

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO
Judge Charlotte N. Sweeney

Civil Action No. 1:21-cv-00410-CNS-MEH

ROY WHITE, individually and on behalf of all others similarly situated,

Plaintiff,

v.

GENERAL MOTORS LLC,

Defendant.

ORDER

Defendant General Motors LLC seeks to exclude the opinions and testimony of two experts proffered by Plaintiff Roy White: Dr. Werner J.A. Dahm, ECF No. 68, and Edward M. Stockton, ECF No. 71. For the reasons below, the Court GRANTS in part and DENIES in part GM's motion to exclude Dr. Dahm, and the Court DENIES GM's motion to exclude Mr. Stockton.

I. BACKGROUND¹

Plaintiff White filed a Class Action Complaint against GM in February 2021, alleging that GM's Generation IV Vortec 5300 Engines (Gen IV LC9 Engine) have an "inherent . . . excessive oil consumption problem," which Plaintiff calls the "Oil

¹ The background facts are drawn from parties' summary-judgment briefings, see ECF Nos. 97, 104, 107, and the stipulations contained in the parties' final pretrial order, ECF No. 150. The Court also provided a detailed background in its order granting Plaintiff's motion for class certification, ECF No. 82, and its order granting in part and denying in part GM's motion to dismiss, ECF No. 48.

Consumption Defect.” ECF No. 1, ¶ 7. Plaintiff alleges that the primary cause of the Oil Consumption Defect is the allegedly defective piston rings GM uses in the Gen IV LC9 Engines. *Id.*, ¶ 8; ECF No. 104, ¶¶ 1–10. Plaintiff also argues that GM knew of the Oil Consumption Defect as early as 2008 and concealed it from consumers. ECF No. 104, ¶¶ 11–15. Plaintiff argues that the defect poses risk of damage to the Gen IV LC9 Engines which, in turn, poses serious safety risks to drivers. GM denies these allegations. See ECF No. 107 at 1–9.

The parties agree that the Class Vehicles are defined and limited to the following GM-manufactured vehicles:

2011-2014 Chevrolet Avalanche, 2011-2014 Chevrolet Silverado, 2011-2014 Chevrolet Suburban, 2011-2014 Chevrolet Tahoe, 2011-2014 GMC Sierra, 2011-2014 GMC Yukon, and 2011-2014 Yukon XL manufactured on or after February 10, 2011 with Generation IV 5.3 Liter V8 Vortec 5300 LC9 Engines (the Gen IV LC9 Engines) and purchased or leased in the State of Colorado. Any vehicle that has received free upgraded piston rings under warranty is excluded from the definition of Class Vehicle.

ECF No. 115 at 5. Mr. White purchased a Class Vehicle—specifically a 2011 GMC Sierra equipped with a “Generation IV LC9 Vortec 5300 engine”—in 2012. *Id.*

II. LEGAL STANDARD

The recently amended Rule 702 of the Federal Rules of Evidence, which governs the testimony of expert witnesses, provides that:

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 the proponent demonstrates to the court that it is more likely than not that: (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's opinion reflects a reliable application of the principles and methods to the facts of the case.

Fed. R. Evid. 702 (as amended on Dec. 1, 2023). Where, as here, a party challenges the admissibility of an expert witness, Rule “702 imposes upon the trial judge an important gate-keeping function with regard to the admissibility of expert opinions.” *Mathis v. Huff & Puff Trucking, Inc.*, 787 F.3d 1297, 1307 (10th Cir. 2015) (citation and quotation omitted). The proponent of expert testimony bears the burden—by a preponderance of evidence—of showing admissibility. Fed. R. Evid. 702; *United States v. Nacchio*, 555 F.3d 1234, 1241 (10th Cir. 2009).

To evaluate admissibility, the Court engages in a “two-step analysis.” *Roe v. FCA US LLC*, 42 F.4th 1175, 1180 (10th Cir. 2022). First, the Court must decide whether the proffered expert is qualified “by knowledge, skill, experience, training, or education” to render the opinion. Fed. R. Evid. 702; see also *Roe*, 42 F.4th at 1180. Second, if the expert is sufficiently qualified, the Court must determine whether the proffered opinions are reliable. *Roe*, 42 F.4th at 1180–81. “The reliability inquiry asks whether the methodology employed by an expert is valid—that is, whether it is based on sufficient data, sound methods, and the facts of the case.” *Id.* at 1181 (citing *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 152 (1999)). The Court also evaluates whether the expert reliably applied the methodology to the facts of the case. *Id.*

The Court’s “gatekeeping function requires more than simply taking the expert’s word for it.” *Id.* (citation and quotation omitted). But the Court’s role as a gatekeeper under *Daubert* “is not intended to serve as a replacement for the adversary system.” *Id.* (quoting *United States v. 14.38 Acres of Land Situated in Leflore Cnty., Miss.*, 80 F.3d 1074, 1078 (5th Cir. 1996)). Rather, “[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.” *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 596 (1993)

The Court has substantial discretion to determine “*how* to perform its gatekeeping function under *Daubert*.” *Bill Barrett Corp. v. YMC Royalty Co., LP*, 918 F.3d 760, 770 (10th Cir. 2019) (emphasis in original); *see also Roe*, 42 F.4th at 1180.

III. ANALYSIS

GM seeks to exclude the opinions and testimony of Plaintiff’s experts Dr. Dahm and Mr. Stockton, both pursuant to Rules 702 and 403. The Court addresses each in turn.

