

# **FINDING OF NO SIGNIFICANT IMPACT**

## **ION Geophysical**

### **Geological & Geophysical Permit Application #12-01 2012 2D Seismic Survey Beaufort Sea and Chukchi Sea, Alaska**

#### **Introduction**

In accordance with the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations at 40 CFR 1501.3(b) and 1508.9, Department of the Interior (DOI) regulations implementing NEPA at 43 CFR Part 46, and Bureau of Ocean Management (BOEM) policy, BOEM prepared an environmental assessment (EA) of the potential effects of ION Geophysical's (ION) proposed 2012 in-ice seismic survey in the Beaufort Sea and Chukchi Sea Planning Areas of the Alaska outer continental shelf (OCS). The proposed seismic survey activities are authorized under the OCS Lands Act and are regulated under 30 CFR 551 Geological and Geophysical (G&G) Explorations of the OCS.

On April 9, 2012, a notice of preparation of an EA on ION's geophysical permit application #12-01 was published on Regulations.gov as docket BOEM-2012-0026, sent to potentially affected stakeholders, and posted on the Alaska OCS Region website. The notice stated that "BOEM is inviting the public to comment on issues that should be considered by BOEM in preparing the EA." Comments were accepted through April 30, 2012. Only one comment was received, from a private individual, stating the hope that the permit not be granted.

BOEM prepared the EA to determine whether the Proposed Action may result in significant effects (40 CFR 1508.27) that could trigger the need for an environmental impact statement (EIS) and to assist with BOEM planning and decision-making (40 CFR 1501.3b). BOEM conducted the environmental evaluation to ensure that the Proposed Action is conducted "in a safe and environmentally sound manner so as to prevent harm or damage...to any life (including fish and other aquatic life)...or the marine, coastal, or human environment" (30 CFR 551.6). The EA analyzes the potential for significant adverse effects from the specific Proposed Action on environmental resources.

#### **Purpose of the Proposed Action**

ION submitted a G&G permit application and supporting documents for a proposed 2012 seismic survey in the Beaufort Sea and Chukchi Sea Planning Areas. The purpose of the seismic survey is to collect two-dimensional (2D) seismic survey data to image the subsurface geological structures in the region, providing geologists and geophysicists with information to better evaluate prospects for potential oil and gas reserves. The data obtained will allow ION to view and interpret large scale subsurface geologic structural features. This information will provide critical insight into the geologic evolution, basin architecture, and depositional and structural history of the petroleum system.

#### **Description of the Proposed Action**

ION's proposal is to conduct a single season of 2D in-ice seismic surveying in the Beaufort Sea and Chukchi Sea between October 1 and December 15, 2012. The proposed seismic survey would extend from the U.S.–Canada exclusive economic zone (EEZ) on the east to Point Barrow on the west with two survey lines extending west of Point Barrow into the Chukchi Sea and three smaller lines segments along the western edge of the survey area. Most of the survey will be conducted in the Beaufort Sea. The survey area would cover portions of the continental shelf, the continental slope, and the abyssal plain. The survey area ranges from about 12 to 250 km (7 to 155 mi) offshore in water depths of less than 20 m (66 ft.) to greater than 3,500 m (11,483 ft.). Approximately 61% of the proposed survey would be conducted in

water depths greater than 200 m (656 ft.). The approximate total length of the proposed survey lines is 7,175 km (4,505 mi).

The Proposed Action area is divided into East and West Survey Areas. ION plans to begin seismic survey operations in October in the East Survey Area, in offshore waters deeper than 1,000 m (3,280 ft). The survey would proceed into shallower waters in the East Survey Area before moving to the West Survey Area. Operations would take place in open-water and first-year ice with ice coverage during the survey expected to range from open water to 10/10 (91%-100%) ice cover. The seismic survey is expected to take approximately 76 days to complete with termination of operations no later than December 15, 2012.

ION would conduct seismic survey operations using the seismic vessel M/V *Geo Arctic*. The vessel is equipped with standard navigation, radar, communication, and depth sounding equipment. The airguns and hydrophone streamer towed by the *Geo Arctic* have been specially designed for operations in ice-covered seas. The *Geo Arctic* would travel at a speed of about 3-4 knots while conducting seismic operations. The *Geo Arctic* will follow 0.5 – 1 km (0.3 – 0.6 mi) behind the icebreaker *Polar Prince* whenever ice is present. *Polar Prince* will carry approximately 500 tons of Arctic diesel fuel, and may perform at-sea refueling of the *Geo Arctic* during late October. *Polar Prince* will perform any other support or supply duties as necessary. ION has previously conducted similar in-ice surveys in Canada and Greenland.

