

**DISTRICT COURT OF THE VIRGIN ISLANDS
DIVISION OF ST. CROIX**

POOLWORKS, INC.,	)	
	)	
<i>Plaintiff,</i>	)	
v.	)	
	)	Civil Action No. 2014-0037
AQUAFIN, INC.,	)	
	)	
<i>Defendant.</i>	)	

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MEMORANDUM OPINION

Lewis, Chief Judge

THIS MATTER comes before the Court on the “Motion to Exclude Expert Opinion of Skip Phillips Based upon Fed. R. Evid. 702 (*Daubert*),” filed by Defendant Aquafin, Inc. (“Aquafin”) on February 26, 2016. (Dkt. No. 48). In its Motion, Aquafin challenges the expert offered by Plaintiff Poolworks, Inc.—Harold “Skip” Phillips—and seeks to exclude his expert opinion under the admissibility requirements of Federal Rule of Evidence 702 and the principles espoused in *Daubert v. Merrill Dow Pharms., Inc.*, 509 U.S. 579 (1993). Poolworks opposes the *Daubert* Motion. (Dkt. No. 52). The Court held an evidentiary hearing on May 20, 2016. For the reasons that follow, the Court will deny Aquafin’s Motion.

I. BACKGROUND

A. Factual Background

According to the Complaint filed in this case, Plaintiff Poolworks is “in the business of coating and surfacing pools in the Caribbean, including in the U.S. Virgin Islands.” (Dkt. No. 1, ¶ 4). Defendant Aquafin “manufactures and sells waterproofing materials for use in pools,” and the brand name of its flagship product is “AQUAFIN-2K/M (“2K/M”).” *Id.* ¶ 5.

The Complaint alleges that, in 2011, Poolworks began purchasing 2K/M from Aquafin to waterproof the concrete interior of pools—*i.e.*, to prevent pools from leaking through their concrete bottoms and sides. *Id.* ¶ 6. Aquafin’s installation instructions provide that “2K/M is to be applied directly to the concrete interior after the interior is acid-washed and pressure-washed. The 2K/M is then overcoated with plaster or tile.” Poolworks allegedly followed Aquafin’s installation instructions. *Id.* ¶ 7.

The Complaint goes on to say that, in 2012, Poolworks noticed that the 2K/M was delaminating in many of the pools it had surfaced and coated—*i.e.*, the plaster top coat had peeled away from the 2K/M in large chunks, ruining the interior of the pools. Poolworks was required to drain, recoat, and replaster those pools at its own expense. *Id.* ¶ 8. Poolworks then used another waterproofing material and allegedly had no delamination issues with the replacement material. *Id.*

Poolworks further alleges that, shortly after noticing the delamination problem, it notified Aquafin. *Id.* ¶ 9. According to the Complaint, Poolworks was not the only installer experiencing problems with 2K/M because, on August 6, 2012, Aquafin sent a memorandum to its customers concerning 2K/M delamination. The memorandum stated, in part, that “[d]uring the past twelve months swimming pools (in ground and elevated) waterproofed with AQUAFIN 2K/M

cementitious flexible waterproofing and over-coated with rigid white preblended pool coatings (plasters) have shown spalling and delamination of the pool plaster from the 2K/M or with 2K/M adhered partially to the pool plaster.” *Id.* The memorandum contained a “new warning” cautioning against using 2K/M “with plasters that had not been tested for compatibility” and suggesting that “2K/M should only be overcoated with tile, not plaster.” *Id.*

On July 16, 2014, Poolworks filed its Complaint against Aquafin. The Complaint alleges four causes of action: Strict Products Liability (Count One); Strict Products Liability-Failure to Warn (Count Two); Breach of Implied Warranty of Fitness (Count Three); and Negligence (Count Four). (Dkt. No. 1). Aquafin filed an Answer on September 26, 2014 (Dkt. No. 5) and an Amended Answer on January 26, 2015 (Dkt. No. 21). Factual and expert discovery then took place.

