

# United States Department of the Interior

# BUREAU OF OCEAN ENERGY MANAGEMENT, REGULATION, AND ENFORCEMENT

Alaska Outer Continental Shelf Region 3801 Centerpoint Drive, Suite 500 Anchorage, Alaska 99503-5823

AUG - 5 2010

Mr. Martin Cohen Alaska Exploration Manager Statoil USA E&P Inc. 2103 CityWest Boulevard, Suite 800 Houston, Texas 77042

Dear Mr. Cohen:

On December 18, 2009, Statoil submitted an application to MMS to obtain a Geological and Geophysical (G&G) permit under the 30 CFR 251 regulations to conduct geophysical exploration operations on certain Outer Continental Shelf (OCS) lands. The activity is in the Chukchi Sea area as shown on the map accompanying your application. Your application specified that Fugro will be your service providing company and will conduct the subject operations using the vessels described in the Operation Plan. Operations are proposed to begin on or after July 15, 2010, and will be completed on or before November 30, 2010. The proposed program is a 3D and 2D marine seismic acquisition using airguns as an energy source.

Your application submittal states that Statoil USA E&P Inc. has requested an Incidental Harassment Authorization (IHA) from National Marine Fisheries Service (NMFS) for whales and pinnipeds, and a Letter of Authorization (LOA) from US Fish and Wildlife Service (USFWS) for polar bears and walrus. The Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) requires a copy of the IHA and LOA authorizations and the Incidental Take Statements (ITS) prior to conducting seismic operations. The IHA from NMFS and the LOA from USFWS are in place to resolve subsistence-related concerns and to insure that impacts to marine mammals are not significant. The procedures outlined in these authorizations are required to avoid conflict with subsistence activities which may be conducted during a portion of the time proposed for this seismic operation.

OCS Permit 10-01 is hereby granted to conduct geophysical exploration operations on the OCS in the area and manner described in the application. A copy of the Permit Approval (Approval Letter with Enclosures and BOEMRE (MMS) Forms 327 and 328) must be posted and available for all personnel and in the possession of the operators of all vessels engaging in the activities approved under the authority of this Permit. A detailed track map of planned operations must be submitted to this office prior to the start of seismic operations. All operations are subject to the enclosed stipulations (see enclosure 1) and approved Permit for Geophysical Exploration for Mineral Resources on the OCS. In all cases, the specific mitigating measures identified in the NMFS IHA and USFWS LOA will apply and will take precedence over any BOEMRE requirements, where applicable, including protocols for



Mr. Martin Cohen

monitoring programs. Information related to compliance with the provisions in the IHA and LOA and penalties of the ESA and the MMPA may be obtained from the

U.S. Fish and Wildlife Service Alaska Region 1011E.Tudor Road Anchorage, Alaska 99503 Telephone (907) 786-3467

and from the

National Marine Fisheries Service Federal Building, Room C-554 Anchorage, Alaska 99513 Telephone (907) 271-5006

This permit is effective from the date of approval until November 30, 2010, or the completion of the survey, whichever occurs earlier. Please be advised that this office requires a weekly report of daily operations (see enclosure 2 for reporting requirements). We will require a completion report as detailed in the permit within 30 days following cessation of field operations.

The BOEMRE requests that Statoil provide us with a copy of the 90 Day Report when it becomes available.

Sincerely,

Rance R. Wall Regional Supervisor

Resource Evaluation

Zam Z. Wall

3 Enclosures

# Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE), Alaska OCS Region Seismic Survey G&G Permit Stipulations for Permit 10-01

