VIRGINIA:

IN THE CIRCUIT COURT FOR THE CITY OF RICHMOND

RIMA FORD VESILIND, *et al.*	)	
Plaintiffs	)	
	)	
v.	)	**Case No. CL15003886**
	)	
VIRGINIA STATE BOARD OF ELECTIONS, *et al.*	)	
Defendants.	)	

MOTION IN LIMINE
REGARDING PLAINTIFFS' NEW COMPACTNESS TEST

Through their designated expert, Dr. Michael McDonald, Plaintiffs intend to present a novel test for determining whether districts are "compact," as required by the Constitution of Virginia. Dr. McDonald admits that Plaintiffs' new test was created for this litigation; has never been published, by him or anyone else; and has never been presented to, much less adopted by, a court in any other redistricting case. The test also lacks the requisite reliability because: (i) it depends on comparing an enacted redistricting plan to an alternative redistricting plan that intentionally fails to consider all redistricting variables and that is merely one possible "ideal"; (ii) the test relies on the averaging of selected compactness scores for individual districts, which lacks foundation; and (iii) the alternative plan was actually drawn by one of Plaintiffs' attorneys, and Dr. McDonald does not know the conditions and procedures used. The Supreme Court of Virginia has repeatedly emphasized trial courts' threshold responsibility to determine whether offered expert evidence is reliable. Yet Plaintiffs ask this Court to abandon existing scholarship and legal precedent regarding compactness in favor of their novel and defective test. Defendants move that the Court exclude evidence of Plaintiffs' new compactness test.

STANDARD FOR ADMISSIBILITY OF EXPERT EVIDENCE

A qualified expert may testify in a civil proceeding "if scientific, technical, or other

specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue." Va. Code § 8.01-401.3(A); *accord* Va. Supreme Ct. Rule 2:702(a)(i); *John v. Im*, 263 Va. 315, 319, 559 S.E.2d 694, 696 (2002). But even where a situation meets that general standard, specific expert evidence must meet admissibility requirements, "including the requirement that the evidence be based on an adequate foundation." *Id.* at 319-20; *accord Holiday Motor Corp. v. Walters*, 790 S.E.2d 447, 458 (Va. 2016) ("Expert opinion may be admitted to assist the fact finder if such opinion satisfies certain requirements, 'including the requirement of an adequate factual foundation.'") (internal citations omitted).

Expert evidence may not be speculative, rest on assumptions that have an insufficient factual basis, or fail to consider all variables bearing on the inferences to be drawn from the facts observed. *John*, 263 Va. at 320. In short, to justify its admission, expert evidence must have a foundation that establishes its reliability, and the court must make a threshold finding of fact with respect to the reliability of scientific evidence offered:

> When scientific evidence is offered, the court must make a threshold finding of fact with respect to the reliability of the scientific method offered, unless it is of a kind so familiar and accepted as to require no foundation to establish the fundamental reliability of the system, such as fingerprint analysis; or unless it is so unreliable that the considerations requiring its exclusion have ripened into rules of law, such as "lie-detector" tests; or unless its admission is regulated by statute, such as blood-alcohol test results.

Spencer v. Commonwealth, 240 Va. 78, 97, 393 S.E.2d 609, 621 (1990) (citations omitted); *Accord Billips v. Commonwealth*, 274 Va. 805, 809-10, 652 S.E.2d 99, 101-02 (holding that "the *Spencer* rule applies to the use of scientific evidence in judicial proceedings generally").

Requiring a "threshold finding of fact with respect to the reliability of the scientific method offered" guards against "'junk science' in the courts." *Id.* at 809-10, 652 S.E.2d 102. The Supreme Court has warned trial courts that "scrutiny of expert testimony is especially important" when that evidence "consists of an array of numbers conveying an illusory

impression of exactness." *ITT Hartford Group, Inc. v. Va. Fin. Assocs., Inc.*, 258 Va. 193, 201, 520 S.E.2d 355, 360 (1999) (citations omitted). The proponent of expert evidence bears the burden of establishing its reliability. *Billips*, 274 Va. at 810, 652 S.E.2d at 102.

WHAT IS NOT AT ISSUE

The parties in this case do not dispute many basic points.

The Constitution of Virginia requires (among other things) that districts be "compact" (art. II § 6), as does the law in many other states.[1] Redistricting involves consideration of constitutional, statutory, and other factors, and the General Assembly makes a "value judgment of the relative degree of compactness required when reconciling the multiple concerns of apportionment." *Jamerson v. Womack*, 244 Va. 506, 517, 423 S.E.2d 180, 186 (1992). Redistricting "inherently involves a balancing of competing goals." Ex. 2 (the transcript of the deposition of Plaintiffs' expert witness, Dr. McDonald) at 214.