B. Phillips’ Expert Report

On August 21, 2015, Poolworks submitted a Notice of Filing Expert Report of Harold R. Phillips, Jr. (Dkt. No. 38). The Phillips Report, filed as an exhibit to Aquafin’s *Daubert* Motion, is dated August 20, 2015. (Dkt. No. 49-1). It reports on five pools inspected by Phillips on St. Croix on August 9 and 10, 2015—owned by Mr. Tang How, Dr. Delano, Mr. Meyer, Mr. Erbey, and Mr. Hodge—where 2K/M had been applied by Poolworks. *Id.* The report generally describes each pool; how much time Phillips spent at each site; where and how the Aquafin product had been applied; and Phillips’ observations. *Id.* At three of the five pools—owned by Mr. Tang How, Mr. Meyer, and Mr. Erbey—Phillips observed delamination, hollow spots, and/or leaching. *Id.* One of the two sites where Phillips found no problems, owned by Dr. Delano, was a reflecting pool; the other, owned by Mr. Hodge, was a regular pool. *Id.*

Phillips spent three hours inspecting the Tang How pool, which he described as follows: a “Freestanding Pool & Spa, Poured in Place (By Others)—Evidence on exterior shell of 3 leaks at

penetrations. Not currently leaking.” (Dkt. No. 49-1 at 1). He first noted that “Poolworks did the mechanical and interior finish,” and described where “Aquafin”¹ had been applied in the pool. His observations were: “1. Spa has hollow spots and multiple calcium leaching nodules. 2. Random leaking in pool, large blister/delamination in the middle of the break leaching, hollow. 3. No destructive testing done.” *Id.*

Phillips spent approximately one hour inspecting the Meyer pool, described as “Shotcrete Pool, Acrylic Spa,” where Poolworks had done “waterproofing (with Aquafin), bond coat, plaster, waterline tile, and mechanical.” *Id.* at 2. He noted that the “[o]riginal multicoated & plaster installation failed, prompting [Poolworks] to remove (sandblast, scarify, etc.) initial finish and waterproofing,” and described the protocol by which the 2K/M was applied. He observed:

[h]ollow areas and leaching throughout pool. Sample removed—area has what appears to be Aquafin exposed within removed area. Sample review forthcoming. Photographed example of test chip at approximately 7:00 PM—Plaster chip has coat of Aquafin exposed on bottom of chip. Delamination is occurring between the coats of Aquafin.

Id.

At the Erbey pool—a “[p]oured in place older pool, remodel accomplished on pool by others [with p]ool tile install[led] by others”—Phillips spent approximately one hour performing his inspection. He noted that “Poolworks did Aquafin waterproofing and bond coat,” and described where the Aquafin product had been placed, as well as the installation protocol. His observations were as follows:

Leaching is occurring approximately midway on the pool walls and floor. Calcium is easily removed from the tile face, but is prevalent. No leaching observed in the step area. No tile delamination was observed at time of inspection, and we did not run the risk of a chisel to the tile face to avoid cracking the tile. No leaching observed in the mid-pool floor areas.

¹ This is apparently a reference to 2K/M. The parties often used “Aquafin” and 2K/M interchangeably during the *Daubert* hearing.

Id. Phillips' report was accompanied by three pages of hand drawings which depicted, in part, where 2K/M had been applied in the three pools. *Id.* at 4-6.

C. The Parties' Arguments

On February 26, 2016, Aquafin filed the instant *Daubert* Motion to Exclude Phillips' Expert Opinion. (Dkt. No. 48). In its Memorandum, Aquafin contends that "[w]ithout taking core samples and subjecting those samples to petrographic analysis,² Phillips lacks the data he needs to be able to offer an opinion on causation. He cannot determine whether the failure is due to improper application, a defect in the plaster, or some defect in the Aquafin." (Dkt. No. 49 at 10). In the same vein, Aquafin criticizes Phillips' report because he "neither identifies the cause of the delamination or leaching nor rules out other causes." *Id.* at 6. According to Aquafin, "Phillips simply states that the conditions exist with *no* additional analysis," *id.*, and his opinion would not help the jury to determine a fact at issue in this case. *Id.* at 8.

