719	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9945092	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 63 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Epson63 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9743037	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9808319	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9877667	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9897574	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9915844	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.9918136	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9929386	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9931154	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9931999	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9933583	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9934559	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9934722	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9935761	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9938673	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
15	.9946506	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9952056	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9956487	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9959217	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.996373	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9965456	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson63 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9492635	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.974254	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9808638	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9874995	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.989731	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9914563	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
7	.9917863	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9931139	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9931909	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9933606	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9934008	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9934038	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9934579	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9938599	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
15	.9945254	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9950467	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9956642	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9959032	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9963787	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9964732	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 63 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Epson63 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9789732	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9789862	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9806994	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9834875	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.984629	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.9848137	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
7	.9862226	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9895303	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.990607	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9934893	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9952555	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9954116	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9958824	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9964306	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9970698	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9972249	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9978706	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9980621	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9984123	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9986616	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson63 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9787436	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9787611	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9834667	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9846054	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
5	.9854702	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
6	.9863616	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9906634	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9910173	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.993827	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.994496	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9950543	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9955358	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9959509	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9961287	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9966395	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9976069	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9977682	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9979746	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9982062	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9982822	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 63 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Epson63 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9276839	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.96847	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.971213	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9713798	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9725779	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.9728511	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9747397	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
8	.9771658	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9796156	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9875666	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.988093	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9888439	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.990181	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9912854	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9915954	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.992979	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9929919	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9952417	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9954707	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9956546	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson63 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9634615	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9656146	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9679998	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9685363	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
5	.9722163	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9728455	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9746438	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
8	.978222	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9816499	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9824451	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9828858	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9860262	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9862353	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9865482	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9867832	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9909808	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9920443	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9922435	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9928266	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9935585	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 63 Ink Sample Run 4

Neat Ink Library

Unknown Spectrum: Epson63 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9160725	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9773627	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9830919	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9847758	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9855996	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9858883	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9859319	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9867416	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.9872234	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9872811	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9875228	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9875714	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9914712	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9924576	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9934373	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9944584	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9949787	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9957574	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.995901	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9961987	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson63 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9608282	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9704027	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9704563	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9791086	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9791578	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9798585	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9801738	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9818392	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.98246	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
10	.9843952	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9847309	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
12	.9847436	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9877324	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.988166	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.988495	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9922386	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9934902	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9949334	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.995476	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9959113	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 63 Ink Sample Run 5

Neat Ink Library

Unknown Spectrum: Epson63 Run5 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9255183	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9833922	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9834562	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
4	.9836468	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9839347	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9841242	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.985973	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9862988	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.9878134	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9900899	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9922583	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9924715	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9925413	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9927598	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9929426	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9936591	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9941364	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9943337	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9947003	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.994724	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson63 Run5 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9594377	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9856911	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
3	.9862306	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9864775	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9874352	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9879817	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.98819	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.989723	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.9902675	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9906638	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9915177	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9918087	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9922768	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.993048	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9931924	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9933031	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9936725	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9939606	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9953709	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9956716	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 63 Ink Sample Run 6

Neat Ink Library

Unknown Spectrum: Epson63 Run6 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9812267	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9823657	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9836723	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9888777	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.989342	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9896141	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9901482	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9907206	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.991056	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9914103	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9925268	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9926399	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9926542	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9942229	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9946055	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9970163	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9976108	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9982074	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9983061	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9986966	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson63 Run6 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9780089	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9841607	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9871277	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9876056	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9884622	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9897864	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
7	.9900959	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9902354	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.9909367	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9917195	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9935658	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9941717	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9950016	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9958997	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9965802	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9976224	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9977008	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9977297	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9979148	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9981193	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 66 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Epson66 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9740605	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9940992	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
3	.9951524	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9951997	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9952739	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9978376	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9978482	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9980748	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9983006	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9983487	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.998614	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9986897	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9987064	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9988869	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9989751	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9989874	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9992128	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9992278	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
19	.9992362	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9993398	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson66 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9931338	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
2	.9941912	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9946898	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9947637	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.997403	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9977685	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9980609	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9981382	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.998279	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9983954	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9984028	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9984916	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9986219	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9986476	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9988191	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9989138	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9990308	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9990761	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9992262	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9993506	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 66 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Epson66 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9813311	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9816449	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9833727	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9836742	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9862661	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9873394	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9875518	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9895859	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9914035	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9916583	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
11	.9922532	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9923127	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9933129	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9943464	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9952351	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9953997	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9954457	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.99597	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9965441	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9966022	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson66 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9813282	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9830412	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9833332	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9853209	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9863483	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9877524	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
7	.9895183	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9914565	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9921694	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9925985	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9928833	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
12	.9932875	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9934429	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9937713	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.994545	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9948901	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9950164	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9952363	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9956941	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9960614	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 66 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Epson66 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9715881	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9736162	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9740349	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9750531	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9781013	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9811921	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
7	.9813675	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
8	.9851435	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.985366	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9878246	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.991111	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.991335	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9918585	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.991909	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9923329	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9929413	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9935024	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9961386	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9972151	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9978389	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson66 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9712082	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9737491	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9740316	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9750485	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9779027	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9806385	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9814521	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9821185	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.9846203	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9859636	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.987384	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9909481	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9912738	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9920721	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9920807	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9924925	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9949555	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.996581	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9967622	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9973643	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 66 Ink Sample Run 4

Neat Ink Library

Unknown Spectrum: Epson66 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.970217	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9849239	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9853275	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9859312	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9862326	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.9882535	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9891872	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
8	.9904855	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.991085	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.991861	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9924853	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9930862	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.994293	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.994466	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9946146	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9948187	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9949949	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9953701	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9956816	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.995768	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson66 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9459321	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9866433	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9871065	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9871811	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
5	.9876362	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9893881	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.990774	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
8	.9915959	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9916229	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9918997	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9925494	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9937134	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9937629	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9939186	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9945673	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9947405	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9949994	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9952269	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9955708	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9958513	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 66 Ink Sample Run 5

Neat Ink Library

Unknown Spectrum: Epson66 Run5 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.8634323	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9719965	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9803534	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9811057	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
5	.9829583	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9832655	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9838333	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9855887	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9859527	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9866697	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9871068	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9889573	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9913641	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9927709	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.992993	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9931809	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9935438	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9942797	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9953508	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9955024	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson66 Run5 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9678855	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.975718	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.976587	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9834071	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
5	.9839634	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9843302	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
7	.985627	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9864311	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9868404	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9877679	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9889985	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9907495	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9915279	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.991679	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9921638	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9938577	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9940315	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9940442	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.994505	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9955137	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 84 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Epson84 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9824995	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9952811	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9956017	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9971794	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9975784	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9982287	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9983449	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9983799	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
9	.998587	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9987458	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9988092	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9988517	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9990154	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
14	.9992375	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9993023	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9993563	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9994053	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9994335	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9995804	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9996039	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson84 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9795738	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9904546	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9942505	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9952362	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9965944	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9974749	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9979405	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.998125	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.998299	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9984104	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9985517	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9985853	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9988033	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
14	.9989705	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9990422	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9991261	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9991904	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9992806	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9993755	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9993966	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 84 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Epson84 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9887415	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9919908	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.994091	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9953141	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9973068	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9974147	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9978081	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9979065	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9979652	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
10	.9979997	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9980124	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9981184	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
13	.9984058	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9984335	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.998521	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9986765	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9989018	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9989548	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9989818	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9989884	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson84 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9786338	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9849402	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9870027	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9904359	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9910914	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9951646	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9957071	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9964996	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9966905	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9969491	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
11	.9971917	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9972922	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9975113	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9977224	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9978742	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
16	.9979275	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9979475	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9983039	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9983091	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9983835	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 84 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Epson84 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9784378	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9912229	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9916635	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9916992	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9923075	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9931128	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.993489	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9935942	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.994065	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9946643	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9950359	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
12	.9951596	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9953358	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9954927	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9955534	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9969809	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9975888	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9976266	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9982703	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9983698	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson84 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9643059	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.986109	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.98737	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9886584	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9911087	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9912779	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9913629	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9919854	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9924934	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9934416	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9935352	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9942811	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9943386	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
14	.99463	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9946622	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9947295	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9966852	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9967798	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.996838	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9970719	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 84 Ink Sample Run 4