Compactness may be measured in many ways, including through compactness "scores" that measure a district by its area dispersion, perimeter irregularity, or population distribution. The exact way in which particular types of scores assess compactness is not in dispute and will be explained at trial.[2] Two of the most common compactness scores, often referred to by the names of the scholars who developed them, are the "Reock" area dispersion measure and the "Polsby-Popper" perimeter measure. A third common measure is the "Schwartzberg" perimeter measure. The parties and their respective designated experts do not disagree about the scores

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[1] The National Conference for State Legislatures in 2010 identified 36 states where compactness was required in legislative plans. *See* NCSL, *Redistricting Law 2010* (Dec. 1, 2009) 106-08, *at* http://www.ncsl.org/research/redistricting/redistricting-law-2010.aspx (last visited Feb. 13, 2017). A 2016 update contained a similar list. *See* NCSL, "Redistricting Criteria," *at* http://www.ncsl.org/research/redistricting/redistricting-criteria.aspx (last visited Feb. 13, 2017).

[2] The academic article attached as Ex. 1 provides some explanation at pages 553-57.

that Virginia districts, past and present, receive on these measures.

It is possible to mandate a specific way to assess compactness, but states rarely do so.[3] Neither the Constitution nor Code of Virginia prescribes a specific way to assess compactness.

Over several decades,[4] social scientists have engaged, and continue to engage, in "an ongoing debate about the best approach to measuring compactness." (Ex. 2 at 189.) "[T]here is no universal definition of what constitutes the best measure for compact districts." *Id.* Instead, scholars have concluded that the best way to assess compactness is to consider multiple measures. (Ex. 2 at 186-87.) And "in the social science community there is no threshold for when a district is sufficiently compact or unreasonably non-compact on any of the compactness measures" used in this case. (Ex. 2 at 145.) "No bright line, in other words." *Id.* at 145-46.

THE ISSUE: PLAINTIFFS' NEW COMPACTNESS TEST

Faced with the reality that compactness is far more amorphous than other redistricting requirements (*i.e.*, equal population and contiguity), and the fact that the Supreme Court of Virginia in past cases has upheld districts with compactness scores similar to the scores of the districts challenged in this case,[5] Plaintiffs sought a new way to support a compactness challenge, an effort in which they enlisted their designated expert, Dr. McDonald.

A. The nature of Plaintiffs' new test

Plaintiffs' new test focuses on the difference in compactness scores between House and

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[3] For example, the Colorado Constitution (art. V § 47) requires that "the aggregate linear distance of all district boundaries shall be as short as possible." Iowa prescribes certain comparison methods by statute. *See* Iowa Code § 42.4(4)).

[4] Reock's area measure traces to his 1961 note in the Midwest Journal of Political Science. The Schwartzberg measure traces to his 1966 Minnesota Law Review article, and the Polsby-Popper measure traces to their 1991 article in the Yale Law and Policy Review.

[5] *See Jamerson v. Womack*, 244 Va. 506, 423 S.E.2d 180 (1992), and *Wilkins v. West*, 264 Va. 447, 571 S.E.2d 100 (2002). The parties are close to completing a stipulation that includes past and current compactness scores, which Dr. McDonald does not dispute. *See* Ex. 2 at 226-27.

Senate districts enacted in 2011, on the one hand, and the districts in a hypothetical redistricting plan newly created for this case, on the other hand.

To create the alternative plan used for the comparison (named Alternative Plan 1 in Dr. McDonald's expert designation, Ex.3), one of the Plaintiffs' attorneys, Nicholas H. Mueller, drew an "ideal" redistricting plan. At Dr. McDonald's direction, Mr. Mueller started by retaining the districts drawn for compliance with the federal Voting Rights Act (sometimes referred to as "VRA districts" or "minority-influence districts"). Mr. Mueller then drew the rest of the districts in Alternative Plan 1 considering only three other legally required redistricting factors, to the exclusion of other permissible redistricting factors. (Ex. 2 at 99-101.) Indeed, the very point of Alternative Plan 1 is that it was produced by considering only equal population, Voting Rights Act compliance, contiguity, and compactness. (Ex. 2 at 159.) Dr. McDonald worked to some extent with Mr. Mueller regarding the drawing of Alternative Plan 1, but Mr. Mueller produced the initial map. (Ex. 2 at 177.) Dr. McDonald does not know exactly how Mr. Mueller drew the districts in the plan and could not recall any specific instance in which Dr. McDonald provided input that led Mr. Mueller to adjust district lines. *See infra* at 13-15.