To support its argument, Aquafin cites the report of its own expert, Eric L. Edelson, a professional engineer who specializes in "forensic analysis of buildings and building envelopes with an emphasis upon concrete applications and the reasons for the deterioration of concrete." *Id.* at 8-9. In his report, Edelson critiqued Phillips' report asserting, *inter alia*, that: no forensic examination was done to determine the weather conditions that existed during application of the product; no analysis was done concerning the cause of the delamination; and no industry standard testing was conducted, such as petrographic analysis, by taking core samples. *Id.* at 9-10.

² "Petrography is a branch of geology that is applied to concrete and concrete raw materials. This technique examines and evaluates the optical properties and microstructural characteristics of the materials." RJ Lee Group, The Scientific Insights Blog, last accessed on August 30, 2016 at <http://www.rjlg.com/2014/12/09/petrography-tell-you-about-concrete-structures/>.

In response, Poolworks points to Phillips' resume which, it contends, qualifies him as a pool expert, as he has worked for over thirty-five years in the pool business, has studied different types of waterproofing and coating materials, and has applied those materials when finishing swimming pools. (Dkt. No. 52 at 14-15). In addition, Phillips has inspected many pools where finishing materials have failed. He is a co-founder of an approved certification program regarding design and construction of pools—Genesis 3 University—and has testified as an expert witness about the failure of various pool coatings. *Id.* at 15; Dkt. No. 52-5. Given his specialized knowledge and the liberal standard of admissibility, Poolworks asserts that Phillips is qualified to give his opinion about the failure of the pool coatings he has observed. *Id.*

Poolworks maintains that Phillips followed the same methodology he has used in inspecting pools over the past thirty-five years: he ascertains what materials were applied and how they were applied; he reads the available data sheets concerning the materials; he performs a visual inspection to determine the extent of the delamination, and an extensive underwater inspection using diving equipment; he uses a tool to tap different parts of the pool to locate hollow areas of the pool coating which could indicate delamination; and he takes photographs and videos, and makes drawings of his findings. *Id.* at 17. Poolworks concludes that Phillips' methodology was "straightforward, understandable, well documented, and capable of being repeated by others," *id.*; that there is no pool industry standard for testing for delamination in a pool finish; that Aquafin did not show that petrographic analysis was required in the pool industry; and that Phillips' conclusion that there were hollow sounds where 2K/M was applied and no hollow sounds where 2K/M was not applied indicates causation, which was confirmed by the sample taken from the Meyer pool (the "Meyer Sample"). *Id.* at 10, 11. Poolworks posits that Phillips' methodology was sufficiently reliable for the jury to have an opportunity to weigh it, and that disagreements between

experts, and disputes as to the best methodology to use and whether Poolworks should have performed other types of testing go to the weight of the expert's testimony, not its admissibility. (Dkt. No. 52 at 17, 18, citing *Bennington Foods, LLC v. St. Croix Renaissance Group, LLP*, 2009 WL 4718099 (D.V.I. Dec. 9, 2009)). Finally, Poolworks claims that Phillips' testimony that delamination occurred in specific areas of the pools where 2K/M was applied and did not occur where 2K/M had not been applied was relevant in helping the jury evaluate the key issues in this case: the failure of the Aquafin product. *Id.* at 19.

D. Daubert Hearing

At the May 20, 2016 *Daubert* hearing, Poolworks' expert, Skip Phillips, and Aquafin's expert, Eric Edelson, testified.

1. Phillips' Testimony

In his testimony, Phillips provided additional details regarding his experience in constructing, waterproofing, and inspecting pools. He stated that he first began building pools in 1979. He owned a service company that constructed about 1,100 pools per week, and observed a myriad of different problems. He has been employed in over 300 cases as a swimming pool expert as part of the California expert witness program, testifying regarding pool mechanical, structural, and cosmetic defects. He is a member of two pool-related trade associations, the National Spa & Pool Institute and the Association of Pool and Spa Professionals (APSP). He testified that APSP vets proposed standards related to the pool industry, of which he keeps abreast. He added that he, along with two other people, founded the Genesis 3 Educational System (today known as Genesis 3 University) which provides higher education in the pool industry. He developed educational seminars which evolved into a certification and continuing education program regarding pool construction with Genesis 3 University.