- No solid or liquid explosives shall be used without specific approval.
- Permittee operations shall be conducted in a manner to ensure that they will not cause pollution, cause undue harm to aquatic life, create hazardous or unsafe conditions, or unreasonably interfere with other uses of the area. If any difficulties are encountered with other uses of the area or any of the above mentioned scenarios occur during operations under this permit, they shall be reported to the Regional Supervisor/Resource Evaluation. Serious or emergency conditions shall be reported without delay.
- The Permittee shall maintain a minimum spacing of 15 miles between their seismic-source vessels and any other concurrently operating seismic-source vessel. If there is not 15 miles between seismic-source vessels, one source vessel must cease operations. The BOEMRE must be notified by means of the weekly report whenever a shut down of operations occurs in order to maintain this minimum distance.
- Permittee operators shall use the lowest sound levels feasible to accomplish their data-collection needs.
- Vessels and aircraft shall avoid concentrations or groups of whales. Permittee operators shall, at all times, conduct their activities at a maximum distance from such concentrations of whales. Under no circumstances, other than an emergency, shall aircraft be operated at an altitude lower than 1,000 feet above sea level (ASL) when within 1,500 lateral feet of groups of whales. Helicopters shall not hover or circle above such areas or within 1,500 lateral feet of such areas.
- When weather conditions do not allow a 1,000-foot ASL flying altitude, such as during severe storms or when cloud cover is low, aircraft may be operated below the 1,000-foot ASL altitude stipulated above. However, when aircraft are operated at altitudes below 1,000 feet ASL because of weather conditions, the operator must avoid known whale-concentration areas and should take precautions to avoid flying directly over or within 1,500 yards of groups of whales.
- When the Permittee operates a vessel near a concentration of whales, every effort and precaution shall be taken to avoid harassment of these animals. Therefore, vessels shall reduce speed when within 900 feet of whales and those vessels capable of steering around such groups should do so. Vessels shall not be operated in such a way as to separate members of a group of whales from other members of the group.
- Vessel operators shall avoid multiple changes in direction and speed when within 900 feet of whales. In addition, operators shall check the waters immediately adjacent to a vessel to ensure that no whales will be injured when the vessel's propellers (or screws) are engaged.

- Small boats shall not be operated at such a speed as to make collisions with whales likely. When weather conditions require, such as when visibility drops, vessels shall adjust speed accordingly to avoid the likelihood of injury to whales.
- When any operator becomes aware of the potentially harassing effects of
  operations on whales, or when any operator is unsure of the best course of action
  to avoid harassment of whales, every measure to avoid further harassment shall be
  taken until the National Marine Fisheries Service (NMFS) is consulted for
  instructions or directions. However, human safety shall take precedence at all
  times over the guidelines and distances recommended herein for the avoidance of
  disturbance and harassment of whales.
- The Permittee shall notify BOEMRE, NMFS, and US Fish and Wildlife Service (USFWS) in the event of any loss of cable, streamer, or other equipment that could pose a danger to marine mammals and other wildlife resources.
- To help avoid causing bird collisions with seismic survey and support vessels, seismic and surface support vessels will minimize the use of high-intensity work lights, especially within the 20-meter-bathymetric contour. High-intensity lights will be used only as necessary to illuminate active, on-deck work areas during periods of darkness or inclement weather (such as rain or fog), otherwise they shall be turned off. Deck lights, interior lights, and lights used during navigation could remain on for safety. <sup>1</sup>
- All bird collisions (with vessels and aircraft) shall be documented and reported within 3 days to BOEMRE. Minimum information shall include species, date/time, location and weather, identification of the vessel or aircraft involved, and its operational status when the strike occurred. Bird photographs are not required, but would be helpful in verifying species. Permittees/operators are advised that the USFWS does not recommend recovery or transport of dead or injured birds due to avian influenza concerns.

The following monitoring and mitigation measures are related to the requirements of the Marine Mammal Protection Act (MMPA) and Endangered Species Act (ESA). The mitigation and monitoring requirements defined in any NMFS (the Federal agency having MMPA management authority for cetaceans and pinnipeds, less Pacific walrus) and USFWS (the Federal agency having MMPA management authority for Pacific walrus, polar bear, and sea otter) Incidental Take Authorization (ITA) and/or Letters of Authorization (LOA) obtained by the seismic survey operator will have precedence over any related measures listed below.

• Exclusion Zone – Any exclusion zones specified in ITAs and/or LOAs for protection of marine mammals from harassment will be enforced by the BOEMRE. The exclusion zones shall be free of marine mammals before the survey can begin and must remain free of marine mammals during the survey. The next four mitigation measures pertain to enforcement of an exclusion zone.

