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UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

Richard L. Chang,

Plaintiff;

v.

Biosuccess Biotech Co. Ltd., et al.

Defendants.

Biosuccess Biotech, Co. Ltd.,

Counterclaimant,

v.

Richard L. Chang et al.,

Counterclaim Defendants.

Case No. CV13-01340 JAK (ANx)

PLAINTIFF'S REPLY ON MOTION *IN LIMINE* NO. 1 TO EXCLUDE THE EXPERT REPORT AND TESTIMONY OF LARRY STEWART

Judge: Hon. John A. Kronstadt
Place: Courtroom 750
Date: June 2, 2014
Time: 3:00 p.m.

Trial: June 17, 2014

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INTRODUCTION[1]

Under *Daubert* and *Kumho Tire* the Court cannot take Stewart's word that the evidence he offers is scientific or that he is an expert. Before the redrafting of the Federal Rules of Evidence, federal courts used to admit expert evidence primarily based on whether the testing or procedures the expert used to get his results were "accepted" by the experts' peers; essentially, if other experts in the same field used the same test, for the same purpose, the court accepted this endorsement, and the expert's evidence was considered qualified to advise the trier of fact in that particular case.[2] *Daubert* and *Kumho Tire* changed this explicitly, noting that the endorsement of an expert's methods by his peers was only one of a non-exclusive and formidable list of other criteria for determining if the test, and therefore the data it produced, and the conclusions the expert drew are admissible.[3] The Court does not now take anyone's word for it, *i.e.* that the evidence being proffered is expert, but forms its own conclusion based on the *Daubert* criteria.

Here, the Court is being offered "scientific" evidence from the field of forensic chemistry.[4] The Court is being told that these chemists can tell us certain

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[1] Plaintiff apologizes for exceeding the 5-page limit, and asks for administrative relief by the Court for this brief, whose added pages are necessary to clearly and completely correct the misinformation in Biosuccess' brief and declaration in opposition with a full statement of the forensic science of ink dating, and Stewart's misapplication and misuse of it here.

[2] *Daubert v. Merrell Dow Pharm., Inc*., 509 U.S. 579 (1993) (Federal Rule of Evidence 702 supersedes the "general acceptance" test of *Frye v. Kelly*, 293 F. 1013, 1014 (1923), although includes it among *Daubert* criteria. *Id*., 593-95.)

[3] *Id*., at 594-95; *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 147-48 (1999) (*Daubert* gatekeeping under FEDERAL RULE OF EVIDENCE 702 applies to all scientific, technical or other specialized matters.)

[4] As opposed to, for example, the non-expert evidence on the age of the ink offered by the parties. Or, on the other hand, less valid, and less reliable "technical"

things about this ink on this paper, specifically what it is made of, and the current qualities of those ingredients that indicate its age. Therefore, the Court must require a showing that chemistry, and in particular the procedures from chemistry used here by our chemists, qualify as scientific. Stewart, properly challenged on Plaintiff's motion for a *Daubert* hearing, has made no showing here, and his testimony, report, conclusions, and opinions must be excluded.

I. FORENSIC INK ANALYSIS AND DATING IS A SPECIALIZED SCIENTIFIC FIELD, BUT STEWART IS NOT AN EXPERT IN THE FIELD.

Stewart is not an expert in forensic chemistry. That forensic chemistry is an empirical field is not in question.[5] That forensic chemistry used to analyze questioned documents, and particularly, analyze the properties of ink to determine its age on a questioned document, is also not in question.[6] That Stewart has the qualifications required of a forensic chemist to testify at an expert level in federal courts is in question. And he does not. His declaration submitted to answer the challenges raised by Plaintiff's expert and Plaintiff's motion *in limine* definitively shows that Stewart is not an expert and his work here is not expert-quality.[7]

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evidence parties might have proffered, the results of a lie detector as the parties were questioned on when the document was signed.

[5] Motion *in Limine* #1, (Docket #150) (May 5, 2014) (*Mot.*).

