

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF TENNESSEE  
AT KNOXVILLE

TOMMY CLARK,	)	
	)	
	)	
Plaintiff,	)	
	)	No. 3:17-CV-33-PLR-DCP
v.	)	
	)	
SAFECO INSURANCE COMPANY OF	)	
ILLINOIS,	)	
	)	
Defendant.	)	

**MEMORANDUM AND ORDER**

This case is before the undersigned pursuant to 28 U.S.C. § 636, the Rules of this Court, and Standing Order 13-02.

Now before the Court is Defendant’s Motion to Exclude Expert Opinion Testimony of Gary Litton [Doc. 16]. The parties appeared before the Court on September 10, 2018, for a *Daubert* hearing. Attorney W. Tyler Chastain appeared on behalf of Plaintiff. Attorney Brian Neal appeared on behalf of Defendant. During the *Daubert* hearing, Plaintiff presented the testimony of his expert witness, Gary Litton (“Litton”), and Defendant cross examined Litton. Accordingly, for the reasons more fully set forth below, the Court finds Defendant’s Motion [**Doc. 16**] well taken, and it is **GRANTED**.

**I. BACKGROUND**

This case arises over an insurance coverage dispute involving Plaintiff’s 2004 Ford Mustang. Defendant has denied coverage asserting that it is not liable under the insurance policy for a mechanical breakdown or failure. Plaintiff denies that the engine experienced a mechanical breakdown or failure and alleges that the failure occurred when the engine hydrolocked.

Plaintiff disclosed his expert witness, Litton, who opines that the engine failed because it experienced hydrolock and that nitrous did not cause the damage.<sup>1</sup> Defendant has challenged Litton's opinion under Federal Rule of Evidence 702. The Court will first discuss the allegations in the Complaint and then turn to the challenged expert witness's testimony.

#### **A. Factual History**

Plaintiff originally filed this action in Knox County Circuit Court. On February 3, 2017, Defendant removed [Doc. 1] the case to this Court. The Complaint states that on or about August 27, 2015, Plaintiff and Defendant entered into an insurance policy (hereinafter, "Policy") to insure Plaintiff's 2004 Ford Mustang Cobra S (hereinafter, "Vehicle"). [Doc. 1-1 at ¶ 4]. In December 2015, Plaintiff attempted to start the Vehicle. [*Id.* at ¶ 8]. The Complaint alleges that because water had leaked into the engine during a rainstorm, the engine hydrolocked, causing significant damage to the engine such that it required a complete replacement. [*Id.*]. The Complaint states that the replacement cost of the Vehicle is approximately \$35,000.00. [*Id.* at ¶ 9]. Prior to December 23, 2015, Plaintiff submitted a claim for the damaged engine to Defendant under the Policy, but Defendant denied Plaintiff's claim. [*Id.* at ¶¶ 10-11]. Plaintiff retained an expert to confirm that the Vehicle's engine had hydrolocked as the result of an accidental accumulation of water within the cylinder block. [*Id.* at ¶ 12].

On November 9, 2016, Plaintiff's counsel submitted notice to Defendant that Plaintiff's claim related to his Vehicle should be paid because the damage was the result of an accident. [*Id.*]

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<sup>1</sup> It appears to the Court that Defendant primarily challenges Litton's opinion with respect whether the engine failed due to hydrolock. Defendant states in its supplemental brief that Plaintiff incorrectly believed that its first expert opined that a nitrous explosion caused the loss at issue. [Doc. 34 at 7]. Instead, Defendant states that its first expert opined that the "damage shown is attributed to detonation which is a condition of excessively high combustion temperatures due to the modifications and racing use." [*Id.*]. Defendant asserts that if the Court finds Litton qualified to testify, he should be limited to his opinion that a nitrous explosion did not occur. [*Id.*]

at ¶ 13]. In addition, counsel included a report from Plaintiff's expert, who detailed exactly why the engine had been damaged accidentally. [*Id.* at ¶ 14]. Later, on December 19, 2016, Plaintiff's counsel received notification from Defendant that it stood by its original denial. [*Id.* at ¶ 15].

### **B. Testimony of Gary Litton**

Litton prepared an Investigative Report in this matter. [Doc. 16-3]. Specifically, the Investigative Report states that Litton's objective was to determine if the engine was damaged. [*Id.* at 1]. The Investigative Report submits that Plaintiff stated that the Vehicle had been sitting at his home/shop and that Plaintiff was out of town when it had rained for three to four days. [*Id.*]. The Investigative Report states that rainwater entered the carburetor through the hood scoop, which had no cover on it, and not knowing what had happened, Plaintiff tried to start the engine. [*Id.*]. The engine hydrolocked, possibly damaging the block, heads, cam, carburetor, crank intake, lifters, gaskets, and so forth. [*Id.*]. Litton described his findings as follows:

Deep pockets machined in lower or bottom of pistons. Pistons would hold water along with the cylinder bore after coming up on power stroke causing a dead stop when compressed against the cylinder head. This causes the head to push up, stretching the head studs. The pushing down on pistons causes damage to the pistons, rings, and rods. This can cause the rods to bend or break, and the crank to crack. The cam will always twist and can crack the block. The pistons are aluminum. The valves are stainless. Neither of those parts will rust.

