UNITED STATES DISTRICT COURT

MIDDLE DISTRICT OF LOUISIANA

BASF CORPORATION

CIVIL ACTION

VERSUS

NO. 13-42–JWD-RLB

MAN DIESEL & TURBO NORTH AMERICA, INC.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

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I. INTRODUCTION AND RULING

1. This is a suit for damages allegedly arising from the failure of a centrifugal compressor ("Compressor") at a chemical plant near Baton Rouge, Louisiana. The plaintiff is plant owner BASF Corporation ("BASF" or "Plaintiff"). Defendant is Man Diesel and Turbo North America, Inc. ("Man" or "Defendant"). The parties are diverse and the amount in controversy is in excess of \$75,000 exclusive of interest and costs.

2. Shortly after Man completed its work on the Compressor, it failed catastrophically. BASF alleges that the failure was caused by Man's breach of contract to properly and safely repair the Compressor and/or its negligent repair of same. BASF claims damages of nearly \$12 million.

3. Man denies those allegations and argues that the failure occurred for reasons other than its work, including BASF's own negligence.

4. To resolve this case, the Court must answer the following questions:

- a. What was the nature of the contract between BASF and Man that governed Man's work on the Compressor, and what were the terms of the contract?
- b. What work did Man perform on the Compressor, did that work breach the terms of the contract, and did that work cause or contribute to the failure of the Compressor?
- c. In performing the work on the Compressor, did Man breach any tort duty that would impose liability on Man for BASF's damages?
- d. Did BASF spoliate evidence, and, if so, what are the legal ramifications of the spoliation?
- e. If BASF is entitled to recover, what are the damages to which it is entitled?

5. In making the following findings of fact and conclusions of law, the Court has considered the record as a whole. The Court has observed the demeanor of those witnesses who gave live testimony or testified by video and has carefully weighed their testimony and credibility in determining the facts of this case and in drawing conclusions from those facts. The Court has also carefully reviewed the deposition testimony submitted in lieu of live testimony and the exhibits introduced into evidence. The Court has reviewed and considered the briefs and arguments of counsel.

6. All findings of fact contained herein that are more appropriately considered conclusions of law are to be so deemed. Likewise, any conclusion of law more appropriately considered a finding of fact is to be so classified.

7. For the reasons which follow, this Court holds that BASF has failed to sustain its burden of proof to establish liability on the part of Man and therefore renders judgment in favor of Man.

II. PRODEDURAL HISTORY

8. BASF initiated these proceedings on December 21, 2012, in the 23rd Judicial District Court of Louisiana.¹ Man removed the case to the United States District Court for the Middle District of Louisiana on January 17, 2013, based upon diversity jurisdiction pursuant to 28 U.S.C. § 1332.²

9. The Compressor is a Siemens C-300 Turbo Compressor owned and operated by BASF at its Ethylene Oxide Unit at the Geismar, Louisiana, facility on December 30, 2011.³ BASF alleges that Man is liable for the damage and repair costs to the

¹ Petition, Doc. 1-4 at 3.

² Complaint for Removal, Doc. 1-1 at 2.

³ Petition, Doc. 1-4 at 6.

Compressor, as well as for the business interruption and lost profits allegedly caused by its failure.⁴ Man denies these allegations.⁵

10. MAN has made a counterclaim of spoliation of evidence against BASF.⁶ In this counterclaim Man asserts that BASF's spoliation of key evidence deprived Man of its opportunity to investigate the incident that formed the basis of this litigation and to present evidence at the trial of this matter in its defense against BASF's allegations.⁷

11. On April 9, 2013, Man moved for summary judgment contending that BASF was precluded from asserting this action for consequential damages and attorneys' fees and costs by the terms of its contractual agreement with Man.⁸ U.S. District Judge James J. Brady, who was formerly assigned this matter, dismissed the Motion for Summary Judgment on April 30, 2013, "without prejudice to being re-filed following completion of discovery."⁹

12. On June 25, 2013, the Court adopted the jointly proposed scheduling order, making it an Order of the Court.¹⁰ This Order established a discovery deadline of April 30, 2014, and set trial for June 8, 2015.¹¹ Approximately 30 depositions were taken in this matter; some 3,706 pages of testimony.

13. On October 18, 2013, Man filed a Motion for Leave to File First Supplemental and Amended Answer and Counterclaim of Spoliation of Evidence.¹² This Motion was granted on November 27, 2013, and the First Supplemental and Amended Answer and

⁴ Petition, Doc. 1-4 at 7—11.

⁵ Answer and Demand for Trial by Jury, Doc. 2 at 2.

⁶ Man's First Supp. & Am. Answer & Countercl., Doc. 26.

⁷ Id.

⁸ Man's Mot. For Summ. J., Doc. 8-1 at 10—14.

⁹ Order, Doc. 12 (dismissing Man's motion for summary judgment).

¹⁰ Scheduling Order, Doc. 15.

¹¹ Scheduling Order, Doc. 15.

¹² Man's Mot. for Leave to File First Suppl. & Am. Answer & Countercl., Doc. 21.

Counterclaim was filed into the record on November 27, 2013.¹³ BASF answered the counterclaim on December 18, 2013.¹⁴

14. A joint Motion for Leave of Court was filed to extend the discovery deadline.¹⁵
That Motion was granted March 20, 2014, extending the discovery deadline to June 30, 2014.¹⁶

15. On June 24, 2014, Man filed its Second Supplemental and Amending Answer and Counterclaim to add an additional factual paragraph to its claim of spoliation against BASF.¹⁷ BASF filed its Answer on July 8, 2014.¹⁸

On August 13, 2014, this case was reassigned to U.S. District Judge John W.
 deGravelles.¹⁹ On November 20, 2014, the trial was reset by this Court to December 14, 2015.²⁰

17. On March 4, 2015, Man re-urged its Motion for Summary Judgment which BASF timely opposed.²¹ BASF filed a Cross Motion for Summary Judgment on April 2, 2015, which Man opposed.²² A hearing was held on April 30, 2015, and on May 15, 2015, both Motions for Summary Judgment were denied.²³

¹³ Order, Doc. 25; Man's First Suppl. & Am. Answer & Countercl., Doc. 26.

¹⁴ Answer of BASF Corp. to First Suppl. & Am. Answer & Counter Claim of Man Diesel, Doc. 28.

¹⁵ Joint Mot. for Leave of Ct. to Extend Disc. Deadlines, Doc. 31.

¹⁶ Order, Doc. 32.

¹⁷ Man's Second Suppl. & Am. Answer & Countercl., Doc. 49.

¹⁸ Answer of BASF Corp. to Second Suppl. & Am. Answer & Counter Claim of Man Diesel, Doc.50.

¹⁹ Case Reassignment, Doc. 52.

²⁰ Order, Doc. 65 (resetting jury trial).

²¹ MAN's Re-urged Mot. for Summ. J., Doc. 78; BASF Corp's Mem. in Opp'n to Reurged Mot. For Summ. J. Filed by Man, Doc. 80.

²² BASF Corp.'s Cross-Mot. for Summ. J., Doc. 86; Man's Mem. in Opp'n to BASF's Cross Mot. For Summ. J., Doc. 90.

²³ Ruling & Order, Doc. 98 (denying BASF and Man's motions for summary judgment).

18. On June 1, 2015, BASF filed a Motion for Summary Judgment on Spoliation of Evidence which Man timely opposed on June 22, 2015.²⁴ A Ruling and Order denying BASF's Motion for Summary Judgment on Spoliation of Evidence was signed on November 5, 2015.²⁵

 On November 10, 2015, this Court dismissed without prejudice Man's *Daubert* Motion and Motion to Exclude Testimony of Edelbach, and Man was allowed to file a new motion regarding BASF's new loss of profit expert by December 15, 2015.²⁶
 On November 24, 2015, BASF produced to Man the expert report of George Panzeca.²⁷ His deposition was taken December 11, 2015, and a subsequent *Daubert* Motion and Motion to Exclude Testimony and Evidence was filed.²⁸ BASF opposed the motion on January 4, 2016.²⁹ A hearing was held on January 14, 2016, and Man's *Daubert* Motion and Motion to Exclude Testimony was granted in part and denied in part.³⁰

21. Thereafter, on February 1, 2016, Man filed a Motion in Limine to Exclude the Testimony of Dr. Fernando Lorenzo and Exclude Evidence.³¹ BASF filed its opposition

²⁴ BASF Corp.'s Mot. for Summ. J. on Spoliation of Evid., Doc. 102; Man's Opp'n to BASF's Mot. For Summ. J. on Spoliation of Evid., Doc. 107.

²⁵ Ruling & Order, Doc. 119 (denying BASF's motion for summary judgment on spoliation).

²⁶ Order, Doc. 120 (dismissing Man's *Daubert* Mot. & Mot. in Lim. to Exclude Edelbach).

²⁷ BASF's Certificate of Service, Doc. 121.

²⁸ Man's Mot. in Lim. To Exclude Evid. of Alleged Economic Loss & Alternatively *Daubert* Mot. to Exclude Test. Of George J. Panzeca, Doc. 122.

 ²⁹ BASF Mot. for Leave to File Mem. In Opp'n to Mot. in Lim. To Exclude Evid. Of Alleged Economic Loss and Alternatively *Daubert* Mot. to Exclude Test. of George J. Panzeca in Excess of Page Limitations, Doc. 131.
 ³⁰ Min. Entry from January 14, 2016, Hearing, Doc. 139 at 2.

³¹ Man's Mot. in Lim. to Exclude the Test. of Dr. Fernando Lorenzo and Exclude Evid., Doc. 145.

to Man's Motion in Limine on February 8, 2016.³² Man's Motion in Limine to Exclude the Testimony of Dr. Fernando Lorenzo was ultimately denied on February 11, 2016.³³

22. Prior to trial, a Joint Stipulation Waiving Demand for Jury Trial was filed,³⁴ and this matter was converted to a Bench Trial on January 20, 2016.³⁵ On February 1, 2016, the parties filed their respective Final Witness Lists,³⁶ Exhibit Lists,³⁷ and their pretrial Proposed Findings of Fact and Conclusions of Law.³⁸

23. Trial was held from February 22, 2016,³⁹ to February 26, 2016, and from

February 29, 2016, to March 8, 2016, at which time it was submitted to this Court. The

Court then requested post-trial Proposed Findings of Fact and Conclusions of Law.

These were submitted by the parties on April 18, 2016.⁴⁰ Replies were filed on May 2,

2016.41

III. FACTUAL BACKGROUND

A. BASF and Its Geismar Facility

24. BASF is a Delaware corporation with its principal place of business in New

Jersey.⁴²

³² BASF Corp.'s Mem. in Opp'n to Man's Mot. in Lim. to Exclude the Test. of Dr. Fernando Lorenzo and Exclude Evid., Doc 157.

³³ Ruling & Order Doc. 160 (denying Man's Mot. in Lim. to Exclude the Test. of Dr. Fernando Lorenzo and Exclude Evid.).

³⁴ Stipulation Waiving Demand for Jury Trial, Doc. 138.

³⁵ Min. Entry of January 20, 2016, Doc. 142 at 1 (converting jury trial to bench trial).

³⁶ MAN's Final Witness List, Doc. 147; BASF's Final Witness List, 151.

³⁷ MAN's Final Exhibit List, Doc. 148; BASF's Final Exhibit List, Doc. 150.

³⁸ MAN's Findings of Fact and Conclusions of Law, Doc. 146; BASF's Proposed Findings and Conclusions, Doc. 149.

³⁹ Min. Entry for Bench Trial, Doc. 169 at 1.

⁴⁰ BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 194; Def.'s Post Trial Findings of Fact and Conclusions of Law, Doc. 193. At the Court's request, BASF submitted a reformatted brief on May 20, 2016, *See* BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197.

⁴¹ Reply Mem. to BASF Corp. to [Man's] Post-Trial Findings of Fact and Conclusions of Law, Doc. 196; Def.'s Rebuttal to Plaintiff's Post-Trial Proposed Findings and Conclusions, Doc. 195.

⁴² Joint Uniform Pretrial Order, Doc. 130 at 1.

25. BASF employs approximately 17,000 people in its North American operations.⁴³
26. BASF's largest North American facility is located at Geismar, Louisiana,⁴⁴ where the events giving rise to this litigation took place ("Geismar," "Geismar site," or "Geismar facility").

27. The events giving rise to this litigation occurred in a portion of the Geismar facility called the Ethylene Oxide Unit ("EO Unit"). This unit, and its associated equipment, combines the raw product ethylene with oxygen to produce ethylene oxide ("EO").

28. The EO produced in Geismar's ethylene oxide unit is piped to other units within the Geismar facility to be used in the production of different products such as surfactants, polyols⁴⁵ and many other products that BASF makes.⁴⁶ EO is also shipped by rail to other BASF plants and to third parties.

29. The EO Unit at Geismar is the only BASF facility in North America that produces EO.⁴⁷

30. The Compressor at the center of this controversy was located in the EO Unit. It was a Siemens Demag Delaval model I-IVK 16-2 integrally geared recycle gas centrifugal compressor.⁴⁸ During normal operation, the Compressor circulated gas in the Recycle Gas Loop in the EO Unit.⁴⁹

⁴³ Trial Test. of Tom Yura, Trial. Tr. vol. 1, 11, Feb. 22, 2016, Doc. 183.

⁴⁴ *Id.* at 12.

⁴⁵ *Id.* at 15—16.

⁴⁶ *Id.* at 19.

⁴⁷ *Id.* at 15; Trial Test. of Ann Marie Foreman, Trial Tr. vol. 6, 124, Feb. 29, 2016, Doc. 188.

⁴⁸ Expert Report of Steven Kushnick, P.E., Tr. Ex. D-284, at 10.

⁴⁹ Id.

31. The Compressor was described as the "lifeline of the plant" and the "heart and soul of this process".⁵⁰ When the Compressor was not working or was taken out of service for maintenance or repair, the entire EO Unit could not function.⁵¹

B. Man and Its Relationship with BASF's Geismar Facility

32. Man is a New York corporation with its principal place of business in New York.⁵²

33. Man's Louisiana operations began in 2008 when it acquired an existing business, Baton Rouge Machine Works.⁵³ Described as a "specialty business," Man's Louisiana office focused on "critical machining [and] rotating repairs," including field service repairs of industrial equipment.⁵⁴

34. Prior to the events at issue, Man had done at least 34 jobs for BASF.⁵⁵ In each of these, a Purchase Order was issued by BASF in connection with the work to be performed by Man.⁵⁶

C. The Events Leading up to the Repair of the Compressor

1. Man's Prior Work on the Compressor

35. In October of 2011, BASF initiated a turnaround of the EO Unit.⁵⁷ Siemens Demag Delaval Turbomachinery, Inc. ("Siemens") provided a technical advisor for the turnaround. During the October turnaround, Man removed the bearing caps to inspect

⁵⁰ Trial Test. of Leonard Landry, Trial Tr. vol. 3, 40, Feb. 24, 2016, Doc. 185; Trial Test. of Joe Parsiola, Trial Tr. vol. 3, 179, Feb. 24, 2016, Doc. 185.

⁵¹ Trial Test. of Leonard Landry, Trial Tr. vol. 3, 40, Doc. 185.

⁵² Joint Uniform Pretrial Order, Doc. 130 at 1.

⁵³ Trial Test. of Nick Granier, Trial Tr. vol. 8, 208–09, Mar. 2, 2016, Doc. 190.

⁵⁴ Id. at 209.

⁵⁵ Dep. of Nick Granier, Tr. Ex. P-416-L, at 72:1—74:6; BASF Corp's Post-Trial Proposed Findings and Conclusions, Doc. 197 at 41.

⁵⁶ Id.

⁵⁷ Trial Test. of Holly Sharp, Trial Tr. vol. 8, 40, Mar. 2, 2016, Doc. 190; Trial Test. of Mervin McCon, Trial Tr. vol. 5, 151, Feb. 26, 2016, Doc. 187.

the journals and bearings among other work performed by Man on the Compressor.⁵⁸ The dry gas seals were not replaced at this time.

36. After the turnaround, BASF restarted the Compressor on or about October 21,2011, without incident.

37. Six days later, on October 27, 2011, BASF shut down the plant due to an ethylene feed leak.⁵⁹ Upon restart, the dry gas seals in the Compressor began to leak.⁶⁰

2. Man's November Quote

38. On November 7, 2011, in response to a verbal request from BASF's Kyle Frederick,⁶¹ Man submitted a quote to replace the seals ("November Quote").⁶² However, BASF concluded that the seals did not need to be changed at that time as it was believed the seals could "make it" another twelve to eighteen months.⁶³ Therefore, BASF made the decision to not respond to the Quote it had solicited.

3. Man's December Quote

39. However, on December 24, 2011, BASF "had a plant upset that tripped the

[C]ompressor and after restart"; the Compressor gas seal flow again began to increase.⁶⁴

40. On Christmas Day, December 25, 2011, at 2:11 p.m., BASF's Kyle Frederic

asked Man's Nicholas Granier if Man could have a crew available on December 28,

2011, to remove and replace the dry gas seals.⁶⁵ Mr. Granier responded on the evening

⁵⁸ The pinion shaft is also referred to as a "journal." *See* BASF Corp's Post-Trial Proposed Findings and Conclusions, Doc. 197 at 9 n. 18.

⁵⁹ BASF Corp's Post-Trial Proposed Findings and Conclusions, Doc. 197 at 9.

⁶⁰ Id.

⁶¹ Trial Test. of Kyle Frederick, Trial Tr. vol. 4, 121, Feb. 25, 2016, Doc. 186.

⁶² Trial Test. of Nicholas Granier, Trial Tr. vol. 8, 217-18, 230, Doc. 190; Man Diesel Quote, Tr. Ex. J-1.

⁶³ Trial Test. of Kyle Frederick, Trial Tr. vol. 4, 122, Doc. 186.

⁶⁴ Def.'s Post Trial Findings of Fact and Conclusions of Law, Doc. 193 at 53; BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 10.

⁶⁵ See Email Chain, Tr. Ex. P-361 at 4.

of December 26, 2011, at 7:18 p.m., stating that Man would have a crew available to

perform the job and that he would contact BASF the next day to discuss it further.⁶⁶

41. On December 27, 2011, at 8:35 a.m., Jerad Mitchell, Man's

Business Development Manager/Technical Assistant, forwarded a quote for the

upcoming work. Rather than draft a new quote, Mitchell forwarded the November Quote:

The December 27, 2011, email stated:

I have attached a copy of the quote that we generated for Leonard in November to perform this job. This quote should be valid with the exception of the holiday that we have on Friday. If this job should go into Friday, our time will be billed according to our rate sheets for holiday pay. Please work with Nick to get a P.O. for this opportunity.⁶⁷

To distinguish between the November Quote and this one, the quote sent by

Mitchell on December 27 will be referred to as the "December Quote" or

simply, the "Quote".

42. The Quote provided to BASF on December 27 included a "Work Scope" that

enumerated several steps for the job.⁶⁸ At the heart of the controversy in this case are the

fourth and fifth steps: "[r]emove the main upper gear case cover"; and "[i]nspect

journals and bearings."69 Both of these steps, if performed, would have involved

loosening bearing cap bolts that were found loose after the failure⁷⁰ and which BASF

maintains caused the failure.⁷¹

43. Additionally, per the Quote, Man would provide "[t]echnical support and

expertise" and provide a completed job report within two weeks of the job.⁷²

⁶⁶ See Email Chain, Tr. Ex. P-361, at 3.

⁶⁷ See Email Chain, Tr. Ex. P-361, at 1.

⁶⁸ Man Quote, Tr. Ex. J-1, at 1.

⁶⁹ Id.

⁷⁰ Dep. of Rene Scholz, Tr. Ex. P-416-J, at 82:7—84:11; *see also* Trial Test. of James Spinks, Trial Tr. vol. 5, 57, Feb. 26, 2016, Doc. 187; Trial Test. of Mervin McCon, Trial Tr. vol. 5, 161, Doc. 187.

⁷¹ See, e.g., BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 58–62.

⁷² Man Quote, Tr. Ex. J-1 at 1.

44. On December 28, 2011, at 6:14 a.m., the morning the job was to begin, Mitchell again informed BASF that the Quote should be valid with the exception of the holiday rate for work done on Friday, December 30, 2011.⁷³

4. December 28, 2011: Man's Arrival at Geismar and BASF's Purchase Order

45. In the early morning hours of December 28, 2011, Man's crew met at the Man facility, loaded its tool trailer and travelled to BASF's Geismar facility.⁷⁴

46. The tool trailer contained the tools that Man would need in order to complete the

work.⁷⁵ All Man personnel working on the job had a key to the tool trailer.⁷⁶ The tool

trailer contained tools that could be used to loosen the bolts on the bearing end cap.⁷⁷

The job file, which held the Quote, was also kept in the tool trailer.⁷⁸

47. Both sides agree that Man arrived at BASF's gate on December 28 "shortly after

6 [a.m.]"⁷⁹ More precisely, a document entitled "MAN GATE PUNCHES BASF

GEISMER 122811-123011"80 demonstrates that Man crew members James Spinks and

Kenneth Thompson arrived at the gates of the Geismar facility at 6:06 a.m.

⁷³ The December 28, 2011 email stated:

We have a crew heading out to you [sic] facility this morning per your request to begin a seal change out on C300. It is possible that the P.O. is caught up due to the time frame we are working in to support this opportunity. Can you please email Nick and I a confirmation P.O. which supports the efforts we a [sic] putting forth. I forwarded the quote put together initially in November for this job as it should be the same pending holiday work on Friday.

See Email Chain, Tr. Ex. P-361 at 3.

⁷⁴ Trial Test. of James Spinks, Trial Tr. vol. 5, 10, 21, Doc. 187.

⁷⁵ MAN Diesel Quote, Tr. Ex. J-1, at 1.

⁷⁶ Trial Test. of James Spinks, Trial Tr. vol. 5, 21, Doc. 187.

