UNITED STATES DISTRICT COURT EASTERN DISTRICT OF LOUISIANA

PETER KAOUI CIVIL ACTION

VERSUS NO. 17-3313

BP EXPLORATION & PRODUCTION, SECTION: D (2)

INC., ET AL.

ORDER

Before the Court is BP's Daubert Motion to Exclude the Causation Testimony of Plaintiff's Expert, Dr. Jerald Cook¹ filed by Defendants BP Exploration & Production Inc., BP America Production Company, and BP p.l.c. as well as Defendants' Motion for Summary Judgment.² Halliburton Energy Services, Inc., Transocean Holdings, LLC, Transocean Deepwater, Inc., and Transocean Offshore Deepwater Drilling, Inc. (collectively "Defendants") have joined in both motions.³ Plaintiff Peter Kaoui ("Plaintiff") opposes both Motions.⁴ Defendants have filed Replies in support of their Motions and Plaintiff has filed a Supplemental Memorandum in Opposition to BP's Daubert Motion to Exclude the Causation Testimony of Plaintiffs' [sic] Expert, Dr. Jerald Cook .⁵

After careful consideration of the parties' memoranda, the record, and the applicable law, the Defendants' Motions are **GRANTED**.

¹ R. Doc. 53.

² R. Doc. 54.

³ See R. Doc. 53 n.1; R. Doc. 54 n.1.

⁴ R. Doc. 55; R. Doc. 56.

⁵ Defendants' Replies, R. Doc. 63 and R. Doc. 64. Plaintiff's Supplemental Memorandum, R. Doc. 67.

I. FACTUAL & PROCEDURAL BACKGROUND

This case arises from the *Deepwater Horizon* oil spill in the Gulf of Mexico in 2010 and the subsequent cleanup efforts of the Gulf Coast. On January 11, 2013, United States District Judge Carl J. Barbier, who presided over the multidistrict litigation arising out of the *Deepwater Horizon* incident, approved the *Deepwater Horizon* Medical Benefits Class Action Settlement Agreement (the "MSA").⁶ However, certain individuals, referred to as "B3" plaintiffs, either opted out of or were excluded from the MSA.⁷ Plaintiff Peter Kaoui opted out of the MSA and, accordingly, is a B3 plaintiff.⁸

Plaintiff filed this individual action against Defendants on April 12, 2017 to recover for injuries allegedly sustained as a result of the oil spill. For approximately four months in 2010, Plaintiff worked as a beach cleanup worker, tasked with cleaning up oil and oil-covered debris from the beaches and coastal areas in Mobile, Gulf Shores, Orange Beach, Bon Secours, Fort Morgan, and Little Lagoon, Alabama. Plaintiff alleges that Defendants' negligence and recklessness in both causing the Gulf oil spill and subsequently failing to properly design and implement a clean-up response caused him to suffer myriad injuries including breathing problems, wheezing, shortness of breath, chest congestion, abdominal pain, nausea, vomiting, diarrhea, loss of appetite, abscesses, rashes, infections, weakness, fatigue, headaches,

⁶ See Brown v. BP Expl. & Prod. Inc., Civ. A. No. 18-9927, 2019 WL 2995869, at *1 (E.D. La. July 9, 2019) (citation omitted) (Africk, J.).

⁷ See In re Oil Spill by Oil Rig "Deepwater Horizon" in Gulf of Mexico, on Apr. 20, 2010, No. MDL 2179, 2021 WL 6053613, at *2 (E.D. La. Apr. 1, 2021).

⁸ R. Doc. 1 at ¶ 5.

⁹ *Id*.

¹⁰ R. Doc. 53-2 at p. 5.

depression, joint pains, night sweats, anxiety, heart palpitations, eye irritation and pain, sinusitis, difficulty swallowing, hoariness, chronic rhinitis, and congestion.

Specifically, Plaintiff seeks to recover economic damages, personal injury damages—including damages for past and future medical expenses and for pain and suffering—punitive damages, and attorneys' fees, costs, and expenses.

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To help support his claims that exposure to the chemicals present in the oil spilled by Defendants caused his particular health symptoms, Plaintiff offers the report ("Report") and testimony of Dr. Jerald Cook. Dr. Cook is a retired Navy physician with expertise specifically as an occupational and environmental physician. Dr. Cook's Report is not tailored directly to Plaintiff's claims; rather, Dr. Cook's generic causation Report has been utilized by numerous B3 plaintiffs, including many plaintiffs currently before this Court as well as in other cases before other sections of this court. Accordingly, Dr. Cook's Report pertains only to general causation and not to specific causation. Cook's Report pertains only to general

Dr. Cook's Report from June 21, 2022—the fourth version of his Report and the one at issue in this case—contains five chapters. Chapter 1 details Dr. Cook's expert credentials, which Defendants do not challenge. Chapter 2 describes the

¹¹ See R. Doc. 53-3 at pp. 1–2.

¹² R. Doc. 1 at pp. 5–6.

¹³ R. Doc. 53-4.

¹⁴ *Id*. at p. 8.

¹⁵ R. Doc. 53-1 at p. 3; *Johns v. BP Expl. & Prod. Inc.*, No. CV 17-3304, 2022 WL 1811088, at *2 (E.D. La. June 2, 2022) (Ashe, J.) ("Cook issued an omnibus, non-case specific general causation expert report that has been used by many B3 plaintiffs.").

¹⁶ R. Doc. 56 at p. 4 ("[P]laintiffs had Dr. Cook prepare a report with his general causation opinions[.]").

¹⁷ R. Doc. 53-4.

¹⁸ *Id.* at p. 8; R. Doc. 53-1 at p. 8.

Deepwater Horizon oil spill.¹⁹ Chapter 3 outlines the particular methodologies employed by Dr. Cook in reaching his opinions as well as tables and figures relating to minimal risk levels of several different chemicals found in crude oil.²⁰ Specifically, Dr. Cook describes how he relied upon the so-called Bradford Hill factors in conducting his general causation analysis.²¹ After evidence demonstrating an association between a particular chemical and a disease has been established, the Bradford Hill criteria are used to determine whether a causal relationship exists.²² One factor in particular, the dose-response relationship, underlies the main basis of Defendants' argument regarding the unreliability of the Report.²³

Next, Chapter 4 discusses a number of scientific studies examining both the *Deepwater Horizon* oil spill as well as other historic oil spills from around the world.²⁴ This section purports to demonstrate a relationship between exposure to oil and a variety of diseases and health effects. The Report includes a number of Tables with data taken from several oil spill studies demonstrating a higher prevalence of certain health conditions among those spill responders who were exposed to oil as compared to persons not exposed.²⁵ Finally, Chapter 5 presents Dr. Cook's opinions on general

¹⁹ R. Doc. 53-4 at pp. 9–15.