Due to water in the cylinder for a short period of time also high torque start turned over the engine ring would have wiped cylinder walls with water in cylinder engine would have hydrolocked causing major damage especially after the engine was started and ran several times. Cylinder walls would have fine film of oil even if had [sic] for several days. All head gaskets were blown out at the thickest point and not between the cylinders.

[*Id.* at 1-2].

After examining the engine, Litton concluded as follows:

It is the opinion of the investigator, with 43 years of experience as a top fuel funny car driver, who raced with a nitro motor with a super charger, that this engine hydrolocked. It was due to rain water in the cylinder having leaked through the carburetor and upon cranking and finally starting that caused the damage to the vehicle's engine. Engine was destroyed due to the water in the cylinder and the engine trying to compress, the sparks plugs were not nipped on any of the 8 cylinders.

[*Id.* at 2]. As an additional note, Litton stated as follows:

If this engine had been damaged by nitrous oxide the following would have had to occur:

- 1) Nitrous switch would have to be turned on;
- 2) Nitrous bottle would have to be turned on;
- 3) Must be under full throttle to trigger the micro switch solenoid, which sprays a burst of nitrous at 850-1100 P.S.I. Nitrous must have gas to burn. An engine runs 75 degrees cooler with nitrous oxide.

If the engine would have been running under full throttle with nitrous, the engine would have shown signs of rust. Hot iron rusts quicker than cold. You must have heat, water, and oxygen in order to rust.

[*Id.*]. Finally, Litton attached a few photographs to his Investigative Report. [*Id.* at 3-8].

As mentioned above, Litton also testified at the September 10 hearing.<sup>2</sup> During direct examination, Litton testified that he became involved in this case when Plaintiff called him and asked him to look at the engine and provide an opinion on what happened to it. [Doc. 32 at 5].

Litton testified that he has experience with racing a nitromethane engine. [*Id.* at 5-6].<sup>3</sup> He stated

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<sup>2</sup> The Court notes that Defendant also submitted Litton's deposition testimony. [Doc. 16-1]. The Court has reviewed the deposition testimony but will not summarize it herein as the deposition testimony is consistent with Litton's testimony at the *Daubert* hearing. The Court will rely on the deposition testimony in the Analysis section, *infra*, to the extent the deposition testimony is relevant.

<sup>3</sup> Litton later testified as to the differences between a nitromethane engine and the engine in Plaintiff's Vehicle. *See infra* at 7-8.

that this experience helped him gain information with respect to racing engines because he did all of his own work. [*Id.* at 6]. For instance, he stated that he built his own engine. [*Id.*]. He also built engines and sold them to third parties. [*Id.* at 7]. Litton stated that in the 1980s, he had a high performance shop where he repaired engines. [*Id.* at 24]. He did not see hydrolock when he repaired those engines. [*Id.*]. Litton testified that he saw hydrolock on his nitromethane engine many times. [*Id.* at 20].<sup>4</sup> Litton stated that he has never testified in federal court with respect to engines. [*Id.* at 6-7].

Litton testified that he has experience with engine failures. [*Id.* at 7]. He continued, however, that Plaintiff's engine is a Ford engine, and he does not regularly deal with Ford engines. [*Id.* at 8]. He explained that he always built with Chrysler product engines. [*Id.*]. He testified that he did not have any reservations about examining Plaintiff's Ford engine because, while the firing order of the pistons is different, the engines wear the same. [*Id.*]. As part of examining Plaintiff's engine, Litton had to research the firing order of the pistons. [*Id.* at 9-10].

Litton testified that the objective at the time he was hired was to determine whether the engine "blew up on nitrous." [*Id.* at 10]. He stated that he eliminated that cause quickly. [*Id.*]. He explained that nitrous is laughing gas—a type of fuel that is injected into the motor through nozzles or solenoids. [*Id.*]. He further explained that an engine will not idle on nitrous and that it must run under full throttle. [*Id.*]. Litton testified that when he was racing, he never used nitrous. [*Id.* at 10-11]. He stated that as part of his experience with building engines, however, he

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<sup>4</sup> With respect to his nitromethane engine, Litton explained it hydrolocks when fuel enters the cylinder. [Doc. 32 at 31]. Plaintiff's engine, however, is designed to have fuel in the cylinder. [*Id.*]. The Court observes that later Litton testified that he has never experienced a cold-start hydrolock upon starting an engine, similar to how Plaintiff's engine was allegedly damaged. [*Id.* at 35].

researched how nitrous worked in engines. [*Id.* at 11]. Litton explained that when he raced, he ran on 98% nitromethane and 2% alcohol. [*Id.* at 12].

Litton testified that in his opinion, Plaintiff's engine hydrolocked and blew up. [*Id.* at 14]. He explained that it was impossible for the engine to have blown up by nitrous because Plaintiff would have had to put the pedal to the floor and flip the nitrous switches on. [*Id.*]. Litton stated that according to Plaintiff, he (Plaintiff) tried to start the Vehicle and the engine turned on for a second and then turned back off. [*Id.*]. Plaintiff tried to start the engine three or four times. [*Id.*]. Litton testified that he saw proof of Plaintiff's version of events. [*Id.*]. Litton explained in his opinion, the engine hydrolocked based on the following:

Hydrolock, when a cylinder comes up or anything presses against a dead stop, whether it be water, whatever it may be – be, there should be just compression in that cylinder. The spark plugs should light the fuel that's in that cylinder, and that's how it develops and makes horsepower. It fires that fuel and pushes that cylinder back down and it's just a repeated deal all the way through.

