

**UNITED STATES DISTRICT COURT
DISTRICT OF NEW MEXICO**

FACTORY MUTUAL INSURANCE
COMPANY (as Assignee of ALBANY
MOLECULAR RESEARCH, INC. and OSO
BIOPHARMACEUTICALS
MANUFACTURING, LLC),

Plaintiff,

v.

Civ. No. 17-760 GJF/LF

FEDERAL INSURANCE COMPANY and
DOES 1-10,

Defendant.

MEMORANDUM OPINION AND ORDER

THIS MATTER is before the Court upon Defendant's "Motion to Exclude Expert Robert Adams" [ECF 61] ("Adams Motion") and "Motion to Exclude Expert Frank Roberts" [ECF 63] ("Roberts Motion"). The Motions are fully briefed. *See* ECFs 83 (Response to Adams Motion), 84 (Response to Roberts Motion), 95 (Reply to Adams Motion), 97 (Reply to Roberts Motion). After careful consideration of the pertinent law, the parties' briefing, and extensive oral argument, the Court will **DENY** both Motions. The Court's reasoning follows below.

I. BACKGROUND

Sounding in contract, this case arises from a pharmaceutical company's ("OSO") loss that is alleged to have resulted from mold contamination. As assignee of an insurance policy that Defendant executed in OSO's favor, Plaintiff contends that Defendant still owes sums due under that policy. Defendant objects to the expected testimony of Plaintiff's expert witness, Frank Roberts, an electrical engineer who has opined that a lightning strike likely caused OSO's interior clean room doors to inadvertently open and remain open for an extended period of time, thus

allowing for possible intrusion by contaminants, including mold.¹ Defendant also asks the Court to bar the testimony of Robert Adams, an industrial hygienist proffered by Plaintiff, who opines that the inadvertent and prolonged opening of the interior clean room doors created a pathway that permitted the intrusion of mold into the clean room.

II. LEGAL STANDARD²

Federal Rule of Evidence 702 governs the admissibility of expert testimony at trial:

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

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

Fed. R. Evid. 702. When, as here, an objection to an expert’s testimony is raised, “the court must perform *Daubert* gatekeeper duties before the jury is permitted to hear the evidence.” *Siegel v. Blue Giant Equip. Corp.*, 2019 WL 5549331 (10th Cir. Oct. 28, 2019) (citing *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 592-93 (1993); *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 149 (1999)). These duties are twofold. First, a court must ensure that the expert is “qualified ‘by knowledge, skill, experience, training, or education’ to render an opinion.” *United*

¹ Even though Defendant’s Motion to Exclude Robert Adams [ECF 61] preceded the Motion to Exclude Frank Roberts [ECF 63], the Court will address the latter motion first because the issue addressed in the Roberts Motion—whether lightning caused the doors to open—logically precedes whether mold entered the room afterwards.

² In both Motions, Defendant extensively cites New Mexico case law. While New Mexico law is of significant importance to other areas of this case, e.g., the contractual interpretation issues, it matters little in this Court’s application of Federal Rule of Evidence 702, even if New Mexico has adopted the federal standard. What matters is *Daubert*, its progeny, and Tenth Circuit precedent. *See Hall v. Conoco Inc.*, 886 F.3d 1308, 1311 (10th Cir. 2018) (“The district court’s exclusion of expert testimony is governed by federal law.” (citing *Sims v. Great Am. Life Ins.*, 469 F.3d 870, 879 (10th Cir. 2006))).

States v. Nacchio, 555 F.3d 1234, 1241 (10th Cir. 2009) (en banc) (quoting Fed. R. Evid. 702). Then, if the expert is sufficiently qualified, a court tests whether the “expert’s opinion is reliable by assessing the underlying reasoning and methodology, as set forth in *Daubert*.” *Id.* “Where an expert testifies based on experience, the tribunal reviews the reliability of the testimony with reference to ‘the nature of the issue, the expert’s particular expertise, and the subject of the testimony.’” *Bill Barrett Corp. v. YMC Royalty Co., LP*, 918 F.3d 760, 770 (10th Cir. 2019) (quoting *F & H Coatings, LLC v. Acosta*, 900 F.3d 1214, 1222 (10th Cir. 2018)).