[6] *Compare Ceglia v. Zuckerberg*, 2013 U.S. Dist. LEXIS 45500, at *76-86 (W. D. N.Y., Mar. 26, 2013). Where Plaintiff cites to this unpublished case it is with caution and only for the limited narrow illustrations stated, because Dr. Aginsky in that case was not a retained expert, and the District Court relied on his deposition testimony discussing the SLRM method. *See Ceglia,* 2013 U.S. Dist. LEXIS, at *83-84, 93-94. The *Ceglia* Court appears to have confused (as Stewart does) Dr. Aginsky's testimony regarding the status of peer-review and outside proficiency testing of the SLRM (used by a different expert in that case, LaPorte.) *Id*. at *83.

[7] References to the Declaration of Larry Stewart in Support of Defendants' Opposition to Plaintiff's Motion *in Limine* No. 1 (May 12, 2014) (Docket #172-1) are styled here as *Stewart Decl*.

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A. A Forensic Practitioner who Does Not Adhere to the Scientific Method is Unqualified to give Expert Evidence Concerning the Forensic Science at Used in a Case.

"Some ostensibly scientific fields adopt appreciably less rigorous standards than others. When this occurs, courts should exclude practitioners of these arts."[8] This is also true where the work of a practitioner in a sufficiently rigorous scientific field are not themselves adhering to the rigorous standards of their field.

> Little of what goes on in forensic science resembles the classical description of how science develops theories, tests hypotheses, and revises its ideas and understandings. That is partly because the scientific method is a description of pure, or basic, science (knowledge building), while forensic science is an applied science. Ideally, forensic science would apply the best knowledge from basic research that has employed the scientific method.[9]

The difference between, and the danger arising from, a scientist qualified to give expert scientific evidence, and a mere practitioner of forensic science who is unqualified to give expert scientific evidence applies here. "The failure of scientists in general, and of forensic scientists in particular, to understand how knowledge is acquired and applied, leads to abuse."[10] Scientific research develops, publishes, peer reviews, and tests the scientific standards to be followed by forensic scientists.[11] If the forensic practitioner does not follow the scientific

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[8] David L. Faigman, et al., MODERN SCIENTIFIC EVIDENCE: THE LAW AND SCIENCE OF EXPERT TESTIMONY, n. 240 (2d ed. 2002).

[9] David L. Faigman, Michael J. Saks, & Edward K. Cheng, "Science and the Scientific Method," MODERN SCIENTIFIC EVIDENCE, FORENSIC SCIENCE 30, § 1:18 (Student ed. 2008) (*Faigman, et al*.).

[10] Faigman, et al., at 14, §1:20.

[11] *See id*., at 18-20, §§ 1:23 – 24 (Everything in this process is essential to showing the reliability, validity, precision, and accuracy of a forensic method in a particular field and in a particular inquiry).

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standard for a method in forensic inquiry, his inquiry is flawed; as a result, his data are corrupted by error, and his conclusions are dangerous and misleading.[12]

B. Stewart is an Unqualified Forensic Practitioner and his Evidence Unreliable Because He Did Not Adhere to the Scientific Standards For the Forensic Analysis He Performed in this Case.

Stewart admits that he does not adhere to the scientific standards of forensic ink analysis and document dating. In fact, he does not even know that there are such standards: he is under the impression that "[t]here are no 'scientific standard' outlining requirements for ink age testing, so best practices dictate the processes utilized."[13] This is not true. In 1985, as Stewart claims, he helped developed specific procedure for using gas chromatography-mass spectrometry in ink-dating analysis, to make sure the procedure is used correctly in one case.[14] Gas chromatography-mass spectrometry (*GC-MS*) is a procedure of analytical and forensic chemistry for analyzing an unknown specimen by separating and identifying its constituent substances.[15] Thirty years ago, Stewart's work was as very preliminary study in use of GC-MS in the field of questioned documents. Since then, the science has far outpaced this work. Dr. Aginsky developed the "two major approaches used for dating ink on documents – ink aging testing" in forensic examination of questioned documents.[16]

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[12] *See id*., at 23, §1:26 ("Techniques exist by means of which error may be measured and managed, but error is never entirely absent.")

