



United States Department of the Interior  
BUREAU OF OCEAN ENERGY MANAGEMENT

Alaska Regional Office  
3801 Centerpoint Drive, Suite 500  
Anchorage, Alaska 99503-5823

David S. Wilkins  
Senior Vice President  
Hilcorp Alaska, LLC  
3800 Centerpoint Drive, Suite 1400  
Anchorage, Alaska 99503

Dear David S. Wilkins:

On February 25, 2020, Hilcorp Alaska, LLC, (Hilcorp) submitted an application to the Bureau of Ocean Energy Management (BOEM) Alaska Regional Office to obtain a Geological and Geophysical (G&G) permit to conduct geophysical exploration operations on certain Outer Continental Shelf (OCS) lands under the authority of 30 CFR part 551. The activity is in the Lower Cook Inlet area shown on the map accompanying your application and will be conducted on Hilcorp's behalf by Terrasond LTD (hereafter referred to as Terrasond). Terrasond will conduct operations using the vessels described in the Environmental Evaluation Document. Operations are proposed to begin on or after April 1, 2020 and will be completed on or before October 31, 2020. The proposed activity is part of a geohazard survey which utilizes a suite of geophysical tools (echosounder, sidescan sonar, sparker, magnetometer, etc.) to image and investigate the seafloor and shallow subsurface for potential obstructions and geohazards. This activity is in conjunction with Hilcorp's Ancillary Activities notification (See Letter of Non-Objection, Attachment 1).

After reviewing Hilcorp's proposed Cook Inlet Shallow Hazard Survey (Proposed Action) and the analysis provided in the Lease Sale 244 Environmental Impact Statement (LS244 EIS), BOEM has determined that the activities described in the Proposed Action do not constitute a change from the activities and associated environmental impacts analyzed in the LS244 EIS; there are no significant new circumstances or information that would result in significantly different environmental effects from those considered in the LS244 EIS; the site of the activities does not present unique circumstances that require additional analysis beyond that addressed in the LS244 EIS, and thus conducting additional NEPA analyses (e.g., a site-specific EA) is not necessary or warranted at this time before BOEM can proceed with a decision on the Proposed Action. BOEM has completed consultation which covers the proposed action under Section 7 of the Endangered Species Act from both the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS).

At Hilcorp's request, the NMFS issued Incidental Take Regulations (ITRs) for whales and pinnipeds on July 31, 2019. Correspondingly, the USFWS issued ITRs for sea otters on August 1, 2019. Hilcorp applied for and was granted Letters of Authorization (LOAs) from NMFS and USFWS covering these permitted and ancillary activities.

OCS Permit 20-01 is hereby granted to conduct geohazard survey operations on the OCS in the area and manner described in the application. Hilcorp shall notify BOEM in writing of intent to begin operations at least 24 hours prior to start of operations. All operations are subject to the

AKOCSR Permit 20-01  
Public Copy

enclosed stipulations (see Attachment 2) and the approved Permit for Geophysical Exploration for Mineral Resources on the OCS (Attachment 3: Forms BOEM-0327 and BOEM-0328). In all cases, the specific mitigating measures identified in the relevant NMFS and USFWS ITRs, LOAs, and Biological Opinions will apply and shall supersede any conflicting BOEM requirements related to marine mammals, including protocols for monitoring programs. Information related to compliance with the provisions in the ITRs and of the Endangered Species Act and the Marine Mammal Protection Act may be obtained from the

U.S. Fish and Wildlife Service  
Alaska Region  
1011 E. Tudor Road  
Anchorage, Alaska 99503  
Telephone: (907) 786-3800

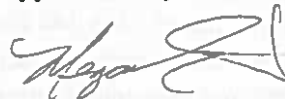
And from the

National Marine Fisheries Service  
222 West 7<sup>th</sup> Avenue, Box 43  
Anchorage, Alaska 99513  
Telephone: (907) 271-5006

Additionally, 30 CFR §551.6(a)(1) requires that your G&G operations must not “Interfere with or endanger operations being conducted under any lease, right-of-way, easement, right-of-use, Notice, or permit issued or maintained under the [OCS Lands] Act.”