Neat Ink Library

Unknown Spectrum: Epson84 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9453367	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9817334	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9851822	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.985768	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9886846	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.991473	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9922714	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
8	.9928665	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9944702	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
10	.9949502	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9949877	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9950264	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.995858	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9966483	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.99686	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9973031	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9979261	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9982423	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9985511	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9991068	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson84 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9779369	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9900358	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.992227	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9927511	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9949383	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.995376	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9954024	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
8	.9959778	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9967239	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
10	.9969976	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9970406	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9970464	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9974846	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9977126	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9979743	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9981455	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.999252	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9992595	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9992826	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9993326	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 90 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Epson90 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9783532	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9792981	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9813012	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9847711	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9962126	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9963666	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9966191	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9971669	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9972298	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9972318	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9977443	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9977864	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
13	.9979714	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9979828	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9984929	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9985322	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
17	.9985772	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9989335	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9991091	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9991282	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson90 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9818511	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9836968	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9867385	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9951448	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.995497	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9962047	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.996484	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9971243	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9977161	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9977391	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9983301	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9986318	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9986833	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
14	.9988037	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9988967	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9989139	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9989906	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9991041	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9991251	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9991694	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs

Epson 90 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Epson90 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9791542	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.982056	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9822158	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9853955	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
5	.9864988	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
6	.9871824	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9896509	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9906112	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.991181	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.991564	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9934717	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9943562	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9944909	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9945917	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9948722	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.995543	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9956957	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9957208	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9958314	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9960505	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson90 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9807247	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9832847	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9834814	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9865794	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
5	.9882971	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
6	.9889926	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9914192	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9931374	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9932926	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9938288	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9943805	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9945822	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9950214	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9952551	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9952634	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9954849	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9956694	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9957744	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9960772	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9962299	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 90 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Epson90 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9661482	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9841625	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9891477	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9911627	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9916589	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9929347	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9934018	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
8	.9934247	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
9	.9935684	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.994217	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9948924	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9953276	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9953851	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9955224	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.995699	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9958436	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9960257	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9960273	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9979948	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9983524	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson90 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9743043	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9804872	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9895503	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9897167	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9915913	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9919356	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9924718	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9929115	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9936006	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
10	.9940426	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
11	.9940469	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9945845	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9952865	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.995603	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9957044	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9962688	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9963749	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9975076	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9975105	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9977195	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 90 Ink Sample Run 4

Neat Ink Library

Unknown Spectrum: Epson90 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9349033	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9737096	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9745483	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
4	.9750679	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9798931	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9801918	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9806294	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9861239	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9864771	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9868227	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9879802	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9907359	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.99201	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9935821	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9940742	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9943102	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9950916	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9952483	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9957959	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9962578	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson90 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9768512	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9784015	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9784049	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
4	.9819312	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9822716	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9833536	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9838024	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9843684	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.988386	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.991055	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9942339	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9948418	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9952537	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9953045	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9958887	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9959535	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9961408	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9962684	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9971464	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9973906	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 93 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Epson93 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9768405	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9787951	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9794129	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9826428	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9844609	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.9849513	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
7	.9863113	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9915931	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9924999	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9934932	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9954612	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9957859	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9960496	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9971051	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9973322	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9981197	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9982054	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9983641	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.998483	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9985127	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson93 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9791805	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9810667	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9845896	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9865124	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9865526	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.9877877	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
7	.9889238	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9912848	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9937564	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9954171	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9955058	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.99593	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.996918	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.997438	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9980587	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9980951	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9983698	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9983929	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9986975	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9987482	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 93 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Epson93 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9404197	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9463605	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.947148	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9507043	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9527981	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9529178	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
7	.9567511	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9595931	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9618368	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
10	.9658899	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9698935	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9732013	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9738911	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9749467	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9761015	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9761808	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9821129	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9856299	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9861369	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9892851	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson93 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9365612	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9469147	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9478377	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9522102	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.952647	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.9531395	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9565936	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9575353	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9595005	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9634371	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
11	.9637997	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9682929	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9724788	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9726611	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9741807	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9783216	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9807451	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9854453	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9854704	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9886405	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 93 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Epson93 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.8869961	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9769804	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9795022	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9812582	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
5	.9822419	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9828911	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9829411	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
8	.9844753	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9845256	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9868345	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9894328	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9904269	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9916824	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9923809	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.99239	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9930418	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9935889	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9938836	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9939831	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9947774	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson93 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9606048	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.981841	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
3	.9821399	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9824153	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9832697	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9845842	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.985355	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9859864	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.9868225	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9869074	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9870111	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9901733	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.991284	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9917336	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9918937	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9920129	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9926459	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9929402	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9938436	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9939572	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 93 Ink Sample Run 4

Neat Ink Library

Unknown Spectrum: Epson93 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.7531419	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9680879	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9749576	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9749867	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
5	.9752939	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
6	.9758693	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9771998	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9772565	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9780292	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9815416	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9849476	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9849613	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9866384	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9914583	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9915012	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9925499	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9930239	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9936179	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9944219	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9947031	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson93 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9413044	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9416767	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9506903	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9566361	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9567853	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9581438	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
7	.964278	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
8	.9682134	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9740685	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9745211	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9763728	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9772184	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9779825	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9787848	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9828211	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9850016	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9868441	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9886161	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9897699	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9902214	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 120 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Epson120 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9841908	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9891561	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9893497	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.990777	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9935262	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.994984	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
7	.9964241	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9972111	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9973424	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9973494	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9974726	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.997492	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9975771	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9977295	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9979683	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9980343	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9982601	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9988209	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9989412	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9993401	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson120 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9820095	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9879411	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9887646	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9893676	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9926251	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.9937148	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
7	.9957329	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9969498	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9971715	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9971979	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9973676	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9974921	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9975493	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9976297	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9976978	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9978979	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9987121	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9987497	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9988855	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9990937	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 120 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Epson120 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9826844	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9862754	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9894679	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9896147	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9917205	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9921769	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9922641	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9926786	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9927739	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.993138	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9941964	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
12	.994243	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
13	.994742	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.996138	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9963717	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9964809	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9970611	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9973732	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9973882	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9981883	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson120 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9645801	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9687735	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9817054	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9827427	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9850299	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9859886	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.989399	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9895951	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9903127	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9907873	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9921677	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
12	.9925048	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
13	.9930139	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.993207	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.994666	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9955311	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9959778	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9962971	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9970082	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9979053	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 120 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Epson120 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.8912975	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.95262	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
3	.9536695	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9553908	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9569957	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9571147	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
7	.958267	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9629064	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9676434	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9732841	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9749889	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9861214	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9882926	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9889467	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9892644	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9896719	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.990269	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9908223	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9909682	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9919706	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson120 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9431483	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9463902	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
3	.946573	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9474457	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
5	.948611	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9490872	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9533238	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.959845	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9670792	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9694747	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9787396	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9802436	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9803133	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9814146	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9821111	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9839696	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9848813	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9873235	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9886686	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9898541	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 120 Ink Sample Run 4

