

enters Judgement in favor of Vigor on its cross-claim for maritime negligence, with Vigor bearing 60% of the fault for the Drydock's sinking inside the marine sanctuary and Western bearing 40%.

II. BACKGROUND AND PROCEDURAL HISTORY

A. Factual Background

Vigor owns and operates shipyards that utilize drydocks. Dkt. #75 at 3. Western owns and operates tugboats, including the OCEAN RANGER. On April 14, 2016, Vigor sold a decommissioned YFD-70 Drydock ("the Drydock") to Amaya Curiel Corporation ("Amaya Curiel"). The Drydock was a three-section steel structure constructed in 1945, with a center section running 368 feet long and 118 feet wide and two end sections each 80 feet long and 118 feet wide. With both end sections attached, the total length of the vessel was 528 feet. The YFD-70 was one of three drydocks in its class, the others being the YFD-69 and the YFD-71.

On October 4, 2016, Western and Vigor entered into an agreement ("the Tow Agreement") providing that Western tow the Drydock from Seattle to Amaya Curiel's shipyard in Ensenada, Mexico. The Tow Agreement stated that Vigor would pay a lump sum hire of \$142,800 in addition to fuel charges. *Id.* at 3-4. The Tow Agreement further stated that that "Customer [Vigor] shall pay Owner [Western] the lump sum hire identified above, which shall be fully and irrevocably earned upon commencement of services, even if the Tug, Tow and/or cargo is lost and/or the voyage is delayed, frustrated or cancelled, except to the extent loss, delay, frustration, or cancellation arises from the negligence or willful misconduct of Owner [Western]." *Id.*

The Tow Agreement required Vigor to "use due diligence to tender the [Drydock] in a seaworthy condition." *Id.* Parties agree that Vigor disclaimed any express or implied warranty of seaworthiness of the Drydock. *Id.* at 3-4. In preparation for the tow, Vigor contracted Captain Richard Shaw, a marine surveyor with Bowditch Marine, Inc., to survey the Drydock before its voyage to Ensenada. *Id.* at 4. The report prepared by Captain Shaw concluded that the intended

voyage could be safely made subject to the tow recommendations set forth in his survey.

On October 17, 2016, the tow commenced from Seattle with Western's tug OCEAN RANGER towing the Drydock. The crew of the OCEAN RANGER first reported a list in the tug's logbook on or around 2:30 PM on October 25, 2016. *Id.* The tug and Western reported the list to Vigor and to the U.S. Coast Guard. At the time, the Drydock was not within the boundaries of a marine sanctuary. By early morning of October 26, 2016, the Drydock was about .92 miles inside the border of the Monterey Bay Marine Sanctuary ("the Marine Sanctuary"), at which point the OCEAN RANGER released the Drydock and the Drydock sank.

In a letter dated January 19, 2021, the U.S. National Oceanic and Atmospheric Administration ("NOAA") advised Vigor, Western, and Amaya Curiel of their potential liability under the National Marine Sanctuaries Act ("NMSA") for damages arising from the Drydock's sinking in the Marine Sanctuary and invited them to "work cooperatively" with NOAA to complete an injury assessment, develop restoration actions, and assist with restoring injured sanctuary resources. Dkt. # 40-13 at 4. In response to NOAA's investigation, Vigor chartered a research vessel and a Remote Operated Vehicle to survey the ocean floor to confirm the location of the Drydock. Dkt. #75 at 5.

B. Procedural History

Western filed this action against Vigor on March 16, 2020, alleging breach of maritime contract to recover the \$187,462.01 Vigor owed Western for its tug services under the Tow Agreement. Dkt. #1. Western also sought a declaratory judgment that Western was not responsible for the sinking of the Drydock in the Marine Sanctuary, thereby exculpating it from liability to the United States in any forthcoming enforcement action under the NMSA. *Id.* at ¶¶ 24-26. Vigor counterclaimed for breach of maritime contract based on Western's alleged failure to render reasonable assistance in the event the Drydock became "disabled... or otherwise unable

to continue the voyage," causing Vigor to incur costs to cooperate with NOAA and creating potential liability to the United States under the NMSA. Dkt. #15 at ¶¶ 36-38. Vigor also counterclaimed for general maritime negligence based on Western's failure to exercise reasonable care in towing the sinking drydock into the Marine Sanctuary and for unjust enrichment based on the costs Vigor expended to cooperate with NOAA. *Id.* at ¶¶ 33-35, 40-45.

On June 21, 2021, this Court concluded as a matter of law that Western failed to exercise prudent seamanship by releasing the Drydock inside the Monterey Bay National Marine Sanctuary ("Marine Sanctuary"). Accordingly, the Court granted summary judgment on Western's counterclaim for maritime negligence. Dkt. #77 at 38. The Court likewise concluded that to the extent parties sought preemptive relief from liability to the United States under the National Marine Sanctuaries Act ("NMSA"), such claims were properly dismissed for lack of subject matter jurisdiction. *Id.* at 16. Furthermore, in an order on parties' post-trial briefing, the Court concluded that Vigor cannot collect from Western those costs already reimbursed by Vigor's insurers. Dkt. #108 at 10.

Between June 28 and July 7, 2021, the Court conducted a bench trial on parties' cross-claims for breach of contract under the Tow Agreement and the question of Vigor's comparative negligence with respect to the Drydock's sinking. At trial, Western presented testimony from Paul Torrey, Vigor's shipyard manager at the time parties entered into the Tow Agreement; Captain Richard Shaw, the marine surveyor of the Drydock; Robert Eske, Vigor's former operations manager; Jeffrey Slesinger, Western's safety and training director; Captain Stephen McGavock, the captain of the OCEAN RANGER; Daniel Keen, a naval architect employed by Vigor; Kiel Jacobson, the second mate on the OCEAN RANGER; John Cowgill, the chief mate on the OCEAN RANGER; Fred Pickhardt, an expert in marine weather forecasting; Bob Shrewsbury III, Western's owner; Russell Shrewsbury, Western's port captain; Dr. Patrick

Hudson, an expert in ocean engineering with respect to drydock configuration and structure, and Dr. Kriebel, an expert in ocean engineering with respect to wave conditions. Vigor Marine presented testimony from Dan Keen, Michael Naylor, an expert in drydock engineering; Rear Admiral Gilmour, an expert in tug and barge safety; Russell Johnson, an expert in maritime incident investigation; Dawn Cartwright, Vigor's vice president of human resources and risk management, and Ken Campbell, an expert in marine weather forecasting.

The Court has carefully considered the testimony of each of the witnesses, the parties' trial exhibits, the parties' proposed Findings of Fact and Conclusions of Law, and the closing arguments of counsel. The following constitutes the Court's Findings of Fact and Conclusions of Law pursuant to Fed. R. Civ. P. 52(a). The trial court is empowered to judge the credibility of the witnesses. *See Spokane Arcade, Inc. v. City of Spokane*, 75 F.3d 663, 665 (9th Cir. 1996); *Zivkovic v. S. Cal. Edison Co.*, 105 Fed. Appx. 892, 893 at n.1 (9th Cir. 2004) (citing *Anderson v. City of Bessemer City, N.C.*, 470 U.S. 564, 575 (1985)). To the extent certain findings of fact may be deemed conclusions of law, or certain conclusions of law be deemed findings of fact, they shall each be considered conclusions or findings, respectively.

III. FINDINGS OF FACT

The Court incorporates by reference the Stipulation of Facts attached to the Agreed Pretrial Order. *See* Dkt. #75. The following additional findings of fact are made by the Court and based upon a preponderance of the evidence presented at trial.

A. Structural Condition of Drydock

1. The Drydock was NAVSEA certified until 2013. Dkt. #102 at 31:6-7. NAVSEA is a government agency whose certification is required for a drydock to dock a Navy ship. Dkt. #105 at 186:11-12. To earn NAVSEA certification, continual maintenance must be performed on a drydock to ensure it is structurally sound. *Id.* at 123:1.

