

United States Department of the Interior

BUREAU OF OCEAN ENERGY MANAGEMENT

Gulf of Mexico OCS Region 1201 Elmwood Park Boulevard New Orleans, LA 70123-2394

In Reply Refer To: GM 235D November 25, 2020

Mr. H. Daniel Hogan Werrus AquaMarine, LLC One City Centre 1021 Main Street, Suite 1960 Houston, Texas 77002

Dear Mr. Hogan,

Reference is made to the following plan:

Control No. S-8027

Type Supplemental Exploration Plan

Received September 17, 2020, amended October 5, 2020 Lease(s) OCS-G 36520, Block 295, Main Pass Area (MP)

You are hereby notified that the approval of the subject plan has been granted as of November 25, 2020, in accordance with 30 CFR 550.233(b)(1).

This approval includes the activities proposed for Well B.

In accordance with 30 CFR 556.901(d), additional security may be required for your proposed activities. Prior to conducting activities in which you need to obtain approvals and/or permits described in 30 CFR 550.281(a) from the appropriate District Manager or BSEE Regional Supervisor, you must contact BOEM Risk Management Operations Group by email at boemrmog@boem.gov to determine if additional security is required and comply with any demand for this security.

In response to the request accompanying your plan for a hydrogen sulfide (H_2S) classification, the area in which the proposed drilling operations are to be conducted is hereby classified, in accordance with 30 CFR 250.490(c), as " H_2S absent."

Exercise caution while drilling due to indications of shallow gas and faulting.

You must comply with the following species protective measures in all activities conducted pursuant to the plan:

• COMPLIANCE WITH BIOLOGICAL OPINION TERMS AND CONDITIONS AND REASONABLE AND PRUDENT MEASURES: This approval is conditioned upon compliance with the Reasonable and Prudent Measures and implementing Terms and Conditions of the Biological Opinion issued by the National Marine Fisheries Service (NMFS) on March 13, 2020. This includes mitigation, particularly any appendices to

Terms and Conditions applicable to the plan, as well as record-keeping and reporting sufficient to allow BOEM and BSEE to comply with reporting and monitoring requirements under the Biological Opinion; and any additional reporting required by BOEM or BSEE developed as a result of Biological Opinion implementation. The NMFS Biological Opinion may be found here:

https://www.fisheries.noaa.gov/resource/document/biological-opinion-federally-regulated-oil-and-gas-program-activities-gulf-mexico. The Appendices and protocols may be found here: https://www.fisheries.noaa.gov/resource/document/appendices-biological-opinion-federally-regulated-oil-and-gas-program-gulf-mexico.

- SUPPORT BASES AND VESSEL TRANSIT ROUTES: Approval of your plan is
 conditioned upon your use of the support bases and vessel transit routes as described in
 your plan. BOEM/BSEE must be notified at least 15 days prior to any vessel route
 changes that require transit of the Bryde's Whale area, and you must receive prior
 approval for that transit from BOEM/BSEE.
- MARINE TRASH AND DEBRIS AWARENESS AND ELIMINATION: The applicant will follow the guidance provided under Appendix B. Gulf of Mexico Marine Trash and Debris Awareness and Elimination Survey Protocols found in the Biological Opinion issued by the NMFS on March 13, 2020. The guidance can be accessed on the National Oceanic and Atmospheric Administration (NOAA) Fisheries internet site at https://www.fisheries.noaa.gov/resource/document/appendices-biological-opinion-federally-regulated-oil-and-gas-program-gulf-mexico.
- VESSEL-STRIKE AVOIDANCE/REPORTING: The applicant will follow the guidance provided under Appendix C. Gulf of Mexico Vessel Strike Avoidance and Injured/Dead Aquatic Protected Species Reporting Protocols found in the Biological Opinion issued by the NMFS on March 13, 2020. The guidance can be accessed on the NOAA Fisheries internet site at https://www.fisheries.noaa.gov/resource/document/appendices-biological-opinion-federally-regulated-oil-and-gas-program-gulf-mexico.
- SEISMIC SURVEY OPERATION, MONITORING, AND REPORTING GUIDELINES: The applicant will follow the guidance provided under Appendix A. Seismic Survey Mitigation and Protected Species Observer Protocols found in the Biological Opinion issued by the NMFS on March 13, 2020. The guidance can be accessed on the NOAA Fisheries internet site at https://www.fisheries.noaa.gov/resource/document/appendices-biological-opinion-federally-regulated-oil-and-gas-program-gulf-mexico.
- **SEA TURTLE RESUSCITATION GUIDELINES**: The applicant will follow the guidance provided under Appendix J. Sea Turtle Handling and Resuscitation Guidelines found in the Biological Opinion issued by the NMFS on March 13, 2020. The guidance can be accessed on the NOAA Fisheries internet site at https://www.fisheries.noaa.gov/resource/document/appendices-biological-opinion-federally-regulated-oil-and-gas-program-gulf-mexico.