Neat Ink Library

Unknown Spectrum: Epson120 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.8253747	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9610769	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9646921	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9710104	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
5	.9710358	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9710789	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
7	.9722711	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9725897	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9730372	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9817842	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9828625	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9830703	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9867843	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9876086	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9901214	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9901586	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9910312	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9923953	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.992528	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9930348	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson120 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9350015	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9358415	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.936735	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.948825	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9500349	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.9518131	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9523233	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9553791	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.9611143	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9632285	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9709016	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9769408	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.977881	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9785521	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9789643	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.981822	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9851146	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.985293	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.988721	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9889147	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 123 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Epson123 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9794371	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9827665	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9843546	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9874204	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
5	.9876768	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9891783	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
7	.9900315	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9934056	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9938284	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9965108	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9965364	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9965604	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9969865	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.997152	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9973425	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9977081	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9982871	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9989499	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9989684	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9991277	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson123 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9774553	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9809385	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9825962	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9853936	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
5	.9858296	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9878198	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
7	.9897482	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.992974	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9929909	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9930631	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9956841	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9964765	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9967107	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9969471	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9970439	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.997429	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9976158	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9983036	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9986537	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.998919	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 123 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Epson123 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9695605	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.970697	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9709251	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9719136	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9746501	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9764063	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
7	.978646	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
8	.9801376	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9830306	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9843892	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9855746	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9884343	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.989379	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9896358	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9902267	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9910018	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.992418	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9928837	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9957697	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9961457	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson123 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9673437	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9682671	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9687118	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9707665	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9714198	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9734831	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
7	.9762422	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9763715	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.9783913	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9811612	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9831679	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9851558	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9885653	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.988653	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.989252	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9901552	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9906456	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9907873	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.992667	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9949277	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 123 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Epson123 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.8584099	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9767785	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9775259	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9781724	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9799613	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.9800237	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9811432	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
8	.9814789	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9816284	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.982749	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9837791	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9902076	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9927854	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9929779	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9940702	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9948621	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9950542	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9955364	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9955521	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9955543	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson123 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9529552	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9608376	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9617664	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9644698	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9686009	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.9708533	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9710438	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9726469	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9734045	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
10	.9745902	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9773636	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9836254	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9865664	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9879354	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9881133	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9899045	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9900002	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9920526	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9936681	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9953499	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 123 Ink Sample Run 4

Neat Ink Library

Unknown Spectrum: Epson123 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.8245481	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9642565	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9726523	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9744821	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.97539	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.9763757	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9768756	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9779356	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.9787395	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9788445	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9833199	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9858009	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9860345	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9864184	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9936451	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9937999	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9946063	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9948057	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9952235	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9955137	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson123 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.960093	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9666944	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9689678	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9723178	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9739801	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.9741946	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9750558	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9769697	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.9774301	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9779441	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9844369	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.986268	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9887268	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9892827	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9895198	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.991136	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9938264	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.994165	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9949866	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9961299	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 156 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Epson156 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.984459	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9897628	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9907765	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9923237	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9936363	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9937332	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9938539	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.993876	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9946218	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
10	.995472	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9955909	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9969161	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9970409	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9972166	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9975163	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9981772	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9983253	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9985173	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9995039	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9995293	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson156 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9839398	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.990743	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9911239	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9926292	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9929475	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9934992	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.993897	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9940845	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
9	.9950424	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
10	.9953052	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9957824	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9965997	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9968894	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9971831	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9974266	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9978566	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9984355	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9984803	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9994335	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9994753	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs

Epson 156 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Epson156 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9867985	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9888623	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9921125	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9928284	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9936143	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
6	.9941061	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9950169	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9969209	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9969286	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9973348	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9982574	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9984158	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9987236	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9989735	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9993601	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9993927	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9996105	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9996221	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9996926	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9997194	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson156 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9864674	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9892907	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9923804	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9931672	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9939693	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
6	.9945945	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9953369	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9958223	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9971477	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9973354	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9976012	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9984469	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9985	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9990764	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.999373	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9994691	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9996415	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9996768	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9997114	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9997252	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 156 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Epson156 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.980941	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9865185	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9894872	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9895579	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9902424	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9905782	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
7	.9918527	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9934214	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
9	.9953256	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9961215	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9963991	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.996528	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9970434	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9970493	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9973445	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9979008	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.998629	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9990333	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9990519	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9990686	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson156 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9767455	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9867535	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.990325	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9905661	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9918233	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
6	.993228	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9933042	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.995615	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9964366	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9967912	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9968285	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9968987	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9971982	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9978172	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9979289	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9980248	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9984905	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9988216	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9988751	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9989181	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Epson 156 Ink Sample Run 4

Neat Ink Library

Unknown Spectrum: Epson156 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9032731	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9406033	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9650707	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.972665	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9769897	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9844718	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9845477	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9849924	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.985087	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
10	.985373	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9859787	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9862051	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9899192	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9931948	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9944237	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9944376	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9957271	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9959486	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9966636	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9973071	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Epson156 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9101393	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9721599	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9798421	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9813277	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9829085	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9848284	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9848328	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9849079	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9849107	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9855581	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
11	.9860556	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9870636	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9911864	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9924108	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9928568	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9938623	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9944618	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9944784	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9946633	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9952006	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Hewlett Packard 198 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: HP198 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9859695	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9876047	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9903744	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9914604	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9942943	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9948218	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9949336	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9951447	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9961709	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.996374	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
11	.996464	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9968254	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
13	.9971354	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.997511	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9976144	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9980257	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9981171	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.998233	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9985753	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9986704	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: HP198 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9826813	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9836306	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9874653	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.991604	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9932703	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9952199	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9952837	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9962954	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9965792	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9967391	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9967914	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
12	.9968141	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9969388	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
14	.9970474	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9973745	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.997962	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9980669	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9986382	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9986814	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9988544	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Hewlett Packard 198 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: HP198 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9747224	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.985356	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9877004	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9883854	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9887777	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.98992	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9939095	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9955752	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9966065	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
10	.996647	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9967709	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9972107	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9972713	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9973698	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9975464	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9975985	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9976405	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9977764	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
19	.9978698	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.99792	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: HP198 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9859799	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9866825	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9870755	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9887579	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9895824	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.991126	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9932716	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9965472	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9973494	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9976792	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9976901	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9977483	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
13	.9979637	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9979793	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
15	.9981092	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9981372	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9982722	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9983186	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9984697	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9984909	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Hewlett Packard 198 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: HP198 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9700831	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9813855	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9816707	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9831274	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9847319	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9860112	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9870157	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.988465	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9908112	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9911606	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9939115	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9942968	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9949021	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9950188	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9950738	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
16	.9952687	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9953729	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9954408	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
19	.9958367	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9971164	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: HP198 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9574864	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9666896	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9736016	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9752284	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9755635	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9777982	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9819747	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9857815	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9869902	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.988697	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9912369	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9931262	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9940495	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9942349	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
15	.9943256	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.99493	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
17	.9949955	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9952016	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9952196	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9963475	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Hewlett Packard 198 Ink Sample Run 4

Neat Ink Library

Unknown Spectrum: HP198 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9629483	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9726023	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9741204	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9827126	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9902434	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9932927	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9946169	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9950743	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9953126	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9957958	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9960201	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9960694	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9961051	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9962428	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
15	.9965815	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9966432	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9968711	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9969521	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9974988	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
20	.9975994	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: HP198 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9589232	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9688805	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9712819	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9790692	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.98857	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9902105	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.992626	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9926758	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9934261	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9937023	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9937823	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
12	.9940505	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.994058	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9940959	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.994498	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9949766	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9953188	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.995447	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
19	.9958839	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9975713	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Hewlett Packard 198 Ink Sample Run 5

Neat Ink Library

Unknown Spectrum: HP198 Run5 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9172066	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9434372	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9513198	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9537824	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9555229	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9696307	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
7	.9733331	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9895621	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9902497	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.991945	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.99239	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9957506	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9959651	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
14	.9967443	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9968002	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9972903	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9973894	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
18	.9975516	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9976448	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9976492	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: HP198 Run5 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9190451	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9440896	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9485769	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9540246	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.955844	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9685088	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
7	.9890511	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9915408	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9938118	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.995245	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9964674	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9967759	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9971181	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9973341	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9974002	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
16	.9977025	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9978925	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9985251	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.998615	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
20	.9987434	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Hewlett Packard 198 Ink Sample Run 6

