



United States Department of the Interior

BUREAU OF OCEAN ENERGY MANAGEMENT

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

In Reply Refer To: MS GM 881A

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

JUL 15 2016

NEOS Geosolutions Inc.
Attention: Mr. Carl Kincheloe
6210 Stoneridge Mall Road, Suite 450
Pleasanton, CA 94588

Dear Mr. Kincheloe:

Your application received December 21, 2015, requests a Federal permit to conduct geophysical operations in the area specified on the map accompanying the application. CGG will conduct the multi-client Airborne Gravity Gradient and Magnetic operations for NEOS Geosolutions on the U.S. Atlantic OCS.

A permit designated OCS Permit E15-002, is hereby granted to conduct geophysical exploration operations on the OCS in the area and manner described in the application subject to the enclosed Permit for Geophysical Exploration for Mineral Resources on the OCS, this letter, and the enclosed Standard Stipulations. **Before starting acquisition, you are required to notify BOEM of your survey start date. BOEM must also be advised of the end date immediately upon survey completion.** In reference to Mitigation 1, BOEM must receive verification that all co-pilots have completed the NMFS-approved Marine Species Awareness Training (MSAT) prior to commencement of operations.

Note: Prior to approval of a permit extension request, BOEM must also receive a certification from DOD and NASA that coordination between the permittee and each of these agencies is satisfactory.

Our National Environmental Policy Act (NEPA) review of the subject action is complete and results in a Finding of No Significant Impact (FONSI). This FONSI is conditioned on adherence to the conditions of approval that ensure environmental protection, consistent environmental policy, and safety as required by NEPA, as amended, and is valid only insofar as the conditions are met in the attached NEPA Review.

If you have any questions, please call Teree Campbell at (504) 736-3231 (teree.campbell@boem.gov) or the Office of Resource Evaluation, Data Acquisition and Special Projects Unit at (504) 736-2455 (GGPermitsGOMR@boem.gov).

Sincerely,

for Matthew G. Wilson
Regional Supervisor
Gulf of Mexico Region
Office of Resource Evaluation

Enclosure

UNITED STATES GOVERNMENT
MEMORANDUM

May 10, 2016

To: Chief, Resource Studies, Resource Evaluation, GOM OCS Region (MS GM881A)

Through: Supervisor, Data Acquisition and Special Project Unit, Resource Studies Section, Resource Evaluation, GOM OCS Region (MS GM881A)

From: Unit Supervisor, Environmental Operations Section, Office of Environment, GOM OCS Region (MS GM633B)

Subject: National Environmental Policy Act Review of NEOS GeoSolutions Inc.'s Geophysical and Geological Exploration Application Number E15-002

Our National Environmental Policy Act (NEPA) review of the subject action is complete and results in a Finding of No Significant Impact (FONSI). This FONSI is conditioned on adherence to the following conditions of approval that ensure environmental protection, consistent environmental policy, and safety as required by NEPA, as amended, and is valid only insofar as the following conditions are met:

Conditions of Approval

1. **PROTECTED SPECIES OBSERVER:** There shall be one Protected Species Observer (PSO) sitting in the forward co-pilot position that will interact with the pilot to monitor and advise on potentially sensitive marine mammal and sea turtle occurrences at sea. PSO and pilots shall complete the NMFS-approved Marine Species Awareness Training (MSAT) by viewing the U.S. Navy MSAT digital versatile disk (DVD). Verification of the training shall be made available to BOEM and/or BSEE upon request.
2. **INJURED/DEAD – PROTECTED SPECIES REPORTING:** Data on protected species observations must be recorded by the protected species observer using standard marine mammal observer data protocols. In the event that an operator discovers an injured, dead, or entangled marine mammal or sea turtle, the sighting and associated data (time, date, location) need to be reported within 24 hours of the discovery. Photographs, video footage, or other documentation of the stranded animal sighting should be sent to BOEM at GGpermitsGOM@boem.gov and BSEE at protectedspecies@bsee.gov. The final Biological Opinion for the *Programmatic Environmental Impact Statement for Geological and Geophysical Activities in the Mid- and South Atlantic Planning Areas* (<http://www.boem.gov/Final-Biological-Opinion-19-July-2013/>) discusses the form of protected species observer reports. Please direct any questions or correspondence pertaining to these requirements to protectedspecies@bsee.gov.
3. **GUIDANCE FOR AIRCRAFT AVOIDANCE:** The permittee and/or operator will abide by aircraft avoidance measures for all aircraft surveys as specified below:
 - The permittee and/or operator must ensure that all aircraft maintain a vigilant watch for marine mammals, sea turtles, and other protected species in order to avoid harassment.
 - For marine mammals, sea turtles, and other protected species in the water, the aircraft shall deviate from the survey to avoid over-flights. The permittee and/or operator shall avoid over-flights by a minimum of 200 meters (656 feet) lateral distance and an altitude of 200 meters (656 feet) above sea level (ASL).
 - The permittee and/or operator must ensure that aircraft operators are briefed to ensure they are familiar with the above requirements.
4. **ADDITIONAL AIRCRAFT CONDITIONS:** For the proposed Airborne Gravity Gradient and Magnetic Survey the following conditions of approval are required:
 - Operations shall be limited to daylight hours, in conditions of good visibility.