To enable a mathematical comparison of districts in the actual enacted plans to districts in Alternative Plan 1, certain compactness scores had to be chosen for comparison. Plaintiffs' counsel instructed Dr. McDonald not to look at population compactness measures, based on their reading of Virginia case law. (Ex. 2 at 187.) Dr. McDonald chose the Reock, Polsby-Popper, and Schwartzberg measures because those scores are widely used and because those three scores appeared in the submission to the U.S. Department of Justice seeking preclearance of Virginia's 2011 redistricting plans, as was required at that time under the federal Voting Rights Act. *See* Ex. 2 at 216-17. Dr. McDonald then averaged those three scores for each district, providing "a

simple summary measure" for comparison. (Ex. 2 at 168.) Plaintiffs' new test compares the average score for an enacted district to the average score for a district in Alternative Plan 1. Exhibit 4 summarizes and illustrates exactly how Plaintiffs' new compactness test works.

Finally, Dr. McDonald formed opinions based on the difference between the average compactness scores. If the average score of an enacted district decreased by more than 50% from the average score of the chosen comparator district in Alternative Plan 1, Dr. McDonald concluded that other, discretionary factors had "predominated" over compactness (Ex. 2 at 170) and therefore that the district failed to meet the constitutional requirement of compactness.

Dr. McDonald chose that 50% threshold based on a dictionary definition or common understanding of what the word "predominate" means. *See* Ex. 2 169-70 (discussing Ex. 5, Dr. McDonald's rebuttal report, at 1-2); Ex. 2 at 253-54. Dr. McDonald agrees there is legislative discretion in redistricting, but through Plaintiffs' new test he proposes a new, seemingly exact boundary for that discretion. (Ex. 2 at 160.) In his view, if a district's compactness has declined by 49% relative to Alternative Plan 1, other factors did not predominate and the district is constitutional; if a district's compactness has declined by 51%, other factors did predominate and the district is unconstitutional. (Ex. 2 at 161.)

B. Plaintiffs' test is a novel creation, developed for this case by Plaintiffs' counsel and Dr. McDonald.

There is no dispute about the novelty of Plaintiff's new test. Dr. McDonald acknowledges that Plaintiffs' new test is "a novel legal theory." (Ex. 2 at 78-79.) He has never used the test in prior cases, nor has any other expert. No court opinions have used the test. And neither Dr. McDonald nor any other expert has ever published the test. Ex. 2 at 167-68:

> Am I right that you have never used this predominance test in a prior -- in your work in a prior redistricting case?
> A. That is correct.

Q. And you're not aware of any other expert in the field of elections and redistricting whose work has used this predominance test?
A. That is correct.
Q. And you're not aware of any court opinions that have used or approved this predominance test?
A. That is correct.
Q. And you've never published this predominance test?
A. That is correct.
Q. And you're not aware of any other economic or expert in the field of elections or redistricting that has published this predominance test for compactness?
A. That is correct.

Nor is there any dispute that Plaintiffs' new test was created specifically for this case. Dep at 78:

Q. Then is it fair or not fair to say that this particular test is one that you've created for this case?
MR. DURRETTE: Objection to form.
THE WITNESS: It's not entirely my creation, but it is a creation for this case.
BY MR. BRADEN:
Q. Who else helped you create this test?
A. I did have discussions with the lawyers in this case as to how we would approach implementing this predominance test.

ARGUMENT

Plaintiffs' new test lacks the reliability required for admission of expert evidence.

I. Plaintiffs' new test lacks a foundation in the social sciences or legal precedent.

Dr. McDonald openly acknowledges the novelty of Plaintiffs' new test. If he were proposing Plaintiffs' new test in an article for a peer-reviewed journal or a law review, where the focus would be on whether a new test advances the understanding and measurement of compactness, innovation might be worthy of praise. But where the issue is proposed expert evidence in a Virginia court, innovation is not the goal; instead, Virginia law requires that expert

evidence be based on a reliable scientific foundation.