In this case, it had – it had a dead stop in it, and when it lit, it shoved it out the weakest point. That's my opinion.

[*Id.* at 17]. Litton testified, however, that his objective was to determine whether the engine blew up on nitrous. [*Id.* at 18].

Litton also testified that a piston burned or broke off due to hydrolock. [*Id.* at 20-21]. He stated that when the engine starts, the ignition becomes hot and generates a hot spark and that if the ignition gets anything hot, it can detonate. [*Id.* at 19]. He further explained that water in the cylinders came upon a compression stroke, and there was nowhere for it to go, so it pushed and broke the rings. [*Id.*]. He stated that there are three sets of rings: compression rings, the "other ring," and the oil ring. [*Id.*]. He explained that the "first two rings are the ones that takes the

beating.” [Id.]. Litton stated that if nitrous caused the engine’s failure, it would have probably destroyed the block into a thousand pieces. [Id. at 20].

Litton stated that when he examined Plaintiff’s Vehicle, the engine was not completely torn down. [Id. at 22]. Litton stated that the head was off and that he checked the oil and saw that there was water in the oil. [Id.].<sup>5</sup> Litton clarified, “But the whole issue, 100 percent, was that the motor had blew up because of nitrous. And my job was to say yes or no. And it did not.” [Id.]. He stated that he did take another step to determine what caused the damage to the engine. [Id.]. He explained that he saw water in the oil and that the only way water can get in the oil is if the head gasket leaked, someone poured the water directly into the oil, or something had to have leaked. [Id. at 22-23]. Based on what he was told regarding where the Vehicle was parked and how the hood scoop was made, Litton stated that water ran back into the cylinder. [Id. at 23].

Litton testified that he also looked at the spark plugs for evidence of nitrous damage, but none of the spark plugs were nipped. [Id. at 24]. He explained that usually when there is a firing problem, it will burn the tips of the spark plugs. [Id. at 24-25]. Litton stated that the spark plugs, which were intact, are not evidence of hydrolock, but it does mean that when the engine was damaged, the engine was not running very hard. [Id. at 25]. Litton stated that some of the damage that occurred could have been from predetonation but that the engine had already hydrolocked and broke some parts. [Id. at 26]. He stated that predetonation probably did occur, but the engine hydrolocked first and caused the damage. [Id. at 27].

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<sup>5</sup> On cross examination, Litton clarified that when he arrived to inspect the engine, the oil had already been drained and that the oil that he saw was in a bucket. [Doc. 32 at 45]. He testified that he saw water mixed in with the oil in the bucket. [Id.]. He further testified that he does not know how long the bucket had been there. [Id.].

On cross examination, Litton testified that he has not taken any classes or obtained certifications in physics, mathematics, thermodynamics, or metallurgy. [*Id.* at 28]. He has never provided testimony with respect to causation of an engine failure. [*Id.*]. He stated that he has never been asked to conduct a forensic examination of an engine before this case but later clarified that he did an autopsy on every car that he “tore up.” [*Id.*]. The engines that he “tore up” were nitromethane engines and that he used those engines for racing from 1968 to 1998. [*Id.* at 28-29]. The last time he raced an engine was twenty years ago in 1998. [*Id.* at 29].

Litton stated that Plaintiff’s engine inside the Vehicle is a completely modified racing engine and not a nitromethane engine and that the two are “different animals.” [*Id.*]. He stated that there was very little that is similar between how the two engines operate. [*Id.*]. For instance, he stated that a nitromethane engine hydrolocks because fuel enters the cylinders, but Plaintiff’s engine is designed to have fuel in the cylinders. [*Id.* at 30]. There are also differences with respect to the make-up of the fuel that operates the two types of engines. [*Id.* at 31-32]. In addition, Litton stated that his nitromethane engine needed a helicopter starter, which is more powerful than Plaintiff’s starter. [*Id.* at 32]. Litton continued that in a nitromethane engine, there is no water in the block, but Plaintiff’s engine is designed to hold water and antifreeze. [*Id.* at 33-34]. In summary, Litton agreed that a nitromethane engine is very different than the engine in Plaintiff’s Vehicle. [*Id.* at 34]. Finally, Litton stated that he has never experienced a cold-start hydrolock upon starting an engine but then clarified that it happened to his lawn mower, weed eater, and golf cart. [*Id.*].

Litton repeated that he was hired to determine whether nitrous caused the failure and that he was not hired to eliminate all other causes of failure. [*Id.* at 38]. Litton stated that he did not disassemble the engine to inspect the pistons because he was there to determine if the engine blew

up on nitrous. [*Id.* at 40]. Plaintiff told Litton that the water entered his engine through the carburetor, but Litton testified that the carburetor had already been removed when Litton arrived to inspect the engine. [*Id.* at 44-45]. In addition, Litton stated that the engine's oil had already been drained. [*Id.* at 45]. Litton testified that he saw water in the bucket with the oil, but he did not know how long the bucket had been there when he observed it. [*Id.*]. He did not test whether the substance was coolant instead of water, but he explained that water separates from oil. [*Id.* at 46]. He did not take any measurements of the engine's parts, and he was not able to see the rod, although he saw pictures of the rod, which were taken by Defendant's expert. [*Id.* at 47].