This permit is effective from May 1, 2020 until October 31, 2020, or the completion of the survey, whichever occurs earlier. Please be advised that this office requires a weekly report of daily operations (see Attachment 4). We also require a final completion report, as detailed in Form BOEM-0328, within 30 calendar days following cessation of field operations.

Appreciatively,



Dr. Megan Carr  
Regional Supervisor  
Office of Resource Evaluation

**4 Enclosures**

- Attachment 1 Letter of Non-Objection
- Attachment 2 Stipulations and Environmental Protective Provisions
- Attachment 3 Forms BOEM-0327 and BOEM-0328
- Attachment 4 Operations Reporting Guidance



United States Department of the Interior  
BUREAU OF OCEAN ENERGY MANAGEMENT  
Alaska Regional Office, DOI Region 11  
3801 Centerpoint Drive, Suite 500  
Anchorage, Alaska 99503-5823

David S. Wilkins  
Senior Vice President  
Hilcorp Alaska, LLC  
3800 Centerpoint Drive, Suite 1400  
Anchorage, AK 99503

APR 24 2020

Dear David S. Wilkins:

The Bureau of Ocean Energy Management Alaska Regional Office has reviewed the Hilcorp Alaska LLC (HAK) Ancillary Activities (AA) Notice to Conduct a Lower Cook Inlet Shallow Hazards Survey (AA Notice). The notice describes on-lease ancillary activities as defined in 30 CFR § 550.105 and 30 CFR § 550.207. According to the AA Notice, HAK proposes to survey the on-lease areas with a suite of geophysical tools composed of a multibeam echosounder, magnetometer, sidescan sonar, hi-res and low-res sparker arrays, and a sound velocity profiler. As part of the AA Notice, Hilcorp also proposes to collect water samples, seabed sediment samples, cores using a gravity/piston corer or grab sampler, and cone penetrometer measurements. The AA are proposed to take place on lease blocks in the Lower Cook Inlet (lease blocks 6310, 6357, 6360, 6405, 6406, 6407, 6410, 6455, 6456, and 6457).

BOEM has evaluated the AA Notice under the process outlined in 30 CFR § 550.209 and concludes that subject to the conditions listed below, the AA described in the notice comply with the performance standards under 30 CFR § 550.202(a), (b), (d), and (e). The conditions are:

- Notify BOEM in writing at least 24 hours prior to initiating activities described in the notification;
- Notify BOEM in writing at least 15 calendar days before conducting other activities not described in the notification pursuant to 30 CFR § 550.208(b)(1);
- Provide BOEM with daily operations, safety, and environmental compliance reports;
- Provide notice to other Outer Continental Shelf Cook Inlet users of your activities;
- Adhere to the conditions and mitigation measures set forth by BOEM for these surveys including those for protecting marine mammals and archeological resources;
- Adhere to the conditions and mitigation measures set forth by US Fish and Wildlife Service and National Marine Fisheries Service in relevant LOAs, ITRs and Biological Opinions; and
- Provide to BOEM a report containing data and resulting analyses of the AA.

If you have questions, please contact Joel Immaraj, Chief of Plans Section, at (907) 334-5238 or by email at [joel.immaraj@boem.gov](mailto:joel.immaraj@boem.gov).