The vessels would begin operations in the East Survey Area on or after October 17, 2012. To get to the East Survey Area, the vessels will traverse the West Survey Area. Operations would end upon completion of the proposed survey, or if weather, ice conditions, or vessel status make further survey efforts untenable, but in any case no later than December 15, 2012. The survey vessels would then depart the Chukchi Sea to the south.

The Proposed Action also includes collection of gravity and magnetic data. These surveys involve no introduction of energy into the marine environment. Because gravity and magnetic surveys are passive data collection, they were not further analyzed in the EA.

### Related Environmental Documents

The site-specific EA incorporates information from previous NEPA documents prepared by BOEM (formerly MMS and BOEMRE), which provide a comprehensive characterization of the Arctic Ocean's physical, biological, and socio-economic resources and Alaska Native subsistence activities, and evaluate a broad spectrum of potential seismic survey-related impacts (<http://www.boem.gov/ak-eis-ea/>). These documents address issues and analyze potential effects of seismic surveys in the U.S. Arctic OCS.

- Environmental Assessment, Beaufort Sea and Chukchi Sea Planning Areas, ION Geophysical, Inc. Geological and Geophysical Seismic Surveys, (OCS EIS/EA BOEMRE 2010-027) September 2010 (USDOI, BOEMRE, 2010a) (hereafter "2010 ION Seismic Survey EA").
- Final Programmatic Environmental Assessment, Arctic Ocean Outer Continental Shelf, Seismic Surveys – 2006 (OCS EIS/EA MMS 2006-038) June 2006 (USDOI, MMS, 2006) (hereafter "2006 Seismic PEA").
- Final Environmental Impact Statement, Beaufort Sea Planning Area Oil and Gas Lease Sales 186, 195 and 202 (OCS EIS/EA MMS 2003-001) February 2003 (USDOI, MMS, 2003) (hereafter "Beaufort Sea Multiple-Sale EIS").
- Final Environmental Impact Statement, Chukchi Sea Planning Area Oil and Gas Lease Sale 193 and Seismic Surveying Activities in the Chukchi Sea (OCS EIS/EA MMS 2007-026) May 2007 (USDOI, MMS, 2007b) (hereafter "Lease Sale 193 and Seismic Surveying EIS").
- Final Supplemental Environmental Impact Statement, Chukchi Sea Planning Area, Oil and Gas Lease Sale 193 (OCS EIS/EA BOEMRE 2011-041) 2011 (USDOI, BOEMRE, 2011b) hereafter "Lease Sale 193 SEIS").

## Environmental Evaluation

BOEM evaluated the Proposed Action and a No Action alternative. Other alternatives were considered but not analyzed because they were determined to be impractical or unfeasible.

### No Action.

Under this alternative, BOEM would not issue a permit for the Proposed Action. This alternative would delay or eliminate any potential adverse effects to the physical environment, biological resources, or subsistence activities from the acquisition of seismic survey data in the vicinity of ION's proposed Beaufort Sea and Chukchi Sea seismic survey during the 2012 season. Not issuing the permit for the Proposed Action could result in delay in understanding of the geophysical makeup of the Beaufort Sea and Chukchi Sea and lost or delayed opportunities for discovery and extraction of natural resources and any associated economic benefits.

### Proposed Action.

Based on review of the Proposed Action and the best available scientific information, the analysis in the attached EA concludes that **negligible to minor** adverse effects are expected to occur from ION's Proposed Action in the Beaufort Sea and Chukchi Sea during the 2012 season. Mitigation measures incorporated into the Proposed Action were considered in the analysis. The overall conclusions of the Proposed Action analysis are summarized below:

**Biological Resources:** ION's Proposed Action is expected to have negligible or minor, short-term effects on biological resources. Effects on marine mammals, marine birds, and most marine fish or their habitats would be restricted to disturbance and temporary avoidance or displacement.

Threatened and endangered species expected to occur in the Proposed Action area are bowhead whales and polar bears<sup>1</sup>. Effects from the Proposed Action are expected to be minor and limited to disturbance and potentially some avoidance of the area being surveyed by some individual animals. No population level effects are anticipated. Adverse effects to bowhead whales and polar bears are expected to be limited to disturbance or displacement by vessel traffic and seismic sound. Adverse effects to ringed and bearded seals, which are proposed for listing under ESA, are expected to be limited to disturbance or displacement by vessel traffic and seismic sound. Effects are expected to be negligible to minor, localized and temporary.

The Proposed Action is expected to have a negligible effect on designated critical habitat for polar bears and Essential Fish Habitat (EFH).