Litton also explained the findings in his Investigative Report. With respect to the pistons, he testified that the pistons would hold water along with the cylinder bore after coming up on a power stroke causing a dead stop. [*Id.* at 48]. He further explained that if the valve on the piston is closed and there is water present, the piston would come to a dead stop. [*Id.*]. Litton testified that if there is any fuel present and the spark plug lights, that is "where all hell breaks loose." [*Id.*].

Although Litton did not measure the head studs, Litton disagreed with Defendant's expert's method for measuring the heads studs. [*Id.* at 49]. Litton stated that Defendant's expert used a certain gauge to check the threads, but the threads are not the only place that the head studs can stretch. [*Id.*]. He continued that most of the time, the cam will twist in a hydrolock, but he did not check the cam. [*Id.* at 50]. In addition, he stated that hydrolock can crack the block, but he did not see any cracks in the block. [*Id.*]. Litton also stated that the rods can bend or break but that he could not see the rods and did not inspect them. [*Id.* at 50-51]. He also did not inspect the wrist pins, which connects the rod to the piston. [*Id.* at 51]. He testified that he saw the head gaskets, which had already been removed when he arrived. [*Id.* at 53].

Litton further testified that the weakest part of the head gasket is usually in between the cylinders, which is where damage can be expected, but that is not where he saw the damage. [*Id.* at 53-54]. He explained, “You never—like a wreck, things happen, you don’t know how and why and how come.” [*Id.* at 54]. Litton stated that he has never experienced a cold-start hydrolock in an automobile engine. [*Id.* at 56-57]. Litton testified that based on what he was told, the engine filled with rainwater and that Plaintiff tried to start the engine. [*Id.* at 57]. Litton stated that he was not there when Plaintiff started the engine, nor was he there when Plaintiff tore the engine down. [*Id.*]. He did not take any measurements to determine the space between the hood and the windshield. [*Id.* at 57-58]. Further, he did not take any measurements between the windshield and the carburetor. [*Id.* at 58].

Litton further testified that he does not agree with Defendant’s expert, who opined that the engine was damaged due to a detonation event. [*Id.* at 61]. He stated that one of the pistons in the engine was deformed upward, which indicated that it was going down when the damage occurred. [*Id.*]. He explained that in a hydrolock situation, the piston goes up to a dead stop, it tries to fire, and then it will not go down. [*Id.*]. He could not explain how the piston became deformed upward but testified that the hole in piston one was consistent with hydrolock. [*Id.* at 61-62]. Litton agreed that he needed to completely disassemble the engine to conduct a full analysis of all the possible modes of failure, but he did not do so in the instant matter. [*Id.* at 63].

On redirect examination, Litton repeated that he looked at the engine to determine whether nitrous caused the damage and that based on his visual inspection and what was presented to him on the day he examined the engine, he eliminated nitrous as a possible cause of the damage. [*Id.* at 64-65]. He stated that based on his knowledge, the damage occurred by hydrolock and that it was not necessary for him to take measurements. [*Id.* at 65].

## **II. POSITIONS OF THE PARTIES**

Defendant moves pursuant to Rule 702 to exclude Litton from testifying at trial. Defendant emphasizes that the core question in this case is what caused the engine to fail. Defendant raises two main objections: (1) Litton is not qualified to opine on engine failure; and (2) Litton's opinion is speculative and not the product of adequate testing. Defendant argues that because Litton is not qualified and his opinion is speculative, he will not be able to assist the jury.

With respect to Litton's qualifications, Defendant asserts that Litton is not qualified to answer the specific question of whether the Vehicle's engine failed due to hydrolock. Defendant states that Litton has no experience, training, or education that qualifies him as an expert on engine failure causation. Further, Defendant states that this is the first case in which Litton has been asked to testify as an expert regarding engine failure. Defendant asserts that Litton's professional experience as a full-time investigator is not related to engine failure analysis. Defendant states that Litton's only conceivable qualification to testify about engines is his experience as a funny car drag racer from 1969 to 1998. Defendant maintains that such experience does not give Litton any special insight or qualification into whether the Vehicle's engine failed due to hydrolock because Litton admits that the engine he used is different from the engine in Plaintiff's Vehicle. Defendant also asserts that Litton lacks experience with the type of hydrolock that he claims occurred in the Vehicle's engine. Defendant argues that Litton has never experienced or examined an engine that was hydrolocked due to water entering the engine. Defendant maintains that Litton's racing experience, which ended twenty (20) years ago, is irrelevant to the mode of failure of the engine at issue.

In addition, Defendant also states that Litton's testimony is based on an unreliable methodology and will be unhelpful to the jury. Defendant asserts that Litton's testimony relies

heavily on anecdotal experience. For instance, Defendant states that Litton relies on Plaintiff's version of the events wherein Plaintiff claims that rainwater entered the carburetor through the hood scoop, which had no cover on it, and Plaintiff tried to start the Vehicle, but it hydrolocked. Defendant states that Litton also relies on Plaintiff's statement that he (Plaintiff) started the Vehicle for fifteen (15) minutes but that when he tried to start it again, the Vehicle would not start. Defendant asserts that Litton's reliance on Plaintiff's version of events is implausible because its expert could not find one instance of hydrolock occurring during a cold-start as described by Plaintiff (i.e., starting an engine allegedly filled with water). Defendant states that Litton acknowledged that he had never experienced a cold-start hydrolock in an automobile.