- During transit, all aircraft shall travel at a minimum of 1,000 feet (305 meters) ASL, provided weather and aircraft safety considerations permit.
- A 400 feet (122 meters) minimum flight altitude is required during survey activities.
- Thorough pre-flight briefings among the observer crew and/or pilots shall be conducted to discuss sensitive areas, such as any Dynamic Management Areas (DMA) and Seasonal Management Areas (SMA), and marine mammal and sea turtle species that could be encountered during the day's survey work. See 50 CFR 224.105 for specific locations of SMAs. Current DMAs can be found on Interactive North Atlantic Right Whale Sightings Map at <http://www.nefsc.noaa.gov/psb/surveys/>.
- Maintain video footage of all survey flights.

PERRY J. BOUDREAU

cc: 102-01a, ENV 5-4b (MS GM633A)
Public Information (MS GM217G)
Environmental Operations Section File – E15-002

(Rev. 06/2015; ATL)

Standard Stipulations

In performance of any operations under the Permit and Agreement for Outer Continental Shelf Geophysical or Geological Exploration for Mineral Resources or Scientific Research, the Permittee shall comply with the following Stipulations:

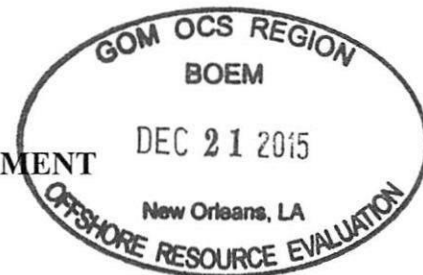
1. Any serious accident, personal injury, or loss of property shall be immediately reported to the Regional Supervisor.
2. In compliance with Section III-B(6) of this permit, digital navigation data shall be recorded on suitable storage media in SEG-P1 or UKOOA P1-90 or other current, industry standard format coded in ASCII. This data shall be provided to BOEM with the permit Final Report.
3. As part of the requirements of 30 CFR 551.8(c) regarding status reports, before starting acquisition, you are required to notify BOEM of your survey start date. BOEM must also be advised of the end date immediately upon survey completion.
4. The final report is due within 30 days after the completion of operations as specified by Section III B of this permit.

PUBLIC

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF OCEAN ENERGY MANAGEMENT

Atlantic OCS Region

(Insert Appropriate Regional Office)



PERMIT FOR GEOPHYSICAL 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

NEOS GeoSolutions Inc.

(Name of Permittee)

6210 Stoneridge Mall Road, Suite 450

(Number and Street)

Pleasanton, California 94588 USA

(City, State, and Zip Code)

PERMIT NUMBER: E15-002

DATE: 21-Dec-2015

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 Parts 551 (Geological and Geophysical (G&G) Explorations of the Outer Continental Shelf). The permittee must 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. The permittee must conduct all geophysical 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. The permittee should note particularly that G&G activities may cause incidental "taking" of animals under the Marine Mammal Protection Act (16 U.S.C. 1361 *et seq.*) or the Endangered Species Act (16 U.S.C. § 1531 *et seq.*). Any such incidental taking is not authorized by this permit, and it may only be authorized by the National Marine Fisheries Service or the U.S. Fish and Wildlife Service. The permittee should contact these two agencies to address any questions about these laws or requirements.

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:

Geophysical exploration for mineral resources as defined in 30 CFR 551.1.

Geophysical scientific research as defined in 30 CFR 551.1. A permit is required for any geophysical investigation that involves the use of solid or liquid explosives or developing data and information for proprietary use or sale.