[13] Stewart Decl., ¶ 16.

[14] Stewart Decl., ¶ 7; *id.*, Ex. A, at p. 10 (Docket #172-2) (Stewart C.V., publications, listing L.F. Stewart, *Artificial Aging of Documents*, 27 J. FORENSIC SCI., [no page] (1982)) *and* Exhibit B, at p. 17, 34 (Docket #172-2) (Citing L.F. Stewart, *Artificial Aging of Documents*, 30 J. FORENSIC SCI., 405-11 (1985)).

[15] Aginsky Expert Report, at internal pp. 6-7, Decl. Christopher Sargent Supp. Mot. in Limine #1, Ex. 1 (May 5, 2014) (Docket # 157-1) (*Aginsky Report*).

[16] *Id*.; *see also* Stewart Decl., Ex. B, at p. 17, 28.

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This is the science: ballpoint ink is a chemical compound of a "carrier (vehicle)" and "colorants (dies, pigments) on paper. The ingredients of the carrier in oil-based[17] ballpoint ink are solvents, which are used to dissolve the colorants into solution (producing a colored liquid) and resins to thicken the ink (a colored liquid of a particular density), as well as other minor ingredients specific to their manufacture.[18] The ingredients of a drying ink change over time in a consistent and measurable way, forming the basis for determining the age of ink on paper; much as carbon-14 in dead organic organisms decreases over time in a consistent and measurable amount, forming the basis for the scientific standard of carbon-dating to determine the age of an organic fossil.

These are the scientific principles which organize ink aging by "measuring the gradual disappearance with time of the solvents contained in ink on paper," which Stewart claims to have pioneered by setting down scientific standards for doing so using gas chromatography-mass spectrometry.[19] Since 1985, scientists found Stewart's work useful in produced reliable, valid, accurate, and precise results under certain laboratory conditions and performed in a specific way: the

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[17] *Compare* paints: the carrier of watercolor is water, the carrier of oil paint is oil, the carrier of classical tempera is egg; and the carrier of modern "tempera" is glue.

[18] Stewart Decl., Ex. B, at pp. 16-17.

[19] *Id*.

"procedure,"[20] and have also validated other tests using GC-MS procedures for its use in forensic ink dating.[21]

One parallel development was the use of different forensic procedures, specifically thin-layer chromatography, for dating inks to corroborate the results of the Stewart method. Dr. Aginsky notes that the method of thin-layer chromatography can be used to analyze another (non-solvent) ingredient of ink: color/dye, and specifically, to identify what dye was used in the ink, and whether it was even being used by ink manufacturers at the time the ink was purportedly laid down on the questioned document, that is, when the pen was put to paper, producing the exemplar being examined.[22] Biosuccess' argument to the contrary is

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[20] Stewart Decl., Ex. B, at p. 17 (Docket #172-2) (Literature review presented by V.N. Aginsky, Current Methods for Dating Ink on Documents, 60th Annual Conference of the American Society of Questioned Document Examiners (Sept. 15-20, 2002), noting work by Aginsky discussing use of GC/MS in SLRM analysis exemplars with water-based (rollerball) inks, porous tip pen inks, stamp pad inks, and jet printer inks, referencing V.N. Aginsky, *Dating and Characterizing Writing, Stamp Pad and Jet Printer Inks by Gas Chromatography/Mass Spectrometry*, 2 INT'L J. FORENSIC DOC. EXAMINERS 103-15 (1996)).

[21] Not least, the SET test developed and used by Dr. Aginsky.

