

**UNITED STATES DEPARTMENT
OF THE INTERIOR
BUREAU OF OCEAN ENERGY MANAGEMENT**

(Insert Appropriate Regional Office)

**PERMIT FOR GEOLOGICAL EXPLORATION
FOR MINERAL RESOURCES OR SCIENTIFIC RESEARCH
ON THE OUTER CONTINENTAL SHELF**

In consideration of the terms and conditions contained herein and the authorization granted hereby, this permit is entered into by and between the United States of America (the Government), acting through the Bureau of Ocean Energy Management (BOEM) of the Department of the Interior, and

(Name of Permittee)

(Number and Street)

(City, State, and Zip Code)

PERMIT NUMBER: _____ **DATE:** _____

This permit is issued pursuant to the authority of the Outer Continental Shelf Lands Act, as amended, (43 U.S.C. 1331 *et seq.*), hereinafter called the "Act," and Title 30 Code of Federal Regulations Part 551 (Geological and Geophysical (G&G) Explorations of the Outer Continental Shelf).

Paperwork Reduction Act of 1995 (PRA) Statement: This permit refers to information collection requirements contained in 30 CFR Parts 551 and 251 regulations. The Office of Management and Budget (OMB) has approved those reporting requirements under OMB Control Number 1010-0048.

Section I. Authorization

The Government authorizes the permittee to conduct:

_____ Geological exploration for mineral resources by means other than a deep stratigraphic test, as defined in 30 CFR 551.1. This activity utilizes geological and geochemical techniques, including, but not limited to, gas sniffing, various bottom sampling methods, and shallow test drilling.

_____ Geological scientific research by means other than a deep stratigraphic test, as defined in 30 CFR 551.1. This activity involves drilling and gathering of geological data and information for scientific research purposes, including, but not limited to, shallow test drilling.

_____ Geological exploration for mineral resources or scientific research by means of a deep stratigraphic test, as defined in 30 CFR 551.1, or developing data and information for proprietary use or sale.

This permit authorizes the permittee to conduct the above geological activity during the period from _____ to _____ in the following area(s):

The permittee shall not conduct any geological operation outside of the permitted area specified here in. Extensions of the time period specified above must be requested in writing. A permit plus extensions for activities other than a deep stratigraphic test will be limited to a period of not more than **1 year** from the original specified issuance date of the permit. The duration of a permit for a deep stratigraphic test must be controlled in accordance with 30 CFR 551.7. Group participation in test drilling activities, bonds, inspection and reporting of geological exploration activities, suspension and cancellation of authority to conduct exploration or scientific research activities under permit and penalties, and appeals must be carried out in accordance with 30 CFR 551.7, 551.8, 551.9, and 551.10.

The authority of the Regional Director may be delegated to the appropriate Regional Supervisor for the purposes of this permit.

Section II. Type(s) of Operations and Technique(s)

A. The permittee will employ the following type(s) of operations:

_____ ;

and will utilize the following instruments and/or technique(s) in such operations:

_____ .

B. The permittee will conduct all activities in compliance with the terms and conditions of this permit, including the " Stipulations," "Environmental Protective Provisions," and the approved "Application for Permit, which are attached to and incorporated into this permit. Any additional mitigations will be included in the permit cover letter.

C. The permittee will conduct all geological exploration or scientific research activities in compliance with the Act, the regulations in 30 CFR Parts 551 and 251, and other applicable

statutes and regulations whether such statutes and regulations are enacted, promulgated, issued, or amended before or after this permit is issued. Some of the provisions of 30 CFR Parts 551 and 251 are restated in this permit for emphasis. However, all of the provisions of 30 CFR Parts 551 and 251 apply to this permit.

Section III. Reports on Operations

A. Status Reports

1. In the Gulf of Mexico and Atlantic OCS Regions:

The permittee must submit status reports every **two months** in a manner approved or prescribed by the Regional Supervisor, Resource Evaluation (here after, except in Section V wherein Supervisor refers to the Regional Supervisor for Operations, referred to as Supervisor). The report must include a map of appropriate scale showing sampling locations, protraction areas, blocks, and block numbers (if map scale permits). The map should be a cumulative update for each status report and clearly distinguish between planned sampling locations (one color) and those locations in which samples have already been collected (a second color). The map should be submitted in digital format, preferably as a GeoPDF.