²⁰ *Id.* at pp. 16–61.

²¹ *Id.* at pp. 29–35.

²² Id. at pp. 28–29. The Bradford Hill criteria include: "(1) Temporal relationship, (2) Strength of the association, (3) Dose-response relationship, (4) Replication of the findings, (5) Biological plausibility, (6) Consideration of alternative explanations, (7) Cessation of exposure, (8) Specificity of the association, and (9) Consistency with other knowledge." Id. at p. 30 (citing Reference Manual on Scientific Evidence, Third Edition (National Research Council, 2011)).

²³ R. Doc. 53-1 at pp. 14–15.

²⁴ R. Doc. 53-4 at p. 62.

²⁵ *Id.* at pp. 76–96.

causation for several different categories of health conditions: (1) respiratory conditions; (2) dermal conditions; (3) ocular conditions; and (4) cancer.²⁶

Defendants filed the instant Motion in limine and Motion for Summary Judgment on September 19, 2022.²⁷ Defendants argue that the critical flaws present in Dr. Cook's March 14, 2022 Report "persist in Version 4,"28 thus rendering Version 4 unreliable and inadmissible. Defendants contend that Dr. Cook's Report should be excluded for three principal reasons: (1) Dr. Cook's failure to identify the harmful level of exposure capable of causing Plaintiff's injuries for each chemical that Plaintiff alleges to have been exposed to; (2) Dr. Cook's failure to verify Plaintiff's alleged medical conditions; and (3) Dr. Cook's failure to follow the proper causation-analysis methodology.²⁹ Additionally, Defendants point out that Plaintiff's argument regarding the purported lack of need to prove specific causation with expert testimony "does not relieve the Plaintiff from the obligation of establishing general causation through admissible expert testimony."30 Next, Defendants argue that none of Plaintiff's arguments regarding discovery disputes relating to BP's alleged failure to conduct biological monitoring of oil spill cleanup workers are relevant to Defendants' Daubert Motion. 31 Finally, because Dr. Cook should be excluded from testifying, Defendants argue, the Court should grant their Motion for Summary Judgment as

²⁶ *Id.* at pp. 102–37.

²⁷ R. Doc. 53; R. Doc. 54.

²⁸ R. Doc. 53-1 at p. 12.

²⁹ *Id.* at pp. 14–20.

³⁰ *Id.* at p. 20.

³¹ *Id.* at pp. 21–25.

Plaintiff is unable to establish general causation through expert testimony, a necessary requirement under controlling Circuit precedent.³²

The main thrust of Plaintiff's argument in response as to why Defendants' Motions should be denied relates to BP's alleged failure to conduct dermal and biological monitoring of oil spill cleanup workers. Plaintiff contends that, to the extent that Dr. Cook is unable to provide specific exposure-level data, it is the fault of Defendants for improperly restricting access to scientific research teams to gather such biological monitoring data.³³ Accordingly, Plaintiff argues that Defendants should not be able to benefit from their intentional spoliation of necessary evidence.³⁴ Further, Plaintiff argues that because Dr. Cook employs the same "state-of-the-art" analyses and methodologies as other researchers working in the field, his failure to conduct a "traditional Bradford Hill analysis" should not render his opinions unreliable.³⁵ According to Plaintiff, other scientists also do not employ dose-response relationships in their analyses regarding the health effects of oil exposure on cleanup workers.³⁶

Additionally, Plaintiff disputes Defendants' characterization of Dr. Cook's Report. Plaintiff contends that Dr. Cook's *Daubert* methodology is sufficient to establish general causation and that Dr. Cook thoroughly explained his methods.³⁷ Plaintiff argues that Dr. Cook has thoroughly analyzed the relevant scientific

³² R. Doc. 54-1 at p. 2.

 $^{^{33}}$ R. Doc. 56 at pp. 6–11.

³⁴ See *id*. at p. 13 n.10.

³⁵ See id. at pp. 11, 15.

³⁶ See id. at pp. 11–15.

³⁷ See id. at pp. 22–24.

epidemiological literature such as the Coast Guard Cohort and the GuLF STUDY and that Dr. Cook does adequately address each of Plaintiff's alleged health conditions.³⁸

Finally, Plaintiff contends that specific causation expert testimony is not necessary for a transient symptom case. In support of that argument, Plaintiff points to orders from other sections of this court in which the court found that "expert testimony on general causation combined with specific evidence of the nature of the class member's exposure is sufficient to permit the jury to conclude that the E.A. release was more likely than not the cause of the class representative's transient symptoms."³⁹ Further, in his opposition to Defendants' Motion for Summary Judgment, Plaintiff points to orders from other sections of this court which concluded that expert testimony may not be required to establish symptoms within the common knowledge of lay people.⁴⁰

Plaintiff filed a supplemental memorandum to his response to Defendants' Motion in limine in which Plaintiff provided an affidavit of Dr. Linda Birnbaum ("Dr. Birnbaum"), the Director of the National Institute of Environmental Health and Sciences from 2009 to 2019.⁴¹ Dr. Birnbaum states that the "proposition that it is possible to establish a BP Oil Spill responder's quantitative exposure to a given chemical at a given level" based on either "the data that was collected during the BP Oil Spill response" or on "studies of other oil spills and non-oil spill related studies of

 $^{^{38}}$ See id.

³⁹ *Id.* at p. 18 n.14 (quoting *Guidry v. Dow Chem. Co.* No. 19-12233, 2021 WL 4460505, at *3 (E.D. La. Sept. 29, 2021)).

⁴⁰ R. Doc. 55 at pp. 4–6.

