**UNITED STATES DISTRICT COURT**
**SOUTHERN DISTRICT OF WEST VIRGINIA**

**AT CHARLESTON**

**CRYSTAL GOOD, individually and as parent and next friend of minor children M.T.S., N.T.K. and A.M.S. and MELISSA JOHNSON, individually and as parent of her unborn child, MARY LACY and JOAN GREEN and JAMILA AISHA OLIVER, WENDY RENEE RUIZ and KIMBERLY OGIER and ROY J. McNEAL and GEORGIA HAMRA and MADDIE FIELDS and BRENDA BAISDEN, d/b/a FRIENDLY FACES DAYCARE, and ALADDIN RESTAURANT, INC., and R. G. GUNNOE FARMS LLC, and DUNBAR PLAZA, INC., d/b/a DUNBAR PLAZA HOTEL, on behalf of themselves and all others similarly situated,**

**Plaintiffs,**

**v.** **Civil Action No.: 2:14-01374**

**AMERICAN WATER WORKS COMPANY, INC., and AMERICAN WATER WORKS SERVICE COMPANY, INC., and EASTMAN CHEMICAL COMPANY, and WEST VIRGINIA-AMERICAN WATER COMPANY, d/b/a WEST VIRGINIA AMERICAN WATER, and GARY SOUTHERN and DENNIS P. FARRELL,**

**Defendants.**

**MEMORANDUM OPINION & ORDER**

**Pending is the motion by Eastman Chemical Company ("Eastman") for summary judgment on the issue of corrosion (ECF No. 754), together with Eastman's motion to exclude the expert testimony of Lyman Antoine Scribner (ECF No. 766), and plaintiffs' motion to exclude the testimony of Gary S. Whittaker (ECF No. 732).**

## I.

On January 9, 2014, approximately 300,000 residents in the Charleston, West Virginia, and the surrounding area suffered an interruption in their water supply. The interruption was caused by a spill into the Elk River of a mixture used for coal cleaning purposes, composed primarily of a chemical known as Crude MCHM that was sold and distributed exclusively by Eastman Chemical Company. Crude MCHM consists primarily of the chemical 4-methylcyclohexane methanol. The mixture was prepared and stored in a facility owned and operated by Freedom Industries, Inc. ("Freedom Industries"). Freedom Industries called the mixture that spilled into the Elk River "Shurflot 944" ("Shurflot"). Shurflot mixed Crude MCHM with other elements, present in relatively small proportion. The mixture containing Crude MCHM infiltrated and contaminated the WV American water treatment plant in Charleston, known as the Kanawha Valley Treatment Plant ("KVTP"), which draws its water from the Elk River.

By order entered on October 8, 2015 (ECF No. 470), the court granted the plaintiffs' motion to certify an issues class under Federal Rule of Civil Procedure 23(c)(4) for the class-wide determination of the defendants' fault for the spill and

**resulting water service interruption. The issues class certification also includes the comparative fault of Freedom, a non-party, for those events. As to Eastman, plaintiffs assert that Crude MCHM, produced by Eastman, was stored in Tank 396, a carbon steel tank, at the Freedom site. Plaintiffs contend that Crude MCHM was capable of corroding the carbon steel tank, that it did in fact corrode the tank, and as a result of the corrosion the tank leaked the chemical into the river.**

**Plaintiffs advance two theories of liability: strict liability and common-law negligence. Under their strict liability theory, plaintiffs contend Eastman is liable for failing to warn of the dangers inherent to Crude MCHM, failing to properly instruct Freedom concerning the proper storage and handling of its product, and for producing and selling a product that was unreasonably dangerous and defective given its hazardous characteristics. Under their negligence theory, plaintiffs allege that Eastman failed to exercise reasonable care, as measured by applicable industry standards, in its sale of Crude MCHM to Freedom.**

**A. Summary Judgment Motion on the Issue of Corrosion**

**Eastman seeks summary judgment on the issue of whether corrosion caused by Crude MCHM was responsible for the failure of Tank 396 and the resulting spill. The motion for summary**