- 2. Vigor allowed the NAVSEA certification for the Drydock to lapse in 2013 because the Navy ships in the market for lifting were too large for the Drydock to service. Dkt. #103 at 183:8.
- 3. That same year, engineering company Heger Dry Dock, Inc. ("Heger") performed an ultrasonic gauging survey on the Drydock. The purpose of the survey was to evaluate the Drydock's condition for lifting vessels and to make repairs to assess its structural suitability for use as a commercial drydock. Dkt. #103 at 179:2-6.
- 4. Even though the Drydock's NAVSEA certification lapsed in 2013, Vigor performed ongoing maintenance and repairs on the Drydock so that it could continue to lift commercial vessels. The last commercial vessel lift was performed in late winter of 2015, during which it had a "major mechanical failure" with a "prohibitive" cost to repair. Dkt. #103 at 184:20-21; 185:1-8. Vigor's naval engineer, Dan Keen, recalled that the major mechanical failure was the pump, two reach rods, and a leaking valve. *Id.* at 185:17-18. He credibly testified that those pieces of equipment were critical for lifting ships but unrelated to the Drydock's structural integrity for towing. *Id.* at 185:22-24.
- 5. In 2015, Vigor determined that the cost of keeping the Drydock repaired was no longer economical and retired it from service. Dkt. #102 at 30:18-20. It was thereafter sold to Amaya Curiel for scrap at the price of \$10,000.
- 6. In 2016, in preparation for the Drydock's voyage to Ensenada, Vigor hired marine surveyor Captain Shaw with Bowditch Marine, LLC to inspect the Drydock and prepare a report on the Drydock's suitability for towing.
- 7. Captain Shaw prepared his survey based on a visual inspection of the Drydock. He and his assistant cumulatively spent about 30 hours on the inspection, which included physically entering about 80 of the Drydock's tanks. Dkt. #102 at 97:3; 99:10-25, 100:13-14. This statement is corroborated by the Bowditch Marine invoice to Vigor, which reports a total of 30.8 hours

billed by Captain Shaw and his assistant, Mike Simonson, for onboard visual inspection of the Drydock. Ex. A-45 at 1-2.

- 8. In preparing his survey, Captain Shaw was not provided the 2013 ultrasonic gauging survey nor was he informed about it. Dkt. #102 at 74:11-13.
- 9. Captain Shaw credibly testified that if provided the report, he "would be concerned with the condition" of the Drydock and would have conducted his survey differently. *Id.* He explained that an ultrasonic gauge reveals the actual thickness of the steel, which cannot be seen with the naked eye. Dkt. #102 at 117:1-6. Consistent with this testimony, Vigor's drydock engineering expert, Mike Naylor, testified that a visual inspection does not reveal the extent of wastage. *See* Dkt. #105 at 220:18-19 ("No one can see if there is wastage. People can see if there's scaling occurring."). He further testified that to determine the extent of corrosion, an inspector would "ideally" want to look back at the ultrasonic gauging survey. *Id.* at 207:8.
- 10. Dan Keen testified that between 2013 and 2016, Vigor performed maintenance work on the Drydock such that the 2013 ultrasonic gauging survey was outdated. He stated that this update included placing steel in "several locations." Dkt. #103 at 179:16-19. Given the vagueness of this testimony and the lack of corroborative evidence as to what specific repairs Vigor made to the Drydock since the 2013 survey, the Court is not persuaded that the 2013 ultrasonic gauging report was not useful to Captain Shaw in assessing the current condition of the Drydock. Dkt. #103 at 180:6-7.
- 11. In 2013, Heger analyzed the YFD-69, a sister drydock to the YRD-70, for a wet tow from Portland, Oregon to Seattle, Washington in the one-piece configuration. Ex. A-37 at 6. Mr. Naylor credibly testified that the YFD-69 was in "very good" condition. Dkt. #105 at 203:23-25.

- 12. Mr. Naylor also inspected a YFD-71 built at the same time as the YFD-70 Drydock: the Eureka. He credibly testified that the Eureka was in "much worse" condition than the YFD-69. *Id.* at 204:12.
- 13. The YFD-69 operated in freshwater whereas the YFD-71, like the YFD-70 Drydock, operated in saltwater. Dkt. #105 at 93:23-25; 103:20-24.
- 14. Western's maritime engineering expert, Patrick Hudson, testified that the Eureka is a better comparison to the Drydock than the YFD-69 since both the Eureka and the Drydock were kept in saltwater. Dkt. #105 at 104:21-25. However, Mr. Naylor's expert report stated that the conditions of docks could vary dramatically depending on their differing maintenance programs and environmental conditions. Ex. A-37 at 18. It is undisputed that the Drydock was maintained for NAVSEA certification until 2013, whereas there is no evidence that the Eureka maintained its NAVSEA certification for the same or a similar length of time. For that reason, the Court cannot conclude that the Drydock's condition was similar to that of the Eureka.
- 15. In preparation for the YFD-69's tow from Portland to Seattle, Vigor contracted Heger to perform a full material condition survey of the dock following Captain Shaw's inspection. Ex. A-37 at 20. The weather restrictions that Captain Shaw recommended for the YFD-69 aligned with those provided by Heger after Heger completed its engineering assessment. *Id.*
- 16. In contrast, no detailed material condition survey was performed on the YFD-70 Drydock within a year of the tow for its much longer voyage to Ensenada. *Id.* at 5. Consequently, the restrictions were not verified by structural analysis specific to the Drydock and its condition. Mr. Naylor's report further noted that Captain Shaw's survey of the Drydock "does not provide much insight to how corroded various structural members may be or ultrasonic thickness (UT) measurements of the steel plating." *Id.*

17. Mr. Naylor's report explains that it would be reasonable to assume similar restrictions

condition of the YFD-70 was generally the same as YFD-69" Ex. A-37 at 20.

18. However, Captain Shaw concluded that the YFD-69 was in *better* condition than the YFD-70. His suitability report for the YFD-70 characterized its structural condition as "fair" with

for the YFD-69 and the YFD-70 "[i]f the Marine Surveyor reached the conclusion that the

"no significant discrepancies noted," whereas his suitability report for the YFD-69 characterized its condition as "good" with "no significant discrepancies noted." *Compare* Ex. A-03 at 13 *with* Ex. 63 at 32. Captain Shaw also rated the majority of components for the YFD-70 Drydock as "very used" condition whereas the majority of components for the YFD-69 were in "used"

condition. Compare Ex. A-03 at 12 with Ex. 63 at 30. These conditions are not "generally the

same"—he found the Drydock in worse condition that the YFD-69.

19. Nevertheless, the towing restrictions that Heger and Captain Shaw imposed on the YFD-69 for its tow from Oregon to Seattle—a significant wave height of 8-feet, maximum wave height of 10 feet, and winds of 17-21 knots—were more restrictive than the towing restrictions Captain Shaw imposed on the YFD-70 for its longer tow to Ensenada. *See* Ex. A-37 at 6 (explaining tow restrictions for YFD-69 tow in 2013).

20. Mr. Naylor's report concluded that the weather restrictions set by Captain Shaw would have been acceptable. However, Mr. Naylor's report was predicated on an estimate that the Drydock had 40% pontoon deck corrosion and 15% general structural corrosion based on (1) qualitative descriptions, (2) available photographs, and (3) Heger's experience with docks of similar age that were certified in the NAVSEA maintenance program. *Id.* Those corrosion assumptions were "intended to be a representative global average," but Mr. Naylor noted that "it would not be unexpected for a dock of this age to have localized corrosion occurrences significantly exceeding the representative average." *Id.* (emphasis added). Based on this report,

the Court finds it likely that the Drydock was significantly more corroded than the corrosion assumptions made in Mr. Naylor's report. For that reason, the Court cannot adopt the conclusion set forth in the Naylor Report that the towing restrictions set by Captain Shaw were reasonable for the Drydock's condition.