This permit authorizes the permittee to conduct the above geophysical activity during the period from 15-July-2016 to 15-Sep-2016 in the following area(s):

See attached map

The permittee shall not conduct any geophysical operation (i.e., active sound source(s)) outside of the permitted area specified herein even if no data is collected or obtained from such operations. Geophysical operations shall not be conducted "in-transit" to the permitted area and may only proceed once the survey vessel enters the permitted area. (This restriction does not apply to Alaska.)

Extensions of the time period specified above must be requested in writing. A permit plus extensions for activities will be limited to a period of not more than 1 year from the original issuance date of the permit. Inspection and reporting of geophysical exploration activities, suspension and cancellation of authority to conduct exploration or scientific research activities under permit, and penalties and appeals will be carried out in accordance with 30 CFR 551.8, 551.9, and 551.10.

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

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

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

Collection of passive geophysical data using fixed wing aircraft; and

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

Gravity Gradient and Magnetic instruments.
Aircraft will fly a grid pattern at an altitude of approximate 400-600 feet with a line spacing of 1-2 km

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 referred to as Supervisor). The report must include a map of appropriate scale showing traverse lines, protraction areas, blocks, and block numbers (if map scale permits). The map should be a cumulative update for each status report and clearly illustrate the planned traverse lines (one color) and the portion of those traverse lines in which data acquisition has been completed to date (a second color). Please indicate the cumulative total line miles (2D) or blocks (3D) of data acquired. 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 **weekly** in a manner approved or prescribed by the Regional Supervisor, Resource Evaluation (here after referred to as Supervisor). The report must include a map of appropriate scale showing the location and extent of acquired lines of 2D data or traverse lines for 3D data and the 3-mile limit when data collection is adjacent to the OCS boundary or other important boundaries as specified by BOEM. The map should be a cumulative update for each status report and clearly illustrate the planned lines (one color) and the portion of those lines in which data acquisition has been completed to date (a second color). The report must show the activity of the source vessel (i.e., no seismic activity, time and location when a mitigation gun is on, ramp-up, and full acquisition mode). Protected Species Observer (PSO) reports must also be included. Please indicate the cumulative total line miles (2D) or square miles (3D) of data acquired. The map should be submitted in digital format as a PDF and ESRI file – gdb-feature class(s) or shape files.

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. The total number of 2D line miles or OCS blocks of geophysical data acquired as well as the “typical” or average sail miles per block for the survey;
- 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 the name of the survey, a date column, a column for number of line miles or blocks collected each day, 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 are completed. The corresponding operations column would contain a *brief* description of the operations for each day listed in the date column noting activities such as the major work stoppages, no data acquired, 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 indicating the areal extent of the data *actually acquired*;

- iv. The start and finish dates on which the actual geophysical 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 geophysical 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 interpreted data or information will be available for inspection by BOEM;
- vii. A CD or DVD containing a *single*, final edited navigational data file. Shot point locations should be provided in both latitude/longitude degrees and in x, y coordinates. The single navigational file should be in either SEG-P1 or UKOOA P190 format for either two-dimensional or three-dimensional geophysical data. Two-dimensional data should be decimated to the first, last, and every tenth shot point. Three-dimensional data should be decimated at every line and first and last CDP. A single ESRI shape file containing navigational data and one shape file with post-plot locations of any geophysical equipment on the seafloor (i.e., ocean bottom nodes, CSEM, etc.) should also be submitted if applicable;
- 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. The total number of 2D line miles or square miles for 3D surveys and the number of OCS blocks of geophysical data acquired, as well as total number of traverse miles for the survey;
- ii. *A weekly report.*
- iii. Chart(s), map(s), or plat(s) 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 geophysical exploration or scientific research activities were performed;
- v. A narrative summary of any: (a) hydrocarbon slicks or environmental hazards observed, (b) adverse effects of the geophysical exploration or scientific research activities on the environment, aquatic life, archaeological resources, or other uses of the area in which the activities were conducted, and (c) safety incidents;
- vi. The estimated date on which the processed or interpreted data or information will be available for inspection by BOEM;
- vii. A final edited navigation file on suitable storage medium of all data or sample locations in latitude/longitude degrees including datum used. The navigation for 2D lines should include line name and location for the first, last, and every tenth SP. For 3D surveys, please submit a

navigation file for the acquired track lines that includes the location of the first and last SP and/or the corner locations for the area acquired. Contact the G&G permitting office for the specific navigation required for this permitted activity. The digital file is to be formatted in standard SEG-P1, UKOOA P1-90 or other current, standard industry format, coded in ASCII. A printed data listing and a format statement are to be included;

- viii. Identification of geocentric ellipsoid (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.