<sup>&</sup>lt;sup>1</sup> Nothing in this mitigation measure is intended to reduce personnel safety or prevent compliance with other regulatory requirements (e.g., U.S. Coast Guard or Occupational Safety and Health Administration) for marking or lighting of equipment and work areas.

- Monitoring of the Exclusion Zone Individuals (marine mammal biologists and/or trained observers as designated by the regulating agencies) shall monitor the area around the survey for the presence of marine mammals to maintain a marine mammal-free exclusion zone and monitor for avoidance or take behaviors. Visual observers monitor the exclusion zone to ensure that marine mammals do not enter the exclusion zone for at least 30 minutes prior to ramp up, during the conduct of the survey, or before resuming seismic-survey work after shut down. The NMFS will set specific requirements for the marine mammal monitoring program and observers.
- Shut Down/Power Down A seismic survey shall be suspended until the exclusion zone is free of marine mammals. All observers shall have the authority to, and will, instruct the vessel operators to immediately deenergize the airgun array whenever a marine mammal is seen within the exclusion zone or to power down to a sound level where the marine mammal is no longer in the exclusion zone. If the airgun array is completely powered down for any reason during nighttime or poor sighting conditions, it shall not be re-energized until daylight or whenever sighting conditions allow for the exclusion zone to be effectively monitored from the source vessel and/or through other passive acoustic, aerial, or vessel-based monitoring.
- Ramp Up Ramp up is the gradual introduction of sound to deter marine mammals from potentially damaging sound intensities and from approaching the exclusion zone. This technique involves the gradual increase (usually 5-6 dB per 5-minute increment) in emitted sound levels, beginning with firing a single airgun and gradually adding airguns over a period of 20 to 40 minutes, until the desired operating level of the full array is obtained. Ramp-up procedures may begin after observers ensure the absence of marine mammals for at least 30 minutes. Ramp-up procedures shall not be initiated when monitoring the exclusion zone is not possible. A single airgun operating at a minimum source level can be maintained for routine activities, such as making a turn between line transects, for maintenance needs or during periods of impaired visibility (e.g., darkness, fog, high sea states), and does not require a 30 minute clearance of the exclusion zone before the airgun array is again ramped up to full output.
- Reporting Requirements —Operators must report immediately any shut downs/power downs due to a marine mammal entering the exclusion zones and provide the regulating agencies and BOEMRE with information on the frequency of occurrence and the types and behaviors of marine mammals (if possible to ascertain) entering the exclusion zones.
- **Spring Lead System** In order to provide bowhead whale and walrus cow/calf pairs additional protection, and unless authorized under the MMPA by NMFS and USFWS, seismic surveys shall not occur in the Chukchi Sea spring lead system as defined by NMFS before July 1.

- Ledyard Bay Critical Habitat Unit (Unit) Except for emergencies or human/navigation safety, surface vessels associated with seismic survey operations shall avoid travel within the Unit between July 1 and November 15. To the maximum extent practicable, aircraft supporting seismic survey operations shall avoid operating below 1,500 feet ASL over the Unit between July 1 and November 15. Vessel travel within the Unit and altitude deviations by aircraft over the Unit for emergencies or human safety shall be reported within 24 hours to BOEMRE.
- Walrus Vessels and aircraft should avoid concentrations or groups of walruses. Operators should, at all times, conduct their activities at a maximum distance from such aggregations. Seismic-survey and associated support vessels shall observe a 0.5-mile safety radius around Pacific walrus groups hauled out onto land or ice. Under no circumstances, other than an emergency, should aircraft be operated at an altitude lower than 1,500 feet ASL when within 0.5-mile of walrus groups. Helicopters may not hover or circle above such areas or within 2,500 lateral feet of such areas.
- Polar Bear Seismic survey operators shall adhere to any mitigation measures identified by the USFWS to protect polar bears from being harassed and/or injured.