⁷⁷ Trial Test. of James Spinks, Trial Tr. vol. 5, 35—36, Doc. 187; Trial Test. of Roger Craddock, Trial Tr. vol. 6, 83, Feb. 29, 2016, Doc. 188.

⁷⁸ Trial. Test. of Mervin McCon, Trial Tr., vol. 5, 157, Doc. 187. While Mr. Spinks does not recall seeing the Quote onsite, Mr. Spinks testified that the Quote may have been in the job file for this work and that the job file is kept in the Man tool trailer or work truck where Messrs. Landry and Thompson waited during Mr. Spinks' meeting with Steven Laiche. Trial Test. of James Spinks, Trial Tr. vol. 5, 56—57, Doc. 187

⁷⁹ Established Facts in Joint Uniform Pretrial Order, Doc.190 at 4—5; *see also* BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 41.

⁸⁰ Work Crew Gate Punches, Tr. Ex. D-173.

48. At about the same time, employees of Turner Industries, BASF's maintenance contractor prepared Safe Work Permits to remove the insulation from the

Compressor and build scaffolding in preparation for Man's work on the Compressor.⁸¹

49. As noted above, at 6:14 a.m. that morning, Jerad Mitchell sent Kyle Frederick an email stating in part:

We have a crew heading out to you [sic] facility this morning per your request to begin a seal change out on C300. It is possible that the P.O. is caught up due to the time frame we are working in to support this opportunity. Can you please email Nick and I a confirmation P.O. which supports the efforts we a [sic] putting forth. I forwarded the quote put together initially in November for this job as it should be the same pending holiday work on Friday.⁸²

50. After entering the plant at around 6:06 a.m., the Man crew did preparatory work

in anticipation of their work on the Compressor.⁸³ This included meeting with other

workers, reviewing drawings and schematics, staging tools, and otherwise preparing to

commence work on the Compressor.⁸⁴

51. When the Man crew arrived, the Siemens Technical Advisor, Rene Scholz, had

not yet arrived. The Purchase Order had also not yet been issued, and Man refused to

start work on the Compressor until a Purchase Order was received.⁸⁵

⁸¹ Safe Work Permits, Tr. Exs. P-5 & P-6.

⁸² Email chain, Tr. Ex. P-361 at 3.

⁸³ Trial Test. of James Spinks, Trial Tr. vol. 5, 19, 22, 116–17, 119–20, Doc. 187. As is made clear later in these Findings, the parties disagree on exactly what was done and said by Spinks and the rest of the Man crew after the crew arrived and before work began on the Compressor (which is arguably relevant to other issues), the Court concludes that Man did some work in preparation for the actual work on the Compressor.

⁸⁵ Trial Test. of James Spinks, Trial Tr. vol. 5, 16, Doc. 187 ("Q. Did you make sure that you got a purchase order before you started the work on this job? A. Yes."); Dep. of Nicholas Granier, Tr. Ex. P-416-L, at 27:1—8 (testifying that the policy at the time of contract was that MAN Diesel would do no work for BASF until BASF issued a purchase order).

52. This delay for the Purchase Order is consistent with BASF and Man's "long history or customary practice"⁸⁶ of delaying work until BASF issued a purchase order.⁸⁷ Man employees were required to receive the purchase order or, at minimum, a purchase order number, before commencing performance.⁸⁸

53. The parties agree that, later that morning, "at 9:02 a.m., [BASF] issued purchase

order No. 4901021764, to [Man] to remove the existing seal and install a new

seal in the C-300 compressor."⁸⁹ The complete BASF Purchase Order was introduced as Trial Exhibit J-2.

54. At 9:02 a.m., Terry Bourgeois, a Turner maintenance planner at Geismar,⁹⁰

emailed the Purchase Order number for this job to Man's Jerad Mitchell:⁹¹

Jerad, Po for C-300 is as follows: PO # 4901021764⁹²

55. According to Man's crew supervisor James Spinks, work on the Compressor

began at around 9:25 a.m.⁹³

⁸⁶ Man and BASF have a long "history of business dealings." Dep. of Nicholas Granier, Tr. Ex. P-416-L, at 44:22–45:13.

⁸⁷ The normal procedure between Man and BASF is for BASF to request a quote, for Man to send a quote, for BASF to issue a purchase order, and finally for Man to perform the work. Dep. of Nicholas Granier, Tr. Ex. P-416-L, at 45:6—9 ("the procedure is, a quote is issued and BASF reviews the quote but no work can be done until BASF issues the purchase order[.]"). *See also* Trial Test. of Nicholas Granier, Trial Tr. vol. 8, 234—35, Doc. 190; Trial Test. of James Spinks, Trial Tr. vol. 5, 16, Doc. 187.

⁸⁸ Dep. of Nicholas Granier, Tr. Ex. P-416-L, at 27:1-13. Mr. Granier suggests that only a Purchase Order number is required when there is an "emergency situation." The parties disagree as to whether this was an emergency.

⁸⁹ Established Facts in Joint Uniform Pretrial Order, Doc. 190 at 4—5; BASF's Jamie Latuso stated that BASF sent the Purchase Order to Man at 8:50 a.m., and Man received a separate email with the Purchase Order number at 9:02 a.m. Joint Stipulations in Lieu of Live Test. by Jamie Latuso, Doc. 174, at 3; Email chain, Tr. Ex. P-361 at 2; *see also* Trial Test. of James Spinks, Trial Tr. vol. 5, 16, 31—32, Doc. 187.

⁹⁰ Turner was the maintenance contractor for the BASF Geismar facility.

⁹¹ See Emails from Terry Bourgeois, Tr. Ex. P-361, at 2.

⁹² Email chain, Tr. Ex. P-361, at 2.

⁹³ Trial Test. of James Spinks, Trial Tr. vol. 5, 31–32, Doc. 187.

56. At 9:29 a.m., Mr. Mitchell forwarded Bourgeois' email to two Man employees, Michael Yu and Leigh Brashier, stating: "P.O. for the job the guys are on today."⁹⁴

57. But there is a dispute as to how much of the Purchase Order was actually received by Man, specifically, whether the full five page document or, as Man claims, only the first two pages, were received.

58. BASF counters with the Joint Stipulations of Fact in Lieu of Live Testimony by Jamie Latuso, who stated that (1) she created the full five page Purchase Order for Man's work; (2) as the Purchase Order was created in BASF's system, it automatically included BASF's terms and conditions; (3) upon her saving the Purchase Order, (including automatically all of BASF's terms and conditions) it was immediately faxed to Man at 8:50 a.m.; and (4) the Purchase Order was "successfully processed," meaning that the purchase order – including the terms and conditions – was, *in whole*, successfully transmitted to Man's facsimile server. ⁹⁵ Latuso further testified the procurement department never received an automated notice error indicating any issue with the transmission of the Purchase Order and further, that no one at BASF ever received a communication from Man reporting an issue with the transmittal of the Purchase Order.⁹⁶

59. There is also a dispute as to the *scope* of work Man was to perform pursuant to whatever contract existed between BASF and Man and, regardless of what was called for in the contract, the work which was actually performed. BASF contends that the

⁹⁴ Email from Jerad Mitchell to Michael Yu and Leigh Brashier, Tr. Ex. P-70, at 1.

⁹⁵ Dep. of Jamie Latuso, Tr. Ex. P-421, at 14:14—16:2; Joint Stipulations of Fact in Lieu of Live Test. by Jamie Latuso, Doc. 174 at 3.

⁹⁶ Dep. of Jamie Latuso, Tr. Ex. P-421, at 14:14—16:2; Joint Stipulations of Fact in Lieu of Live Test. by Jamie Latuso, Doc. 174 at 3.

contract called for the removal of the bearing cap and associated bolts⁹⁷ and that this work was actually performed by Man, leading to the catastrophic failure of the Compressor.⁹⁸

60. Man, on the other hand, contends that the only work it was contracted to do in December was to replace the dry gas seals (which did not include the removal of the bearing cap or associated bolts). It claims that this is the only work it performed, that it performed this work well. It insists that its work was unrelated to the Compressor failure. This issue is explored in detail in another section of this Ruling.

61. After receiving the Purchase Order by fax and the Purchase Order number by email, Man's crew began performing work on the compressor.⁹⁹

D. Man's Work on the Compressor

62. At around 9:25 a.m., after the Job Safety Analysis was issued,¹⁰⁰ and after

receiving the Purchase Order by fax and the Purchase Order number by email, Man's crew began performing work on the Compressor.¹⁰¹

63. Man's crew consisted of James Spinks, Mervin McCon, James Landry, Kenny

Thompson and Alan McGill.¹⁰²

64. Man's crew worked on the Compressor from the morning of December 28, 2011, until the morning of December 30, 2011.¹⁰³

⁹⁷ BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 54—55.

⁹⁸ *Id.* at 58—62.

⁹⁹ Trial Test. of James Spinks, Trial Tr. vol. 5, 16, Doc. 187; Trial Test. of Mervin McCon, Trial Tr. vol. 5, 210–11, Doc. 187.

¹⁰⁰ Safe Work Permit, Tr. Ex. J-4; Trial Test. of James Spinks, Trial Tr. vol. 5, 31–32, Doc. 187.

¹⁰¹ Trial Test. of James Spinks, Trial Tr. vol. 5, 16, Doc. 187; Trial Test. of Mervin McCon, Trial Tr. vol. 5, 210–11, Doc. 187.

¹⁰² Trial Test. of James Spinks, Trial Tr. vol. 5, 13, Doc. 187. Only Thompson and Landry were with Spinks when they arrived on December 28. *Id.* at 17, 186–87.

¹⁰³ The Compressor was released to BASF on December 30, 2011 at 10:50 a.m. after Man removed its lock and signed the lock-out/tag-out sheet. Trial Test. of James Spinks, Trial Tr. vol. 5, 107, Doc. 187.

65. A central factual dispute is what work Man's crew actually performed on the Compressor. BASF contends the work included loosening and ultimately retightening the bolts associated with the bearing caps and that its failure to retighten these bolts with the proper torque resulted in the Compressor's catastrophic failure.¹⁰⁴ Man claims it only performed the replacement of the dry gas seals which did not involve working on or around these bolts.¹⁰⁵

E. Man's Completion of Work, Start-Up and Failure of Compressor

66. On December 30, 2011, after completing the installation of the new seals, Man reassembled the Compressor, cleaned up their work area, removed their locks, and, at around 10:50 a.m., returned the Compressor to BASF.¹⁰⁶

67. The BASF operators then completed a pre-start-up checklist.¹⁰⁷

68. BASF started the Compressor at approximately 12:15 p.m., and, within 17

seconds, the Compressor experienced a catastrophic failure.¹⁰⁸ The Compressor emitted a loud noise, experienced extreme vibrations, sprayed oil from multiple locations, and ceased operating.¹⁰⁹

F. BASF's Investigation and Root Cause Failure Analysis

69. Aaron Rose, BASF engineer, was contacted at 1 p.m. on December 30, the date of the accident, and was designated BASF's lead investigator to head its Root Cause Failure Analysis ("RCFA").¹¹⁰

¹⁰⁴ See, e.g., BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 5-6.

¹⁰⁵ See, e.g., Trial Test. of James Spinks, Trial Tr. vol. 5, 22, 25, 53, 72, 104, 112, Doc. 187.

¹⁰⁶ Trial Test. of James Spinks, Trial Tr. vol. 5, 107, Doc. 187; Leonard Landry estimated the turnover time to be between 8 a.m. and 10 a.m. Trial Test of Leonard Landry, Trial Tr. vol. 3, 46, Doc. 185.

¹⁰⁷ Recycle Compressor Normal Start Up Checklist, Tr. Ex. J-7.

¹⁰⁸ BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 17.

¹⁰⁹ *Id.* at 17—18.

¹¹⁰ Trial Test. of Aaron Rose, Trial Tr. vol. 1, 110, 123–25, Feb. 22, 2016, Doc. 183; Trial Test. of Aaron Rose, Trial Tr. vol. 2, 9, Feb. 23, 2016, Doc. 184.

70. Rose arrived at the scene at about 8:00 p.m. that same day to begin to investigate the cause of the failure and the extent of the damages.¹¹¹

71. BASF appointed other BASF employees to the RCFA team, including Joe Parsiola, Kyle Frederick, Kalen Jaworski and Richard Willwerth.¹¹²

72. On December 31, Rose accompanied the Compressor to the Siemens TurboCare facility in Houston, Texas where repairs were made on the Compressor.¹¹³

73. The conclusion of the RCFA was that the loose bolts on the B side bearing cap caused the failure.¹¹⁴ The RCFA was concluded when Rose "presented the RCFA findings at a January 24, 2012, meeting,"¹¹⁵ less than a month following the event.¹¹⁶

74. Man strenuously challenges the methodology and conclusions of the investigation and RCFA.¹¹⁷ In addition, it filed a counterclaim alleging that BASF intentionally spoliated critical evidence during the investigation.¹¹⁸ While BASF acknowledges certain shortcomings of the RCFA,¹¹⁹ it argues for the integrity of the investigation's process and results.¹²⁰ These allegations are considered and resolved elsewhere in this ruling.

¹¹¹ Trial Test. of Aaron Rose, Trial Tr. vol. 1, 128, Doc. 183; Trial Test. of Aaron Rose, Trial Tr. vol. 2, 25, Doc. 184.

¹¹² Trial Test. of Aaron Rose, Trial Tr. vol. 1, 198–99, 204, Doc. 183.

¹¹³ Trial Test. of Aaron Rose, Trial Tr. vol. 2, 165, Doc. 184.

¹¹⁴ Trial Test. of Aaron Rose, Trial Tr. vol. 1, 231–34, Doc. 183.

¹¹⁵ BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 23.

¹¹⁶ Trial Test. of Aaron Rose, Trial Tr. vol. 1, 220-21, Doc. 183; Apollo Root Cause Chart, Tr. Ex. P-332. For Mr. Rose's full testimony regarding the chart and the different failure causes considered, see Trial Test. of Aaron Rose, Trial Tr. vol. 1, 210-20, Doc. 183. *See also* Trial Test. of Joe Parsiola, Trial Tr. vol. 3, 185, Doc. 185.

¹¹⁷ Def.'s Post Trial Findings of Fact and Conclusions of Law, Doc. 193 at 13-25; Defendant's Rebuttal to Plaintiff's Post-Trial Proposed Findings and Conclusions, Doc. 195 at 1—4.

¹¹⁸ Man's First Suppl. & Am. Answer & Countercl., Doc. 26; Man's Second Suppl. & Am. Answer & Countercl., Doc. 49.

¹¹⁹ The RCFA contained "certain imperfections" (BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 74), and its "documentation . . . left something to be desired." (*Id.* at 73).

¹²⁰ BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 19–24, 72–75.

IV. FINDINGS OF FACT

A. Arguments of the Parties – the Contract

1. BASF's Position¹²¹

75. BASF argues that its Purchase Order was the contract that controlled the work done on the Compressor.¹²² Man, on the other hand, argues that it was its December Quote.¹²³ There are different legal consequences that flow from it being one or the other. 76. Specifically, BASF contends that Man's December Quote was an offer¹²⁴ and that its Purchase Order was a counter offer.¹²⁵ It argues that Man did not object or attempt to renegotiate the terms of the Purchase Order and accepted its terms by performing the work after the Purchase Order was sent and received.¹²⁶ Invoking the so-called "acceptance by performance" provision of the contract, it argues that by working on the Compressor after the Purchase Order was issued by BASF and received by Man, Man accepted the terms of the Purchase Order.¹²⁷ BASF maintains its position is further bolstered by the "long history of dealing between them, wherein the same purchase order terms were governing...[and] Man Diesel never opposed BASF's terms for work

77. BASF argues that the testimony of Jamie Latuso and evidence submitted in connection therewith establishes that, despite the testimony of Nick Granier to the

¹²¹ The cited record references in the sections summarizing the positions of the parties are those to which the parties have directed the Court in their briefing.

¹²² BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 56—57.

¹²³ Def.'s Post Trial Findings of Fact and Conclusions of Law, Doc. 193 at 53—58.

¹²⁴ BASF argues in the alternative that, even if the Quote was an offer, it did not accept that offer or any of its terms and conditions. *See* BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 57.

¹²⁵ BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 54.

¹²⁶ *Id.* at 54, 57.

¹²⁷ BASF December Purchase Order, Tr. Ex. J-2, at 4.

¹²⁸ BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 57 n. 291 (citing Dep. of Linda Harris, Tr. Ex. P-416-G, at 19–20).

contrary, Man received all five pages of its December Purchase Order and, by "accepting by performance," bound itself to the terms contained in all five pages.¹²⁹

78. The full five-page Purchase Order provides important elements of the offer in the

allegedly unsent pages. The third page lists the price as \$45,000.¹³⁰ This price differs

from the \$26,750.00 listed in the Quote. On the fourth page, the Purchase Order

expressly states that, if it is sent in response to a quote, then the terms of the Purchase

Order supersede the terms of the quote and shall be a rejection of same.¹³¹ Finally, the

fifth page provides that any cost or damage incurred by BASF as a result of a breach of a

warranty would be borne by Man.¹³²

79. Regardless of whether the entire Purchase Order was transmitted, both sides agree

that, at the very least, the entire first page was transmitted.¹³³ This page of the Purchase

Order provides, in part:

THIS ORDER IS SUBJECT TO THE TERMS AND CONDITIONS INCLUDED HEREWITH, AND SELLER AGREES TO BE BOUND THEREBY. BY SHIPPING THE GOODS, OR BY ACKNOWLEDGING RECEIPT OF THIS ORDER SELLER AGREES TO SUCH TERMS AND CONDITIONS. ANY DIFFERENT OR ADDITIONAL TERMS IN SELLER'S ACCEPTANCE FORM, IF ANY, ARE HEREBY REJECTED.

¹²⁹ BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 11 (citing Dep. of Jamie Latuso, Tr. Ex. P-21, at 14—16; Joint Stipulations of Fact in Lieu of Live Test. by Jamie Latuso, Doc. 174).

¹³⁰ BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 12 (citing BASF December Purchase Order, Tr. Ex. J-2, at 3).

¹³¹ BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 12 (citing BASF December Purchase Order, Tr. Ex. J-2, at 4).

¹³² BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 12 (citing BASF December Purchase Order, Tr. Ex. J-2, at 5).

¹³³ BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 12 (citing BASF December Purchase Order, Tr. Ex. J-2, at 1).

2. Man's Position

80. Man, on the other hand, claims that its Quote was accepted by BASF by virtue of 1) BASF's requesting Man's assistance on an emergency basis, 2) BASF's receipt of Man's Quote, 3) allowing Man onto its premises and 4) allowing it to begin work in preparation for the Compressor repair, all before the issuance of the Purchase Order.¹³⁴

81. Man disputes that it received all five pages of the Purchase Order; rather, it claims that it only received the first two pages so that, even if the Purchase Order is the controlling contract, only the first two pages are binding on Man.¹³⁵ Therefore, argues Man, the warranty clause, the acceptance-by-performance clause and the consequential damages clause, among others, are legally irrelevant in this case.

82. In any event, however, because Man's Quote had already been accepted by virtue of BASF's silence and failure to object to it and by allowing Man to begin work,¹³⁶
BASF's Purchase Order was no more than "a unilateral [and unsuccessful] attempt to modify the existing contract."¹³⁷

¹³⁴ Def.'s Post Trial Findings of Fact and Conclusions of Law, Doc. 193 at 53-59.

¹³⁵ In its briefing on pretrial motions, Man submitted the affidavit of Nick Granier who stated Man received only two of the five pages. (Doc. 78-8, at 3.) At trial, Granier testified he did not see the document on December 28, but reviewed it later. Trial Test. of Nick Granier, Trial Tr. vol. 8, 223—24, Doc. 190. As discussed *infra*, this issue is resolved in BASF's favor, largely based on the Joint Stipulations of Fact in Lieu of Live Testimony by Jamie Latuso.

¹³⁶ Def.'s Post Trial Findings of Fact and Conclusions of Law, Doc. 193 at 53—59.

¹³⁷ *Id.* at 58.

B. Findings of Fact - the Contract

83. Man's Quote was not an offer because both parties contemplated that a purchase

order would issue in response to the Quote. Rather the Court finds that the intent of both

parties was that BASF's Purchase Order would constitute the contract between them.

84. The following facts, among others, support the Court's conclusion that Man's

Quote was not an offer and that BASF's Purchase Order constituted the contract between

BASF and Man:

- In his December 27, 2011, email attaching the Quote, Man's Jerad Mitchell stated, "Please work with Nick *to get a P.O. for this opportunity*."¹³⁸
- In his December 28 email at 6:14 a.m., Mitchell again stated, "It is possible that the P.O. is caught up due to the time frame we are working in to support this opportunity. Can you please email Nick and I *a confirmation P.O.* which supports the efforts we a [sic] putting forth."¹³⁹
- The Quote states, "We would need a purchase order before we can lock in a firm date."¹⁴⁰ Further, the Quote states, "Tooling required to perform *scope finalized by client and MAN*," implying that the scope needed to be finalized.¹⁴¹
- The testimony of Man's employees confirms the Quote was not an offer and the Purchase Order controlled. James Spinks, Man's supervisor for the job, testified that he made sure he got the Purchase Order before starting work on the Compressor.¹⁴² Man's Nick Granier also testified that "no work can be done until BASF issues the purchase order [,]"¹⁴³ and agreed that the Purchase Order is what controls the scope of work.¹⁴⁴

¹³⁸ Email Chain, Tr. Ex. P-361, at 1 (emphasis added).

¹³⁹ Email Chain, Tr. Ex. P-361, at 3 (emphasis added).

¹⁴⁰ Quote, Tr. Ex. J-1, at 2 (emphasis added).

¹⁴¹ Quote, Tr. Ex. J-1, at 1 (emphasis added).

¹⁴² Trial Test. of James Spinks, Trial Tr. vol. 5, 16, Doc. 187.