As Dr. McDonald admits, Plaintiffs' new test has never been published. It has never been critiqued by other scholars. It has never been accepted by a court. It has never even been proposed in any of the numerous redistricting cases around the country that have involved analysis of compactness. In short, under the Virginia case law cited above (*see supra* at 1-3), Plaintiffs' new test simply lacks the foundation in scholarship or legal precedent that is necessary to show the reliability required for admissibility.[6]

II. Plaintiffs' new test is unreliable because it involves a defective methodology.

Plaintiffs' new test uses an array of compactness score numbers to propose that legislative balancing and discretion can be measured mathematically, offering an impression of exactness. But the methodology of Plaintiffs' new test is legally flawed and unreliable, providing further reason why the Court should grant this motion.

A. Plaintiffs' new test relies on comparison to a hypothetical plan that intentionally fails to consider all redistricting variables and that is only one possible "ideal."

Plaintiffs' new test relies upon the comparison of a legislatively adopted redistricting plan with a hypothetical "ideal" redistricting plan (Alternative Plan 1). Indeed, Dr. McDonald asserts such a hypothetical plan is the only valid comparison, rejecting all comparisons to districts that have a basis in reality. *See* Ex. 2 at 157-58:

> 10 Q. So in your opinion, you shouldn't assess
> 11 compactness by comparing a particular district to
> 12 districts in other states, for example, because
> 13 geography or other factors may differ?
> 14 A. Correct.

[6] Dr. McDonald stated he started thinking about predominance based on voting rights cases in federal court. *See* Ex. 2 at 76. But the Supreme Court does not apply a percentage test in such cases and a four justice plurality has rejected applying the same approach to redistricting considerations other than race. *See Vieth v. Jubelirer*, 541 U.S. 267, 285-86 (2004).

15 Q. And you shouldn't assess compactness by
16 comparing a district to other districts in the same
17 plan because geography and other factors may differ?
18 A. Correct.
19 Q. And you shouldn't assess compactness by
20 comparing a district to prior plans because factors
21 may differ?
22 A. Correct.
1 Q. So the only thing you should assess
2 compactness by is comparing it to alternative plans
3 like those you've created in this case?
4 A. Correct. Yes.

Yet scrutiny of Plaintiffs' hypothetical plan provides further reason to exclude their new test.

Alternative Plan 1 purposefully fails to consider all of the variables in redistricting. The very point of Alternative Plan 1 is that it reflects *only* equal population, the Voting Rights Act districts, contiguity, and compactness. (Ex. 2 at 159.) As such, Alternative Plan 1 represents an intentional failure to consider traditional redistricting criteria, such as not splitting localities or other communities of interest, and an intentional refusal to balance or consider any of the General Assembly's discretionary goals, such as not pairing incumbents. *See Wilkins v. West*, 264 Va. at 463-64, 571 S.E.2d at109 (in addition to constitutional and statutory factors, "traditional redistricting elements not contained in the statute, such as preservation of existing districts, incumbency, voting behavior, and communities of interest, are also legitimate legislative considerations."); *Jamerson*, 244 Va. at 514 ("minimizing the splitting of counties and cities" and "recognizing existing communities of interest" are factors to be considered, even though not a constitituional requirement); Ex. 2 at 194 (admitting that respect for existing political boundaries is a traditional redistricting principle).

Expert testimony is "inadmissible when an expert has failed to consider all variables bearing on the inferences to be drawn from the facts observed." *John*, 263 Va. at 320. And "where tests are involved, such [expert] testimony should be excluded unless there is proof that

the conditions existing at the time of the tests and at the time relevant to the facts at issue are substantially similar." *Tittsworth v. Robinson*, 252 Va. 151, 154 (1996) (citations omitted).

Here, Plaintiffs have constructed a test that relies on comparison to Alterative Plan 1 and thus intentionally fails to consider all redistricting variables. Alternative Plan 1 – the basis of Plaintiffs' new test – is purposefully *dissimilar* to the actual process of redistricting in Virginia, in which the General Assembly must balance constitutional, statutory, and other factors. It is improper to admit evidence concerning a test that fails to consider all redistricting factors. *See id.*; *see also Wilkins*, 264 Va. at 462 ("Determinations of contiguity and compactness ... are limited to consideration of the district from a spatial perspective, *taking into consideration the other factors which a legislative body must balance in designing a district.*") (citation omitted) (emphasis added). Like testimony ruled inadmissible because it was based on "an assumption that clearly lacked a sufficient factual basis and disregarded the variables" bearing on an auto manufacturer's sensor location determination, *see Hyundai Motor Co. v. Duncan*, 289 Va. 147, 156, 766 S.E.2d 893, 897 (2015), Plaintiffs' new test is inadmissible because it assumes an "ideal" and disregards variables bearing on the General Assembly's redistricting determinations.[7]