Neat Ink Library

Unknown Spectrum: HP198 Run6 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9229335	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9537112	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.954287	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9615602	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9646022	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9724854	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
7	.9860483	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9891236	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9927977	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9932055	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9936778	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9948431	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9972348	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9974411	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.998002	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.998058	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9984213	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9984489	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9984644	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9987746	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: HP198 Run6 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9210441	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9536757	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9541867	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9609927	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.963841	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9728389	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
7	.9862273	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9887313	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9917938	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9926919	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9935563	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9945089	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9972408	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.997385	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9979114	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9980215	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9982853	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9984565	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9984644	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9987481	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Hewlett Packard 199 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: HP199 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9838498	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9842908	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9857393	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9928064	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9928213	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9935284	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9956073	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9963815	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9970258	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9972445	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9972939	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9977579	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.998241	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9985521	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9988033	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9990187	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9991245	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9991298	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9994863	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9995105	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: HP199 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9816973	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9826755	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.982802	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9895343	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9921285	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9932287	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9951417	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9959614	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9961444	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9962392	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9963421	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9968418	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9983664	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9985505	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9986935	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9987664	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9988576	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9989301	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9989884	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9991499	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs

Hewlett Packard 199 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: HP199 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9740313	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9768398	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9844871	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9860306	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.98932	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9905624	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9907656	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9917053	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9926772	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.993645	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9937884	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9938232	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9943987	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9951932	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9952276	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9954733	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9955674	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
18	.9955779	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
19	.9956195	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9963523	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: HP199 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9749832	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9763687	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9844294	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9896528	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9905837	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9909478	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9911851	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9926381	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9934137	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9937767	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9941159	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.994155	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9947427	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9955906	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9956487	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9958399	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9960238	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
18	.9961116	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9961677	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.996256	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs

Hewlett Packard 199 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: HP199 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9530607	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9608236	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9616176	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9658672	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9661282	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9667472	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9727464	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.976011	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9774963	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9795319	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9839369	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9858892	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9908178	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9941444	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
15	.9944688	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
16	.9946471	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9950873	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
18	.9951192	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9953848	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9955695	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: HP199 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9436668	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9545441	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9598746	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9610661	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9687273	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9689538	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9732648	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9733131	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9792965	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.98158	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9815848	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9822543	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9917238	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9926468	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
15	.9958431	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
16	.99603	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9961643	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9962595	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9964405	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9966037	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Hewlett Packard 199 Ink Sample Run 4

Neat Ink Library

Unknown Spectrum: HP199 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.8848522	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9095383	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.961768	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9765401	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.991172	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9921305	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9935582	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9943979	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9951891	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
10	.995616	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9970735	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9972934	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9974574	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9977899	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
15	.9978068	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9979389	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9982037	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9985221	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9988623	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.999103	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: HP199 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.8845069	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9088815	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9615327	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9762152	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9914277	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9920357	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9934149	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9938658	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9951876	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
10	.9954181	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9967044	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9969687	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9974558	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
14	.9974919	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9976981	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9977627	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9978422	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9979689	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9983831	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9988931	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs

Hewlett Packard 200 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: HP200 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9772103	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9786265	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9844406	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9890797	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9895882	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9900851	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9901084	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9935533	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9942662	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9945828	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9956245	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9958421	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9962984	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
14	.9963521	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9966646	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9975632	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
17	.9985102	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9985388	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9985712	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9989028	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: HP200 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9758074	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9765439	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9816106	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9880768	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9885168	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9893303	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9924374	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9933535	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9940866	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9944845	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9956468	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9960887	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9963639	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
14	.9965145	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9974273	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
16	.9980313	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9980638	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.99861	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9986246	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.998767	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Hewlett Packard 200 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: HP200 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.983484	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9863743	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9872946	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9875141	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9911848	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9915565	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9916407	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9951814	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9953888	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9963379	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9964108	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9969276	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9971698	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9972548	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
15	.9974592	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
16	.9974784	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9977002	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9983776	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9986936	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9989551	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: HP200 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9816169	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9856321	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9861821	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9868645	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9894416	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9905217	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9910113	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9914292	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9948947	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9957263	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9960473	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9965392	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9969659	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
14	.9971595	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9973698	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9977527	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
17	.9978819	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9983533	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9986572	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9990375	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Hewlett Packard 200 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: HP200 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9731884	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9873179	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9892151	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9903103	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9914337	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9918845	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9921631	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9942275	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9957275	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
10	.9967712	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9989509	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9989829	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9990549	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9990712	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9990811	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9990866	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9991304	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9992564	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9993263	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9993588	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: HP200 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9537639	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9822747	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9823197	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9854114	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9869937	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9871315	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9887514	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9931622	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
9	.9937626	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9948959	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9977561	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9982318	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9982371	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9982946	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9986231	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9988193	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9988899	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9989684	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
19	.9989986	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9990536	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Hewlett Packard 200 Ink Sample Run 4

Neat Ink Library

Unknown Spectrum: HP200 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9477515	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9524416	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9774437	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9829791	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9883386	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9914346	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9920771	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
8	.9927281	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9941866	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9942542	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9942684	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9946157	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9960045	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9963236	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9963405	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9968139	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9968857	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9972448	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
19	.9973229	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9975284	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: HP200 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9319555	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9692581	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9764214	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9855047	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9892856	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
6	.9904285	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9925144	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9934072	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9935286	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9936027	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9953168	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9953536	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9953594	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9960652	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.996164	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9963444	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9967305	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9974117	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
19	.9977397	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9977819	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Hewlett Packard 201 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: HP201 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9410918	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9433123	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9613975	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9706391	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9870187	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9895678	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9930982	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9932552	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9950462	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9972394	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
11	.9974602	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9977988	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9984597	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.998491	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9986386	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9986587	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9987239	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
18	.9990246	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9995136	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
20	.9995653	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: HP201 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9341995	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9370824	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9540023	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9670346	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9858894	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9890463	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9923049	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.993377	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9938914	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9939836	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9965084	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9969168	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9971302	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
14	.9975509	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9977815	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.998189	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9983256	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9983649	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
19	.9990908	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9992994	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs

Hewlett Packard 201 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: HP201 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9087741	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9172133	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9518343	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9807	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9883313	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9893318	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9908549	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9939917	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9955982	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
10	.9962322	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9976117	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.997918	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.998639	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9988244	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9989049	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9989763	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9990448	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9990464	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9992077	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9994608	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: HP201 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9081689	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9164407	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9512734	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9795464	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.988318	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9893429	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9900058	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9940945	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9956209	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
10	.9957745	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.995899	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9976616	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9985515	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9986613	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9988096	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9988454	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9989503	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9990004	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9990671	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9993259	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Hewlett Packard 201 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: HP201 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9019186	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9082515	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9183645	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9200135	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9492325	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9693227	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9700277	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9775546	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9802914	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9835826	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9852571	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9888828	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9917538	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
14	.9940649	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9948993	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9952873	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
17	.9956149	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9956982	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
19	.995988	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.995989	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: HP201 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.886808	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9024851	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9116696	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9401927	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9640501	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9709928	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9759772	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9798301	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9841459	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9842921	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.98526	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9868981	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9900923	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
14	.9936338	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9944696	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9958068	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
17	.9958767	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9963949	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9967095	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
20	.9969554	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Hewlett Packard 201 Ink Sample Run 4