III. ANALYSIS

A. Frank Roberts

1. Parties’ Arguments

Defendant claims that this Court should bar Mr. Roberts’ testimony³ at trial because his opinion does not require scientific knowledge, is not the product of a sufficient factual basis, and is not founded on a reliable methodology. *See* Mot. Hr’g Tr. 55:3-15 [ECF 114]. Specifically, Defendant argues that, without a proper foundation for explaining how lightning could have caused a malfunction in the “Human Machine Interface” (“HMI”), Mr. Roberts cannot conclude—even based on his experience as an engineer and the temporal proximity of the lightning strike—that lightning caused a power anomaly that (through an apparent HMI malfunction) caused OSO’s interior clean room doors to open. Mot. 1-2, 7; Mot. Hr’g Tr. 55:3-15. Defendant believes that a lay jury does not need an expert witness to make that inference for it, and the Court should therefore exclude Mr. Roberts’ testimony as irrelevant and unhelpful. For its part, Plaintiff responds that “[b]ased on his experience and knowledge, Mr. Roberts concluded that the odds are

³ Defendant asks this Court to exclude all testimony relating to (1) what led to the opening of Room 152’s doors, (2) whether or not lightning had any relationship to a power anomaly that occurred on July 31, 2014, and (3) whether such power anomaly affected the Human Machine Interface (“HMI”). Mot. at 22.

overwhelmingly against these two events being unrelated,’ and thus his testimony is relevant and helpful. Roberts Resp. 3.

Defendant next asserts that Mr. Roberts lacks a sufficient factual basis for his opinions. Specifically, Defendant argues that Mr. Roberts must possess knowledge of the design specifications of the HMI, and also must be able to quantify the extent of the power anomaly at issue, before he can properly opine that the “lightning strike was so close to the plant and so powerful that it overcame the design limitations of the protection that was designed into [the HMI].” Mot. 8-9; Ex. 1, 127:25-128:8 (Roberts Deposition). Plaintiff, however, contends that this argument is a red herring. Plaintiff asserts that such knowledge, i.e., an appreciation of HMI design specifications, is wholly irrelevant given that the tests that form the basis for such design specifications are not conducted under actual lightning conditions. Resp. 3-4. Plaintiff further argues that the ability to quantify the extent of the power anomaly—something even Defendant’s own expert does not claim knowledge of—is not necessary to opine on whether lightning caused a malfunction of the HMI. *Id.* Rather, Plaintiff contends that, based on sufficient data included in Mr. Roberts’ report, he may properly render an admissible expert opinion on whether lightning caused the doors to room 152 to open. *Id.*

Finally, Defendant heavily relies on Mr. Roberts’ deposition to attack his methodology. For example, Defendant claims that, “[d]espite evidence indicating a power sag occurred from the breakers tripping twice, Mr. Roberts indicated he did not have data to show if there was a voltage increase or decrease during the relevant time because lightning can cause both.” Mot. 13. Defendant directs the Court to the following dialogue:

Q: Okay. How long do you think it lasted?

Mr. Roberts: I think that the disturbance that was initiated by the lightning and the two associated outages by the power company circuit breakers opening, then

closing, then opening the second time, and then closing the second time last a period of approximately 2 to 4 seconds.

Q: When we say power disturbance, is it a voltage sag that occurred?

Mr. Roberts: We don't have data to directly indicate that. Lightning is unpredictable and could have resulted in a voltage increase or decrease or both.

Id. at 13-14. This type of back-and-forth deposition dialogue (which consumed more than half of the motion and which did not include meaningful citations to any evidence that purportedly disproves Mr. Roberts' opinions other than the contrary opinions of Defendant's own expert) forms the crux of Defendant's final argument.⁴

2. *Mr. Roberts' Opinion Is Sound under Daubert*

Beginning with Mr. Roberts' qualifications, the Court finds that he possesses the necessary tools to survive a Rule 702 inquiry at this juncture. Mr. Roberts is an electrical engineer who works for a consulting firm that provides investigative and litigation services to clients. *See* ECF 50, Ex. 2; *see also* Mot. Ex. 1, *passim*. He has testified in depositions and at trials regarding his investigations. Mot. Ex. 1, 5:13-23.⁵ He has investigated at least two other lightning-related equipment damage claims. *Id.* at 9:17-24. In the Court's view, the foregoing establishes that Mr. Roberts possesses the qualifications necessary to render an expert opinion.