A. GM’s Motion to Strike Dr. Werner J.A. Dahm, ECF No. 68

1. *Dr. Dahm’s Qualifications and Opinions*

Dr. Dahm is Plaintiff’s technical engineering expert. ECF No. 65-5 (Dahm Report), ¶ 1. He obtained a PhD from the Division of Engineering and Applied Science at the California Institute of Technology (Caltech) in 1985, an M.S. degree in mechanical engineering from the University of Tennessee in 1981, and a B.S.E. degree in mechanical engineering from the University of Alabama in Huntsville in 1978. *Id.*, ¶ 8. Dr. Dahm has been a professor for 35 years; he currently is a professor of mechanical and aerospace

engineering at Arizona State University and a professor emeritus at the College of Engineering at the University of Michigan. *Id.*, ¶ 5. During his 35 years of teaching, Dr. Dahm states that he has “performed extensive teaching, research, and consulting on matters related to numerous areas of mechanical and aerospace engineering including fluid dynamics, combustion, heat transfer, lubrication, piston and turbine-driven engines, propulsion systems, and related matters.” *Id.*, ¶ 7. Dr. Dahm also has extensive experience working with the U.S. Air Force; he has served as the Chief Scientist of the Air Force and chaired the Air Force’s Scientific Advisory Board. *Id.*, ¶¶ 17, 98.

Dr. Dahm is a member of several relevant associations, including the SAE International (the Society of Automotive Engineers),² American Society of Mechanical Engineers (ASME), Combustion Institute, American Institute of Aeronautics and Astronautics (AIAA), and American Physical Society (APS). *Id.*, ¶ 9. He writes and presents extensively “on topics dealing with fluid dynamics, combustion, heat transfer, lubrication, engines, propulsion systems, and related areas, and more broadly with mechanical and aerospace.” *Id.*, ¶ 10.

Plaintiff retained Dr. Dahm “to develop and provide [his] own independent opinions regarding combustion, lubrication, ring sealing, heat transfer and related aspects of the Gen IV 5.3L Vortec engines in the Class Vehicles, in particular as they relate to oil consumption, engine performance, piston ring wear, and related matters, and from this to

² According to its website, “SAE is a global association of more than 128,000 engineers and related technical experts in the aerospace, automotive and commercial vehicle industries.” SAE International Home Page, <https://www.sae.org> (last visited Feb. 28, 2024).

provide [his] assessment of the opinions expressed in the report from Dr. Jeffrey Ball.”³ *Id.*, ¶ 24. To that end, Dr. Dahm opines that the alleged oil issues in the Class Vehicles “are attributable to a single root cause, namely excessive piston ring wear, due to an incorrect ‘piston ring system’ design.” *Id.*, ¶ 92. He refers to this as the “Oil Consumption Defect.” *Id.*, ¶ 64. He goes on to state that he has “found no evidence for any other root cause than excessive piston ring wear, or for any combination of lesser causes, that can explain the totality of the evidence in this matter.” *Id.*, ¶ 92; *see also id.*, ¶¶ 31–45.

According to Dr. Dahm, the Oil Consumption Defect can affect the operating performance of the Class Vehicles in a myriad of ways, including rough engine running, decreased engine power, engine stalling, increased ring wear, and increased oil consumption. *Id.*, ¶ 64 (listing 18 performance issues that may occur). Dr. Dahm opines that

[b]ecause all Class Vehicles have the same “piston ring system” design, and because the errors in this ring system are inherent in its design and do not result from any manufacturing abnormalities in its production:

- The Oil Consumption Defect is present in all Class Vehicles, it is common across all Class Vehicles, and it is precisely the same defect in all of the Class Vehicles.
- It is unaffected by how the vehicle owner drives their vehicle or maintains their vehicle; those factors may produce other beneficial or detrimental impacts, but they are unrelated to the impacts that result from the Oil Consumption Defect.
- The defect is organic to the Class Vehicles, and it is present in each and every Class Vehicle regardless whether its owner has

³ Dr. Jeffrey Ball was Plaintiff’s original liability expert in the *Sloan v. Gen. Motors LLC* action. ECF No. 104 at 7 n.47. He unfortunately passed away in 2020. *Id.* However, GM deposed Dr. Ball in late 2019. *Id.* Plaintiff intends to present his deposition testimony at trial. ECF No. 115 at 14–15.

or has not already encountered any of the impacts from the defect.

- The impacts from the Oil Consumption Defect, as detailed in Section X [Impacts of the Oil Consumption Defect on Engine Operations], are occurring in each and every Class Vehicle regardless whether the owner is aware of those impacts or not.
- All Class Vehicles will eventually suffer impacts from the Oil Consumption Defect as they are driven over the normal life of a typical modern engine.
- Many Class Vehicle owners are already experiencing some of the early impacts of the Oil Consumption Defect, such as increased oil usage, and other owners are already experiencing subsequent impacts such as spark plug fouling, cylinder misfiring, and rough running.
- A smaller number have already experienced some of the more severe impacts of the Oil Consumption Defect, such as their engine stalling or entering limp mode, and have thus experienced the safety risks that these impacts present to occupants of a Class Vehicle.
- The Oil Consumption Defect is present in all Class Vehicles, regardless whether their owners have already experienced or reported any of the impacts from the defect.

Id., ¶ 65 (emphasis in report).

To arrive at his opinions, Dr. Dahm explains that he “used the same methodology [he has] used every day in the 42+ years of [his] professional life as a degreed engineer working in industry, academia, and government.” *Id.*, ¶ 28. That methodology includes the “standard and widely accepted principles and engineering methods relevant to fluid dynamics, combustion, heat transfer, lubrication, piston and turbine driven engines, propulsion systems, and related matters.” *Id.*, ¶ 30.