**Subsistence Activities, Employment, and Public Health:** Effects on subsistence activities undertaken by Kaktovik, Nuiqsut, and Barrow are expected to be negligible because of the timing of the Proposed Action. The effect of employment of local residents in support of Proposed Action is expected to be negligible at the community level. The Proposed Action is expected to have no adverse effect on the health of the residents of the North Slope Borough or the communities of Kaktovik, Nuiqsut and Barrow.

### Significance Review (40 CFR 1508.27)

Pursuant to 40 CFR 1508.27, significance is evaluated by considering both context and intensity.

The potential significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the Proposed Action. For site-specific actions such as this one, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short-term and long-term effects are relevant. For this Proposed Action, the context is one of an offshore environment. Given the

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<sup>1</sup> Other threatened and endangered species do occur in the Proposed Action area, but are not expected to occur during the time period of this action.

nature and timing of the Proposed Action, essentially all notable effects are expected to be short-term, occurring only while the activities are taking place. It is with this context in mind that the intensity of potential effects is considered.

Intensity refers to the severity of effect. Pursuant to 40 CFR 1508.27(b), the following ten factors have been considered in evaluating the intensity of ION's Proposed Action:

1. **Impacts that may be both beneficial and adverse.** A beneficial effect of the Proposed Action will be an increase in knowledge of the geologic structure of the project area. Potential adverse effects of the Proposed Action to the physical environment, biological resources, and subsistence activities are expected to be negligible to minor. ION intends to hire local Iñupiat Protected Species Observers (PSOs) and will financially support an emergency communications center in Deadhorse, Alaska. While these arrangements will probably bring some income into specific communities, they will also temporarily remove individual workers from their local labor pools. Therefore, the level of adverse and beneficial effects of the Proposed Action does not render the potential impacts significant.
2. **The degree to which the Proposed Action affects public health or safety.** The communities closest to the Proposed Action area are Nuiqsut, Kaktovik, and Barrow. The Proposed Action is not expected to adversely affect public health. Previous seismic survey-related environmental evaluations (2006 Seismic PEA and Lease Sale 193 and Seismic Surveying EIS) concluded that effects to water and air quality from open-water seismic survey operations would be negligible. The mitigation measures designed to lessen or alleviate adverse impacts to subsistence activities that were included in ION's 2010 IHA application request have been incorporated into ION's 2012 Proposed Action and thus would be required by any BOEM-issued permit.

BOEM will require an additional mitigation measure to reduce the potential for effects on subsistence activities: *The vessels must remain at least 30 miles from whaling activities when transiting the West Survey Area to begin operations in the East Survey Area. Vessels shall maintain communication with the Alaska Eskimo Whaling Commission and the Barrow Whaling Captains' Association during the eastward transit around Pt. Barrow.*

Therefore, the degree to which the Proposed Action may affect public health or safety does not render the potential impacts significant.

3. **Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.**

All of the Proposed Action area occurs in designated adult and late juvenile Arctic cod and Pacific salmon Essential Fish Habitat (EFH) and the western-most proposed Chukchi Sea tracklines overlap with a very small section of the eastern-most adult and late juvenile saffron cod EFH. ION's 2012 Proposed Action could cause temporary, localized effects along any single trackline overlapping EFH, and dispersed effects over the entire project area over the three-month survey period. An EFH assessment for the Proposed Action was submitted to NMFS on September 7, 2012. The assessment designated a finding of no adverse effects for saffron cod and Pacific salmon late juvenile and adult EFH. A designation of adverse effects was determined for Arctic cod juvenile and adult EFH, but at a local level and not at a population level. NMFS has verbally concurred with BOEM determinations.

Polar bear critical habitat is made up of three units: terrestrial denning habitat, barrier islands and sea ice. The Proposed Action will be  $\geq 20$  km (13 mi) from the barrier islands and shorelines, therefore no effects to terrestrial denning habitats or barrier islands are anticipated. The Proposed

Action overlaps only with sea ice and would affect relatively small areas of critical habitat at any given time, as the ice will re-freeze behind the icebreaker and survey ship within a few hours to a few days. No long-term or widespread effects on the areal extent and distribution of critical habitat are anticipated because the ice is likely to be constantly shifting and moving during transit. Any adverse effects from ice breaking are expected to be short term and localized. No adverse modification of critical habitat is anticipated.

Emissions and discharges from the survey vessels must comply with regulations that are applicable to all vessels. Emissions are expected to be localized and short term, and to have negligible effects on local air quality. Discharges would be regulated under the Environmental Protection Agency's (EPA) National Pollutant Discharge Elimination System Vessel General Permit for Discharges Incidental to the Normal Operation of Vessels (EPA, 2009a), which became effective for Alaska on February 6, 2009. Current USCG regulations related to pollution prevention and discharges for vessels carrying oil, noxious liquid substances, garbage, municipal or commercial waste, and ballast water are at 33 CFR 151. Allowable discharges and emissions are not expected to affect the coastal area or sea ice.