- C. The Final Report is a stand-alone document containing all the pertinent information regarding the permit.

Section IV. Submission, Inspection, and Selection of Geophysical Data and Information

- A. The permittee must notify the Supervisor, in writing, when the permittee has completed the initial processing and interpretation of any geophysical 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 processed or interpreted any geophysical data and information collected under a permit, the permittee must respond within 30 days. If further processing of the data and information is conducted, 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 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 geophysical data, processed geophysical information, and interpreted geophysical information.
- B. The Supervisor will have the right to inspect and select the geophysical data, processed geophysical information, or interpreted geophysical information. This inspection will be performed on the permittee's premises unless the Supervisor requests that the permittee submit the data or information to the Supervisor for inspection. Such submission must be within 30 days following the receipt of the Supervisor's request unless the Supervisor authorizes a later delivery date. If the inspection is done on the permittee's premises, the permittee must submit the geophysical data or information selected within 30 days following receipt of the Supervisor's request, unless the Supervisor authorizes a longer period of time for delivery. The data or information requested for inspection or selected by the Supervisor must be submitted regardless of whether the permittee and the Government have or have not concluded an agreement for reimbursement. If the Supervisor decides to retain all or a portion of the geophysical data or information, the Supervisor will notify the permittee, in writing, of this decision.
- C. In the event that a third party obtains geophysical data, processed geophysical information, or interpreted geophysical 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 processing and interpretation of the data and information and is subject to the penalty provisions of 30 CFR Part 550, Subpart N; and

2. A permittee or third party that sells, trades, licenses, or otherwise provides the data and information to a third party 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.
- D. Each submission of geophysical data, processed geophysical information, and interpreted geophysical information must contain, unless otherwise specified by the Supervisor, the following:
1. An accurate and complete record of each geophysical survey conducted under the permit, including digital navigational data and final location maps of all surveys;
 2. All seismic data developed under a permit presented in a format and of a quality suitable for processing;
 3. Processed geophysical information derived from seismic data with extraneous signals and interference removed, presented in a format and of a quality suitable for interpretive evaluation, reflecting state-of-the-art processing techniques; and
 4. Other geophysical data, processed geophysical information, and interpreted geophysical information obtained from, but not limited to, shallow and deep subbottom profiles, bathymetry, side-scan sonar, gravity, magnetic, and electrical surveys, and special studies such as refraction, shear wave, and velocity surveys.

Section V. Reimbursement to Permittees

- A. After the delivery of geophysical data, processed geophysical information, and interpreted geophysical information requested by the Supervisor in accordance with subsection IV 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. If the processing was in a form and manner other than that used in the normal conduct of the permittee's business at BOEM's request, BOEM will reimburse the permittee or third party for the reasonable costs of processing or reprocessing such data. Requests for reimbursement must identify processing costs separate from acquisition costs.
- C. The permittee or third party will not be reimbursed for the costs of acquiring or interpreting geophysical information.
- D. Data and information required under section IV.D.1. of this permit are not considered to be geophysical data or processed geophysical information and must be provided by the permittee at no cost to the Government.

Section VI. 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 Parts 551 and 251, and 30 CFR Parts 552 and 252 (Outer Continental Shelf (OCS) Oil and Gas Information Program).
- B. Except as specified in this section, or Section VIII, or in 30 CFR Parts 550, 552, 250, and 252, no data or information determined by BOEM or the Bureau of Safety and Environmental Enforcement 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. Geophysical data and processed or interpreted geophysical information submitted under a permit, and retained by BOEM, will be disclosed as follows:
 - 1. Except for deep stratigraphic tests, BOEM will make available to the public geophysical data 50 years after the date of issuance of the permit under which the data were collected (see 30 CFR 551.12 (a) (b) (c) and (d)).
 - 2. Except for deep stratigraphic tests, BOEM will make available to the public processed geophysical information and interpreted geophysical information 25 years after the date of issuance of the permit under which the original data were collected (see 30 CFR 551.12(a), (b), (c) and (d)).
 - 3. BOEM will make available to the public all geophysical data and information and geophysical interpretations 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 line-specific preplot or postplot plot(s), and navigation tapes, including but not limited to seismic survey traverses and shotpoint locations, submitted as a requirement of 30 CFR 551.7, 551.12, or 251.7, will be considered as "PROPRIETARY INFORMATION." Such information will not be made available to the public without the consent of the permittee for a period of 25 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.
- E. 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 up to 25 years from the date of issuance of the permit as addressed in 30 CFR 551.14, 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 "PROPRIETARY" except the public information copy, which will be available to the public upon request and on BOEM's website.
- F. 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 VII. 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, processing, reprocessing, 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's 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 VIII. 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 Parts 552.7 and 252.7 and subsections 8(g) and 26(e) (43 U.S.C. 1337(g) and 1352(e)) of the Act, will provide the Governor of the State (or the Governor's designated representative) the following information that has been acquired by BOEM 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 Parts 552.7 and 252.7 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 and the regulations contained in 30 CFR Parts 550, 551, 552, 250, 251, and 252.