To remedy the defect, Dr. Dahm opines that the pistons must be replaced with more robust rings having physical vapor deposition (PVD) coating. *Id.*, ¶ 229. In terms of the repair costs, Dr. Dahm states that “the cost to replace the pistons, and to replace the piston rings with [physical vapor deposition] rings, is at least \$2,700 or more.” *Id.*, ¶ 232. He reached this conclusion by pointing to a document produced by GM in which GM completed a cost analysis to address a piston replacement. *Id.*, ¶ 230.

Finally, Dr. Dahm opines that the Oil Consumption Defect can lead to driving with insufficient oil levels which can create serious safety risks for the vehicle occupants. *Id.*, ¶¶ 209–28.

2. *GM’s Motion to Strike*

GM moves to strike Dr. Dahm’s testimony on three primary grounds. First, GM argues that he is not qualified to offers his opinions. ECF No. 69 at 8–10. Second, GM contends that Dr. Dahm’s opinions lack sufficient facts and reliable methodology. *Id.* at 10–13. Third, GM argues that Dr. Dahm’s testimony invades the province of the jury. *Id.* at 13–15. The Court addresses these arguments in turn.

a. *Dr. Dahm’s Qualifications*

GM first argues that Dr. Dahm is an aerospace engineer with no practical expertise in automotive engineering or design. *Id.* at 5, 9. According to GM, Dr. Dahm must have knowledge of and experience with the specific system at issue—the automotive piston ring assembly. *Id.* at 9. GM also appears to argue that he must have previously been “engaged by an automotive manufacturer” to diagnose the root cause of piston ring wear or excess oil consumption prior to serving as an expert. *Id.* Second, GM argues that,

because Dr. Dahm admits that he is not an expert in the field of human factors or behaviors, his opinions concerning how drivers would react to excess oil consumption and vehicle warning lights must be excluded. *Id.* at 9–10. The Court addresses each argument, ultimately agreeing with GM on the latter point but not the former.

i. Dr. Dahm's Automotive Engineering Opinions

To support its argument that Dr. Dahm must have specialized expertise in the field of automotive engineering to serve as an expert in this matter, GM cites *Hauck v. Michelin N. Am., Inc.*, 343 F. Supp. 2d 976 (D. Colo. 2004). There, the plaintiff was injured in a vehicle accident purportedly caused by a tire blowout. *Id.* at 978. The court excluded the plaintiff's expert, Dr. Ziernicki, who intended to testify on the cause of the tire failure. *Id.* at 979. Dr. Ziernicki, however, admitted that he was not an expert in tire design or manufacturing, even going so far as admitting that he was not "qualified as an expert" to opine on such matters. *Id.* at 982.

GM also relies on *Siegel v. Blue Giant Equip. Corp.*, 793 F. App'x 737, 741–42 (10th Cir. 2019). ECF No. 69 at 9. In *Siegel*, the plaintiff was injured in a workplace accident while using a stationary dock scissor lift. *Id.* at 739. He sued the manufacturer of the lift, asserting a product liability claim. *Id.* The district court excluded the plaintiff's Metallurgical Engineering expert, Dr. Block, on qualification grounds, finding that, although Dr. Block had significant experience and expertise in field of general engineering, he lacked "the relevant expertise to opine about the dock lift at issue." *Id.* at 741. In upholding the decision, the Tenth Circuit noted that the district court outlined the numerous reasons why Dr. Block's expertise did not align with the issue at hand, including

that Dr. Block (a) “is not a member of the Material Handling Industry of America,” (b) “has never authored a paper on the subject,” (c) “has never read any book on material handling machinery,” and (d) “has no expertise in the design, manufacture or use of the lift at issue in this case.” *Id.* (citing district court opinion).

The Court is not persuaded that either *Hauck* or *Siegel* support exclusion in this case. Unlike Dr. Ziernicki, Dr. Dahm made no concessions concerning his qualifications to assert his engineering opinions. To the contrary, in addition to the experience and qualifications listed in his report and CV, Dr. Dahm submitted a declaration to supplement his report. ECF No. 79-4. In no uncertain terms, he states that he has “specific experience related to automobiles and automobile engine,” including teaching “courses and conduct[ing] research that touches on automotive engine design and operation.” *Id.*, ¶ 7. He further states that he has developed his own “fully functioning ‘micro’ internal combustion engine” and has served as an expert related to “automotive engines.” *Id.*

His experience plainly aligns with the scope of his assignment, which was to provide opinions “regarding combustion, lubrication, ring sealing, [and] heat transfer” of the Vortec engines housed in the Class Vehicles. Dahm Report, ¶ 24. These topics, as noted, are areas he has “performed extensive teaching, research, and consulting on.” *Id.*, ¶ 7. And unlike Dr. Block, Dr. Dahm is a member of relevant associations, namely the Society of Automotive Engineers, and he has written and lectured extensively on the

topics he opines, including “fluid dynamics, combustion, heat transfer, lubrication, engines, propulsion systems, and related areas.” *Id.*, ¶¶ 9–10.⁴

The Court is satisfied that Dr. Dahm is sufficiently qualified to provide technical opinions in this case, and therefore, the Court denies GM’s motion to exclude Dr. Dahm’s testimony on this point.

ii. Dr. Dahm’s Human Behavior Opinions

GM fails to direct the Court to the specific “human behavior” opinions it wishes to exclude, see ECF No. 69 at 9–10, but it is plain to the Court that GM moves to strike the opinions in Sections XVIII (GM’s Oil Pressure Instruments are Insufficient and Faulty), XIX (The Defect Can Lead to Driving with Insufficient Oil Levels), and XX (The Defect Creates Safety Risks for Vehicle Occupants). Dahm Report, ¶¶ 192–228. These opinions relate to how drivers interact with the Class Vehicle oil pressure instruments. See *e.g.*, *id.*, ¶ 195 (“I thus conclude that GM’s oil pressure instruments and alerts in the instrument cluster are insufficient to allow drivers to maintain their engine oil at levels that ensure