⁴¹ R. Doc. 67; R. Doc. 67-1.

exposure to crude oil . . . is not plausible."⁴² Dr. Birnbaum also opines that the "GuLf Study exposure assessment and epidemiology are the current, best, and state of the art scientific literature on the exposure and health effect outcomes of BP Oil Spill responders."⁴³ Plaintiff relies upon Dr. Birnbaum to support his argument that Dr. Cook's failure to meet the requirements for general causation opinions as called for by Defendants as well as every section of this court should be excused because Dr. Cook has nevertheless utilized the best available methodologies to support Plaintiff's causation claim given Defendants' conduct.⁴⁴

The Court addresses each argument and each Motion in turn.

II. LEGAL STANDARD

A. Motion in Limine

The district court has considerable discretion to admit or exclude expert testimony under Fed. R. Evid. 702,⁴⁵ and the burden rests with the party seeking to present the testimony to show that the requirements of Rule 702 are met.⁴⁶ Rule 702 provides that an expert witness "qualified . . . by knowledge, skill, experience, training or education may testify in the form of an opinion" when all of the following requirements are met:

⁴² R. Doc. 67-1 at pp. 6–7.

⁴³ *Id.* at p. 7.

⁴⁴ See R. Doc. 67 at p. 2 ("In sum, what BP demands of Dr. Cook is something that the best research scientists, with the benefit of massive financial resources and over ten years to conduct their research have not done.").

⁴⁵ See Gen. Elec. Co. v. Joiner, 522 U.S. 136, 138–39 (1997); Seatrax, Inc. v. Sonbeck Int'l, Inc., 200 F.3d 358, 371 (5th Cir. 2000); Tajonera v. Black Elk Energy Offshore Operations, LLC, Civ. A. No. 13-0366 c/w 13-0550, 13-5137, 13-2496, 13-5508, 13-6413, 14-374, 14-1714, 2016 WL 3180776, at *8 (E.D. La. June 7, 2016) (Brown, J.) (citing authority).

⁴⁶ Moore v. Ashland Chem. Inc., 151 F.3d 269, 276 (5th Cir. 1998).

- (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.⁴⁷

Rule 702 codifies the Supreme Court's opinion in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, which charges district courts to act as "gatekeepers" when determining the admissibility of expert testimony.⁴⁸ "To be admissible under Rule 702, the court must find that the evidence is both relevant and reliable."⁴⁹ According to the Fifth Circuit, reliability is determined by assessing whether the reasoning or methodology underlying the testimony is scientifically valid, while relevance depends on whether the reasoning or methodology underlying the testimony can be properly applied to the facts at issue.⁵⁰ The purpose of the reliability requirement is to exclude expert testimony based merely on subjective belief or unsupported speculation.⁵¹

To satisfy the reliability prong of the *Daubert*/Rule 702 analysis, a "party seeking to introduce expert testimony must show (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

⁴⁷ Fed. R. Evid. 702; *Tajonera*, 2016 WL 3180776, at *8.

 $^{^{48}}$ United States v. Fullwood, 342 F.3d 409, 412 (5th Cir. 2003) (citing Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579 (1993)).

⁴⁹ *United States v. Ebron*, 683 F.3d 105, 139 (5th Cir. 2012) (citing *United States v. Valencia*, 600 F.3d 389, 423 (5th Cir. 2010)).

⁵⁰ Ebron, 683 F.3d at 139 (citing Pipitone v. Biomatrix, Inc., 288 F.3d 239, 244 (5th Cir. 2002)).

⁵¹ Tajonera, 2016 WL 3180776, at *8 (citing Daubert, 509 U.S. at 590).

facts of the case."⁵² To prove reliability, the proponent of the expert testimony must present some objective, independent validation of the expert's methodology.⁵³ The objective of this Court's gatekeeper role is to ensure that an expert "employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field."⁵⁴

B. Summary Judgment

Summary judgment is appropriate under Federal Rule of Civil Procedure 56 "if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." 55 When assessing whether a genuine dispute regarding any material fact exists, the Court considers "all of the evidence in the record but refrain[s] from making credibility determinations or weighing the evidence." 56 While all reasonable inferences must be drawn in favor of the nonmoving party, a party cannot defeat summary judgment with conclusory allegations, unsubstantiated assertions or "only a scintilla of evidence." Instead, summary judgment is appropriate if a reasonable jury could not return a verdict for the nonmoving party. 58

⁵² Recif Res., LLC v. Juniper Cap. Advisors, L.P., Civ. A. No. H-19-2953, 2020 WL 5623982, at *2 (S.D. Tex. Sept. 18, 2020) (quoting Huss v. Gayden, 571 F.3d 442, 452 (5th Cir. 2009)) (internal quotation marks omitted).

⁵³ Recif Res., LLC, 2020 WL 5623982, at *2 (citing Brown v. Illinois Cent. R. Co., 705 F.3d 531, 536 (5th Cir. 2013)).

⁵⁴ Kumho Tire Co. v. Carmichael, 526 U.S. 137, 152 (1999); Hodges v. Mack Trucks Inc., 474 F.3d 188, 194 (5th Cir. 2006).

⁵⁵ Fed. R. Civ. P. 56; Celotex Corp. v. Catrett, 477 U.S. 317, 322 (1986); Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 247 (1986).

⁵⁶ Delta & Pine Land Co. v. Nationwide Agribusiness Ins. Co., 530 F.3d 395, 398–99 (5th Cir. 2008) (citations omitted).

⁵⁷ *Id.* (quoting *Little v. Liquid Air Corp.*, 37 F.3d 1069, 1075 (5th Cir. 1994)) (internal quotation marks omitted).

⁵⁸ Delta & Pine Land Co., 530 F.3d at 399 (citing Anderson, 477 U.S. at 248).

If the dispositive issue is one on which the moving party will bear the burden of proof at trial, the moving party "must come forward with evidence which would entitle it to a directed verdict if the evidence went uncontroverted at trial." The non-moving party can then defeat summary judgment by either submitting evidence sufficient to demonstrate the existence of a genuine dispute of material fact, or by "showing that the moving party's evidence is so sheer that it may not persuade the reasonable fact-finder to return a verdict in favor of the moving party." If, however, the nonmoving party will bear the burden of proof at trial on the dispositive issue, the moving party may satisfy its burden by merely pointing out that the evidence in the record is insufficient with respect to an essential element of the nonmoving party's claim. The burden then shifts to the nonmoving party who must go beyond the pleadings and, "by her own affidavits, or by the 'depositions, answers to interrogatories, and admissions on file,' designate 'specific facts showing that there is a genuine issue for trial."

