



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

June 11, 2020

Ms. Sue Sachitana
LLOG Exploration Offshore, L.L.C.
1001 Ochsner Boulevard
Suite 200
Covington, Louisiana 70433

Dear Ms. Sachitana,

Reference is made to the following plan:

Control No.	N-10100
Type	Initial Exploration Plan
Received	January 7, 2020, amended January 28 and 29, February 10, and April 28, 2020
Lease(s)	OCS-G 34904, Block 634, Mississippi Canyon Area (MC)

You are hereby notified that the approval of the subject plan has been granted as of June 11, 2020, in accordance with 30 CFR 550.233(b)(1).

This approval includes the activities proposed for Subsea Wells A, A Alt, B, and B Alt.

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 boermog@boem.gov to determine if additional security is required and comply with any demand for this security.

The projected NO_x emissions amounts in your plan were calculated using historic fuel consumption rates. Maintain monthly records of the total annual fuel consumption for the drillship Discover with a limit of 1,479,000 gallons/year and provide the information to the BOEM Regional Supervisor, Office of Leasing and Plans, Plans Section (GM 235D) annually by February 1st of each year, beginning in the year 2021. If no activities were conducted during a calendar year, provide a statement to that effect in lieu of the required records. If at any time during your activities these records indicate that your NO_x annual emissions may exceed the annual limit approved in your plan or the total annual fuel consumption limit, you must immediately prepare a revised plan pursuant to 30 CFR 550.283 to include the recalculated emissions amounts. You will not proceed with the actions that could cause the potential annual increase in emissions until the revised plan has been submitted to and approved by BOEM.

In response to the request accompanying your plan for a hydrogen sulfide (H₂S) 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 "H₂S absent."

Exercise caution while drilling due to indications of shallow gas and possible water flow.

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 (BiOp) 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 BiOp; and any additional reporting required by BOEM or BSEE developed as a result of BiOp implementation. The NMFS BiOp 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 BiOp issued by 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 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 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 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>.
- **MOON POOL MONITORING AND REPORTING:** A moon pool has been identified during review of your plan submittal. If any sea turtle or other marine mammal is detected, you are required to contact NMFS at <mailto:nmfs.psoreview@noaa.gov> and BSEE at <mailto:protectedspecies@bsee.gov> within 24 hours for additional guidance and incidental report information.

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

You will also employ the following protective measures:

- Prior to movement of the vessel and/or deployment and retrieval of equipment, the moon pool must be monitored continuously by a dedicated observer with no other tasks, to ensure no Endangered Species Act (ESA) listed species are present in the moon pool. Monitoring time depends on moon pool size as follows: large moon pools (i.e., greater than 45 feet in length on any side or a diameter greater than 40 feet for circular pools) should be monitored for at least 30 minutes prior to activity; medium moon pools (i.e., 20 feet to 45 feet in length on any side or 20 to 40 feet in diameter for circular pools) should be monitored for at least 20 minutes prior to activity; small moon pools (i.e., smaller than 20 feet in length on any side or 20 feet or less in diameter for circular pools) should be monitored for at least 10 minutes prior to activity. If visibility is limited in the moon pool due to turbidity or low light, 30 minutes of monitoring is required regardless of moon pool size.
- Equipment should be deployed and retrieved at a slow enough rate to ensure that any potential for interaction with an undetected ESA listed species would not cause harm.
- If the moon pool has hull doors that can be closed, then the moon pool must be monitored continuously prior to and following closure by a dedicated crew observer with no other tasks to ensure that no ESA listed species are contained within the moon pool prior to transit. Monitoring time should be based on moon pool size as described above. If visibility is limited in the moon pool due to turbidity or low light, 30 minutes of monitoring are required regardless of moon pool size.
- If the moon pool has hull doors that can be closed, the operator should attempt to keep hull doors closed at all times when no activity is occurring within the moon pool, unless the safety of crew or vessel require otherwise.

In addition, in the event of an ESA listed species entering the moon pool, the following measures should be taken:

- Any interaction with equipment or entanglement/entrapment of any ESA listed species (i.e., the animal cannot or does not leave the pool of its own volition) must be reported immediately. For assistance with marine mammals and sea turtles contact the stranding network listed at www.fisheries.noaa.gov/report and call BSEE at 985-722-7902 for additional guidance on continued monitoring requirements, recovery assistance needs (if required), and incidental report information. Other ESA listed species (e.g., giant manta ray) should be reported to relevant state agency wildlife lines, the ESA Section 7 biologist, and BSEE at 985-722-7902.
- Any observation of a leatherback turtle (regardless of whether interaction with equipment or entanglement/entrapment is observed) must be reported immediately, using the contact information above.
- The vessel should not be moved, and equipment should not be deployed or retrieved to/from the pool, to the extent practicable, until NMFS and BSEE are contacted and provide input on how to proceed.
- Any ESA listed species observed within a moon pool that then leaves the moon pool of its own volition should be reported within 24 hours to NMFS at nmfs.psoreview@noaa.gov and BSEE at protectedspecies@bsee.gov.
- If the observed animal is no longer observed in the moon pool, monitoring should take place for at least 30 minutes to ensure it has left the moon pool. After 30 minutes, activities may commence.

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