¹⁴³ Dep. of Nick Granier, Tr. Ex. P-416-L, at 44-45; *see also* Trial Test. of Nick Granier, Trial Tr. vol. 8, 234—35, Doc. 190.

¹⁴⁴ Trial Test. of Nick Granier, Trial Tr. vol. 8, 225, Doc. 190.

• Man did not reject or attempt to negotiate the Terms and Conditions of the BASF Purchase Order before beginning work.¹⁴⁵ Man was well aware of how to do so.¹⁴⁶ Indeed, on past occasions, if Man sought to dispute the terms and conditions of a purchase order, it would attempt to negotiate or revise the terms and conditions before beginning the work.¹⁴⁷ In the absence of such efforts, Man admitted that the customer's terms and conditions controlled.¹⁴⁸

85. In conclusion, the Quote was not sufficiently precise and complete so that the

intended contract could be concluded by the BASF's expression of its assent. It is clear

that the parties agreed that the Purchase Order would be the contract governing the work

to be done on the Compressor.

86. The Court finds, even if the Quote were an offer, BASF did not accept its terms

expressly or by silence. BASF's December 25, 2011, email to Nick Granier of Man

("Would you have a crew available to assist changing the seal on C300 Wednesday 28th?

Can you give me a quote?")¹⁴⁹ cannot reasonably be construed as an acceptance of the

December 7 Quote. The email did not mention the Quote, and BASF specifically asked

Ms. Harris testified:

¹⁴⁵ Dep. of Barbara Lang, Tr. Ex. P-416-F, at 43:17–44:7.

¹⁴⁶ Man previously negotiated supplemental terms and conditions with BASF that were only applicable in Texas. Dep. of Linda Harris, Tr. Ex. P-416-G, at 19:15—20:21. No such negotiated terms covered work in Louisiana. *Id.* at 20:18— 21. However, this negotiation and Man's corporate policy for handling customer-provided terms and conditions evidences that Man was fully aware of how to reject terms and conditions or negotiate different arrangement with their customers.

¹⁴⁷ Dep. of Barbara Lang, Tr. Ex. P-416-F, at 41:6—43:4; Dep. of Linda Harris, Tr. Ex. P-416-G, at 17:7—18:12. ¹⁴⁸ Ms. Lang testified:

Q: Now, if the customer has—going back to my hypothetical—has this purchase order that says our terms and conditions control, and MAN Diesel does not contact the customer to negotiate but simply begins work, would you agree with me that MAN Diesel is then bound by what the purchase order said?

A: Yes.

Dep. of Barbara Lang, Tr. Ex. P-416-F, at 43:9-16.

Q: . . . A quote is issued by M-A-N Diesel. The customer issues a purchase order that has its own terms and conditions that do not waive consequential damages, and M-A-N doesn't do anything as far as responding to that; they just send a crew out and they start working. Under that scenario, the customer's terms and conditions control, correct?

A: That is correct.

Dep. of Linda Harris, Tr. Ex. P-416-G, at 18:17-25.

¹⁴⁹ Email Chain, Tr. Ex. P-361, at 4.

Man to send it a quote. BASF's other email ("Thanks in advance for the help.")¹⁵⁰ also was not an acceptance. This email was sent in response to Granier's December 26 email, which did not mention the Quote and only stated that Man has "several people available" and that Man would contact BASF the following morning to discuss the project.¹⁵¹ In short, there was no express acceptance.

87. Man argues, however, that even if its Quote was not expressly accepted, that under Louisiana Civil Code article 1942, "When, because of special circumstances, the offeree's silence leads the offeror reasonably to believe that a contract has been formed, the offer is deemed accepted."¹⁵² Based on the plain text, there are three requirements to this article: (1) special circumstances, (2) silence by the offeree, and (3) reasonable belief by the offeror that a contract has been formed. Man argues that all three requirements were met. The Court disagrees.

88. The parties argue as to whether there was an emergency here which would qualify as "special circumstances" justifying acceptance by silence.

89. While the evidence shows that this work requested from Man was not routine and might even be fairly characterized as an emergency, nonetheless, these were not the kind of "specialized circumstances" envisioned by Article 1942. The communications from Man show that it anticipated and, indeed required, a BASF purchase order to issue before its work on the Compressor itself would begin. This is exactly what happened.

90. The Court further concludes that BASF's allowing the Man crew to do some work before the Purchase Order was issued was not an acceptance of the Quote. Even though

¹⁵⁰ Email Chain, Tr. Ex. P-361, at 3.

¹⁵¹ Email Chain, Tr. Ex. P-361, at 3.

¹⁵² La. Civ. Code. art. 1942.

preparatory work began before the Purchase Order issued, both sides anticipated that a purchase order would issue and actual work on compressor would not begin until that happened.

91. When that Purchase Order was issued and, at the very least, two pages of it were received by Man, Man did not balk, Man did not protest, and Man did not attempt to renegotiate. Rather, Man's crew began to work on the Compressor.

92. On the issue of whether all or only a part of the Purchase Order was received, the Court concludes that the weight of the evidence favors BASF. The deposition testimony of Jamie Latuso¹⁵³ and the stipulation made in lieu of her live testimony¹⁵⁴ along with the circumstances surrounding same, convinces the Court that BASF sent and Man received all five pages.

93. In sum, the Court finds that the full five page Purchase Order constitutes the contract existing between BASF and Man as regards the work done on the Compressor. Man's Quote was not an offer. Even if it was an offer, there was no express acceptance or acceptance by silence.

C. Arguments of the Parties – Investigation, RCFA and Alleged Spoliation of Evidence

1. Man's Position

94. Man makes three separate but interrelated points in support of its spoliation counterclaim: ¹⁵⁵ first, Man was not advised as to BASF's preliminary conclusion that loose bearing cap bolts were discovered after the event, that loose bolts caused the

¹⁵³ Dep. of Jamie Latuso, Tr. Ex. P-421, at 14—16.

¹⁵⁴ Joint Stipulations of Fact in Lieu of Live Test. by Jamie Latuso, Doc. 174 at 3.

¹⁵⁵ First Suppl. & Am. Answer and Countercl., Doc. 26; Second Suppl. & Am. Answer and Countercl., Doc. 49; The counterclaim was the subject of a motion for summary judgment by BASF (Doc. 102) which was denied (Doc. 119).

failure, that Man was thought to be responsible, and that BASF was contemplating a claim against Man for the damages, until after the Compressor was repaired and the bolts and other evidence were lost and no longer able to be independently examined. Second, when it was advised of these points, Man's request to be allowed access to this evidence was rebuffed. Third, Man was not invited to participate in BASF's RCFA and, indeed, was not even made aware that one was being conducted until after the evidence was no longer able to be examined in its post-accident state.

95. Independent of its spoliation claim, Man strenuously challenges the objectivity, methodology and conclusions of BASF's investigation and RCFA.¹⁵⁶

96. Because the Court's decision potentially involves an adverse evidentiary presumption that will affect its evaluation of fact questions of liability, the Court will now consider the issues of BASF's investigation, RCFA, and its alleged spoliation of evidence.

97. First, Man complains that it was denied access to the Compressor and the opportunity to inspect it independently or participate in BASF's investigation of the accident. Indeed, for a significant period of time, Man was unaware that there was an ongoing investigation and that Man was a potential target as a responsible party.

98. Man contends that its crew members were initially escorted away from the area of the Compressor and out of the plant shortly after the failure, and were therefore not present for the discovery by Mason Cook of the loose bolts on the B side bearing cap.¹⁵⁷ Man's crew had no access to the compressor or any evidence until their crew members

¹⁵⁶ Def.'s Post Trial Findings of Fact and Conclusions of Law, Doc. 193 at 13-25; Defendant's Rebuttal to Plaintiff's Post-Trial Proposed Findings and Conclusions, Doc. 195 at 1–4.

¹⁵⁷ See Trial Test. of James Spinks, Trial Tr. vol. 5, 75, Doc. 187.

were summoned back to the plant on the evening of December 31, 2011, to partially dismantle the machine. This occurred under the direction and supervision of Aaron Rose in order for him and Rene Scholz, the Siemens consultant, to make an assessment regarding the extent of the internal damage to its components.¹⁵⁸

99. According to Man, neither Man's crew on the scene nor Man's management were notified at that time of the failure or later that day that BASF considered Man at fault for the failure and that BASF was contemplating a claim against it,¹⁵⁹ although BASF's Management was already contemplating such a claim, as evidenced by company internal emails such as the one sent to Kevin McCarroll (Services Director, BASF) on December 31, 2011:

... Aaron Rose is assisting with the failure investigation and, at this time, the failure is said to be mechanical in nature. The root cause is not clear yet but, bolts on the bearing end caps were found loose ... with the discovery of the loose bolts, both Siemen's (oversight) and/or Mann (craftsman) may incur some or all liability for this event.¹⁶⁰

100. Man contends that other email exchanges between and among BASF plant executives further confirm that, within days of the incident, both Siemens and MAN Diesel were suspected of being at fault and causing whatever loss BASF was to sustain.¹⁶¹

101. Thus, says Man, BASF's argument that Man's crew had access to the evidence shortly after the accident and could have been included in the investigation if they had

¹⁵⁸ See Trial Test. of James Spinks, Trial Tr. vol. 5, 129–31, Doc. 187.

¹⁵⁹ Man argues that its first notice was on January 18, 2012, when it received a formal demand letter from BASF. Letter from Roth to Yura, Tr. Ex. J-45.

¹⁶⁰ Email from Falsone to McCarroll regarding work done on compressor (BASF_MAN0002329), Tr. Ex. D-70 (emphasis added).

¹⁶¹ Trial Test. of Tom Yura, Trial Tr. vol. 1, 81, 84, Feb. 22, 2016, Doc. 183; Emails regarding compressor failure (BASF_MAN 003343-003344), Tr. Ex. D-274; Emails from Yura inquiring whether statements have been taken from Man (BASF_MAN 005480), Tr. Ex. D-275; Emails from Rose to Yura regarding no formal interviews have been conducted (BASF_MAN 000284), Tr. Ex. D-276.

only asked, fails for four reasons: first, BASF did not tell Man's crew or management that BASF considered Man responsible, nor were they told that an RCFA had already begun, nor was Man's management invited to participate;¹⁶² second, Man's on-site crew members were ordinary millwrights, with no expertise in accident investigation or analysis, and were given no notice that BASF Management had already reached the tentative conclusion that their company might be held responsible for the damage; third, after Man personnel completed loading the Compressor and personnel left the premises on December 31,¹⁶³ Man personnel were thereafter barred from the BASF facility, without access to any evidence and have not, since then, set foot inside the BASF plant;¹⁶⁴ and finally, by the time Man was made aware of BASF's preliminary conclusions and intention to make claim against Man on January 18, 2012,¹⁶⁵ the evidence was no longer available for inspection.

102. In sum, insists Man, BASF consciously decided to not reveal its preliminary suspicions and possible future claim to Man until January 18, 2012, after critical evidence could no longer be examined by Man, notwithstanding its (1) initial conclusion that improperly loosened bolts was the cause of the failure, (2) that Man was likely responsible, and (3) a claim against Man for damages might be made.¹⁶⁶
103. By letter dated January 18, 2012, BASF first placed Man on notice that Man would be held responsible by BASF for this loss, estimated to be in the millions of

dollars.¹⁶⁷

¹⁶² Trial Test. of Tom Yura, Trial Tr. vol. 1, 51, Doc. 183.

¹⁶³ Trial Test. of Mervin McConn, Trial Tr. vol. 5, 189, Doc. 187.

¹⁶⁴ Trial Test. of Nicholas Granier, Trial Tr. vol. 8, 212–14, Doc. 190.

¹⁶⁵ Letter from Yura to Doiron, Tr. Ex. J-40; Trial Test. of Tom Yura, Trial Tr. vol. 1, 51, Doc 183.

¹⁶⁶ Trial Test. of Tom Yura, Trial Tr. vol. 1, 84, Doc. 183; *see also* Correspondence dated January 2, 2012

⁽BASF_MAN0002207), Tr. Ex. D-268 (stating that Siemens was to be involved in investigation and Man was not).

¹⁶⁷ Letter from Yura to Doiron, Tr. Ex. J-40; Trial Test. of Tom Yura, Trial Tr. vol. 1, 51, Doc. 183.

104. After receiving that letter, Man replied by letter dated February 3, 2012, asking to be included in any investigation,¹⁶⁸ specifically requesting that it be allowed to attend any investigation or testing, receive reports, and participate in root cause discussions, unaware the RCFA was already complete and the culminating "brainstorming" discussion

had already been held.¹⁶⁹

105. But that request was rejected by BASF, who refused to permit Man

representatives to attend the root-cause analysis presentation¹⁷⁰ and failed to mention that BASF's RCFA had already been completed on January 24 and Man's only opportunity to access the evidence or participate had already passed.¹⁷¹

106. In addition to intentionally depriving Man from participating in the post-accident investigation, Man accuses BASF of destroying, losing and failing to preserve important pieces of evidence which would have helped the parties objectively identify the true cause of the failure.

107. The particular evidence about which MAN Diesel complains consists primarily of (1) the four bearing cap bolts on the "B" side of the compressor or, indeed, of the sixteen or more various other bolts found loose after the failure, (2) the pre-start-up checklist completed by the BASF operations crew documenting their activities including the pre-start-up drainage of the suction piping and the quantities of water drained, and (3)

¹⁶⁸ Letter from Roth to Yura, Tr. Ex. J-45.

¹⁶⁹ Letter from Roth to Yura, Tr. Ex. J-45; Letter from Roth to Yura dated February 3, 2012 (MAN Diesel 577), Tr. Ex. D-269.

¹⁷⁰ Letter from Roth to Yura, Tr. Ex. J-45; Letter from Roth to Yura dated February 3, 2012 (MAN Diesel 577), Tr. Ex. D-269; Letter from Yura to Man (MAN Diesel 644-645), Tr. Exs. D-25 & J-47 ("Man will not be allowed to participate in, or be privy to, any internal review or investigation conducted by BASF.").

¹⁷¹ Trial Test. of Tom Yura, Trial Tr. vol. 1, 74-76, 99, Doc. 183; Letter from Yura to Man (MAN Diesel 644-645), Tr. Ex. J-47.

documentation regarding the post-failure root cause findings or analysis conducted by BASF which was required by BASF's own internal policies.

108. Loose bolts on the B-side bearing cap were noticed immediately after the accident¹⁷² and emails sent shortly thereafter make clear that these loose bolts were suspected of causing the accident.¹⁷³

109. Yet, the bolts were not preserved and, in the process of machining, the bolts were either lost or mixed in with other fastening bolts so that BASF could no longer produce or identify them for Man and its experts to examine.¹⁷⁴

110. Man argues that the loss of the bolts was a severe blow to its ability to defend itself and, in support, offered the expert testimony of mechanical engineer and metallurgist Dr. Thomas Shelton. Shelton testified regarding the potential of factual findings, deductions and conclusions that might have been drawn by close or microscopic examination of the four "suspect" bolts.¹⁷⁵

111. Dr. Shelton confirmed that had the bolts and other component parts of the machine been subjected to proper inspection and evaluation, including microscopic observation, the root cause of the failure regarding the bolts likely could have been eliminated or confirmed.¹⁷⁶

112. Further, testimony by Manfred Chi of The Gear Works Out of Seattle Washington (which performed repairs on part of the Compressor) confirmed that bolts identical to the

¹⁷² Email from Mayers regarding compressor failure (BASF_MAN001535), Tr. Ex. D-69.

¹⁷³ Emails dated December 31, 2011, regarding work done on the compressor (BASF_MAN0002329), Tr. Ex. D-70.

¹⁷⁴ Trial Test. of Aaron Rose, Trial Tr. vol. 2, 17—18, 20—21, Doc. 184; Trial Test. of Tom Yura, Trial Tr. vol. 1,

^{82,} Doc. 183; Trial Test. of Tom Shelton, Ph.D., Trial Tr. vol. 8, 157, Mar. 2, 2016, Doc. 190.

¹⁷⁵ Trial Test. of Tom Shelton, Ph.D., Trial Tr. vol. 8, 156–57, 163, 171, 174, Doc. 190; Expert report of Tom Shelton, Ph.D., Tr. Ex. D-283, at 8.

¹⁷⁶ Trial Test. of Tom Shelton, Ph.D., Trial Tr. vol. 8, 156—57, 163, 171, 174, Doc. 190; Expert report of Tom Shelton, Ph.D., Tr. Ex. D-283.

ones on the bearing caps were neither rare nor unobtainable on the open market belying any contention that these bolts could not have been segregated and preserved.¹⁷⁷

113. Man also complains about BASF's loss of the pre-start-up checklist made by BASF personnel before restarting the Compressor.

114. In the immediate hours and days after the failure, while the RCFA was under way, Leonard Landry wrote a report summarizing the activities that preceded the failure.¹⁷⁸ At that time, Landry was unquestionably aware of the magnitude of the failure and the effect it would have on revenues generated by the unit where he had worked for years.¹⁷⁹

115. According to Landry, the checklist was to document completion of various tasks, including drainage of the intake piping leading to the Compressor, and the "checklist" was to be fully completed, *including measurements of the quantity of water drained* from the pipes.¹⁸⁰

116. Landry conceded the form was completed, and, Man contends, it can hardly be doubted that such evidence might have been critical to the investigation and analysis of the cause of the loss; yet BASF did not preserve it.¹⁸¹

117. Thus, when the bearing cap bolts and pre-start-up checklist would still have been in its possession and the RCFA had just begun,¹⁸² it is clear that BASF was contemplating a claim against Man for the failure and thus had an obligation to preserve this important evidence.

¹⁷⁷ Trial Test. of Manfred Chi, Trial Tr. vol. 3, 21–22, Feb. 24, 2016, Doc. 185.

¹⁷⁸ Trial Test. of Leonard Landry, Trial Tr. vol. 3, 116–18, Doc. 185.

¹⁷⁹ Id.

¹⁸⁰ *Id.*

¹⁸¹ Trial Test. of Leonard Landry, Trial Tr. vol. 3, 112–14, Doc. 185.

¹⁸² Trial Test. of Tom Yura, Trial Tr. vol. 1, 81, 84, Doc. 183; Email from Falson to McCarroll regarding work done on compressor during September turnaround (BASF_MAN0002329), Tr. Ex. D-70.

118. Yet, Landry could not account for its disappearance admitting he did not see fit to preserve this evidence.¹⁸³

119. Steve Kushnick, consultant and expert witness for Man, also testified how the loss of the documentary evidence put him "at a disadvantage" in his own failure analysis and impaired his ability to review and analyze evidence regarding the drainage of the suction pipes and the quantity of liquid disgorged.¹⁸⁴

120. Finally, Man charges that BASF's RCFA was an "institutional whitewash"¹⁸⁵ in that BASF failed to follow its own procedures and guidelines for conducting an RCFA and, instead, followed a procedure intentionally designed to insure that its conclusion would confirm its initial theory, i.e. that loose bolts caused the failure.

121. BASF had an extensive, formal methodology and policy for conducting RCFAs after significant accidents or failures, such as the one involved here.¹⁸⁶

122. Yet, says Man, Rose failed to follow those guidelines. For example, although the RCFA guidelines allowed the team to consult with independent experts and even though Rose initially proposed that the RCFA do so, that idea was ultimately ignored and thereby rejected.¹⁸⁷

123. BASF's RCFA policy required, *inter alia*, <u>that the findings</u> and results of the RCFA, be documented, that documented recommendations be submitted to Management, and that documented follow up procedures be articulated and confirmed.¹⁸⁸

¹⁸³ Trial Test. of Leonard Landry, Trial Tr. vol. 3, 114, Doc. 185.

¹⁸⁴ Trial Test. of Steve Kushnick, P.E., Trial Tr. vol. 9, 94–95, Mar. 8, 2016, Doc. 191.

¹⁸⁵ Defendant's Rebuttal to Plaintiff's Post Trial Proposed Finding and Conclusions, Doc. 195 at 2.

¹⁸⁶ Trial Test. of Tom Yura, Trial Tr. vol.1, 86—87, Doc. 183; BASF's Guideline for RCFA, Tr. Ex. P-37 & Tr. Ex. D-14.

¹⁸⁷ Trial Test. of Tom Yura, Trial Tr. vol. 1, 83, Doc. 183; Trial Test. of Aaron Rose, Trial Tr. vol. 2, 8—9, Doc. 184; *see also* Tr. Exs. D-72 & D-68.

¹⁸⁸ Trial Test. of Tom Yura, Trial Tr. vol. 1, 83, Doc. 183; Trial Test. of Aaron Rose, Trial Tr. vol. 2, 8—9, Doc. 184.

124. Neither the findings, conclusions nor the analysis of the Root Cause Failure Analysis were reduced to writing, as BASF policy regarding the conduct of RCFA's required, and thus "[a] final 'written' root cause report was never created"¹⁸⁹ thus depriving Man of an opportunity to learn of the alleged root cause before the machine was rebuilt.

125. BASF has denied the existence of any other document prepared by its RCFA team in connection with what it claims is a multi-million-dollar loss for which it has brought this lawsuit, notwithstanding its own, self-imposed obligation to have done so.

126. While BASF has consistently maintained that it conducted a fair and objective RCFA, none of the required documentation was kept except for an abstract "decision tree" apparently utilized by Rose and evidently presented to several BASF Management personnel at a meeting on January 24, 2012.¹⁹⁰

127. Even the January 24, 2012, meeting at which Rose presented the findings and conclusions of the RCFA is devoid of minutes, notes, power points or any other documentation.

128. Man argues that the fact that no report, findings, or conclusions were made by BASF, as its own RCFA policy required, makes clear that the investigation was not truly an objective root cause investigation. Rather, it was an effort to support its almost immediate conclusion that the cause of the accident was loose bolts for which Man was allegedly responsible.

¹⁸⁹ Email dated October 7, 2013, from David Nelson, Counsel for BASF, to Richard Chopin and Sarah Ney, Counsel for Man, Doc. 21-4 at 2.