III. ANALYSIS

A. Motion in Limine

This Court has previously considered the admissibility of Dr. Cook's expert opinions, finding that Version 2 of his Report failed to meet the *Daubert* standards for reliability and, thus, that his opinions were inadmissible.⁶³ In that prior Order,

⁵⁹ International Shortstop, Inc. v. Rally's, Inc., 939 F.2d 1257, 1264–65 (5th Cir. 1991).

⁶⁰ *Id.* at 1265.

⁶¹ See Celotex, 477 U.S. at 322–23.

⁶² Id. at 324 (quoting Fed. R. Civ. P. 56(e)).

⁶³ See, e.g., English v. BP Expl. & Prod., Inc., No. CV 17-4325, 2022 WL 5158669 (E.D. La. Sept. 26, 2022) (Vitter, J.), reconsideration denied, No. CV 17-4325, 2022 WL 17532293 (E.D. La. Dec. 8, 2022).

the Court noted that it did not "write on a blank slate" in finding that Dr. Cook's Report failed to meet Fifth Circuit requirements for expert opinions on general causation; every other section of this court had reached the very same conclusion.⁶⁴

That is the case here, as well, regarding Version 4 of Dr. Cook's report. Other sections of this court that have considered the admissibility of Version 4 of his Report has found that Dr. Cook failed to correct the deficiencies fatal to his prior reports, namely, the failure to identify a dose-response relationship between the chemicals the Plaintiff allegedly came into contact with and the types of injuries complained of by the Plaintiff.⁶⁵ Once again, while the Court finds the thoughtful opinions and analyses of the other sections to be persuasive, the Court nevertheless conducts an independent inquiry here. The Court has thoroughly examined Dr. Cook's updated Report and, for the reasons that follow, finds that his Report still fails to satisfy applicable Fifth Circuit standards for general causation opinions.

The burden of proof is on the B3 plaintiffs to prove that "the legal cause of the claimed injury or illness is exposure to oil or other chemicals used during the response." To prove causation, the B3 plaintiffs are required to provide reliable

⁶⁴ *Id.* at *4 (collecting cases).

⁶⁵ See, e.g., Walker v. BP Expl. & Prod. Inc., No. CV 17-3012, 2022 WL 17987118 (E.D. La. Dec. 29, 2022) (Africk, J.); Darrington v. BP Expl. & Prod. Inc., No. CV 17-3139, 2022 WL 3586772 (E.D. La. Aug. 22, 2022) (Ashe, J.); McGill v. BP Expl. & Prod. Inc., No. CV 17-3392, 2022 WL 4353573 (E.D. La. Sept. 15, 2022) (Barbier, J.), reconsideration denied, No. CV 17-3392, 2022 WL 16552832 (E.D. La. Oct. 28, 2022); Davenport v. BP Expl. & Prod., Inc., No. CV 17-3726, 2022 WL 4353557 (E.D. La. Sept. 15, 2022) (Guidry, J.); Abdelfattah v. BP Expl. & Prod., Inc., No. CV 17-3443, 2022 WL 4245490 (E.D. La. Sept. 15, 2022) (Milazzo, J.), reconsideration denied sub nom. Harris v. BP Expl. & Prod., Inc., No. CV 17-3265, 2022 WL 16851174 (E.D. La. Nov. 10, 2022); Campbell v. B.P. Expl. & Prod., Inc., No. CV 17-3119, 2022 WL 17251115 (E.D. La. Nov. 28, 2022) (Vance, J.); Marler v. BP Expl. & Prod., Inc., No. CV 17-3206, 2022 WL 14684114 (E.D. La. Oct. 25, 2022) (Zainey, J.).
⁶⁶ In re Oil Spill, 2021 WL 6053613, at *11.

expert testimony.⁶⁷ "A plaintiff in such a case cannot expect lay fact-finders to understand medical causation; expert testimony is thus required to establish causation."⁶⁸

Courts use "a two-step process in examining the admissibility of causation evidence in toxic tort cases." First, a court must determine whether general causation exists. General causation is whether a substance is capable of causing a particular injury or condition in the general population." Second, if the court finds that there is admissible general-causation evidence, "the district court must determine whether there is admissible specific-causation evidence." [S]pecific causation is whether a substance caused a particular individual's injury." If the court finds that there is no admissible general causation evidence, it need not consider the issue of specific causation.

To establish general causation, a causation expert must identify "the harmful level of exposure to a chemical" at which physical symptoms manifest.⁷⁵ As explained by Dr. Cook, nearly every chemical on Earth may be toxic or even fatal at a certain level of exposure.⁷⁶ Thus, causation experts determine not only *whether* a chemical

⁶⁷ See, e.g., Seaman v. Seacor Marine, LLC, 326 Fed. Appx. 721, 723 (5th Cir. 2009).

⁶⁸ Id. (citing Allen v. Penn. Eng'g Corp., 102 F.3d 194, 199 (5th Cir. 1996)).

 $^{^{69}}$ Knight v. Kirby Inland Marine, Inc., 482 F.3d 347, 351 (5th Cir. 2007).

 $^{^{70}}$ *Id*.

⁷¹ *Id.* (quoting *Merrell Dow Pharm., Inc. v. Havner*, 953 S.W.2d 706, 714 (Tex. 1997)).

 $^{^{72}}$ *Id*.

 $^{^{73}}$ *Id*.

 $^{^{74}}$ Id. ("Evidence concerning specific causation in toxic tort cases is admissible only as a follow-up to admissible general-causation evidence.").

⁷⁵ Allen, 102 F.3d at 199.