21. Given that the YFD-70 was in worse condition than the YFD-69, it was not reasonable for Captain Shaw to impose less stringent towing requirements on the YFD-70 for its much longer voyage to Ensenada.

B. One-Piece Configuration of Drydock Tow

- 22. Amaya Curiel and Vigor originally contracted to transport the Drydock by heavy-lift ship along with another decommissioned drydock, the Emerald Sea. Ex. 42 at ¶ 2.1; Dkt. #102 at 26:13-20. Dan Keen and Paul Torrey credibly and consistently testified that the towing arrangement changed from the wedding cake approach to a wet tow because even if the docks were stacked at Vigor's shipyard, Amaya Curiel likely could not have unstacked the Drydock once it arrived in Ensenada due to lack of operational pumps, lack of water depth and power. *Id.* at 185:18-20.
- 23. Guidance from the U.S. Navy titled "General Information and Operating Manual" recommends towing the family of drydocks YFD-68, YFD-69, YFD-70, and YFD-71 with bow and stern sections detached and docked on the center section for towing. Dkt. #42-8 at 8 (stating that the dock "has been designed to facilitate towing at sea. When towed, the end sections are stowed on the center section."). The manual specifies that this guidance applies to open-ocean tow of the drydocks.
- 24. Captain Shaw was not informed about the Navy Manual's guidance to stack the Drydock in preparation for an open ocean tow. Dkt. #102 at 72:11-12.

25. Vigor's naval architect, Dan Keen, and Mr. Naylor both testified that whether the Drydock could safely be towed in one piece depended on whether sea state restrictions were placed on the tow. Dkt. #103 at 178:14 (Navy Manual stacked configuration was for "unrestricted" towing during wartime); Ex. A-37 at 5.

- 26. The Naylor Report explains that sea state restrictions are necessary to safely tow the Drydock in one piece because of the longitudinal strength of the Drydock's "U"-shaped hull. Sea state restrictions would ensure that wave conditions encountered by the tow would not cause bending moments, i.e. hogging and sagging, on the hull that would exceed safe limits. *Id.* at 5-6. If the dock were to experience a wave causing its ultimate stress level to be realized, the dock would be damaged and its structural capacity reduced. *Id.* at 13.
- 27. In deciding whether the Navy Manual was relevant, Captain Shaw did not distinguish between restricted and unrestricted towing. Rather, he testified that the Navy Manual's guidance to stack the Drydock was not relevant here because the voyage from Seattle to Ensenada was a "coastal" or "coastwise" voyage as opposed to an open ocean tow. Dkt. #102 at 72:11-12. He determined that the voyage was coastwise, not open-ocean, because the swells and distance from ports of refuge were "totally different" from an open-ocean tow. Dkt. #102 at 73:2-3.
- 28. Based on Mr. Naylor's credible testimony on the effect of sea state on the Drydock's longitudinal strength, the Court concludes that increased hull stress from towing the Drydock in one piece rather than in its stacked configuration was a factor that should have been considered when determining suitable sea state conditions for the one-piece tow.
- 29. Because there is no evidence that Captain Shaw considered increased hull stress from towing the Drydock in one piece as opposed to stacked, the Court cannot conclude that his towing restrictions for the Drydock's multi-day voyage to Ensenada were reasonable for the one-piece tow.

C. Vigor's Preparation of the Drydock for Wet Tow

- 30. To prepare the Drydock for wet tow, Dan Keen testified that Vigor had a crew of eight people working "over a month, maybe two" totaling around a thousand hours of work. Dkt. #103 at 190:17-21.
- 31. Dan Keen testified that this crew performed the following tasks: (1) prepared the tow brake; (2) reinstalled pad eyes; (3) installed a tow rig; (4) entered each tank and where there was a shell flood valve, they installed a steel blank; (5) for the two valves that had failed and allowed water to cross-flood compartments, they removed those valves and installed steel blanks so water could not cross through compartments; (6) installed four steel cofferdams on top of the flood valves located on the leading edge of the tow to reduce or eliminate hydrostatic pressure on those valves; (7) installed steel blanks on the inside of the tank to create triple protection for those sea chests; (8) sealed the small tanks located in the center section of the tow to create more compartmentalization and increase compartment survivability; (9) cleaned debris including environmental greases to ensure it was a contaminant-free tow; (10) removed all gear, including spares in storage on safety deck, to ensure no gear could shift or move during tow and cause damage to the hull; (11) closed and sealed doors on the safety deck; and (12) resealed all deck hatches and put down gaskets and silicone to improve the seal. Dkt. #103 at 186:14-25; 187:1-25; 188:1-2.
- 32. The Court finds credible Dan Keen's testimony that Vigor's crew undertook these measures prior to the tow.
- 33. Vigor also hired Captain Shaw to certify that the Drydock was suitable for towing. Dkt. #103 at 190:25.
- 34. After Captain Shaw and his assistant spent approximately 30 hours on their visual inspection of the Drydock, Captain Shaw prepared a trip in tow suitability survey ("the Bowditch

Report") concluding that the Drydock was suitable for tow under recommended sea state restrictions.

D. Recommended Towing Restrictions for Drydock and Western's Tow Plan

- 35. A tow plan is a guidance document prepared for the captain on a specific tow that they are about to undertake. Dkt. #102 at 140:16-21. The tow plan functions to give practical guidance to the captain, including recommendations on how to proceed with the tow. *Id.* at 141:22-24. The tow plan also incorporates input from third parties and their recommendations on certain conditions of which the captain should be aware. *Id.* at 24-25; 142:1.
- 36. The OCEAN RANGER's Captain, Stephen McGavock, credibly testified that captains do not receive tow plans for all jobs. However, they receive tow plans for a "specialty tow," meaning a tow that is "out of the ordinary." Dkt. #103 at 23:2-8. The Drydock was a specialty tow. *Id*.
- 37. Western's Director of Safety and Training, Jeff Slesinger, prepared an initial tow plan for the OCEAN RANGER based on Western's templates from prior tows. Dkt. #102 at 143:25; 144:1-2. According to Western's Safety Management System Manual ("SMS Manual"), part of the Director of Safety and Training's responsibilities include implementing safety policies, procedures, and best practices, monitoring compliance, and overseeing training and educational programs. Ex. A-41 at WT000248.
- 38. On October 6, 2016, Captain Shaw provided a draft suitability survey setting forth tow recommendations. For wave conditions, the draft Bowditch survey stated: "OCEAN RANGER shall avoid heavy seas (greater than 15 ft.) to avoid pitching or rolling" Ex. A-03 at 6. For wind conditions, the draft survey stated: "OCEAN RANGER is not to proceed from any safe port or sheltered waters during the voyage without first determining that reasonable weather conditions (less than Gale Force) are predicted along his intended track" *Id*.

39. Mr. Slesinger incorporated Captain Shaw's tow recommendations into a revised tow plan. Dkt. #102 at 169:14-15. This revised tow plan submitted to the Coast Guard stated that "the tow will depart Puget Sound upon a receipt of favorable weather forecast of seas of 15' or less." Ex. A-02 at 3. Mr. Slesinger interpreted Captain Shaw's recommendations as a "general recommendation," meaning that the tow would "do the best to our ability [to] stay within those bounds." Dkt. #103 at 8:15-17.