Finally, Defendant argues that Litton's testimony is the product of subjective belief and unsupported speculation, rather than adequate testing. Defendant states that when Litton inspected the engine, it had already been partially disassembled. Defendant states that despite Litton's conclusion that water entered the engine based on the presence of water in the oil, Litton never saw water in the engine. Defendant states that Litton's testimony relies on his inspection of altered evidence and, by extension, speculation about the condition of the Vehicle's engine before it was disassembled. Defendant states that Litton admitted that he did not measure or inspect the engine's connecting rods. Thus, Defendant requests that Litton be excluded from testifying in this matter.

In Response [Doc. 21], Plaintiff asserts that Litton is qualified to testify as a non-scientific expert based on his years of experience and that his expert opinion will assist the trier of fact. With respect to Litton's qualifications, Plaintiff states that Litton's testimony is not based upon scientific methodology but on his knowledge and professional experience with racing engines, engine failure, and causes of engine failure. Plaintiff explains that Litton began working in the racing industry in the 1950s. Plaintiff states that Litton raced from 1968 to 1998 in high performance top

fuel and funny car divisions and that he also built engines. Plaintiff asserts that although Litton raced nitromethane engines, as opposed to a nitrous engine, that fact is immaterial because Litton knows from experience the operational and functional requirements associated with the present nitrous engine.

Further, Plaintiff explains that Litton provided detailed testimony as to the engine starter, the compression ratio motor, how the nitro motor is filled with fuel with a power stroke, and how the motor operates. Plaintiff states that Litton also conducted the necessary research by reviewing the expert reports commissioned by Defendant on the engine's failure, Litton interviewed Plaintiff, and Litton examined Plaintiff's Vehicle and engine for the cause of the failure. Litton further researched the firing order of the pistons because Plaintiff's engine is a Ford engine, as opposed to the Chevy engines Litton raced. Plaintiff states that Litton also took photographs. Plaintiff maintains that Litton may properly draw from his professional knowledge and experience in rendering his opinions. Plaintiff argues that Litton is permitted to rely on information provided by Plaintiff and that Litton's investigation, research, and experience are sufficient to permit him to testify in this matter.

In addition, Plaintiff states that Litton's expert opinion will assist the trier of fact. Plaintiff maintains that Litton conducted a reasonable and proper investigation and that he was able to draw on his experience of racing and his experience with engines to present sufficient findings in support of his conclusion. Plaintiff asserts that Litton was able to provide an opinion on the cause of the engine's failure, and he was also able to provide additional information to debunk other possible causes of the engine failure. Plaintiff maintains that Litton should be permitted to testify in this case.

Defendant filed a Reply [Doc. 22], asserting that Plaintiff concedes, or does not dispute, the following arguments: (1) Litton's experience as a private investigator and past expert testimony do not bolster his qualifications in this case; (2) Litton lacks any scientific background or formal training that could qualify him to testify that the engine failed due to hydrolock; (3) Litton has never dealt with or examined an engine that allegedly hydrolocked due to water entering the engine and never encountered an engine that hydrolocked from a cold start; (4) Litton's analysis relied on anecdotal evidence from Plaintiff and a cursory examination of the altered engine; and (5) Litton did not measure, test, or inspect several of the Vehicle's components that show tell-tale signs of a hydrolock event. Defendant asserts that the pertinent question is whether Litton is qualified to testify that the engine failed due to a cold-start hydrolock. Defendant argues that Plaintiff points to nothing in Litton's experience that qualifies him to answer this specific question. Finally, Defendant repeats that Litton's testimony is based on an unreliable methodology and will be unhelpful to the trier of fact.

In addition to the above filings, the parties filed supplemental briefs after the *Daubert* hearing. In Plaintiff's supplemental brief [Doc. 33], he explains that Litton's experience with racing engines is extensive. Plaintiff states that on direct examination, Litton was able to identify his experience as it related to racing engines and what allowed him to make an evaluation of Plaintiff's Vehicle. Plaintiff maintains that the fact that Litton raced nitromethane engines as opposed to nitrous engines is immaterial. Plaintiff asserts that Litton clearly knows from experience the operational and functional requirements associated with the present nitrous engine. Plaintiff points to Litton's testimony regarding how nitrous works—that is, the bottle must be on and there must be full acceleration. Plaintiff argues that Defendant questioned Litton extensively on his initial investigation of the engine, and Litton testified that he inspected the engine in order

to determine whether nitrous caused damage to the engine. Plaintiff states that Litton was able to exclude nitrous and determine that the engine had hydrolocked. Plaintiff explains that Litton examined the oil and water that were removed from the engine, and he researched and determined the firing order of the pistons so that he could establish where the water could have been initially injected into the engine. Plaintiff states that Defendant raises grounds to cross examine Litton's opinion but such grounds are not reasons to exclude him from testifying in this case.

Defendant filed a supplemental brief [Doc. 34], asserting that Litton's testimony at the *Daubert* hearing did not weaken Defendant's arguments raised in its previous filings with respect to Litton's qualifications and methodology. With respect to his qualifications, Defendant asserts that Litton confirmed at the hearing that he lacks any scientific background or formal training that could qualify him to testify that the Vehicle engine failed due to hydrolock. Defendant states that although Litton has experience as a nitromethane funny car driver, Plaintiff's engine is much different than the engines used by Litton. With respect to Litton's methodology, Defendant states that Litton confirmed that he relied on anecdotal evidence and that he did not measure, test, or inspect several components in the Vehicle that show tell-tale signs of a hydrolock event. Defendant asserts that Litton's testimony is unreliable because he performed no testing or verification.