Phillips then testified about his involvement in this case. He stated that he received a telephone call from the President and majority owner of Poolworks, Michael Fuller, who told him that he was having delamination problems with Aquafin. Phillips then arranged a site visit to St. Croix. Fuller explained to him that he had applied the product consistent with the product instructions. Phillips inspected the five pools, using diving equipment and sounding the walls on those pools where delamination was visible to determine if hollow areas existed. According to Phillips, a hollow area means that a void exists behind the surface finish. As to what such a void could signify, Phillips stated “it depends,” but he believed that, in this case, it signified delamination between the two coats of 2K/M. According to Phillips, his finding was confirmed by the Meyer Sample which showed delamination between the two coats of 2K/M. Phillips noted that he had previously used this methodology in determining if a pool coating had failed.

At the hearing, Phillips reiterated the findings included in his report: the Tang How and Meyer pools contained a significant number of hollow areas, and the Erbey pool showed leaching through the surface finish but had no hollow spots. His key observation was that no hollow sounds existed in the areas where no 2K/M had been applied and hollow areas existed where the 2K/M had been applied. He asserted that this finding was consistent with the Meyer Sample and the 2012 Aquafin document that acknowledged delamination problems with 2K/M. Asked why the pools were not drained to analyze the delamination issues, Phillips responded that draining would be “catastrophic” since all the material would come off and a crew would have to be on site to immediately refinish them.

On cross-examination, when asked what might cause delamination, Phillips explained that delamination occurs when two materials do not bond or the bond breaks. If a plaster finish is attached directly to the shell of a pool, the bond could break in a number of ways. The cause of the

breakage could depend on whether, for example, a foreign substance became embedded between the layers of plaster or whether the surface was too hot, cold, or wet when the plaster was applied. Phillips testified that when he taps to determine hollowness, the same hollow sound could result from any of these causes of delamination.

Aquafin queried whether Phillips had conducted forensic tests to determine why the delamination had occurred. Phillips responded that he had not; he took a sample of the pool wall which showed delamination between the two layers of 2K/M, and those delamination areas were consistent with where 2K/M was applied. He asserted that if other conditions, such as the presence of foreign material, had occurred when the plaster was applied, there would be hollow sounds throughout the pool, rendering the application of 2K/M irrelevant. He also stated that Fuller informed him that he followed the suggested application recommendations which, in Phillips' view, eliminated the possibility of application errors.

2. Edelson's Testimony

Aquafin then called its expert, Rick Edelson, who stated he has been a forensic structural engineer for over thirty-five years with a specialty in structural failure analysis—in particular with concrete and cementitious (cement-based) products.³ In the early 1990s, he added waterproofing to his activities, as architects hired his firm to design waterproofing for new structures as well as pools and fountains. He stated he had been licensed in over 20 states, including the Virgin Islands. He teaches subjects such as forensic evaluation, cracked concrete, and repair and restoration.

³ Edelson explained that when limestone is ground up and heated, and comes into contact with water, it becomes cement. If sand and large stone is added, it becomes concrete, which is much stronger. A new generation of waterproof cementitious products has been developed, which uses bendable acrylic. According to Edelson, 2K/M is an acrylic-based cementitious product.

Edelson testified that the methodology he uses to determine the cause of a bonding failure of cementitious products is to analyze samples under a polarized electron microscope—petrographic analysis—which allows him to see certain patterns of cracks. Each crack pattern has a different cause: the pattern shown by microscopic salt or sand particles in the atmosphere, for example, is different from the pattern shown if someone applied the second layer of 2K/M before the first layer was fully cured. He also noted that one of the pools in this case was originally waterproofed with another product which failed and was removed. The removal process could have created microfractures on the pool surface, which may have caused 2K/M not to bond with the surface of the pool. If that had occurred, it could be seen in petrographic analysis.

Edelson testified that petrographic analysis uses samples that are a few microns thick, viewed under various lighting conditions. He observed that it takes several weeks to prepare these samples. Edelson also testified that the American Society for Testing and Materials (“ASTM”) standard for petrographic analysis requires that a 6” square sample of material be analyzed since smaller samples, if cut too closely, could cause debonding. The ASTM industry standard requires three samples—two from the debonded area and one from the nondebonded area—after which a petrographic, not visual, analysis takes place.

