

FILED

OCT. 19 2012

4TH DISTRICT
STATE OF UTAH
UTAH COUNTY

IN THE FOURTH JUDICIAL DISTRICT COURT
IN AND FOR UTAH COUNTY, STATE OF UTAH

<p>COTT BEVERAGES INC,</p> <p>Petitioner,</p> <p>vs.</p> <p>AMERICANN CO-PACK INC, AUTOMATED PROCESS AND PACKING,</p> <p>Respondents.</p>	<p>RULING AND ORDER</p> <p>Case No. 100402774</p> <p>Judge Darold J. McDade Division #10</p>
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This matter came before the Court for Evidentiary Hearing on the Motion In Limine to Exclude the Report and Testimony of Respondent/Cross-Claimant Americann Co-Pack Inc.'s Expert, Gerald M. Laporte, and opposition thereto on September 24, 2012. Respondent, Americann Co-Pack Inc., was represented by counsel, Steven R. Skirvin. Respondent, Automated Process and Packing, was represented by George L. Chingas, Jr. After hearing the arguments of the parties, the Court took the pending motion in limine under advisement.

PROCEDURAL HISTORY

On August 13, 2010, Petitioner, Cott Beverages, Inc. ("Cott") filed an interpleader complaint with the Court to determine the security interest in Cott's secured creditor sale of assets previously owned by Daishin Co-Pack, LLC ("Daishin"). The excess funds from the creditor's sales have been interplead in this action until the Court makes a determination

regarding the rights to the money by Automated Process and Packaging, LLC, ("Autopropac") and Americann Co-Pack, Inc. ("Americann"). Autopropac claims a security interest in the money pursuant to a contract and security agreement ("Contract") signed by Daishin's officer, Gary Chlarson, on or about March 4, 2008. In his deposition, Mr. Chlarson testified that the signature was his and that he signed the document on the date stated in the document.

Americann, the successor in interest to Daishin, claims that Autopropac does not have a security interest in the money, because Mr. Chlarson post-dated his signature on the Contract, thereby invalidating Autopropac's claim. To support the claim that Mr. Chlarson post-dated his signature on the Contract, Americann retained a document examiner, Gerald M. Laporte ("Laporte").

Laporte conducted an examination of the signatures using gas chromatography-mass spectrometry chemical analysis ("GC/MS") and submitted his results to Americann on September 20, 2011. Laporte's examination stated that the signatures on pages 3 and 4 for the representative of Autopropac, dated February 15, 2008, were produced with blue non-ballpoint ink, and that the signatures on pages 3 (dated March 4, 2008) and 4 (dated February 15, 2008) for the representative of Daishin were produced with blue ballpoint ink. GC/MS was performed on the blue ballpoint ink to determine if the signature found on page 3 was executed on the purported date of March 4, 2008. Laporte concluded that it was highly probable that the ink used to execute the signature of the representative for Daishin on the third page of the document was not placed on the document until sometime after June, 2009. Autopropac submitted its Motion in Limine to Exclude on The Report and Testimony of Defendant/Cross-Claimant

Americann Co-Pack, Inc.'s Expert Gerald M. Laporte on March 14, 2012. Americann submitted its Opposition to Motion in Limine to Exclude on March 30, 2012. The matter came before the Court for Evidentiary Hearing and Oral Argument on September 24, 2012.

STANDARD OF REVIEW

Under Rule 702 of the Utah Rules of Evidence, the Court must consider several factors in a three step analysis for qualifying an expert witness and determining the reliability of the methodology underlying the testimony given.

Rule 702(a) Purported Expert Analysis

First, Under Rule 702 (a) the Court determines whether the expert testimony will be helpful in assisting the trier of fact to understand the evidence or to determine a fact in issue. Utah R. Evid. 702(a). Second, the court determines whether the proposed expert has the necessary skill, knowledge, experience, training or education to provide assistance to the trier of fact. Utah R. Evid. 702(a). The Utah Supreme Court held that the expert "testimony must simply comply with rule 702 by assisting the trier of fact in understanding evidence or determining a fact in issue." *State v. Schultz*, 58 P. 3d 879, 884 (2002). Under Rule 702, the key question is "whether on balance, the evidence will be helpful to the finder of fact." *State v. Larsen*, 865 P. 2d 1355, 1361 (Utah 1993). Further, "Helpfulness depends on whether the subject is within the knowledge or experience of the average individual." *Id.* at 1361. Additionally, the Utah Supreme Court interpreted Rule 702 to routinely allow "persons to testify as experts based on the totality of their qualifications and experience, and not on licensing or formal standards alone." *State v.*

Kelly, 1 P.3d 546, 550 (Utah 2000). However, the Utah Supreme Court held that “if an expert testifies as to scientific evidence that is based upon novel methods or techniques, a separate threshold reliability test must be met.” *State v. Rimmasch*, 775 P. 2d 388, 397-403 (Utah 1989). Finally, the Utah Supreme Court held that the *Rimmasch* inherent reliability standard applies only where there is a *plausible claim* that the expert testimony sought to be admitted is based on “novel scientific principles or techniques.” *Green v. Louder*, 29 P. 3d 638 (Utah 2001)(emphasis added).