B. Plaintiffs' new test relies on averaging compactness scores, which lacks foundation.

To provide "a simple summary measure" for comparison, Dr. McDonald averaged the three chosen compactness scores for each district and then compared the average score for an

[7] Indeed, Dr. McDonald cannot even say with certainty that Alternative Plan 1 embodies the actual ideal. (Ex. 2 at 183) Dr. McDonald admits that, unless one chooses a purely theoretical approach, "you can never know with certainty that you've created the most compact plan" (Ex. 2 at 102) "because there are more quirks in the universe than there are redistricting plans." (Ex. 2 at 103-04.) Alternative Plan 1 is just one possible ideal. (Ex. 2 at 182.) In fact, Dr. McDonald envisions the minority and majority parties each creating their own "ideal" compact plan. (Ex. 2 at 92-93.) Even assuming that comparison with the "ideal" plan is a proper approach, there is a lack of foundation that Plaintiffs have identified the ideal.

enacted district to the average score for a district in Alternative Plan 1. (Ex. 2 at 168.)

Dr. McDonald does not believe he has ever averaged compactness scores before:

> Q. Have you ever relied on average measures of compactness scores in your work in other redistricting cases?
> A. I don't believe so. I'm not certain, but I don't believe so.
> Q. And in your publications, have you ever relied on averaged measures of compactness scores?
> A. Again, I don't believe so, but I'm not 100 percent certain that we never averaged compactness. [Ex. 2 at 168-69.]

In his rebuttal report, responding to other experts' criticism of his use of averaged scores, Dr. McDonald identified only one redistricting-related source: a 1993 law review article that adds compactness scores. *See* Ex. 5 at 10 (citing Richard H. Pildes and Richard G. Niemi, *Expressive Harms, "Bizarre Districts," and Voting Rights*, 92 Mich. L. Rev. 483, 566 (1993), excerpts of which are attached as Exhibit 1). Yet that article specifically criticizes averaging compactness scores because different compactness scores measure different aspects of a district, and averaging scores masks situations in which one score is high and the other low. Ex. 1 at 558 n.217. Dr. McDonald agrees that is a problem with averaging compactness scores. *See* Ex. 2 at 169. Neither in his expert reports nor in his deposition has Dr. McDonald provided a foundation that justifies accepting averaging compactness scores for individual districts as a reliable scientific method.[8]

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[8] In a footnote (*see* Ex. 1 at 566 n.233), that 1993 Pildes and Niemi article averages compactness scores for a Texas district, but the article does so to illustrate the problem the authors described earlier, where an average masks when a district is unusual on one measure but not another. Aside from that article, which does not support averaging compactness scores to assess individual districts, Dr. McDonald cited indexes created by public policy advocacy groups concerning election administration performance and "global freedom," as well as football quarterback ratings. *See* Ex. 5 at 9-10. None of those other citations concerns redistricting generally or compactness specifically, so they fail to provide the requisite foundation in this case.

C. Plaintiffs' new test fails even to provide the bright line claimed.

Plaintiffs' new test purports to provide a bright line that decades of scholarship and cases have failed to identify. *See* Ex. 2 at 145-46 ("Up 'til this point, there has been no bright line, that's correct."). Yet Dr. McDonald's deposition revealed the promise of exactness to be illusory.

First, Dr. McDonald admitted which of the many compactness measures to incorporate in Plaintiffs' new test was a "policy choice" and a "policy matter." (Ex. 2 at 113.) Neither Plaintiffs nor this Court may make such a policy choice in an area constitutionally committed to the General Assembly. *See* VA. CONST. art. II § 6 ("...members of the Senate and of the House of Delegates of the General Assembly shall be elected from electoral districts established by the General Assembly"); *Jamerson*, 244 Va. at 517 ("we must give proper deference to the wide discretion accorded the General Assembly in its value judgment of the relative degree of compactness required when reconciling the multiple concerns of apportionment").

Second, Dr. McDonald said different compactness standards would apply to Voting Rights Act districts, which would not be subject to the same compactness requirements as the other legislative districts in the state. (Ex. 2 at 93-94.) Districts adjacent to Voting Rights Act districts also are a different context according to Dr. McDonald, so those districts too should not be used as a benchmark for compactness. *See* Ex. 2 at 248.

And third, Dr. McDonald stated that a district would not always be unconstitutional if compactness declined more than 50%, so long as a geographical constraint or other compelling explanation for the degradation existed. *See* Ex. 2 at 240-41 ("There could be circumstances that are based on the context of where the district is being drawn that would lead you to say that yes, that was a permissible district even if it failed the predominance test.").