2. In the Alaska and Pacific OCS Regions:

The permittee must submit status reports on a **weekly basis**, beginning when the permittee enters the permit area in a manner approved or prescribed by the Regional Supervisor, Resource Evaluation (here after, except in Section V wherein Supervisor refers to the Regional Supervisor, Leasing and Plans, referred to as Supervisor). The report must include a map of appropriate scale showing sampling locations, OCS blocks with OCS block numbers (if map scale permits), and the OCS boundary or other important boundaries as specified. The map should be a cumulative update for each status report and clearly distinguish between planned sampling locations (one color) and those locations in which samples have already been collected (a second color). The map should be submitted in digital format, preferably as a PDF and an ESRI file – gdb-feature class(s) or shape files of the weekly data collection. All maps must be submitted in NAD 83.

B. The permittee must submit to the Supervisor a Final Report within **30 days after the completion of operations. The Final Report must contain the following:**

1. In the Gulf of Mexico and Atlantic OCS Regions:

- i. A *brief* description of the work performed including number of samples acquired as well as coring, drilling, and sampling methods including depth of penetration;
- ii. A *brief* daily log of operations. A suggested format for the daily log of operations would include, but is not limited to, a table that provides a date column and an operations column. Preferably, the date column would commence on the date in which the vessel begins to transit to the permitted area and end on the date in which the vessel either transits away from the permitted area or when operations pertinent to the permitted activity ceases. The corresponding operations column would contain a brief description of the operations for each day listed in the date column noting activities such major work stoppages, and other pertinent activities. This may be submitted as a digital Word document or as an Excel spreadsheet;

- iii. A PDF or, preferably a GeoPDF or shape file depicting the areas and blocks in which any exploration or scientific research activities were conducted. These graphics must clearly indicate the location of the activities so that the data produced from the activities can be accurately located and identified;
- iv. The start and finish dates on which the actual geological exploration or scientific research activities were performed;
- v. A narrative summary of any: (a) hydrocarbon slick or environmental hazards observed and (b) adverse effects of the geological exploration or scientific research activities on the environment, aquatic life, archaeological resources, or other uses of the area in which the activities were conducted;
- vi. The estimated date on which the processed or analyzed data or information will be available for inspection by BOEM;
- vii. A CD or DVD containing all of the data or sample locations in latitude/longitude degrees (and/or x,y coordinates). The data should also be submitted as an ESRI shapefile(s) illustrating the location of all Geological data collection;
- viii. Identification of geocentric ellipsoid (NAD 27 or NAD 83) used as a reference for the data or sample locations; and
- ix. Such other descriptions of the activities conducted as may be specified by the Supervisor.

2. In the Alaska and Pacific OCS Regions:

- i. A *brief* description of the work performed including number of samples acquired as well as coring, drilling, and sampling methods including depth of penetration;
- ii. A *brief* summary of operations that provides, but is not limited to, the name of the survey, the date, the number of samples collected each day, and a discussion of any operational or environmental issues that occurred (e.g., major work stoppages, no data acquired, safety incidents, protected species mitigation actions, and other pertinent activities). Provide the date for the start of operations and the end date when operations pertinent to the permitted activity are completed.
- iii. A PDF map(s) and a geodatabase file(s) or shape file(s) depicting the areas and OCS blocks and OCS boundary/3-mile limit in which any exploration or scientific research activities were conducted. These graphics must clearly indicate the location of the activities so that the data produced from the activities can be accurately located and identified;
- iv. The start and finish dates on which the actual geological exploration or scientific research activities were performed;
- v. A narrative summary of any: (a) hydrocarbon slicks or environmental hazards observed, and (b) adverse effects of the geological exploration or scientific research activities on the environment, aquatic life, archaeological resources, or other uses of the area in which the activities were conducted;

- vi. The estimated date on which the processed or analyzed data or information will be available for inspection by BOEM;
- vii. A CD or DVD of a *single*, final edited navigational data file, coded in ASCII, containing all of the data or sample locations in latitude/longitude degrees (and/or x, y coordinates). The data should also be submitted as an ESRI file – gdb-feature class(s) or shape file(s) illustrating the location of all Geological data collection.
- viii. Identification of geocentric ellipsoid, which in the Alaska and Pacific Regions must be NAD 83, used as a reference for the data or sample locations; and
- ix. Such other descriptions of the activities conducted as may be specified by the Supervisor.