- 40. On October 7, 2016, the U.S. Coast Guard for Sector Puget Sound approved Western's tow plan. Ex. A-56. In this e-mail, the Coast Guard re-attached Western's tow plan and the October 6, 2016, draft Bowditch suitability survey listing the 15-foot wave limit and gale force wind limit. *Id.* at 1, 6.
- 41. Mr. Slesinger stated under cross-examination that the 15-foot limit in the tow plan was "his number" taken from previous tow plans. Dkt. #102 at 165:13. However, even if Mr. Slesinger originally listed a 15-foot restriction based on internal templates, the Coast Guard's e-mail that attached both the tow plan and the corresponding tow suitability survey confirms that the 15-foot recommendation set forth in Western's approved tow plan came from Bowditch's October 6, 2016, draft suitability survey.
- 42. Rear Admiral Gilmour credibly testified that Captain Shaw revised his 15-foot recommendation after an inquiry from Vigor's underwriter, Chris Law, from Starr Marine. Dkt. #106 at 19:25; 20:1-3. This testimony is corroborated by an October 8, 2016, e-mail from Chris Law, loss control for Starr Marine, to Captain Shaw inquiring about the 15-foot sea state limit and "below gale force" wind limit.
- 43. Chris Law's October 8, 2016, e-mail specifically asked Captain Shaw, "What is the rationale behind the 15ft sea state limit? This seems a high sea state especially given the age of the dry dock and reference to some wasted steel. Have steel thickness gaugings been taken to

compare current steel thicknesses with as built? I have concerns over strength of the dry dock against bending and racking . . . and ability of the bolted end connections to resist such in seas to 15ft." Ex. A-59 at 2.

- 44. Chris Law further recommended "limiting sea state is reduced to 8-10ft in absence of steel thickness reports, longitudinal bending strength analysis, racking analysis and stability analysis referenced below." *Id*.
- 45. Captain Shaw confirmed with Chris Law that he would revise his recommendations according to Starr Marine's recommendation: "Final Tow Recommendations will reinforce a Sea State Limit of 8-10 ft. with reasonable weather to ensure Forecast is below Gale Force." *Id.*
- 46. The e-mail from Starr Marine further inquired about the wind limits: "Has a bending strength assessment, racking and stability (including free surface) analysis been made based on assumed remaining scantling and limiting sea state conditions and also including wind heel noting reference to acceptable wind speeds being 'below gale force'. Recommend that wind speed for tow be limited to 20-25 knots due to large sail area." *Id*.
- 47. Captain Shaw responded, "Weather recommendations is reasonable to ensure forcast [sic] is below Gale Force." *Id*.
- 48. In that same e-mail, Captain Shaw did not confirm that any of the engineering assessments were undertaken in the course of developing his recommended weather restrictions. Instead, he informed Chris Law that he would "address your concerns with WESTERN Tow and provide update to include your concerns" with respect to Starr Marine's recommendation to limit acceptable sea state for towing to 8-10 ft and wind speeds to 20-25 knots. *Id*.
- 49. Mr. Slesinger credibly testified that he received a revised draft survey from Captain Shaw that changed the tow conditions to "eight to ten foot seas" and "20 to 25 knots of wind." Dkt. #103 at 6:15-16, 22. This testimony is corroborated by the undated tow plan amendment,

which lists the following wave and wind restrictions: "Ideally no more than 8-10' seas and 20-25 knots of wind." Ex. A-06 at 1.

- 50. Neither Western nor Vigor has introduced into evidence the referenced "revised draft survey" from Captain Shaw that Mr. Slesinger relied upon when preparing the tow plan amendment. Since the tow plan amendment is not dated, it is likewise unclear the precise date that Mr. Slesinger updated Western's tow plan based on Captain Shaw's revised recommendations.
- 51. Given that Mr. Slesinger went on vacation from October 15-29, Dkt. #102 at 142:14-16, the Court concludes that the tow plan amendment was prepared no later than October 14, 2016.
- 52. Captain McGavock testified that he reviewed the tow plan amendment providing for "[i]deally, no more than eight- to ten-foot seas and 20 to 25 knots of wind" before he departed Seattle the morning of October 17, 2016. Dkt. #103 at 24:1. He also testified that he was provided the tow plan and the tow plan amendment for the voyage. *Id.* at 104:10-12.
- 53. Captain McGavock credibly testified that he did not see Captain Shaw's draft or final suitability survey. *Id.* at 106:19.
- 54. Mr. Slesinger credibly testified that "[u]sually the surveyor presents that to the captain in person, has been my experience." Dkt. #103 at 7:8-9. He explained that "[e]very time we've used a warranty surveyor, that surveyor has gone down to the vessel and met in person with the captain to discuss his recommendations. . . It's transferred directly from a surveyor to the captain." *Id.* at 7:11-13, 16-17.
- 55. Although parties dispute whether Captain Shaw met Captain McGavock before the OCEAN RANGER's departure from Vigor's docks, the Court finds no dispute that Captain Shaw

never discussed his recommendations in the Bowditch Survey with Captain McGavock. Dkt, #103 at 25:19, 23.

- 56. Captain Shaw e-mailed another draft Bowditch survey to Paul Torrey and Dan Keen at 8:18 PM on October 17, 2016, approximately 12 hours after the tow left Seattle. Ex. A-70. Captain Shaw advised this was a "rough" draft report and that the final report would be submitted "soonest." *Id.* at 1.
- 57. The October 17, 2016, survey contained the following wave height and wind restrictions: "OCEAN RANGER shall avoid heavy head or beam seas (greater than 8 to 10 ft.) to avoid pitching or rolling" *Id.* at 7. It likewise revised the recommended wind conditions to read: "OCEAN RANGER is not to proceed from any safe port or sheltered waters during the voyage without first determining that reasonable weather conditions (less than Force 6) are predicted along his intended track" *Id.*
- 58. Captain Shaw's final survey is dated October 18, 2016, the day after the tow left Seattle. Ex. A-05 at 21. This final survey contained the same recommendations set forth in the October 17, 2021 rough draft: "OCEAN RANGER shall avoid heavy head or beam seas (greater than 8 to 10 ft.) to avoid pitching or rolling" and "is not to proceed from any safe port or sheltered waters during the voyage without first determining that reasonable weather conditions (less than Force 6) are predicted along his intended track" *Id*.
- 59. Considering that the earliest draft of the Bowditch Survey containing the "heavy head or beam seas" language was dated after Mr. Slesinger prepared the tow plan amendment and after the tow had left, and considering Captain McGavock's credible testimony that Captain Shaw never discussed his survey recommendations with him, Vigor has not carried its burden to show that the tow plan and its amendment drafted by Jeff Slesinger inaccurately adopted the sea state and wind recommendations communicated to Western by Captain Shaw.

E. Seaworthiness

- 60. Based on the evidence in the record, the Court reaches no conclusion on whether the Drydock could have successfully made its journey to Ensenada had the weather along the route met the limitations set forth in the Bowditch Survey. For that reason, it cannot reach a conclusion as to the Drydock's seaworthiness.
- 61. However, sufficient evidence in the record establishes that Vigor failed to exercise due diligence in tendering the Drydock in a seaworthy condition to Western, as was required under the Tow Agreement. *See* Ex. 4 at 3.
- 63. Vigor bears the burden of demonstrating that it exercised due diligence in providing a seaworthy ship. *See GTS Indus. S.A. v. S/S "Havtjeld"*, 68 F.3d 1531, 1535 (2d Cir. 1995) ("The burden of proof to show due diligence in providing a seaworthy ship is, of course, on the owner because of its superior knowledge of what diligence was used compared to the shipper, which has none.").
- 64. The Tow Agreement does not define "seaworthy," but courts have construed the term to mean "the ability of a vessel adequately to perform the particular services required of her on the voyage she undertakes." *Starr Indemintiy & Liab. Co. v. Transfair N. Am. Int'l Freight Servs.*, No. C17-697 RAJ, 2018 WL 4002541, at *4 (W.D. Wash. Aug. 22, 2018) (quoting *GTS Indus. S.A.*, 68 F.3d at 1535) (internal quotations omitted).
- 65. As part of this due diligence, Vigor was required to inform Western of "any special circumstances or conditions applicable to the Tow or cargo which may affect the performance of services" under the tow agreement. Dkt. #40-1. Accordingly, Vigor hired Captain Shaw to survey the Drydock and prepare a report setting wind and wave recommendations for the tow.
- 66. Vigor's expert witness, Mike Naylor, testified that marine surveyors are "the authority for determining if something is seaworthy or not," wherein it is "their job . . . to sign off on

suitability of tow, towing arrangements . . . things that need to be done to prepare a vessel" for its voyage. Dkt. #105 at 222:17-23.