To be sure, Mr. Roberts' job was to evaluate, based on the totality of the circumstances, the likely cause of an event (i.e., Room 152's doors swinging open). This evaluation, however,

⁴ Similarly, Defendant argues that, because Mr. Roberts failed to investigate the accuracy of the underlying timing estimates of when the power anomaly occurred, he somehow cannot opine on causation. *Id.* at 16-18. Although Defendant quotes from Mr. Roberts' deposition in an attempt to support this argument, *id.*, Defendant nevertheless failed to capture what Mr. Roberts actually opined regarding the timing disparity: "As the times reported by different sources were all close to each other, ED&T considers the small variations in the reported times of the event to be insignificant." ECF 50, Ex. 2 at 13.

⁵ For clarity, the Court uses the ECF pagination designated on the top of the exhibit to cite to deposition excerpts because the entire deposition is not before the Court. Therefore, Ex. 1, 5:13-23 corresponds to page five of exhibit one (not page five of Mr. Roberts' deposition).

does not require him to be an expert on every piece of electrical equipment within a building (or the corresponding DC international standards or HMI industry standards), nor does it require him to pinpoint the exact component that failed. Instead, his job was to analyze the complete system that was in place and determine whether it failed and – if so – whether its failure triggered the event in question. Therefore, Defendant’s criticism that Mr. Roberts did not know the specific HMI design standards is irrelevant to the question of whether a lightning strike caused a near-simultaneous electrical equipment failure throughout OSO. This lack of specific expertise of design standards of a single piece of equipment does not mean, however, that an expert (with whom a party disagrees) is unqualified to render an opinion about why a system—particularly one that is comprised of many interfaces and controls—likely failed.⁶ *See Wheeler v. John Deere Co.*, 935 F.2d 1090, 1099 (10th Cir. 1991) (holding that an expert can testify “within the reasonable confines of his subject area . . . a lack of specialization does not affect the admissibility of [the expert] opinion, but only its weight”) (permitting a mechanical engineer, with expertise in the design of farm equipment, to testify on consumer expectations despite his lack of experience in consumer sampling).

Moreover, Mr. Roberts’ inability to quantify the actual extent of the power anomaly or to determine whether the HMI’s failure was software or hardware related does not render his opinion speculative. Ultimately, what matters here are the correlation and degree of interdependence between the lightning-caused power anomaly and Room 152’s doors opening, not the elemental specifics of the HMI’s failure. In sum, Mr. Roberts is qualified to render an opinion about whether lightning caused Room 152’s doors to open.

⁶ Mr. Roberts’ report did, however, discuss how the HMI was connected to the PCL on the date of the power anomaly. *See* ECF 50, Ex. 2 at 13-23. He then compared the setup on the date of the anomaly, i.e., the routing of ethernet cables in parallel in violation of the manufacturer’s instructions, to the installation instructions for the HMI. *Id.* at 21. Thus, Mr. Roberts analyzed at least one potential reason why the HMI could have failed.

Mr. Roberts' reasoning and methodology are similarly sufficient to render his opinions admissible at trial. As a basis for his report, Mr. Roberts relied on, among other things, control manuals, six investigative reports (including PNM and Defendant's own expert), wire diagrams, depositions, and physical inspections/photographs of the Programmable Logic Controller and HMI. *Id.* at 10-11. Mr. Roberts then used this information to determine the likely cause of Room 152's doors to open. *Id.* at 13-23. Contrary to Defendant's representation, Mr. Robert's analysis took into account HMI standards, i.e., how the HMI should have been installed, as well as other surrounding circumstances, which included PNM's breakers flipping, OSO's backup generators turning on, etc. *Id.* This Court simply cannot say that Mr. Roberts' reasoning and methodology are infirm because Defendant disagrees with how much weight he placed on timing variations, *see* n.2 *supra*, n.10 *infra*, nor can it exclude his testimony because he considered the possibility that an HMI could have failed even though it is designed not to. And this Court will not venture into the specific details of each cherry-picked deposition excerpt that Defendant relies on to bolster its attack on Mr. Roberts' methodology because that attack is premised on the contested assumption that lightning could not have caused the doors to open—i.e., the assumption that because HMI industry standards would not allow for this to happen, it did not happen. Or put in other words, this Court will not exclude Mr. Roberts because Defendant's expert disagrees with him.⁷

Lastly, Mr. Roberts testimony is relevant and "fits" a material issue in this case. This case hinges on whether the mold contamination in the clean room was "directly caused by" or "directly resulted from" lightning. That *something* caused the HMI to fail and the clean room doors to open

