OMB Control No.: 1010-0072 Expiration Date 08/31/2021

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF OCEAN ENERGY MANAGEMENT

(Insert Appropriate Regional Office)

Requirements for Geological and Geophysical Prospecting, Exploration, or Scientific Research on the Outer Continental Shelf Related to Minerals Other than Oil, Gas, and Sulphur

Application for Permit or Authorization to
Conduct Geological or Geophysical
Prospecting or Exploration for Mineral Resources or
Notice of Scientific Research on the
Outer Continental Shelf Related to
Minerals Other than Oil, Gas, and Sulphur

Nonexclusive Use Agreement for Scientific Research

SUBMIT: Two originals, one digital copy, and one public copy (all with original signatures).

Paperwork Reduction Act of 1995 (PRA) Statement: The PRA (44 U.S.C. Chapter 35 *et seq.*) requires us to inform you that the Bureau of Ocean Energy Management (BOEM) collects this information to evaluate applications for permits or authorizations to conduct pre-lease prospecting or exploration offshore and to monitor activities of scientific research conducted under notices. BOEM uses the information to ensure there is no environmental degradation, personnel harm, damage to historical or cultural sites, or interference with other uses. Information requested in this form is required to obtain or retain a benefit. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. The reporting burden for this form is estimated to average 88 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct your comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Bureau of Ocean Energy Management, 45600 Woodland Road, Sterling, Virginia 20166.

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF OCEAN ENERGY MANAGEMENT

REQUIREMENTS FOR GEOLOGICAL AND GEOPHYSICAL PROSPECTING, EXPLORATION, OR SCIENTIFIC RESEARCH ON THE OUTER CONTINENTAL SHELF RELATED TO MINERALS OTHER THAN OIL, GAS, AND SULPHUR

Authority

You must perform all geological and geophysical prospecting, exploration, or scientific research activities authorized and conducted on the Outer Continental Shelf (OCS) according to the OCS Lands Act, 30 CFR Part 580, as applicable, and other applicable Federal statutes and regulations, as amended.

General Requirements of Permits and Notices

You must conduct geological and geophysical activities for mineral prospecting, exploration, or scientific research activities authorized under Section 11 of the OCS Lands Act, 30 CFR Part 580, as applicable, and in compliance with all applicable mitigation measures so that those activities do not:

- A. Interfere with or endanger operations under any lease or right-of-way or permit issued or maintained under the OCS Lands Act;
- B. Cause harm or damage to aquatic life or to the marine, coastal, or human environment;
- C. Cause pollution;
- D. Create hazardous or unsafe conditions;
- E. Unreasonably interfere with or harm other uses of the area (including submarine cables); or
- F. Disturb archaeological resources.

Any person conducting geological or geophysical activities for mineral prospecting, exploration or scientific research under Section 11 of the OCS Lands Act and 30 CFR Part 580, as applicable, must immediately report to us if you:

- A. Detect hydrocarbon and/or mineral occurrences;
- B. Encounter environmental hazards which constitute an imminent threat to human activity; or
- C. Are aware of activities which adversely affect the environment, aquatic life, archaeological resources, or other uses of the area in which you are conducting prospecting or scientific research activities.

Any person conducting shallow or deep stratigraphic test drilling activities under a permit for mineral prospecting or scientific research under 30 CFR Part 580 must utilize the best available and safest technologies that BOEM determines to be economically feasible.

The authorization BOEM grants you under Section 11 of the OCS Lands Act and 30 CFR Part 580, as applicable, to conduct geological and geophysical prospecting or exploration for minerals other than oil, gas, and sulphur or for scientific research does not confer a right to any discovered oil, gas, or other minerals, or to a lease under the OCS Lands Act.

Time Restriction for Permits, Authorizations, and Notices

We limit the term of a permit or authorization to a period not to exceed 3 years but we issue it in 1-year increments. We limit extensions to a period of not more than two 1-year extensions from the initial termination date of the permit.

Geological and Geophysical Activities Requiring Permits, Authorizations, and Notices Geological and Geophysical Prospecting for Mineral Resources

You may not conduct geological and geophysical prospecting or exploration for minerals other than oil, gas, and sulphur in the OCS without an approved permit or authorization unless you conduct such activities under a lease issued or maintained according to the OCS Lands Act. You must obtain separate permits or authorizations for either geological or geophysical prospecting or exploration for mineral resources. If BOEM disapproves an application, the statement of rejection will give the reasons for the denial and will advise the applicant of those changes needed for you to obtain approval.