# Weekly Operations Report for submittal to BOEMRE

- Weekly Summary Report
  - Map showing data collected to date
  - Summary of operating time by categories listed below
  - Compilation of line Kms and/or sq Kms collected
  - Daily record of weather seas, winds, ice
- > Daily operation records will include
  - All dates and times in AK local time
  - Survey name
  - Track line # that data were collected on
  - Start and end time plus total time in that mode for the following categories:
    - Ramp-up
    - Full array on
    - Mitigation gun only
    - Power down; record output in cubic inches if possible
    - Shut down (no guns operating)
  - Reason for shutdowns/power downs marine mammals (include species if possible), weather, ice, equipment failure, etc.
  - > Safety Incident Report (if applicable) for same time period
  - > MMO Report for same time period
  - ➤ Send to Pete Sloan, G&G Permitting Coordinator, Alaska Region, BOEMRE, Pete.Sloan@mms.gov or call 907-334-5328 (office) or 907-382-1134 (cell)

OMB Control No. 1010-0048 OMB Approval Expires: August 31, 2012

# **UNITED STATES** DEPARTMENT OF THE INTERIOR MINERALS MANAGEMENT SERVICE

RECEIVED Resource Evaluation

Alaska OCS Region

DEC 2 2 2009

(Insert Appropriate Regional Office)

U.S. Dept. of the Interior Minerals Management Svc. Alaska OCS Region

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

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

(Attachment 1)

Nonexclusive Use Agreement for Scientific Research (Attachment 2)

**SUBMIT:** Original, two copies, and one public information 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 Minerals Management Service (MMS) collects this information to evaluate applications for permits to conduct pre-lease exploration offshore and to monitor activities of scientific research conducted under notices. The MMS 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 to obtain 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 the 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 3 hours per response, including 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, Minerals Management Service, Mail Stop 5438, 1849 C Street, NW, Washington, DC 20240.

# UNITED STATES DEPARTMENT OF THE INTERIOR MINERALS MANAGEMENT SERVICE

# REQUIREMENTS FOR GEOLOGICAL AND GEOPHYSICAL EXPLORATIONS OR SCIENTIFIC RESEARCH IN 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 Part 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 Part 251 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; or
- F. Disturb archaeological resources.

Any person conducting geological or geophysical activities for mineral exploration or scientific research under 30 CFR Part 251 must immediately report to the Director, MMS:

- 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 Part 251 must utilize the best available and safest technologies that MMS determines to be economically feasible.

The authorization that MMS grants you under 30 CFR Part 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 MMS 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 MMS 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 the MMS 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.

## **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 page-size plat(s) showing the location of the proposed activity. The plat(s) should show geographic coordinates relative to the MMS area and block numbers, an easily identified onshore point of reference, and the distance and direction from the point of reference to area of activity. Line locations should not be included on these plat(s). In addition, each applicant for a geological or geophysical permit must submit the appropriate attachment to section D of the application. Each applicant for a scientific research permit must also 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 327 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. The MMS 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, MMS may determine that earlier release is necessary for the proper development of the area permitted.

### **Modifications to Approved Permits**

The MMS 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 each notice or application for a permit in triplicate, plus one public information copy, at the following locations 30 days before you begin operations:

A. For the OCS off the State of Alaska:

Regional Supervisor for Resource Evaluation Minerals Management Service Alaska OCS Region 3801 Centerpoint Drive Suite #500 Anchorage, Alaska 99503-5823

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

Regional Supervisor for Resource Evaluation Minerals Management Service 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:

Chief, Office of Reservoir Evaluation & Production Minerals Management Service Pacific OCS Region 770 Paseo Camarillo Camarillo, California 93010-6092

# UNITED STATES DEPARTMENT OF THE INTERIOR MINERALS MANAGEMENT SERVICE

RECEIVED
Resource Evaluation

Alaska OCS Region

DEC 2 1 2009

(Insert Appropriate Regional Office)

U.S. Dept. of the Interior Minerals Management Svc.