¹⁹⁰ Trial Test. of Aaron Rose, Trial Tr. vol. 2, 35–37, 41, Doc. 184.

2. BASF's Position

129. Not surprisingly, BASF defends its investigation, its RCFA, and the conclusions flowing therefrom.¹⁹¹ While it concedes that its RCFA may not have been "perfect" and its documentation "left something to be desired,"¹⁹² BASF claims that the RCFA was adequately and completely performed and ultimately reached the right result as to the cause of the event.¹⁹³

130. Further, BASF protests that its loss of evidence was inadvertent, innocent, and, in any event, harmless.¹⁹⁴

131. BASF argues that it began investigating the root cause on December 30, immediately following the failure. BASF assigned Reliability Engineer Aaron Rose to lead a team to conduct its RCFA.¹⁹⁵

132. Further, BASF contends it was not legally required to perform an RCFA at all.¹⁹⁶

BASF adds that, while standard methodologies exist, there is no one "right" way to perform an RCFA.¹⁹⁷ Rather, each company and individual is free to set their own

guidelines.198

133. BASF does have a set of RCFA guidelines that Rose referenced during the RCFA because he found them to be helpful.¹⁹⁹

¹⁹¹ BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 19-24, 72-75.

¹⁹² *Id.* at 73—74.

¹⁹³ *Id.* at 19–24, 72–75.

¹⁹⁴ *Id.* at 55.

¹⁹⁵ Trial Test. of Tom Yura, Trial. Tr. vol. 1, 56–58, Doc. 183.

¹⁹⁶ Trial Test. of Tom Shelton, Ph.D., Trial Tr. vol. 8, 189, Doc. 190.

¹⁹⁷ Id.

¹⁹⁸ Trial Test. of Steven Kushnick, P.E., Trial Tr. vol. 9, 24–25, Doc. 191.

¹⁹⁹ BASF's Guideline for RCFA, Tr. Ex. P-37; Trial Test. of Aaron Rose, Trial. Tr. vol. 1, 201, Doc. 183; *see also* Trial Test. of Thomas Yura, Trial Tr. vol. 1, 102, Doc. 183.
134. The goals set for the RCFA included that "[b]y correct identification and elimination of the causes for equipment failure, plant availability and effectiveness will be improved."²⁰⁰ As described in the BASF RCFA guidelines and by Rose, the purpose of the RCFA was to find the cause of the failure in order to ensure that it did not occur again, rather than determine the fault of any particular party.²⁰¹

135. Rose was not at work on the day of the failure but was called on that day to lead the investigation. While en route to the BASF facility, Rose spoke with John Richard and Joe Parsiola about the incident and their initial thoughts regarding the cause.²⁰² Rose was informed that the B Side bearing cap on the pinion had lifted and that there was some speculation that there had been an explosion internal to the Compressor.²⁰³

136. Parsiola also suggested that liquid intrusion could be a potential cause.²⁰⁴ At the time of those calls, BASF maintains that, while Rose had some initial facts of the failure, he had not ruled out any theories.²⁰⁵

137. Rose arrived onsite at approximately 8:00 p.m.²⁰⁶ He performed a visual overview of the machine to determine its damage condition.²⁰⁷

²⁰⁰ BASF's Guideline for RCFA, Tr. Ex. P-37, at 1. BASF contends that Dr. Shelton agreed that Mr. Rose's notes reflected that he was trying to identify the problem, the reason for the failure, and the fix, so they could get the compressor back into service, as directed by the guidelines. Trial Test. of Tom Shelton, Ph.D., Trial Tr. vol. 8, 188, Doc. 190.

²⁰¹ Trial Test. of Aaron Rose, Trial Tr. vol. 1, 151, Doc. 183. Aaron Rose testified that his main concern in following through this investigation was to ensure that he understood what mechanically had happened so that it would not happen again when the machine was restarted. *Id.* at 167.

²⁰² Trial Test. of Aaron Rose, Trial Tr. vol. 1, 126–27, Doc. 183.

 $^{^{203}}$ *Id.* Mason Cook testified that he had noticed that the bearing caps were lifted on the B side of the compressor. Dep. of Mason Cook, Tr. Ex. J-86, at 38:1—8.

²⁰⁴ Trial Test. of Aaron Rose, Trial Tr. vol. 1, 127, Doc. 183; Trial Test. of Joseph Parisola, Trial Tr. vol. 3, 179–80, Doc. 185.

²⁰⁵ Trial Test. of Aaron Rose, Trial Tr. vol. 1, 141, Doc. 183.

²⁰⁶ *Id.* at 128.

²⁰⁷ *Id.* at 141.

138. Afterwards, Rose inspected the B Side bearing cap area, where he had been told that the bearing cap had lifted.²⁰⁸ He found a gap between the top and bottom surfaces of the bearing cover for the B Side of the Compressor. He also found that several bolts on the B Side of the Compressor appeared to be loose. After first documenting their position with photographs, he found that the bolts were loose enough to be unscrewed by hand.²⁰⁹ 139. Those included the bearing cap bolts, several smaller bolts that connect the bearing caps to the gear case, and several bolts that connect an exhaust pipe to the bearing caps.²¹⁰ Rose, in the presence of BASF and Man employees, was able to screw the B side bearing cap bolts in and out of the end cap by hand without difficulty.²¹¹

140. Based on this, Rose initially hypothesized that there was no damage to the bolts or to the threads in the bearing cap,²¹² indicating that the bolts were loose before the failure and did not loosen as a result of the failure.²¹³

141. BASF contends that Rose asked Man personnel if they knew how the bolts could have come loose, and they claimed to have no idea.²¹⁴

142. Rose similarly attempted to unscrew the bolts on the bearing caps on the A Side of the Compressor by hand, but he could not do so.²¹⁵

²⁰⁸ Id.

²⁰⁹ *Id.* at 142; Dep. of Rene Scholz, Tr. Ex. P-416-J, at 92:13–18.

²¹⁰ These are the bolts that would be removed to take the bearing cap off. Trial Test. of Aaron Rose, Trial Tr. vol. 1, 142, Doc. 183.

²¹¹ Trial Test. of Aaron Rose, Trial Tr. vol. 1, 163, Doc. 184; Trial Test. of James Sprinks, Trial Tr. vol. 5, 75–76, 131, Doc. 187.

²¹² Trial Test. of Aaron Rose, Trial Tr. vol. 1, 171, Doc. 183.

²¹³ *Id.* at 170–71.

²¹⁴ Id. at 163; Trial Test. of Mervin McCon, Trial Tr. vol. 5, 187-88, Doc. 187.

²¹⁵ Trial Test. of Aaron Rose, Trial Tr. vol. 1, 147, Doc. 183.

143. Later that night, Man's crew returned to the facility to disassemble the
Compressor.²¹⁶ During that disassembly, Man observed the damage to the Compressor.²¹⁷
144. Rose observed dusty, sandy debris along the bottom of the inlet when the elbow
was taken off and the inlet guide vane was visible.²¹⁸ No one observed any water or
moisture in the bottom of the pipe.²¹⁹

145. The Compressor sustained catastrophic internal damages including destruction of the Compressor's gear box and the turbine blades.

146. Once BASF determined that the damage was so severe that it could not be fixed on site, Man was asked to disassemble the Compressor from the unit and to prepare it for loading onto a truck for shipment to the Siemens TurboCare facility in Houston.²²⁰ Thus, BASF maintains that, for a few hours immediately after the failure, Man was onsite until the Compressor was shipped to Houston.²²¹

147. BASF insists that, despite Rose's observation of the loose bearing cap bolts,

BASF conducted a full and impartial root cause analysis in order to rule out other

potential causes, since failure to correctly identify the cause could lead to future failures

at start-up.222

²²² Aaron Rose discussed the necessity of performing a full root cause failure analysis in his testimony:

²¹⁶ Id. at 151—52; Trial Test. of Mervin McCon, Trial Tr. vol. 5, 186, Doc. 187.

²¹⁷ Trial Test. of James Sprinks, Trial Tr. vol. 5, 79–81, Doc. 187.

²¹⁸ Trial Test. of Aaron Rose, Trial Tr. vol. 1, 153—55, Doc. 183; Photos taken night of failure at Geismar, Tr. Ex. P-77, at 44.

²¹⁹ Aaron Rose described the inside of the Compressor as being "bone dry." Trial Test. of Aaron Rose, Trial Tr. vol. 1, 154—55, Doc. 183.

²²⁰ Trial Test. of Aaron Rose, Trial Tr. vol. 1, 165, Doc. 183; Trial Test. of Mervin McCon, Trial Tr. vol. 5, 189, Doc. 187.

²²¹ Trial Test. of Aaron Rose, Trial Tr. vol. 1, 164, Doc. 183; Trial Test. of Mervin McCon, Trial Tr. vol. 5, 231—32, Doc. 187.

Q: Mr. Rose, was your root cause investigation conclusion driven? A: No, not at all. It couldn't be. This is a multimillion dollar piece of equipment that caused substantial financial disruption for not only our company but many others, over the course of 52 or so day outage for this commodity. Beyond that, from a safety standpoint, you really don't want these kind of gases getting out into the atmosphere in the uncontrolled manner that this happened. We

148. BASF argues that the RCFA team analyzed the evidence from the failure, firsthand observations, and data gathered from instruments on the Compressor.²²³

149. Rose also traveled to Houston, Texas to observe the Compressor as it was being disassembled, repaired, and reassembled at TurboCare. There he personally observed the damage to the internal components.²²⁴

150. During the disassembly and repair, Rose and the TurboCare personnel extensively photographed the Compressor. Rose observed that the damage to the A Side of the Compressor (where the bolts were tight after failure) was much worse than the damage to the B Side.²²⁵ Specifically, the pinion shaft, bearings, and bearing on the A Side of the Compressor sustained more damage.²²⁶

151. BASF insists that, after investigating the failure, Rose and the RCFA team began an objective review of potential causes and the likelihood of said causes through the creation of the fault tree.

152. BASF maintains that its RCFA team fully considered other possible failure modes and the physical evidence and correctly concluded that the loose bolts on the B side

were down for 52 days this time. Had I been wrong in my conclusion and this machine had done the same thing again, we would have been down for over a year because there would not have been another compressor . . . we would have had to remanufacture all of their rotating assembly which, as I recall, took over a year after the fact to replace our spare parts. . . . There was no concern for me in the conduct of this root cause analysis other than—other than being absolutely certain that when I told them they could start that machines that it was going to start perfectly.

Trial Test. of Aaron Rose, Trial Tr. vol. 1, 229-30, Doc. 183.

²²³ Trial Test. of Aaron Rose, Trial Tr. vol. 1, 165, Doc. 183. Mason Cook and Aaron Rose discussed several possible causes of the failure including the loose bolts, non-process slugging, and deadheading. Tr. Ex. J-86, Dep. of Mason Cook, Tr. Ex. J-86, at 50:10—53:11.

²²⁴ The majority of Mr. Rose's time and education in Houston was related to the disassembly and measurement of the machine and its condition so he could determine the timeline and the cause of the failure. Trial Test. of Aaron Rose, Trial Tr. vol. 1, 197, Doc. 183. The Siemens personnel provided information regarding the design intent of the machine, its tolerance, and other information about the operation of the Compressor. *Id.*

²²⁵ Trial Test. of Aaron Rose, Trial Tr. vol. 1, 168, Doc. 183.

²²⁶ *Id.* at 149—50, 177—78, 183—85.

bearing cap caused the failure.²²⁷ The RCFA team used the "Apollo" RCFA program to walk through a process of elimination procedure to find the most probable cause of the failure.

153. The RCFA team ruled out water intrusion early in the investigation because the interior of the Compressor was extremely dry and there was no evidence that any liquid had ever been in the Compressor during the failure²²⁸ and because a knockout drum upstream of the Compressor that would catch any water in the pipe before it reached the Compressor.²²⁹ If there had been any moisture in the pipe between the knockout drum and the Compressor, BASF insists, it would have fallen down to the B Side of the Compressor, not the A Side, and would have been drained at the elbow drain.²³⁰

154. The fault tree created in BASF's Apollo program provided the documentation for some of the RCFA team's analysis.²³¹ BASF contends that the process used by the RCFA team was logical and followed a natural progression wherein all causes—including those proposed during this trial—other than the loose bolts were eliminated.

²²⁷ In particular, BASF argues that the RCFA team considered the inconsistent damage in the internal components, which indicated differing conditions on the two sides (i.e., one side being loose while the other is tight), and that the loose bearing cap on the south side. According to BASF, this indicated that the pinion shaft caused greater damage on the north side because it was forced to be in close contact with the bearing, while it had more "give" on the south side because the bearing cap was not properly tightened. The RCFA team considered other causes, but the evidence consistently pointed to the loose bearing cap bolts on the south side of the Compressor. Trial Test. of Aaron Rose, Trial Tr. vol. 1, 231–34, Doc. 183.

²²⁸ "We had not seen an indication of liquid whatsoever internal to that machine when we disassembled it very shortly after the failure. And so while we had not necessarily ruled that out, that was a pretty large chunk of evidence supporting that that wasn't how this happened." Trial Test. of Aaron Rose, Trial Tr. vol. 1, 169, Doc. 183. Water intrusion was not included explicitly on the fault tree because it was ruled out so early. However, it was included as a part of other theories on the fault tree. Trial Test. of Aaron Rose, Trial Tr. vol. 1, 232-34, Doc. 183; *see also* Trial Test. of James Spinks, Trial Tr. vol. 5, 79, Doc. 187 ("Q: There was oil everywhere. Did you see any water, sir? A: No, sir.").

²²⁹ Trial Test. of Aaron Rose, Trial Tr. vol. 1, 232–33, Doc. 183.

²³⁰ *Id.* at 233.

²³¹ Trial Test. of Aaron Rose, Trial Tr. vol. 2, 35, Doc. 184.

155. Rose presented the RCFA findings at a January 24, 2012, meeting by discussing the Apollo fault tree analysis, a detailed discussion of the mechanisms of the Compressor that, says BASF, supported the eliminations made on the fault tree, and relevant photographs.²³²

156. After considering and eliminating numerous alternative causes, the RCFA team determined that the loose bearing cap bolts caused the failure.²³³

157. Rose testified that water intrusion could be ruled out early in the RCFA because, as also noted by Dr. Lorenzo, no water was found in the Compressor.²³⁴

158. The RCFA team was also able to rule out willful damage by a disgruntled BASF or Turner employee by searching the tools held by BASF and Turner and finding that neither party had access to the necessary tools to loosen the bolts.²³⁵

159. BASF claims that its conclusion is further supported by the fact that, after the Compressor was repaired and reinstalled, it was restarted successfully using the same checklists as before the incident and has run successfully since the reinstallation.²³⁶ In fact, the testimony establishes that the Compressor has been stopped and started several times since the incident without any problems.

160. Parsiola, as the production Manager for the EO Unit, testified that he was completely comfortable with restarting the Compressor based upon the conclusions of the RCFA.²³⁷

²³² Trial Test. of Aaron Rose, Trial Tr. vol. 1, 220—21, Doc. 183; Apollo Root Cause Chart, Tr. Ex. P-332; *see also* Trial Test. of Aaron Rose, Trial Tr. vol. 1, 210—20, Doc. 183 (concerning Mr. Rose's full testimony regarding the chart and the different failure causes considered); Trial Test. of Joe Parsiola, Trial Tr. vol. 3, 185, Doc. 185.
²³³ Trial Test. of Aaron Rose, Trial Tr. vol. 1, 220, 224, Doc. 183.

²³⁴ Trial Test. of Aaron Rose, Trial Tr. vol. 1, 169, Doc. 183. The construction of the facility, including the knockout drum, is an additional reason for ruling out water intrusion. *Id.* at 232—33.
²³⁵ *Id.* at 172.

 $^{^{236}}$ Id. at 202.

²³⁷ Trial Test. of Joseph Parsiola, Trial Tr. vol. 3, 222, Doc. 185.

161. Rose testified that he was 100 percent sure that the loose bolts were the cause of the Compressor failure.²³⁸

162. BASF argues that, though Man and Siemens did not participate in the RCFA, neither was prevented from performing their own investigation. No one denied Man access to the Compressor while it was being rebuilt, says BASF. Man knew where the Compressor was being sent for repairs, having disassembled and prepared the Compressor for shipment.

163. BASF insists that it was not biased in its performance of the RCFA and that it did not limit the scope of the RCFA in order to avoid a finding of BASF liability.

164. For instance, two of the first potential causes that were suggested by Joe Parsiola to Mr. Rose during his drive to the BASF facility were water intrusion and combustion.²³⁹ Both of these potential causes are causes that could have been BASF's fault; specifically, the Operations Department, of which Mr. Parsiola was a member.²⁴⁰ Both of these potential causes were fully vetted and ruled out during the RCFA.²⁴¹

165. In addition, Rose, who has participated in numerous RCFAs, testified that he has never seen an incident where someone's judgment during an RCFA was clouded by potential liabilities.²⁴²

²³⁸ Trial Test. of Aaron Rose, Trial Tr. vol. 1, 231, Doc. 183.

²³⁹ Trial Test. of Aaron Rose, Trial Tr. vol. 1, 127, Doc. 183; Trial Test. of Joseph Parsiola, Trial Tr. vol. 3, 179-80, Doc. 185.

²⁴⁰ Trial Test. of Joseph Parsiola, Trial Tr. vol. 3, 180, Doc. 185.

²⁴¹ *Id.* at 185.

²⁴² Trial Test. of Aaron Rose, Trial Tr. vol. 1, 117, 121, Doc. 183; Trial Test. of Aaron Rose, Trial Tr. vol. 2, 46, Doc. 184.

166. However, says BASF, out of an abundance of caution, Rose requested outside party input to "keep him honest," which he received during the January 24, 2012, RCFA meeting.²⁴³

167. Last, given the testimony of Butch Landry and Parsiola about the dangers of working with EO and the importance of the lives of the people working at the facility, BASF maintains that its culture of safety at BASF would have trumped individual concern for liability.²⁴⁴

168. BASF acknowledges that the documentation in the RCFA left "something to be desired"²⁴⁵ but points out that Man's expert, Tom Shelton, noted that Mr. Rose's note-taking was more geared towards collecting information to key Mr. Rose's memory as to how to put the Compressor back into service, fix the Compressor, and schedule the events.²⁴⁶

169. Rose claimed that he did not take notes of the Man interviews because the conversations with Man were less than helpful in determining the root cause. Man personnel consistently claimed that they did not know how the bolts came loose.²⁴⁷ This

²⁴³ Trial Test. of Aaron Rose, Trial Tr. vol. 2, 83, Doc. 184. Mr. Rose further testified that he was never denied the help he needed in performing the RCFA. *Id.* at 82.

²⁴⁴ Mr. Landry and Mr. Parsiola both testified that they would have no reason to believe that any person at BASF would allow fault to cloud their judgment during an RCFA. Trial Test. of Leonard Landry, Trial Tr. vol. 3, 92-93, Doc. 185 ("The reason for these incident reports are [sic] for us to learn from our mistakes . . . if we make a mistake we've got to fix them. . . . It's all about safety at this point . . . We don't want to hurt nobody. So a conflict of interest for me to provide information, no, No. . . . Even if it put fault on me. . . . If it's my fault, it's my fault, okay? I'm responsible for too many people out there."); Trial Test. of Joseph Parsiola, Trial Tr. vol. 3, 178—79, Doc. 185 ("The gases that we use in this process are toxic, they're flammable and they're extremely volatile. . . . whenever things happen that are unexpected, people can get hurt. . . . I work with these guys on a daily basis. . . . I know these guys, some of these guys' wives and their kids. This is not a job responsibility job, you know, title issue. To me this is a human issue, okay?").

²⁴⁵ BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 73.

²⁴⁶ Trial Test. of Tom Shelton, Ph.D., Trial Tr. vol. 8, 188–89, Doc. 190.

²⁴⁷ Trial Test. of Aaron Rose, Trial Tr. vol. 1, 167, Doc. 183.

information, said Rose, was unhelpful to determining the root cause, so it was not written down.²⁴⁸

170. Shelton said that Mr. Rose's notes were consistent with Mr. Rose's work and responsibilities as a reliability engineer.²⁴⁹

171. Rose and other BASF personnel admitted that the RCFA that was conducted was not a perfect RCFA.²⁵⁰

172. Despite these imperfections, BASF contends that the documentation made through the fault tree and the evidence in this case is sufficient for this Court to find that the RCFA reached the correct conclusion; that is, the loose bolts were more likely than not the cause of the failure.

173. Despite not having a "perfect" RCFA, says BASF, the RCFA team reached the correct result: that it is more likely than not that the Compressor failure was caused by the loose bolts on the B Side of the Compressor.

174. BASF argues that the RCFA testimony and documentation along with the expert testimony and the other evidence in this matter supports the conclusion that the most probable cause of the failure is the loose bolts on the B Side of the Compressor.²⁵¹

²⁴⁸ During trial, Rose admitted it was unusual to have no written notes of the interviews written down or a formalized written report. Trial. Test. of Aaron Rose, Trial Tr. vol. 2, 85-86, Doc. 184. However, BASF argues this of no moment because the interviews may not have provided helpful information. Additionally, this Court notes the "newness" of the Apollo procedure and that the fault tree provides the various causes that were considered by the RCFA team in determining the root cause. The Apollo program has the ability to self-document; hence, no written report was produced. Trial Test. of Aaron Rose, Trial Tr. vol. 2, 86, Doc. 184.

²⁴⁹ Trial Test. of Tom Shelton, Ph.D., Trial Tr. vol. 8, 189, Doc. 190.

²⁵⁰ Trial Test. of Aaron Rose, Trial Tr. vol. 1, 202, Doc. 183. Kyle Frederick was asked to be a part of the RCFA team, but testified that if he had any reservations about how he personally responded to the incident, that would be his only one. Trial Test. of Kyle Frederick, Trial Tr. vol. 4, 133, Doc. 186.