Section IX. 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 VI, VII, and VIII 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

Joseph Carl Kincheloe III
(Signature of Permittee)

Joseph Carl Kincheloe III
(Type or Print Name of Permittee)

Director, Business Development
(Title)

7/14/2016
(Date)

THE UNITED STATES OF AMERICA:

Angela Gaubert
for (Signature of Regional Supervisor)

Angela Gaubert
(Type or Print Name of Regional Supervisor)

7/15/16
(Date)

Standard Stipulations

In performance of any operations under the Permit and Agreement for Outer Continental Shelf Geophysical or Geological Exploration for Mineral Resources or Scientific Research, the Permittee shall comply with the following Stipulations:

1. As part of the requirements of 30 CFR 551.6(a), if any operation under this Permit and Agreement is to be conducted in a leased area, the Permittee shall take all necessary precautions to avoid interference with operations on the lease and damage of existing structures and facilities. The lessee (or operator) of the leased area will be notified, in writing, before the Permittee enters the leased area, or commences operations, and a copy of the notification will be sent to the Regional Supervisor executing this Permit and Agreement.
2.
 - (a) Solid or liquid explosives shall not be used, except pursuant to written authorization from the Regional Supervisor. Requests of the use of such explosives must be in writing, giving the size of charges to be used, the depth at which they are to be detonated, and the specific precautionary methods proposed for the protection of fish, oysters, shrimp, and other natural resources. The use of explosives represents a may affect situation under Section 7 of the Endangered Species Act of 1973, as amended.
 - (b) The following provisions are made applicable when geophysical exploration on the Outer Continental Shelf using explosives is approved:
 - (i) Each explosive charge will be permanently identified by markings so that unexploded charges may be positively traced to the Permittee and to the specific field party of the Permittee responsible for the explosive charge.

- (ii) The placing of explosive charges on the seafloor is prohibited. No explosive charges shall be detonated nearer to the seafloor than five (5) feet (1.52 meters) .
 - (iii) No explosive shall be discharged within 1,000 feet (304.8 meters) of any boat not involved in the survey.
- 3. Any serious accident, personal injury, or loss of property shall be immediately reported to the Regional Supervisor.
- 4. All pipes, buoys, and other markers used in connection with seismic work shall be properly flagged and lighted according to the navigation rules of the U.S. Corps of Engineers and the U.S. Coast Guard .
- 5. In compliance with Section III- B(6) of this permit, digital navigation data shall be recorded on tape or other suitable storage media for seismic reflection surveys. The navigation data shall be in a format according to SEG P1 (Morgan, J.G. , et al, 1983, SEG Standard Exchange Formats for Positional Data, Society of Exploration Geophysicists, Special Report) . For 2-dimensional seismic events, a geographic location shall be reported for every shot point, irrespective of SEG P1 specifications. For 3-dimensional surveys, the first and last binned and centered locations for each line only shall be reported in SEG P1 format. Suitable media include, but are not limited to, CD-ROM coded in ASCII . All formatting are to be in accordance with Exchange Format for Postplot Location Data presented in Notice to Permittees dated August 14,1990 .
- 6. In addition to the Stipulations above, the Environmental Protective Measures attached hereto shall apply.

STANDARD ENVIRONMENTAL PROTECTIVE MEASURES

1. Comply with the provisions of NTL No. 2012-JOINT-G02, Implementation of Seismic Survey Mitigation Measures and Protected Species Observer Program, effective January 1, 2012 (see the BOEM website at: <http://www.boem.gov/Regulations/Notices-To-Lessees/2012/2012-JOINT-G02-pdf.aspx>).