⁷⁶ R. Doc. 53-4 at p. 32; see also English v. BP Expl. & Prod. Inc., No. CV 13-1033, R. Doc. 48-6 (Deposition of Dr. Jerald Cook) at 150:14–16 (E.D. La. September 26, 2022) (Vitter, J.) ("Like I said, something not very harmful, such as water, can become harmful at a high enough dose.").

is capable of causing certain health effects, but *at what level* of exposure do those health affects appear. Experts, such as Dr. Cook, refer to this inquiry with the maxim, *dosis sola facit venenum*, or "the dose determines the poison."⁷⁷ This analysis is also referred to in the Bradford Hill factors as the dose-response relationship.⁷⁸

In recognition of the importance of this step of the causation analysis, the American Medical Association's *Guide to the Evaluation of Disease and Injury Causation* states that determining "whether the estimated dose was sufficient to explain observed clinical effects known to be associated with the agent in question" is the "most critical phase of the hazard evaluation process." Relatedly, the Fifth Circuit states that this detail is one of the "minimal facts necessary to sustain the plaintiff's burden in a toxic tort case." Plaintiff's must provide reliable expert testimony establishing the requisite level of exposure necessary to cause each alleged physical harm. Accordingly, failure to properly identify the level of exposure to a particular chemical at which harmful effects occur necessarily renders a general causation opinion to be unreliable and, thus, inadmissible.

⁷⁷ R. Doc. 53-4 at p. 32. Such knowledge dates back to at least the time of Paracelsus, the great sixteenth-century Swiss philosopher and scientist, who remarked that "[s]olely the dose determines that a thing is not a poison." See Joseph Borzelleca, Paracelsus: Herald of Modern Toxicology, 53 Toxicological Scis. 2, 4 (1999).

⁷⁸ R. Doc. 53-4 at p. 32.

⁷⁹ R. Doc. 53-6 at pp. 6–7. Dr. Cook testified that he regularly consults the AMA *Guide*. *See English*, R. Doc. 48-6 (Deposition of Dr. Jerald Cook) at 59:22–60:1.

⁸⁰ Allen, 102 F.3d at 199; accord McGill v. BP Expl. & Prod., Inc., 830 Fed. Appx. 430, 433 (5th Cir. 2020) (affirming exclusion of expert's opinions where "none [of the studies on which the expert relied] provide conclusive findings on what exposure level of Corexit is hazardous to humans.").

⁸¹ Allen, 102 F.3d at 195; see also McGill, 830 Fed. Appx. at 433 n.1 (excluding expert testimony where the studies relied upon by expert "did not address what level of exposure would be unsafe for humans or what specific illnesses that exposure may cause.") (emphasis added).

⁸² See Dawkins v. BP Expl. & Prod., Inc., No. CV 17-3533, 2022 WL 2315846, at *6 (E.D. La. June 28, 2022) (Vance, J.), reconsideration denied, No. CV 17-3533, 2022 WL 4355818 (E.D. La. Sept. 20, 2022) ("Accordingly, if the Court finds that plaintiff cannot 'prove, at [a] minimum, that exposure to a certain

Version 4 of Dr. Cook's Report contains several changes and additions to the second version previously examined and addressed by the Court. On its face, the Report is noticeably longer (253 pages versus 107 pages), although most of this increased length appears to be attributed to an extended references section.⁸³ Dr. Cook also includes a new section detailing a few of the chemicals commonly found in crude oil and provides several new charts and graphs providing toxicity data for those chemicals.⁸⁴ Dr. Cook explains that of the hundreds, if not thousands, of different hydrocarbons found in crude oil, toxicity data is available for only 95 of them. 85 These figures purportedly demonstrate the minimal risk level ("MRL") of several different chemicals at which certain biological and physiological ailments might manifest at certain levels of exposure (acute, intermediate, or chronic).86 Additionally, other figures show the lowest observed adverse effect level ("LOAEL") and no observed adverse effect level ("NOAEL") of different hydrocarbons.⁸⁷ Both MRLs as well as LOAELs and NOAELs are considered when examining a dose-response relationship of a particular substance.88

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level of a certain substance for a certain period of time can cause a particular condition in the general population,' then the Court's inquiry into general causation is complete." (quoting *Williams v. BP Expl. & Prod., Inc.*, No. 18-9753, 2019 WL 6615504, at *8 (E.D. La. Dec. 5, 2019) (Morgan, J.)).

⁸³ Compare R. Doc. 53-4 (Version 4), with R. Doc. 53-7 (Version 2). Nearly half of Version 4—117 out of 253 pages—is a list of "References and Materials Considered" whereas the "References" in Version 2 covered less than fifteen pages.

⁸⁴ See R. Doc. 53-4 at pp. 35–61.

 $^{^{85}}$ See id. at p. 38. Further, minimal risk levels are available for only 12 of these hydrocarbons. See id.

⁸⁶ See id. at p. 40 ("The duration of exposure is described as either acute (14 days or less), intermediate (15–365 days), or chronic (greater than 365 days)."). MRLs "do not consider cancer risk, only non-cancer health effects." *Id.* at p. 32.

⁸⁷ See id. at pp. 43–61.

⁸⁸ See id. at pp. 32–33, 40.

The Court concurs with the other sections of the court that have addressed this version of Dr. Cook's Report and found Dr. Cook's continued failure to address the harmful dosage level of each chemical necessary to produce Plaintiff's health effects to be ultimately fatal to his Report.⁸⁹ At no point in his Report does Dr. Cook adequately identify what level of exposure to the chemicals present in the oil is capable of producing the harmful health effects alleged by Plaintiff.

While the Court recognizes that Dr. Cook has attempted to shore up the deficiencies of his prior Reports by providing data establishing a relationship between exposure to chemicals found in weathered crude oil and adverse health effects, Dr. Cook still fails to demonstrate that any of the chemicals allegedly encountered by Plaintiff are capable of causing the harm alleged by Plaintiff in the general population. As Dr. Cook explains, "[p]rior oil spills have found that dermal exposure is a more significant route of exposure than inhalation exposure particularly with weathered crude oil." Yet, none of the tables or figures provide minimal risk levels for dermal exposure to any of the chemicals found in weathered oil. Indeed, "MRLs have not been established for dermal exposures to petroleum hydrocarbons." The lack of any data demonstrating the minimum level of exposure to chemicals found within crude oil necessary to cause adverse health effects via dermal exposure—the

⁸⁹ See, e.g., Walker, 2022 WL 17987118, at *8 ("Cook's failure to identify a harmful level of exposure when evaluating the scientific literature referenced in his report renders his opinions unhelpful and unreliable in establishing general causation.").

 $^{^{90}}$ R. Doc. 53-4 at p. 35; see also id. at p. 40 ("Inhalation and dermal are considered the most significant routes of exposure in occupational groups.").

⁹¹ *Id.* at p. 38.