- 66. Despite this authority, the record reflects that the 8-10 foot tow limit and 20-25 knot wind limit were generated by Vigor's underwriters—not their marine surveyor. Indeed, in response to Chris Law's inquiry as to whether steel thickness gaugings were taken to compare current steel thicknesses, Captain Shaw simply revised his recommendation to comply with the underwriter's recommended 8-10-foot sea state limit and 20-25 knots wind limit. Ex. A-59 at 2. The YFD-69, in contrast, underwent a full material condition survey by Heger in preparation for its much shorter tow from Oregon to Seattle, and weather restrictions set by Captain Shaw were subsequently verified by Heger's engineers based on their engineering assessment of the dock.
- 67. The Drydock was in worse condition than the YFD-69 and undertaking a significantly longer voyage than the YFD-69, but Vigor nevertheless provided Western with less restrictive weather conditions for the Drydock.
- 68. Hull stress from towing the Drydock in one piece rather than in its stack configuration was also a factor that should have been considered when determining suitable sea state conditions for the one-piece tow. There is no evidence that Captain Shaw conducted such an analysis when developing his tow recommendations.
- 69. These errors, taken together, do not comprise reasonable diligence by Vigor in determining the special conditions or circumstances for safe towage of the Drydock to Ensenada.
- 70. Vigor also failed to exercise reasonable diligence in communicating these restrictions to Western. Before Captain Shaw revised his recommendations to conform with the underwriter's recommendation, Western incorporated the original 15-foot sea state and gale force wind limits set forth in the draft Bowditch Survey into its tow plan. This same plan was the tow plan submitted to and approved by USCG Sector Puget Sound. At some point before Slesinger,

Western's safety director, left on vacation, Captain Shaw revised the sea state and wind

restrictions that Slesinger incorporated into the tow plan amendment. That tow plan amendment

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stated that conditions would "ideally" be no more than 8-10 foot seas and 20-25 knots wind.

71. Despite the fact that surveyors typically discuss their recommendations with the vessel captain before departure, Captain Shaw did not communicate that the 8-10 foot sea state and 20-25 knot wind limit were hard upper limits that could not be exceeded as opposed to "ideal" limits

72. As a result, Captain McGavock departed Seattle with the understanding that the "no

more than 8-10 foot seas" and "wind under 20-25 knots" were ideal conditions as opposed to hard

upper limits. This understanding was not unreasonable given the original 15-foot wave and gale

force wind restrictions issues by Captain Shaw, incorporated into Western's town plan, and

approved by USCG. Captain McGavock made several critical decisions based on his reasonable

understanding of Captain Shaw's recommendations, including whether to undertake the voyage

at that time of year and whether the forecast was sufficiently favorable to proceed from Cape

Flattery.

- 73. Captain Shaw, as a seasoned captain and marine surveyor, knew that Western was
- planning to undertake the voyage in October when the weather was highly unpredictable.

Nevertheless, he certified the tow as suitable for its intended voyage: a voyage that required no

greater than 8-10 foot wave heights and winds no greater than 20-25 knots in mid-October.

74. As corroborated by extensive testimony from Vigor's own experts, the stringent sea

state and wind conditions set forth in Captain Shaw's survey were unrealistic conditions to expect

throughout a multi-day voyage in mid-October.

75. Although Vigor attempts to place the onus on Western to reschedule the Drydock for

towing in the spring, the Tow Agreement provided that "[i]n the event that conditions do not

allow the tow to commence by November 7, *either party may reschedule* to more favorable dates in the next year." Ex. 4 at 1 (emphasis added).

- 76. Despite this provision, Vigor's marine surveyor certified the Drydock as suitable for the mid-October tow despite the fact that a reasonably prudent mariner would know that such strict conditions would likely be exceeded during that season.
- 77. Based on these deficiencies, Vigor was not reasonably prudent in informing Western of the special circumstances or conditions that would affect the tow in its voyage to Ensenada. Vigor therefore breached its duty to exercise reasonable diligence in tendering a seaworthy tow to Western.

F. Weather Forecasted and Encountered by the Tug

- 78. The estimated departure date from Seattle was originally October 7, 2021. Ex. A-08 at 2. However, Amaya Curiel requested that Vigor delay the tow by "a few days" to push the estimated arrival time from October 19 to October 23. *Id.* at 1-2. Vigor communicated the requested delay to Western, and Bob Shrewsbury replied that Western "will make it work." *Id.* at 1.
- 79. Western's tow plan amendment stated that Western would use Rich Courtney of Maritime Weather Service for weather information and course guidance. Ex. A-6 at 1.
- 80. On October 10, 2016, Western's Dan Kelley wrote Rich Courtney about whether a weather window was available for the OCEAN RANGER to begin its voyage to Ensenada with the Drydock. Kelley's e-mail specified that the tug would be towing a drydock for scrap and the surveyor wanted "a max of a 12' Head Swell." Ex. 36 at 4.
- 81. Courtney responded that there was no window for the next 96 hours and requested further information from Western on the tow restrictions for beam and following swells. *Id.* at 3.

- 82. On October 12, 2016, Western's owner, Bob Shrewsbury, responded to Courtney's email explaining the parameters detailed in the draft Bowditch Report received on October 6, 2016: "Maximum Seas of 15' is what Vigor is requiring for the trip." Ex. 36 at 2. Bob Shrewsbury credibly testified that he was not aware the restriction had changed to ten feet. He was aware of the original 15-foot limit when Mr. Slesinger talked to Captain Shaw and agreed on a tow plan, but he "didn't know that they changed it." Dkt. #104 at 195:19-20.
- 83. Given that Vigor has introduced no evidence of when Captain Shaw updated his recommendations, the Court cannot conclude that Western committed error when it advised Rich Courtney of the original 15-foot restriction rather than the revised 8-10 foot restriction.
- 84. On October 15, 2016, Rich Courtney notified Western that "[u]sing the limitations of a 12-15FT head sea/swell, the seas will subside off Cape Flattery starting Sunday. A persistent 15 FT Westerly swell holds south of the Columbia River through Monday morning. Thereafter, the swells subside along the coast to an average of 12 FT along the coast. The Sea conditions further subside to 09-10FT starting Tuesday morning." *Id.* at 1. In that same email, Courtney advised Western, "You should be able to leave anytime." *Id.*
- 85. Based on these communications between Western and Rich Courtney, the Court finds that Western satisfied its obligation to use Rich Courtney for weather information and course guidance as set forth in its tow plan.
- 86. Captain Shaw credibly testified that he was also monitoring the weather encountered by the OCEAN RANGER throughout its voyage to Ensenada. Dkt. #102 at 87:23.
- 87. The OCEAN RANGER departed Seattle with the Drydock at 8:00AM on Monday, October 17, 2016. Ex. 33 at 1. Captain McGavock testified that the tug reached Cape Flattery on the evening of October 18, 2016. Dkt. #103 at 139:13.

88. Jeff Slesinger testified that once the OCEAN RANGER rounded Cape Flattery, the points of refuge were limited, with San Francisco being "the first real opportunity as a port of refuge." Dkt. #102 at 156:13-14. Captain McGavock's testimony corroborated Mr. Slesinger's testimony, noting that the Columbia River Bar was not a realistic port of refuge from the weather for the Drydock given that handling in the bar would require "the best, perfect conditions to pull into" and "if the weather is already deteriorating to that point, then it's kind of a no-go." Dkt. #103 at 35:5-8. This testimony is credible and corroborated by Western's tow plan amendment, which noted that the safe refuges available to the tug were "limited to Columbia River bar worst case and San Francisco." Ex. A-6 at 1. Based on this evidence and testimony, the Court concludes that Cape Flattery was the tug's last realistic port of refuge before San Francisco.