⁴ Apparently anticipating a challenge, Dr. Dahm explains that the

fields of mechanical and aerospace engineering are closely related, and both are based on the same major technical disciplines. Whereas mechanical engineering is generally focused more on applying these technical disciplines toward designs for lower-cost production and maintenance, aerospace engineering is generally focused more on applying these same technical disciplines toward designs for higher performance, lower weight and volume, and extreme environments. The main technical subjects involved in this litigation, including fluid dynamics, combustion, heat transfer, lubrication, and engines, are taught to students of both mechanical and aerospace engineering, and engineers practicing in these fields may have degrees in either mechanical or aerospace engineering. Moreover, in most university programs or departments, mechanical and aerospace engineering are grouped together in a single Mechanical and Aerospace Engineering program or department.

Dahm Report, ¶ 6.

safe engine operation.”); *id.*, ¶ 201 (“I find that the dipstick in the Class Vehicles is also insufficient as an instrument for drivers to maintain their engine oil at levels that will ensure safe engine operation.”).

Although Dr. Dahm’s report and CV do not directly address his experience with human behavior, his declaration does. He states that his work with the Air Force provides the necessary experience, including “many technical interactions with human factors specialists in the Air Force Research Laboratory (AFRL) Human Effectiveness Directorate and Information Directorate.” ECF No. 79-4, ¶ 18. That’s not enough for Plaintiff to satisfy his burden under Rule 702.

Dr. Dahm’s interactions with human behavior experts does not make him an expert in human behaviors. Certainly, a neurologist who interacts extensively with pilot does not make the neurologist an aviation expert. Dr. Dahm admitted at his deposition that he has no training, education, or experience in the fields of human factors or human behavior, and he does not hold himself out as an expert on those subjects. ECF No. 70-1 (Dahm Deposition) at 123:15–24 (explaining that he has “encountered lots of human factors . . . and worked with human factors specialists . . . but “agree[s] that he does not hold himself out to be a human factors specialist”). Given this concession, the Court is somewhat baffled at Plaintiff’s response where he argues that Dr. Dahm has specialized knowledge to testify about human responses to the Class Vehicles’ instrumentation. ECF No. 79 at 8–9.

Because Dr. Dahm lacks the specialized knowledge, skill, experience, training, or education to offer human behavior opinions, the Court will exclude his opinions concerning the interplay between the Class Vehicle instruments and the drivers.

* * *

Consistent with the above findings, the Court concludes that Dr. Dahm is qualified “by knowledge, skill, experience, training, or education” to render his technical, engineering opinions but not his human factor opinions. Fed. R. Evid. 702; see also *Roe*, 42 F.4th at 1180.

b. Reliability of Dr. Dahm’s Opinions

GM argues that Dr. Dahm’s opinions are not reliable because his opinions are not based on sufficient facts or data, they are not the product of reliable principles, and the methods employed, if any, are not appropriately applied to the facts in this case. ECF No. 69 at 10. GM objects to two broad categories of Dr. Dahm’s opinions. *Id.* The Court addresses GM’s objections in succession.

i. The Presence of the Alleged Oil Consumption Defect in All Class Vehicles

GM moves to strike Dr. Dahm’s opinions that the ring wear is “the root cause” of the alleged Oil Consumption Defect, and that the same Oil Consumption Defect is present in all Class Vehicles. ECF No. 69 at 10–11. GM contends that his opinions are not based on sufficient facts or data because he did not test, inspect, examine, or physically handle any Class Vehicle, Gen IV LC9 Engines, or Gen IV LC9 Engine components. *Id.* And for that reason, GM contends that his opinions are unreliable. *Id.* at 12–13. The Court agrees.

Plaintiff bears the burden of showing that his expert's opinions and testimony are "based on sufficient facts and data." Fed. R. Evid. 702. But where, as here, the opinions are "connected to existing data only by the *ipse dixit* of the expert" such that "there is simply too great an analytical gap between the data and the opinion offered," the Court may exclude the opinion. *Heer v. Costco Wholesale Corp.*, 589 F. App'x 854, 861 (10th Cir. 2014) (quoting *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997)).

Dr. Dahm states that he applied "the same methodology" he has used over his four decades as an engineer, including employing "widely acceptable principles and engineering methods." Dahm Report, ¶¶ 28–30. But his report fails to identify the specific principles and engineering methods he purportedly used. He also provides no basis for how he applied his four decades of experience to determine that ring wear was "the root cause" of the Oil Consumption Defect, and that the defect was present in every Class Vehicle in exactly the same way. Nor did he apply his purported methodology to any data in this case. *Nacchio*, 555 F.3d at 1241. Dr. Dahm even concedes that he does not know how or why the piston ring design is inadequate.⁵

And despite Plaintiff's response that Dr. Dahm conducted an "extensive analysis in accordance with generally accepted engineering principles," ECF No. 79 at 11–12, he,

⁵ See Dahm Deposition at 90:04–18 ("Q. So . . . you don't have an opinion about what specifically is . . . incorrect in the piston ring design of these engines? A. Well, I wouldn't . . . state it that way. The piston rings are clearly failing to perform the three functions that the piston rings have to perform in an engine and the fact that they are failing to perform that function as is evidenced. As I said, from the totality of the evidence here, it indicates that there is some inadequacy in the piston ring system design. Q. But you are not offering an opinion about specifically what that inadequacy is? A. Correct."); see *also id.* at 137:15–25 ("Q. What specifically about the piston ring system in the LC9 engines are you contending is incorrect? A. And as I testified earlier, the available evidence is not sufficient to determine specifically which one or more attributes of the piston ring system design were inadequate, but the data are more than adequate to show that it has to be an inadequate piston ring system design.").

like Dr. Dahm, fails to explain what principles he employed and how he employed them. Plaintiff apparently hopes that the Court will simply take the expert's word for it, which the Court will not do. Fed. R. Evid. 702 advisory committee's notes to 2000 amendment (a court's "gatekeeping function requires more than simply taking the expert's word for it" (citation and quotation omitted)).