Rule 702(b) Threshold Showing of Reliability Analysis

Under Rule 702(b) the court must determine whether a party has met its threshold burden to show: 1) the reliability of the principles and methods that form the basis for the expert’s testimony; 2) that the principles and methods are based upon sufficient facts or data; and 3) whether the principles and methods are reliably applied to the facts of the case. Utah R. Evid. 702(b). The Utah Court of Appeals held that the “threshold requires only a basic foundational showing of indicia of reliability for the testimony to be admissible, not that the opinion is undisputably correct.” *Gunn Hill Dairy Properties, LLC v. Los Angeles Dept. of Water & Power*, 2012 WL 163827, 33 (Utah App.)(quoting Utah R. Evid. 702 Advisory Committee note). Additionally, the Court held that the threshold requirement is low in straightforward cases, but “will vary depending on the complexity of the case.” *Id.* at 32. After an initial showing of indicia of reliability, “it is up to the trier of fact to determine the ultimate reliability of the evidence.” *Id.* Other considerations that are relevant in the courts determination of a threshold showing

of reliability include the policy considerations shaping the courts gatekeeper function. The advisory committee notes state that, "Contrary or inconsistent opinions may simultaneously meet the threshold; it is for the fact finder to reconcile-or choose between-the different opinions."

Utah R. Evid. 702 advisory committee note.

Daubert Standard

In *Daubert*, the Supreme Court charged trial judges with the responsibility of acting as gatekeepers to exclude unreliable expert testimony. *Daubert v. Merrell Dow Pharmaceutical, Inc.* 509 U.S. 579 (1993). *Daubert* set forth a non-exclusive checklist for trial courts to use in assessing the reliability of scientific expert testimony. The specific factors explicated by the *Daubert* Court are: 1) whether the expert's technique or theory can be or has been tested-that is, whether the expert's theory can be challenged in some objective sense, or whether it is instead simply a subjective, conclusory approach that cannot reasonably be assessed for reliability; 2) whether the technique or theory has been subject to peer review and publication; 3) the known or potential rate of error of the technique or theory when applied; 4) the existence and maintenance of standards and controls; and 5) whether the technique or theory has been generally accepted in the scientific community. *Id.* However, the Supreme Court held that a trial judge has "considerable leeway in deciding in a particular case how to go about determining whether particular expert testimony is reliable." *Kumho Tire Co v. Carmichael*, 119 S. Ct. 1167 (1999). Finally, the *Daubert* Court held that "Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means

of attacking shaky but admissible evidence.” 509 U.S. at 595.

Rule 702© Judicial Notice of Reliability if Generally Accepted by Relevant Scientific Community

Under Rule 702© the court may take judicial notice of the threshold reliability analysis under subsection (b) if the principles and methods underlying the testimony are generally accepted by the relevant scientific community. Utah R. Evid. 702©. The Utah Supreme Court held that “When expert testimony does not require evaluation under the inherent reliability test announced in *Rimmasch*, we evaluate the testimony according to the standard set forth in *State v. Clayton*.” *Balderas v. Stark*, 138 P. 3d 75 (2006). The Utah Supreme Court held that “Once the expert is qualified by the court, the witness may base his opinion on reports, writings, or observations not in evidence which were made or compiled by others, so long as they are of a type reasonably relied upon by experts in that particular field. The opposing party may challenge the suitability or reliability of such materials on cross-examination, but such challenge goes to the weight to be given the testimony, not to its admissibility.” *State v. Clayton*, 646 P. 2d 723 (Utah 1982).

RULING

The Court finds that the Motion In Limine to Exclude the Report and Testimony of Respondent/Cross-Claimant Americann Co-Pack Inc.’s Expert should be denied, and finds that Laporte is qualified as an expert with the necessary skill, knowledge, experience, training, and education to provide assistance to the trier of fact, and that his testimony will be helpful to the trier of fact under Utah R. Evid. 702(a).

