

IN THE CIRCUIT COURT, EIGHTEENTH JUDICIAL CIRCUIT,  
IN AND FOR SEMINOLE COUNTY, FLORIDA

CASE NO.: 07-CA-1867-16

LAKE FOREST MASTER COMMUNITY  
ASSOCIATION, INC., a Florida not for profit  
Corporation

Plaintiff / Counterdefendant,

v.

ORLANDO LAKE FOREST JOINT VENTURE,  
a Florida Joint Venture, ORLANDO LAKE FOREST,  
INC., a Florida corporation, NTS MORTGAGE  
INCOME FUND, a Delaware corporation, OLF II  
CORPORATION, a Florida corporation, and  
ORLANDO CAPITAL CORPORATION,

Defendants / Counterclaimants.

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**DEFENDANTS' MOTION TO PARTIALLY  
EXCLUDE EXPERT REPORT AND TESTIMONY OF LARRY STEWART**

COME NOW Defendants/Counterclaimants, ORLANDO LAKE FOREST JOINT VENTURE, ORLANDO LAKE FOREST INC., NTS MORTGAGE INCOME FUND, OLF II CORPORATION and ORLANDO CAPITAL CORPORATION (collectively the original developer of Lake Forest Community, the "Developer"), and hereby file this motion to partially exclude the expert report and testimony of Larry Stewart, and in support thereof state as follows:

In response to Developer's expert interrogatories, Plaintiff/Counterdefendant LAKE FOREST MASTER COMMUNITY ASSOCIATION, INC. ("the HOA") disclosed that it intends to call Larry Stewart as an expert witness during the Evidentiary Hearing on Thursday, March 25, 2010. Counsel for the HOA also provided Developer with a copy of Larry Stewart's expert report dated February 23, 2010 (the "Stewart Report"), a copy of which is attached hereto as **Exhibit "A"**. Larry Stewart's expert deposition was taken in California on March 15, 2010.

Developer seeks to partially exclude Mr. Stewart's report and testimony on two grounds. First, the methods employed by Mr. Stewart in his ink dating analysis are new, novel and not generally accepted. To wit, Mr. Stewart's application of the novel 'dye ratio analysis' to the ink at issue in this case is not generally accepted for ink dating purposes. Moreover, Mr. Stewart's use of a common desktop scanner, instead of a highly sophisticated piece of scientific equipment called a densitometer, to conduct this analysis has not been accepted for ink dating purposes. Accordingly, Mr. Stewart's ink dating methods fail to pass the *Frye* test and thus lack a sufficient basis. Furthermore, Mr. Stewart introduced certain variables into his analysis and failed to control for such variables, thus rendering his analysis unreliable. As the methods, equipment and manner in which Mr. Stewart performed his ink dating analysis are unreliable, the portions of the Stewart Report and his testimony relative thereto should be excluded from consideration by this Court.

Under the *Frye* test, "the burden is on the proponent of the evidence to prove general acceptance of both the underlying scientific principle and the testing procedures used to apply that principle to the facts of the case at hand. The general acceptance under the *Frye* test must be established by the preponderance of the evidence." Ramirez v. State, 651 So.2d 1164, 1168 (Fla. 1995). The hearing on admissibility of novel scientific evidence is an adversarial proceeding in which conflicting evidence is submitted to the Trial Court as the trier of fact. *Id.* at. 1168. The Trial Court can consider three methods of proof: (1) expert testimony; (2) scientific and legal writings; and (3) judicial opinions. *Castillo v. E.I. DuPont*, 854 So.2d 1264, 1268 (Fla. 2003).

In the interest of judicial economy, the Court should hear the testimony of both sides' experts at the March 25, 2010 evidentiary hearing and reserve ruling on this Motion until that evidence has been submitted, so as to insure that the procedure outlined above is followed.

## **I. Florida Evidence Code and the *Frye* Test**

The Florida Evidence Code § 90.702 provides that where scientific knowledge will assist the trier of fact, an expert witness may offer an opinion if it can be applied to evidence at trial. Fla. R. Evid. § 90.702 (2009). While section 90.705(1) explains that while there is no requirement that the expert provide prior disclosure of the facts or data underlying the expert opinion rendered, § 90.705(2) provides that where the opposing party “establishes prima facie evidence that the expert does not have a sufficient basis for the opinion, the opinions and inferences of the expert are inadmissible unless the party offering the testimony establishes the underlying facts or data.” Fla. R. Evid. § 90.705 (2009). As explained in detail below, those sections of Mr. Stewart’s report and testimony relating to ink dating fail to have a sufficient factual basis.