**judgment turns entirely on Eastman's accompanying motion to exclude the testimony of plaintiffs' expert on corrosion, Lyman Antoine Scribner ("Scribner"). As discussed below, Scribner's reports state that Crude MCHM is corrosive to the carbon steel material of which Tank 396 was composed, and that the storage of Crude MCHM in it was a substantial cause of the tank's failure. Eastman argues that Scribner's testimony is inadmissible, and that plaintiffs cannot raise a genuine issue of material fact as to whether Crude MCHM is corrosive without that testimony.**

**In their response (ECF No. 819), plaintiffs argue that Scribner's opinions are admissible but that even if the court grants the motion to exclude his opinions, there is additional evidence showing Crude MCHM is corrosive. Plaintiffs point to deposition statements by two Eastman employees, Dr. Brent Tennant, an in-house expert on chemical production, and Gary Shrum, Eastman's Director of Global Compliance, which they interpret as concessions that Crude MCHM can corrode carbon steel. Plaintiffs also rely on a one-line notation in an internal Eastman product profile for Crude MCHM, stating that the product should not be transported in carbon steel railcars "due to corrosion." ECF No. 847-2. Taken together, plaintiffs argue that these pieces of evidence are sufficient to raise a genuine issue of material fact as to whether Crude MCHM is**

**corrosive regardless of whether Scribner's expert opinion is excluded.**

**Eastman's reply (ECF No. 918) argues that plaintiffs need expert testimony to establish whether Crude MCHM is corrosive to carbon steel and, if so, whether the presence of Crude MCHM caused the failure of Tank 396. Eastman also argues that the lay testimony and evidence cited in plaintiffs' response, as noted above, falls well short of establishing the corrosivity of Crude MCHM. ECF No. 918 at 6 ("The centerpiece of Plaintiffs' entire claim that Crude MCHM is corrosive has been two cherry-picked snippets of evidence taken out of context and overblown."). Eastman argues that in context, the above statements by its employees do not suggest that Crude MCHM is corrosive.[1] With respect to the product profile entry stating**

[1] **Eastman urges the court not to consider Shrum's testimony, arguing that it should be stricken as impermissible legal and lay opinion testimony. To the extent their reply seeks exclusion of that testimony at trial, that motion should be addressed by a motion in limine at the appropriate time. Similarly, plaintiffs' response cited an excerpt from the deposition of Dennis Farrell, a former owner of Freedom. In the excerpt, Farrell reads a portion of the product profile of Crude MCHM advising against transporting the product in carbon steel rail cars. Farrell then indicates that he never received this warning from Eastman. Eastman objects to the admission of the testimony on the grounds that Farrell had invoked his Fifth Amendment privilege against self-incrimination. The court does not find Farrell's testimony relevant to the pending motions, and to the extent plaintiffs intend to introduce such testimony at trial, evidentiary objections can be taken up at the appropriate time.**

**Crude MCHM should not be transported in carbon steel railcars due to corrosion, Eastman argues that the record shows this language was inserted due to a concern that Crude MCHM would be discolored by storage in those railcars (which Eastman asserts is a commercial disadvantage), not any concern that the product was corrosive enough to damage the railcars themselves.**

**B. Motion to Exclude Lyman Antoine Scribner**

**Eastman's motion to exclude Scribner argues that Scribner's expert opinions are inadmissible and should be excluded for five reasons:**

1. **Scribner reaches the conclusion that Crude MCHM "was a substantial contributing cause of the failure of Freedom's storage tank," but by his own admission, never saw the inside of the leaking tank. He admits that good failure analysis methodology dictates that physical observation of the tank "would have been much better."**

2. **Scribner's corrosion testing does not "fit" or replicate the conditions of the tanks at Freedom and in fact, in several key respects, Scribner's tests created extreme test conditions[2] grossly unlike the conditions at Freedom;**

3. **Scribner's opinion that Crude MCHM "was a substantial contributing cause of the failure of Freedom's storage tank" is not supported by his own corrosion testing or physical observation of portions of the inside of the**

[2] **In particular, Eastman takes issue with Scribner's use of a blender to "puree" the test samples. The pureeing saturated the samples with oxygen, which Eastman contends would have resulted in a higher saturation of oxygen within the samples than that present at Freedom, and that this high oxygen saturation would increase the corrosivity of the sample.**