Sincerely,



Patricia LaFramboise  
Alaska Regional Supervisor for Leasing & Plans  
Bureau of Ocean Energy Management  
DOI Region 11

cc: Mark Storzer, Alaska Deputy Regional Director, BOEM  
Megan Carr, Alaska Regional Supervisor for Resource Evaluation, BOEM  
Sharon Randall, Alaska Regional Supervisor for Environment, BOEM  
Michael Haller, Tribal & Community Liaison, BOEM  
John Callahan, Public Affairs, BOEM  
Kyle Monkeliën, Regional Supervisor, BSEE  
Steven Pearson, Senior Preparedness Analyst, Oil Spill Preparedness Division, BSEE  
Jay Jerome, Senior Marine Inspector, USCG  
Jennifer Curtis, Alaska Oil, Gas and Energy Sector Manager, EPA  
Christopher Putnam, Supervisory Wildlife Biologist, USFWS  
Sara Young, NMFS  
Joel Immaraj, Alaska Chief for Plans, BOEM



United States Department of the Interior  
BUREAU OF OCEAN ENERGY MANAGEMENT  
Alaska OCS Region  
3801 Centerpoint Drive, Suite 500  
Anchorage, Alaska 99503-5823

Attachment 2

**Stipulations and Environmental Protective Provisions for G&G Survey OCS Permit 20-01**

- No solid or liquid explosives shall be used without specific approval.
- Activities shall follow guidance in NTL-2005-A03, Archaeological Survey and Evaluation for Exploration and Development Activities. No instruments shall be placed on the seafloor that could cause an effect to known or suspected historic properties, including archaeological sites.
- Operations shall be conducted in accordance with 30 CFR §551.6. Potential or known violations of these requirements shall be reported to BOEMs Regional Supervisor/Resource Evaluation via email to [AKOCS.GGpermits@BOEM.gov](mailto:AKOCS.GGpermits@BOEM.gov) within 24 hours. Serious or emergency conditions shall be reported without delay.
- Permittee shall not exceed the sound levels approved within accompanying Authorizations.
- Vessels shall avoid concentrations or groups of marine mammals. Vessels shall always conduct their activities at a maximum distance from such concentrations of marine mammals.
- When operating near a concentration of marine mammals, every effort and precaution shall be taken to avoid harassment of these animals. At minimum, vessels shall reduce speed when within 900 feet (274 m) of marine mammals and those vessels capable of steering around such groups must do so when practicable. Vessels shall not be operated in such a way as to separate members of a group of marine mammals from other members of the group. This stipulation applies to normal vessel operation while sound sources are not in active operation.
- Vessels shall avoid multiple changes in direction and speed when within 900 feet (274 m) of marine mammals. In addition, operators shall monitor the waters immediately adjacent to a vessel to ensure that no marine mammals will be injured when the vessel's propellers (or screws) are engaged when operating within this 900 foot area.
- Small boats shall be operated at such a speed as to minimize the likelihood of collisions with marine mammals based on present conditions. When weather conditions require, such as when visibility drops, vessels shall adjust speed accordingly to avoid these potential collisions.
- When any operator becomes aware of the potentially harassing effects of operations on marine mammals, or when any operator is unsure of the best course of action to avoid harassment of marine mammals, every measure to avoid further harassment shall be taken until the National Marine Fisheries Service (NMFS) or U.S. Fish and Wildlife Service (USFWS) are consulted for direction. However, human safety shall always take precedence over the guidelines and distances recommended herein for the avoidance of disturbance and harassment of marine mammals.
- The Permittee shall notify BOEM via email, [AKOCS.GGpermits@BOEM.gov](mailto:AKOCS.GGpermits@BOEM.gov), in the event of any loss of cable, streamer, or other equipment that could pose a danger to marine mammals and other wildlife resources.