Neat Ink Library

Unknown Spectrum: HP201 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.8136419	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.8495278	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9208508	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9532415	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9887236	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9891911	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9943598	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
8	.9960272	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.9960483	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9960882	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9966934	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.996865	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9972475	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9974331	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9974353	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
16	.9976146	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9982562	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9984763	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9991893	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9992141	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: HP201 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.8072482	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.8446695	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.917825	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9545113	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9884431	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9940457	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
7	.996837	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9970002	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.9970297	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9970741	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9973145	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9975522	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9979423	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9979471	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
15	.9979517	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9984421	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9985954	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9987974	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9991866	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9992917	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Hewlett Packard 205 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: HP205 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9864186	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.986658	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9872988	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9875402	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9881725	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9893983	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9906361	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9909173	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9919197	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9928671	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
11	.9971454	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9974821	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9980953	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9983256	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9984807	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.998525	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9986217	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9987641	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.998998	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9990063	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: HP205 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9846357	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9850345	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9860505	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.986187	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9874834	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9887018	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9899758	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9900137	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9915007	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9924061	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
11	.996693	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9969637	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.99725	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9979172	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9980453	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9981564	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9981701	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9985904	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9989082	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9989299	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Hewlett Packard 205 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: HP205 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.988631	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9890171	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9895483	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.991739	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
5	.9922749	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9925193	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
7	.9928246	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9930299	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9935282	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9944059	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.994414	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9947616	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9970236	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9972445	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9974794	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9978286	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9978424	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.998438	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9985006	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9985272	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation

With D-Allose Mask

Unknown Spectrum: HP205 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9893078	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9896132	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9901566	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9920602	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
5	.9926232	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9927547	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9931707	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9933165	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.9938061	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.994283	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9942938	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9954571	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9972367	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9972442	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9974023	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9976252	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9978057	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9984027	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9984368	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9986367	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Hewlett Packard 205 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: HP205 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9438525	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9548092	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9706839	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.976746	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9818258	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9852146	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9860129	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9867103	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9871209	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9880788	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.988364	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9892154	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9897252	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
14	.9900707	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9917197	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9935049	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9941928	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9942227	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9946006	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9964564	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: HP205 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.934207	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9441008	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9548748	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9708315	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9771154	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9816484	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.985081	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9862989	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
9	.9865652	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9881851	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9884071	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9895062	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9900762	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
14	.9904481	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9917362	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9937218	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9944013	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.994467	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9948117	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9965182	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Hewlett Packard 205 Ink Sample Run 4

Neat Ink Library

Unknown Spectrum: HP205 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9258458	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9369612	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9581262	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9686256	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9754782	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9794524	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
7	.97958	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9796534	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9823404	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9824783	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9836302	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9838357	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9842419	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
14	.9858648	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.989226	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9893893	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9906337	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9910392	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9911497	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9945057	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: HP205 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.923553	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9261577	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.937068	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9581526	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9690818	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9752162	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9793597	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9794521	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9799242	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
10	.9824656	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9825469	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9841638	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9848301	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
14	.9863377	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9892518	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9897917	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9910239	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9914032	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9914447	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9945884	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Hewlett Packard 205 Ink Sample Run 5

Neat Ink Library

Unknown Spectrum: HP205 Run5 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9872164	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9891875	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.989619	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9908864	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9918647	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.9921432	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9924729	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9930557	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.9931415	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9938592	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9962335	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9963518	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.996817	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9974325	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9974913	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9976601	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9977692	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9981474	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.998434	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9986548	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: HP205 Run5 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9851705	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9866486	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9866725	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9874117	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9895543	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9898028	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9898233	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9908074	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9911472	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9919884	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
11	.9937435	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9939854	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9958761	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9963887	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9967057	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9967467	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9968398	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9972067	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.997677	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9978094	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 217 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Canon217 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.967346	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9843145	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9908825	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9939801	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9963639	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9964787	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9966899	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9969728	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9974704	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9975489	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9977522	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
12	.9977547	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9980044	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9981044	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9981585	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9982122	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9982469	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9986015	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9986066	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9986289	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon217 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9661087	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9840065	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9915319	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9939906	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9943668	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9967578	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9969774	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9970672	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
9	.9974194	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9976418	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9978052	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.998055	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
13	.9980738	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.998165	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9981666	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9983506	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9984061	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9984325	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9985597	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9986169	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 217 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Canon217 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9733248	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9775179	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9824712	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.986622	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9869637	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9874543	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9888338	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9896171	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.9913882	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9928274	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.993041	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9938984	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9948076	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9951673	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9951809	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9953863	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9958355	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9960903	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9966549	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.996856	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon217 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9811075	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9837623	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.987716	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9881424	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9897085	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9900932	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
7	.9916238	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
8	.9929381	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9932863	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9943264	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9943739	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9944381	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9954848	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9955316	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9957821	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.995868	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9960707	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9962878	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9963954	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9965954	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 217 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Canon217 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9436094	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9880749	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9891308	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9902198	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
5	.9902691	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9904762	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.990769	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9909217	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9911541	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9913335	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9915296	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
12	.9935226	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9943318	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9945452	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9952667	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9960977	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9976833	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9977068	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.99801	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9986479	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon217 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9895161	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9907484	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9911284	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.991173	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9921276	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.9924483	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9927843	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9930944	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9935204	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9935832	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
11	.9949212	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9952084	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9952437	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9957312	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9960523	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9966585	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9968362	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9979504	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9981344	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9985779	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 217 Ink Sample Run 4

Neat Ink Library

Unknown Spectrum: Canon217 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9771066	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9834357	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9843988	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9865887	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9867633	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9874359	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9880331	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9883404	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9889699	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
10	.9892713	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
11	.9919403	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9935001	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9958314	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9959379	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9968995	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9972466	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9974017	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9976923	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9980146	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9981641	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon217 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9776705	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9827969	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9848046	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9857947	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9865143	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9878381	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9878469	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9880398	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.9880882	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9889933	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
11	.9912128	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.993057	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9964098	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9964986	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9966749	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.99706	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9975514	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9977154	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9978147	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9983686	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 217 Ink Sample Run 5

Neat Ink Library

Unknown Spectrum: Canon217 Run5 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.942824	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9774662	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9812899	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9820028	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
5	.9828954	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9829466	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9859057	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
8	.9867349	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9875906	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9912338	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9921261	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.992231	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9935395	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9950985	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9963858	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9965929	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9967278	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
18	.997116	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9980505	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9988269	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon217 Run5 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9787537	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9805657	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9823064	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
4	.9826633	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9830607	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9861479	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9862024	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
8	.9874962	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9905447	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9935063	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9940167	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9943495	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9946584	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9962062	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9964972	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
16	.9968294	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9980599	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9981443	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9984347	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9985828	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 223 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Canon223 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9912485	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9932423	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9934171	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9938738	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9945546	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9946269	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
7	.9954972	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9970571	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9978911	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9980252	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9982336	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.998252	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9982904	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9983686	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9985799	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9987254	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9987806	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9990041	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9990816	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.999159	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon223 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9913448	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9931799	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9931964	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9934449	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9941696	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9948752	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
7	.9953161	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9971095	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9972132	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9974371	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9978138	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9979821	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9982923	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9983358	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9985269	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9987543	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9987982	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9989486	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9989777	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9990571	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 223 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Canon223 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.8610372	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9858888	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
3	.986239	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9895104	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9898373	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9901524	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
7	.9907495	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9917887	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9926894	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9930992	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9957321	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9962651	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9963996	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9967368	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9971592	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9973521	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9975935	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9980602	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9985294	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9985755	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon223 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9815182	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9854093	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
3	.985773	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.988636	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9889918	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9893399	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
7	.9893675	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9899712	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9918437	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9934653	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9939909	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.994797	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9954662	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9957213	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.996977	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9972711	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9974534	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9977329	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9980188	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9982704	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 223 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Canon223 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9597219	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9787857	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9828257	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9845918	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9893958	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9895336	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9921636	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9925825	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
9	.9926073	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9931165	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9932585	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9942133	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9948727	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9949438	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9954304	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9958546	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9964231	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9965305	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9972482	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9973042	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon223 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9603315	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.976606	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9776128	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9839622	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9892053	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9921359	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9924727	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9925941	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9929055	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
10	.993425	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9934696	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.994558	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9946321	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9949688	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9954875	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9957884	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9964002	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9967393	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.997059	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9971455	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Xerox 244 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Xerox244 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9903956	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9909983	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9945518	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9976826	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9977283	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9978102	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9978124	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9981507	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9982389	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9983206	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
11	.998466	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
12	.9986675	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9987012	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
14	.9987051	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9987118	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9987303	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9987813	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9989856	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9990352	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9991918	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Xerox244 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9869735	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9954404	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9959725	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.997062	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9973023	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.997307	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9973823	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9977041	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
9	.9979563	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9982785	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.998528	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9986043	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9986109	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9987163	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9987624	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9987826	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
17	.9987897	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9988017	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.998867	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9989217	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs

Xerox 244 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Xerox244 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9808835	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9886588	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9910967	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9944165	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9949505	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9949689	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9951909	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.996034	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9960833	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9965279	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9965487	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
12	.9967917	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
13	.9969768	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
14	.9970253	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9972799	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9973521	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9975237	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9975978	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9977586	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9977632	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Xerox244 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9620919	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9755759	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9818632	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9909093	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9922223	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9939202	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9948792	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9950116	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9952399	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9952676	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9953874	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
12	.9956647	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9962705	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9963369	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9964076	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9964265	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
17	.9965906	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9969184	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
19	.9971148	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9973366	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Xerox 244 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Xerox244 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9830456	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9894246	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9919619	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9920551	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9928551	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9946101	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9951023	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.996893	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9972762	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9972817	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9973027	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9974657	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9975676	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9978878	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9981508	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
16	.9982111	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9982172	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9984933	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9986975	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9988508	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Xerox244 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9852769	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.986429	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9877678	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9918342	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9934592	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9947427	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9953325	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9964644	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9970496	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9971633	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9972036	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9972566	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9972572	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9975365	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9977782	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9981108	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9985291	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9985629	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.998679	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
20	.9988704	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs

Canon 282 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Canon282 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9853713	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9894724	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9967626	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9976476	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9982187	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9986038	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9988425	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9988853	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9992347	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9993212	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9993688	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.999466	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9995837	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9995897	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9996296	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9996386	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
17	.999665	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9996679	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9997082	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9997578	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon282 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.985651	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9970306	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9976535	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9976795	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9977899	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9982029	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9984027	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9986011	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9987268	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.998808	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9989534	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9991062	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9991885	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9993969	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9994295	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9994873	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9995094	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.999533	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9995399	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9996396	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 282 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Canon282 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9809819	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9828789	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9923252	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9924738	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9942605	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9944005	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9947338	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
8	.994925	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9950361	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
10	.9950376	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9952253	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.995866	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.996563	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9971789	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9984143	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9985505	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9985619	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.998585	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9986313	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9987554	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon282 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9655475	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9791478	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9886681	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9891338	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.989237	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9904363	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9914418	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9916937	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9920906	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9921532	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
11	.9927164	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
12	.9941537	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9950842	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9954988	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9967005	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9972085	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9973993	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9978436	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9981959	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9982942	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 282 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Canon282 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9663455	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9913358	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9925585	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9929374	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9934866	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9941947	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9946662	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9949878	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9950057	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9951787	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9952634	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9955839	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9956254	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
14	.9956468	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9956894	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
16	.9968289	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9970503	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
18	.9975516	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9976392	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9977492	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon282 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9714217	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9859981	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9875988	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.991397	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9925725	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9932158	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9935241	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9944768	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9946389	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9951016	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9952148	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9953027	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9954595	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
14	.9956722	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9957575	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9958805	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
17	.9963788	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9968274	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
19	.9969947	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9971436	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 306 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Canon306 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9725453	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9784849	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9911618	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9940157	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9944183	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9951135	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9953924	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9957988	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9963008	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
10	.9964437	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9966662	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
12	.9970236	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9970476	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9977133	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9979714	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9980397	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9989451	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9989998	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9993634	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9993899	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon306 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.966521	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9784301	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.983487	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9913047	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9923707	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9953498	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9954243	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9958102	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9962265	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
10	.9964045	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9973291	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
12	.9973837	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9977168	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9978225	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9984878	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9985923	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9987962	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9988938	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9991257	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9994413	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 306 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Canon306 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9759574	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.995381	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9965118	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9967275	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9969471	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.997036	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
7	.9972785	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9973099	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9973798	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9976213	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
11	.997721	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9977696	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9978751	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9982181	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9985709	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9987513	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9988286	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9989789	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9990555	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9991634	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon306 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9306323	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9961154	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9967563	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.997102	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
5	.9971027	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9973114	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9973249	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9974309	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9975502	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9976008	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9976733	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9978797	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9979723	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
14	.9981304	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9982792	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9986163	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9987088	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9990701	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9990706	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9991003	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 306 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Canon306 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.8545496	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9546729	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9696696	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9747804	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9760184	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9828889	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9888278	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9888589	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
9	.9888897	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9895044	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9903348	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9911711	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
13	.9919819	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9925435	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9925666	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9928313	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9957168	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9957427	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9958209	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9962132	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon306 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9374801	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9628689	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9659911	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.966091	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9746149	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.989326	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9903333	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.990617	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9907833	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
10	.9910017	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.991007	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9927231	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9927611	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9933899	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
15	.9937415	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9938886	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.994194	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.994549	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9948172	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9963191	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 306 Ink Sample Run 4

Neat Ink Library

Unknown Spectrum: Canon306 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9478552	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.980302	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9899508	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9923928	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9924455	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9944919	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9948353	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9948645	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9959484	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9961382	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9962991	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9963903	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
13	.9965153	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
14	.9967514	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9968055	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9974263	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9975808	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9975949	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9977894	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9978625	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon306 Run4 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9716315	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.985095	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9872047	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9890055	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9943762	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9950034	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9951884	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9954814	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9956091	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9956437	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9957632	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9958473	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.995917	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9965028	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9967225	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9969086	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9970574	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9970827	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
19	.9973089	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9975677	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 312 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Canon312 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9521227	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9815642	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9824318	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9837287	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9865693	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9880568	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9887264	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.988848	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9889656	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.98964	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9906204	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9916452	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9925842	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
14	.99289	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9930757	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9937526	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9942602	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.994817	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9954061	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9960403	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon312 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9553555	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9810613	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9832617	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9855237	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9855368	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9882899	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9902639	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9903474	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9907289	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9907799	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9912854	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9922124	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9923066	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9940922	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9943793	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
16	.9948882	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9949452	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9949757	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9951611	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.995163	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 312 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Canon312 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9926425	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9938304	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.996568	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9975199	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9977375	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9978371	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9978536	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9980817	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9982048	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.998535	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.998543	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.99867	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9987364	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9989312	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9989743	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9990101	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.999074	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9990953	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9991347	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
20	.9993107	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon312 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9823661	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9905131	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9909871	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9920084	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9941872	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9968306	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9969412	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9971331	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9976854	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9978036	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9984462	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9985837	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9988207	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.998919	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9989552	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9990182	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9990237	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9990427	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9991249	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
20	.9991555	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs

Canon 312 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Canon312 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9179299	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9921496	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9937588	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.994871	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9971368	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9972293	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9975753	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9975979	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9976093	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9977663	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9980207	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9982844	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9984691	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9984963	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9986442	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9986526	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9992027	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
18	.9993243	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9993873	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9994093	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon312 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.99323	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9934772	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9972418	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.997627	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9981099	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9983589	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9985436	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9986812	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9987623	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
10	.9989126	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9991355	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9992515	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.999337	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9995053	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9996232	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9997088	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9997276	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9997477	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9997602	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9997885	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 318 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Canon318 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.8873262	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9477068	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9518932	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9667496	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9725072	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.9745321	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9753758	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9780156	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.978699	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9791383	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
11	.9820528	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9823084	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9835235	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9853064	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9868312	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9887054	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9897672	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9936807	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.99378	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9953048	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon318 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9411335	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9515724	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9678727	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9697386	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9739436	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
6	.9743069	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9771467	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9782441	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9795612	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9817406	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.983077	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
12	.9834628	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9841103	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.987288	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9877949	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9897715	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9900165	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9903753	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9925085	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9934679	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 318 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Canon318 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9836244	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9898421	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9899858	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9909806	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9912126	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9919362	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9920719	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9927493	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9956665	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9967841	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9975416	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9976436	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9978177	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9979582	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
15	.9979753	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9980947	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9981839	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9985291	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
19	.9987553	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9990901	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon318 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9779641	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9839876	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9866965	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9871674	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.98884	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9901608	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9939479	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9949757	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9965049	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9966812	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
11	.9968281	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
12	.9976823	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9977899	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9981774	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9987254	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.999042	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9992197	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9992988	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9994398	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9995211	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 318 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Canon318 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9764267	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9805083	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9903632	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9940013	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9949524	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9969193	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9974017	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9974056	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9976353	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9976643	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.997849	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.99797	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9983274	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9983969	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9984654	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9985487	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9985576	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9989961	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9991573	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9992967	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon318 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9865942	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9873633	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9932432	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9954475	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9962142	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9962654	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9963157	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9965361	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9965593	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.996659	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.997031	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9971939	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9972057	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9973561	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9974666	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9975414	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9976186	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
18	.9977745	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.997971	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9980339	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 318a Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Canon318a Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.961004	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9755322	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.982132	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9828312	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9833497	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
6	.9887957	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9896026	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.991112	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9912369	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9916884	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9920421	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
12	.9925296	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9934543	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.993769	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9958669	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9959849	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9960124	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9961671	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9969738	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9970474	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon318a Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9608651	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9751781	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9807922	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9821217	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9835282	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
6	.983921	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9889059	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9899427	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9910793	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9913526	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9920801	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9924871	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
13	.9932031	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9935138	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9939426	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9949629	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9958633	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.995906	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9963003	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9968168	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 318a Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Canon318a Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9540066	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9757326	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9867103	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9875208	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9899651	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9911631	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9914685	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9915852	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9917223	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9917657	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9923609	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9933203	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9936182	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.99391	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
15	.9941625	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9941919	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9945265	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
18	.9948549	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9948742	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9959686	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon318a Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9330668	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9617538	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9738925	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9770015	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9848572	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.986246	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9889979	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9894974	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9896924	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9899833	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9921598	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9922011	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.992843	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9931834	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9933472	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9933875	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9934763	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
18	.9937846	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
19	.9939024	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9942885	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 318a Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Canon318a Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9435176	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9671161	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9676966	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9695906	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9712198	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9752233	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9757004	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9787394	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9807528	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9814722	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
11	.9816796	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
12	.9844654	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9859929	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9873992	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9921129	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9923138	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9933968	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9942083	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9956762	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9957587	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon318a Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.940834	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9659782	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9662806	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9686488	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9699275	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9723465	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.974023	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9747066	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9754574	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9798781	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.980118	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
12	.9810163	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
13	.9839033	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9847627	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9861214	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9921261	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9921666	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.992331	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9943078	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9952878	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 327 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Canon327 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9790086	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9924437	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9946468	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9955531	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.996607	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9966893	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9971078	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9974082	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9985853	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9988157	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.999112	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9992312	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9992483	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9994031	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9994391	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9995081	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
17	.999521	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.999617	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9996811	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9996997	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon327 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9772146	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.99505	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9967567	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9971163	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9972751	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9973185	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9973285	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9982842	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9988921	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9990743	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9992682	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9993017	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9993979	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9994124	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9994652	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9994938	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9995875	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9996037	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9996591	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
20	.9996723	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 327 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Canon327 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9505363	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9896133	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9931092	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9941257	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9941386	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9949225	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.995478	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9955781	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
9	.9959012	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.995909	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
11	.9963235	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.996523	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.997026	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9976476	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9977117	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.997735	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9983869	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9984043	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9987205	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9989042	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon327 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9843082	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.987861	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.988761	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9924901	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9927103	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9933535	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.993587	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9939125	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9942707	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
10	.9946188	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9949166	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9952571	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9954306	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9960862	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9962875	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9967907	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
17	.9973016	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9978386	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9981467	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9982589	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 327 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Canon327 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9675838	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9806949	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9874904	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9884048	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9885688	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9889575	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9894875	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9897656	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9902183	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9906017	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9916529	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
12	.9917604	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9919921	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9921325	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
15	.992591	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9926089	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9940364	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9975064	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9984326	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9987155	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon327 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9720529	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9739088	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9848718	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9854141	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9854802	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9869881	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9880807	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9880852	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9883408	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9885737	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9890829	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9897643	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9911466	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
14	.9914425	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9915994	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9918182	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9924824	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
18	.9968641	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9968826	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9979208	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 348 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Canon348 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9826501	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9938425	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.995128	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9954239	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9960958	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9969668	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9974676	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9974831	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9978374	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9979071	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.998161	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9987391	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9987674	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9988291	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9989076	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9989806	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9990088	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9991195	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9991325	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9992474	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon348 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9907113	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9919467	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9928648	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.992934	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.996402	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9964973	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9965373	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9966247	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9966603	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9966944	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9967551	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9974663	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9977901	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9980557	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9981661	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9982383	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9983183	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9983615	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9983851	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9984303	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 348 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Canon348 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9884732	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9916114	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9916598	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9918097	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.992295	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9923922	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9931742	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9936539	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.99407	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9944127	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
11	.9962702	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
12	.9967576	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9973189	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9974104	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9978257	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9978811	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9985686	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9987284	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.99895	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9991056	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon348 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9862933	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9886691	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9897977	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9909032	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9909432	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9915162	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9925337	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9927777	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9938652	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9942092	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
11	.9949702	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
12	.996554	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9968749	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9977341	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9979153	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9980471	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9982436	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9983519	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9984151	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9986969	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 348 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Canon348 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9432659	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9802997	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9890401	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9947803	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9948239	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9952473	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.997067	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9971195	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9974043	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9986737	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
11	.9989792	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9990095	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
13	.9990324	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.99905	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9990757	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9991437	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9991874	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
18	.9992531	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9992607	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.99949	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon348 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9524189	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9888794	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9894305	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9897211	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9918951	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.993032	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.993398	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9949414	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9971552	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9973225	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9974662	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
12	.9980382	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9980463	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9981601	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9981794	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
16	.9981853	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9982408	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.998356	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9984329	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9984842	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 384 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Canon384 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9668808	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9775522	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9819604	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9839305	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9844297	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.987241	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9872612	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9887478	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.989252	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9893733	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.989417	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.990118	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
13	.9906296	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9915891	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9926075	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9944724	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9944777	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9944783	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
19	.9961364	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9967658	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon384 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9504488	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9668061	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9741517	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9764119	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9770098	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9812823	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9822443	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9843889	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9843962	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9847444	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9853014	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9861706	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9863654	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
14	.9868399	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9881821	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.989325	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9921764	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
18	.9927659	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.993118	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9949685	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 384 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Canon384 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9764654	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9823931	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9845026	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9876317	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9880832	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9891251	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9897528	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9902991	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9914654	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
10	.9917054	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9917292	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9924072	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9924988	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9930843	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9950466	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.99526	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9953135	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.995459	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9954652	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9954985	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon384 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9724438	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9758791	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9794685	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9841319	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9860122	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9863581	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9877409	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9883864	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9897882	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9899482	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9903266	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
12	.9904294	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9910402	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9921925	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9924843	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9926347	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9939721	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9945972	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9952298	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9953854	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 384 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Canon384 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9796559	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.987526	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9897889	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9921852	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9931442	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9953702	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9967209	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9970032	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9980947	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9981561	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9983094	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
12	.9984903	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9984917	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.999099	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9991477	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9992099	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9992693	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9994785	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
19	.9995106	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9995232	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon384 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9841927	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9894522	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9919897	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9923404	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9949899	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9953771	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9955187	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.997581	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9980307	05May2009 Can402 Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9980544	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9981593	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9986796	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
13	.9989319	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9991305	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9991586	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9993339	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
17	.9995043	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9995312	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9996802	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9997756	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 402 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Canon402 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9416814	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9807268	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9935602	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9956382	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9956573	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9972619	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9974963	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
8	.9975241	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.998368	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9988732	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9990972	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9992339	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9995419	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9996132	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
15	.9996907	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9997065	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9997612	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9997751	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9998047	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9998509	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon402 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9879583	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9940402	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9951567	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9968852	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9969484	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9973746	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9978757	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
8	.9979647	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9981639	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9987934	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9989827	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9992765	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9996076	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.999621	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
15	.9996465	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9996909	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.999704	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9997203	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9997485	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9997585	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 402 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Canon402 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9724654	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9916643	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9928963	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9940581	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9956093	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9975846	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9975935	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9978968	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9979588	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9983578	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9985649	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9985839	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9985948	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9987707	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
15	.9987899	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9988514	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9990253	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9990393	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9991059	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9991497	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon402 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9576707	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9671435	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9870222	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9922625	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9928779	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.995212	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9956554	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9957405	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9966388	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9973975	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9974691	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9974869	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9977416	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9978334	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9981895	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.998239	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
17	.998286	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9984662	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9985342	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
20	.9987779	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 402 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Canon402 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.961668	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9731361	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9818427	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9896546	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9959874	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9962032	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9974914	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9975369	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9975737	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.997714	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9980255	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9981086	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9983113	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9986678	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.998717	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9987753	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9990513	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
18	.9993781	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9993961	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9994621	07May2009 HP199 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon402 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9642301	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9850928	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9914131	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9915672	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9938254	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9938451	31Mar2009 Kod17 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9943298	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.994342	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9943815	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9960637	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9968461	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9969186	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9974363	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9980295	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9980888	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9982662	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
17	.9984763	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9989733	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9990499	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9990816	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 492 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Canon492 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9715667	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9774136	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9834592	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9914221	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9934922	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9936091	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9940025	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9960837	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9960977	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9977224	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9981866	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9982983	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.998379	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9984227	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9985576	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9986151	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9987452	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9989573	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9990191	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9990631	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon492 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9709603	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.975721	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9812216	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9912081	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9927735	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9930193	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9931956	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9959422	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9980887	08May2009 HP200 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9980944	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9981025	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9981259	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9981971	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9983522	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9985299	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9987742	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9989555	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9990007	07May2009 HP201 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.999016	08May2009 Xer24 Ink Run2 Inkjet Mtd 750c15s; Dissertation Runs
20	.9990938	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs

Canon 492 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Canon492 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9745738	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9792655	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9927099	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9928978	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9952904	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9960723	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9961947	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.996285	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9964496	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9964934	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9972736	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9973939	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9974061	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9974535	03Apr2009 Can318a Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9975901	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9979314	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
17	.9980409	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9980431	31Mar2009 HP198 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9980654	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9981902	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon492 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9654264	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9884622	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9895202	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9915218	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9940451	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9944569	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9945383	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9948022	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9955441	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9956263	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9956353	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9959878	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.996123	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.99615	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9967203	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9968708	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9969742	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9969965	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9970327	08May2009 Xer24 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9976133	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 492 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Canon492 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9518889	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9734393	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9744445	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9794509	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.989783	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9901686	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9915676	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9921592	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9926438	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9931187	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9937013	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
12	.9941654	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9948002	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.99525	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.995325	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9955212	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.995577	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9957973	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9961107	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9965357	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon492 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9726071	05May2009 Can312 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9727419	03Apr2009 Can492 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9806918	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9931517	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9936512	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9938485	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9940446	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9942687	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9944112	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9945024	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9950244	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9951689	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9952736	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9955932	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9958169	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9960551	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9961379	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
18	.9971209	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9974154	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9977766	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 522 Ink Sample Run 1

Neat Ink Library

Unknown Spectrum: Canon522 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9695446	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9810948	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.983722	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9845344	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9848298	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9851482	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9853361	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9870667	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9874254	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9875359	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
11	.9905102	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9905115	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9917875	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9923171	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
15	.9923514	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9926789	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9927617	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9933738	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9940377	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9951906	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon522 Run1 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9601109	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9753023	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9786217	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9793805	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.979396	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9801881	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9809816	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9828361	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.983284	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
10	.9835134	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9871168	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9877027	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9890836	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9890956	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.989606	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
16	.9906343	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9908417	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9916129	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9936401	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9941471	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 522 Ink Sample Run 2

Neat Ink Library

Unknown Spectrum: Canon522 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9134917	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9373295	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9530678	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9538789	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9613202	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9647793	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9677929	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9693426	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
9	.9721569	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
10	.9809738	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9862558	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9873412	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9876723	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9898152	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.9903725	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.990591	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9920312	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9934791	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.993713	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.995169	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon522 Run2 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9219671	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9428362	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9430121	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9555677	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9611996	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9634108	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9660251	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
8	.9705219	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
9	.9711573	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9777729	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9825016	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9847956	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9853277	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9854445	31Mar2009 Xer13 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.989112	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9901032	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9924553	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9926667	05May2009 Xer244 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.992764	05May2009 Can522 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9934341	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

Canon 522 Ink Sample Run 3

Neat Ink Library

Unknown Spectrum: Canon522 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.8905773	31Mar2009 Kod22 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9869042	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9876094	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9886773	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9894598	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9897274	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9897548	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9904688	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9904695	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9906644	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9912227	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9912302	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.9922802	28Apr2009 Eps30 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9923579	28Apr2009 Eps90 Ink Inkjet Mtd 750c15s; Dissertation Runs
15	.9925465	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
16	.9931961	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9936467	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9936637	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
19	.9936981	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9943765	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

With D-Allose Mask

Unknown Spectrum: Canon522 Run3 Normalized.SPC

Hit #	Hit Quality	Memo Library Index
1	.9825734	05May2009 Can384 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
2	.9844693	28Apr2009 Eps156 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
3	.9855825	05May2009 Can282 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
4	.9865014	03Apr2009 Can318 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
5	.9872062	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
6	.9876031	28Apr2009 Eps123 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
7	.9886238	31Mar2009 Can306 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
8	.9896101	28Apr2009 Eps60 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
9	.9901488	31Mar2009 Can223 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
10	.9917952	31Mar2009 Eps84 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
11	.9919984	28Apr2009 Eps93 Run1 Inkjet Mtd 750c15s; Dissertation Runs
12	.9921246	05May2009 Can348 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
13	.992762	08May2009 Eps66 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
14	.9928555	31Mar2009 Eps33 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
15	.992867	31Mar2009 Oki04 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
16	.9931287	05May2009 Can327 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
17	.9935805	31Mar2009 HP205 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
18	.9936966	08May2009 Eps63 Ink Run3 Inkjet Mtd 750c15s; Dissertation Runs
19	.9941314	28Apr2009 Eps120 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs
20	.9944561	05May2009 Can217 Ink Run1 Inkjet Mtd 750c15s; Dissertation Runs

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