Laporte is extremely qualified to testify in the general and specific areas of forensic science and inkdating methodology. Laporte is arguably one of the foremost researchers, presenters, educators, and expert witnesses in the field of forensic science in general and in the area of ink-dating methodology in particular. Laporte's job, career, and educational qualifications are unsurpassed. He received his Masters of Science in Forensic Science from the University of Birmingham in 1994, followed by a job as Guest Forensic Lecturer for the University for two years. From January 1993 to July 1996 he served as an Autopsy Assistant/Forensic Technician for the Jefferson County/Medical Examiner Office in Birmingham, Alabama. From January 1999 to November 1999 he worked as a forensic chemist for the Anne Arundel County Police Department Crime Lab. From November 1999 to April of 2001 he worked as a forensic scientist for the Virginia Division of Forensic Science. From August 2008 to January 2009 he served as an adjunct Professor of Forensic Science at Marymount University. From April 2001 to March 2009 he served as the Chief Research Forensic Chemist, Senior Document Analyst, and Document Analyst for the United States Secret Service. From March 2009 to the present he is employed as the Forensic Policy Program Manager and Acting Associate Director of the Department of Justice's Forensic Department. Additionally, Laporte is or has been a member of organizations/policy working groups devoted to the standardization and improvement of the forensic sciences, including membership in the American Society of Questioned Document Examiners, and International Collaboration for Ink Dating, and Co-Chair of the Standards, Practices, and Protocols Inter-Agency Working Group.

Laporte's knowledge, training and skill in the area of forensic science and ink dating methodology is also unsurpassed. He has given 36 lectures and instructional courses to County, State, and federal law enforcement officers and forensic technicians. He has provided training for the United States Secret Service, the Federal Bureau of Investigation, the Department of Justice, numerous workshops for University curriculum, and international organizations. Many of the instructional courses have focused on the specific area of Ink and Paper chemistry and Forensic Examination. Additionally, he has given at least 46 professional presentations before the leading forensic working groups and forensic organizations, law enforcement specialists, and private research groups. Additionally, he has published at least 15 peer reviewed scientific articles in the standard and foremost journals of the forensic science field, including an article titled, "The Identification of 2-Phenoxyethanol in Ballpoint Inks Using Gas Chromatography/Mass Spectrometry". Further, he has authored a book review in the Journal of Forensic Identification titled, "Advances in the Forensic Analysis and Dating of Writing Ink." Additionally, he has published and presented over 15 times on the topic of analyzing PE using GC/MS for dating inks. Finally, he has testified approximately 60 times on issues related to forensic document examinations in State, Federal, and International Courts. The majority of which have involved the ink-dating method of GC/MS.

Laporte is extremely qualified and is arguably one of the foremost experts in the specific area of GC/MS and his educational, career, and professional qualifications support this conclusion. Because of his experience, skill, and knowledge in the specific area of GC/MS

inkdating his testimony is not only helpful, but necessary. Therefore, the Court finds that Laporte satisfies the requirements under Rule 702(a).

The Court Takes Judicial Notice of Method

Under Rule 702©, the Court takes judicial notice of the threshold reliability of Laporte's GC/MS ink-dating method because the principles and methods underlying the testimony are generally accepted by the relevant scientific community. Utah R. Evid. 702©. The Supreme Court held in the context of conducting *Daubert* hearings a trial judge has discretion "both to avoid unnecessary 'reliability' proceedings in ordinary cases where the reliability of an expert's methods is properly taken for granted, and to require appropriate proceedings in the less usual or more complex cases where cause for questioning the expert's reliability arises." *Kumho Tire Co. v. Carmichael*, 119 S. Ct. 1167, 1176 (1999). Further, the Court finds that the *Rimmasch* standard does not apply because GC/MS analysis is not a novel scientific technique. Here, GC/MS ink-dating differs from artificial aging that Autopropac asserts is not generally accepted in the relevant scientific community and the research to support this however is somewhat inconclusive but tends to suggest that artificial aging is unreliable and not generally accepted but GC/MS and the method of measuring burned off 2-Phenoxyethanol is generally accepted in the relevant scientific community as demonstrated by the extensive published research conducted in this area (see section III), the acceptance of this method in Utah, and other state and federal cases.

After qualifying Laporte as one of the foremost experts in the area of using GC/MS on

the volatile substance PE, his testimony and opinion should be granted substantial deference. Laporte testifies that this method is routinely used in forensic laboratories throughout the world, has a variety of applications, and that to the best of his expert knowledge, the chemical analysis of GC/MS has never been excluded or held unreliable by any court in the world. LaPorte Decl. at ¶ 10.