²⁵¹ While Man argues that microscopic metallurgical evaluation could have assisted the Court in confirming whether the bolts were loose before start-up, BASF responds that Dr. Lorenzo testified that microscopic metallurgical evaluation is not required to determine that the loose bolts were the cause of the Compressor failure. See Trial Test. of Fernando Lorenzo, Ph.D., Trial Tr. vol. 4, 63, Feb. 25, 2016, Doc. 186; *see also id.* at 61, 82 (While Dr. Lorenzo agreed that some metallurgical testing could beneficial, he limited his testimony to specifically pieces that fail, corrode,

175. With respect to Man's charge that BASF repaired the Compressor before giving Man an opportunity to inspect it and BASF's loss of the subject bolts, BASF answers: "BASF did not repair the Compressor or fail to preserve the bolts for metallurgical testing with the intent to deprive [Man] of their evidence for trial."²⁵²

D. Findings of Fact – BASF's Investigation, RCFA and Alleged Spoliation of Evidence

176. Within a day of the accident, BASF representatives believed that a) the loose B-Side bearing cap bolts were a prime suspect in what caused the failure,²⁵³ b) Man might be to blame and c) Man "may incur some or all liability for this event."²⁵⁴

177. Given these undisputed facts, and the fact that the investigation began on

December 30, the day of the failure, BASF had "notice that the evidence [was] relevant

to litigation or . . . should have known that the evidence may be relevant to future

litigation[]" and therefore had a "duty to preserve" it.²⁵⁵

178. Under these circumstances, it is quite troubling to the Court that BASF did not

preserve the evidence nor notify Man of the potential claim until a formal demand letter

issued on January 18, 2012,²⁵⁶ by which time BASF's RCFA was largely completed and

Man's access to important, if not critical, evidence was forever lost.

break down or explode where the goal is to determine whether the original specifications were met. This case is not a bolt failure case.).

²⁵² BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 55.

²⁵³ Email dated 12/31/2011, from McCarroll to Yura (BASF_MAN0002329), Tr. Ex. D-70; *see also* Email regarding Compressor failure, Tr. Ex. D-71.

²⁵⁴ Email dated 12/31/2011, from McCarroll to Yura (BASF_MAN0002329), Tr. Ex. D-70 ("Mann (craftsman) (sic) may incur some or all liability for this event.").

²⁵⁵ *Rimkus Consulting Grp., Inc. v. Cammarata*, 688 F. Supp. 2d 598, 612 (S.D. Tex.2010) (quoting *John B. v. Goetz*, 531 F.3d 448, 459 (6th Cir. 2008) (omission in original)). The legal implications of this finding on Man's spoliation claim is discussed in the Conclusions of Law section. *See infra*, Section V.B.

²⁵⁶ Letter from Yura to Doiron, Tr. Ex. J-39, at 1 ("BASF believes the compressor damage and our losses to be the direct result of the negligence and/or improper workmanship of [Man]. This letter puts [Man] on notice of this claim and the significant damages being sustained as a result."); *see also* Letter from Roth to Yura, Tr. Ex. J-45.

179. In Man's February 3, 2012, response to BASF's demand letter, Man rightly complained:

Since the date of the incident, [Man] has not been involved in the analysis or repair of the compressor. We have not received any technical reports, and have not participated in any root cause analysis. Therefore, we cannot, due to lack of sufficient information to justify such a belief, agree with your contention that the compressor damage was a direct result of [Man's] negligence and/or improper workmanship [].²⁵⁷

180. In that same letter, Man asked for "an opportunity to have a representative present for any future inspections, tests, etc. and to take part in any ongoing root cause discussions[.]"²⁵⁸

181. BASF's response of February 13, 2003 was blunt: "Man will not be allowed to participate in, or be privy to, any internal review or investigation conducted by BASF."²⁵⁹ Tom Yura, the author of that letter, failed to mention that BASF's investigation and repairs and RCFA had been completed for weeks, thus foreclosing any opportunity for Man to conduct its own inspection, investigation or RCFA with the equipment in its post-accident state.²⁶⁰

182. In BASF's February 13 letter, BASF attempts to justify its conduct by pointing out that Man "was present during the start-up of the compressor[,] witnessed the catastrophic event [and was] the party who disassembled the compressor and prepared it for transport."²⁶¹ It further maintains that BASF did "nothing to prevent" Man from

²⁵⁷ Letter from Roth to Yura, Tr. Ex. J-45.

²⁵⁸ Id.

²⁵⁹ Letter from Yura to Roth, Tr. Ex. J-47, at 1.

²⁶⁰ *Id.* at 1-2.

²⁶¹ *Id.* at 1.

"visiting Siemen's Houston facility or conducting whatever investigation it sought fit to do regarding this matter."²⁶² BASF's briefing argues the same.²⁶³

183. The Court finds these arguments are baseless since 1) Man had no idea what caused the Compressor failure at the time it occurred; 2) Man was not notified at the time of the disassembly and up until January 18 that BASF considered Man to be at fault and therefore had no reason to believe there was a need for such an investigation; 3) in any event, Man's millwright crew were not experts in mechanical engineering or accident reconstruction and were not qualified to perform this kind of investigation; and 4) by the time Man was put on notice, critical evidence had been lost and therefore, such an inspection and investigation could no longer be performed.

184. The Court finds that BASF's decision not to notify Man of BASF's working hypothesis as to the cause of the Compressor failure and Man's possible culpability in it was consciously and deliberately made.²⁶⁴

185. Thus, BASF deprived Man of the opportunity to have it or its experts a) inspect, examine and photograph the Compressor in its original post-accident state to, for instance, test BASF's representations as to the placement of the subject bolts and caps and the absence of fluids in certain parts of the compressor and associated piping; and b) inspect, examine (microscopically or otherwise), test (non-destructively or otherwise) and photograph the bolts which it was accused of having failed to properly tighten and which BASF claims caused the accident.

²⁶² Id.

²⁶³ BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 23.

²⁶⁴ Of the emails introduced in support of this contention, Joseph Falsone's January 1, 2012, email to Thomas Yura is particularly telling as to the considered nature of its decision to not alert Man: "Regarding need for notice, I think we are good as far as Siemens is concerned since they are involved in the investigation.... I need to understand the contractual relationship with Mann (sic) to determine if we or Siemens need to put them on notice." Tr. Ex. D-72

186. BASF claims this conduct was innocent and inconsequential. The Court disagrees and finds that this conduct was clearly knowing and deliberate. In a case with potentially millions of dollars at stake, BASF was, or certainly should have been aware of the need for preserving evidence for all interested stakeholders to examine. BASF was, or certainly should have been aware that its conduct would deprive Man of important evidence. Furthermore, the Court finds that these failures by BASF created a significant impediment to Man's defense.²⁶⁵

187. However, although the Court finds that BASF knew that its conduct would deprive Man of important evidence, Man has not proved that BASF's conduct was *for the purpose of* depriving Man of this evidence.²⁶⁶ There was no direct evidence of the reason for BASF's deliberate conduct. Certainly one reasonable inference from these undisputed facts is that BASF desired to deprive Man of this evidence. But an equally plausible inference is that BASF was in a hurry to get its Compressor back on line and its EO Unit back in production so as to minimize its financial losses.²⁶⁷

188. In addition to depriving Man of the opportunity to inspect the Compressor in its post-accident state, BASF failed to preserve the bolts which it claims were left untightened by Man. Despite the obvious importance of preserving the subject bolts for later testing, BASF admittedly failed to do so.

²⁶⁵ See, e.g., Expert Report of Tom Shelton, Ph.D., Tr. Ex. D-283, at 8 ("The degree to which the bolts were tightened at the time of the accident could have more probably than not been determined if the root cause failure analysis had included a sufficient analysis and documentation of the bolts and bearing caps."); Expert Report of Steven Kushnick, P.E., Tr. Ex. D-284, at 62 ("Formal hardware inspection would have provided information useful or pivotal in determining the issues in the failure of the C-300 compressor.").

²⁶⁶ The legal implications of this finding are discussed in the Conclusions of Law section. *See infra*, Section V.B. ²⁶⁷ Indeed, this conclusion seems to be supported by Man's expert Dr. Tom Shelton, who stated that the scanty notes of RCFA leader Aaron Rose appeared to be directed toward answering the question "how do I get this thing back in service; how do I get it fixed." Trial Test. of Tom Shelton, Ph.D., Trial Tr. vol. 8, 188—89, Doc. 190.

189. In addition to failing to preserve the bolts, BASF failed to preserve the pre-startup check list,²⁶⁸ which may well have proved an important piece of evidence on the issue of whether the Compressor was properly checked for liquids before start up.

190. However, the Court also finds that Man has failed to prove that BASF's loss of the bolts or checklist was done for the purpose of depriving a potential opposing party of its use. Rather, as stated above, an equally plausible explanation is that BASF, in its rush to return the "lifeline of the plant" and the "heart and soul of [their production] process" to operational status and stem the financial bleeding caused by its loss, BASF cut legal corners by avoiding what was clearly required of it: making this critical evidence available for inspection, possible testing, and photographic documentation to all concerned stakeholders. Man has failed to show, more probably than not, that it was the former and not the latter.

191. A separate but interrelated issue is Man's attack on the methodology and conclusions of BASF's RCFA. The Court concludes that the methodology used by BASF was sloppy *at best* and its conclusions unreliable.

192. Clearly, this was no ordinary accident. BASF knew from the beginning that this would involve the shutdown of a profitable part of its business for a significant period of time and that this would result in millions of dollars of losses.²⁶⁹ Yet the manner in which the investigation was carried out was strikingly amateurish.

²⁶⁸ Trial Test. of Leonard Landry, Trial Tr. vol. 3, 112—14, Doc. 185 (admitting he realized it would have been a "good idea" to preserve the evidence and that it was a "serious incident" but he "did not think to pick up those check lists.").

²⁶⁹ In BASF's January 18, 2012, notice of claim and demand that Man notify its insurers, BASF's Tom Yura spoke of the "significant damages being sustained as a result [of the Compressor failure]." Tr. Ex. J-40, at 1.

193. BASF's Guideline for RCFA was introduced as Tr. Ex. P-37. It is clear under this Guideline that an RCFA was required to be performed.²⁷⁰ Indeed, because this event involved a unit shutdown *and* a "large, expensive repair (i.e., [greater than] \$25,000 \dots)," a " 'Formal' RCFA" was called for.²⁷¹

194. The purpose of BASF's RCFA procedure was to ensure the "correct identification and elimination of the causes of equipment failure [so that] plant availability and effectiveness will be improved."²⁷² "From this, corrective actions are then developed and implemented."²⁷³ Team members were responsible not only for determining the root cause but also for "data and evidence collection, . . . recommending corrective actions [and] reporting the results and recommendations from the RCFA."²⁷⁴

195. The RCFA procedure called for "information and data gathering" to be "comprehensive."²⁷⁵ An "[i]mpartial [r]epresentative (someone who has no stake in the outcome)" was to be included on the team, and the team was permitted to utilize "vendor representatives, witnesses [and] technical experts."²⁷⁶ "Once the root causes have been identified and validated, the RCFA Team should develop recommendations and propose corrective actions to prevent or eliminate future recurrences."²⁷⁷

196. The Court finds that these procedures, designed to insure a fair, comprehensive, open and objective investigation into what caused the event, were largely disregarded.

²⁷⁰ BASF's Guideline for RCFA, Tr. Ex. P-37, at § 4.1: An RCFA "is to be performed" where an event occurred "that resulted or could result in a Unit shutdown or product quality issues" or a [1]arge, expensive repair." Even for "smaller events," "[a]n Informal RCFA should be performed." *Id.* at §§ 4.1 & 4.1.2.

²⁷¹ *Id.* at § 4.1.1.

²⁷² *Id.* at § 1.

²⁷³ *Id.* at § 2.

²⁷⁴ *Id.* at § 5.2.

²⁷⁵ *Id.* at § 4.2

²⁷⁶ *Id.* at §§ 4.2.1 & 4.2.2.

²⁷⁷ *Id.* at § 4.7

197. Aside from BASF's own guidelines, there are a variety of nationally published standards for the proper way to conduct an RCFA, including those issued by the American Society of Mechanical Engineers, American Society of Testing Materials, and the American Society of Metals.²⁷⁸ The Court accepts the opinion of expert witness Dr. Tom Shelton that BASF's RCFA did not follow or meet these standards.²⁷⁹

198. The Court agrees with Shelton's testimony that the RCFA and investigation did not utilize the usual and standard tools and techniques which are used in this kind of inquiry and, as a result, there is simply insufficient data²⁸⁰ to support the conclusions reached by it.²⁸¹

199. The Court finds Aaron Rose's explanations for these deficiencies unconvincing. He admitted, for instance, that "it was not the usual practice" to conduct interviews not documented in some manner; yet, his explanation for there being none in this case was: "There isn't a defined standard to say that that has to be documented."²⁸² His explanations for having no written findings, conclusions, recommendations, or record of the meeting in which he revealed same are equally unpersuasive.

200. The Court is unimpressed by BASF's argument that there is no legal requirement that an RCFA be done at all. Since BASF's own guidelines required an RCFA to be performed and set parameters for the way it should be conducted and since the findings and conclusions of its RCFA form a central part of its claim, it would have behooved BASF to conduct the RCFA in a normal and acceptable manner. It did not.

²⁷⁸ Trial Test. of John Shelton, Ph.D., Trial Tr. vol. 8, 199–200, Doc. 190.

²⁷⁹ Id.

²⁸⁰ The Court agrees with Shelton's conclusion that the photographs alone are insufficient to allow an adequate conclusion to be drawn. *Id.* at 198.

²⁸¹ *Id.* at 147—49, 155—75.

²⁸² Trial Test. of Aaron Rose, Trial Tr. vol. 2, 85, Doc. 184.

201. The Court also agrees with Shelton that the return of the Compressor without incident following repairs at TurboCare does not mean the RCFA reached an accurate conclusion as to the cause of the failure.²⁸³

202. In addition to being inadequately conducted and not properly documented, the RCFA's conclusion that loose bolts on the bearing cap were to blame fails to account for the fact that there were many bolts loose after the accident, most of which, even under BASF's theory of the case, Man would have had no reason to touch. This point is considered in more detail *infra*.

203. In conclusion, the Court finds that BASF intentionally deprived Man of access to important evidence. However, Man has failed to prove that BASF's intent was for the purpose of depriving Man of the evidence.

204. As to BASF's RCFA, the Court finds that it was poorly done and gives no weight to its conclusions for the following reasons:

- Rose began with the belief that loose bolts were to blame and did little to rule out other possible causes during the approximate three weeks the RCFA lasted.²⁸⁴
- b. The bolts in question and receptacles, key evidence in the RCFA's working hypothesis, were not preserved, inspected microscopically, or tested metallurgically.

²⁸³ Trial Test. of Tom Shelton, Ph.D., Trial Tr. vol. 8, 193–94, Doc. 190.

²⁸⁴ The Court agrees with expert Steven Kushnick that the "Root Cause Failure [was] already a 'done deal' before the RCFA meeting was ever held." Expert Report of Steven Kushnick, P.E., Tr. Ex. D-284, at 27; *see also* Email dated December 31, 2011, from Kevin McCarrol, Tr. Ex. D-70 ("The root cause is not clear yet, but the bolts on the bearing end caps were found loose…"); Email dated January 1, 2012, from John Richard, Tr. Ex. D-71 ("We are conducting an RCFA to 'officially' determine the reason for the failure, but during the initial investigation we found that the bolts on the bearing end caps were only hand tightened."). Also supporting this conclusion is the email string quoted in Kushnik's expert report, Tr. Ex. D-284, at 20-27.

- Man was not informed or involved in the RCFA (although BASF's guidelines allowed for this)²⁸⁵ and was denied access to key evidence once demand was made on it.
- d. Although the RCFA had several other team members, ²⁸⁶ they did little other than to gather information for Rose.
- e. While Rose was authorized by RCFA guidelines to consult outside experts²⁸⁷ and even considered doing this,²⁸⁸ he chose not to do so.²⁸⁹
- f. Contrary to BASF's own guidelines, the RCFA produced no statements, findings, conclusions, recommendations of any kind nor was there any written documentation of the meeting at which the findings were presented.²⁹⁰

E. Arguments of the Parties – Work Done by Man

205. A key question is whether Man's crew ever touched the subject bolts, either

intentionally in carrying out their assignment or inadvertently. A second question is

²⁸⁵ BASF's Guideline for RCFA, Tr. Ex. P-37.

²⁸⁶ Team members included Joe Parisola, Kyle Frederick, Kalen Jaworski, and "go-between" Kritie Pickering. Trial Test. of Aaron Rose, Trial Tr. vol. 2, 6—7, Doc. 184.

²⁸⁷ BASF's Guideline for RCFA, Tr. Ex. P-37, at §§ 4.2.1 & 4.2.2.

²⁸⁸ Email dated January 2, 2012, from Rose to McCarrol (BASF_MAN000277), Tr. Ex. D-73 (". . . If we have an expert in turbo compressors who would be willing to assist with verifying details for the RCFA basically just to keep me honest, I think that would be helpful."); *see also* Email from Falsone to Yura (BASF_MAN0002356), Tr. Ex. D-72 ("Kevin and I discussed the need for a third party expert to serve as a neutral observer. I think we are fine with Aaron Rose there for now. Aaron should call for third party support if the analysis goes beyond his level of expertise.").

²⁸⁹ While Rose claims that these experts were consulted, the evidence shows that they were present only for the final January 24 presentation of the conclusions of the RCFA. Trial Test. of Aaron Rose, Trial Tr. vol. 2, 82—83, Doc. 184.

²⁹⁰ The Court wholeheartedly agrees with Dr. Tom Shelton's conclusion that "[T]he root cause analysis performed by BASF did not contain sufficient documentation to support the conclusions reached and that would provide parties with sufficient information to independently verify the results of the analysis." Expert Report of Tom Shelton, Ph.D., Tr. Ex. D-283, at 8.

whether Man's work required it to check the subject bolts for tightness before returning the Compressor to BASF.

1. BASF's Position

206. BASF contends Man's crew loosened and then failed to properly retighten the B-

Side bearing cap bolts, which ultimately resulted in the catastrophic failure.²⁹¹

207. While BASF has no direct evidence that this is so, it points to the following

circumstantial evidence in support of its position.

- The work Man agreed to perform on the Compressor was expressed in the scope of work included in its Quote²⁹² (issued only a day before work began). This work necessarily required the loosening and retightening of these bolts. The fourth and fifth steps in the Scope of Work were to "[r]emove the main upper gear case cover"; and "[i]nspect journals and bearings." Both of these steps, if performed, would have involved loosening the bearing cap bolts that were found loose after the failure²⁹³ and which BASF maintains caused the failure.²⁹⁴
- The Quote was "the only scope of work that was present on the job site...,"²⁹⁵ and therefore, suggests BASF, Man's crew must have followed it.
- With the exception of a small leak, the Compressor had been operating properly prior to Man's work on the Compressor.
- From the time that the Compressor was handed over to Man for repair until the time that Man handed the Compressor back to BASF for startup, no one other than Man performed work on the Compressor.²⁹⁶
- Yet, within a very short time after Man completed its work and returned the Compressor to BASF for start-up, and within 17 seconds of start-up, the Compressor failed.

²⁹¹ BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 55, 83.

²⁹² Man Quote, Tr. Ex. J-1, at 1.

²⁹³ Dep. of Rene Scholz, Tr. Ex. P-416-J, at 82:7-84:11. *See also* Trial Test. of James Spinks, Trial Tr. vol. 5, 57, Doc. 187; Trial Test. of Mervin McCon, Trial Tr. vol. 5, 161, Doc. 187.

²⁹⁴ See, e.g., BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 58-62.

²⁹⁵ *Id.* at 77-78.

²⁹⁶ *Id.* at 54; *see also* Trial Test. of James Spinks, Trial Tr. vol. 5, 35, 138, Doc. 187; Trial Test. of Roger Craddock, Trial Tr. vol. 6, 34—35, 39, Doc. 188.

- "No [Man] employee can say with certainty that [Man] did not loosen the bolts because no [Man] employee was on site for the entirety of the job."²⁹⁷
- BASF further argues that, even if Man did not do so intentionally, it must have loosened the bearing cap bolts during their work, even if inadvertently. In removing the dry gas seals, Man admits it had serious problems removing the seals due to dirt and polymer buildup, and Man attempted several methods of removing the seals before they were successful.²⁹⁸ These methods included pulling on the seals, hammering and chiseling around the seals, using a heat gun, and spraying lubricant.²⁹⁹ This work applied significant pressure and force to the seals, which are within two to three inches of the bearing caps.³⁰⁰ In fact, so much force was applied that several all-thread bolts were repeatedly broken during the effort.
- BASF's expert, Dr. Fernando Lorenzo, suggests that Man was responsible for loosening the bolts by opining that the loose bolts, among other items, "all point to the faulty workmanship and deficient working and supervision procedures on the part of [Man] . . ."³⁰¹

208. In any event, BASF argues, even if Man did not work directly on these bolts, it

nonetheless should have inspected "other parts [of the Compressor] within the immediate

proximity of [Man's] work that could have been affected by its work."³⁰² Since the

subject bolts were "within two to three inches" of the dry gas seals that Man admittedly

changed,³⁰³ had it done so, Man would have discovered the loose bolts, would have

tightened them, and would have consequently averted the catastrophe.³⁰⁴

²⁹⁷ BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 83.

²⁹⁸ Trial Test. of Mervin McConn, Trial Tr. vol. 5, 171–72, Doc. 187.

²⁹⁹ Trial Test. of James Spinks, Trial Tr. vol. 5, 38—39, Doc. 187; Dep. of Rene Scholz, Tr. Ex. P-416-J, at 27:14—28:4.