Defendant states that in addition to these deficiencies, Litton testified at the hearing that he did not consider other possible causes and explained that the objective of his inspection was to determine whether the Vehicle blew up on nitrous oxide. Defendant states that Litton further testified that in order to analyze all possible causes of failure, he would have needed to disassemble the motor. Defendant states that, at most, Litton should only be allowed to serve as a rebuttal

expert regarding whether a nitrous explosion occurred because the scope of his inspection and testing was limited to that determination.

### III. STANDARD OF REVIEW

“Federal Rule of Evidence 702 obligates judges to ensure that any scientific testimony or evidence admitted is relevant and reliable.” *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 147 (1999) (quoting *Daubert v. Merrell Dow Pharma., Inc.*, 509 U.S. 579, 589 (1993)).

Specifically, Rule 702 provides as follows:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is 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.

In *Daubert*, the Supreme Court of the United States stated that a district court, when evaluating evidence proffered under Rule 702, must act as a gatekeeper, ensuring “that any and all scientific testimony or evidence admitted is not only relevant, but reliable.” 509 U.S. at 589. The *Daubert* standard “attempts to strike a balance between a liberal admissibility standard for relevant evidence on the one hand and the need to exclude misleading ‘junk science’ on the other.” *Best v. Lowe’s Home Ctrs., Inc.*, 563 F.3d 171, 176–77 (6th Cir. 2009).

The factors relevant in evaluating the reliability of the testimony, include: “whether a method is testable, whether it has been subjected to peer review, the rate of error associated with the methodology, and whether the method is generally accepted within the scientific community.” *Coffey v. Dowley Mfg., Inc.*, 187 F. Supp. 2d 958, 970-71 (M.D. Tenn. 2002) (citing *Daubert*, 509 U.S. at 593–94). Rule 702 inquiry as “a flexible one,” and the *Daubert* factors do not constitute a

definitive checklist or test. *Kumho Tire Co.*, 526 U.S. at 138-39 (citing *Daubert*, 509 U.S. at 593); see also *Heller v. Shaw Indus., Inc.*, 167 F.3d 146, 152 (3d Cir.1999) (explaining that these factors “are simply useful signposts, not dispositive hurdles that a party must overcome in order to have expert testimony admitted”).

“Although *Daubert* centered around the admissibility of scientific expert opinions, the trial court’s gatekeeping function applies to all expert testimony, including that based upon specialized or technical, as opposed to scientific, knowledge.” *Rose v. Sevier Cnty., Tenn.*, No. 3:08-CV-25, 2012 WL 6140991, at \*4 (E.D. Tenn. Dec. 11, 2012) (citing *Kumho Tire Co.*, 526 U.S. at 138-39). “[A] party must show, by a ‘preponderance of proof,’ that the witness will testify in a manner that will ultimately assist the trier of fact in understanding and resolving the factual issues involved in the case.” *Coffey*, 187 F. Supp. 2d at 70-71 (quoting *Daubert*, 509 U.S. at 593-94). The party offering the expert has the burden of proving admissibility. *Daubert*, 509 U.S. at 592 n. 10.

Moreover, the Supreme Court has explained that in determining “whether the expert is proposing to testify to (1) scientific knowledge that (2) will assist the trier of fact,” the court must assess “whether the reasoning or methodology underlying the testimony is scientifically valid and whether it can properly be applied to the facts in issue.” *Id.* at 592–93. “Furthermore, the court must examine the expert's conclusions in order to determine whether they can reliably follow from the facts known to the expert and the methodology used.” *In re Diet Drugs*, No. MDL 1203, 2001 WL 454586, at \*7 (E.D. Pa. Feb. 1, 2001) (citing *Heller*, 167 F.3d at 153).

Further, a court should “exclude proffered expert testimony if the subject of the testimony lies outside the witness's area of expertise.” *In re Diet Drugs*, 2001 WL 454586, at \*7 (quoting 4 Weinstein's Fed. Evid. § 702.06[1], at 702–52 (2000)). This simply means that “a party cannot

qualify as an expert generally by showing that the expert has specialized knowledge or training which would qualify him or her to opine on some other issue.” *Id.* (other citations omitted).

Finally, “the court will not exclude expert testimony merely because the factual bases for an expert's opinion are weak.” *Andler v. Clear Channel Broad., Inc.*, 670 F.3d 717, 729 (6th Cir. 2012) (quotation marks and citations omitted). Exclusion is the exception, not the rule, and “the gatekeeping function established by *Daubert* was never ‘intended to serve as a replacement for the adversary system.’” *Daniels v. Erie Ins. Group*, 291 F. Supp. 3d 835, 840 (M.D. Tenn. Dec. 4, 2017) (quoting *Rose v. Matrixx Initiatives, Inc.*, No. 07–2404–JPM/tmp, 2009 WL 902311, at \*7 (W.D. Tenn. March 31, 2009)) (other quotations omitted). Rather, “[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.” *Daubert*, 509 U.S. at 596. Rule 702 does not “require anything approaching absolute certainty.” *Daniels*, 291 F. Supp. 3d at 840 (quoting *Tamraz v. Lincoln Elec. Co.*, 620 F.3d 665, 671–72 (6th Cir. 2010)).