# APPLICATION FOR PERMIT TO CONDUCT GEOLOGICAL OR GEOPHYSICAL EXPLORATION FOR MINERAL RESOURCES OR SCIENTIFIC RESEARCH IN 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 Part 251)

	Statoil	il USA E&P Inc.	
<del></del>	Nam	ne of Applicant	
	2103 CityWes	st Boulevard, Suite 800	
-	Num	nber and Street	
	Houst	ton, TX 77042	
-	City, Sta	tate, and Zip Code	
	Fugro-	-Geoteam, Inc.	
		ce Company or Purchaser erent from above)	
Application is ma	de for the following activity:	: (check one)	
$\bigcirc$	Geological exploration for i	mineral resources	
0	Geological scientific resear	rch	
<b>O</b>	Geophysical exploration for	or mineral resources	
0	Geophysical scientific resea	arch	
Submit: Original,	two copies, and one public in	nformation copy.	
	To be con	ompleted by MMS	
Permit Number:	10-01	Date:8 5 10	11

## A. General Information

1.	The activity will be conducted by: Fugro-Geoteam, Inc.	Statoil USA E&P Inc.
	Service Company Name 6100 Hillcroft	Purchaser(s) of the Data 2103 CityWest Boulevard, Suite 800
	Address	Address
	Houston, TX 77081	Houston, TX 77042
	City, State, Zip	City, State, Zip
	713-369-5591/713-778-6815 (fax )	713-918-8200/713-918-8290 (fax)
	Telephone/FAX Numbers	Telephone/FAX Numbers
	E-Mail Address	E-Mail Address
2.	The purpose of the activity is:	_ Mineral exploration
	0	_ Scientific research
3.		
4.	The expected commencement date is: July	15, 2010 
	The expected completion date is: November	er 30, 2010
5.	The name of the individual in charge of the	field operation is: Sigbjorn Vigeland, Project Manage
	May be contacted at: Fugro Geoscience	Division, 6100 Hillcroft, Houston, TX 77081
		cell (Marine) +47 23 25 42 92 (On board Party Chief)
	Radio call sign LAKF6	<del></del>
6.	The vessel(s) to be used in the operation is (  M/V Geo Celtic (seismic source vesse)  Name	D26988 Bergen, Norway
	Registered owner E Forland AS	
7.	The port from which the vessel(s) will opera	ate is: Dutch Harbor, Alaska: Nome, Alaska
8.	Briefly describe the navigation system (vess	sel navigation only):
	Furuno FE 700 echosounde; Furuno 10	0cm ARPA-radar; Furuno 3cm ARPA-radar

# **Geological Scientific Research** 1. The type of operation(s) to be employed is: (check one) Deep stratigraphic test, or Shallow stratigraphic test with proposed total depth of \_\_\_\_\_\_, or Other NA 2. Exact geographic coordinates of proposed test(s) (attach a page-size plat(s)): NA C. Complete for Geophysical Exploration for Mineral Resources or **Geophysical Scientific Research** 1. Proposed location of the activity (attach a page-size plat(s)): See attached figures 2. The type(s) of operation(s) to be employed is (are): Marine 3D Seismic Acquisition and Marine 2D Seismic Acquisition (Seismic, gravity, magnetic, etc.) 3. The instrumentation and/or technique(s) to be used in the operation(s) is (are): Towed airgun array and a towed 12-streamer hydrophone array (Air gun, sparker, etc.) 4. Explosive charges will owwill 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

B. Complete for Geological Exploration for Mineral Resources or

## D. Proprietary Information Attachments

Use the appropriate form on page 9 for a "geological" permit application or the form on page 10 for a "geophysical" permit application. You must submit a separate Form MMS-327 to apply for each geological or geophysical permit.

I hereby cer	rtify that foregoing and attache	ed information are true	and correct.	
SIGNED_	Karon Cohe	a i k (the th	_ DATE _ (2/	17/201
TITLE	Martin Cohen, Alaska E	Exploration Manage	er	
		efec to effect to	Not District	=
		OMPLETED BY M		
Permit No. 10	Assigned	by Nother of	MMS	Date/2/22/200
This applicatio	- I - I - I - I - I - I - I - I - I - I			
a	Approved			
b	Returned for reasons in the att	ached		
The approved	permit is:			
a	Attached Will be forwarded at a later da	ate		