**tank;**

4. **Scribner's methodology and proffered mechanism is defective in that he has no explanation for the fact that Tank 395, an identical tank which had limited, if any, storage of Crude MCHM, was more corroded than Tank 396.**

5. **Scribner's opinions make no effort to evaluate alternative, likely causes of the corrosion to the floor of Freedom's tanks and ignore the most likely alternative causes, that petroleum storage or external corrosion caused the tank failure.**

**Eastman Mem. in Supp. at 2 (ECF No. 767). The crux of Eastman's argument is that Scribner's theory of how Crude MCHM would have corroded the bottom of Tank 396 is neither scientifically sound nor consistent with Scribner's own laboratory results.**

**Because the composition of samples tested by Scribner and their comparability to material stored in Tank 396 underlies much of the disagreement between the parties, the court finds it useful to set forth some of the undisputed facts and contested issues regarding Crude MCHM, the contents of Tank 396, and the material tested by the experts. First, the parties agree that at the time of the leak, Tank 396 stored a chemical mixture composed primarily of Crude MCHM and propylene glycol phenyl ("PPH") which Freedom called Shurflot.[3] Shurflot was mixed by**

[3] **Plaintiffs' Memorandum in Opposition names the material in Tank 396 at the time of the leak as "Freedom sale product" rather than "Shurflot," see ECF No. 843, pg. 11, though their expert, Scribner, does identify the material as "Shurflot," see**

**Freedom on site and marketed to coal companies for purposes of washing and purifying coal. Though the parties seem to agree to the general proposition that Shurflot is a mixture of Crude MCHM and PPH, the precise composition is unclear and appears to be a point of dispute. See Plaintiff's Mem. in Supp. at 6-7 (ECF No. 733). Eastman expert Whittaker's opinion asserts that Shurflot is composed of 10-25% PPH and 75-90% Crude MCHM. An analysis conducted by plaintiffs' expert on Shurflot collected from Tank 396 indicates that it was composed of 91.3% Crude MCHM, 2.7% PPH, 4.6% water, and 1.4% methyl esters. See Expert Dec. of Scribner, pg. 3(ECF No. 766-1), pg. 3. In further contrast, the West Virginia Attorney General's Incident Report gives the content of the material as 88.5% Crude MCHM, 7.3% PPH, and 4.2% water. ECF No. 756-7, pg. 2.**

**The parties also agree that Tank 396 stored Shurflot for at least seventeen months immediately preceding the leak in Tank 396. See Scribner Response and Rebuttal, pg. 2 (ECF No. 766-2) (indicating a "Start Date" for storage of Shurflot 944 of August 2012); See also Whittaker Expert Report, pp. 3, 7 (ECF No. 732-1) (discussing Freedom operating procedures and history of the storage tanks). The parties disagree as to the contents**

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**ECF No. 766-2, pg. 2. Whatever quibble the plaintiffs may have with the label "Shurflot," is irrelevant to the pending matter.**

**of Tank 396 prior to August 2012. Plaintiffs, based on the deposition testimony of Freedom employee Michael Burdette, contend that Tank 396 held Crude MCHM, alone, from October 2004 (at the latest) until the contents were changed to Shurflot in August 2012. See ECF No. 843-9, pg. 3; 6-7. Eastman, through the testimony of Whittaker, asserts that Tank 396 contained Shurflot between 2010 and August 2012. See Whittaker Expert Report, pg. 7. Eastman asserts that Tank 396 was used for glycerin storage between 2001 and 2010, and for petroleum storage prior to 2001. Id.**

**Scribner originally ran four tests on two different shipments of sample material. The first shipment of sample material to Scribner, received on February 20, 2015, was provided by Dr. Scott Simonton, another of the plaintiffs' experts. The material provided by Dr. Simonton was originally collected from the contents of Tank 396. Scribner tested the corrosivity of this material (Shurflot 944) in Tests 1, 3, and 4. The next shipment, received in April 2015, was provided by Eastman Chemical, and was represented by Eastman as Crude MCHM.[4] Scribner tested material from this shipment in Test 2. Though his initial report labelled the material in both shipments as**