#### **IV. ANALYSIS**

Guided by the foregoing, the Court will now turn to Defendant's Motion. As mentioned above, Litton opines that nitrous was not the cause of the damage to the engine and that the cause of the damage was hydrolock. Defendant has challenged Litton’s qualifications and methodology. The Court will analyze each of these arguments separately.

##### **1. Qualifications**

As outlined above, Defendant has challenged Litton’s qualifications to opine on engine failure causation. Plaintiff disagrees and points to Litton’s experience in the racing and engine industry in support of his qualifications.

With respect to an expert witness's qualifications, "[t]he court is to examine 'not the qualifications of a witness in the abstract, but whether those qualifications provide a foundation for a witness to answer a specific question.'" *Berry v. Crown Equip. Corp.*, 108 F. Supp. 2d 743, 749 (E.D. Mich. 2000) (quoting *Smelser v. Norfolk Southern Ry. Co.*, 105 F.3d 299, 303 (6th Cir. 1997)). This simply means that the "trial court must determine whether the expert's training and qualifications relate to the subject matter of his proposed testimony." *Id.* (citing *Smelser*, 105 F.3d at 303).

In the instant matter, Litton opines on what caused the engine to fail (i.e., hydrolock) and what did not cause the engine to fail (i.e., nitrous). The parties do not dispute that Litton has not had any formal training or received any degrees or certifications relating to engine failure. Instead, Plaintiff relies on Litton's experience in the racing and engine industry. Thus, the question before the Court is whether Litton's experience is sufficient to allow him to testify as to engine failure causation. The Court has carefully reviewed Litton's qualifications with respect to engine failure causation, and the Court finds that Plaintiff has not established that Litton is qualified to testify as to the opinions he provided in this case.

Clearly, Litton is knowledgeable about racing and nitromethane engines. While Litton raced for approximately thirty (30) years, from 1969 to 1998, his last experience with racing was about twenty years ago. He acknowledged that the vehicles he raced were much different than Plaintiff's Vehicle. Specifically, at the hearing, Litton agreed that the engines' "modes of operation were completely different ball games" and that there was very little that was similar with respect to how they operate. [Doc. 32 at 29]. Litton further testified that he never used nitrous. Although he testified that he researched how nitrous worked when he built engines, he never explained what exactly he researched and how such research assisted him with his opinion in this

case. Thus, while Plaintiff emphasizes Litton's experience, Plaintiff did not establish Litton had any experience with Plaintiff's particular engine or nitrous.

Further, when asked whether he had ever conducted a forensic examination on an engine, he stated that he performed an "autopsy on every motor that we tore up." [Doc. 32 at 28]. Litton, however, did not explain how many engines he had disassembled and what specifically he did during an autopsy that would assist him in reaching his opinions in this case. For instance, it remains unclear whether he took apart engines and examined the parts therein and what type of damage he observed. In summary, he did not explain how his autopsies translate into him being qualified to issue the causation opinions rendered in this case. In addition, Litton testified that he operated a high performance shop in the 1980s, but he stated that he never saw hydrolock in the engines that he repaired at the shop. Thus, Litton's testimony left the Court speculating how his experience, with much different engines, renders him qualified to issue an engine failure causation in this case. *Powell v. Camping World RV Sales LLC*, No. 4:13-CV-00195 KGB, 2015 WL 13651139, at \*8 (E.D. Ark. Mar. 25, 2015) (finding that "although [the expert] pronounces that he has conducted dozens of investigations of fuel contamination, he cites no specific example of an investigation and offers no explanation of how a prior investigation assisted his reaching his opinions in this case"). As the Advisory Committee Notes explain, "If the witness is relying solely or primarily on experience, then the witness must explain how that experience leads to the conclusion reached, why that experience is a sufficient basis for the opinion, and how that experience is reliably applied to the facts." Fed. R. Evid. 702 advisory committee's note to 2000 amendment. Here, the Court finds that Plaintiff did not establish how Litton's experience relates to his opinion in this case.

In addition, while Litton provided a causation opinion as to why Plaintiff's engine failed, Litton acknowledged that he never had any experience with an automobile engine hydrolocking due to water. [Doc. 16-1 at 59]. Accordingly, the Court finds that Plaintiff did not meet his burden in establishing that Litton is qualified to testify as to the cause of the engine failing.

## **2. Methodology**

Defendant maintains that Litton's methodology is unreliable and that his testimony will not assist the jury. Defendant asserts that Litton formed his opinions based on anecdotal evidence from Plaintiff, the engine was partially disassembled and contained no water in it when Litton inspected it, and Litton failed to measure or test several of the Vehicle's components. Defendant also asserts that Litton failed to consider other possible modes of failure.

Plaintiff argues that Litton's opinion is based on his observations and experience in the engine and racing industry. Plaintiff maintains that Litton conducted a reasonable and proper investigation. Plaintiff states that Litton spoke with him about what Plaintiff experienced and read Defendant's experts' reports. Plaintiff concludes that Litton's findings coupled with his experience establish a proper foundation for his testimony.