In addition to the measures proposed above and in your plan, the following additional measures are require after consultation with NMFS to ensure compliance with the Biological Opinion:

- Establish an Exclusion Zone of 157-m and Monitoring Zone of 500-m. Monitoring by a dedicated observer, which would have no other tasks, must take place from 30 minutes prior to initiation of pile driving activity through 30 minutes post-completion of pile driving activity.
- Initiate and conduct pile driving only during daylight hours, as practicable. Use lights to monitor the exclusion zone during times when visibility is limited due to dark, rain, fog, etc.
- Use soft start techniques when initiating pile driving. Soft start requires the operator to provide an initial set of strikes at reduced energy, followed by a thirty-second waiting period, then two subsequent reduced energy strike sets. A soft start must be implemented at the start of each day's pile driving and at any time following cessation of impact pile driving for a period of 30 minutes or longer.
- Delay pile driving if an Endangered Species Act (ESA) listed species is observed
 entering or within the Exclusion Zone within 30 minutes prior to commencement of pile
 driving. If a delay is called for based on an ESA listed species entering or within the
 Exclusion Zone, pile driving may not commence until either the animal has voluntarily
 left and been visually confirmed beyond the Exclusion Zone or 30 minutes have elapsed
 without subsequent detection.
- Shut down pile driving if an ESA listed species is observed entering or within the Exclusion Zone while pile driving is underway, except when shutdown would jeopardize human safety or the stability of the pile being driven. Pile driving may not commence following shutdown until either the animal has voluntarily left and been visually confirmed beyond the Exclusion Zone or 30 minutes have elapsed without subsequent detection.
- In advance of the pile driving activity, the designated, dedicated observers shall provide an email and/or resume package describing qualifications to BSEE at protectedspecies@bsee.gov and NMFS at nmfs.psoreview@noaa.gov for approval in the observer role. Qualifications shall include background experience, training and/or education appropriate for fulfilling the role as an observer of ESA listed species.
- Specifics of the pile driving activity and reasoning for why a shutdown could not occur should be communicated to the observer and reported in the post activity report sent to BSEE and NMFS.
- Report any observations of ESA listed species and report any mitigation actions that were
 undertaken in response to observations of ESA listed species (i.e., postponing ramp up or
 shutting down due to presence of ESA listed species in the exclusion zone) to BOEM at
 protectedspecies@boem.gov and to NMFS at nmfs.psoreview@noaa.gov after operations
 have ceased.
- SLACK-LINE PRECAUTIONS: If operations require the use of flexible, small diameter (< 2 inch) lines to support operations (with or without divers), operators/contractors must reduce the slack in the lines, to the extent practicable, to prevent accidental entanglement of protected species (i.e., species protected under the ESA and/or Marine Minerals Protection Act (MMPA)). This may include tether lines attached to remotely operated equipment. The requirements below must be followed for any activities entailing use of flexible, small diameter lines that will not remain

continuously taut, except under circumstances when complying with these requirements would put the safety of divers, crew or the vessel at risk:

- Operators must utilize tensioning tools and/or other appropriate procedures to reduce unnecessary looseness in the lines and/or potential looping.
- The lines must remain taut, as long as additional safety risks are not created by this action.
- A line tender must be present at all times during dive operations and must monitor the line(s) the entire time a diver is in the water.
- Should the line tender and/or diver become aware of an entanglement of an individual protected species, the reporting requirements described below must be followed as soon as safety permits.