While the foregoing Rules of Evidence control the admissibility of expert testimony, Florida courts continue to utilize the *Frye* test for determining whether to admit novel scientific evidence. Marsh v. Valyou, 977 So.2d 543, 547 (Fla. 2007). The *Frye* test requires that “the thing from which the [expert’s] deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs.” Frye v. United States, 293 F. 1013, 1014 (D.C. Cir. 1923). “This test requires that the scientific principles undergirding this evidence be found by the trial court to be generally accepted by the relevant members of its particular field.” Hadden v. State, 690 So.2d 573, 576 (Fla. 1997). Florida courts have consistently recognized that when determining admissibility of expert opinion testimony on novel scientific methods, it is of utmost importance that the court “not permit cases to be resolved on the basis of evidence for which a predicate of reliability has not been established. Reliability is fundamental to issues involved in the admissibility of evidence.” Marsh v. Valyou,

977 So.2d at 548 (quoting Hadden v. State, 690 So.2d at 578). As Florida courts have oft repeated, the *Frye* test is based on the rationale that “a courtroom is not a laboratory, and as such it is not the place to conduct scientific experiments. If the scientific community considers a procedure or process unreliable for its own purposes, then the procedures must be considered less reliable for courtroom use.” Id.; Stokes v. State, 548 So.2d 188, 193-94 (Fla. 1989).

The *Frye* test “requires a determination, by the judge, that the basic underlying principles of scientific evidence have been sufficiently tested and accepted by the relevant scientific community.” Brim v. State, 695 So.2d 268, 272 (Fla. 1997); see also Ramirez v. State, 810 So.2d 836, 843 (Fla. 2001). When applying the *Frye* test, the court need not take a “nose count” of experts in the field, but may look to sources such as expert testimony, scientific and legal publications, and judicial opinions to determine whether the theory at issue has been “sufficiently tested and accepted by the relevant scientific community.” Marsh v. Valyou, 977 So.2d at 548.

Under the *Frye* test, the proponent of evidence bears the burden of proving the general acceptance of not only the underlying scientific principle, but also the testing procedures used to apply that principle to the facts of the case at hand. Id. The general acceptance of both the scientific method and the testing measures used must be established by a preponderance of the evidence. Id. “Evidence based on a novel scientific theory is inherently unreliable and inadmissible in a legal proceeding in Florida unless the theory has been adequately tested and accepted in the relevant scientific community.” Ramirez v. State, 810 So.2d at 843.

The HOA has failed to establish that the testing procedures used by their expert, Mr. Stewart, have been generally accepted within the relevant scientific community. Furthermore, Mr. Stewart does not have a sufficient basis for the decisions he has set forth in his expert report

relating to ink dating, and thus his opinions and inferences related thereto are unacceptable under both the *Frye* test and the Florida Evidence Code.

## **II. Dye Ratio Analysis is Not Generally Accepted, Especially for Non-Ballpoint Inks.**

Forensic document experts employ a number of methods when attempting to determine the age of written documents. While certain methods of analysis have gained general acceptance among the relevant scientific community, this dynamic field continues to develop new and novel techniques. Accordingly, certain testing techniques have become generally accepted for certain purposes, while others are currently regarded as experimental.

Mr. Stewart's report indicates that he used thin-layer chromatography ("TLC") to analyze the writings he tested. Stewart Report, p. 1. Courts have consistently recognized that "TLC analysis is widely and successfully used to determine the formula and release date of an ink sample." Janopoulos v. Harvey L. Walner & Associates, Ltd., 866 F.Supp. 1086 (N.D.Ill. 1994). TLC is a chemical technique used to separate the components of the inks on glass plates. See Richard L. Brunelle & Kenneth R. Crawford, Advances in the Forensic Analysis and Dating of Writing Ink, 74 (2003). To determine the age of inks, the chemical components separated on the TLC plates are subjected to subsequent processing. Id. Recognized processes for performing ink dating analysis include "TLC densitometry [using a TLC scanning densitometer]" as well as "high-performance liquid chromatography (HPLC) electrophoresis, gas chromatography [GC] and gas chromatography-mass spectrometry (GC-MS)." Id. Of the foregoing processes, "GC and GC-MS are especially useful for measuring volatile components in inks." Id. As inks age, their volatile components dissipate at certain rates, and thus measuring the volatile components can be useful for determining the date of a writing. See id. GC and GC-MS have thus gained

general acceptance in this field for the purpose of ink dating (which processes should not be confused with the new and novel method of dye ratio analysis).