"more significant route of exposure" for oil spill cleanup workers like Plaintiff—renders these figures unhelpful, unreliable, and irrelevant.⁹²

Moreover, the MRLs pertaining to either oral or inhalation exposure do not establish the level of exposure to a particular chemical at which the types of injuries actually complained of by Plaintiff might manifest. 93 That is, there is little overlap between Plaintiff's injuries and the health effects for which minimal risk levels are provided for in Dr. Cook's Report. For example, Table 3-2 shows an MRL of 0.009 ppm for an acute inhalation exposure of benzene, at which point adverse health effects affecting the immune system and lymphocytes might manifest. 94 Plaintiff's claims do not include claims regarding his immune system and lymphocytes.⁹⁵ Neither Plaintiff nor Dr. Cook provide any explanation as to how it is either helpful, relevant, or reliable to allow testimony about minimal exposure levels for unrelated symptoms. That a certain level of exposure to, for instance, benzene or toluene, might cause hematopoietic problems does not suffice to support a general causation opinion regarding the bevy of unrelated health effects alleged by Plaintiff here. In sum, Dr. Cook fails to link exposure to petroleum hydrocarbons with any of Plaintiff's claimed injuries.

⁹² See Ebron, 683 F.3d at 139 ("To be admissible under Rule 702, the court must find that the evidence is both relevant and reliable" (citing *Valencia*, 600 F.3d at 423)).

⁹³ Plaintiff alleges that he suffered (1) respiratory symptoms including breathing problems, wheezing, shortness of breath and chest congestion, (2) GI symptoms including abdominal pain, nausea, vomiting, diarrhea, and loss of appetite, (3) dermal symptoms including abscesses, rashes, and infections, (4) neurological symptoms including weakness, fatigue, headaches, depression, joint pains, night sweats, anxiety, and heart palpitations, (5) ocular symptoms such as eye irritation and pain, and (6) ENT symptoms including sinusitis, difficulty swallowing, hoariness, chronic rhinitis, and congestion. See R. Doc. 53-3 at pp. 1–2.

⁹⁴ R. Doc. 53-4 at p. 41.

⁹⁵ See Plaintiff's sworn statement, R. Doc. 1-1.

The Court has thoroughly examined all of the other revisions to Dr. Cook's Report and is unable to find any portion of the Report which addresses and remedies the problems in the second version of the Report previously identified by the Court. Nor has Plaintiff pointed to any such relevant change or update. Notably, Plaintiff does not contend that Version 4 of Dr. Cook's Report ameliorates the deficiencies of his prior reports by providing sufficient exposure level or dose-response relationship data. Indeed, Plaintiff admits that Dr. Cook does not employ a "traditional Bradford Hill dose-response relationship" in his analysis and that he "does not identify a particular dose to a particular chemical."96 Instead, Plaintiff argues that Dr. Cook's opinion is reliable because he employs and relies upon "current, state of the art science" which "utilize[s] qualitative exposure assessment without reference to specific chemicals or dose."97 Plaintiff also contends that BP's alleged failure to collect biomonitoring data of oil spill cleanup workers has forced the scientific community studying the Gulf oil spill to employ "exposure-response," "ever vs. never" exposed, or Likert scale self-reported levels of exposure in lieu of a dose-response relationship.⁹⁸ Accordingly, Plaintiff argues, "Dr. Cook is simply using the same methodology as the relevant scientific community studying these workers and in doing so, he fulfills the requirements for methodology and reliability under Daubert."99

Plaintiff's argument fails for multiple reasons. Addressing Plaintiff's argument that Dr. Cook's Report is reliable because he employs the same

⁹⁶ R. Doc. 56 at pp. 11, 15.

⁹⁷ *Id.* at p. 15.

⁹⁸ *Id.* at p. 11.

⁹⁹ *Id.* at p. 15.

methodologies as other researchers in the field, the Court disagrees. While Plaintiff may be correct that other scientists working on issues related the Gulf oil spill do not or are unable to employ a dose-response relationship in their analysis, that statement does not relieve Plaintiff of his burden of establishing the reliability and relevance of his expert's general causation opinions. As this Court previously explained, Fifth Circuit precedent on the requirements for general causation opinions is clear: "[t]o establish general causation, a causation expert must identify 'the harmful level of exposure to a chemical' at which physical symptoms manifest." Indeed, evidence of harmful exposure level is one of the "minimal facts necessary to sustain the plaintiff's burden in a toxic tort case." That other scientists working in this area purportedly also lack exposure-level data sufficient to meet the *Daubert* standards for reliability does not mean that those requirements disappear. Rather, this Court must ensure that the strictures of Federal Rule of Evidence 702 are met before allowing an expert witness to opine.

Second, Plaintiff's contention that Dr. Cook's difficulty in utilizing harmful exposure level data stems from Defendants' intentional obstruction of researchers from collecting data on oil cleanup workers likewise fails to move the needle on the reliability of Dr. Cook's report. As this Court has explained in numerous B3 cases, Plaintiff's argument misses the mark because a general causation analysis does not

¹⁰⁰ Allen, 102 F.3d at 199.

¹⁰¹ *Allen*, 102 F.3d at 199; *accord McGill v. BP Expl. & Prod.*, *Inc.*, 830 Fed. Appx. 430, 433 (5th Cir. 2020) (affirming exclusion of expert's opinions where "none [of the studies on which the expert relied] provide conclusive findings on what exposure level of Corexit is hazardous to humans."). ¹⁰² R. Doc. 56 at pp. 6–11.

depend upon particular sampling taken from the incident in question. Rather, a general causation expert is allowed to consult the entire universe of relevant epidemiological studies to support their opinion. Dr. Cook, after all, "was not prevented from consulting the relevant scientific and medical literature on the harmful effects of oil to determine whether a relevant chemical has the capacity to cause the harm alleged by plaintiff in the general population." Accordingly, the Court does not find that Dr. Cook is excused from providing the requisite doseresponse relationship data on account of Defendants' alleged misdeeds. BP's alleged failure to conduct dermal and biological monitoring of the oil spill cleanup workers has no bearing on Dr. Cook's Report and the requirement that Dr. Cook adequately demonstrate the level of exposure to the chemicals in the oil encountered by Plaintiff required to cause the injuries complained of by Plaintiff. Accordingly, Plaintiff's argument in this regard is irrelevant to the deficiencies in Dr. Cook's report. Dr. Cook's report. Dr. Cook's report.