[4] **Another shipment, received on December 23, 2015 from Eastman, was not opened or used.**

**"Crude MCHM," the parties now agree that the material stored in Tank 396 at the time of the leak was not Crude MCHM. There is substantial evidence to conclude that it was Shurflot. Plaintiffs attribute Scribner's error to the fact that he conducted the tests prior to Freedom's release of records indicating the storage history of Tank 396. Scribner later performed a fifth test using a sample of Crude MCHM provided by Eastman in November 2015 in order to prepare his rebuttal to Eastman's expert.**

**Though the exact steps varied by test, in general Scribner's tests were performed by placing carbon steel samples ("tags") within jugs containing the sample liquids. Two to four tags were placed in each jug, with at least one tag in the lower "water phase," and at least one in the upper "organic phase" of the sample liquid.[5] The tags were kept in the liquid for a period of time ranging from 140 hours (Test 4) to 1509 hours (Test 3). The weight of the tags at the beginning of the test was compared to the weight at the end of the test to derive a rate of corrosion. While Eastman has raised a number of issues concerning whether these tests replicated the conditions of Tank 396, they do not challenge the design of the tests insofar as**

[5] **Crude MCHM separates into these two phases when stored, with the water phase sinking to the bottom.**

**they relate to placing of carbon steel tags within jugs containing sample material, or Scribner's mathematical method in calculating the rate of corrosion.**

**In Tests 1, 3, and 4 (using the material collected from Tank 396, i.e. Shurflot), the sample was found to corrode carbon steel at a rate of .001 to .005 inches per year. Because the bottom of Tank 396, where the leak occurred, was one quarter inch thick, Eastman argues it would take 50 to 250 years for this material to corrode through the tank. However, in Test 2, using Crude MCHM, the rate of corrosion was .032 inches per year, which would suggest Crude MCHM could corrode through the tank within the eight-year period in which plaintiffs assert that Crude MCHM was stored in Tank 396. Based on Scribner's opinion, plaintiffs believe Test 2 best represents the corrosivity of the Crude MCHM stored in Freedom's tank, because it replicated the contents of Tank 396 for a longer period of time. Though Test 5 also sampled Crude MCHM and showed a far slower corrosion rate (.004 inches per year), Scribner attributes the disparity to changes in the production of Crude MCHM after April 2015 which altered the acidity of the product he received in November 2015.**

**Eastman points to a number of purported deficiencies in the test Scribner relies upon, including the unexplained presence of**

**copper residue which Scribner admitted "will make the MCHM more corrosive than it naturally is." Eastman also objects to Scribner's general testing methods, such as the use of a blender to "puree" Crude MCHM prior to testing its corrosiveness, which Eastman suggests would have resulted in a higher saturation of oxygen than that of the Crude MCHM stored in Tank 396, causing a higher rate of corrosion. Eastman argues that Scribner's methodology did not comply with standard practices for corrosion testing.**

**Eastman also argues that Scribner's conclusions are unreliable because he failed to take into account alternative explanations for the corrosion of Tank 396. First, Eastman argues that the tank was previously used to store petroleum, which could have caused internal corrosion. Next, Eastman cites testimony by a Freedom employee, Kevin Skiles, suggesting that Tank 396 was used to stored brine saltwater, another agent that could be responsible for the corrosion. Finally, Eastman argues that Scribner failed to account for external corrosion due to rain and runoff water.[6]**

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**[6] Eastman also raises a number of additional criticisms of Scribner's work, ranging from his storage of the crude MCHM sample in his personal hangar to questions about the chain of custody for some of the materials he sampled. The court has considered these arguments and does not find them either persuasive or worthy of extended treatment.**