While Mr. Stewart's report fails to disclose the testing method he used in his attempt to determine the age of the inks, he indicated in deposition that he used a method known as "dye ratio technique" for this purpose. A copy of Mr. Stewart's March 15, 2010 deposition (the "Stewart Deposition") will be filed with the Court before the Evidentiary Hearing. As described by Mr. Stewart in his deposition, dye ratio analysis requires that the examiner analyze not only the writing in question, but also a series of other writings made at known dates, which are used as 'controls,' so to speak. See Stewart Deposition, p. 82-84, 118-119, 124-126, 143-144, 150. The writing in question is then compared with the 'controls' to determine the approximate date of the writing in question. Id. According to Mr. Stewart, dye ratio analysis is dependent not only on the controls being written on the actual date purported but also that the controls and the writing in question all be stored and maintained in the same temperature and environmental conditions. Id. at 84-85, 139.

Most, if not all, of the available literature discussing dye ratio analysis only applies this method to **ballpoint** inks. See Brunelle & Crawford, supra, at 154-55 and related footnotes. Experts have noted that different inks behave differently and respond to different testing methods in different manners. See generally, id. The expert reports to be submitted to the Court in this action each indicate that the writings tested were created with a "**non-ballpoint writing inks**" known as "**roller ball**" ink. Laporte Report, p. 8 (emphasis added); see also Stewart Report, p. 2 ("The results of the chemical analysis indicate that all of the inks examined match and are consistent with being from a **rolling ball marker pen**["]) (emphasis added). Copies of the report and supplemental report to be filed by expert Gerry LaPorte (the "LaPorte Report") are attached

hereto as **Composite Exhibit "B"**. Ballpoint inks are made up of resins, dyes, pigments and benzyl alcohol; rollerball inks, on the other hand, are water-based inks made up of dyes, moist-keeping agents, emulsifying agents and diluting agents. Brunelle & Crawford, supra, at 31-37. It is thus important to note that while dye ratio analysis is discussed in some literature as applied to ballpoint inks, there is little to no support for application of dye ratio analysis to non-ballpoint inks, especially rollerball ink. Accordingly, use of the dye-ratio analysis for ink dating is not generally accepted as applied to rollerball ink.

Furthermore, dye ratio analysis, even when applied to ballpoint inks, has been deemed unreliable due to the introduction of certain variables and rates of error. In the case of Equal Opportunity Employment Comm. v. Ethan Allen, Inc., the court pointed to the decision of In re Estate of Wang The Huei, 2002 WL 1341762 (2002) (Hong Kong Special Administrative Region Ct. of First Instance) in concluding that the dye-ratio method of analysis is unreliable. 259 F.Supp.2d 625 (N.D.Ohio 2003). Relevant sections of the Wang opinion, Section III & IV Ink Dating & Final Conclusion, are attached hereto as **Exhibit "C"**. In Wang, the court noted the numerous variables and sources of error present in the dye-ratio method. 2002 WL 1341762 at 24.1 – 24.16. The court described the methodology employed in dye ratio analysis as follows: A densitometer is used to measure the degree of separation of ink components on the TLC plates; this degree of separation is then represented in chromatographic peaks, which in turn are plotted and compared by the examiner. Id. at 24.1 – 24.13. In analyzing this methodology, the court observed that where the dye components are not well separated on the TLC plate, the chromatographic peaks are fused and thus are unreliable: "The experimental errors in the determination of the area of fused non-Gaussian peaks are so large as to shed doubt on the usefulness of such methods for quantitative purposes." Id. While the dye ratio method has been

described in some publications, as Mr. LaPorte will attest, this method of ink dating still lacks general acceptance because it has not been adequately studied or reviewed - particularly as it relates to non-ballpoint inks. Accordingly, the dye ratio method is not generally accepted within the relevant field – and has little to no support for application with rollerball ink. Accordingly, this testing method fails to pass the *Frye* test.

### **III. Ink Dating Analysis on Roller Ball Ink is Not Generally Accepted.**

The vast majority of research relating to ink dating is limited to ballpoint inks. Expert Gerry LaPorte noted this significant limitation in the report he submitted in this case (the “LaPorte Report”): **“All the modern research that has been published with regards to the use of [ink dating] pertains to the analysis of ballpoint inks.”** Laporte Report, P. 9 (emphasis added); See also Janopoulos v. Harvey, 866 F.Supp. 1086. Accordingly, while certain ink dating methods have gained general acceptance for determining the age of writings composed with ballpoint ink, application of such ink dating methods have *not* gained general acceptance for application to non-ballpoint inks.

As noted above, both of the expert reports submitted to the Court in this action indicate that the writings tested were created with non-ballpoint, rollerball ink. As the writings in question were not created with ballpoint ink, the ink dating methods that have gained general acceptance for dating of ballpoint inks are new and novel as applied to the rollerball ink used to create the writings in question. Accordingly, the ink dating methods used by Mr. Stewart fail to pass the *Frye* test.