Moreover, as one judge has put it, "[Dr.] Birnbaum's affidavit neither cures nor explains the deficiencies of [Dr.] Cook's report." While the Court takes no issue with Dr. Birnbaum's statement that it is "not plausible" to establish any particular oil responder's exposure level with data collected either from the Gulf oil spill or from any other spill, Dr. Birnbaum's remark is beside the point and appears to conflate

¹⁰³ Indeed, Dr. Cook himself utilized studies from different oil spills. *See, e.g.*, R. Doc. 53-4 at pp. 63–66; *see also Heathington v. BP Expl. & Prod. Inc.*, No. CV 17-4353, 2022 WL 2986490, at *4 (E.D. La. July 28, 2022) (Barbier, J.) ("Notably, this inquiry does not depend upon environmental sampling data taken as part of the incident.").

¹⁰⁴ Dawkins, 2022 WL 2315846, at *8.

¹⁰⁵ For the same reasons, the Court further finds Plaintiff's arguments in his opposition brief filed under seal to be irrelevant to this analysis.

¹⁰⁶ Walker, 2022 WL 17987118, at *8.

general causation with specific causation. General causation does not require quantitative exposure data of the Plaintiff; rather, it requires evidence demonstrating that the types of chemicals encountered by Plaintiff are actually capable of causing the injuries alleged by Plaintiff.¹⁰⁷ The supposed implausibility of "establish[ing] a BP Oil Spill responder's quantitative exposure to a given chemical at a given level"¹⁰⁸ simply has no bearing on the threshold general causation inquiry. Accordingly, the Court does not find that Dr. Birnbaum's affidavit corrects or explains the shortcomings of Dr. Cook's Report so as to render his opinions admissible.

Finally, insofar as Plaintiff argues that Dr. Cook's reliance on studies employing an "exposure response" or "ever/never" analysis is sufficient to satisfy the standards for reliability of general causation testimony, the Court again disagrees. For instance, in Chapter 4 of his Report, Dr. Cook provides multiple Tables purporting to establish a relationship between exposure to oil and ill health. 109 The data from the Tables themselves is taken from prior studies evaluating the effects of oil exposure on responders to the *Deepwater Horizon* Gulf oil spill. 110 The Tables indicate a statistically significant relationship between oil exposure and the onset of various health problems, including respiratory, neurological. dermal. gastrointestinal, and genitourinary ailments. 111 However, some of these Tables—and the underlying studies—fail to demonstrate the level of exposure to the chemicals in

¹⁰⁷ Knight, 482 F.3d at 351 ("General causation is whether a substance is capable of causing a particular injury or condition in the general population." (quoting *Havner*, 953 S.W.2d at 714)).

¹⁰⁸ R. Doc. 67-1 at pp. 6–7.

¹⁰⁹ R. Doc. 53-4 at pp. 77–96.

¹¹⁰ *Id.* at pp. 75–76. These studies specifically examined Coast Guard service members who were responders in the Deepwater Horizon spill. *See id.*

¹¹¹ See, e.g., id. at p. 77 (Table 4-1).

the oil at which these symptoms manifested. Rather, these studies instead concerned themselves only with the binary question of whether or not the workers were exposed to oil at all. This type of study is referred to as an "ever/never" study because the participants are divided into two groups: those that were exposed to oil and those who were not. Taking those studies at face value, the Court emphasizes that studies indicating that health problems may arise from exposure to oil do not answer the essential question of what *level* of exposure is necessary to cause the particular symptoms. As such, the Court finds that these portions of Dr. Cook's Report fail to satisfy Fifth Circuit standards for reliability of expert reports.

Other Tables in Dr. Cook's Report, however, do provide greater detail on the relationship between the level of exposure to oil and the prevalence of health effects. For instance, Table 4-1 reports the prevalence ratio ("PR") of certain health effects of those who were exposed to oil and further breaks the data down into whether the person had a low, medium, or high exposure. Briefly, the Report reflects that the PR is the ratio comparing the prevalence of symptoms in those who were exposed to the oil versus those who were not. Thus, a higher PR indicates a greater prevalence of a particular health effect in an oil-exposed person as compared to a non-exposed

 $^{^{112}}$ See, e.g., id. at p. 78 (Table 4-2) (comparing health conditions between responders with and without oil exposure).

 $^{^{113}}$ *Id.*; *see also id.* at p. 78 ("They compared of [*sic*] responders versus non-responders, and "ever" oil exposure with "never" oil exposure among the responders.").

¹¹⁴ See Dawkins, 2022 WL 2315846, at *8 ("These studies, both of which are 'silent on the level of exposure . . . that would be significant,' do not assist Dr. Cook in meeting [Plaintiff]'s minimal burden of establishing by '[s]cientific knowledge . . . the harmful level of exposure to a chemical." (quoting Seaman, 326 Fed. Appx. at 727)).

¹¹⁵ R. Doc. 53-4 at p. 77.

¹¹⁶ *Id.* at pp. 91–92.

person. Importantly, as Dr. Cook specifically notes, "prevalence ratios do show associations, *but not causation*, because they do not account for when a disease began, so it does not meet the temporal relationship criterion of causation."¹¹⁷

Despite ostensibly indicating an association between a higher level of exposure to oil and a greater prevalence of ill health effects, what the data still fails to show is the level of exposure at which each of the complained of health problems manifest. That there is some positive association between prevalence of health effects and the level of exposure does not answer the antecedent—and necessary—question of what particular dose is sufficient to cause the particular health effect. None of these studies show what level of exposure to oil and dispersants is required for health conditions, such as those complained of by Plaintiff, to appear. Accordingly, they too are insufficient to satisfy Plaintiff's burden to demonstrate a harmful level of exposure.

Dr. Cook's general causation opinions of specific health conditions found in Chapter 5 of his Report suffer for many of the above reasons. As carefully explained by another section of this court, many of the studies relied upon by Dr. Cook are "silent on the *level of exposure*... that would be significant" to demonstrate a proper dose-response relationship. In fact, many of the studies utilize the same "ever/never" dichotomy which, for the reasons explained above, does not satisfy Plaintiff's burden to adequately establish a harmful level of exposure. 119

¹¹⁷ *Id.* at p. 92 (emphasis added).