³⁰⁰ Mr. Spinks testified that the work needed in order to remove the old dry gas seals "considerably slowed down [the] job." Trial Test. of James Spinks, Trial Tr. vol. 5, 44, Doc. 187.

³⁰¹ Preliminary Report of Fernando Lorenzo, Ph.D., P.E., Tr. Ex. P-317, at 6.

³⁰² BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 84 (citing Trial Test. of Roger Craddock, Trial Tr. vol. 6, 68, Doc. 188).

³⁰³ Id.

³⁰⁴ BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 33—34, 84—85.

209. While conceding that Man's crew members deny having touched the bolts, BASF argues there are significant discrepancies and inconsistencies within this testimony. ³⁰⁵ 210. In its Reply Memorandum, BASF argues that Man's arguments generally are supported by "incorrect citations, incorrect testimony, [] incorrect identification of documents or testimony . . ." and an overstatement of "the testimony of several witnesses by stretching what they have said beyond the metes and bounds of argumentation."³⁰⁶

2. Man's Position

211. Not surprisingly, Man's position is dramatically different. Man claims it did not remove the bearing cap or touch the subject bolts, intentionally or inadvertently, and therefore cannot be responsible for the Compressor's failure, even if the loose bolts are to blame. In support of this contention Man relies on the following points:

- Unlike BASF, Man points to direct evidence, in the form of eyewitness testimony, to support its position. The Man crew members who actually performed the work on the Compressor uniformly deny that they touched the bolts at issue.³⁰⁷
- b. Furthermore, says Man, no witness or worker who testified by deposition or trial (be they BASF, Turner or Siemens) testified that they saw Man workers perform work on these bolts, including Rene Scholz, the Siemen's consultant hired to assist in the job.³⁰⁸

³⁰⁵ Reply Mem. of BASF Corp. to [Man's] Post-Trial Findings of Fact and Conclusions of Law, Doc. 196 at 5—7. ³⁰⁶ *Id.* at 2 & nn. 2—6.

³⁰⁷ Trial Test. of James Spinks, Trial Tr. vol. 5, 112—13, Doc. 187; Trial Test. of Mervin McCon, Trial Tr. vol. 5, 209, Doc. 187; Dep. of Kenneth Thompson, Tr. Ex. P-416-E, at 45:2—13; Dep. of Alan Gill, Tr. Ex. P-416-D, at 40:11—25, 41:1—4.

³⁰⁸ Dep. of Rene Scholz, Tr. Ex. P-416-J, at 74:6-75:4, 41:2-17, 41:25-42:3, 42:10-15, 42: 16-20.

- c. Man points to circumstantial evidence of its own. If, as BASF insists, its Purchase Order (and not Man's Quote) is the contract which controlled the work being done by Man, the scope of work in the Purchase Order controlled and included only the replacement of dry gas seals which would not have required Man to remove the bearing caps and touch the associated bolts.³⁰⁹
- d. Furthermore, if the Purchase Order controls, its issuance constituted, by its very language, "a rejection" of Man's Quote.³¹⁰ Thus, argues Man, if the scope of work contained in Man's December Quote was rejected, as was common practice at BASF, the scope of work was that created by BASF's Purchase Order, i.e. the changing of the dry gas seal alone.³¹¹
- e. Every BASF or Turner Industries fact witness with personal knowledge of the dry gas seal change job testified that loosening the bolts on the bearing cap would not have been necessary for the replacement of the dry gas seals that MAN Diesel was hired to change.³¹² Internal BASF emails sent as a part of its post-event investigation also confirm that merely changing the dry gas seals would not have required working on the bolts in question.³¹³ Indeed, BASF admits same in its post-trial briefing.³¹⁴

³⁰⁹ BASF Purchase Order (BASF_MAN0000260-0000269), Tr. Ex. J-2;*ee also*, Trial Test. of Kyle Frederick, Trial Tr. vol. 4, 123, Doc. 186.

³¹⁰ BASF December Purchase Order (BASF_MAN0000260-0000269), Tr. Ex. J-2, at 1, 4.

³¹¹ Trial Test. of Kyle Frederick, Trial Tr. vol. 4, 123, Doc. 186.

³¹² Dep. of Steven Laiche, Tr. Ex. P-416-C, at 39:9—17, 39:25—40:03; Dep. of Grant Mayers, Tr. Ex. P-416-B, at 41:15—23; Dep. of Jonathon Richard, Tr. Ex. P-416-M, at 180:19—24, 193:10—14; Dep. of Rene Scholz, Tr. Ex. P-416-J, at 74:25—75:04, 41:25—42:03, 42:10—15, 42:16—20.

³¹³ Meeting Minutes dated 1-01-12 (BASF_MAN0007462), Tr. Ex. D-77; Email to Metzger from Rose regarding bearing caps being prepped (BASF_MAN0003395), Tr. Ex. D-83.

³¹⁴ Reply Mem. of BASF to [Man's] Post-Trial Findings and Conclusions, Doc. 196 at 12 ("BASF does not dispute that if the scope of the work was limited to changing the dry gas seals alone then the bearing end cap bolts would not need to be loosened.").

- f. On December 28, before work began, James Spinks spoke to Turner employees Mason Cook and Steve Laiche, during which time Spinks revealed his understanding that the gear case did not need to be "split" since the job of inspecting the bearings and journals quoted in BASF's December Quote would not have to be done and that only the dry seals would have to be replaced.³¹⁵
- g. Man insists that all other documentary and testamentary evidence on this issue shows that the *actual* work performed on December 28-30, was to change the dry gas seals and nothing else.³¹⁶
- h. Man also points to the fact that BASF's investigation revealed that some 20 bolts were found loose on the Compressor after the failure. Of these, some 12-16 would not have been loosened as a part of removing the bearing caps.³¹⁷ This, argues Man, supports Kushnick's conclusion that all bolts (including the bearing cap bolts) loosened as a result of the vibration associated with the event itself and not any manipulation by Man employees.³¹⁸ It also supports the conclusion of metallurgist Dr. Tom Shelton, who testified that, "because you have so many other loose bolts on this thing, and some of them not in areas which are deformed, that vibration may have played a role in it"³¹⁹

³¹⁵ Trial Test. of James Spinks, Trial Tr. vol. 5, 116–17, Doc. 187.

³¹⁶ Man cites the following evidence: Dep. of Grant Mayers, Tr. Ex. P-416-B, at 41:15—23; Dep. of Jonathon Richard, Tr. Ex. P-416-M, at 180:19—24, 193:10—14; Dep. of Rene Scholz, Tr. Ex. P-416-J, at 74:25—75:04, 41:25—42:03, 42:10—20; Dep. of Steven K. Laiche, Tr. Ex. P-416-C, at 39:9—17, 39:25—40:03; Trial Test. of James Spinks, Trial Tr. vol. 5, 19, Doc. 187; Trial Test. of Mervin McCon, Trial Tr. vol. 5, 211, Doc. 187. ³¹⁷ Def.'s Post Trial Findings of Fact and Conclusions of Law, Doc. 193 at 29—30 (citing Compressor Schematic, Tr. Ex. D-90, and Hand Written Notes of Aaron Rose, Tr. Ex. D-224); *see also*, Def.'s Post Trial Findings of Fact and Conclusions of Law, Doc. 193 at 52; Expert Report of Steve Kushnick, P.E., Tr. Ex. D-284, at 29, 32, 61—62. ³¹⁸ Expert Report of Steven Kushnick, P.E., Tr. Ex. D-284, at 62.

³¹⁹ Trial Test. of Tom Shelton, Ph.D., Trial Tr. vol. 8, 203, Doc. 190.

- Furthermore, Man argues that all bolts and fasteners that Man admittedly *did* loosen, remove and then replace as part of the replacement of the dry gas seal were all found to be "tight" after the failure.³²⁰
- j. In any event, Man's expert mechanical engineer Steve Kushnik, opined that the cause of the failure was not loose bolts³²¹ but "liquid in the suction line."³²² So, even if Man did loosen the bolts, this could not have caused the accidental shut-down of the Compressor.

212. As to the charge that Man owed an obligation to inspect the subject bolts, even if they did not work on them, Man replies that its only job was to replace the dry gas seals,³²³ which it did correctly. Further, Man argues that BASF's own start-up check list demonstrates that the job of "inspecting all bearing caps to ensure they are secure" belonged to BASF, not Man.³²⁴

213. While Man concedes that its work was performed within inches of the bearing cap bolts, it insists that those bolts were separated by a metal volute and that their hammering could not have inadvertently loosened the bearing cap bolts.³²⁵

 ³²⁰ Def.'s Post Trial Findings of Fact and Conclusions of Law, Doc. 193 at 44 (citing Trial Test. of Aaron Rose, Trial Tr. vol. 2, 27, Doc. 184); *see also*, Dep. of Rene Scholz, Tr. Ex. P-416-J, at 41:2-13; Trial Test. of Aaron Rose, Trial Tr. vol. 2, 27, Doc. 184; Trial Test. of Fernando Lorenzo, Ph.D., Trial Tr. vol.4, 65, Doc. 186.
 ³²¹ Expert Report of Steve Kushnick, P.E., Tr. Ex. D-284, at 61.

 $^{^{322}}$ *Id.* at 62.

³²³ Trial Test. of James Spinks, Trial Tr. vol. 5, 15, 104, Doc. 187.

³²⁴ Defendant's Rebuttal to BASF's Post-Trial Proposed Findings and Conclusions, Doc. 195 at 10-11; *see also*, Def.'s Post Trial Findings of Fact and Conclusions of Law, Doc. 193 at 47 (citing Recycle Start Up Checklist (BASF_MAN 0000639), Tr. Ex. J-7, at item 8); Expert Report of Steve Kushnick, P.E., Tr. Ex. D-284, at 40. BASF counters that "[w]hile the checklist does instruct the operators to inspect all bearing caps to ensure they are secure, testimony [was] submitted that this inspections has always been a visual inspection and that BASF personnel [did] not possess the necessary tools onsite to check the tightness of the bolts." Reply Mem. of BASF to [Man's] Post-Trial Findings and Conclusions, Doc. 196 at 19; *see also* Rebuttal to BASF's Post-Trial Proposed Findings and Conclusions, Doc. 195 at 11.

³²⁵ See, e.g., Demonstrative aids showing compressor, Tr. Exs. D-277, D-278, & D-279; Trial Test. of James Spinks, Trial Tr. vol. 5, 51, 113-15, Doc. 187.

F. Findings of Fact – Work Done by Man

214. On this central factual dispute the Court finds that BASF has failed to carry its burden of proof. While there is evidence pointing in both directions, the Court finds the weight of the evidence favors Man.

215. Man's crew uniformly denied having touched these bolts.³²⁶ While BASF correctly points out that there are some inconsistencies in parts of the accounts given by Man's crew members,³²⁷ on this key point they are consistent, and the Court finds the testimony credible and consistent with the other evidence.

216. Nor were any witnesses presented who claim to have seen Man's crew work on these bolts.³²⁸

217. The parties envisioned that BASF's Purchase Order would control the work done on the Compressor. The Scope of Work in that document called only for the dry gas seals to be changed. That being the case, Man's crew would have had no reason to work on the bearing caps since loosening the bolts on the bearing caps would not have been necessary for the replacement of the dry gas seals that MAN Diesel was hired to change.³²⁹ BASF agrees. "BASF does not dispute that if the scope of work was limited to changing the dry gas seals alone then the bearing end cap bolts would not need to be loosened."³³⁰

³²⁶ Trial Test. of James Spinks, Trial Tr. vol. 5, 112-13, Doc. 187; Trial Test. of Mervin McCon, Trial Tr. vol. 5, 209, Doc. 187; Dep. of Kenneth Thompson, Tr. Ex. P-416-E, at 45:2—13; Dep. of Alan Gill, Tr. Ex. P-416-D, at 40:11—25, 41:1—4.

³²⁷ Reply Mem. of BASF to [Man's] Post-Trial Findings and Conclusions, Doc. 196 at 5—6.

³²⁸ Dep. of Grant Mayers, Tr. Ex. D-416-B, at 41:15—23; Dep. of Jonathon S. Richard, Tr. Ex. P-416-M, at 180:19—24, 193:10—14; Dep. of Rene Scholz, Tr. Ex. P-416-J, at 74:24—75:04, 41:2—17, 41:25—42:03, 42:10—15, 42:16—20.

³²⁹ BASF's Purchase Order (BASF_MAN0000262), Tr. Ex. J-2, at 3; Dep. of Steven K. Laiche, Tr. Ex. P-416-C, at 39:9—17, 39:25—40:03; Dep. of Grant Mayers, Tr. Ex. P-416-B, at 41:15—23; Dep. of Jonathon S. Richard, Tr. Ex. P-416-M, at 180:19—24, 193:10—14; Dep. of Rene Scholz, Tr. Ex. P-416-J, at 74:25—75:04, 41:25—42:03, 42:10—15, 16—20.

³³⁰ Reply Mem. of BASF to [Man's] Post-Trial Findings and Conclusions, Doc. 196 at 12. *See also* BASF's Purchase Order (BASF_MAN0000262), Tr. Ex. J-2, at 3; Dep. of Steven K. Laiche, Tr. Ex. P-416-C, at 39:9—17, 39:25—40:03; Dep. of Grant Mayers, Tr. Ex. P-416-B, at 41:15—23; Dep. of Jonathon S. Richard, Tr. Ex. P-416-

218. But, argues BASF, Man's crew must have worked on these bolts based on the mistaken belief that the Man Quote controlled. This contention is belied by the conversation Man's crew chief, James Spinks, had with Turner's Steve Laiche before work began where Spinks expressed his opinion that, because he and his crew were only going to be changing out the dry gas seals, they weren't going to have to "split the case," which would require removing the bearing caps.³³¹

219. While BASF does not label it as such, BASF makes an argument akin to *res ipsa loquitur*: because the Compressor catastrophically failed within 17 seconds of start-up, because bearing cap bolts were found loose after the failure, and because Man was

working on or near these bolts, Man must have loosened the bolts and caused the failure.

220. An important piece of evidence militates against such reasoning. If Man

undertook to remove the bearing caps and then failed to properly retighten them, one

would not expect to find loose bolts at locations on the Compressor which, even under

BASF's expanded view of what Man did, were some distance from and unconnected with

the work which Man did. Yet, this was one of the findings of BASF's investigation.³³² Of

the some 20 bolts found loose on the Compressor after the Compressor failure, some 12-

16 of them would not have been loosened as a part of removing the bearing caps.³³³

³³² Def.'s Post Trial Findings of Fact and Conclusions of Law, Doc. 193 at 29—30 (citing Compressor Schematic, Tr. Ex. D-90, and Handwritten notes of Aaron Rose, Tr. Ex. D-224); *see also* Def.'s Post Trial Findings of Fact and Conclusions of Law, Doc. 193 at 52; Expert Report of Steve Kushnick, P.E., D-284, at 29, 32, and 61—62.

M, at 180:19—24, 193:10—14; Dep. of Rene Scholz, Tr. Ex. P-416-J, at 74:25—75:04, 41:25—42:03, 42:10—15, 42:16—20.

³³¹ Trial Test. of James Spinks, Trial Tr. vol. 5, 116—17, Doc. 187. In Man's brief, Man claims that Turner employee Steve Laiche told Spinks that the gear case would not have to be split. Def.'s Post Trial Findings of Fact and Conclusions of Law, Doc. 193 at 27. This is incorrect, as noted by BASF in its Reply Memorandum, Doc. 196 at 2, 13 & 2 n. 3. It is clear from Spinks' testimony, that Spinks made this statement to Laiche and not *vice versa*. Nonetheless, it shows that Spinks was under the belief before the work started that he would not need to remove the bearing cap or associated bolts.

³³³ Expert Report of Steve Kushnick, P.E., D-284, at 32; Dep. of Rene Scholz, Tr. Ex. P-416-J, at 41:2—42:20; Compressor Schematic (BASF_MAN0002577), Tr. Ex. D-90; Handwritten notes from Aaron Rose (BASF_MAN 0007652-0007658), Tr. Exs. J-36 & D-224.

221. As to BASF's alternative allegation that Man must have inadvertently loosened the bolts during its work on the dry gas seal, which work was very close to the subject bolts,³³⁴ the Court finds that this speculative assertion is belied by the fact that the bolts were separated from Man's work area by a metal volute which would have made such highly unlikely, if not impossible.³³⁵

222. BASF's argument that, regardless of whether its crew loosened the bolts, Man is nonetheless liable by failing to inspect the bolts before returning the Compressor to BASF is equally unavailing. Man clearly had a duty to return the area of the Compressor where it had replaced the seals in proper order, and this it did. ³³⁶ The Court finds that the evidence does not support that Man had a duty, contractual, express or implied, to go beyond that.

223. Indeed, there was evidence submitted suggesting that BASF's own operators had the duty to "check all the bolts" on the Compressor.³³⁷ BASF concedes that its "checklist does instruct [BASF] operators to inspect all bearing caps to ensure they are secure[,]"³³⁸ but argues that "this inspection has always been a visual inspection and . . . BASF personnel do not possess the necessary tools onsite to check the tightness of the bolts."³³⁹ Regardless, BASF failed to prove that this duty belonged to Man.

224. In sum, BASF has failed to prove that Man's conduct, negligent or not, was responsible for the failure of the Compressor.

³³⁴ BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 16.

³³⁵ See, e.g., Demonstrative aids showing compressor, Tr. Exs. D-277, D-278, & D-279; Trial Test. of James Spinks, Trial Tr. vol. 5, 51, 113—15, Doc. 187.

³³⁶ Trial Test. of Aaron Rose, Trial Tr. vol. 2, 27, Doc. 184; *see also* Dep. of Rene Scholz, Tr. Ex. P-416-J, at 41:2—13; Trial Test. of Fernando Lorenzo, Ph.D., Trial Tr. vol. 4, 65, Doc. 186.

³³⁷ BASF Recycle Start Up Checklist, Tr. Exs. J-7 & D-1; *see also* BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 47.

³³⁸ Reply Mem. of BASF Corp. to [Man's] Post-Trial Findings of Fact and Conclusions of Law, Doc. 196 at 19. ³³⁹ *Id*.

G. Arguments of Parties – Fault and the Cause of the Failure

225. Given the Court's conclusion that Man's conduct was not the cause of the claimed damages, issues of Man's fault and the cause of the Compressor failure (loose bolts vs. liquid ingestion) are academic ones and need not be resolved by the Court. Nonetheless, the Court briefly considers them.

1. BASF's Position

226. BASF makes a broad based attack on Man's work practices and documentation, including its failure to make, keep, or provide to BASF work notes or a work report and its failure to use torque wrenches.³⁴⁰

227. More specifically, BASF's strenuously argues that the loose bearing cap bolts were caused by Man's negligent failure to properly retighten them and/or Man's failure to ensure they were tight before returning the Compressor to BASF.

228. After Man's crew removed its lock from the Compressor and BASF completed its pre-start-up checklist, the Compressor was started and immediately experienced a catastrophic failure. BASF contends it is more likely than not that the bearing cap bolts being left loose on the B Side of the Compressor caused the failure.

229. BASF's expert Fernando Lorenzo, Ph.D., opined that the loose bolts were the most likely cause of the Compressor failure. Dr. Lorenzo agreed with the RCFA's determinations by concluding that, for a failure to have occurred after only seventeen seconds of operation, the most likely cause of the failure was the presence of loose bolts

³⁴⁰ BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 31-36; *see generally* Trial Test. of Roger Craddock, Trial Tr. vol. 6, 58—66, Doc. 188.

on the B Side of the Compressor.³⁴¹ In Dr. Lorenzo's opinion, if the bolts had been properly torqued, the failure most likely would not have occurred.³⁴²

230. Dr. Lorenzo's conclusions, BASF argues, are supported by several facts, the first of which is the condition of the bolts after the failure. Dr. Lorenzo noted in his study of the Compressor damage that the large Allen bolts found loose after the failure did not appear to have any evidence of stretching or over-tension as a result of the incident.³⁴³

231. The testimony provided by Manfred Chi of Seattle Gear Works also indicated that the female threads were found to be used, but not damaged.³⁴⁴ Dr. Lorenzo confirmed Aaron Rose and Manfred Chi's assessments by looking at several pictures that were taken after the incident that show the female threads were free from damage.³⁴⁵ Dr. Lorenzo noted that there also appeared to be no necking or deformation in any of the bolts, and Dr. Lorenzo affirmed that Aaron Rose's ability to screw and unscrew the bolts by hand following the incident provided further proof that the bolts, nor the threaded

holes in the bearing cover surface, were deformed.³⁴⁶

232. BASF argues that no evidence was presented affirmatively demonstrating that there was any damage to the bolts or the female threads in the bolt holes; BASF contends

³⁴¹ Trial Test. of Fernando Lorenzo, Ph.D., Trial Tr. vol. 3, 250, Doc. 185. Dr. Tom Shelton has also agreed that there are indications in this case that the bolts may have been loose prior to start-up. Trial Test. of Tom Shelton, Ph.D., Trial Tr. vol. 8, 201, Doc. 190.

³⁴² Trial Test. of Fernando Lorenzo, Ph.D., Trial Tr. vol. 4, 69, Doc. 186.

³⁴³ Expert Report of Fernando Lorenzo, Ph.D., Tr. Ex. P-317, at 5; Trial Test. of Aaron Rose, Trial Tr. vol. 1, 185, Doc. 183.

³⁴⁴ Trial Test. of Manfred Chi, Trial Tr. vol. 3, 20, Doc. 185; Trial Test. of Fernando Lorenzo, Ph.D., Trial Tr. vol. 3, 253, Doc. 185. Dr. Lorenzo testified that Manfred Chi's testimony confirms the fact that the bolts were loose and simply backed out because there was no damage to the male or female threads. Trial Test. of Fernando Lorenzo, Ph.D., Trial Tr. vol. 3, 258, Doc. 185.

³⁴⁵ Trial Test. of Fernando Lorenzo, Ph.D., Trial Tr. vol. 3, 258, Doc. 185.