Asked whether Phillips’ methodology was acceptable for determining the cause of the debonding, Edelson responded that delamination could have various causes, and Phillips did not specify the cause.

On cross-examination, Edelson asserted that, based on Aquafin’s 2012 document, if a particular coating material was placed on top of the Aquafin product, it could fail because of incompatibility with 2K/M. He also stated that he had not asked to see the sample taken by

Poolworks, and thus had not viewed it under the microscope. However, if Phillips had performed a petrographic analysis, he would know the cause of the delamination.

II. APPLICABLE LEGAL PRINCIPLES

The introduction of expert opinion testimony is governed by Rule 702 of the Federal Rules of Evidence. Rule 702 provides that a witness qualified as an expert by knowledge, skill, experience, training or education may provide opinion testimony if: (1) the testimony is helpful to the trier of fact and based upon sufficient facts or data; (2) the testimony is the product of reliable principles and methods; and (3) the witness has applied the principles and methods reliably to the facts of the case. Fed. R. Evid. 702.⁴ A trial judge “acts as a ‘gatekeeper,’ preventing opinion testimony that does not meet these requirements from reaching the jury.” *Mercedes-Benz USA, Inc. v. Coast Auto. Group, Ltd.*, 362 F. App’x 332, 334 (3d Cir. 2010) (citing *Daubert*, 509 U.S. at 592-95).

The Third Circuit has stated that “Rule 702 has three major requirements: (1) the proffered witness must be an expert, *i.e.*, must be qualified; (2) the expert must testify about matters requiring scientific, technical, or specialized knowledge [*i.e.*, reliability]; and (3) the expert’s testimony must assist the trier of fact[, *i.e.*, fit].” *United States v. Schiff*, 602 F.3d 152, 172 (3d Cir. 2010) (quoting

⁴ The full text of Rule 702 provides as follows:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert’s scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

FED. R. EVID. 702.

Pineda v. Ford Motor Co., 520 F.3d 237, 244 (3d Cir. 2008) (internal quotations omitted)); see also *Schneider ex rel. Estate of Schneider v. Fried*, 320 F.3d 396, 404 (3d Cir. 2003) (“Rule 702 embodies a trilogy of restrictions on expert testimony: qualification, reliability and fit.”). “The party offering the expert must prove each of these requirements by a preponderance of the evidence.” *Mahmood v. Narciso*, 549 F. App’x 99, 102 (3d Cir. 2013) (citing *In re TMI Litig.*, 193 F.3d 613, 663 (3d Cir. 1999)).

To qualify as an expert under Rule 702, “the witness [must] possess specialized expertise.” *Schneider*, 320 F.3d at 404. The Third Circuit has “emphasized that the ‘specialized expertise’ requirement is a liberal one: ‘a broad range of knowledge, skills, and training [may] qualify an expert as such.’” *De La Cruz v. V.I. Water & Power Auth.*, 597 F. App’x 83, 91 (3d Cir. 2014) (quoting *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 741 (3d Cir. 1994)).

To establish reliability, the expert’s opinion “must be based on the ‘methods and procedures of science’ rather than on ‘subjective belief or unsupported speculation’; the expert must have ‘good grounds’ for his or her belief.” *In re Paoli*, 35 F.3d at 742 (quoting *Daubert*, 509 U.S. at 590). In assessing whether a particular methodology is reliable, the Third Circuit has held that courts should consider the following, non-exhaustive factors:

(1) whether a method consists of a testable hypothesis; (2) whether the method has been subject to peer review; (3) the known or potential rate of error; (4) the existence and maintenance of standards controlling the technique’s operation; (5) whether the method is generally accepted; (6) the relationship of the technique to methods which have been established to be reliable; (7) the qualifications of the expert witness testifying based on the methodology; and (8) the non-judicial uses to which the method has been put.