[22] Stewart Decl., Ex. B, at p. 18; *see Ceglia*, 2013 U.S. Dist. LEXIS, at *85 (Cited only for SLRM's to SET's difference from TLC: SLRM uses GC/MS to examine a different "ingredient" in ink, that is, it is "used to determine a specific ink's age according to the ink's vehicle components, including volatile solvents, resins, and **other noncolored ink components**." [Emphasis added.])

This **may** be the "corroborating principle" Stewart and Biosuccess' counsel attempt to use to defend Stewart's comparison of the questioned exemplar signature to another ink "of a known age" on the questioned document. *See* Opp. Mot. *in Limine* #1 at 4:5-11) (Docket #172) (May 12, 2014)(*Opp.*) Stewart Decl., ¶ 13. Stewart's approach was scientifically invalid for a number of reasons, most critically as to the apples and oranges criticism, and for an additional reason. This reason is that Stewart confirms that at no point was Stewart asked to perform blind forensic analysis which is a critical aspect of empirical analysis, and indeed, he was specifically fed and relied upon so-called empirical "facts." Stewart Decl., ¶ 13 ("I utilized an ink that was presented to me as not being in dispute."). Where

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simply wrong on the science and wrong on the law of admissible scientific evidence. Biosuccess argues that Dr. Aginsky performed this corroborating thin-layer chromatography test and learned the likely manufacture of the ink, and whether it was available in both the earlier date from which Biosuccess claims the exemplar dates, and the later date Plaintiff argues.[23] Biosuccess is wrong in asserting this is "unsurprising[24] but *it **is not** informative to the question presented*."[25] As Dr. Aginsky notes, TLC testing is the peer-reviewed, validated, and reliable way to corroborate an ink aging test in which the component of the exemplar examined is the PE component in the ink solvent: "[b]ecause TLC and GC/MC each provides only partial information regarding the composition of writing ink, the two methods are often used in combination."[26]

There are thus undisputedly specifically defined and authoritatively vetted scientific standards for estimating the age of an ink exemplar using forensic testing, without which the forensic analysis is simply wrong. Just as not everyone knows how to carbon-date a fossil, by using the scientific procedures correctly, not

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empirical information that is a "legitimate part of the technical problem" is fed to the forensic examiner by the parties, the value of analysis is further diminished. Faigman et. al., at 392, § 4:39, n.1.

[23] Opp., at 9:4-13.

[24] " . . . [U]nsurprising [to Stewart, who did not perform the test and does not explain the basis for this opinion]. . . ." *Id.*; Stewart Decl. ¶ 20, lines 24-28 ("***I have no basis*** to take issue with such a result; I find it to be unsurprising but also not informative to the question presented." [Emphasis added]).

[25] Opp., at 9:11-13.

[26] *See, e.g.*, *Ceglia*, 2013 U.S. Dist. LEXIS, at * 85 (Illustrating that the *correct* use of two versions of ink-dating tests, in that case SLRM and TLC, each of which examines a different component in ink, can be complementary to, and corroborative of, each other. Again, SLRM has not been subjected to outside proficiency testing or peer review.).

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everyone knows how to date an ink stroke on paper, and Stewart either does not or he has forgotten.

C. Stewart Does Not Know the Difference between the SET and SLRM tests for Dating an Ink Exemplar by Forensic Aging.

Stewart was under the impression he correctly used a forensic ink-aging technique developed by Dr. Aginsky, the Solvent Loss Ratio Method (*SLRM*). The SLRM method by itself is unvalidated for ink dating through ink aging. Stewart cited inapposite scientific authority for "validation" of SLRM.[27] The paper attached as Exhibit B to his declaration is not a peer-reviewed academic article, but a conference presentation.[28] Additionally, the portion of the paper cited by Stewart does not refer to the SLRM test (although he thinks it does[29]). That portion refers to the validated SET method, which Dr. Aginsky did use, and rely upon, in addition to SLRM, and has been, as Dr. Aginsky notes, validated by peer review and outside proficiency testing.[30] The only relevant portion of that 2002 presentation is page 2 where Dr. Aginsky discusses methods "the ink dating method that evaluates decrease in the evaporation rate of ink volatile components as a function of the ink age," which later as called the Solvent Loss Ratio Method (SLRM). Stewart has confused his forensic tests or he is trying to mislead the court.