⁷ Defendant claims that Mr. Roberts failed to consider scientific evidence that "demonstrates lightning was not likely the cause of the HMI failure." Roberts Mot. 18-19. But the "scientific evidence" Defendant relies on is nothing more than its own expert's discussion of HMI compliance standards. Unfortunately for Defendant, failing to entertain certain aspects of an opposing expert's opinion does not make that expert's methodology "faulty and his conclusions suspect." *Id.* at 19. Defendant also does not include in the Roberts Motion any standard that states the HMI is designed to and will withstand lightning-caused power anomalies.

and remain open is only one link in the chain of causation, but an important one. Whether – as Mr. Roberts has opined – that “something” was an external force (ie. lightning) powerful enough to overcome OSO’s systems and controls and open the doors is a question for the fact-finder. And that fact-finder would benefit from Mr. Roberts’ opinions on that issue, as well as Defendant’s criticisms thereof.

Having discharged its gatekeeper role and having decided that Mr. Roberts may testify, the Court hastens to add that Defendant retains its ability to make all appropriate trial objections to his testimony.⁸ In addition, given the crucial value of the expert testimony in this case, the Court intends to grant wide latitude to the parties in cross-examining adverse experts. Doing so will best equip the jury to decide the important factual questions committed to its purview.

B. Robert Adams

1. Parties’ Arguments

In the first paragraph of its motion, Defendant forecasts a full-scale, multi-pronged assault on Mr. Adams’ expected testimony. The reader is told that Mr. Adams cannot testify regarding the cause of mold contamination because (1) he failed to base his testimony on sufficient facts, (2) he failed to base his testimony on reliable principles, (3) his opinion will not assist the jury, (4) there is a lack of peer review of this theories, (5) his theories are not generally accepted in the scientific community, and (6) his testimony would be confusing and misleading to the jury and cause undue prejudice. Adams Mot. 1.

⁸ The Court notes that “the rejection of expert testimony is the exception rather than the rule . . . the trial court's role as gatekeeper is not intended to serve as a replacement for the adversary system . . . Vigorous 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.” Fed. R. Evid. 702 advisory committee's note (internal citations and quotations omitted). Thus, while at this juncture the Court will permit both experts to testify, the Court intends to ensure careful compliance with the Federal Rules of Evidence at trial.

But as it turns out, the true basis for Defendant's motion is substantially narrower: Mr. Adams' deposition "revealed a pattern of hedging and a failure to point to any definitive explanation of why this theory was more likely than any other as to the cause of the appearance of the mold." Adams Mot. at 7. Specifically, Defendant argues that Mr. Adams cannot testify as an expert because he does not know (1) how the mold migrated, what its probable pathway was, or how long it took the mold to migrate down that pathway; or (2) where airflow reversals occurred inside the facility. *Id.* 7-16. In sum, Defendant contends that Mr. Adams' testimony must be barred because it concerns only the *possibility* of mold contamination and not the *probability* that it occurred.

In response, Plaintiff asserts that the law does not require an expert to opine with complete certainty. Adams Resp. 2. In addition, Plaintiff argues that Defendant's challenges to Mr. Adams' methodology and the soundness of his opinions bear only on the weight of his testimony and not its admissibility. *Id.*

2. *Analysis*

While Defendant does not meaningfully contest Mr. Adams' qualifications to render an opinion under Rule 702, the Court nonetheless is confident that he is qualified to testify about mold. Mr. Adams has over thirty-five years of experience as a safety and health professional. ECF 47, Ex. 5 at 3 (Adams Report). He is a nationally-certified safety professional as well as a certified industrial hygienist. *Id.* Mr. Adams is also a Fellow of the American Industrial Hygiene Association, a Professional Member of the American Society of Safety Professionals, and a Diplomate of the American Academy of Industrial Hygiene. *Id.* He holds a Bachelor of Science degree in Biology from Clarion University and a Master's degree in Safety Sciences from Indiana University of Pennsylvania. *Id.* He has served as an Adjunct Professor at St. Joseph's University in Philadelphia, Pennsylvania, where he taught graduate-level industrial hygiene courses for over

fifteen years. *Id.* Furthermore, Mr. Adams has provided expert support “in quantitative and qualitative exposure analysis, assessment and reconstruction, and has served as an expert on a range of matters related to . . . mold.” *Id.* at 17. Lastly, he has been published several times as well as given numerous presentations. *Id.* at 28-31. The Court concludes that Mr. Adams is sufficiently qualified under Rule 702 and *Daubert* to render expert testimony.