**In opposition to the motion to exclude Scribner, plaintiffs argue that corrosion analysis relies more on the experience of the analyst than any standardized methodology, making some of Eastman's methodological criticisms irrelevant. Plaintiffs also argue that Eastman's criticisms go to the weight rather than admissibility of Scribner's expert opinion, and that the questions Eastman raises regarding Scribner's tests are properly addressed by cross-examination. Plaintiffs then dispute each of Eastman's criticisms point-by-point, arguing for example that the use of a blender to puree Crude MCHM samples was a reasonable method, that Scribner's failure to visually inspect Tank 396 did not impact his conclusions, and that Scribner's Test 2, finding a .032 inch per year corrosion rate, is the most relevant because it was the only test conducted on "older vintage" Crude MCHM, rather than Shurflot or the Crude MCHM received in November 2015.**

**In reply, Eastman argues that Scribner's opinions must be excluded because they lack factual and technical foundation and rely on Scribner's ipse dixit. Eastman points out that the 0.32 inches per year corrosion rate plaintiffs rely upon was not replicable in any other tests and was measured by Scribner on a steel sample in the "organic phase" of Crude MCHM rather than the "water phase." Eastman argues that Scribner has failed to**

**explain why his test of a sample in the "organic phase" is relevant to evaluating the cause of a leak at the bottom (i.e., within the water phase) of Tank 396. Scribner's rebuttal report suggests that the corrosion observed on the tags in the organic MCHM phase, rather than the water phase, may be attributable to the precipitation of acid water out of the Crude MCHM.**

**C. Motion to Exclude Gary S. Whittaker**

**Plaintiffs' motion to exclude Gary Whittaker ("Whittaker"), Eastman's corrosion expert, rests on the allegation that his proffered opinions were formed based on incomplete data, undisclosed materials, and incorrect information about the timeline regarding which materials were stored in Tank 396. Plaintiffs rely on Freedom reports logging the contents of the tank to contradict Whittaker's claim that a mixture of Crude MCHM and PPH was stored in the tank between 2010 and 2012. The reports suggest that the decision to switch the contents of Tank 396 from Crude MCHM to Shurflot was not made until August 2012. This distinction matters because Eastman contends that, even if Crude MCHM was corrosive, it was not stored in Tank 396 long enough to have contributed to the leak.**

**Plaintiffs also challenge Whittaker's qualifications based on his failure to answer some questions regarding chemical**

**processes and his admission at a deposition that he is not an analytical chemist. Finally, plaintiffs argue that "Whittaker's report relies heavily upon hearsay and chemical experiments and analyses conducted by Eastman chemical analysts at the request of Mr. Whittaker and under the direction and control of Eastman" but that those materials were never disclosed. ECF 733 at 7-8.[7]**

**In response, Eastman argues that all of plaintiffs' criticisms go to the weight and credibility of Whittaker's conclusions rather than the admissibility of his expert opinions. Eastman argues that plaintiffs have not challenged Whittaker's methodology and that factual disputes over issues such as the timeline with respect to what was stored in Tank 396 cannot justify exclusion. Eastman also argues that contrary to plaintiffs' representations, Eastman has produced all of the materials based upon which Whittaker formed his opinions. Finally, Eastman argues that to the extent Whittaker based his**

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**[7] Plaintiffs also argue that failures by Eastman to disclose certain photographs and tests relating to process changes in the production of crude MCHM in 2014 justify exclusion of Whittaker's report as unreliable and as a sanction under Fed. R. Civ. P. 37. The 2014 changes in the production of crude MCHM are relevant because, plaintiffs contend, changes in production may mean that crude MCHM tested by Whitaker in 2014 did not reflect the acidity or corrosivity of crude MCHM prior to the changes. To the extent this argument is grounded on an unresolved discovery dispute, the court declines to reach its decision on Whittaker's testimony on that basis. It is not apparent that any of the materials that the plaintiffs claim were not disclosed are relevant to Whittaker's conclusions.**

**conclusions on chemical analyses conducted by other Eastman employees, this is not only permissible but also true of Scribner's analysis which relied in part on the plaintiffs' chemical expert Louis A. Kapicak.**

## II. Legal Standards

### A. Summary Judgment

**Summary judgment is appropriate only "if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). "Material" facts are those necessary to establish the elements of a party's cause of action. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986); see also News & Observer Publ'g Co. v. Raleigh-Durham Airport Auth., 597 F.3d 570, 576 (4th Cir. 2010) (same). A "genuine" dispute of material fact exists if, in viewing the record and all reasonable inferences drawn therefrom in a light most favorable to the non-moving party, a reasonable fact-finder could return a verdict for the non-movant. Anderson, 477 U.S. at 248. On the other hand, "[f]actual disputes that are irrelevant or unnecessary will not be counted." Id.**