2. Comply with the provisions of NTL No. 2012-BSEE-G01, Marine Trash and Debris Awareness and Elimination, effective January 1, 2012 (see the BOEM website at: <http://www.bsee.gov/Regulations-and-Guidance/Notices-to-Lessees/2012/2012-BSEE-G01-pdf.aspx>).

3. Comply with the provisions of NTL No. 2012-JOINT-G01, Vessel Strike Avoidance and Injured/Dead Protected Species Reporting, effective January 1, 2012 (see the BOEM website at: <http://www.boem.gov/Regulations/Notices-To-Lessees/2012/2012-JOINT-G01-pdf.aspx>).

4. Man-made structure(s) such as pipeline(s) or other potential hazard(s) may be located in the permitted work area; therefore, prior to performing operations that involve bottom surface disturbance (e.g., coring), take precautions in accordance with Notice to Lessees and Operators No. 2008-G05, Section VI.B. (see the BOEM website at: <http://www.boem.gov/Regulations/Notices-To-Lessees/2008/08-g05.aspx>)

5. If you conduct activities that could disturb the seafloor in an Ordnance Dumping Area (see the BOEM website at: at <http://www.boem.gov/Environmental-Stewardship/Environmental-Studies/Gulf-of-Mexico-Region/OrdnanceDumpingAreas.aspx> for a map), exercise caution, since this area might contain old ordnance, including unexploded shells and depth charges, dumped before 1970. In addition, the U.S. Air Force has released an undeterminable amount of unexploded ordnance in Water Test Areas 1 through 5 (most of the Eastern Planning Area of the GOM).

6. If you discover any site, structure, or object of potential archaeological significance (i.e., cannot be definitively identified as modern debris or refuse) while conducting operations, the provisions of 30 CFR 250.194(c) and NTL 2005-G07 require you to immediately halt operations within 1,000 feet of the area of discovery and report this discovery to the Regional Supervisor of Leasing and Environment (RSLE) within 48 hours. Every reasonable effort must be taken to preserve the archaeological resource from damage until the RSLE has told you how to protect it.

10/29/2012

7. If you conduct activities within a military warning or water test area (see the BOEM website at: http://www.boem.gov/Environmental-Stewardship/Environmental-Studies/Gulf-of-Mexico-Region/MWA_boundaries-pdf.aspx for a map), or if the associated boat or aircraft traffic will traverse a military warning or water test area, contact the commander(s) of the appropriate command headquarters having jurisdiction over the respective area(s) before you commence such traffic. You can obtain the names and telephone numbers of the command headquarters for each military warning and water test area by consulting the BOEM website at: <http://www.boem.gov/Environmental-Stewardship/Environmental-Studies/Gulf-of-Mexico-Region/Military-Contacts-pdf.aspx>.

8. Comply with the provisions of NTL 2009-G39, Biologically Sensitive Areas of the Gulf of Mexico, effective January 27, 2010, (see the BOEM website at: <http://www.boem.gov/Regulations/Notices-To-Lessees/2009/09-G39.aspx>). If you conduct activities near an identified biologically sensitive topographic feature (see the BOEM website at: <http://www.boem.gov/Environmental-Stewardship/Environmental-Studies/Gulf-of-Mexico-Region/topoblocks-pdf.aspx> for a list and <http://www.boem.gov/Environmental-Stewardship/Environmental-Studies/Gulf-of-Mexico-Region/topomap-pdf.aspx> for a map), make sure that you do not anchor or otherwise disturb the seafloor within 152 meters (500 feet) of its designated "No Activity Zone." Within 90 calendar days after completing activities that disturbed the seafloor within 305 meters (1,000 feet) of the "No Activity Zone" of a biologically sensitive topographic feature, submit to the BOEM GOMR Data Acquisition and Special Project Unit (see page 5 of these "Protective Measures" for the address) a map at a scale of 1 inch = 1,000 feet with DGPS accuracy, showing the location of the seafloor disturbance relative to these features.