Pineda, 520 F.3d at 247-48 (citations omitted). However, “each factor need not be applied in every case.” *Elcock v. Kmart Corp.*, 233 F.3d 734, 746 (3d Cir. 2000) (underscoring the flexibility of the *Daubert* analysis). In this regard, in *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137 (1999), the

Supreme Court addressed “how *Daubert* applies to the testimony of engineers and other experts who are not scientists,” but who nevertheless possess “technical” and “other specialized” knowledge under Fed. R. Evid. 702. *Id.* at 141. The Court ruled that *Daubert*’s list of specific factors does not necessarily or exclusively apply to all experts or in every case, and that a district court has “broad latitude” when determining how to assess reliability as well as in its ultimate reliability determination. *Id.* at 142; *see id.* at 152 (“[T]he trial judge must have considerable leeway in deciding in a particular case how to go about determining whether particular expert testimony is reliable.”). The Court added that, in some cases, the expert testimony may have a scientific foundation; in other cases, “the relevant reliability concerns may focus on personal knowledge or experience,” where the court’s gatekeeping inquiry is “tied to the facts of a particular case.” *Id.* at 150 (internal quotation marks omitted). Finally,

[w]hile a litigant has to make more than a *prima facie* showing that his expert’s methodology is reliable, we have cautioned that ‘[t]he evidentiary requirement of reliability is lower than the merits standard of correctness.’ [*Paoli*, 35 F.3d] at 744; *see also In re TMI Litig.*, 193 F.3d at 665 (stating that “the standard for determining reliability is not that high, even given the evidentiary gauntlet facing the proponent of expert testimony under Rule 702”).

Pineda, 520 F.3d at 247 (quoting *In re Paoli*, 35 F.3d at 742).

To determine fit, expert testimony “must be relevant for the purposes of the case and must assist the trier of fact.” *Calhoun v. Yamaha Motor Corp., U.S.A.*, 350 F.3d 316, 321 (3d Cir. 2003) (quoting *Schneider*, 320 F.3d at 405) (internal quotation marks omitted)). In other words, it must be “sufficiently tied to the facts of the case that it will aid the jury in resolving a factual dispute.” *Schiff*, 602 F.3d at 173 (quoting *Daubert*, 509 U.S. at 591). The Third Circuit has explained that this requirement is met “when there is a clear ‘fit’ connecting [an] issue in the case with the expert’s opinion[.]” *Meadows v. Anchor Longwall & Rebuild, Inc.*, 306 F. App’x 781, 790 (3d Cir. 2009) (citing *Lauria v. AMTRAK*, 145 F.3d 593, 600 (3d Cir. 1998)).

III. DISCUSSION

A. Reliability

At the hearing, Aquafin stated that it did not challenge Phillips' qualifications as an expert under *Daubert* and Fed. R. Evid. 702. Nor did it argue "fit," although fit was briefly mentioned in its *Daubert* motion. Its primary challenge was to whether Phillips' methodology underlying his testimony was "the product of reliable principles and methods." Fed. R. Evid. 702.

As indicated above, in order to determine whether an expert's methodology is sufficiently reliable, a court engages in a "flexible" inquiry tied to the facts of a particular case. *Daubert*, 509 U.S. at 594. A court may consider the *Daubert* factors set forth above or, if those factors are not pertinent to assessing reliability, it may consider other factors in performing its gatekeeping requirement. *Kumho Tire*, 526 U.S. at 141-42. Two of the listed *Daubert* factors bear mentioning here: whether "standards controlling the technique's operation" exist, and "whether the method is generally accepted."

Phillips noted that APSP vets pool industry standards, but he did not cite any established standard for testing causes of delamination in pools. Poolworks argued that there were no such standards. As a result, Phillips relied on his extensive experience in the pool industry, including his significant role in developing educational seminars and certifications in pool construction, and employed an investigative methodology that he had used before when evaluating pool surface delamination. His methodology—and conclusion—were simple: he tapped the surface of the pools to test for hollow spots which he believed would indicate delamination; he found that no delamination occurred where 2K/M had not been applied, and that delamination occurred where 2K/M had been applied—leading to his conclusion that the application of 2K/M caused the delamination. According to Phillips, this conclusion was buttressed by the Meyer Sample that

showed delamination between the two layers of 2K/M, as well as by Aquafin's 2012 document which acknowledged delamination issues with 2K/M.