The methodology underpinning Mr. Adams’ report is also sufficiently reliable under *Daubert* to be admissible under Rule 702. It is clear from the overall content and organization of his report that he has evaluated all the circumstances surrounding OSO’s loss as well as all reports and internal investigations conducted afterwards. Based on his experience as an industrial hygienist with expertise in mold, Mr. Adams has opined that Room 152’s “opened doors, more likely than not provided a pathway for the introduction of objectional [sic] fungal species that were present in the ambient air to migrate into the building and to eventually migrate to and collect within the previously controlled aseptic processing area.” *Id.* at 5.

Defendant’s deposition of Mr. Adams does not undermine the Court’s conclusion that his methodology was sufficiently sound as to be admissible. Defendant contends that Mr. Adams’ methodology is flawed because he spoke during his deposition in terms of possibilities instead of probabilities. But whatever its value may be at trial, this argument is disposed of easily at this juncture. Rule 702 does not require certainty, but only that the expert opinion be “based on facts which enable [the expert] to express a reasonably accurate conclusion as opposed to conjecture or speculation . . . absolute certainty is not required.” *Dodge v. Cotter Corp.*, 328 F.3d 1212, 1222 (10th Cir. 2003) (quoting *Gomez v. Martin Marietta Corp.*, 50 F.3d 1511, 1519 (10th Cir. 1995)). Mr. Adams’ “more likely than not” opinion meets this standard. The Court rejects Defendant’s argument to the contrary.

Next Defendant contends that Mr. Adams' testimony must be barred because he assumed (by relying on reports) that air reversals contributed to the mold infiltration, without independently confirming where the reversals actually occurred. Defendant also asserts that Mr. Adams' methodology is shaky because he said—when asked to identify the air reversal locations on a map provided to him at the deposition—“what Mr. Hewlett has described on this, I don't see a direct connection between the air reversal and the unclassified space to room 152.” Adams Mot. 11.

These arguments do not convince the Court to exclude Mr. Adams' testimony. Putting aside whatever probative force at trial they might someday have, Defendant's criticisms regarding Mr. Adams relying on another's reports of air reversals instead of confirming them himself go to the weight of the evidence not its admissibility. *See Paradigm Alliance, Inc. v. Celeritas Technologies, LLC*, 2009 WL 3855677, at *3 (D. Kan. 2009) (holding that challenges directed to the validity of an expert's assumptions go to the weight of the expert's opinions rather than admissibility under Rule 702). Trying to unravel and make sense of the deposition excerpts that Defendant used to fill up the majority of its motion was challenging enough for the Court, but after having done so, the Court is left with the firm conviction that Defendant's critique of Adams – including any variances between his report and his deposition – are matters best left for cross-examination and closing argument.

Before the Court can permit Mr. Adams to testify, however, it must confirm that his testimony is relevant and would be helpful to the jury. As discussed above with respect to Mr. Roberts, the issue of whether Room 152's doors opened as a result of a lightning strike is vitally important. If that is established, the next important links in the chain of causation are whether those open doors provided a pathway for mold to infiltrate Room 152 and whether that pathway more likely than not was the pathway traveled by the mold. These are the issues on which Mr.


Adams' opinions will bear, and the jury would benefit from his opinions and Defendant's criticisms thereof.

Having discharged its gatekeeper role and having decided that Mr. Adams may testify, the Court again emphasizes that Defendant retains its ability to make all appropriate trial objections to his testimony. As with Mr. Roberts' testimony, the Court intends to grant wide latitude to defense counsel in cross-examining Mr. Adams. Doing so will best equip the jury to understand and to find how mold did – and did not – infiltrate the clean room in question.

IV. CONCLUSION

For the forgoing reasons, and the reasons stated on the record, *see* ECF 114, the Court will (1) allow Mr. Roberts to render expert testimony on whether lightning caused Room 152's doors to inadvertently open and remain open, and (2) allow Mr. Adams to testify on issues relating to mold and its introduction into Room 152.

IT IS ORDERED that Defendant's Motions [ECFs 61 and 63] are **DENIED**.



THE HONORABLE GREGORY J. FOURATT
UNITED STATES MAGISTRATE JUDGE
Presiding by Consent