E. Certification

Zan Well TITLE Regional Supervisor DATE 8/5/10

# Section D Proprietary Information Attachment Required for an Application for Geological Permit

1.	Brief description of method of shallow drilling or sampling:			
	NA			
2.	Brief description of shallow drilling or sampling equipment to be used:  NA			
3.	Number of boring or sample locations to be occupied:  NA			
4.	Navigation system or method to be used to position sample locations:  NA			
5.	Method of sample analyses, storage, and handling:			
	NA			
6.	Description and list of the final analyzed and/or processed data that will result from operations under the proposed activity:  NA			
	Estimated date on which samples, logs, and analyzed and/or processed data will be ready for specti on: NA			
8.	Attach map(s), plat(s), and chart(s) (preferably at a scale of 1:250,000) showing latitude and longitude, scale, specific block numbers, specific boring sample locations, and total number of			

borings or samples proposed.

# Section D Proprietary Information Attachment Required for an Application for Geophysical Permit

1.	Brief description of the energy source and streamer (receiving array):			
	THE INFORMATION IN THIS SECTION CONTAINS CONFIDENTIAL/PROPRIETARY INFORMATION AND IS NOT AVAILABLE IN THIS PUBLIC INFORMATION COPY OF THE EXPLORATION PLAN			
	and the company of paraller of the system of the Section of the Se			
2.	Total energy output per impulse:			
3.	Number of impulses per linear mile:			
4.	Towing depth of the energy source:			
5.	Towing depth of the streamer:			
6.	Navigation system or method to be used to position shotpoint locations:			
	no (supply on sensing years or a supply agent			
7.	Area of activity and total number of line miles proposed:			
8.	Description and list of the final processed data that will result from operations under the proposed			
ac	tivity :			
_				
9.	Estimated date on which processed data will be available for inspection:			
10.	Attach map(s), plat(s), and chart(s) (preferably at a scale of 1:250,000) showing latitude and longitude, scale, specific block numbers, specific track lines with line identifications, and the total number of line miles proposed			

# UNITED STATÉS DEPARTMENT OF THE INTERIOR MINERALS MANAGEMENT SERVICE

Alaska OCS Region
(Insert Appropriate Regional Office)

# NONEXCLUSIVE USE AGREEMENT FOR SCIENTIFIC RESEARCH IN THE OUTER CONTINENTAL SHELF

Α.	state the time and manner in which data and information resulting from the proposed activity will be made available to the public for inspection and reproduction, such time being the earliest practicable time.
	NA
_	
В.	(applicant) agrees that the data and information resulting from the proposed activity will not be sold or withheld for exclusive use.
	(Signature of Applicant)
	(Type or Print Name of Applicant)
	(Title)
	(Date)

Submit: Original, two copies, and one public information copy.

# UNITED STATES DEPARTMENT OF THE INTERIOR MINERALS MANAGEMENT SERVICE

### ALASKA OCS REGION

(Insert Appropriate Regional Office)

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Resource Evaluation

DEC 2 1 2009

U.S. Dept. of the Interior Minerals Management Syc. Alaska OCS Region

# PERMIT FOR GEOPHYSICAL EXPLORATION FOR MINERAL RESOURCES OR SCIENTIFIC RESEARCH IN 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 Minerals Management Service (MMS) of the Department of the Interior, and

Ctata:ILICA FOD In-

Staton USA E	&P Inc.			
	(Name of Po	ermittee)		
2103 CityWes	st Boulevard, Su	iite 800		
	(Number an	d Street)		
Houston, TX	77042			
	(City, State, an	d Zip Code)		
PERMIT NUMBER:	10-01	DATE: _	8 5 10	

This permit is issued pursuant to the authority of the Outer Continental Shelf Lands Act, as amended, (43 U.S.C. 1331 et seq.), hereinafter called the "Act," and Title 30 Code of Federal Regulations Part 251 (Geological and Geophysical (G&G) Explorations of the Outer Continental Shelf).