- PSOs will be instructed to monitor for the presence of Steller's eider. If Steller's eiders are observed, PSOs will note the time, ship's position, course, and speed and an estimate of the distance and bearing to the Steller's eider for inclusion in the weekly report.
- All vessel operators shall be instructed that the use of high-intensity exterior lighting on, and the radiation outward of high-intensity lighting from, vessels shall be minimized. During periods of darkness or inclement weather, exterior lights shall be used only as necessary to illuminate active, on-deck work areas or for safety. Exterior-facing window coverings shall be closed in illuminated rooms during periods of darkness except as required for specific work or safety purposes. Interior and navigation lights may remain on as needed for safety.
- Permittee shall report to BOEM specific information about any birds found on at-sea vessels (i.e., downed bird that strikes the vessel and either found on board dead or apparently unable to depart on its own). An individual report entry shall be generated for each bird, compiled in electronic format (e.g., spreadsheet), and submitted to BOEM as part of the weekly report. Each entry shall include:
  - Vessel name and the date, time, and position (latitude/longitude) determined as closely as possible for actual or estimated time of strike;
  - Bird species (if known), number, and condition (alive with no visible injury, injured, dead, etc.);
  - Photograph (indicating size of bird), including in situ if safety allows;
  - Visibility and vessel lighting conditions (determined as closely as possible for actual or estimated time of strike); and
  - Notes on potential cause of strike, if known or speculated.

The mitigation and monitoring requirements defined in any NMFS (the Federal agency having MMPA jurisdiction for cetaceans and pinnipeds, less Pacific walrus) and USFWS (the Federal agency having MMPA jurisdiction for Pacific walrus, polar bear, and sea otter) Incidental Take Authorizations (ITAs) obtained by the Permittee shall replace and supersede any conflicting provisions concerning marine mammal measures.

OMB Control Number: 1010-0048  
OMB Approval Expires: 04/30/2021

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF OCEAN ENERGY MANAGEMENT**  
Alaska OCS Region

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(Insert Appropriate Regional Office)

**Requirements for Geological and Geophysical Explorations  
or Scientific Research on the Outer Continental Shelf**

**Application for Permit to Conduct Geological or Geophysical  
Exploration for Mineral Resources or Scientific Research on  
the Outer Continental Shelf**

(Attachment 1)

**Nonexclusive Use Agreement for Scientific Research  
on the Outer Continental Shelf**

(Attachment 2)

**SUBMIT:** One original, one copy of the original, one digital copy, and one public copy (all with original signatures).

**Paperwork Reduction Act of 1995 (PRA) Statement:** The PRA (44 U.S.C. 3501 *et seq.*) requires us to inform you that the Bureau of Ocean Energy Management (BOEM) collects this information to evaluate applications for permits to conduct pre-lease 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. Responses are mandatory or to obtain or retain a benefit. Proprietary information is protected in accordance with standards established by the Federal Oil and Gas Royalty Management Act of 1982 (30 U.S.C. 1733), the Freedom of Information Act (5 U.S.C. 552(1), (4)), and Department regulations (43 CFR 2). 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 300 hours per response in the Gulf of Mexico Region and 1,000 hours per response for applications in the Pacific, Alaska, and Atlantic OCS due to NEPA requirements. Much of the work to comply with NEPA requirements has already been done in the Gulf; however, for areas outside the Gulf, BOEM is accounting for the total time expended to compile and submit the necessary information to obtain the required authorizations to acquire a BOEM permit. This includes the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct 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, VA 20166.

## **REQUIREMENTS FOR GEOLOGICAL AND GEOPHYSICAL EXPLORATIONS OR SCIENTIFIC RESEARCH ON THE OUTER CONTINENTAL SHELF**

### **Authority**

You must perform all geological and geophysical explorations or scientific research activities authorized and conducted in the Outer Continental Shelf (OCS) according to the OCS Lands Act, 30 CFR Parts 551, 251, and other applicable Federal statutes and regulations, and amendments thereto.

### **General Requirements of Permits and Notices**

You must conduct geological and geophysical activities for mineral exploration or scientific research activities authorized under 30 CFR Parts 551, 251, 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 pursuant to 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 exploration or scientific research under 30 CFR Parts 551 and 251 must immediately report to the Regional Director, BOEM:

- A. Detection of hydrocarbon occurrences;
- B. Encounters of environmental hazards that constitute an imminent threat to human activity; or
- C. Activities that adversely affect the environment, aquatic life, archaeological resources, or other uses of the area in which the exploration or scientific research activities are conducted.