Additionally, despite his opinions that the piston ring wear was the root cause of the Oil Consumption Defect, and that the same defect was present in all Class Vehicles, Dr. Dahm admits that he did not test or inspect any Class Vehicle or Gen IV LC9 Engines. Dahm Deposition at 70:14–21 ("Q. [Y]ou did not inspect any engine components as part of your work in this case, correct? A. That's correct. By inspect," you mean physically touch and look at? Correct. Q. Physically touch and look at. . . . [Y]ou did not physically inspect any engines? A. That's correct."); *id.* at 73:19–21 ("Q. [D]id you perform any oil consumption test on any vehicle? A. No, I did not."); *id.* at 91:6–10("Q. And you did not conduct any independent testing or inspection of any LC9 engine to try to reach a determination about what would be inadequate about the piston ring system; is that right? A. That's correct.").

Plaintiff, in a one-paragraph response, argues that Dr. Dahm "has actually handled the defective pistons at issue in this case." ECF No. 79 at 11. Plaintiff then goes on to argue that Dr. Dahm agreed with the opinions of Plaintiff's original liability expert, Dr. Ball. *Id.* at 11–12. Plaintiff does little, if anything, to connect his response to GM's reliability argument. Gen IV LC9 Engine

On Plaintiff's first point, Dr. Dahm received a set of pistons about two weeks before his deposition and well after he submitted his expert report. Dahm Deposition at 71:10-73:11. Dr. Dahm had no knowledge of the origins of the pistons, and according to evidence submitted in GM's motion, these pistons do not belong to a Class Vehicle. *Id.*; ECF No. 69 at 11 n.43. On the second point, setting aside that Dr. Ball's opinion is not yet at issue, Dr. Dahm testified that he disagreed with some of Dr. Ball's key opinions. Dahm Deposition at 74:1-9 ("Q. You also note that Dr. Ball did not account for oil that was trapped or that could have been trapped in the oil filter, right? A. That's correct. Q. And that could affect his calculations about oil consumption rates? A. They may affect his calculations, but they don't affect my report because I didn't rely on any of that.").

GM also points out the inconsistency in Dr. Dahm's logic; specifically, he concedes that only 3% of the Class Vehicles ever needed new piston assemblies for any reason during the 100,000-mile warranty period despite his conclusion that the defect is present in all Class Vehicles. ECF No. 69 at 13. Plaintiff, again, ignores this argument. It likely would not have mattered, because the "analytical gap between the data"—that only 3% of the Class Vehicles ever needed new pistons—and "the opinion offered"—that the defect is present in all vehicles—"is simply too great." *Gen. Elec. Co.*, 522 U.S. at 146.

In sum, Plaintiff has failed to satisfy his burden of showing the reliability of Dr. Dahm's root cause opinions. *Nacchio*, 555 F.3d at 1241 ("The party offering the expert must show that the method employed by the expert . . . is scientifically sound and that the opinion is based on facts which satisfy Rule 702's reliability requirements." (citation and quotations omitted)). The Court, therefore, excludes Dr. Dahm's opinions concerning the

root cause of the Oil Consumption Defect, and that the Oil Consumption Defect is present in all Class Vehicles.⁶

ii. The Cost to Repair the Oil Consumption Defect

Dr. Dahm concludes that “the cost to replace the pistons, and to replace the piston rings with PVD rings, is at least \$2,700 or more.” Dahm Report, ¶ 232. GM argues that Dr. Dahm did nothing to determine the actual cost of that service procedure and instead relied exclusively on a single document concerning internal warranty costs for installing new piston rings. ECF No. 69 at 11. GM argues that this cost figure is outdated, and because he does not know how the \$2,700 figure was calculated or the actual cost of the piston rings, Dr. Dahm has no independent basis to opine on the cost of repair. *Id.* In response, Plaintiff suggests that “Dr. Dahm does not offer the number *as an opinion*” but rather uses this figure “to provide supporting information for the fact that a defect exists, and a repair is in fact needed, the necessity of which GM was aware.” ECF No. 79 at 14 n.69 (emphasis added).

Plaintiff’s response is belied by Dr. Dahm’s report. There, he references a single GM cost analysis and determined that the cost to replace the original piston rings with the ‘278 rings was \$2,700. Dahm Report, ¶¶ 230–32. Using that cost analysis—for a different piston assembly—he then opines that the “repair cost for PVD coated rings should be consistent with cost of ‘278 rings, considering the cost of the rings themselves represent a small fraction of the calculated repair cost.” *Id.*, ¶ 231. He also summarizes this opinion

⁶ In some instances, experience alone may provide sufficient foundation for expert testimony. But that does not relieve an expert from the obligation of explaining “how that experience le[d] 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 notes to 2000 amendment.

in his “summary of my opinions section,” stating that “[a]dequate repair involves replacing the pistons, and replacing the '278 piston rings with PVD piston rings, along with replacing any internal components prematurely worn by the Defect, at an approximate baseline cost of at least \$2700 per vehicle.” Dahm Report, ¶ 233 (summary opinion #37) (emphasis added).