Section IV. Permit or Notice Requirements for Shallow Test Drilling

Before any shallow test drilling begins for exploration for mineral resources or for scientific research, the Supervisor may require for permits, or recommend for notices, the gathering and submission of geophysical data and information sufficient to determine shallow structural detail across and in the vicinity of the proposed test. Data and information may include, but are not limited to, seismic, bathymetric, side-scan sonar, and magnetometer systems, across and in the vicinity of the proposed test. When required, 30 CFR 551.7(a) will apply to permits issued for shallow test drilling. All Outer Continental Shelf (OCS) regulations relating to drilling operations in 30 CFR Part 550 and 250 apply, as appropriate, to drilling activities authorized under this section.

Section V. Permit Requirements for a Deep Stratigraphic Test

- A. No deep stratigraphic test drilling activities may be initiated or conducted until a Drilling Plan is submitted to the Regional Supervisor, Leasing and Plans; in the Pacific, submit to the BOEM Regional Director; and an Application for Permit to Drill is submitted by the applicant and approved by the BSEE Regional Director (BSEE-RD); in Alaska, submit to the BSEE Alaska Regional Director; in the Pacific, submit to the BSEE Pacific Regional Director. The Drilling Plan must include:
 - 1. The proposed type of sequence of drilling activities to be undertaken together with a timetable for their performance from commencement to completion;
 - 2. A description of the drilling rig proposed for use, unless a description has been previously submitted to the Supervisor, indicating the important features thereof, with special attention to safety features and pollution prevention and control features, including oil spill containment and cleanup plans and onshore disposal procedures;
 - 3. The location of deep stratigraphic test to be conducted, including the surface and projected bottomhole location of the borehole;
 - 4. The types of geological and geophysical instrumentation to be used for site surveys;
 - 5. Geophysical data and information sufficient to evaluate seafloor characteristics, shallow geologic and man-made hazards, and structural detail across and in the vicinity of the proposed test to the total depth of the proposed test well. Data and information from side-

scan sonar and magnetometer surveys must be submitted as required, at the option of the Supervisor; and

6. Such other relevant data and information as the Supervisor may require.
- B. At the same time the applicant submits a Drilling Plan to the Supervisor, an Environmental Report must be submitted. The report must be in summary form and should include information available at the time the related Drilling Plan is submitted. Data and information that are site-specific, or that are developed subsequent to the most recent Environmental Impact Statement or other environmental analyses in the immediate area, must be specifically considered. The applicant must summarize and provide references for data, information, and issues specific to the site of drilling activity in the related plan, and in other environmental reports, analyses, and impact statements prepared for the geographic area. Any material based on proprietary data, which is not itself available for inspection, should not be referenced. The Environmental Report must include the following:
1. (a) A list and description of new or unusual technologies that are to be used, (b) the location of travel routes for supplies and personnel and a description of all vessels to be used, (c) the kinds and approximate levels of energy sources to be used, (d) the environmental monitoring systems that are to be used, and (e) suitable maps and diagrams showing details of the proposed project layout;
 2. A narrative description of the existing environment. This section must include the following information on the area: (a) geology, (b) physical oceanography, (c) other uses of the area, (d) flora and fauna, (e) existing environmental monitoring systems, and (f) other unusual or unique characteristics that may affect or be affected by the drilling activities;
 3. A narrative description of the probable impacts of the proposed action on the environment and the measures proposed for mitigating these impacts;
 4. A narrative description of any unavoidable or irreversible adverse effects on the environment that could be expected to occur as a result of the proposed action; and
 5. Such other relevant data and information as the Supervisor may require.
- C. Any revisions to an approved Drilling Plan must be approved by the Supervisor.
- D. All OCS regulations relating to drilling operations in 30 CFR Parts 550 and 250 apply, as appropriate, to drilling activities authorized under this Permit.
- E. At the completion of the test activities, the borehole of all deep stratigraphic tests must be permanently plugged and abandoned by the permittee before moving the rig off location in accordance with the requirements of the regulations in 30 CFR Parts 550 and 250.

Section VI. Submission, Inspection, and Selection of Geological Data and Information

- A. The permittee must notify the Supervisor, in writing, when the permittee has completed the initial analysis, processing, or interpretation of any geological data and information collected under an exploration permit or a scientific research permit that involves developing data and information for proprietary use or sale. If the Supervisor asks if the permittee has further analyzed, processed, or interpreted any geological data and information collected under a permit, the permittee must

respond within 30 days. If the data or information are further analyzed or reprocessed, it is the responsibility of the permittee to keep the most current resulting products available in the event the Supervisor requests the current status of data analysis or processing. At any time within 10 years after receiving notification of the completion of the acquisition activities conducted under the permit, the Supervisor may request that the permittee submit for inspection and possible retention all or part of the geological data, analyzed geological information, processed geological information, and interpreted geological information.