Any person conducting shallow or deep stratigraphic test drilling activities under a permit for mineral exploration or scientific research under 30 CFR Parts 551 and 251 must utilize the best available and safest technologies.

The authorization that BOEM grants you under 30 CFR Parts 551 and 251 to conduct geological and geophysical explorations for minerals 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 and Notices**

Permitted activities approved for a specified period, including requests for extensions, and activities under a notice may not exceed 1 year.

## **Geological and Geophysical Activities Requiring Permits and Notices**

### **Geological and Geophysical Explorations for Mineral Resources**

You may not conduct geological and geophysical explorations for mineral resources in the OCS without an approved permit unless you conduct such activities pursuant to a lease issued or maintained under the OCS Lands Act. You must obtain separate permits for either geological or geophysical explorations for mineral resources. If BOEM disapproves an application, the statement of rejection will state the reasons for the denial and will advise the applicant of those changes needed to obtain approval.

### **Geological and Geophysical Scientific Research**

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

Each applicant for a permit must complete the applicable sections of the Application for Permit (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.2 of Attachment 1). In addition, each applicant for a geological or geophysical permit 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 provided on the Application for Permit (excluding section D) and on the Nonexclusive Use Agreement, including continuation sheets and the page-size plat(s), is considered NON-PROPRIETARY INFORMATION. These non-proprietary portions of the application constitute the "public information" copy of Form BOEM-0327 and with the executed permit will be available to the public upon request.

The information listed in Section D is considered PROPRIETARY INFORMATION and you should NOT attach it to the public information copy. BOEM will not make this information available to the public without the consent of the potential permittee or for a period mandated by law or regulation. However, BOEM may determine that earlier release is necessary for the proper development of the area permitted.

### **Modifications to Approved Permits**

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

### **Filing Locations for Permits to Conduct Explorations for Mineral Resources and for Permits or Notices to Conduct Scientific Research**

File one original, one copy of the original, 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 Drive  
Suite #500  
Anchorage, Alaska 99503-5823

**B. For the OCS in the Gulf of Mexico and off the Atlantic Coast:**

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:**

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

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

Alaska OCS Region

\_\_\_\_\_  
(Insert Appropriate Regional Office)

**APPLICATION FOR PERMIT TO CONDUCT GEOLOGICAL OR GEOPHYSICAL  
EXPLORATION FOR MINERAL RESOURCES OR SCIENTIFIC RESEARCH ON  
THE OUTER CONTINENTAL SHELF**

(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 551 and 251)

Hilcorp Alaska, LLC

Name of Applicant

3800 Centerpoint Drive, Suite 1400

Number and Street

Anchorage, AK 99503

City, State, and Zip Code

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

- Geological exploration for mineral resources
- Geological scientific research
- Geophysical exploration for mineral resources
- Geophysical scientific research

**Submit:** Original plus three copies, totaling four copies, which include one copy of the original, one digital copy, and one public copy (all with original signatures).

=====  
**To be completed by BOEM**

**Permit Number:** 20-01

**Date:** February 25, 2020

**A. General Information**

1. The activity will be conducted by:

Terrasond LTD

For Hilcorp Alaska, LLC

Service Company Name

Purchaser(s) of the Data

1617 S Industrial Way, Suite 3

3800 CenterPoint Drive, Suite 1400

Address

Address

Palmer, Ak 99465

Anchorage, Ak, 99503

City, State, Zip

City, State, Zip

+1(907) 745-7215

+1(907) 777-8300

Telephone/FAX Numbers

Telephone/FAX Numbers

rcross@terrasond.com

sdeetz@hilcorp.com

E-Mail Address

E-Mail Address

2. The purpose of the activity is:  Mineral exploration

Scientific research

3. Describe your proposed survey activities (i.e., vessel use, benthic impacts, acoustic sources, etc.) and describe the environmental effects of the proposed activity, including potential adverse effects on marine life. Describe what steps are planned to minimize these adverse effects (mitigation measures). For example: 1) Potential Effect: Excessive sound level Mitigation; Soft Start, Protected Species Observers (PSO's), mammal exclusion zone or 2) Potential Effect: Bottom disturbance; Mitigation: ROV deployment/retrieval of bottom nodes) (use continuation sheets as necessary or provide a separate attachment. Label as **BOEM-0327 Section A General Information.**):  
Refer to the attached Environmental Evaluation Document (EED) for details of the proposed survey

activities, potential adverse effects, and mitigation measures.