An expert must do more than parrot a document, even if that document was produced by the defendant. *Heer*, 589 F. App'x at 861. Assuming *arguendo* that Dr. Dahm is qualified to testify on such matters, he “made no attempt to test his theory, nor did he make any calculations, apply any engineering principles to his causation theory, discuss any industry standards, or mention any scientific authority that supported his theory.” *Id.* (affirming trial court’s decision to exclude design defect expert). The Court, therefore, is left only with Dr. Dahm’s conclusory opinion that the cost to repair each and every Class Vehicle is \$2,700. This unsubstantiated opinion cannot withstand a Rule 702 challenge.

Because Plaintiff has not carried his burden of establishing the reliability of this opinion, the Court will exclude Dr. Dahm’s testimony concerning the cost of repair of the alleged Oil Consumption Defect.

c. Invading the Jury’s Province

GM’s final argument is that Dr. Dahm’s testimony invades the province of the jury. ECF No. 69 at 13–15. GM contends that Dr. Dahm selectively quotes GM documents and

testimony without any testing or analyzing that data. *Id.* GM identifies three specific such opinions.⁷

First, GM states that Dr. Dahm “calculates” a GM-recommended oil consumption rate of “1 quart per 2000 to 3000 miles” by applying basic math to information in unspecified owner manuals, but GM Technical Service Bulletin #10-06-01-008, which he also cites, clearly states that oil consumption is “excessive” at more than “1 quart per 2000 to 3000 miles.” The Court will reserve ruling on this particular issue for trial. On the one hand, Rule 702 requires experts to base their opinions on sufficient facts and data. GM is entitled to attack Dr. Dahm’s opinions on cross examination if it disagrees with Dr. Dahm’s reliance on certain owner manuals. *See Daubert*, 509 U.S. at 596. On the other, the Court will not permit Dr. Dahm to merely summarize GM documents and deposition testimony—which he does extensively in his report—without attempting to interpret the data in reaching certain opinions, especially when the jury is perfectly capable of interpreting the documents itself. *See Thompson v. State Farm Fire & Cas. Co.*, 34 F.3d 932, 941 (10th Cir. 1994) (when “expert testimony is offered on an issue that a jury is capable of assessing for itself, it is plainly within the trial court’s discretion to rule that testimony inadmissible because it would not even marginally ‘assist the trier of fact’”).

Second, GM argues that Dr. Dahm should be excluded from testifying that the alleged Oil Consumption Defect puts drivers at risk of “robbery, assault, rape, murder, and other forms of personal injury” in the event the oil issue forces drivers to unexpectedly

⁷ GM also challenges Dr. Dahm’s reliance on the single cost-analysis document to opine on the cost of the repair. ECF No. 69 at 18. Because the Court has already excluded that opinion on reliability grounds, it will not address it here.

pull over. ECF No. 69 at 14; Dahm Report, ¶¶ 217, 222 (“[I]t is clear that the Oil Consumption Defect is in fact also a safety defect There is ample evidence, even in anecdotal data, showing that vehicle passengers stranded at a roadside are at greatly elevated risk of harm. Such harm may come from robbery, assault, rape, murder, and other forms of personal injury. It is a fact that, in modern times, passengers stranded at the side of a roadway are immediately placed at substantial risk to their personal safety.”). The Court has already determined that Dr. Dahm is not qualified to make these opinions, but even so, the Court agrees with GM that these opinions are inappropriate, especially when neither Plaintiff nor Dr. Dahm point to any evidence in the record of bodily harm to anyone resulting from the alleged defect. What limited value this testimony might have is substantially outweighed by a danger of unfair prejudice to GM. See Fed. R. Evid. 403. Jurors do not need an engineer to understand the safety risks that accompany drivers forced to pull over their vehicles, and thus, these opinions would not assist the trier of fact. See Fed. R. Evid. 702(a); *Murray v. Am. Colloid Co.*, No. 20-CV-3-J, 2022 WL 1132145, at *9 (D. Wyo. Mar. 11, 2022) (finding that the expert opinions improperly attempt to “tell the jury there are certain uncontroverted relevant facts and the jury should reach a particular legal conclusion based on those facts . . . [where the] average juror is capable of determining what the relevant uncontroverted facts are and what conclusion to reach based on assessment of those facts”).

Finally, GM broadly attacks Dr. Dahm’s testimony which “selectively quotes GM witness testimony and documents” on which he has no personal knowledge. ECF No. 69 at 15 (citing 27 paragraphs in Dr. Dahm’s report). This argument is the same argument

GM makes with respect to the owner manuals, and the Court makes the same ruling. If necessary, the Court will address the 27 opinions identified by GM at trial.

* * *

Consistent with the above analysis, the Court finds that certain opinions and testimony of Dr. Dahm as detailed above lack reliability and thus are excluded. The Court, therefore, GRANTS in part and DENIES in part GM's motion to exclude Dr. Dahm. ECF No. 68.⁸

B. GM's Motion to Strike Edward M. Stockton, ECF No. 71

1. Mr. Stockton's Qualifications and Opinions

Mr. Stockton is the Vice President and Director of Economics Services of The Fontana Group, Inc., a consulting firm located in Tucson, Arizona. ECF No. 73-1 (Stockton Report), ¶ 1. He has as B.A. in economics and an M.S. in "Agriculture and Resource Economics (Applied Econometrics)." *Id.* at 16. Fontana provides economic consulting services and expert testimony in the motor vehicle industry throughout the United States and Canada. *Id.*