Plaintiffs' new test does not even reliably deliver the bright line claimed.

D. In creating the basis of Plaintiffs' new test, Dr. McDonald has improperly relied on unknown actions by Plaintiffs' counsel.

Dr. McDonald was not the primary creator of the hypothetical Alternative Plan 1 that is the basis of Plaintiffs' new test. Instead, one of Plaintiffs' counsel, Nicholas H. Mueller, drew the alternative plans that Dr. McDonald used to form his opinions. *See* Ex. 2 at 99:

When you drew your alternatives, how did you draw your alternative plans? What computer were you on?
A. I did not actually physically draw these districts.
Q. Who did?
A. Nicholas Mueller drew the plans.
Q. One of the lawyers in this case?
A. Correct.

Dr. McDonald gave Mr. Mueller certain limited instructions concerning the Voting Rights Act districts and maintaining equal population and contiguity (*see* Ex. 2 at 100-01, 176-77), but Dr. McDonald was unable to say how Mr. Mueller proceeded to draw the districts. *See* Ex. 2 at 179 ("A. I do not know how he approached the initial starting points for his mapping or how he was balancing district populations while he was attempting to create compact districts along the way."). Dr. McDonald claimed to have made "recommendations" to Mr. Mueller and "had discussions" with Mr. Mueller concerning district lines. *Id.* But Dr. McDonald was unable to provide any specifics regarding that recollection, which he described as vague:

Q. For the districts in Alternative Plan 1 that correspond most closely to the challenged districts, did you ask him to move any of the lines?
A. I don't recall. I can't recall if that was what was guiding what we may have done in that respect.
Q. Do you recall any specific instances in which you asked him could we move this line or that line?
A. Again, I vaguely recall doing that direction. I just don't recall whether or not it was specific to any of the districts that were being

challenged that -- you know, in a way, I -- and I may be wrong, but I'm not even sure if we were numbering yet the districts. So I don't even recall if we had numbered the districts yet using the procedure that's described in Footnote 12. So, again, I can't recall the sequencing there of what happened. [Ex. 2 at 179-80.]

Mr. Mueller's deposition is scheduled for the evening of February 16th, so there has not yet been an opportunity to probe his qualifications. Mr. Mueller was not designated as an expert, however, and there is no evidence that he would qualify as a redistricting or mapping expert.[9]

Dr. McDonald's reliance on an unqualified person, and his inability to describe the conditions and procedures that unqualified person used in drawing Alternative Plan 1, are grounds to exclude Plaintiffs' new test. In *John v. Im*, the plaintiff offered the testimony of Dr. Thatcher, who opined based on "QEEG" testing conducted by a person he identified as "Dr. Sitar." 263 Va. at 317-18. But Thatcher was unable to state Sitar's qualifications and unable to say how he performed the testing. *Id.* The Supreme Court affirmed excluding Thatcher's testimony, explaining that "[t]he initial deficiency in the foundation evidence was Thatcher's inability to identify the person who actually performed the QEEG test on John. Without this information, the testing conditions and procedures could not be ascertained." *Id.* at 320. Here, Dr. McDonald at least knows who Mr. Mueller is – and that Mr. Mueller was one of Plaintiffs' attorneys in this case. But the fundamental problem remains the same: like the expert whose testimony was excluded in *John*, Dr. McDonald relied on a person whose qualifications have not been established, and Dr. McDonald is unable to detail the conditions and procedures used in drawing the plan that forms the basis of Plaintiffs' new test.

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[9] The choice to use one of Plaintiffs' counsel as a key part of the foundation of expert evidence that is (and always foreseeably would be) contested raises questions under the Virginia Rules of Professional Conduct. *See* Pt. 6, § II, Rule 3.7 (Lawyer as Witness).

CONCLUSION

The Court should rule that Plaintiffs' new compactness test fails the threshold reliability requirement for expert scientific evidence and therefore should exclude the testimony and other evidence describing Plaintiffs' new test.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I certify that, on February 16, I am serving a copy of the foregoing on the following by hand, with a courtesy copy sent by email:

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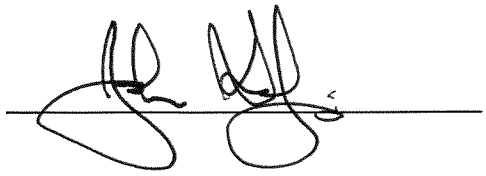

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