4. The expected commencement date is: April 1, 2020

The expected completion date is: October 31, 2020

5. The name of the individual(s) in charge of the field operation is:

Ryan Cross

May be contacted at:

1617 S Industrial Way, Suite 3; Palmer, Ak 99645

Telephone (Local) +1 (907) 745-7215 (Marine) \_\_\_\_\_

Email Address: rcross@terrasond.com

6 The vessel(s) to be used in the operation is (are):

Vessel Name (s)	Vessel Model	Registry Number(s)	Radio Call Sign(s)	Registered Owner(s)
R/V Qualifier 105	Research Vessel	528583	WDH9546	Q105, LLC
(alt) R/V Norseman	Research Vessel	601068	WDD6688	Support Vessels of AK

7. The port from which the vessel(s) will operate is: Homer, AK

8. Briefly describe the navigation system (vessel navigation only):

See attached EED.

**B. Complete for Geological Exploration for Mineral Resources or Geological Scientific Research**

1. The type of operation(s) to be employed is: (check one)

- a.  Deep stratigraphic test, or
- b.  Shallow stratigraphic test with proposed total depth of \_\_\_\_\_, or
- c.  Other \_\_\_\_\_

2. Attach a page-size plat showing: 1) The generalized proposed location for each test, where appropriate, a polygon enclosing the test sites may be used; 2) BOEM protraction areas, coastline, point of reference, OCS boundary/3-mile limit; 3) Distance and direction from a point of reference to area of Activity; and 4) Label as "Public Information".

NA

**C. Complete for Geophysical Exploration for Mineral Resources or Geophysical Scientific Research**

1. The proposed operation: geohazard survey

- a. Acquisition method (OBN, OBC, Streamer): Sparker with towed cables and various towed "fish"
- b. Type of acquisition: (High Resolution Seismic, 2D Seismic, 3D Seismic, gravity, magnetic, CSEM, etc.)  
Multi-beam echosounder, sound velocity profiler, sidescan sonar, two sparker sources, magnetometer, SSV for sparker source

2. Attach a page-size plat showing:

- a. The generalized proposed location of the activity with a representative polygon;
- b. BOEM protraction areas, coastline, point of reference, OCS boundary/3-mile limit;
- c. Distance and direction from a point of reference to area of activity;
- d. Label as "Public Information"; and
- e. Submit relevant shape files needed to recreate the map as part of the required digital copy.

3. List all energy source types to be used in the operation(s): (Air gun, air gun array(s), sub-bottom profiler, sparker, towed dipole, side scan sonar, etc.).  
Sparker, side scan sonar, multibeam. See attached for additional details.

4. Explosive charges will  will not  be used. If applicable, indicate the type of Explosive and maximum charge size (in pounds) to be used: \_\_\_\_\_

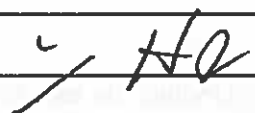
Type \_\_\_\_\_ Pounds \_\_\_\_\_ Equivalent Pounds of TNT \_\_\_\_\_

**D. Proprietary Information Attachments**

Use the appropriate form on page 9 for a "geological" permit application or the form on page 11 for a "geophysical" permit application. You must submit a separate Form BOEM-0327 to apply for each geological or geophysical permit.

**E. Certification**

I hereby certify that foregoing and attached information are true and correct.