In contrast, based on Edelson's testimony, Aquafin asserts that the ASTM C856 standard—entitled “Standard Practice for Petrographic Examination of Hardened Concrete”—must be used to prove that 2K/M caused the delamination and, without such an analysis, Phillips' expert testimony was not reliable. In his testimony, Edelson referred in passing to the ASTM C856 standard as requiring three six-inch square samples to properly conduct petrographic analysis. In his expert report, Edelson asserted that “[i]ndustry standard testing such as Petrographic Analysis (ASTM C467) is standard protocol for the determination of defects in cementitious materials.” (Dkt. No. 49-2 at 4).⁵ However, in the absence of compelling evidence that the ASTM C856 “hardened concrete” standard is not only applicable but necessary for the testing of the delamination at issue here, the Court rejects Aquafin's argument, based on Edelson's conclusory statements, that Phillips' testimony must be excluded on reliability grounds. The fact that Phillips could have performed other testing, but did not, goes to weight, not admissibility. *See Geis v. Tricam Indus., Inc.*, 2010 WL 8591142, at *8 (D.N.J. Oct. 6, 2010) (ruling that defendant's effort to impeach plaintiff's expert's testimony because he did not test allegedly defective product pursuant to applicable industry standard went to credibility and validity, not admissibility, which could be attacked at trial); *Bennington Foods*, 2009 WL 4718099, at *5 (the question of whether an expert “should have researched further the underlying facts . . . ‘is a question of weight, not admissibility’”) (quoting *Floorgraphics Inc. v. News Am. Marketing In-Store Servs., Inc.*, 546 F. Supp. 2d 155, 169 (D.N.J. 2008)); *Robinson v. Hartzell Propeller Inc.*, 2007 WL 2571447, at *7

⁵ At the *Daubert* hearing, Edelson stated that he made a mistake in his expert report by citing ASTM C467 as the standard, when the proper standard was ASTM C856.

(E.D. Pa. Aug. 30, 2007) (“Under *Daubert*, the argument that additional testing methods were possible goes to the weight of [the expert’s] testimony and not its admissibility.”).

Aquafin also contends that Phillips’ statement that the proper methodology for testing delamination is the one he used is not sufficient to demonstrate reliability because that approach is based only on Phillips’ *ipse dixit*. The reference to the “*ipse dixit* of the expert” hearkens to *General Elec. Co. v. Joiner*, 522 U.S. 136 (1997), where the Supreme Court warned against admitting “opinion evidence that is connected to existing data only by the *ipse dixit* of the expert.” *Id.* at 146. As the Court in *Joiner* noted: “[a] court may conclude that there is simply too great an analytical gap between the data and the opinion offered.” *Id.* In other words, the expert’s conclusion must be supported by record evidence. See *Stecyk v. Bell Helicopter Textron, Inc.*, 295 F.3d 408, 414 (3d Cir. 2002) (“It is an abuse of discretion to admit expert testimony which is based on assumptions lacking any factual foundation in the record.”). This case does not present an *ipse dixit* situation.

It is well established that “an expert might draw a conclusion from a set of observations based on extensive and specialized experience.” *Kumho Tire*, 526 U.S. at 156; see *id.* at 150 (relevant reliability concerns may focus on personal knowledge or experience). Phillips testified that he relied on his extensive experience to support his view that it was appropriate to test for delamination by tapping on the surface of a pool to determine whether there were hollow spots. Further, based on his observations, he noted that delamination occurred where 2K/M was applied and did not occur where 2K/M was not applied, and concluded that the delamination was caused by 2K/M. Based on Phillips’ observations, together with his reliance on the Meyer Sample as support for his conclusion that 2K/M caused the delamination, the Court cannot conclude that the testimony “lack[s] any factual foundation in the record.” *Stecyk*, 295 F.3d at 414; cf. *Elcock*, 233

F.3d at 745 (expert's approach may not be based on "subjective belief or unsupported speculation.").