Geological and Geophysical Scientific Research

You may not conduct geological and geophysical scientific research related to minerals other than oil, gas, and sulphur in the OCS without an approved permit or filing of a notice. You must obtain separate permits for geological and geophysical scientific research which involves the use of solid or liquid explosives or the drilling of a deep stratigraphic test. If BOEM disapproves your application, the statement of rejection will give the reasons for the denial and will advise the applicant of the changes needed for you to obtain approval.

You must file a notice with BOEM at least 30 days before you begin scientific research not requiring a permit. We may inform you of all environmental laws and regulations pertaining to the OCS. BOEM recommends that you submit your notice 90-120 days prior to beginning your work to ensure timely review of your notice by BOEM

Information Required for Permits or Authorizations

Each applicant for a permit or authorization must complete the applicable sections of the Application for Permit or Authorization (Attachment 1) and must include a public-information, page-size plat(s) showing the location of the proposed area of activity (Section B.2 or C.1). In addition, each applicant for a geological or geophysical permit or authorization must submit the appropriate attachment to section D of the application. This includes a detailed map of the proposed activity for Section D.8 (Geological Application) or Section D.12 (Geophysical Application). Only applicants for a *Notice of scientific research* must complete a Nonexclusive Use Agreement (Attachment 2).

The information you provide on the Application for Permit or Authorization (excluding section D) and on the Nonexclusive Use Agreement, including continuation sheets and the page-size plat(s), is NON-PROPRIETARY INFORMATION. These non-proprietary portions of the application constitute the "public information" copy of Form BOEM-0134 and with the executed permit we will make them available to the public

The information listed in section D is PROPRIETARY INFORMATION. We will not make this information available to the public without the consent of the applicant/permittee for a period mandated by law or regulation. However, we may determine that earlier release is necessary to properly develop the area permitted.

Modifications to Approved Permits or Authorizations

The BOEM Regional Supervisor must approve any modification to the permitted or authorized operations.

Filing Locations for Permits or Authorizations to Conduct Prospecting or Exploration for Mineral Resources and for Permits or Notices to Conduct Scientific Research

File two originals, one digital copy, and one public copy (all with original signatures) at the following locations at least 30 days before you begin operations. BOEM recommends that you submit your notice or application 90-120 days prior to beginning your work to ensure timely review of your notice by BOEM.

A. For the OCS off the State of Alaska:

Regional Supervisor for Resource Evaluation Bureau of Ocean Energy Management Alaska OCS Region 3801 Centerpoint Dr., Suite #500 Anchorage, Alaska 99503-5823

B For the OCS in the Gulf of Mexico, off the Atlantic Coast, Puerto Rico, and U.S. Territories in the Caribbean Sea:

Regional Supervisor for Resource Evaluation Bureau of Ocean Energy Management Gulf of Mexico OCS Region 1201 Elmwood Park Boulevard New Orleans, Louisiana 70123-2394

C. For the OCS off the States of California, Oregon, Washington, or Hawaii and other Pacific Federal Territories:

Regional Supervisor for Office of Strategic Resources Bureau of Ocean Energy Management Pacific OCS Region 760 Paseo Camarillo Ste. 102 Camarillo, California 93010-6092

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF OCEAN ENERGY MANAGEMENT

(Insert Appropriate Regional Off	ice)

APPLICATION FOR PERMIT OR AUTHORIZATION TO CONDUCT GEOLOGICAL OR GEOPHYSICAL PROSPECTING OR EXPLORATION FOR MINERAL RESOURCES OR NOTICE OF SCIENTIFIC RESEARCH ON THE OUTER CONTINENTAL SHELF RELATED TO MINERALS OTHER THAN OIL, GAS, AND SULPHUR

(Section 11, Outer Continental Shelf Lands Act of August 7, 1953, as amended on September 18, 1978, by Public Law 95-372, 92 Statute 629, 43 U.S.C. 1340; and 30 CFR Parts 580 and 280, as applicable)

Name of Applicant

Number and Street

City, State, and Zip Code

Application is made for the following activity: (check one)

Geological prospecting or exploration for mineral resources

Geophysical scientific research

Geophysical scientific research

Geophysical scientific research

Geophysical scientific research

Two originals, one digital copy, and one public copy (all with original signatures).