**When examining the record, the court must neither resolve disputes of material fact nor weigh the evidence,**

**Russell v. Microdyne Corp., 65 F.3d 1229, 1239 (4th Cir. 1995), nor make determinations of credibility, Sosebee v. Murphy, 797 F.2d 179, 182 (4th Cir. 1986). Instead, the party opposing the motion is entitled to have his or her version of the facts accepted as true and, moreover, to have all internal conflicts resolved in his or her favor. Charbonnages de France v. Smith, 597 F.2d 406, 414 (4th Cir. 1979). Along those lines, inferences that are "drawn from the underlying facts . . . must be viewed in the light most favorable to the party opposing the motion." United States v. Diebold, Inc., 369 U.S. 654, 655 (1962).**

**B. Daubert Standard**

**Federal Rule of Evidence 702 governs the admissibility of expert witness testimony. A qualified expert's testimony is admissible if "it rests on a reliable foundation and is relevant." Daubert v. Merrell Dow Pharm., 509 U.S. 579, 597 (1993). Neither Rule 702 nor case law establish a mechanistic test for determining the reliability of an expert's proffered testimony. Rather, "'the test of reliability is flexible' and 'the law grants a district court the same broad latitude when it decides how to determine reliability as it enjoys in respect to its ultimate reliability determination.'" United States v. Wilson, 484 F.3d 267, 274 (4th Cir. 2007) (quoting Kumho Tire**

**Co. v. Carmichael, 526 U.S. 137, 141-42 (1999)).**

**The court is not obliged to "determine that the proffered expert testimony is irrefutable or certainly correct" -- "[a]s with all other admissible evidence, expert testimony is subject to testing by '[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof.'" United States v. Moreland, 437 F.3d 424, 431 (4th Cir. 2006) (quoting Daubert, 509 U.S. at 596) (alteration in original); see also Maryland Cas. Co. v. Therm-O-Disc., Inc., 137 F.3d 780, 783 (4th Cir. 1998) (noting that "[a]ll Daubert demands is that the trial judge make a 'preliminary assessment' of whether the proffered testimony is both reliable ... and helpful"). Instead, the inquiry of the court is focused on the principles and methodology employed by the expert, not the conclusion reached. Westberry v. Gislaved Gummi AB, 178 F.3d 257, 261 (4th Cir. 1999).**

## III. Application

**As an initial matter, the court finds that the issue of whether and the extent to which Crude MCHM is corrosive of carbon steel must be established by expert testimony in this case. While plaintiffs argue that statements by Eastman employees and the notation in Eastman's product profile containing a recommendation that Crude MCHM not be transported**

**in carbon steel railcars are sufficient to show there is a genuine issue of material fact as to Crude MCHM's corrosivity, a close review of this evidence reveals that it falls well short of supporting such a showing. The testimony of Dr. Tennant and Gary Shrum, which essentially amount to non-expert statements that Crude MCHM might be corrosive, are insufficient to support such a finding. Similarly, the brief entry recommending against storage in carbon steel railcars in Eastman's product profile, even taken in the light most favorable to the plaintiffs, would not be enough for the trier of fact to conclude that corrosion due to Crude MCHM caused the failure of Tank 396.**

**Having concluded that the issue of corrosion will turn on the availability of expert testimony, the court turns to the challenges raised to the testimony of Scribner and Whittaker. Plaintiffs have offered the expert testimony of Lyman Scribner to assert, based on the five tests he conducted, that Crude MCHM is capable of corroding carbon steel, that it was capable of corroding through Tank 396 within the eight-year period plaintiffs assert it was stored there, and that it was a significant contributing cause to the failure of the tank.**

**Eastman does not challenge Scribner's qualifications to offer expert testimony. Instead, Eastman raises five challenges to Scribner's testimony that speak to both the**