In Utah, the use of and reliability of GC/MS for chemical analysis and comparison has been codified. Utah Code Ann. 34-38-6(6)(a) states, "Testing of a sample shall conform to scientifically accepted analytical methods and procedures. (b) Before a test of a sample may be considered a failed test and used as a basis for an action by an employer under Section 34-38-8, testing of the sample shall include a confirmation test: (I) by gas chromatography, gas chromatography-mass spectroscopy, or other comparably reliable analytical method." Utah Code Ann. 34-38-6(6)(a) and Utah Code Ann. 34-38-(6)(b)(I). Additionally, the Utah Court of Appeals held that with GC/MS there is "no novel scientific principles or techniques involved." *State v. Kemp*, 2002 WL 466553 *1 (Utah App.). The GC/MS analysis was held reliable in *Dowland v. Lyman Products for Shooters*, 642 P.2d 380, 380-81 (Utah 1982). Finally, the Supreme Court of the United States has held recently that "Gas chromatography is a widely used scientific method of quantitatively analyzing the constituents of a mixture." *Bullcoming v. New Mexico*, 131 S. Ct. 2705, 2711 (2011).

The Court finds based on the reliability of the method and the evidence that GC/MS analysis is widely used, and has been admitted as reliable evidence in courts, that Americann has

satisfied the requirements under Rule 702© and takes judicial notice of the method as generally accepted in the relevant scientific community. However, although the Court's inquiry can now conclude based on the above, a further reliability analysis will also be undertaken under Rule 702(b).

GC/MS Meets the Threshold Reliability

The standard that Laporte's method must meet is an initial showing of an indicia of reliability. GC/MS ink-dating differs from artificial aging that Autopropac asserts is not generally accepted in the relevant scientific community. However, the method used in this case is not artificial aging but the dynamic approach to ink-dating by GS/MS analysis and the Court finds its reliability is demonstrated through extensive peer reviewed research and literature and that the method has been reliably applied to the facts of this case.

In a research article determining the reliability of the GC/MS method on PE, Laporte and his co-authors state that, "Volatile analysis of ballpoint inks, using GC/MS, for determining the age of inks on paper [have] been studied and reviewed in the literature for more than a decade." Gerald M. Laporte et al., *The Identification of 2-Phenoxyethanol in Ballpoint Inks Using Gas Chromatography/Mass Spectrometry-Relevance to Ink Dating*, J. Forensic Sci., 49(1) (2004). Additionally, the authors state that "Chemical analysis of writing inks by means of thin layer chromatography (TLC) is viewed by the scientific community as a valid procedure to compare inks." *Id.* The research determined that PE was identified in 85% and 83% of black and blue ink, this finding was used to determine how often PE occurs in ink formulations. The thrust of the

article is that PE is a volatile organic compound that serves as a scientifically valid and reliable compound to apply the methods of GC/MS to determine solvent loss percentages. Additionally, in another study the basic methodology of GC/MS is described as being "used to compare non-colorant ingredients in inks that are not detectable when analyzed with TLC, such as resins, volatile, and semi-volatile components." JH Bugler et al., *Characterization of ballpoint inks by thermal desorption and gas chromatography-mass spectrometry*, J. Forensic Sci., 50(5) (2005). Further and extensive research supports Laporte's method of burning off the particular volatile component known as 2-phenoxyethanol. These studies suggest that PE as a solvent dissolves and evaporates in the twenty four months after the ink has been placed on a document. The research is conclusive that after twenty four months PE no longer evaporates at a significant or measurable rate. Valery N. Aginsky, *Current Methods for dating Documents - Which is Best?* Proceedings of 49th Annual Meeting of the American Academy of Forensic Sciences, (1997)(See also, Valery N. Aginsky, *Measuring Ink Extractability as a Function of Age - Why the relative Aging Approach is Unreliable and Why it is more Correct to Measure Ink Volatile Components than Dyes*. Int. J of Forensic Document Examiners, 4(3):214-230 (1998); Valery N. Aginsky, *Ink Dating Using a Solvent Loss Ratio Method*. Proceedings of the 60th Annual Conference for the American Society of Questioned Document Examiners, August 14-19 (2002); JH Bugler et al., *Age Determination of ballpoint ink by thermal desorption and gas chromatography-mass spectrometry*, J. Forensic Sci., 50(5) (2005)).