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

## Section I. Authorization

Th	The Government authorizes the permittee to conduct:		
	Geophysical exploration for mineral resources as defined in 30 CFR 251.1.		
	Geophysical scientific research as defined in 30 CFR 251.1. 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.		
Jul	This permit authorizes the permittee to conduct the above geophysical activity during the period from July 15, 2010 to November 30, 2010 in the following area(s):		
the wi Ins	e time period specified above must be requested in writing. A permit plus extensions for activities libe limited to a period of not more than 1 year from the original issuance date of the permit. Spection and reporting of geophysical exploration activities, suspension and cancellation of authority conduct exploration or scientific research activities under permit, and penalties and appeals will be tried out in accordance with 30 CFR 251.8, 251.9, and 251.10.		
	e authority of the Regional Director may be delegated to the Regional Supervisor for Resource aluation for the purposes of this permit.		
Section	on II. Type(s) of Operations and Technique(s)		
A.	The permittee will employ the following type(s) of operations:		
	3D seismic acquisition and 2D seismic acquisition in open waters. See Plan of Operations.		
	and will utilize the following instruments and/or technique(s) in such operations:		
	Towed airgun source and a towed 12-streamer hydrophone array.		
В.	The permittee will conduct all activities in compliance with the terms and conditions of this permit, including the "Stipulations," "Special Provisions," and the approved "Application for Permit," which are attached to and incorporated into this permit.		
C.	The permittee will conduct all geophysical exploration or scientific research activities in compliance with the Act, the regulations in 30 CFR Part 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 Part 251 are restated in this permit for emphasis. However, all of the provisions of 30 CFR Part 251 apply to this permit.		
Section	on III. Reports on Operations		
A.	The permittee must submit status reports on a <u>weekly</u> basis in a manner approved or prescribed by the Regional Supervisor, Resource Evaluation (hereinafter referred to as Supervisor). The report must include a daily log of operations and a map (preferably on a scale of 1:250,000 ) showing traverse lines according to Minerals Management Service (MMS) area and block numbers.		

- 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. A description of the work performed including number of line miles or OCS blocks of geophysical data acquired;
  - 2. 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;
  - 3. The dates on which the actual geophysical exploration or scientific research activities were performed;
  - 4. A narrative summary of any: (a) hydrocarbon occurrences 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:
  - 5. The estimated date on which the processed or interpreted data or information will be available for inspection by the MMS;
  - 6. 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 locations for the first, last and every tenth SP. For 3D surveys, please supply 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;
  - 7. Identification of geocentric ellipsoid (NAD 27 or NAD 83) used as a reference for the data or sample locations; and
  - 8. Such other descriptions of the activities conducted as may be specified by the Supervisor.
- C. The last status report and the final report can be combined into one report.

## 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 250, 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 MMS that the requested reimbursement is proper, MMS 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 MMS's request, MMS 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. The MMS 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 Part 250 (Oil and Gas and Sulphur Operations in the Outer Continental Shelf), 30 CFR Part 251, and 30 CFR Part 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 250 and 252, no data or information determined by MMS 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 MMS, will be disclosed as follows:
  - 1. Except for deep stratigraphic tests, the MMS 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 251.12 (a) (b) (c) and (d)).
  - 2. Except for deep stratigraphic tests, the MMS 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 251.12 (a) (b) (c) and (d)).

- 3. The MMS 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 251.7 or 251.12, 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, MMS, 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 251.8 and determined by MMS 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 251.14, unless the Director, MMS, 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.
- 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. <u>Disclosure to Independent Contractors</u>

The MMS 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, MMS will advise the permittee who provided the data or information of intent to disclose the data or information to an independent contractor or agent. The MMS'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 MMS 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 MMS'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 MMS.

### 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, MMS, pursuant to the provisions of 30 CFR 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 MMS 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 256, MMS, 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 MMS 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 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 Part 250, Part 251, and Part 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:	THE UNITED STATES OF AMERICA:
(Signature of Permittee)	(Signature of Regional Supervisor)
Martin Cohen	Rance R. Wall
(Type or Print Name of Permittee)	(Type or Print Name of Regional Supervisor)
Alaska Exploration Manager  (Title)	(Date) 8 /5 /10
(Date)	