**reliability of his methods and the relevance of his testimony. Eastman first argues that Scribner's methodology was unsound because he never observed the inside of the leaking tank. Eastman emphasizes Scribner's admission that it "would have been much better" had he been able to observe the inside of the tank. The Federal Rules of Evidence do not require an expert's opinion to be based on direct, personal observation. See Fed. R. Evid. 703 ("An expert may base an opinion on facts or data in the case that the expert has been made aware of or personally observed. If experts in the particular field would reasonably rely on those kinds of facts or data in forming an opinion on the subject, they need not be admissible for the opinion to be admitted."). There is no basis here to conclude that experts in his field would not reasonably rely on the data gathered by Scribner through his testing. Nor is there reason to believe that failure to directly survey the inside of Tank 396 would undermine the reliability of his methodology or conclusion regarding the corrosivity of crude MCHM. To the extent that Scribner's failure to directly observe Tank 396 calls into question the weight to be given to his testimony, it is appropriately a subject for cross-examination. See Moreland, 437 F.3d at 431.**

**Similarly, Eastman asserts that the tests run by**

**Scribner did not replicate the conditions of Tank 396. Eastman contends that Scribner's use of a blender to puree the mixtures he tested resulted in an oxidation of the mixtures that would not have existed for material stored within the tank, and suggest that Scribner used the blender in order to influence the outcome of his testing. Certainly, whether Scribner's tests fairly represent the actual conditions within Tank 396 speaks to the reliability of his methods and relevance of his testimony. See General Elec. Co. v. Joiner, 522 U.S. 136, 146 (1997) (courts may exclude expert testimony where there is too great an analytical gap between the data and opinion proferred); see also Wilson, 484 F.3d at 267. Plaintiffs, citing the opinion of their expert chemist Dr. Kapicak, assert that the blending of the samples allowed the acidity within the Crude MCHM to reach an equilibrium between the water and organic layers, and thus simulates the conditions of Crude MCHM within Tank 396. Moreover, plaintiffs cite tests conducted by Eastman's expert Whittaker which illustrate that blending the material had little measurable effect on corrosivity and thus on the outcome of the tests. In view of these justifications, the court cannot conclude that Scribner's tests so failed to replicate the conditions of Tank 396 as to render them unreliable or irrelevant. Scribner's use of a blender and the conditions of his tests are issues for cross examination. See Moreland, 437**

**F. 3d at 431.**

**Eastman next argues that Scribner's opinion must be excluded because his conclusion that Crude MCHM was a substantial contributing cause of the failure of Tank 396 is contrary to the results of the tests he ran. In particular, Eastman notes that in four of the five tests he conducted, the rate at which Crude MCHM corroded carbon steel was too slow to have contributed to the leak in Tank 396. Scribner's conclusion, however, was based on the results of Test 2, which as earlier noted, suggested that Crude MCHM could corrode through Tank 396 in about eight years. Though Eastman implies that the sample in Test 2 was contaminated, it does not argue that the results of Test 2 could not support Scribner's conclusion. Thus, Eastman's argument is in essence a challenge to the correctness of Scribner's conclusion, and as such is not a proper basis for a Daubert challenge. See Daubert, 509 U.S. at 580; see also TFWS, Inc. v. Schaefer, 325 F.3d 234, 240 (4th Cir. 2003) (issue of whether an expert's calculations support the expert's conclusion is a question of weight, not admissibility). Eastman's final two arguments to exclude Scribner's testimony suffer from similar shortcomings. Scribner's failure to explain the absence of corrosion in a different tank, and his failure to consider potential**

**alternative causes of corrosion may cast doubt on the correctness of his conclusion, but they do not raise issues with the methodology or principles he relied on to reach his conclusion. See Westberry, 178 F.3d at 261.**

**Eastman's motion for summary judgment asserts that plaintiffs have failed to create a genuine issue of fact regarding the corrosivity of Eastman's Crude MCHM and the cause of failure of Tank 396, and that plaintiffs' negligence and strict liability claims against Eastman must therefore be dismissed. However, Eastman's argument rests on the exclusion of the testimony of Scribner. In view of the admissibility of Scribner's testimony, the court concludes that the plaintiffs have raised a genuine issue of fact regarding the corrosivity of Crude MCHM and Eastman's contribution to the failure of Tank 396. Thus, Eastman's motion to exclude Scribner's testimony and its motion for summary judgment are denied.**