B. In the event that a third party obtains geological data, analyzed geological information, processed geological information, or interpreted geological information from a permittee or from another third party by sale, trade, license agreement, or other means:

1. The third party recipient of the data and information assumes the obligations under this section, except for notification of initial analysis, processing, and interpretation of the data and information, and is subject to the penalty provisions of 30 CFR Part 550, Subpart N;
2. A permittee or third party that sells, trades, licenses, or otherwise provides the data and information must advise the recipient, in writing, that accepting these obligations is a condition precedent of the sale, trade, license, or other agreement; and
3. Except for license agreements, a permittee or third party that sells, trades, or otherwise provides data and information to a third party, must advise the Supervisor in writing within 30 days of the sale, trade, or other agreement, including the identity of the recipient of the data and information; or
4. With regard to license agreements, a permittee or third party that licenses data and information to a third party, within 30 days of a request by the Supervisor, must advise the Supervisor, in writing, of the license agreement, including the identity of the recipient of the data and information.

C. Each submission of geological data, analyzed geological information, processed geological information, and interpreted geological information must contain, unless otherwise specified by the Supervisor, the following:

1. An accurate and complete record of geological (including geochemical) data, analyzed geological information, processed geological information, and interpreted geological information resulting from each operation;
2. Paleontological reports identifying microscopic fossils by depth, and/or washed samples of drill cuttings normally maintained by the permittee for paleontological determination and are made available upon request by the Supervisor. In addition, any other samples or cores requested by the Supervisor are made available on request;
3. Copies of well logs and charts: one paper copy, one copy on a reproducible stable base, and copies of composite digital well logs on magnetic tape or other suitable medium in a format approved by the Supervisor;
4. Data and results obtained from formation fluid test;
5. Analyses of core or bottom samples or a representative cut or split of the core or bottom sample;

6. Detailed descriptions of any hydrocarbons or hazardous conditions encountered during operations, including near losses of well-control, abnormal geopressure, and losses of circulation; and
7. Such other geological data, analyzed geological information, processed geological information, and interpreted geological information as may be specified by the Supervisor.

Section VII. Reimbursement to Permittees

- A. After the delivery of geological data, analyzed geological information, processed geological information, and interpreted geological information requested by the Supervisor in accordance with subsection VI of this permit, and upon receipt of a request for reimbursement and a determination by BOEM that the requested reimbursement is proper, BOEM will reimburse the permittee or third party for the reasonable costs of reproducing the submitted data and information at the permittee's or third party's lowest rate or at the lowest commercial rate established in the area, whichever is less.
- B. The permittee or third party will not be reimbursed for the costs of acquiring, analyzing, or interpreting geological information.

Section VIII. Disclosure of Data and Information to the Public

- A. BOEM will make data and information submitted by a permittee available in accordance with the requirements and subject to the limitations of the Freedom of Information Act (5 U.S.C. 552) and the implementing regulations (43 CFR Part 2), the requirements of the Act, and the regulations contained in 30 CFR Parts 550 and 250 (Oil and Gas and Sulphur Operations in the Outer Continental Shelf), 30 CFR Part 551, and 30 CFR Part 552 (Outer Continental Shelf (OCS) Oil and Gas Information Program).
- B. Except as specified in this section, or Section X of this form, or in 30 CFR Parts 550, 551 552, and 250, no data or information determined by BOEM to be exempt from public disclosure under subsection A of this section will be provided to any affected State or be made available to the executive of any affected local government or to the public unless the permittee or third party and all persons to whom such permittee has sold, traded, or licensed the data or information under promise of confidentiality agree to such an action.
- C. Geological data, analyzed geological information, processed geological information, and interpreted geological information submitted under a permit, and retained by BOEM will be disclosed as follows:
 1. The Director, BOEM, will immediately issue a public announcement when any significant hydrocarbon occurrences are detected or environmental hazards are encountered on unleased lands during drilling operations. In the case of significant hydrocarbon occurrences, the Director will announce such occurrences in a form and manner that will further the national interest without unduly damaging the competitive position of those conducting the drilling. Other data and information pertaining to the permit will be released as indicated under 30 CFR 551.14.
 2. BOEM will make available to the public all processed geological data, analyzed geological information, processed geological information, and interpreted geological

information (except geological data, analyzed geological information, processed geological information, and interpreted geological information obtained from drilling a deep stratigraphic test) 10 years after the date of issuance of the permit under which the data and information were obtained (30 CFR 551.14); and