9. Comply with the provisions of NTL 2009-G39, Biologically Sensitive Areas of the Gulf of Mexico, effective January 27, 2010, (see the BOEM website at: <http://www.boem.gov/Regulations/Notices-To-Lessees/2009/09-G39.aspx>). If you conduct activities in the Live Bottom "Pinnacle Trend" area (see the BOEM website at: <http://www.boem.gov/Environmental-Stewardship/Environmental-Studies/Gulf-of-Mexico-Region/topoblocks-pdf.aspx> for a list and <http://www.boem.gov/Environmental-Stewardship/Environmental-Studies/Gulf-of-Mexico-Region/topomap-pdf.aspx> for a map), make sure that you do not anchor or otherwise disturb the seafloor within 30 meters (100 feet) of any identified pinnacles or other hard bottoms that have a vertical relief of eight feet or more. Within 90 calendar days after completing an ancillary activity that disturbed the seafloor within 61 meters (200 feet) of pinnacles in the "Pinnacle Trend" area, submit to the BOEM GOMR Data Acquisition and Special Project Unit (see page 5 of these "Protective Measures" for the address) a map at a scale of 1 inch = 1,000 feet with DGPS accuracy, showing the location of the seafloor disturbance relative to these features.

10/29/2012

10. Comply with the provisions of NTL 2009-G39, Biologically Sensitive Areas of the Gulf of Mexico, effective January 27, 2010, (see the BOEM website at: <http://www.boem.gov/Regulations/Notices-To-Lessees/2009/09-G39.aspx>). If you conduct activities in the Live Bottom "Low Relief" area (see the BOEMRE website at <http://www.boem.gov/Environmental-Stewardship/Environmental-Studies/Gulf-of-Mexico-Region/topomap-pdf.aspx> for a map), make sure that you do not anchor or otherwise disturb the seafloor near any identified live bottom low relief features. Within 90 calendar days after completing an ancillary activity that disturbed the seafloor within 30 meters (100 feet) of live bottom low relief features, submit to the BOEM GOMR Data Acquisition and Special Project Unit (see page 5 of these "Protective Measures" for the address) a map at a scale of 1 inch = 1,000 feet with DGPS accuracy, showing the location of the seafloor disturbance relative to these features.

11. If you conduct activities in water depths 400 meters (1,312 feet) or greater, make sure that you do not anchor, use anchor chains wire ropes or cables, or otherwise disturb the seafloor within 76 meters (250 feet) of any features or areas that could support high-density chemosynthetic communities. The known chemosynthetic community sites are listed in Appendix A of NTL No. 2009-G40, Deepwater Chemosynthetic Communities, effective January 27, 2010 (see the BOEM website at: <http://www.boem.gov/Regulations/Notices-To-Lessees/2009/09-G40.aspx>). Within 90 calendar days after completing an ancillary activity that disturbed the seafloor within 152 meters (500 feet) of features or areas that could support high-density chemosynthetic communities, submit to the BOEMRE GOMR Data Acquisition and Special Project Unit (see page 5 of these "Protective Measures" for the address) a map at a scale of 1 inch = 1,000 feet with DGPS accuracy, showing the location of the seafloor disturbance relative to these features.

12. Comply with the provisions of NTL 2009-G39, Biologically-Sensitive Underwater Features and Areas of the Gulf of Mexico, effective January 27, 2010, (see the BOEM website at: <http://www.boem.gov/Regulations/Notices-To-Lessees/2009/09-G39.aspx>). If you discover any high-relief topographic feature with a relief greater than eight (8) feet while conducting activities, report the discovery to the BOEM GOMR Regional Director. Make sure you do not anchor on or otherwise disturb such a feature. Within 90 calendar days after completing an ancillary activity that disturbed the seafloor within 30 meters (100 feet) of such a feature, submit to the BOEM GOMR Data Acquisition and Special Project Unit (see page 5 of these "Protective Measures" for the address) a map at a scale of 1 inch = 1,000 feet with DGPS accuracy, showing the location of the seafloor disturbance relative to the feature.

13. Before you conduct activities that could disturb the seafloor within 254 meters (1,000 feet) of a Texas artificial reef site or artificial reef permit area, within 152 meters (500 feet) of a Louisiana artificial reef site or artificial reef permit area, or could disturb the seafloor within a General Permit Area established by the States of Texas, Alabama or Florida for the placement of artificial reef material, contact the appropriate State reef management agency. See the BOEM websites at: <http://www.boem.gov/Environmental-Stewardship/Environmental-Studies/Gulf-of-Mexico-Region/artreefmap.aspx> for a map and <http://www.boem.gov/Environmental-Stewardship/Environmental-Studies/Gulf-of-Mexico-Region/artreefcontacts-pdf.aspx> for State contacts.