**Turning to the plaintiffs' motion to exclude, plaintiffs challenge both the methodology employed by Eastman's expert, Whittaker, in making his analysis and Whittaker's competency to offer testimony regarding the corrosion within Tank 396. Plaintiffs first argue that Whittaker relied on several erroneous facts in reaching his conclusion that a combination of corrosion from petroleum storage, brine, external corrosion, and**

**cold weather caused the leak. In particular, plaintiffs assert that Whittaker assumed that Tank 396 stored Shurflot, rather than crude MCHM, from January 2010 to August 2012 without any factual basis to support his conclusion. Additionally, plaintiffs note disparities between Whittaker's reporting of the contents of ShurFlot (as containing approximately 10% to 25% of PPH) and other analyses of the contents of Shurflot (showing a PPH content of substantially less than 10%). Eastman argues that these factual errors are issues of weight of Whittaker's testimony, not admissibility, citing TFWS, 325 F.3d at 240. The court agrees. Whitakker's potential error regarding the contents of Tank 396 for what might be a thirty-month period (from January 2010 until August 2012) does not so undermine the reliability of his conclusions as to require their exclusion, especially given that Whittaker largely attributes the leak to external corrosion and corrosion prior to 2010. Similarly, plaintiffs failed to explain how Whittaker's alleged inaccuracy regarding the percentage of PPH in Shurflot undermines his conclusions regarding the causes of the leak. To the extent that this error raises questions regarding Whittaker's familiarity with the processes of Freedom Industries, it is a matter of weight for a finder of fact.**

**Plaintiffs next argue that Whittaker's testimony must**

**be excluded because he based his conclusions upon undisclosed data or hearsay. Specifically, plaintiffs argue that Whittaker's report relies on chemical experiments and analyses conducted by Eastman chemical analysts as well as consultations between Whittaker and a retired Eastman staff chemist, Dr. Tindall. Relatedly, plaintiffs contend that because Whittaker relies on his consultations with Dr. Tindall, Whittaker's testimony is inadmissible hearsay. As stated previously, Fed. R. Evid. 703 permits an expert to base his opinion upon data that would not otherwise be admissible, provided that experts in that particular field would reasonably rely on those kinds of facts or data in forming an opinion on the subject. Still, an expert's testimony cannot simply serve as a conduit for testimonial hearsay. Johnson, 587 F.3d at 635. The key question for the court is whether the expert is offering an independent judgment, based on the application of his training and experience to the sources before him, or whether he is merely acting as a transmitter for testimonial hearsay. Id. Though Whittaker may have relied on chemical analyses provided by Eastman and consultation with Dr. Tindall regarding specific esters present in Crude MCHM, his testimony reflects an independent and original judgment regarding how those chemicals may have interacted with or contributed to the corrosive process within Tank 396. Accordingly, the court believes that**

**Whittaker's testimony is permissible.**

**In summary, the court concludes that the testimony of plaintiff's expert Scribner as to the cause of the leak in Tank 396 is sufficiently reliable and relevant as to be admissible. See Daubert, 509 U.S. at 597. Likewise, the testimony of Whittaker regarding the cause of the leak is sufficiently reliable and relevant, and thus admissible. Id.**

## IV. Conclusion

**For the above-stated reasons, the court ORDERS as follows:**

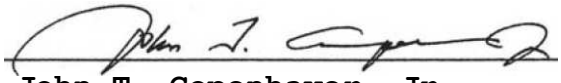
1. **Eastman's motion for summary judgment on the issue of corrosion be, and it hereby is, denied;**

2. **Eastman's motion to exclude Lyman Antoine Scribner be, and it hereby is, denied; and**

3. **Plaintiffs' motion to exclude Gary S. Whittaker be, and it hereby is, denied.**

**The Clerk is directed to forward copies of this memorandum opinion and order to counsel of record and any unrepresented parties.**

**DATED: September 26, 2016**



**John T. Copenhaver, Jr.**
**United States District Judge**