Print Name: William G. Britt  
SIGNED  DATE 2/25/2020  
TITLE Environmental Department Manager  
COMPANY NAME: Hilcorp Alaska LLC

**TO BE COMPLETED BY BOEM**

Permit No. 20-01 Assigned by Daniel Lasco (Permit Coordinator) Date 02/25/2020  
of BOEM

This application is hereby:

- a.  Accepted
- b.  Returned for reasons in the attached

SIGNED  TITLE Regional Supervisor DATE 5/1/2020

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

**Alaska 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

**Hilcorp Alaska, LLC**

(Name of Permittee)

**3800 Centerpoint Drive, Suite 1400**

(Number and Street)

**Anchorage, AK 99503**

(City, State, and Zip Code)

**PERMIT NUMBER: 20-01                      DATE: May 1, 2020**

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 May 1, 2020 to October 31, 2020 in the following area(s):

Lower Cook Inlet (Map attached to permit application)

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:  
geohazard survey

\_\_\_\_\_ ; and

will utilize the following instruments and/or technique(s) in such operations:  
multibeam echosounder, sound velocity profiler, sidescan sonar, two sparker sources,  
two sparker sources, SSV for sparker source

**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 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:
  - I. 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 551.14).
  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 551.14).
  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 plat(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:

  
\_\_\_\_\_  
(Signature of Permittee)

THE UNITED STATES OF AMERICA:

  
\_\_\_\_\_  
(Signature of Regional Supervisor)

DAVID S. WILKINS  
\_\_\_\_\_  
(Type or Print Name of Permittee)

Dr. Megan Carr  
\_\_\_\_\_  
(Type or Print Name of Regional Supervisor)

SR. Vice President  
\_\_\_\_\_  
(Title)

5/1/2020  
\_\_\_\_\_  
(Date)

5/1/2020  
\_\_\_\_\_  
(Date)



## United States Department of the Interior

Attachment 4

### BUREAU OF OCEAN ENERGY MANAGEMENT

Alaska OCS Region  
3801 Centerpoint Drive, Suite 500  
Anchorage, Alaska 99503-5823

## Operations Reporting Guidance for Submittal to BOEM

In accordance with Form BOEM-0328 Section A-2, Permittee is required to submit to BOEM and BSEE weekly operations status summary reports as prescribed below. The weekly reports are composed of a Weekly Status Summary Report and the permittee's (and/or their designated operator's) daily operations records. Weekly reports are to be submitted to the points of contact listed below by 6 A.M. AKDT each Friday throughout operations. Deviations from these prescribed requirements must be approved by the Supervisor prior to their required submission.

- **Weekly Status Summary Report (per Form BOEM-0328 Section A-2, the Supervisor is authorized to prescribe the manner in which reports are submitted) including:**
  - Map showing all data collected to date. The map will include the coastline and the OCS boundary
  - Summary of operating time by categories listed below (Ramp-up, Full array on, etc.)
  - Compilation of square miles collected. Include an accounting of the percent of total survey completed
  - Create and provide shape files of the track lines collected. Include all the daily information listed above as metadata
  - Any additional operations reports provided to Permittee by their operators/contractors
  
- **Daily operation records will include:**
  - All dates and times in AK local time.
  - Record of weather – sea conditions, winds, ice, etc.
  - Survey name and track line number where data was gathered
  - Start and end time plus total time in that mode for the following categories:
    - Ramp-up
    - Full array on
    - Power down
    - Shut down (no operational energy sources)
  - Reason for shutdowns/power downs – marine mammals (include species if possible), weather, ice, equipment failure, etc.
  - Safety Incident Report (if applicable), including and spillage of petroleum products
    - Should a serious injury occur, to human or animal, it must be reported to BOEM and BSEE within 24 hours.
  - PSO Reports

Send a copy of reports to:

Daniel Lasco, G&G Permitting Coordinator, AKOCS.GGpermits@boem.gov  
D. Thomas Donley, AOCs BSEE, akocscpliance@bsee.gov