- 89. Western's tow plan provided that if it became necessary to seek additional ports of refuge, those would "be discussed and mutually agreed upon between the tug master, Western Towboat, and surveyor." Ex. A-02 at 3.
- 90. Vigor's maritime weather expert, Ken Campbell, testified that Captain McGavock did not have a favorable forecast when he left Cape Flattery. Dkt. #106 at 83:15. Mr. Campbell based his conclusion on "GFS GRIB files" which is the U.S. Global Forecast model. *Id.* at 85:9-13. However, Western's weather expert, Fred Pickhardt, testified that the GFS model is a "hindcast" as opposed to a forecast, meaning it is a forecast made after the fact based on information that would have been available at the time. Dkt. #104 at 118:19-21. Based on this record, the Court cannot conclude that the weather reports Captain McGavock viewed on the evening of October 18 indicated an unfavorable forecast.
- 91. Captain McGavock credibly testified that when reaching Cape Flattery, he decided to proceed based on the information he had gathered and applying his judgment to that information. He testified that he "knew that there was going to be a little bit of a blow off of northern Oregon,

but it was flowing off the beach, so there's not much of a fetch to generate a sea state." Dkt. #103 at 40:3-7. "Fetch" refers to the distance of water over which the wind blows, thus generating waves. *Id.* at 40:17. Specifically, he testified that the forecast indicated that the wind may reach up to 30 knots. *Id.* at 42:21-25.

- 92. Captain McGavock further testified that he "knew the barge is going to be more affected, obviously, by the sea state than the wind" and, based on his past experiences and judgment, decided it would be safe to proceed. *Id.* at 40:8-12.
- 93. Captain McGavock was a full-time master since 2014 with experience towing non-barges. *Id.* at 20:3-25, 21:1-12. When considering weather forecasts for a voyage, he consults live-streamed apps such as Windy TY, Stormsurf, Wave Underground, as well as NOAA weather pictures and maps and NOAA texts. *Id.* at 106:2-5.
- 94. For the first five days of the journey, the vessel's logs reflect that the OCEAN RANGER encountered sea conditions of no greater than 8 to 10 feet. *Id.* at 1-5.
- 95. The logs likewise reflect that wind conditions remained under 25 knots except for approximately eight hours on Wednesday, October 19 when they increased up to 35 knots. The logs reports winds from the southeast and south-southeast between 25 to 30 knots from 12:15 until 2:00PM, increasing to 30 to 35 knots from 2:00PM until 4:00PM, and back down to 25 to 30 knots from 4:00PM until 10:00PM. *Id.* at 3. By 10:00PM, the logs reported winds between 20 to 25 knots. *Id.* During those eight hours, the sea state remained between 6 to 8 feet and 7 to 9 feet.
- 96. Considering Captain McGavock's testimony and the sea state and wind conditions reported in the ship's log by the OCEAN RANGER's crew, the Court finds that Captain McGavock was aware that the tow would hit wind conditions higher than 20-25 knots on October 19 when he decided to proceed from the sheltered waters of Cape Flattery.

97. The Court finds that Captain McGavock's decision to leave Cape Flattery on Tuesday, October 18, despite higher winds predicted over the next 24-48 hours, was reasonably prudent based on his experience and judgment that the Drydock would be more affected by sea state than the wind and given that the crew observed no issues with the tow over the next 48 hours.

98. On Saturday, October 22, the OCEAN RANGER's crew reported waves above the 8 to 10-foot recommended sea state for approximately six hours. The logs reported waves at 10-13 feet from 10:00AM until 12:00PM and 10-12 feet from 12:00PM until 4:00PM. Ex. 33 at 6. During this time, winds remained within the tow plan recommendations between 10 to 15 knots from the southeast and south-southeast. *Id.* The OCEAN RANGER slowed its speed to between 3.2 and 3.7 knots. *Id.*

99. Captain McGavock credibly testified that the conditions on October 22 were not in the forecast and were beyond the range of what he could have foreseen when leaving Cape Flattery on October 18. Dkt. #103 at 143:8-11. He stated that he generally trusts "up to maybe three days depending on the area, time of year, et cetera" and explained that a long period of swell without wind, like the one experienced by the OCEAN RANGER, "can come out of nowhere you can't predict some of those." Dkt. #103 at 143:19-25.

100. Captain McGavock's testimony regarding the unpredictability of weather patterns is corroborated by Vigor's weather expert, Mr. Campbell. Campbell's report states that "the reliability of a 5 day weather and routing forecast during a quickly changing and evolving weather pattern is normally quite low. Updates to the weather forecast and route may need to be done on a daily basis." Ex. A-38 at 3. His report further explains that the fall and spring "see the most volatile weather patterns," with the least stable weather occurring in the second half of October and November. *Id*.

101. The evening of October 23, the vessel logs reported winds at 30 knots from the 1 southeast from 8:00 PM until midnight. Ex. 33 at 8. 2 102. The wind continued rising into the morning of October 24, reaching 35 to 40 knots 3 by 6:00 AM. Between 2:00 AM and 12:00 PM on Monday, October 24, the wind ranged from 30 to 40 knots combined with sea states of 10-12 feet. *Id.* 5 103. The conditions that the OCEAN RANGER encountered on October 24 were extreme 6 enough to concern Captain Shaw, who had been tracking the OCEAN RANGER's progress. 7 After seeing the reported conditions, Captain Shaw e-mailed Chris Law at 12:33 PM on October 8 24 noting it was a "[s]loppy day north of San Francisco." Ex. A-71 at 3. Chris Law responded, 9 "obviously some concerns with the noted high winds in excess of the voyage recommendations – 10 what is forecast and what are the wave heights? Recommend discussing possibility to seek shelter 11 SF bay with tug Capt." *Id.* at 2. 12 104. Mr. Campbell's testimony corroborates Captain McGavock's testimony that the 13 storm that arose between October 23-24 could not have been predicted at the time Captain 14 McGavock left the last port of refuge at Cape Flattery. Mr. Campbell stated that based on the 15 data he had, "the earliest I saw it was the 20th." Id. Indeed, his report confirms that the forecast 16 for October 18, the day the OCEAN RANGER departed Cape Flattery, showed "softer 17 conditions" than what were observed on October 23 and "really good conditions were forecast" 18 for October 24 and 25, which were "completely wrong." A-38 at 3. 19 105. The Court concludes that the storm that the Drydock hit on October 24 could not 20 have been predicted by Western at the time the OCEAN RANGER departed its last port of refuge, 21 Cape Flattery, on October 18. 22 23 24

G. The Sinking

106. On October 25 at 2:30 PM, Second Mate Kiel Jacobson observed a port list. Ex. 33 at 9; Ex. A-16 at 1. The list increased and the OCEAN RANGER's crew agreed that the Drydock was taking on water. *Id.*; Ex. A-18 at 1. At that time, the tow was approximately 16 nautical miles west of North Farallon Island. *Id.*

107. Captain McGavock notified Bob and Russell Shrewsbury of the list to discuss options. *Id.* The OCEAN RANGER altered course for San Francisco Bay to seek repairs. *Id.* Western's office thereafter notified Vigor and USCG Sector San Francisco of the situation. *Id.*; Ex. 33 at 9.

108. Around 4:00 PM, Western's office communicated with USCG Sector San Francisco to determine if the Drydock could be brought into San Francisco Bay for repairs. Ex. A-72 at 1. Bob Shrewsbury informed Vigor that the next possible place for the OCEAN RANGER to seek refuge would be Monterey Bay to find a lee. *Id*.