Should an ESA listed species interaction resulting in entanglement, entrapment and/or injury occur, the interaction must be reported immediately or after diver safety (if present) is ensured.

• REPORTING REQUIREMENTS:

Review of your proposed activities identified potential entanglement and/or entrapment risk(s) to protected species (i.e., species protected under the ESA and/or MMPA). Procedures and measures for reporting are dependent upon the situation and must be followed only in cases where they do not jeopardize human safety. These general requirements replace those specific to dead and injured species reporting in respective sections of Appendix A as they relate to geophysical surveys and Appendix C of the 2020 Biological Opinion on the Bureau of Ocean Energy Management's Oil and Gas Program Activities in the Gulf of Mexico.

Incidents Requiring **Immediate** Reporting

Should any of the following occur at any time, **immediate reporting** of the incident is required after personnel and/or diver safety is ensured:

- Entanglement or entrapment of a protected species (i.e., an animal is entangled in a line or cannot or does not leave a moon pool of its own volition).
- Injury of a protected species (e.g., the animal appears injured or lethargic).
- Interaction, or contact with equipment by a protected species.
- Any observation of a leatherback sea turtle within a moon pool (regardless of whether it
 appears injured, or an interaction with equipment or entanglement/entrapment is
 observed).

As soon as personnel and/or diver safety is ensured, report the incident to NMFS by contacting the appropriate expert for 24-hr response, until contact is made. Contact information for reporting is as follows:

- **Marine mammals**: contact Southeast Region's Marine Mammal Stranding Hotline at 1-877-433-8299.
- **Sea turtles**: contact Brian Stacy, Veterinary Medical Officer at (352) 283-3370. If unable to reach Brian Stacy, contact Lyndsey Howell at (301) 301-3061. This includes the immediate reporting of any observation of a leatherback sea turtle within a moon pool.

• Other protected species (e.g., giant manta ray, oceanic whitetip shark, or Gulf sturgeon): contact the ESA Section 7 biologist at (301) 427-8413 (nmfs.psoreview@noaa.gov) and report all incidents to takereport.nmfsser@noaa.gov.

Minimum reporting information is described below:

- 1. Time, date, water depth, and location (latitude/longitude) of the first discovery of the animal;
- 2. Name, type, and call sign of the vessel in which the event occurred;
- 3. Equipment being utilized at time of observation;
- 4. Species identification (if known) or description of the animal involved;
- 5. Approximate size of animal;
- 6. Condition of the animal during the event and any observed injury/behavior;
- 7. Photographs or video footage of the animal, only if able; and
- 8. General narrative and timeline describing the events that took place.

After the appropriate contact(s) have been made for guidance/assistance, you may contact BSEE at protectedspecies@bsee.gov (24 hours/day) for questions or additional guidance on recovery assistance needs (if still required) and continued monitoring requirements. Minimum post-incident reporting includes all information described above (1 through 8) in addition to the following:

- 1. NMFS liaison or stranding hotline that was contacted for assistance;
- 2. For moon pool observations or interactions;
- 3. Size and location of moon pool within vessel (e.g., hull door or no hull door);
- 4. Whether activities in the moon pool were halted or changed upon observation of the animal; and
- 5. Whether the animal remains in the pool at the time of the report, or if not, the time/date the animal was last observed.

These measures are designed to promote environmental protection, consistent environmental policy, compliance with environmental laws, and safety.

If you have any questions or comments concerning this approval, please contact Nicole Martinez at (504) 736-2971.

Sincerely,

for Bernadette Thomas Regional Supervisor Office of Leasing and Plans