In addition, Aquafin challenges Phillips' *conclusion* that the delamination was caused by 2K/M. Specifically, this reliability challenge focuses on Phillips' alleged failure to exclude other possible causes of delamination by not conducting petrographic analysis and thereby allegedly failing to pinpoint the actual cause of the delamination. In this regard, this case presents a number of parallels to *Bennington Foods*. There, although the defendant formulated its *Daubert* argument as an attack on the reliability of plaintiff's expert's report, the court found that the defendant was "actually disputing the accuracy of [the expert's] conclusions." 2009 WL 4718099, at *3. The court emphasized that, when evaluating the admissibility of expert opinion evidence, its analysis "is not focused on comparing the conclusions of opposing experts, but rather on determining whether a particular expert used reliable methodology in arriving at his conclusions." *Id.* (citing *Daubert*, 509 U.S. at 595). If a defendant disagrees with the plaintiff's expert's conclusions, it could "challenge those conclusions during cross-examination." *Id.* at *4. The bottom line is that "[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." *Id.* (quoting *Daubert*, 509 U.S. at 596). *Daubert* itself noted that "[t]he focus, of course, must be solely on principles and methodology, not on the conclusions that they generate." *Daubert*, 509 U.S. at 595.

Recognizing that the "evidentiary requirement of reliability is lower than the merits standard of correctness," *Pineda*, 520 F.3d at 241, once an expert has made a sufficient showing that his or her methodology is reliable, the proper venue for the opposing party to attack that expert's assumptions, inferences, and conclusions is at trial via cross-examination. *See Joiner*, 522

U.S. at 154 (“*Daubert* quite clearly forbids trial judges to assess the validity or strength of an expert’s scientific conclusions, which is a matter for the jury.”) (Stevens, J., concurring in part and dissenting in part); *De La Cruz*, 597 F. App’x at 92 (observing that “[w]hatever weaknesses” plaintiff’s expert identified in defendant’s expert’s methods, “they were sufficiently grounded in science to be offered in court and then attacked on cross-examination.”); *Stecyk*, 295 F.3d at 414 (“Rule 705, together with Rule 703, places the burden of exploring the facts and assumptions underlying the testimony of an expert witness on opposing counsel during cross-examination” and “[a] party confronted with an adverse expert witness who has sufficient, though perhaps not overwhelming, facts and assumptions as the basis for his opinion can highlight those weaknesses through effective cross-examination.”); *Walker v. Gordon*, 46 F. App’x 691, 695 (3d Cir. 2002) (opining that the district court’s role is “to evaluate whether the *methodology* utilized by the expert is reliable, *i.e.*, whether, when correctly employed, that methodology leads to testimony helpful to the trier in fact. . . . Determinations regarding the weight to be accorded, and the sufficiency of, the evidence relied upon by the proffered expert, are within the sole province of the jury.”).

Accordingly, the Court concludes that Phillips’ methodology satisfies the reliability prong of *Daubert* and Fed. R. Evid. 702, and that Aquafin may test any weaknesses in the methodology and conclusions, as well as any assumptions and inferences, in the crucible of cross-examination.

ii. Fit

The third *Daubert*/Rule 702 requirement mandates that “the expert’s testimony must be relevant for the purposes of the case and must assist the trier of fact.” *Schneider*, 320 F.3d at 404. The Federal Rules of Evidence “embody a strong and undeniable preference for admitting any evidence which has the potential for assisting the trier of fact.” *Kannankeril v. Terminix Int’l, Inc.*, 128 F.3d 802, 806 (3d Cir. 1997).

Based on the discussion above, the Court finds that Phillips' testimony that application of 2K/M caused the delamination in the affected pools is relevant for the purposes of this case, would assist the trier of fact, and thus satisfies the "fit" requirement of Fed. R. Evid. 702 and *Daubert*.

IV. CONCLUSION

For the reasons set forth above, the Court will deny Defendant Aquafin's *Daubert* Motion to exclude the opinion testimony of Poolworks' expert, Harold "Skip" Phillips.

An appropriate Order accompanies this Memorandum Opinion.

Date: August 30, 2016

_____/s/_____
WILMA A. LEWIS
Chief Judge