One consequence of Biosuccess' consulting an unqualified forensic practitioner is that it does not understand the ink-aging methodology its "expert"

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[27] Stewart Decl., ¶ 15, and at Ex, B (cited to in Stewart Decl. to internal page 13, para. 5).

[28] Stewart Decl., at Ex., B, at p. 17 (internal p. 2.)

[29] *Id*., at ¶¶ 6, 15.

[30] PE is an organic solvent, 2-phenoxyethanol, used for manufacturing the overwhelming majority (more than 85%) of ballpoint inks. Stewart Decl., Ex. B at p. 28 (internal page 13); Aginsky Report, p. 7, n. 6. "SET" is the name for the validated, reliable ink aging technique ("Sequential Extraction Technique") which is performed on that solvent, as by Plaintiff's expert Dr. Aginsky. *Id*., at p. 8.

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used, and that his results contradict its argument. Stewart used a test which if correctly done, may show whether a questioned ink exemplar was created within six months of testing.[31] Even if Stewart correctly performed SLRM, and even if that test were validated as required to be admissible, the test he did on February 13, 2014, and the result he obtained and his opinion based on that result, is that the signature was less than two years old on February 13, 2014 (created no later than February 2012).[32] This is actually contradictory Biosuccess' position: that the exemplar was created in August 2011.

This misinformation and confusion, given to the court through Biosuccess in reliance on Stewart, even in the *Daubert* motion examining whether Stewart is qualified to give expert evidence, is just one reason why it is critical to exclude Stewart's evidence and testimony from this matter at this time.

D. The Quality of Stewart's Results Was Also Compromised By the Poor Technique He Used in Performing SLRM.

Dr. Aginsky also noted that the way in which Stewart performed his forensic analysis was "methodologically unsound." Stewart's declaration confirms Dr. Aginsky was right about Stewart.

Stewart asserts, for example, that making a comparison between two differently-composed inks is nonetheless a meaningful comparison, when it is specifically *not* forensically meaningful in the context of this test. SET and SLRM explicitly rely on comparing the results of the test on an unknown ink to the results compiled from known inks of the same composition, because inks with different compositions produce different results in those tests. As noted above and in Dr. Aginsky's Report, ink aging techniques examine remnants of the volatile ingredients (solvent), in an ink specimen. Different manufactures of ink use

[31] Stewart Decl., Ex. B, at p. 2.

[32] Mot., at 9:3-25.

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different "carriers (vehicles)" that differently affect the rates at which inks age on paper. If anything, Stewart's misuse of the test demonstrates that he does not understand the test or its purpose in ink-dating.

Stewart also reveals he does not know what a "sample" is in the context of ink aging techniques (or chemistry).[33] He presumes it refers to the number of times he conducted a test. Whether for SET or SLRM ink-aging testing, one correct procedure for preparing a sample of the ink exemplar for testing is the bore sampling.[34] For ink-aging testing, there are published recommendations on the number of bores, in the form of plugs, which are taken from ink strokes and where and how they are taken.[35] Among other problems, Stewart tested four vials, each containing a combined 10 plugs/samples (this itself is not the proper methodology for the test).[36] Sampling does not refer to the number of times one procedure of a multi-part protocol is performed, and Stewart shows he does not know this basic scientific term, and did not follow the right procedure in any event.

In addition, Stewart misunderstands what Dr. Aginsky means when he noted that Stewart only obtained one "result." Getting multiple results does not refer to the measurements taken averaging multiple runs of the GC-MS, as Stewart seems

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[33] Stewart Decl., ¶ 17.