³⁴⁶ Expert Report of Fernando Lorenzo, Ph.D., Tr. Ex. P-317, at 5.

that testing under similar conditions indicates that the bolts would have experienced localized plastic deformation had the bolts loosened during and because of the failure.³⁴⁷ 233. Since the bolts are strong enough to withstand the failure loads without damaging the threads, BASF contends that there are only two other possibilities as to why the bolts were found loose: (1) the bolts were loose to start with; or (2) the bolts had been tightened, but had not been properly torqued and, consequently, backed out.³⁴⁸

234. BASF points to Man's expert Dr. Tom Shelton, who testified that, assuming the design engineer had made the right calculation on what torque was to be put onto the bolts,³⁴⁹ then all properly torqued bolts would have stayed tight instead of some—but not all—backing out.³⁵⁰

235. Dr. Lorenzo testified that the damage to the Compressor is consistent with the bolts having been loose prior to start-up.³⁵¹ Because the bolts on the B Side were left loose or were not properly torqued, the parts of the B Side that could move with the bearing cap had some give and could move away from the pinion shaft. In contrast, the A Side was completely secured, had no place to move, and received the higher impact of friction and grinding.³⁵² The difference in damage between the A Side and the B Side is

³⁴⁷ Expert Report of Fernando Lorenzo, Ph.D., Tr. Ex. P-317, at 6.

³⁴⁸ Trial Test. of Fernando Lorenzo, Ph.D., Trial Tr. vol. 3, 259, Doc. 185. Dr. Shelton also testified that, if the bolts had been properly torqued, the bolts would have been more resistant to vibration. Trial Test. of Tom Shelton, Ph.D., Trial Tr. vol. 8, 204, Doc. 190.

³⁴⁹ BASF points to the lack of testimony presented in this case that would suggest that the design engineer had not made the correct calculations. Rather, the Compressor has successfully operated with no evidence of excessive vibration at all times prior to this incident.

³⁵⁰ Trial Test. of Tom Shelton, Ph.D., Trial Tr. vol. 8, 206–07, Doc. 190.

³⁵¹ Trial Test. of Fernando Lorenzo, Ph.D., Trial Tr. vol. 4, 6—7, Doc. 186; *see also* Trial Test. of Aaron Rose, Trial Tr. vol. 1, 180, Doc. 183.

³⁵² Trial Test. of Fernando Lorenzo, Ph.D., Trial Tr. vol. 4, 8—9, Doc. 186. *see also* Trial Test. of Aaron Rose, Trial Tr. vol. 1, 184, 186, Doc. 183.

consistent with the reports made by TurboCare, the company to whom the Compressor was sent for repair.³⁵³

236. In conclusion, based upon the evidence presented at trial, BASF asks this Court to conclude that it is more likely than not that Man's negligent failure to tighten or properly torque the bolts caused the Compressor failure.

237. In addition, BASF argues that Man "was required to look over the Compressor area where the bolts [were] located while cleaning up after the job."³⁵⁴ BASF faults Man for failing to check the bearing cap bolts, even if Man did not touch them as a part of their work.³⁵⁵

238. BASF then attacks Man's alternative theory of causation: that the damage was caused by liquid intrusion, wherein condensation formed in piping upstream from the shutoff valve, moved downward and entered the A Side and B Side impellers.

239. BASF argues that there are several reasons why the ingestion theory of Man's expert Steven Kushnick is wrong:

- The Compressor is a centrifugal compressor that is not affected by the presence of liquids in the gas stream in the same Manner as a reciprocating compressor;³⁵⁶
- When a centrifugal compressor experiences damage caused by liquid ingestion, the damage will manifest as wear, specifically in the outlet section of the impeller. Wear caused by liquid ingestion is caused by the rapid acceleration of entrapped liquid to the point that cavitation may develop and result in significant wear on the outlet of the

³⁵³ "There appears to be some amount of damage to the A location pinion bearing lower gear case saddle & bearing cover. The amount of damage on the B location is approx. 50% of the A location." Field Service Operations Daily Status Report – January 8, 2012, Tr. Ex. P-135.

³⁵⁴ BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 33 (citing Dep. of James Landry, Tr. Ex. J-87, at 107:16–109:17).

³⁵⁵ BASF Corp.'s Post-Trial Proposed Findings and Conclusions, Doc. 197 at 33—34.

³⁵⁶ Expert Report of Fernando Lorenzo, Ph.D., Tr. Ex. P-317, at 7.

impeller. No excessive or cavitation-type wear or damage was reported or observed on the impellers.³⁵⁷

- It is unlikely that failure due to liquid ingestion would present itself within seventeen seconds of the start-up.³⁵⁸
- The inlet guide vanes were set at 80 degrees at the time of the start-up, which would deflect any liquid that would enter the inlet line and prevent any liquid from reaching the impeller as a "slug."³⁵⁹
- The volutes and other areas of the Compressor were found dry after the failure.³⁶⁰
- Damage caused by a failure from liquid ingestion would be expected to be consistent on both sides of the Compressor.³⁶¹ Here, there was more damage to the A Side of the Compressor.³⁶²
- BASF's start-up procedure includes in its steps draining any liquid that may be present in the suction lines.³⁶³

2. Man's Position

240. Man argues that it carried out its assigned duties in a safe, proper and

workmanlike manner. As proof, it points the Court to the findings of BASF's

investigation showing that the bolts associated with the changing of the dry gas seals

were found after the event to be properly tightened.³⁶⁴

³⁵⁷ See id.

³⁵⁸ See Trial Test. of Aaron Rose, Trial Tr. vol. 1, 170—171, Doc. 183. BASF further contends that Aaron Rose testified that certain threads became embedded in the bottom of the clearance hole. According to BASF, Mr. Rose testified that this damage would have occurred if the bearing cap was not secure and was able to be thrusted forcefully upward during the start-up. *Id.* at 189. BASF also asserts that Aaron Rose testified that there is no history of significant vibration for the Compressor that would loosen properly torqued fasteners in 17 seconds. *Id.* at 219—220.

³⁵⁹ Expert Report of Fernando Lorenzo, Ph.D., Tr. Ex. P-317, at 7.

³⁶⁰ Trial Test. of Aaron Rose, Trial Tr. vol. 1, 169, Doc. 183 ("We had not seen any indication of liquid whatsoever internal to that machine when we disassembled it very shortly after the failure. And so while we had not necessarily ruled that out, that was a pretty large chunk of evidence supporting that that wasn't how this happened.").

³⁶¹ Expert Report of Fernando Lorenzo, Ph.D., Tr. Ex. P-317, at 8.

³⁶² Trial Test. of Aaron Rose, Trial Tr. vol. 1, 168, Doc. 183.

³⁶³ Trial Test. of Leonard Landry, Trial Tr. vol. 3, 41—42, Doc. 185; Pre-Start Up Recycle Gas Loop Drain Checklist, Tr. Ex. J-6.

³⁶⁴Dep. of Rene Scholz, Tr. Ex. P-416-J, at 41:2—13; Trial Test. of Aaron Rose, Trial Tr. vol. 2, 27, Doc. 184; Trial Test. of Fernando Lorenzo, Ph.D., Trial Tr. vol. 4, 65, Doc. 186.

241. Even were the Court to find that Man worked on the bearing cap bolts, Man argues that BASF failed to carry its burden of proof to show that the Compressor failure was caused by these loose bolts or by any other acts or omissions of Man.

242. Man insists that BASF's contention that loose bearing cap bolts caused the Compressor failure rests on a fatally flawed RCFA and the unreliable expert opinion of BASF's expert Fernando Lorenzo.

243. Supported by the expert testimony of Tom Shelton,³⁶⁵ Man argues that the failure to perform an adequate examination and analysis of the evidence prevents this Court from determining whether the loose bolts caused the accident or were caused by the accident.

244. Man also points to its expert Steve Kushnick who opined that the loose bolts were not the cause of the Compressor's failure.³⁶⁶ Kushnick, indeed, argues that the more severe damage to the opposite side of the Compressor "is inconsistent with loose bearing cap bolts on the 'B' side."³⁶⁷

245. As to the cause of the Compressor failure, Man again looks to Kushnick who opines that "liquids in the suction line to the [Compressor] more likely than not caused the failure on 30 December 2011."³⁶⁸

246. Even if the bolts were the culprit, Man contends in the alternative that BASF has failed to prove Man crew members even touched the subject bolts and, indeed, the great weight of the evidence shows they did not.³⁶⁹

³⁶⁵ Expert Report of Tom Shelton, Ph.D., Tr. Ex. D-283, at 8.

³⁶⁶ Expert Report of Steven B. Kushnick, P.E., Tr. Ex. D-284, at 61.

³⁶⁷ Id.

³⁶⁸ *Id.* at 62.

³⁶⁹ See supra, Section IV.E.2 (concerning Man's position regarding its work on the Compressor).

247. As to BASF's charge that Man should have checked to ensure the tightness of the subject bolts (even if Man was not responsible for their loosening), Man argues that the subject bolts were not within its scope of work and points to BASF's checklist showing BASF, not Man, was responsible for this task. ³⁷⁰ Further, Kushnick opined that BASF's maintenance contractor Turner could and should have tightened the subject bolts as a part of its removal and replacement of insulation.³⁷¹ Finally, Man faults the Siemens representative for having failed in its supervisory capacity.³⁷²

H. Findings of Fact – Fault and the Cause of the Failure

248. Failing to properly torque bolts on a piece of rotating (and vibrating) equipment is shoddy workmanship and negligent conduct, a conclusion arguably so obvious that expert testimony is not required. But BASF has failed to prove that Man is guilty of this conduct.

249. While BASF has presented evidence suggesting that some aspects of Man's work was deficient,³⁷³ it has failed to prove Man's deficient work was a cause of the Compressor failure.³⁷⁴

250. In summary, the Court finds there are two separate reasons BASF has failed to carry its burden of proof to establish Man's work was negligently performed in a way which caused the Compressor's failure:

• First, as is explored in detail elsewhere in this ruling, even if loose bearing cap bolts caused the failure, BASF has failed to show that Man's crew was responsible for the loose bolts, either by a) loosening and then failing to properly retighten the bolts, b) inadvertently

³⁷⁰ Recycle Start Up Checklist, Tr. Exs. J-7 & D-1.

³⁷¹ Expert Report of Steven B. Kushnick, P.E., Tr. Ex. D-284, at 40–41.

³⁷² Def.'s Post Trial Findings of Fact and Conclusions of Law, Doc. 193 at 49-53.

³⁷³ See generally Trial Test. of Roger Craddock, Trial Tr. vol. 6, 33-112, Doc. 188; Expert Report of Roger Craddock, Tr. Ex. P-316.

³⁷⁴ As is discussed in the Conclusions of Law section, BASF must prove causation for both its contract and tort claims. *See infra*, Section V.C.

loosening them while working in the area, or c) in simply failing to inspect them following their work to ensure that they were tight;

• Second, aside from the question of whether Man did or did not loosen the subject bolts, the Court finds that BASF has failed to prove that the loose bearing cap bolts caused the failure.

251. While BASF's expert Lorenzo posits a logical scenario regarding how the loose B-side bearing cap bolts could have led to the shut-down of the Compressor, the Court finds that his opinion relies and is dependent upon the findings of the flawed RCFA which cannot bear the weight placed upon it.³⁷⁵

I. Summary of Findings of Fact

252. BASF contracted with Man to change dry gas seals on its Compressor.

253. BASF's Purchase Order (the *entire* Purchase Order) constituted the contract between BASF and Man.

254. Despite the fact that BASF knew the Compressor, bearing caps, and related hardware were likely to be relevant evidence to future litigation, it failed to make this evidence available to Man. However, Man failed to prove BASF's actions were done for the purpose of depriving it of evidence.

255. Man adequately performed its assigned task of changing the dry gas seals on the Compressor.

256. BASF's RCFA was poorly performed, inadequately documented and provides an insufficient foundation for BASF's contention or Fernando Lorenzo's conclusion that loose bolts caused the Compressor failure.

257. BASF has failed to prove that any acts or omissions of Man played a role in the failure of the Compressor.

³⁷⁵ See supra, Section IV.D.

V. CONCLUSIONS OF LAW

A. The Contract

258. "A party who demands performance of an obligation must prove the existence of the obligation."³⁷⁶ Accordingly, a "party claiming the existence of a contract has the burden of proving that the contract was perfected between himself and his opponent."³⁷⁷ 259. "A contract is formed by the consent of the parties established through offer and acceptance."³⁷⁸ "Unless the law prescribes a certain formality for the intended contract, offer and acceptance may be made orally, in writing, or by action or inaction that under the circumstances is clearly indicative of consent."³⁷⁹

260. "If there is a genuine dispute, it is left to the fact-finder to determine whether there has been a 'meeting of the minds' between the parties so as to constitute mutual consent."³⁸⁰ "Moreover, '[t]he existence or nonexistence of a contract is a question of fact and, accordingly, the determination of the existence of a contract is a finding of fact."³⁸¹

261. The Court finds that Man's Quote was not an offer. Louisiana doctrine has explained:

To constitute a true offer, a declaration of will must be sufficiently precise and complete so that the intended contract can be concluded by the offeree's expression of his own assent, thereby giving rise to that "mutual consent" of the parties which, in practical terms, is indistinguishable from the contract itself.³⁸²

³⁷⁶ La. Civ. Code art. 1831.

³⁷⁷ Enter. Prop. Grocery, Inc. v. Selma, Inc., 38,747, p. 4 (La. App. 2 Cir. 9/22/04); 882 So. 2d 652, 655 (citing *Pennington Constr., Inc. v. R.A. Eagle Corp.*, 94-0575 (La. App. 1 Cir. 3/3/95); 652 So. 2d 637). ³⁷⁸ La. Civ. Code art. 1927.

³⁷⁹ *Id*.

³⁸⁰ SnoWizard, Inc. v. Robinson, 897 F. Supp. 2d 472, 478 (E.D. La. 2012) (citation omitted).

³⁸¹ Id. (quoting Sam Staub Enters., Inc. v. Chapital, 2011-1050 (La. App. 4 Cir. 3/14/12); 88 So. 3d 690, 694).

³⁸² Saul Litvinoff, Consent Revisited: Offer Acceptance Option Right of First Refusal and Contracts of Adhesion in the Revision of the Louisiana Law of Obligations, 47 LA. L. REV. 699, 706 (1987).
262. For the reasons detailed in its Findings of Fact, Man's Quote was clearly not such that an agreement could be reached by BASF's mere acceptance. Rather, it is clear that the Quote was merely a preparatory step towards BASF issuing its Purchase Order.

263. BASF's Purchase Order, on the other hand, was an offer and, for the reasons detailed in its Findings of Fact, the Court finds that Man accepted that offer by beginning work on the Compressor on December 28, 2011, following receipt of the Purchase Order by Man.³⁸³

264. As set out in the Findings of Fact section, the work to be performed (and which was in fact performed) by Man per this contract was to replace the dry gas seals.³⁸⁴

B. Spoliation

1. Spoliation Introduction

265. Man argues that it has satisfactorily shown that BASF committed the tort of intentional spoliation of evidence under Louisiana law. Alternatively, Man claims that BASF's spoliation entitles Man to an adverse presumption.

266. As will be demonstrated below, Man's tort claim for spoliation is governed by Louisiana law while Man's effort to obtain an adverse presumption is governed by federal law.

267. To succeed under both federal and state law, the party urging spoliation must prove that the alleged spoliator destroyed or lost evidence for the purpose of depriving his opponent of its use.

³⁸³ See Illinois Cent. Gulf R. Co. v. Int'l Harvester Co., 368 So. 2d 1009, 1012 (La. 1979); Norris v. Causey, No. 14-1598, 2016 WL 311746, at *5 (E.D. La. Jan. 26, 2016).

³⁸⁴ BASF Purchase Order (BASF_MAN 0000262), Tr. Ex. J-2, at 3 ("Repl. C-300 mech seal").

268. While Man proved that BASF's deliberate actions deprived Man of access to important evidence, Man failed to prove BASF's actions were for the purpose of depriving Man of the use of this evidence. Thus, under either standard, Man has failed to prove that BASF spoliated evidence.

2. Intentional Tort of Spoliation of Evidence

269. Because jurisdiction in this case is based on diversity, the Court applies Louisiana substantive law with respect to the tort of spoliation.³⁸⁵

270. In *Reynolds v. Bordelon*, the Louisiana Supreme Court held that there was no cause of action in Louisiana for negligent spoliation of evidence.³⁸⁶

271. The Louisiana Supreme Court has not yet determined whether there is a cause of action for intentional spoliation of evidence.³⁸⁷ However, this Court has performed an *"Erie* guess" and determined that Louisiana does in fact recognize a cause of action for intentional spoliation of evidence.³⁸⁸

272. In *Burge v. St. Tammany Parish*, the Fifth Circuit set forth the standard for claims of intentional spoliation of evidence under Louisiana law.³⁸⁹ *Burge* stated, "[t]he Louisiana tort of spoliation of evidence provides a cause of action for *an intentional destruction of evidence carried out for the purpose of depriving an opposing party of its*

use."³⁹⁰

³⁸⁵ Hodges v. Mosaic Fertilizer LLC, 289 F. App'x 4, 7 (5th Cir. 2008) (citing Erie R. Co. v. Tompkins, 304 U.S. 64, 58 S. Ct. 817, 82 L. Ed. 1188 (1938)).

³⁸⁶ Reynolds v. Bordelon, 2014-2362, p. 14 (La. 6/30/15); 172 So. 3d 589, 600.

³⁸⁷ *Hodges*, 289 F. App'x at 7.

 ³⁸⁸ See Ruling and Order, Doc. 119 at 9 n. 5 (citing Bertrand v. Fischer, No. 09-0076, 2011 WL 6254091, at *3 (W.D. La. Dec. 14, 2011); Union Pump Co. v. Centrifugal Tech., Inc., No. 05-0287, 2009 WL 3015076, at *5—*6 (W.D. La. Sept. 18, 2009)); see also Burge v. St. Tammany Parish, 336 F.3d 363, 374 (5th Cir. 2003).
 ³⁸⁹ Burge, 336 F.3d at 363.

³⁹⁰ Id. at 374 (emphasis added) (citing Pham v. Contico Int'l, Inc., 99-945 (La. App. 5 Cir. 3/22/00); 759 So. 2d 880).

273. The Fifth Circuit has relied on *Burge* several times in unpublished opinions and held that a spoliation claim under Louisiana law requires that the destruction of evidence be both intentional and for the purpose of depriving an opposing party of its use.³⁹¹

While these cases are not binding, they are highly persuasive.

274. Similarly, this Court has stated that, under Louisiana state law, "[s]poliation of

evidence is the intentional destruction of evidence to avoid providing it to an opposing

party."³⁹² Case law from other federal Louisiana district courts confirms this.³⁹³

275. The Court has also reviewed jurisprudence from Louisiana appellate courts and

determined that this standard applies.³⁹⁴

276. Thus, as this Court has explained:

Spoliation of evidence is the intentional destruction of evidence to avoid providing it to an opposing party. For spoliation, the destruction must be intentional. Whether the party had an obligation to preserve the evidence

³⁹¹ See Adams v. Dolgencorp, L.L.C., 559 F. App'x 383, 387 (5th Cir. 2014) (affirming the denial of the plaintiff's motions for leave to amend her complaint and reasoning that neither of the two proposed amended complaints "allege[d] facts showing any individual defendant intentionally destroyed the [evidence] 'for the purpose of depriving [plaintiff] of its use.'") (quoting *Burge v. St. Tammany Parish*, 336 F.3d 363, 374 (5th Cir. 2003)); *Kemp v. CTL Distrib., Inc.*, 440 F. App'x 240, 247 (5th Cir. 2011) (holding that the Plaintiffs' complaint "fail[ed] to even plead the necessary elements of the tort [of intentional spoliation] under Louisiana law, namely, that (1) [defendant] intentionally destroyed documents, and (2) that he did so with the purpose of depriving Plaintiffs of their use").
³⁹² Herster v. Bd. of Supervisors of Louisiana State Univ., 72 F. Supp. 3d 627, 639 (M.D. La. 2014) (emphasis added) (citing Clavier v. Our Lady of the Lake Hospital, Inc., 2012-0560, p. 5 (La. App. 1 Cir. 12/28/12); 112 So. 3d 881, 886)).

³⁹³ See Union Pump Co., 2009 WL 3015076, at *6 ("Intentional spoliation requires a showing by a plaintiff that evidence was destroyed with the intent to deprive another party of its use at trial."); *Bertrand*, 2011 WL 6254091, at *3 (relying on *Union* and reaching same conclusion); *Pelas v. EAN Holdings, L.L.C.*, No. 11-2876, 2012 WL 2339685, at *3 (E.D. La. June 19, 2012) ("To state a claim for the tort of spoliation under Louisiana law the plaintiff must plead facts sufficient to plausibly establish two elements: (1) intentional destruction of the evidence and (2) destruction of the evidence was for the purpose of depriving the plaintiff of its use.") (citing *Kemp v. CTL Distribution, Inc.*, 440 F. App'x 240 (5th Cir. 2011)).

³⁹⁴ See Tomlinson v. Landmark Am. Ins. Co., 2015-0276, p. 9 (La. App. 4 Cir. 3/23/16); 192 So. 3d 153, 160 (stating, post *Reynolds*, "Under this Court's jurisprudence, spoliation of evidence refers to the intentional destruction of the evidence for the purpose of depriving the opposing party of its use at trial.") (citations omitted); *Zurich Am. Ins. Co. v. Queen's Mach. Co., Ltd*, 08-546, p. 9—10 (La. App. 5 Cir. 1/27/09); 8 So. 3d 91, 96 (same) (citations omitted); *Randolph v. Gen. Motors Corp.*, 93-1983 (La. App. 1 Cir. 11/10/94); 646 So. 2d 1019, 1027 ("We find that the trial court imposition of liability upon the Parish under the theory of spoliation of evidence was clearly wrong since the record does not indicate there was an intentional destruction of evidence by the Parish for the purpose of depriving the opposing parties of its use.").

is central to the spoliation analysis. Evidence must be preserved when "the need for the evidence in the future" is foreseeable.³⁹⁵

277. The Court has found that Man proved BASF's evidence destruction was intentional and done when it knew, or certainly should have known that it would deprive Man of this evidence. But Man has not shown that BASF's actions were taken for the purpose of depriving Man of access to the evidence.