¹¹⁸ See Dawkins, 2022 WL 2315846, at *8.

¹¹⁹ See, e.g., R. Doc. 53-4 at p. 107.

The Court recognizes that mathematically precise figures detailing the exact level of exposure at which physical conditions manifest may often be difficult or impossible to ascertain. As Dr. Cook notes, "[t]he quantified dose is usually unknown in epidemiology studies and can be very challenging to accurately measure or estimate." Nevertheless, for the above-discussed reasons, the Court finds that Dr. Cook's Report fails to adequately demonstrate the harmful dosage of the particular chemicals found in the type of weathered oil and dispersants encountered by Plaintiff.

For many of the same reasons that the Court has determined that Dr. Cook's Report is unreliable, and thus fails to meet the requirements of Rule 702 and *Daubert*, the Court likewise finds Dr. Cook's Report to be unhelpful to the trier of fact. Because the Court finds that Dr. Cook's Report fails to demonstrate the "minimal facts necessary to sustain the plaintiff's burden in a toxic tort case," 122 i.e., the harmful exposure level, the Court does not find it necessary to address Defendant's other arguments as to why the Report should be excluded. Additionally, the Court finds it unnecessary to address the parties' arguments regarding specific causation. 124

¹²⁰ See Harrison v. BP Expl. & Prod. Inc., No. CV 17-4346, 2022 WL 2390733, at *6 (E.D. La. July 1, 2022) ("While Courts 'do not require a mathematically precise table equating levels of exposure with levels of harm . . . there must be evidence from which a reasonable person could conclude that a defendant's emission has probably caused a particular plaintiff the kind of harm of which he or she complains before there can be a recovery." (quoting Wright v. Willamette Industries, Inc., 91 F.3d 1105, 1107 (8th Cir. 1996)).

¹²¹ R. Doc. 53-4 at p. 32.

¹²² Allen, 102 F.3d at 199.

¹²³ R. Doc. 53-1 at pp. 15–20. Although some sections have addressed multiple rationales for excluding Dr. Cook's Report, *see*, *e.g.*, *Novelozo* v. *BP Expl. & Prod. Inc.*, No. CV 13-1033, 2022 WL 1460103 (E.D. La. May 9, 2022) (Africk, J.), most have relied solely upon Dr. Cook's failure to provide harmful exposure level data as grounds for exclusion, *see*, *e.g.*, *Johns*, 2022 WL 1811088.

¹²⁴ See Knight, 482 F.3d at 351 ("Evidence concerning specific causation in toxic tort cases is admissible only as a follow-up to admissible general-causation evidence.").

Accordingly, because Cook's report is unreliable and unhelpful, it is insufficient to establish general causation.

B. Motion for Summary Judgment

Dr. Cook is Plaintiff's sole expert on general causation. ¹²⁵ Because the Court determines that Plaintiff has failed in his burden of establishing the reliability and relevance of his expert's report, the Court finds it appropriate to exclude Dr. Cook's Report. Plaintiff accordingly lacks expert testimony on general causation. Without expert testimony, which is required to prove general causation, ¹²⁶ Plaintiff has failed to demonstrate a genuine dispute of material fact regarding his claims that his injuries were caused by exposure to oil. "When a plaintiff has no expert testimony to prove his medical diagnosis or causation at trial, the plaintiff's suit may be dismissed at the summary judgment stage." Thus, Defendants' Motion for Summary Judgment must be granted as Defendants are entitled to judgment as a matter of law due to Plaintiff's failure to establish general causation.

Plaintiff's further argument that both of Defendants' Motions should be denied because expert testimony is not necessary in a transient symptom case, such as here, and because Plaintiff's lay testimony can establish his injuries conflates two separate issues, general causation and specific causation. In support of this argument, Plaintiff cites to orders from other sections of this court which have concluded that

¹²⁵ Plaintiff's other retained expert, Dr. Rachel Jones, does not address the issue of general causation nor does she cure any of the problems contained within Dr. Cook's Report.

¹²⁶ Plaintiff does not dispute that expert testimony is required to establish general causation. *See* R. Doc. 56 at p. 4; *see also, e.g., Perkins v. BP Expl. & Prod.*, No. 17-4476, 2022 WL 972276, at *2 (E.D. La. Mar. 31, 2022) (Milazzo, J.) ("In a toxic tort suit such as this one, the plaintiff must present admissible expert testimony to establish general causation as well as specific causation.").

¹²⁷ *Williams*, 2019 WL 6615504, at *11.

"temporary physical irritant symptoms and mental anguish symptoms to be 'within the common knowledge of lay people' and for which expert testimony was not necessary to establish causation." Notedly, the order relied on by Plaintiff very clearly states, "[b]ecause BP, for purposes of this motion, does not contest Plaintiff's general causation report from Jerald Cook, M.D. . . . the Court will only evaluate specific causation." Indeed, the final sentence of the Order concludes, "[t] herefore, Plaintiff does not require an expert on specific causation for these particular medical conditions." As the issue before this Court centers on the sufficiency of Plaintiff's general causation expert, the Court does not reach the merits of Plaintiff's arguments on the necessity of expert testimony to establish specific causation.

IV. CONCLUSION

IT IS HEREBY ORDERED that Defendants' *Daubert* Motion to Exclude the Causation Testimony of Plaintiff's Expert, Dr. Jerald Cook¹³¹ is **GRANTED**.

IT IS FURTHER ORDERED that Defendants' Motion for Summary $\text{Judgment}^{132} \text{ is } \textbf{GRANTED}.$

IT IS FURTHER ORDERED that Plaintiff's claims against Defendants are DISMISSED with prejudice.

New Orleans, Louisiana, January 12, 2023.

WENDY B VITTER

United States District Judge

¹²⁸ R. Doc. 55 at p. 5 (quoting *Stephens v. BP* (Civ. Action No. 17-4294), *Turner v. BP* (Civ. Action No. 17-4210); *Wallace v. BP* (Civil Action No. 13-1039)).

¹²⁹ Stephens v. BP (Civ. Action No. 17-4294), R. Doc. 61 at n.2.

 $^{^{130}}$ *Id*.

¹³¹ R. Doc. 53.

¹³² R. Doc. 54.