Additionally, the method of burning off PE at temperature of 70 degrees Celsius to

compare with an unheated sample to determine the evaporation and concentration rate of burned off PE is supported by extensive research conducted by laboratories all over the world, including the United States, Russia, Germany, Canada, and Sweden. Further, the extensive research and validation studies conducted on this particular method shows a that there is a significant decrease in the level of PE by more than 25% after the questioned sample is heated indicates that the ink is less than two years old. Jan Andrasko, *Some Examples of Applications of a Microthermal Desorption Device in the Forensic Laboratory*. J. Forensic Sci, 54(5) (2009); Valery N. Aginsky, *Dating and characterizing writing, stamp pad and jet printer inks by gas chromatography/mass spectrometry*. Int J Forensic Doc Exam, 2(2)103-16 (1996); L. Brazeau & M. Gaudreau, *Ballpoint Pen Inks: The Quantitative Analysis of Ink Solvents on Paper by Solid-Phase Microextraction*. J Forensic Sci, 52(1):209-215 (2007). Additionally, as pertains to the error rate of the method, it is well settled in this area that the 24 month threshold is the most conservative and correct benchmark, as no research indicates that any amount of PE remains after that date, reducing the error rate to nearly zero. Gerald M. Laporte et al., *The Identification of 2-Phenoxyethanol in Ballpoint Inks Using Gas Chromatography/Mass Spectrometry*. J Forensic Sci, 49 (1) (2007).

Laporte starts the method by conducting a physical examination by visual examination and by Microscopic examination using Stereomicroscopes, of the questioned document to determine how it was produced, if there are any extraordinary observations that might serve to date the document, and a physical examination and classification of the ink, according to the

ASTM International Standard Guide E 1422-05. *Standard Guide for Test Methods for Forensic Writing Ink Comparison*. ASTM International (2005). Second, Laporte conducts Optical Examinations using the Video Spectral Comparator to assess Ultraviolet, infrared reflectance, and infrared luminescence characteristics of the writing inks and paper. Filtered light examinations are used to detect the presence of colorants and other materials that might affect the manner in which an ink absorbs, reflects, and transmits light. Third, Laporte conducts Chemical Examinations of the writing inks. The first examination he used is not at issue in this case but is referred to as Thin Layer Chromatography ("TLC"). TLC involves using solvent to extract ink or paper components and separate them, so that they can be compared with each other to determine if they match, and if the combination of components is identifiable by manufacturer and if the date of introduction is known. Laporte determined based on TLC that the blue ballpoint inks used for the Daishin signatures matched and that the blue non-ballpoint inks used for the Autopropac signatures matched. Fourth, Laporte conducted a GC/MS analysis of PE to determine if the ink entries were authentic. GC/MS was performed on the blue ballpoint ink to determine if the Daishin signature found on page 3 was executed on the purported date of March, 4, 2008. During the initial testing, high levels of PE were found relative to the levels that are typically not observed in inks that are more than two years old. Laporte then conducted additional testing for reproducibility and reduction of error, and found that the PE level decreased an average of 28% when the questioned ink samples were heated. Then, GC/MS analysis was performed on the Daishin signatures on page 3 and 4 and found that the levels of PE in both signatures were


determined to be comparable. A second analysis was performed nearly 90 days after the first examination. Laporte found that the level of PE had continued to decrease significantly indicating that the ink is still in an ongoing aging process. Laporte concluded based on his application of the method of GC/MS on PE, that it was highly probable that the ink used to execute the signature of the representative for Daishin on page 3 was not placed on the document until sometime after June 2009.

Finally, Laporte's conclusion was couched in reliable and scientifically valid terminology, stating that it was "highly probable" based on the error rate in the evaporation rates of PE studies and that the signature was not placed until after June 2009, well within the 24 month time frame that has been found to be a reliable threshold for reducing error rates and false positives.

ORDER

Based upon the above ruling, the Court hereby ORDERS that the Motion In Limine to Exclude the Report and Testimony of Respondent/Cross-Claimant Americann Co-Pack Inc.'s Expert shall be, and it is, hereby DENIED, and thus determines that Laporte is qualified as an expert in accordance with Utah R. Evid. 702(a).

DATED this 19 day of October, 2012.


JUDGE DAROLD J. MCDADE

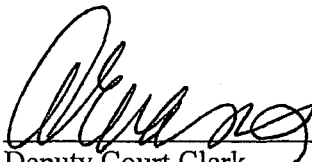


MAILING CERTIFICATE

I hereby certify that true copies of the foregoing Ruling and Order were mailed, postage prepaid, on the 19 day of October, 2012, to the following at the addresses indicated, to wit:

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