#### **IV. Ink Dating Analysis using Desktop Scanner is Not Generally Accepted.**

As set forth in the book referenced above, Advances in the Forensic Analysis and Dating of Writing Ink, the new and novel dye ratio analysis should be performed by “measur[ing] the dyes separated on the [TLC] plate using a scanning TLC densitometer.” Brunelle & Crawford, supra, at 74. Mr. Stewart described the technique he employed for conducting his dye ratio analysis during his deposition. Instead of using a TLC densitometer, Mr. Stewart used a common desktop scanner that he described as “not more scientific” than what is typically used in business offices, a “Hewlet Packart type of model[.]” Stewart Deposition, p. 123. Mr. Stewart noted in deposition that the desktop scanner’s resolution was unknown. Id. Mr. Stewart further explained that he placed the TLC plate on the scanner and then ran a single scan of it. Id. at 128. He then used a computer software program on his laptop computer known as “UN-SCAN-IT” to analyze the primary scan. Id. Mr. Stewart then attempted to analyze the results from the computer software program to determine the relative dates of the inks tested. Id. at 128-29.

There is no published, peer-reviewed literature available on the utilization of a desktop scanner, nor the UN-SCAN-IT software program, to replace a densitometer in dye ratio analysis. When asked to identify “publications that reference the scanner technique that [Mr. Stewart] used” he referenced only his own book, Document Examination, published in 2010. There is no indication that Mr. Stewart’s book is peer-reviewed. Nevertheless, this single publication fails to indicate that Mr. Stewart’s method of using a scanner in dye ratio analysis is generally accepted within the field. “Novel scientific evidence must also be shown to be reliable on some basis other than simply that it is the opinion of the witness who seeks to offer the opinion.” Marsh v. Valyou, 690 So.2d at 578; see also Ramirez, 810 So.2d at 844 (recognizing that the *Frye* test requires more than a “bald assertion by the expert that his deduction is premised upon well-

recognized scientific principles”). The use of the desktop scanner is a prime example of a “new and novel” method within the field of ink dating. As this testing procedure is not generally accepted within the field of forensic document analysis, it fails to pass the *Frye* test.


**V. Testing Methods Used by Mr. Stewart Fail to Control for Variables.**

Mr. Stewart introduced certain variables into his analysis, and failed to control for such variables, thus rendering his analysis unreliable. Particularly concerning is the fact that the Stewart Report fails to disclose to this Court certain important variables and lack of controls. For instance, the Stewart Report indicates that prior to performing his dye ratio analysis to determine relative ink dating, Mr. Stewart first conducted a physical analysis in which “indentations found on the document were developed.” Stewart Report, p. 1. Mr. Stewart fails to divulge that in performing his “development” of the indentations, he humidified the writing in question. This is of particular importance because humidification would have affected the ink contained on this page because, as both experts indicated, the ink was water-based rollerball ink. See Brunelle & Crawford, supra, at 37. Furthermore, as Mr. Stewart asserted in his deposition, the accuracy of dye ratio analysis is dependent on the controls and the writing in question being maintained in the same environmental conditions. Stewart Deposition, p. 84-85, 139. Mr. Stewart did not, however, humidify any of the other four (4) control pages which he tested to determine the relative age of the writing in question. This introduction of humidity to only one of the tested writings rendered Mr. Stewart’s ink dating analysis unreliable.

For the foregoing reasons, those portions of Mr. Stewart’s report that relate to ink dating, and his testimony relative thereto, should be excluded from consideration by this Court at the Evidentiary Hearing, as they lack a sufficient basis and fail to pass the *Frye* test.

WHEREFORE, Developer respectfully requests that this Court exclude those portions of the expert testimony and report of Larry Stewart that fail to satisfy the *Frye* test, specifically (i) the dye ratio analysis methods employed by Mr. Stewart in his ink dating analysis, which is new, novel and not generally accepted; and (ii) Stewart's use of a common desktop scanner, instead of a highly sophisticated piece of scientific equipment called a densitometer, to conduct this ink dating analysis has not been accepted for ink dating purposes. Accordingly, Mr. Stewart's ink dating methods fail to pass the *Frye* test and thus lack a sufficient basis and grant such other and further relief as this Court deems just and proper.

Respectfully submitted, March 24, 2010.



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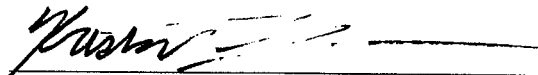
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### CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing has been furnished via email, facsimile and U. S. Mail Delivery, on this 24th day of March, 2010 to **PATRICK C. HOWELL, ESQUIRE**, Taylor & Carls, P.A., 150 North Westmonte Drive, Altamonte Springs, Florida 32714; and **BETH-ANN SCHULMAN, ESQUIRE**, Law Offices of Jeffrey G. Slater, 2420 Lakemont Avenue, Suite 125, Orlando, Florida 32814.



**T. Todd Pittenger / Kristopher Kest**