To be completed by BOEM

Permit Number: ______ Date: _____

A. General Information

The activity will be conducted by:	
Service Company Name	Purchaser(s)/User(s) of the Data
Number and Street	Number and Street
City, State, and Zip Code	City, State, and Zip Code
Telephone/FAX Numbers	Telephone/FAX Numbers
E-Mail Address	E-Mail Address
	lineral prospecting or exploration cientific research
Describe your proposed survey activities (i.e., v describe the environmental effects of the proposed marine life. Describe what steps are planned to	essel use, benthic impacts, acoustic sources, etc.) and sed activity, including potential adverse effects on minimize these adverse effects (mitigation measures
Describe your proposed survey activities (i.e., v describe the environmental effects of the proposemarine life. Describe what steps are planned to For example: 1) Potential Effect: Excessive sour mammal exclusion zone or 2) Potential Effect: 1	essel use, benthic impacts, acoustic sources, etc.) and sed activity, including potential adverse effects on minimize these adverse effects (mitigation measures and level; Mitigation: Marine Mammal Observers,
Describe your proposed survey activities (i.e., v describe the environmental effects of the proposed marine life. Describe what steps are planned to For example: 1) Potential Effect: Excessive sour mammal exclusion zone or 2) Potential Effect: I deployment/retrieval of vibracoring rigs (use constantment): The expected commencement date is:	essel use, benthic impacts, acoustic sources, etc.) and sed activity, including potential adverse effects on minimize these adverse effects (mitigation measures and level; Mitigation: Marine Mammal Observers, Bottom disturbance; Mitigation: ROV ntinuation sheets as necessary or provide a separate
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	7.	The port from which the vessel(s) will operate is:
	8.	Briefly describe the navigation system (vessel navigation only):
В.		nplete for Geological Prospecting or Exploration for Mineral Resources or logical Scientific Research
	1.	The type of operation(s) to be used is: (check one)
	(a)	Deep stratigraphic test, or
	(b)	Shallow stratigraphic test with proposed total depth of, or
	(c)	Vibracoring
	(d)	Other
	app	ttach a page-size plat showing: 1) The generalized proposed location for each test. Where opriate, a polygon enclosing the test sites may be used and 2) BOEM protraction areas; coastline; of reference
	3.]	istance and direction from a point of reference to area of activity
	4.]	abel as "Public Information"
C.	1. 1 (a) (b) etc.	replete for Geophysical Prospecting or Exploration for Mineral Resources or physical Scientific Research or the proposed operation: Acquisition method (OBN, OBC, Streamer): Cype of acquisition: (High Resolution Seismic, 2D Seismic, 3D Seismic, gravity, magnetic, CSEM,
	(a) (b) (c)	ttach a page-size plat showing: The generalized proposed location of the activity with a representative polygon BOEM protraction areas; coastline; point of reference Distance and direction from a point of reference to area of activity
		st all energy source types to be used in the operation(s): (Air gun, air gun array(s), sub-bottom ler, sparker, towed dipole, side scan sonar, etc.):
		xplosive charges will will not be used. If applicable, indicate the type of explosive naximum charge size (in pounds) to be used:
		Type Pounds Equivalent Pounds of TNT

D. Proprietary Information Attachments

E. Certification

Use the appropriate form on page 9 for a "geological" permit or authorization application or the form on page 10 for a "geophysical" permit or authorization application. You must submit a separate form BOEM-0134 to apply for each geological or geophysical prospecting permit or exploration authorization.

Thereey commy made is	oregoing and attached informat	ion die dide did confecti	
Print Name:			
SIGNED		DATE	
TITLE			
COMPANY NAME:			=====
	TO BE COMPLET	TED BY BOEM	
Permit No	Assigned by	of BOEM	Date
This application is hereb	y:		
a Accepted			
b Returned	for reasons in the attached		
The approved permit or	authorization is:		
a Attached			
b Will be fo	rwarded at a later date		
CICNED	TITLE	Dagional Supervisor	DATE

Section D Proprietary Information Attachment Required for an Application for Geological Prospecting Permit or Exploration Authorization

1.	Description of proposed coring, drilling or sampling method. Include heat flow measurements, and depth of penetration.:
2.	Description of coring, drilling or sampling equipment to be used:
3.	List proposed coring, drilling or sample location(s) with their latitude and longitude coordinates and the total number of samples to be acquired. These locations may be sent digitally on a CD (attach separate page if necessary):
4.	Navigation system or method to be used to position sample locations:
5.	Method of sample, storage, and handling:
6.	List each test to be conducted on the samples with a brief description of its objective:
7.	Estimated date on which samples, logs, and analyzed and/or processed data will be ready for inspection:

8. Attach map(s), plat(s), and chart(s) (preferably at a scale of 1:250,000) and/or an electronic version of same showing latitude and longitude, scale, protraction areas, specific block numbers, and specific sample location(s) in latitude(s) and longitude(s) for each of the proposed sample site(s). The map, plat or chart should be submitted at a sufficient size and scale to make out all details of the activities shown. Label the hardcopy map "Proprietary," if the data are for commercial purposes and are considered proprietary. Along with the hardcopy map, submit on CD, the ArcGIS shapefiles needed to reproduce the map of the proposed sample site(s) including individual site names in the attribute table.

Section D Proprietary Information Attachment Required for an Application for Geophysical Prospecting Permit or Exploration Authorization

1.	Detailed narrativ streamer(s) (rece			nd propag	ation, and v	isual description	of the energy	source(s) and
2.	Attach a map vie vessel indicating number of chase	its fun	ction and in	clude the	dimensions			
3.	List each energy sub bottom profii 1µPa @1m in wa Peak). If the man enter N/A. Addi	ler, etc ater (Ri nufactu	.). Indicate (MS) and if a are does not	the source pplicable, provide a	s's manufact Source Lev a peak to pea	urer, model, Sourcel (SL) in dB reak level (many si	ırce Level (SL 1µPa @1m in	a) in dB re water (Peak to
	Energy Source	Man	ufacturer	Model	Array or Airgun Size (cu. in.)	Source Level (SL) in dB re 1µPa @1m in water (RMS)	Source Level (SL) in dB re 1µPa @1m in water (Peak to Peak)	Frequency (Hz-kHz range)
RM	air guns/air gun a S db levels: (Req M that will use si	uired f	or Alaska R	egion; GO	M Region o	only requires this	s information f	
	dB level		Maximum	Distance	from Sour	ce		
	190 db							
	180 db 160 db							
	Shot (energy pulse Fowing depth (ft/s		uency per lir	near mile ((statute):			
	Fowing depth (ft/s) Fowing depth (ft/s)							

	necessary).
8.	Navigation/positioning system or method used to position shotpoint locations and or ocean bottom receivers:
9.	Proposed areal extent (blocks) for 3D surveys or total number of line miles proposed for 2D or high resolution survey:
10.	Estimated date (month and year) on which final data will be available for all proposed data sets:

7. CSEM, OBN, Magnetotelluric, and OBC surveys: Describe the node deployment and retrieval

procedures. Indicate the location (latitude and longitude coordinates), number and spacing of any ocean bottom receivers, cables, and anchors. If anchors will not be retrieved, provide their physical composition and rate of decomposition. Location data may be submitted digitally on a CD (attach separate page if

11. Attach map(s), plat(s), and chart(s) (preferably at a scale of 1:250,000) and an electronic version of same showing latitude and longitude, scale, specific protraction areas, block numbers. The map, plat, or chart should be submitted at a sufficient size and scale to make out all details of the activities shown. The map should be labeled "Proprietary," if the data are for commercial purposes and are considered proprietary. For 2D data acquisition, provide specific track lines with line identifications with the total number of line miles proposed or a representative polygon and total number of blocks for 3D surveys. Along with the hardcopy map, submit on CD, the necessary ArcGIS shapefiles to reproduce the map for 2D track lines including individual line names in the attribute table. For 3D surveys provide a representative polygon as an ArcGIS shapefile.

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF OCEAN ENERGY MANAGEMENT

(Insert Appropriate Regional Office)	(Insert Appropriate Regional Office)	

NONEXCLUSIVE USE AGREEMENT FOR SCIENTIFIC RESEARCH ON THE OUTER CONTINENTAL SHELF

made available to the public for hispe	ection and reproduction, such time being the earliest practicable
rom the proposed activity will not be	(applicant) agrees that the data and information resulting sold or withheld for exclusive use.
rom the proposed activity will not be	(applicant) agrees that the data and information resulting sold or withheld for exclusive use. (Signature of Applicant)
rom the proposed activity will not be	
from the proposed activity will not be	(Signature of Applicant)

Submit: Two originals, one digital copy, and one public copy (all with original signatures).