Plaintiff asked Mr. Stockton to evaluate the extent of the proposed class members' economic damages and to assist Plaintiff in developing a method for quantifying and allocating those damages. *Id.*, ¶ 7. Mr. Stockton assumed the following for purposes of his report: the Class Vehicles owned or leased by the class members suffer from the

⁸ In a single sentence, GM argues that Dr. Dahm's testimony runs afoul of Federal Rule of Evidence 403. ECF No. 69 at 15. GM makes the identical argument in its challenge to Mr. Stockton's opinions. ECF No. 72 at 15. GM offers no grounds to substantiate its concern that either testimony would be unfairly prejudicial, and the Court will not address GM's undeveloped and perfunctory arguments. *Rocky Mountain Christian Church v. Bd. of Cnty. Comm'rs*, 613 F.3d 1229, 1239 (10th Cir. 2010) (cursory and undeveloped arguments waived).

alleged Oil Consumption Defect; the Oil Consumption Defect results from abnormal and premature degradation in the piston rings in the Class Vehicles' engines; and consequently, drivers of the Class Vehicles can experience engine misfires and shutdown events. *Id.*, ¶ 6. These assumptions allowed Mr. Stockton to conclude that the alleged defect is not contained to the location of the piston rings themselves but rather the Class Vehicle engine design—and the value of that engine design—that would be necessary to fulfill the reasonable expectations of the consumers who purchased or leased those vehicles. *Id.*

2. *GM's Motion to Strike*

GM does not challenge Mr. Stockton's qualifications. GM, however, asks the Court to exclude Mr. Stockton's opinions and testimony in their entirety, asserting two primary arguments. First, GM contends that Mr. Stockton's opinions are improper because they are based on assumptions, not facts. ECF No. 72 at 7. Second, GM challenged Mr. Stockton's methodology employed to reach his opinions. *Id.* at 11. The Court addresses each in turn.

a. *Experts' Reliance on Assumptions*

GM argues that Mr. Stockton's opinion that all Class Vehicle purchasers and lessees suffered economic damages of \$2,700 should be excluded because it is "based on nothing but unsupported assumptions." ECF No. 72 at 7. In his report, Mr. Stockton identified the assumptions upon which he relied in forming this opinion, including that all Class Vehicles are defective, the defective piston ring system results in dangerously excessive oil consumption, the defect is an organic safety defect, the defect affects all

consumers in the same way, and the defect can be remedied with the same uniform \$2,700 repair. See e.g., ECF No. 73-1, ¶¶ 6, 14 (“I have been asked to assume that Defendant sold the Subject Vehicles with a safety defect that was serious enough to create a significant risk of the Subject Vehicles’ engines unexpectedly shutting down and causing an accident or stranding drivers and passengers in unsafe situations.”), 16, 17, and 35.

GM’s argument is not persuasive. To start, claiming that the opinion is based on unsupported assumptions ignores that Mr. Stockton obtained the \$2,700 cost-of-repair figure from an internal GM document. *Id.*, ¶ 35⁹; see also *TK-7 Corp. v. Est. of Barbouti*, 993 F.2d 722, 731 (10th Cir. 1993) (“The fact that [the plaintiffs’ financial expert] assumed certain sales figures does not necessarily makes his testimony inadmissible.”). As for the other assumptions, he clearly lists those in his report. Those assumptions are reasonably based on the evidence Plaintiff intends to introduce at trial. And more fundamentally, Mr. Stockton is a damages expert, which entitles him to assume liability to prepare his damages calculation. See *Graystone Funding Co., LLC v. Network Funding, L.P.*, 598 F. Supp. 3d 1228, 1236 (D. Utah 2022) (“The role of a damages expert is to calculate hypothetical damages given an assumed set of facts; so long as those assumed facts are reasonably based on the evidence in the record, such assumptions are permissible.” (citation omitted)).

⁹ To be precise, Mr. Stockton obtained the \$2,700 figure from Dr. Dahm’s report, which he notes Dr. Dahm pulled from internal GM documents. ECF No. 73-1, ¶ 35.

GM further argues that Mr. Stockton's opinions are inadmissible because he did not independently verify the facts or assumptions given to him. ECF No. 72 at 7. Again, Tenth Circuit caselaw clearly permits a damages expert to assume facts where, as here, there is some evidentiary support for those assumptions. See *BC Tech., Inc. v. Ensil Int'l Corp.*, 464 F. App'x 689, 704 (10th Cir. 2012) ("The assumptions were certainly subject to debate but had sufficient evidentiary support to pass the admissibility threshold."); *Aspen Highlands Skiing Corp. v. Aspen Skiing Co.*, 738 F.2d 1509, 1526 (10th Cir. 1984) ("If the calculations upon which the loss of profits are based are estimated in any reasonable way and the underlying assumptions on which the [expert] relied are not without support in the record, the calculations may be upheld as a valid means of measuring loss of profits." (citation and quotation omitted)), *aff'd*, 472 U.S. 585 (1985).

GM next argues that Mr. Stockton improperly opines that the alleged defect can be remedied in precisely the same way—through a \$2,700 piston ring replacement—for every GM vehicle with a Gen IV LC9 Engine. ECF No. 72 at 10. This essentially is the same argument as above. GM is permitted to challenge the accuracy of the cost of repair through cross examination, its experts, and the introduction of counter evidence, see *Daubert*, 509 U.S. at 596, but the Court will not strike it just because he assumes certain facts.