109. Over the next few hours, the Drydock's list increased drastically. Dkt. #103 at 53:3-8. Captain McGavock determined that it was unsafe to tow the Drydock into San Francisco Bay as it would create a major navigational hazard at a main thoroughfare for vessel traffic. *Id.* at 54:12-14; Ex. A-75 at 3 (Email from Bob Shrewsbury to Dan Keen on October 25 at 6:26pm stating, "We want to have a look in the daylight to make sure we are safe to transit the San Francisco Bar Crossing. We do not want the Dock to sink where it would have to be a Major Salvage job. If it goes down in 1500 feet of [sic] the coast is one thing. But we don't want it on the Bar entrance or Harbor.").

110. Around 7:00 PM, Western decided that the tow should head for Monterey Bay due to the tow's condition. Ex. 33 at 9. Following communications between USCG Sector San

Francisco, Western, and Vigor management, USCG approved the tow to enter Monterey Bay for inspections and/or dewatering. Ex. 43 at 1. 2 111. However, with night approaching, the OCEAN RANGER decided to stay in deeper 3 water and monitor the tow during the night, then proceed into Monterey Bay in daylight. Dkt. #42-20. 5 112. At 2:00 AM on October 26, the fog lifted and the crew could see that the Drydock's 6 port wing wall was at the water's edge. Ex. A-16 at 1; Ex. A-18 at 1. Shortly thereafter, around 7 2:10 AM, the tow began to capsize rapidly. *Id.*; Ex. A-33 at 10. 8 113. Captain McGavock sounded the general alarm and released the tow. Id. He then 9 notified USCG San Francisco and Western's office. The OCEAN RANGER remained at the 10 scene until the Drydock was completely submerged at 3:05 AM. USCG cleared the OCEAN 11 RANGER to leave the scene at 3:20 AM. *Id.* 12 114. The assistance that Western rendered since the OCEAN RANGER's discovery of the 13 list around 2:30 PM was reasonable and in accordance with its obligations under the Tow 14 Agreement, which provided that "[s]hould the Tow become disabled, breakaway or be otherwise 15 unfit to continue the voyage, the Tug shall render assistance as the Master deems reasonable under 16 the circumstances, including without limitation the right to deviate to effect repairs, obtain 17 supplies, restow cargo, etc." Ex. 4 at 4. 18 115. In its incident investigation report, the Coast Guard determined that the Drydock 19 sank because of "unknown flooding that occurred onboard the vessel leading it to list and 20 eventually sink while being towed off the coast of California." Ex. A-38 at 2. However, "[i]t is 21 unknown if the flooding occurred because of some sort of damage or if material fatigue led to 22 some sort of equipment failure leading to the ingress of seawater into the hull of the vessel." *Id.* 23 24

116. Using GHS computer software to conduct a flooding analysis of the drydock, Vigor's drydock engineering expert, Mr. Naylor, determined that extensive and widespread damages to the pontoon bottom structure was required to produce the forward trim and port list conditions observed the crew to the tow. Ex. A-37 at 22. The report states, "[a]s much as 75% of the dock's ballast tanks would have to be ruptured to cause the extent of flooding required to submerge the dock. The dock would not sink unless the safety compartments in the upper portions of the wingwall were also damaged during the tow." *Id.* The Court finds Mr. Naylor's testimony credible.

117. Mr. Naylor further determined that the watertight integrity of the Drydock's submerged structure was likely compromised on October 24 and 25 due to the storm creating wave conditions that created stress levels exceeding the ultimate capacity of the structure. *Id.* This testimony is consistent with Dr. Kriebel's conclusion that the wind and sea conditions on October 24 likely generated wave lengths that matched the dock's 528-foot length, thereby creating maximum bending moments that led to flooding. Dkt. #104 at 139:15-25; 140:1-2, 23-25.

118. Considering this expert testimony, the Court concludes that the storm the Drydock encountered on October 24, 2016 and into October 25 led to the flooding that caused the Drydock's sinking. There is insufficient evidence to conclude that any weather experienced by the Drydock before October 24 led to the Drydock's sinking.

H. Damages

119. On November 4, 2016, NOAA informed Vigor of its determination that the Drydock sank .92 miles within the Monterey Bay National Marine Sanctuary ("Marine Sanctuary"). Ex. A-40 at 1.

1	120. For purposes of cooperating with NOAA to reduce the potential civil penalty, Vigor
2	and Amaya Curiel chartered a research vessel to locate the wreckage of the Drydock. Dkt. #40-
3	13 at 2; Ex. A-40. Dawn Cartwright, Vigor's Vice President for HR and Risk, credibly testified
4	that Vigor contracted its own voyage in order to mitigate costs. <i>Id.</i> at 876:6-18.
5	121. On the advice of counsel, Western declined to cooperate with NOAA. Dkt. #105 at
6	79:24-25.
7	122. Vigor worked with Polaris Applied Sciences ("Polaris") to hire a vessel and
8	remotely-operated-vehicle ("ROV") that cost \$351,980.14. Ex. A-93 at 15. Vigor also contracted
9	Eclipse Group ("Eclipse") for services related to the ROV survey. <i>Id</i> .
10	123. Although parties dispute whether the total amount expended by Vigor and its
11	insurers totaled \$415,441.67 as set forth in Vigor's trial brief or \$397,476.67 as set forth in
12	Vigor's interrogatories, the Court finds no dispute that Vigor directly paid its deductible, which
13	Ms. Cartwright credibly testified was \$100,000. Dkt. #105 at 69:25
14	124. The Court previously determined that Vigor cannot recover those sums reimbursed
15	by its insurers. Dkt. #108 at 10. For that reason, Vigor's damages incurred through cooperation
16	with NOAA total \$100,000.
17	125. The \$100,000 that Vigor expended to cooperate with NOAA are recoverable as
18	damages for future consequences of the Drydock's sinking because it is reasonably probable that
19	NOAA will issue a penalty assessment as a result of the Drydock's sinking. These damages are
20	neither speculative nor hypothetical.
21	IV. CONCLUSIONS OF LAW
22	A. Vigor's Breach of Contract for Failure to Pay Lump Sum Hire
23	1. It is undisputed that the Tow Agreement is a maritime contract. To establish breach of
	a maritime contract, a plaintiff must demonstrate "(1) the existence of an agreement (2) adequate

- 2. Under the Tow Agreement, Vigor was required to pay Western a lump sum hire of \$142,800 in addition to fuel charges. It is undisputed that Vigor failed to pay this lump sum hire.
- 3. The Tow Agreement provides that "Customer [Vigor] shall pay Owner [Western] the lump sum hire identified above, which shall be fully and irrevocably earned upon commencement of services, even if the Tug, Tow and/or cargo is lost and/or the voyage is delayed, frustrated or cancelled, except to the extent loss, delay, frustration, or cancellation arises from the negligence or willful misconduct of Owner [Western]." Id. at 3 (emphasis added). Based on this provision, Vigor argues that Western's negligence relieved Vigor of its obligation to pay the lump sum hire, given that the negligence contributed to or caused the sinking.
- 4. The elements to establish negligence under maritime law are the same as the elements of negligence under common law. *In re MS Angeln GmbH & Co. KG*, 10 F. Supp. 3d 424, 430 (S.D.N.Y. 2014). Those elements include duty of care, breach of duty, causation, and damages. *Id.* (citing *Cornfield v. Cornfield*, 156 Fed. Appx. 343, 344 (2d Cir. 2005)). In a maritime tort case, the claimant generally bears the burden of proving the elements of negligence. *Zerega Ave. Realty Corp. v. Hornbeck Offshore Transp., LLC*, 571 F.3d 206, 211 (2d Cir. 2009).
- 5. A tug has a duty to "exercise such reasonable care and maritime skill as prudent navigators employ for the performance of similar service." *Stevens v. The White City*, 285 U.S. 195, 202 (1932). "The owner of a tow is responsible for its seaworthiness, and the owner of the tug for its safe navigation." *Greger Pac. Marine, Inc. v. Oregon Offshore Towing, Inc.*, No. 3:13-

CV-00461-SI, 2014 WL 3420770, at *5 (D. Or. July 10, 2014) (quoting *Marina Mgmt. Grp., Inc.* v. *Basic Towing, Inc.*, 64 F. App'x 532, 534 (6th Cir. 2003)) (unpublished) (citation omitted).