278. While the Court has serious reservations about the wisdom of applying

Louisiana's standard under these circumstances,³⁹⁶ it reluctantly does so.³⁹⁷

3. Adverse Presumption (federal law)

279. "[F]ederal courts . . . apply federal evidentiary rules rather than state spoliation

laws in diversity suits."³⁹⁸ Thus, in this case, federal law governs the use of evidentiary

presumptions and adverse inferences based on spoliation.³⁹⁹

280. Under federal law, "[s]poliation of evidence 'is the destruction or the significant

and meaningful alteration of evidence.' "400

³⁹⁵ Herster, 72 F. Supp. 3d at 639 (citations omitted).

³⁹⁶ It seems to this Court that a spoliation remedy is appropriate, *regardless of motivation*, where a party, aware of the need to preserve evidence for potential litigation and that its destruction will deprive another party or potential party of that evidence, nonetheless *knowingly* destroys that evidence.
³⁹⁷ See June Med. Servs. LLC v. Kliebert, 158 F. Supp. 3d 473, 528 n. 64 (M.D. La. 2016) ("However much a district")

³⁹⁷ See June Med. Servs. LLC v. Kliebert, 158 F. Supp. 3d 473, 528 n. 64 (M.D. La. 2016) ("However much a district court may disagree with an appellate court, . . . [it] is not free to disregard the mandate or directly applicable holding of the appellate court.") (quoting Whole Woman's Health v. Cole, 790 F.3d 563, 581 (5th Cir. 2015), modified, 790 F.3d 598 (5th Cir. 2015), rev'd and remanded sub nom. Whole Woman's Health v. Hellerstedt, 136 S. Ct. 2292, 195 L. Ed. 2d 665 (2016), as revised (June 27, 2016)).

³⁹⁸ Condrey v. SunTrust Bank of Ga., 431 F.3d 191, 203 (5th Cir. 2005) (citing King v. Ill. Cent. R.R., 337 F.3d 550, 556 (5th Cir. 2003)).

³⁹⁹ See King, 337 F.3d at 556 (citations omitted).

⁴⁰⁰ *Guzman v. Jones*, 804 F.3d 707, 713 (5th Cir. 2015) (quoting *Rimkus Consulting Grp., Inc. v. Cammarata*, 688 F. Supp. 2d 598, 612 (S.D. Tex. 2010)); *see also Rimkus*, 688 F. Supp. 2d at 612 ("Spoliation is the destruction of records or properties, such as metadata, that may be relevant to ongoing or anticipated litigation, government investigation or audit") (citation omitted)).

281. Spoliation also includes " 'the failure to preserve property for another's use as evidence in pending or reasonably foreseeable litigation.' "⁴⁰¹

282. "Allegations of spoliation, including the destruction of evidence in pending or reasonably foreseeable litigation, are addressed in federal courts through the inherent power to regulate the litigation process if the conduct occurs before a case is filed or if, for another reason, there is no statute or rule that adequately addresses the conduct."⁴⁰² 283. "When inherent power does apply, it is 'interpreted narrowly, and its reach is limited by its ultimate source, the court's need to orderly and expeditionally perform its

limited by its ultimate source—the court's need to orderly and expeditiously perform its duties.' "⁴⁰³

284. "It is well established that a party seeking the sanction of an adverse inference instruction based on spoliation of evidence must establish that: (1) the party with control over the evidence had an obligation to preserve it at the time it was destroyed; (2) the evidence was destroyed with a culpable state of mind; and (3) the destroyed evidence was 'relevant' to the party's claim or defense such that a reasonable trier of fact could find that it would support that claim or defense."⁴⁰⁴

⁴⁰¹ Ashton v. Knight Transp., Inc., 772 F. Supp. 2d 772, 799 (N.D. Tex. 2011) (quoting Silvestri v. Gen. Motors Corp., 271 F.3d 583, 590 (4th Cir. 2001)).

⁴⁰² *Rimkus*, 688 F. Supp. 2d at 611 (citations omitted); *see also Yelton v. PHI, Inc.*, 284 F.R.D. 374, 378 n. 2 (E.D. La. 2012) (quoting affirmed magistrate's order which recognized that, because there was no allegation that the spoliating party "violated any discovery order or other directive by the Court[,]" the spoliation motions were "properly stated pursuant to this Court's inherent powers, and not Rule 37.").

⁴⁰³ *Rimkus*, 688 F. Supp. 2d at 611 (quoting *Newby v. Enron Corp.*, 302 F.3d 295, 302 (5th Cir. 2002) (footnote omitted)).

⁴⁰⁴ *Rimkus*, 688 F. Supp. 2d at 615–16 (citing *Zubulake v. UBS Warburg LLC (Zubulake IV)*, 220 F.R.D. 212, 220 (S.D.N.Y. 2003)).

285. Concerning the first requirement, "[g]enerally, the duty to preserve arises when a party ' "has notice that the evidence is relevant to litigation or . . . should have known that the evidence may be relevant to future litigation." ' "⁴⁰⁵

286. The Fifth Circuit has recognized that "[a] party's duty to preserve evidence comes into being when the party has notice that the evidence is relevant to the litigation or should have known that the evidence may be relevant."⁴⁰⁶

287. "Generally, the duty to preserve extends to documents or tangible things (defined

by Federal Rule of Civil Procedure 34) by or to individuals 'likely to have discoverable

information that the disclosing party may use to support its claims or defenses." "407

288. As one district court within this circuit explained:

These general rules [about the duty to preserve] are not controversial. But applying them to determine when a duty to preserve arises in a particular case and the extent of that duty requires careful analysis of the specific facts and circumstances. It can be difficult to draw bright-line distinctions between acceptable and unacceptable conduct in preserving information and in conducting discovery, either prospectively or with the benefit (and distortion) of hindsight. Whether preservation or discovery conduct is acceptable in a case depends on what is *reasonable*, and that in turn depends on whether what was done—or not done—was *proportional* to that case and consistent with clearly established applicable standards.... [T]hat analysis depends heavily on the facts and circumstances of each case and cannot be reduced to a generalized checklist of what is acceptable or unacceptable.⁴⁰⁸

⁴⁰⁵ *Rimkus*, 688 F. Supp. 2d at 612 (quoting *John B. v. Goetz*, 531 F.3d 448, 459 (6th Cir. 2008) (omission in original) (quoting *Fujitsu Ltd. v. Fed. Express Corp.*, 247 F.3d 423, 436 (2d Cir. 2001))). *See also Zubulake IV*, 220 F.R.D. at 216 ("The obligation to preserve evidence arises when the party has notice that the evidence is relevant to litigation or when a party should have known that the evidence may be relevant to future litigation.") (quoting *Fujitsu Ltd.*, 247 F.3d at 436).

⁴⁰⁶ *Guzman*, 804 F.3d at 713 (citing *Rimkus Consulting Grp., Inc. v. Cammarata*, 688 F. Supp. 2d 598, 612 (S.D. Tex. 2010)).

⁴⁰⁷ *Rimkus*, 688 F. Supp. 2d at 612-13 (quoting *Zubulake v. UBS Warburg LLC (Zubulake IV)*, 220 F.R.D. 212, 217-18 (S.D.N.Y. 2003) (footnotes omitted)).

⁴⁰⁸ *Rimkus*, 688 F. Supp. 2d at 613 (footnotes omitted).

289. Concerning the second requirement (culpability), different circuits adopt different standards for the level of culpability required for an adverse presumption.⁴⁰⁹ For example, "[t]he First, Fourth, and Ninth Circuits hold that bad faith is not essential to imposing severe sanctions if there is severe prejudice, although the cases often emphasize the presence of bad faith."⁴¹⁰

290. However, the Fifth Circuit "permit[s] an adverse inference against the spoliator or sanctions against the spoliator only upon a showing of 'bad faith' or 'bad conduct.' "⁴¹¹

291. "Bad faith, in the context of spoliation, generally means destruction for the purpose of hiding adverse evidence."⁴¹²

292. Other circuits that require a finding of bad faith for a spoliation claim have utilized a similar standard. For instance, in *Mathis*, the Seventh Circuit remarked, "What remains—the possibility of an adverse inference—depends on persuading the court that the evidence was destroyed in 'bad faith'. [(citation omitted)] That the documents were destroyed *intentionally* no one can doubt, but 'bad faith' means destruction for the purpose of hiding adverse information."⁴¹³ In *Greyhound Lines, Inc. v. Wade*, the Eighth Circuit explained:

A spoliation-of-evidence sanction requires "a finding of intentional destruction indicating a desire to suppress the truth." [*Stevenson v. Union Pac. R.R. Co.*, 354 F.3d 739, 746 (8th Cir. 2004)]; *see Richter v. City of Omaha*, 273 Neb. 281, 729 N.W.2d 67, 71–73 (2007) (unfavorable inference where "spoliation or destruction was intentional and indicates

⁴⁰⁹ See Rimkus, 688 F. Supp. 2d at 614–15.

⁴¹⁰ *Id.* at 614 (collecting cases from these circuits).

⁴¹¹ *Guzman*, 804 F.3d at 713 (quoting *Condrey v. SunTrust Bank of Georgia*, 431 F.3d 191, 203 (5th Cir.2005)); *see also Consol. Aluminum Corp. v. Alcoa, Inc.*, 244 F.R.D. 335, 344 (M.D. La. 2006) ("although courts in other circuits may permit the imposition of an adverse inference instruction based upon the gross negligence of the spoliating party, the Fifth Circuit has held that such a sanction may only be imposed upon a showing of 'bad faith' or intentional conduct by the spoliating party." (citations omitted)).

 ⁴¹² Guzman, 804 F.3d at 713. (citing Mathis v. John Morden Buick, Inc., 136 F.3d 1153, 1155 (7th Cir.1998)).
 ⁴¹³ Mathis, 136 F.3d at 1155 (emphasis in original); see also Faas v. Sears, Roebuck & Co., 532 F.3d 633, 644 (7th Cir. 2008) (relying on Mathis and holding same).

fraud and a desire to suppress the truth"). "Intent is rarely proved by direct evidence, and a district court has substantial leeway to determine intent through consideration of circumstantial evidence, witness credibility, motives of the witnesses in a particular case, and other factors." *Morris v. Union Pac. R.R.*, 373 F.3d 896, 902 (8th Cir. 2004). . . .

The ultimate focus for imposing sanctions for spoliation of evidence is the intentional destruction of evidence indicating a desire to suppress the truth, not the prospect of litigation. *Morris*, 373 F.3d at 901.⁴¹⁴

293. Even in those circuits that do not require a finding of bad faith for spoliation, the

courts provide a similar definition of bad faith. For example, in Micron Tech., Inc. v.

Rambus Inc., the Delaware district court imposed the dispositive sanction of dismissal

against the defendant.⁴¹⁵ The district court recognized negligent spoliation but noted that

culpability was a factor in assessing sanctions.⁴¹⁶ On appeal, the defendant argued that

the district court erred in determining that it acted in bad faith.⁴¹⁷ In that context, the

Federal Circuit provided the following description of bad faith:

To make a determination of bad faith, the district court must find that the spoliating party "intended to impair the ability of the potential defendant to defend itself." Schmid, 13 F.3d at 80. See also Faas v. Sears, Roebuck & Co., 532 F.3d 633, 644 (7th Cir. 2008) ("A document is destroyed in bad faith if it is destroyed 'for the purpose of hiding adverse information.' ") (citation omitted); In re Hechinger Inv. Co. of Del., Inc., 489 F.3d 568, 579 (3d Cir. 2007) (noting that bad faith requires a showing that the litigant "intentionally destroyed documents that it knew would be important or useful to [its opponent] in defending against [the] action"); Anderson v. Cryovac, Inc., 862 F.2d 910, 925 (1st Cir. 1988) (finding bad faith "where concealment was knowing and purposeful," or where a party "intentionally shred[s] documents in order to stymie the opposition"); Gumbs v. Int'l Harvester, Inc., 718 F.2d 88, 96 (3d Cir. 1983) (noting that an adverse inference from destruction of documents is permitted only when the destruction was "intentional, and indicates fraud and a desire to suppress the truth") (citation omitted). The fundamental element of bad faith spoliation is advantage-seeking behavior by the party with superior access to information necessary for the proper administration of justice.⁴¹⁸

⁴¹⁴ Greyhound Lines, Inc. v. Wade, 485 F.3d 1032, 1035 (8th Cir. 2007).

⁴¹⁵ Micron Tech., Inc. v. Rambus Inc., 645 F.3d 1311, 1316 (Fed. Cir. 2011).

⁴¹⁶ See Micron Tech., Inc. v. Rambus Inc., 255 F.R.D. 135, 148-49 (D. Del. 2009).

⁴¹⁷ *Micron*, 645 F.3d at 1316.

⁴¹⁸ *Id.* at 1326.

Micron ultimately remanded to the district court to provide grounds for its finding of bad faith.⁴¹⁹

294. Numerous district courts within the Fifth Circuit have also found that, to constitute bad faith, the spoliating party must essentially act with the purpose of destroying the evidence. For instance, in *Consolidated Aluminum Corp.*, this Court explained, "[f]or the spoliator to have a 'culpable state of mind,' it must act with fraudulent intent and a desire to suppress the truth."⁴²⁰ In *Tammany Parish Hospital Service District No. 1 v. Travelers Property Casualty Co. of America*, the Eastern District of Louisiana explained that "[t]he theory of spoliation of evidence refers to an intentional destruction of evidence for [the] purpose of depriving opposing parties of its use."⁴²¹ In *Thomas v. Tangipahoa Parish School Board*, the Eastern District of Louisiana recently explained:

The Fifth Circuit has not further defined "bad faith" in the spoliation context, but has defined it under Louisiana law as [t]he opposite of "good faith," generally implying or involving actual or constructive fraud, or a design to mislead and deceive another, or a neglect or refusal to fulfill some duty or some contractual obligation, not prompted by an honest mistake as to one's rights or duties but by some interested or sinister motive. The term bad faith means more than mere bad judgment or negligence, it implies the conscious doing of a wrong for dishonest or morally questionable motives.

<u>Industrias Magromer Cueros y Pieles S.A. v. Louisiana</u>, 293 F.3d 912, 922 (5th Cir. 2002) (emphasis added); <u>compare Black's Law</u> <u>Dictionary</u> BAD FAITH (10th ed. 2014) ("dishonesty of belief, purpose, or motive") <u>with id.</u> GOOD FAITH ("A state of mind consisting in (1) honesty in belief or purpose, (2) faithfulness to

⁴¹⁹ *Id.* at 1328.

⁴²⁰ Consolidated Aluminum Corp., 244 F.R.D. at 343–44.

⁴²¹ St. Tammany Par. Hosp. Serv. Dist. No. 1 v. Travelers Prop. Cas. Co. of Am., 250 F.R.D. 275, 277 (E.D. La. 2008) (citing Burge v. St. Tammany Parish Sheriff's Office, No. 91-2321, 96-0244, 2000 WL 815879, at *3 (E.D. La. June 22, 2000), aff'd sub nom. Burge v. St. Tammany Par., 336 F.3d 363 (5th Cir. 2003)).

one's duty or obligation, . . .or (4) absence of intent to defraud or to seek unconscionable advantage."). As these definitions emphasize, the evidence must show that a party had a dishonest, deceptive or culpable state of mind for the court to find that the party acted in bad faith.⁴²²

295. Applying this standard, the Court finds that Man has failed to sustain its burden of proving that BASF destroyed evidence in bad faith, i.e., *for the purpose of* depriving Man of the evidence. This rule seems just in situations where the destroyer of evidence is unaware of the possible significance of the evidence in future litigation or is unaware that his actions will result in the permanent loss of the evidence. Here BASF knew or should have known of the importance of the evidence in contemplated litigation and knew that its conduct would foreclose Man's access to it permanently. However, the Court is bound to follow the rule in this Circuit and therefore finds Man is not entitled to the adverse presumption.⁴²³

C. Man's Liability

1. Burden of Proof

296. "In Louisiana tort cases and other ordinary civil actions, the plaintiff, in general, has the burden of proving every essential element of his case, including the cause-in-fact of damage, by a preponderance of the evidence[.]"⁴²⁴

297. "Proof by direct or circumstantial evidence is sufficient to constitute a preponderance, when, taking the evidence as a whole, such proof shows that the fact or causation sought to be proved is more probable than not."⁴²⁵

⁴²² Thomas v. Tangipahoa Par. Sch. Bd., No. 14-2814, 2016 WL 3542286, at *2 (E.D. La. June 29, 2016).

⁴²³ See supra, 75 nn. 396-97.

⁴²⁴ Lasha v. Olin Corp., 625 So. 2d 1002, 1005 (La. 1993) (citations omitted).

⁴²⁵ *Id.* (citations omitted).

2. Breach of Contract

298. Article 1994 of the Louisiana Civil Code provides that "[a]n obligor is liable for the damages *caused by* his failure to perform a conventional obligation."⁴²⁶

299. Thus, "[t]o succeed on a breach of contract claim, the plaintiff must prove (1) the obligor undertook an obligation to perform; (2) the obligor failed to perform the obligation (the breach); and (3) the obligor's failure to perform resulted in damages to the obligee." ⁴²⁷

300. Considering all of the evidence, and for the reasons detailed above, the Court finds that BASF has failed to prove its breach of contract claim by a preponderance of the evidence. Man clearly undertook the obligation to change the dry gas seals on the Compressor, and that contract was governed by the entire Purchase Order. Man performed its obligations under that agreement, so there was no breach of contract. Further, even if Man had breached, as detailed above, BASF has failed to prove by a preponderance of the evidence that any such failure to perform caused the damages that BASF claims. Accordingly, BASF's breach of contract claim fails.

3. Tort Liability

301. The Louisiana Supreme Court has explained:

Under Louisiana jurisprudence, most negligence cases are resolved by employing a duty/risk analysis. The determination of liability under the duty/risk analysis usually requires proof of five separate elements: (1) proof that the defendant's substandard conduct was a cause-in-fact of the plaintiff's injuries (the cause-in-fact element); (2) proof that the defendant's conduct failed to conform to the appropriate standard (the breach element); (3) proof that the defendant had a duty to conform his conduct to a specific standard (the duty element); (4) proof that the

⁴²⁶ La. Civ. Code art. 1994 (emphasis added).

⁴²⁷ Cent. Facilities Operating Co. v. Cinemark USA, Inc., 36 F. Supp. 3d 700, 712 (M.D. La. 2014) (citing Favrot v. Favrot, 2010-0986, p. 14—15 (La. App. 4 Cir. 2/9/11); 68 So. 3d 1099, 1108–09).

defendant's substandard conduct was a legal cause of the plaintiff's injuries (the scope of liability or scope of protection element); and (5) proof of actual damages (the damages element). If the plaintiff fails to prove any one element by a preponderance of the evidence, the defendant is not liable.⁴²⁸

302. The Louisiana Supreme Court has further explained the following concerning the

causation requirement:

Generally, the initial determination in the duty/risk analysis is cause-infact. Cause-in-fact usually is a "but for" inquiry, which tests whether the accident would or would not have happened but for the defendant's substandard conduct. Where there are concurrent causes of an accident, the proper inquiry is whether the conduct in question was a substantial factor in bringing about the accident. To satisfy the substantial factor test, the plaintiff must prove by a preponderance of the evidence that the defendant's conduct was a substantial factor bringing about the complained of harm. . . . Whether the defendant's conduct was a substantial factor in bringing about the harm, and, thus, a cause-in-fact of the injuries, is a factual question to be determined by the factfinder.⁴²⁹

303. Considering all of the evidence, and for the reasons detailed above, the Court

concludes that BASF has not proven by a preponderance of the evidence that Man's

alleged failure to tighten the bolts was a substantial factor in bringing about the

Compressor failure. Indeed, BASF has failed to satisfy its burden of proving by a

preponderance of the evidence that any act or omission by Man was a cause-in-fact of the

Compressor failure. BASF has not proven that, but for Man's conduct, the accident

would not have occurred. As a result, BASF cannot prevail on its tort claim.

⁴²⁸ Perkins v. Entergy Corp., 2000-1372, p. 7 (La. 3/23/01); 782 So. 2d 606, 611 (citations omitted).

⁴²⁹ *Id.* at 611—12 (citations omitted).

VI. SUMMARY

304. The Court finds that BASF and Man entered into a contract under which Man was to change the dry gas seals on its Compressor. BASF's entire five-page Purchase Order constituted that contract.

305. Even though BASF knew that the Compressor, bearing caps, and related equipment would likely be relevant evidence to future litigation, BASF knowingly failed to make such evidence available to Man. However, Man failed to prove by a preponderance of the evidence that BASF acted for the purpose of depriving Man of evidence. Accordingly, Man's spoliation claim is dismissed with prejudice, and it is entitled to no adverse presumption.

306. Nevertheless, BASF failed to prove by a preponderance of the evidence that Man breached its contract or that, even if there was a breach, Man's breach caused BASF's damages. Consequently, BASF's breach of contract claim is dismissed with prejudice. 307. Similarly, BASF has failed to prove that any act or omission of Man was a causein-fact of the failure of the Compressor. BASF has specifically failed to prove that it is more likely than not that the loose bolts caused the Compressor failure. As a result, BASF's tort claim is dismissed with prejudice.

Signed in Baton Rouge, Louisiana, on September 30, 2016.

JUDGE JOHN W. deGRAVELLES UNITED STATES DISTRICT COURT MIDDLE DISTRICT OF LOUISIANA