[34] Aginsky Report., p. 5-6 (procedures for samples for TLC); 7-8 (procedures for samples for SET; *compare* Stewart Decl., at Exhibit D, L. Brazeau, et al., *Ballpoint Pen Inks: The Quantitative Analysis of Ink Solvents on Paper by Solid-Phase Microextraction*, 52 J. FORENSIC SCI. 209-15 (2007), at Abstract, and pp. 209-212 That article by Brazeau et al., did not produce or publish any experimental data from their study. Because their experiment has yet to be substantiated with experimental data, it is too early to rely on this method in casework. *Id.*

[35] *Compare* Aginsky Report., p. 5-6; 7-8, and n.7; the next paragraph discusses further steps to prepare samples for SLRM testing.

[36] *Id*.

to believe.[37] SLRM is a *comparative* analysis using GC-MS: that is, two sample micro-plugs are taken from adjacent parts of an ink line, similar in thickness, appearance and arrangement. [38] One sample is heated, simulating, under laboratory conditions, one effect of ink "aging": evaporation of the solvent.[39] The other is left "as-is."[40] The amount of PE in both the artificially "aged" and "as-is" are "read" using the GC-MS machine, and *the amounts are compared* using Dr. Aginsky's *solvent loss ratio equation* for determining the rate of aging.[41] Then, the rate of aging calculated by this equation is compared to threshold values to determine the time frame within which the questioned exemplar was written.[42]

Dr. Aginsky determined that Stewart only performed his error-riddled, arbitrarily/ineptly modified version of SLRM once, on one heated ink sample, which gave him his one result.[43] Stewart's confused declaration concedes this, noting that his "fourth test . . . involved me heating the questioned ink, re-tested it and then determining whether the levels of PE detected had significantly changed. ***For that fourth test, I performed that test only once***."[44] Put another way, it is not clear what, exactly Stewart appears to consider "testing" the ink; the closest analog

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[37] Stewart Decl., ¶16.

[38] Aginsky Report. p. 10. (Stating, *e.g.*, that the plugs are to be "taken from two adjacent parts of an ink line, similar in thickness . . . , appearance and arrangement . . . of ink.")

[39] *Id.*; *see also id*. at pp. 7-8 (Discussing the application of the Ink Aging Approach to dating an unknown ink writing).

[40] Aginsky Report. p. 10.

[41] *Id.*, at (Eq. (Equation) 3); Stewart Decl., Ex. B, at p. 2.

[42] *Id*.

[43] *Id.*, p. 15.

[44] Stewart Decl., ¶16, lines 25-28.

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to a mutant version of SLRM appears to be this "fourth test." He performed it only once by his own declaration.

Finally, Stewart does not point to his use of an internal standard on any of the multiple tests he performed on his one sample. An "internal standard" is not configuring and testing equipment, following proper procedure, or cleaning and testing equipment and reagents.[45] It is specifically an experimental control .An experimental control is part of the design of the experiment or test which ensures that with every step, measurement, or comparison, the analysis keeps "all else equal" or, failing that, varies with a known rate, amount, or effect, so that the data are not contaminated by "signals" from other variables that are unrelated to the variable being tested. Identifying and minimizing specific types of errors are what scientific research, peer-review, and proficiency testing accomplish.[46]

Here, measurement by GC-MS uses an internal standard to produce readings from a GC-MS, the introduction of which has the identified risks of dilution and injection volume error that are "controlled" by using including a known amount of PE with a known concentration in the experimental solvent.[47] Without an internal standard, Stewart's "test" was akin to sending a "test" command to a printer, and receiving a printout that says "test page." It tells him nothing about the variable (amount of PE) he is trying to measure.

Note, too, that gas chromatography was not developed for this forensic test, but is "routinely used for chemical analysis" of all forensic inquiry and indeed, forensic inquiry based on analytical chemistry.[48] A qualified chemist would know this; a qualified forensic examiner would know this and do this. Federal courts

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[45] *Compare id.*, ¶ 19

[47] Aginsky Report, p. 15, & n. 30; *see also* Stewart Decl., Ex. B, at p. 28 (internal p. 13), n.12.