- 6. It is undisputed that Western owed a duty to Vigor with respect to exercising reasonable care and skill to ensure the Drydock did not sink during the voyage. As determined *supra*, the Court concludes that the Drydock's sinking was caused by its exposure to the storm on October 24. There is insufficient evidence to conclude that any weather conditions before that point caused the flooding that led to the Drydock's sinking.
- 7. Captain McGavock exercised reasonable care in his navigational decisions with respect to preventing the tow from sinking. When he departed Cape Flattery on the evening of October 18, the storm that appeared on October 24 was not predicted and was outside the window of time for which the forecast was reliable. This decision adhered to Captain Shaw's recommendation to not depart from any port of refuge without a favorable forecast. For these reasons, the Court concludes that Western did not commit negligence with respect to its handling of the tow during the voyage and its decision to proceed from Cape Flattery on October 18.
- 8. However, Western committed negligence when it agreed to tow the Drydock to Ensenada in mid-October with only one realistic port of refuge after Cape Flattery. Western was aware that the Drydock was a specialty tow subject to specific sea state and wind restrictions. A reasonably prudent mariner would know that fall was a season with unpredictable marine weather, and that a captain would likely not be able to forecast severe storms more than one or two days in advance. Nevertheless, Western agreed to undertake a multi-day voyage down the Pacific coast in mid-October with only one realistic port of refuge after Cape Flattery—San Francisco—which was more than two days of sailing from Cape Flattery. As a result, it was foreseeable that the Drydock would not be able to seek refuge if an unexpected storm arrived while the tow was in between its two ports of refuge and would therefore be exposed to wind and sea state conditions

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in excess of those recommended by Captain Shaw and the tow plan. Western therefore breached its duty of prudent seamanship when it agreed to undertake the specialty tow in mid-October with only one realistic port of refuge after Cape Flattery.

- 9. Once it became apparent that the Drydock was suffering a list, the OCEAN RANGER spent hours attempting to navigate to a port of refuge. Western ultimately could not enter San Francisco because towing it over the San Francisco bar was too great a risk. After the OCEAN RANGER determined it could not proceed into San Francisco with the Drydock, it attempted to reach Monterey Bay. In the process of seeking a viable port of refuge for repairs, the Drydock sank en route. Based on these facts, the Court finds that Western's decision to undertake a specialty tow during a season with highly unpredictable weather, with only one realistic port of refuge after Cape Flattery, led in part to the Drydock being towed through the October 24 storm that caused its sinking.
- 10. Accordingly, because Western's negligence contributed to the Drydock's sinking, Western cannot recover the lump sum hire owed under the Tow Agreement.

B. Western's Breach of Contract for Failure to Render Reasonable Assistance

- 11. Vigor has counterclaimed for breach of contract based on Western's failure to render reasonable assistance in the event the Drydock became "disabled . . . or otherwise unable to continue the voyage." Dkt. #15 at ¶¶ 36-37.
- 12. Based on the factual record, the Court concludes that Western rendered reasonable assistance when the Drydock developed a list.
- 13. To the extent Vigor argues that Western breached its duty to provide reasonable assistance when it unknowingly entered the Marine Sanctuary with the sinking dock, the plain language of the Tow Agreement imposes no such requirement on Western. Rather, it only requires that Western either proceed to the nearest safe port or stand by the tow until assistance

is rendered. *See* Ex. 4 at 4. It draws no distinction between standing by the Drydock inside a marine sanctuary as opposed to outside of one.

14. Accordingly, Western did not breach the Tow Agreement for failure to render reasonable assistance to the Tow when it developed a list.

C. Vigor's Comparative Negligence in Drydock's Sinking Inside the Sanctuary

- 15. The Court previously concluded that Western's negligence led to the Drydock sinking inside the marine sanctuary when it breached its duty to navigate with cognizance of the vessel's position in relation to navigational hazards. Dkt. #77 at 37.
- 16. The Court likewise determined *supra*, ¶¶ 8-9, that Western's negligence in agreeing to undertake the specialty tow in mid-October with only one realistic port of refuge after Cape Flattery contributed to the Drydock's sinking.
- 17. However, where more than one party is at fault, the comparative negligence standard applies. *Tidewater Marine, Inc. v. Sanco Int'l, Inc.*, 113 F. Supp. 2d 987, 998 (E.D. La. 2000).
- 18. To the extent Western argues that Vigor was negligent with respect to the events between October 24 and the Drydock's sinking, it is well-established that the duty of safe navigation lay with Western—not Vigor. *Greger Pac. Marine, Inc.*, 2014 WL 3420770, at *5. At that time, control of the Drydock lay entirely in Western's hands. For that reason, the actions of Dan Keen or other Vigor personnel in calculating tank numbers and coordinating with Global Diving are inapposite to the negligence inquiry.
- 19. Nevertheless, the Court has concluded that Vigor was not diligent in tendering a seaworthy vessel to Western and therefore bears comparative fault in the Drydock's sinking.
- 20. Vigor's failure to exercise diligence in tendering a seaworthy tow contributed to the Drydock's sinking before it could reach its destination in Ensenada. By tendering the Drydock for an October tow without conducting proper due diligence on the Drydock's seaworthiness,

Vigor caused the Drydock to undertake a voyage where it would likely hit conditions in excess of weather conditions the 71-year-old Drydock could withstand. Vigor's decision therefore contributed to the Drydock's sinking when it hit the unpredicted storm on October 24.

- 21. Accordingly, Vigor bears comparative fault with respect to the Drydock's sinking, which resulted in Vigor incurring \$100,000 of damages as a result of the dock sinking inside the Marine Sanctuary.
- 22. Notwithstanding Western's negligence in voyage planning and Captain McGavock's negligence navigating into the Marine Sanctuary at the time the tow was sinking, Vigor's comparative negligence saddled Western with a nearly impossible task: managing an unwieldy, 528-foot drydock that a reasonably prudent owner would not have certified as suitable for tow during that time of year and without appropriate pre-tow analyses to determine its suitability.
- 23. In light of these considerations, the Court limits Vigor's recovery by 60% to account for its contribution of fault. Western owes Vigor \$40,000 in damages of the \$100,000 Vigor sustained as a result of the Drydock's sinking inside the Marine Sanctuary.
- 24. The court awards prejudgment interest to run from the date of the incident, October 25, 2016, at the rate provided in 28 U.S.C. § 1961(a) for calculating post-judgment interest. See *Western Pac. Fisheries, Inc. v. SS President Grant*, 730 F.2d 1280, 1288 (9th Cir. 1984) ("It is well-established that compensatory damages in maritime cases normally include prejudgment interest.")

V. DECISION OF THE COURT

Based on the foregoing findings of fact and conclusions of law, the Court ORDERS as follows:

1	(1) Defendant-Counterclaim Plaintiff Vigor Marine, LLC shall recover \$40,000.00 in
2	damages, plus pre-judgment interest to run from October 25, 2016 until the date of this Order,
3	and post-judgment interest to run from the date of this order until paid in full;
4	(2) Defendant-Counterclaim Plaintiff Vigor Marine, LLC shall submit a proposed
5	judgment to the Court on or before December 30, 2021, consistent with the above findings of fact
6	and conclusions of law.
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8	DATED this 16 th day of December, 2021.
9	BITTED this to day of December, 2021.
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12	RICARDO S. MARTINEZ CHIEF UNITED STATES DISTRICT JUDGE
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