3. BOEM will make available to the public all geological data and information related to a deep stratigraphic test at the earlier of the following times: (a) 25 years after the completion of the test, or (b) for a lease sale held after the test well is completed, 60 calendar days after the Department of the Interior executes the first lease for a block, any part of which is within 50 geographic miles (92.6 kilometers) of the site of the completed test.
- D. All other information submitted as a requirement of 30 CFR 551.8 and determined by BOEM to be exempt from public disclosure will be considered as "PROPRIETARY." Such data and information will not be made available to the public without the consent of the permittee for a period of 10 years from the date of issuance of the permit; unless the Director, BOEM, determines that earlier release is necessary for the proper development of the area permitted. The executed permit will be considered as "NONPROPRIETARY" and will be available to the public upon request and also on BOEM's website.
- E. The identities of third party recipients of data and information collected under a permit will be kept confidential. The identities will not be released unless the permittee and the third parties agree to the disclosure.

Section IX. Disclosure to Independent Contractors

BOEM reserves the right to disclose any data or information acquired from a permittee to an independent contractor or agent for the purpose of reproducing, analyzing, processing, or interpreting such data or information. When practicable, BOEM will advise the permittee who provided the data or information of intent to disclose the data or information to an independent contractor or agent. BOEM notice of intent will afford the permittee a period of not less than 5 working days within which to comment on the intended action. When BOEM so advises a permittee of the intent to disclose data or information to an independent contractor or agent, all other owners of such data or information will be deemed to have been notified of BOEM's intent. Prior to any such disclosure, the contractor or agent will be required to execute a written commitment not to sell, trade, license, or disclose any data or information to anyone without the express consent of BOEM.

Section X. Sharing of Information with Affected States

- A. At the time of soliciting nominations for the leasing of lands within 3 geographic miles of the seaward boundary of any coastal State, BOEM, pursuant to the provisions of 30 CFR 552.7 and subsections 8(g) and 26(e) of the Act (43 U.S.C. 1337(g) and 1352(e)), will provide the Governor of the State (or the Governor's designated representative) the following information that has been acquired by the Supervisor on such lands proposed to be offered for leasing:
1. All information on the geographical, geological, and ecological characteristics of the areas and regions proposed to be offered for leasing;
 2. An estimate of the oil and gas reserves in the area proposed for leasing; and

3. An identification of any field, geological structure, or trap located within 3 miles of the seaward boundary of the State.
- B. After the time of receipt of nominations for any area of the OCS within 3 geographic miles of the seaward boundary of any coastal State and Area Identification in accordance with the provisions of Subparts D and E of 30 CFR Part 556, BOEM, in consultation with the Governor of the State (or the Governor's designated representative), will determine whether any tracts being given further consideration for leasing may contain one or more oil or gas reservoirs underlying both the OCS and lands subject to the jurisdiction of the State.
 - C. At any time prior to a sale, information acquired by BOEM that pertains to the identification of potential and/or proven common hydrocarbon-bearing areas within 3 geographic miles of the seaward boundary of any such State will be shared, upon request by the Governor and pursuant to the provisions of 30 CFR 552.7 and subsections 8(g) and 26(e) of the Act, with the Governor of such State (or the Governor's designated representative).
 - D. Knowledge obtained by a State official who receives information under subsections A, B, and C of this section will be subject to the requirements and limitations of the Act, the regulations contained in 30 CFR Parts 550, 551, 552, and 250.

Section XI. Fishermen's Contingency Fund

For deep stratigraphic test drilling activities as described under Section V of this permit, the permittee must meet the requirements of establishing an account with the Fishermen's Contingency Fund for the drilling activities area pursuant to Title IV [Subsection 402(b)] of the Act and pay assessment as required in 50 CFR 296.3 (Chapter 11 - National Marine Fisheries Service; Subchapter J - Continental Shelf). The amount of the assessment is specified by the Secretary of Commerce, collected by the Director, BOEM, and deposited in the fund to be appropriate account.

Section XII. Permit Modifications

The Department will have the right at any time to modify or amend any provisions of this permit, except that the Department will not have such right with respect to the provisions of Sections VIII, IX, and X hereof, unless required by an Act of Congress.

IN WITNESS WHEREOF the parties have executed this permit and it will be effective as of the date of signature by the Supervisor.

PERMITTEE:

THE UNITED STATES OF AMERICA:

(Signature of Permittee)

(Signature of Regional Supervisor)

(Type or Print Name of Permittee)

(Type or Print Name of Regional Supervisor)

(Title)

(Date)

(Date)