14. If you conduct activities within the boundaries of the Flower Gardens National Marine Sanctuary (Flower Gardens Banks and Stetson Bank), exercise caution to ensure that such activities do not endanger any other users of the Sanctuary. See the BOEM website at: <http://www.boem.gov/Environmental-Stewardship/Environmental-Studies/Gulf-of-Mexico-Region/FGNMSmap-pdf.aspx> for map. Additionally, if the activities involve moving the marker buoys at the Sanctuary, contact Mr. G. P. Schmahl, the current Sanctuary Manager, for instructions. See the BOEM website at: <http://www.boem.gov/Environmental-Stewardship/Environmental-Studies/Gulf-of-Mexico-Region/FGNMScontacts-pdf.aspx> for Mr. Schmahl's contact information. See the BOEM website at: <http://www.boem.gov/Environmental-Stewardship/Environmental-Studies/Gulf-of-Mexico-Region/FGNMSbuoys-pdf.aspx> for the locations of the Flower Gardens' marker buoys.

15. If your proposed activities will involve using boats from a port located south of the Suwannee River mouth in Florida, make sure that you adhere to the following manatee protection plan:

- a. Advise your personnel of the possibility of the presence of manatees in the inland and coastal waters of Florida in the Eastern GOM.
- b. Advise your personnel that there are civil and criminal penalties for harming, harassing, or killing manatees, which are protected under the Endangered Species Act, the Marine Mammal Protection Act, and the Florida Manatee Sanctuary Act of 1978.
- c. Advise your vessel operators to (1) use the deeper ship channels to the maximum extent possible; (2) avoid collisions with manatees and to stay within the existing channels; and (3) obey all speed restrictions and travel at "no wake/idle" speeds at all times while operating in shallow water or in channels where the draft of the vessel provides less than four (4) feet of clearance. (Areas of manatee concentrations have been identified and speed limit signs have been erected in accordance with Federal, State, and local regulations.)
- d. While vessels are berthed in port, advise your vessel operators to use fenders between the dock and the vessel and/or between adjacent vessels berthed side-by-side. Make sure that the fenders have a minimum clearance of three feet when compressed between the dock and the vessel.

10/29/2012

e. Ensure that your vessel operators keep logs detailing any sighting of, collision with, damage to, or death of manatees that occur while you conduct an ancillary activity. If a mishap involving a manatee should occur, make sure that the vessel operator immediately calls the "Manatee Hotline" ((888) 404-3922), and the U.S. Fish and Wildlife Service, Jacksonville Field Office ((904) 232-2580) for north Florida or the U.S. Fish and Wildlife Service, Vero Beach Ecosystem Office ((772) 562-3909) for south Florida.

f. Within 60 calendar days after completing the ancillary activity, submit a report summarizing all manatee incidents and sightings to the Florida Marine Research Institute, Florida Fish and Wildlife Conservation Commission, 100 Eighth Avenue SE, St. Petersburg, FL 33701-5095; and to the U.S. Fish and Wildlife Service, 6620 Southpoint Drive South, Suite 310, Jacksonville, FL 32216-0958, for north Florida, or to the U.S. Fish and Wildlife Service, 1339 20th Street, Vero Beach, Florida 32960-3559, for south Florida.

16. The Magnuson-Stevens Fisheries Conservation and Management Act (see 50 CFR 600.725) prohibits the use of explosives to take reef fish in the Exclusive Economic Zone. Therefore, if your activities involve the use of explosives, and the explosions result in stunned or killed fish, do not take such fish on board your vessels. If you do, you could be charged by the National Oceanic and Atmospheric Administration Fisheries Service (NOAA Fisheries Service) with a violation of the aforementioned Act. If you have any questions, contact NOAA Fisheries Service, Office for Law Enforcement, Southeast Division, at (727) 824-5344.

17. When operations extend south of approximately 26 degrees north latitude in the Western Gulf of Mexico or 24 degrees to 25 degrees north latitude in the Eastern Gulf (the 200-nautical mile provisional maritime also called the Exclusive Economic Zone Conservation Zone Limit), notify the Department of State: Ms. Liz Tirpak Room 5801, OES/OA, Department of State, Director, Office of Ocean Affairs, Washington, D.C., 20520, at (202) 647-1106.

18. BOEM GOMR Data Acquisition and Special Project Unit Address:

Regional Supervisor, Resource Evaluation
Resource Studies Section
Data Acquisition and Special Project Unit (MS 5123)
Bureau of Ocean Energy Management
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394