[48] Aginsky Report, p. 6.

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require experts' opinions, and the scientific techniques "on which an opinion is premised" to have a known or potential rate of error, as well as existing and maintained . . . standards controlling the techniques' operation."[49] Stewart does not know this and did not do this, and is not admissible (qualified) to advise the court.

II. STEWART HAS NOT REHABILITATED HIS PROFESSIONAL CREDENTIALS.

Thirty years ago, Stewart was perhaps working at a competent practitioner level in forensic science of questioned documents. His preliminary work help show was forensically feasible to study the age of ink specimens using GC-MS to test and opine scientifically on the age of ballpoint ink on paper.[50]

Perhaps twenty years ago, Stewart may still have been working at this level. According to his C.V., his last publication in a journal of forensic chemistry specializing in its application to ink analysis and documents dating was in 1992.[51] Stewart has not had a peer-reviewed publication in eighteen years. Again, according to his C.V., his publications have all been through himself and not peer-reviewed academic journals in his field (or any field).[52]

Stewart's "limited professional research publications" demonstrate he has not been working at a level qualifying him to testify as an expert forensic chemist in federal court since at least 2004: "[s]ince 2004, Stewart has published only in newsletters and internet expert witness directories, many self-published, but not in any academic journal."[53] Stewart has not rehabilitated himself in his opposition.

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[49] *Daubert*, 509 U.S. at 594.

[50] Stewart C.V., publications, Exhibit A, at p. 10 (Docket #172-2).

[51] *Id*.

[52] *Id*., at pp. 12-13.

[53] *Ceglia*, 2013 U.S. Dist. LEXIS, at *92-93 (Cited only for the fact that the Court noted that parties in that case "attribute[d] Stewart's "limited professional research

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He has submitted no published articles from a peer-reviewed journal not noted on his C.V., and he has not amended his C.V. to show any more recent published articles. His work and papers presented to industry practitioners do not qualify, because he does not submit any evidence showing that these societies have adopted scientifically rigorous standards that are "sufficiently strict for judicial use."[54]

CONCLUSION

Stewart only performed a single, inconclusive forensic test. As Dr. Aginsky noted, Stewart did not show that he is able to identify the Standard-Loss Ratio Method (*SLRM*) in the scientific literature, nor understand its purpose and parameters in the relevant literature.[55] Additionally, he used methodologically unsound procedures in the mixed-up version of the test he did perform. Stewart does not refute either criticism, and he does not rehabilitate his lack of expert credentials. He is at best a former practitioner of forensic science, and currently a poor one at that. Indeed, as Plaintiff has shown, his own words are aptly applied to himself: "[i]t is my opinion that some examiners are improperly using [ink dating] technique in a modified way that I believe is quite dangerous and could lead to

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publications to the fact that in 2004, he was indicted by the United States Department of Justice for perjury," which was not disputed there.) Stewart does not dispute the indictment's effect, ending Stewart's career as with the United States government. Stewart Decl., ¶¶8, 22.

[54] David L. Faigman, et al., MODERN SCIENTIFIC EVIDENCE: THE LAW AND SCIENCE OF EXPERT TESTIMONY, n. 240 (2d ed. 2002).

[55] Mot., at 5:13-6:2. Indeed, his use of the test and his description of it shows that Stewart began by assuming that the ink on this paper is less than two years old. This is contrary to a fundamental part of the scientific method: "Scientific methodology today is based on generating hypotheses and testing them to see if they can be falsified; indeed, this methodology is what distinguishes science from other fields of human inquiry." *Daubert*, 509 U.S. at 593 (and citations there). *Id.*

inaccurate results."[56] This has been shown here, and he is not qualified to testify as an expert in this Court. Accordingly, the Court should grant this Motion and exclude Stewart's testimony and evidence.

Respectfully submitted,

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[56] Stewart Decl., at ¶10, lines 18-20.