Having determined that there is adequate evidentiary support for Mr. Stockton's opinions at this juncture, the Court will not exclude Mr. Stockton's opinions simply because he relied on assumptions provided by counsel.

b. Stockton's Methodology

GM next attacks the application of Mr. Stockton’s “expected utility” theory, arguing that Mr. Stockton does not reliably employ the damages theory to the facts of the case. ECF No. 72 at 11–15. To correctly apply the theory, GM argues, Mr. Stockton needed to consider (1) the rate at which the alleged Oil Consumption Defect manifested in the Class Vehicles, (2) how the defect manifested in the Class Vehicles, (3) whether and to what extent any needed repairs may be covered by warranty, and (4) variations in consumers’ risk-tolerance and decision-making process when purchasing and/or leasing automobiles. *Id.* at 12. Because he did not assess any of those factors, according to GM, Mr. Stockton’s opinions are not reliable. *Id.*

At the heart of GM’s argument is, again, that Mr. Stockton “impermissibly (and erroneously) assumes” these factors and evidence without testing them. *Id.* The Court has already determined that Mr. Stockton, as a damages expert, is entitled to assume liability. *See Aspen Highlands Skiing Corp*, 738 F.2d at 1526.

The Court also finds that Mr. Stockton reliably applied the expected utility theory, which aims to put Plaintiff and other class members in the same position they bargained for when purchasing Class Vehicles. To that end, Mr. Stockton assessed the expected utility consumers had when purchasing or leasing Class Vehicles. ECF No. 73-1, ¶¶ 8–24. He opined that, for vehicles with an undisclosed defective condition—such as the Oil Consumption Defect—“the purchase or lease price represents an overpayment by the purchaser or lessee versus what she would have paid had GM disclosed that the vehicles were defective.” *Id.*, ¶ 26. Thus, according to Mr. Stockton, “the actual vehicle value received by the purchaser/lessee is diminished, compared to the value bargained for, by

at least the value or cost of remedying the defect.” *Id.*, ¶ 27; *id.*, ¶ 29 (“[T]he repair and the value of the repair restore the transaction to its originally negotiated terms, under which the consumer would receive the benefit-of-the-bargain and the consumer’s Expected Utility Schedule would align with that which would have existed under the terms of the transaction originally negotiated[.]”).

Using the alleged defect’s cost of repair to calculate the “negative utility,” *see id.*, ¶ 28 (opining that the “minimum amount of total negative utility of the defective component” is the “hypothetical cost to the consumer of restoring the vehicle to its intended condition at the time of purchase or lease”), has been deemed reliable in other federal cases. *See Nguyen v. Nissan N. Am., Inc.*, 932 F.3d 811 (9th Cir. 2019) (generally approving of repair cost as a proxy for benefit of the bargain damages); *Hampton v. General Motors LLC*, No. 21-CV-250-RAW, 2024 WL 718197, at *17 (E.D. Okla. Jan. 4, 2024) (denying GM’s challenge to Mr. Stockton’s damage methodology); *Siqueiros v. General Motors LLC*, No. 16-CV-07244-EMC, 2022 WL 74182, at *11 (N.D. Cal. Jan. 7, 2022) (same); *Simmons v. Ford Motor Co.*, 576 F. Supp. 3d 1136, 1148 (S.D. Fla. 2021) (finding Mr. Stockton’s opinions reliable).

Lastly, GM challenges Mr. Stockton’s purported “zero-value assumption.” ECF No. 72 at 13. This assumption, according to GM, improperly assumes that the defective pistons were completely valueless. *Id.* The Court is not persuaded because Mr. Stockton does not opine that the allegedly defective pistons are worth \$0; he merely opines that the \$2,700 repair is required to return the consumer to the benefit of the bargain. ECF No. 73-1, ¶¶ 35–37.

GM relies extensively on *Philips v. Ford Motor Co.*, 2016 WL 7428810 (N.D. Cal. Dec. 22, 2016) *aff'd*, 726 F. App'x 608, 609 (9th Cir. 2018). ECF No. 72 at 11–14. GM's reliance is misplaced. The damages expert in *Philips* admitted in his deposition that he was “not calculating the expected value” of Ford's new Electronic Power Assisted Steering (EPAS) system. *Id.* at *20. Rather, the expert quantified damages based on the amount Ford charged for the EPAS systems; that is, his damages calculation was the total price consumers paid for the defective system. *Id.*

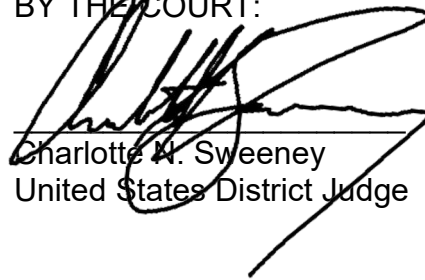
Unlike the damages expert in *Philips*, Mr. Stockton does not assume that “not a single class member received any benefit” from the piston rings in their Class Vehicle. *Id.* at 14 (quoting *Philips*, 2016 WL 7428810, at *21). He instead assessed the consumer's expected utility in determining the benefit of the bargain calculation. ECF No. 73-1, ¶¶ 23–29. As noted throughout this order, GM is permitted to challenge the application of Mr. Stockton's damages models, *see Daubert*, 509 U.S. at 596, but the Court will not exclude it on Rule 702 grounds. *See also* Fed. R. Evid. 702 advisory committee's notes to 2000 amendment (exclusion of expert testimony under Rule 702 “is the exception rather than the rule”).

IV. CONCLUSION

Consistent with the above analysis, the Court GRANTS in part and DENIES in part GM's motion to exclude Dr. Dahm, ECF No. 68, and the Court DENIES GM's motion to exclude Mr. Stockton, ECF No. 71.

DATED this 29th day of February 2024.

BY THE COURT:



Charlotte M. Sweeney
United States District Judge