Even if the Court were to find Litton qualified to testify, the Court finds that Litton's methodology with respect to the engine hydrolocking is not sufficiently reliable. First, Litton repeatedly acknowledged that his only objective when he examined the engine was to determine whether nitrous caused the failure. Litton agreed that in order to conduct a full analysis of all the possible modes of failure, he needed to completely disassemble the engine, which he did not do. *See Newell Rubbermaid, Inc., v. Raymond*, 676 F.3d 512, 527 (6th Cir. 2012) (noting that one red flag that cautions against certifying an expert is the failure to consider other possible causes).

Further, the Court finds that Litton's testimony highlights the primary issue with his opinion—he performed a cursory examination to arrive at his opinion. In his Investigative Report, Litton only provides a general explanation of what happens when an engine experiences hydrolock, but the Investigative Report lacks specificity as to the damage observed in the engine at issue. For instance, he explains in the Investigative Report that in a hydrolock situation, the pistons will stop when compressed against the cylinder head and that the compression will cause the head to push up, which stretches the head studs. During the hearing, he admitted that he did not measure the head studs to determine if they had stretched. In the Investigative Report, he states that the pressure on the pistons causes damage to the pistons, rings, and to the rod. During the hearing, he testified that he did not inspect the rods or the wrist pins to determine if they had been damaged. In his deposition, he testified that had he been able to inspect the engine again, he definitely would have checked the rods. [Doc. 16-1 at 47]. In the Investigative Report, Litton states that when an engine hydrolocks, the cam will always twist and crack the block. During the hearing, he admitted that he did not inspect the cam to determine if it twisted or cracked the block. As Defendant emphasizes in its supplemental brief, it appears Litton neither tested or observed any of the components to determine if they were damaged, even though such damage, in Litton's opinion, would be consistent with hydrolock.

The Court observes that during his deposition, Litton was asked whether he took any measurements with respect to how the rainwater hit the windshield and then dripped into the carburetor. [Doc. 16-1 at 101]. He responded that he needed to take that measurement but that Plaintiff was busy. [*Id.* at 102]. Further, during his deposition, he was asked whether the cylinders had any damage due to hydrolock, and he responded that he was not able to determine if the

cylinders had damage because he would need to take them out individually. [*Id.* at 69]. Given the above deficiencies, the Court finds Litton’s opinion unreliable.

In addition, during the hearing, he could not fully explain why the damage to the head gasket did not occur at the weakest point, which is where he expected to observe the damage. Instead, Litton testified, “You never – like a wreck, things happen, you don’t know how and why and how come.” [Doc. 32 at 55]. Further, Litton was unable to explain how the piston deformed upward, although he testified that the burned hole in the piston was consistent with hydrolock.

It appears to the Court that Litton bases his opinion on Plaintiff’s version of the events, the fact that he saw water in the oil bucket, and the condition of certain components in the Vehicle. First, courts do not exclude expert testimony for relying on an individual’s version of events. *See Andler*, 670 F.3d at 729 (explaining that courts do not “exclude expert testimony merely because the factual bases for an expert’s opinion are weak”) (quotation marks and citations omitted). In the instant matter, however, it appears that Litton accepted as true Plaintiff’s statement that rainwater entered the Vehicle, despite Litton’s ability to take measurements and adequately inspect the Vehicle to determine if rainwater could have entered the Vehicle. *See Newell*, 676 F.3d at 527 (explaining that one red flag that cautions against certifying an expert include reliance on anecdotal evidence). At the hearing, Litton testified that based on what he was told, the engine was already filled with rainwater when Plaintiff tried to start it. [Doc. 32 at 57]. Litton did not take any measurements or perform an adequate inspection to determine if Plaintiff’s version of events is consistent with the engine hydrolocking. For instance, Litton testified during his deposition:

Q. . . . Did you make any measurements on the rainwater how it would have to hit the windshield to get into the carburetor as the engine had been con –

A. No. And I told Tommy I wanted to do that. I said, I need to – I said, I need to do that, and course, he – you know, we never did get together. Tommy’s busy busy busy.

[Doc. 16-1 at 102].

With respect to seeing water in the oil bucket, Litton acknowledged that the oil had already been drained, he did not know how long the bucket had been where he originally observed it, and he did not test to determine whether it was water or coolant in the bucket. With respect to the gaskets, he testified that he expected the damage to occur at the weakest point but he could not explain why the damage was not at the weakest point. Finally, with respect to the piston, he was not able to testify as to how it became deformed upward.

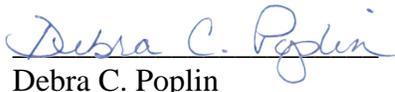
Defendant asserts that Litton did not perform any testing, which also renders Litton’s opinion unreliable. Testing, however, is not required in every case. *Jacobs v. Tricam Indus., Inc.*, 816 F. Supp. 2d 487, 493 (E.D. Mich. 2011) (“Furthermore, testing is not required in every case, particularly where, as here, the expert conducted an examination of the physical evidence.”). Here, Litton simply relies on Plaintiff’s version of the events without performing an adequate examination of the physical evidence. Accordingly, based on the above, the Court finds that Litton’s testimony is not based upon sufficient facts or data, and therefore, his opinion is unreliable.

## V. CONCLUSION

Accordingly, for the reasons stated above, the Court finds Defendant’s Motion to Exclude Expert Opinion Testimony of Gary Litton [Doc. 16] well taken, and it is **GRANTED**.

**IT IS SO ORDERED.**

ENTER:

  
Debra C. Poplin  
United States Magistrate Judge