Therefore, the degree to which the Proposed Action may affect unique geographic areas does not render the potential impacts significant.

4. **The degree to which the effects on the quality of the human environment are likely to be highly controversial.** Whaling is a culturally self-defining practice of the Iñupiat people. Stakeholder concerns related to anthropogenic noise in the Arctic marine environment have focused on the potential effects to marine species, particularly the bowhead whale, from impulse sounds associated with high-energy seismic surveys, such as the Proposed Action. Stakeholder concerns have included the potential effects of noise on other marine mammals, fish, and birds; the biological significance of bowhead whales' responses to anthropogenic marine noise; and potential interference with subsistence activities.

The anticipated effects of the Proposed Action are based upon established models for sound transmission, which will be verified through field measures before start of surveying operations. The effects analyses in the EA are based on the best available scientific information. No unavailable information relevant to potential significant effects and essential to a reasoned decision on the proposal or alternatives was identified.

The Proposed Action includes specific and enforceable measures. ION's vessels will remain outside of the East Survey Area until October 17 at the earliest, which is after the Kaktovik and Nuiqsut subsistence bowhead whale hunts are completed. BOEM will require that the vessels remain at least 30 miles from whaling activities when transiting the West Survey Area to begin operations in the East Survey Area and that the vessels maintain communication with the Alaska Eskimo Whaling Commission and the Barrow Whaling Captains' Association during the eastward transit around Pt. Barrow. This will reduce any potential adverse impact to the subsistence bowhead hunt.

No substantial questions remain regarding whether the Proposed Action may cause significant effects. Therefore, the degree to which the potential effects of the Proposed Action may be highly controversial does not render the potential impacts significant.

5. **The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.** Permitted seismic surveys have been conducted in the federal waters of the Beaufort Sea and Chukchi Sea since the 1960's with a peak in the 1980's. Prior to the 2006 open-water season, approximately 99,000 line-miles and 80,000 line-miles of 2D seismic surveys had been conducted in the Beaufort Sea Planning Area and Chukchi Sea Planning Area, respectively. Since 2006, three deep-penetration seismic

surveys were conducted during the open-water season in the Beaufort Sea Planning Area and six were conducted in the Chukchi Sea Planning Area. No significant adverse effects were observed during these operations.

Potential effects from seismic survey noise and ice-breaking on bowhead whales, other marine mammals, and subsistence use were analyzed previously in NEPA documents: 2010 ION Geophysical EA, 2006 Seismic PEA, Beaufort Sea Multiple-Sale EIS, Lease Sale 193 and Seismic Surveying EIS, and EAs prepared by BOEM and NMFS for proposed seismic surveys in 2007, 2008, and 2010. Based on its NEPA analyses, BOEM found no significant effects to marine mammals and subsistence activities from seismic surveying activities. Based on its NEPA analyses, NMFS found negligible effects to marine mammals and no unmitigable adverse effects to the availability of subsistence resources from seismic survey activities.

BOEM and NMFS, as Action Agencies, are in the process of jointly consulting with NMFS on the Proposed Action. Any necessary measures to minimize incidental take will be addressed through the IHA issued by NMFS.

BOEM completed formal programmatic consultation on May 8, 2012, on the spectacled eider, the Steller's eider, the Ledyard Bay Critical Habitat Unit, the polar bear, and polar bear critical habitat with the US Fish and Wildlife Service (FWS). The May 8 programmatic consultation included in-ice seismic surveying.

The findings of the NEPA analyses and ESA consultations above were neither highly uncertain nor involved unique or unknown risks. The effects of the Proposed Action are not expected to be highly uncertain nor does the Proposed Action involve unique or unknown risks. Therefore, the degree to which the potential effects of the Proposed Action may be highly uncertain or involve unique or unknown risks does not render the potential impacts significant.

6. **The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.** ION's G&G permit application #12-01 was submitted pursuant to OCS regulations at 30 CFR 551. The permit application is limited to ION's proposed seismic survey in the Beaufort Sea and Chukchi Sea Planning Areas during 2012 in open water and in-ice conditions. In compliance with OCS Lands Act and DOI policy in 516 DM 15, BOEM conducts technical and environmental reviews of G&G permit applications. Each G&G permit is subject to a proposal-specific technical and environmental reviews and decision making process. No precedent for future actions for surveys in other conditions or a decision on principles for future considerations is made through a decision on this specific Proposed Action. Issuance of a G&G permit does not constrain the decision on any future G&G permit, nor does denying a G&G permit set a precedent for future approval of any future G&G permit. Therefore, the degree to which the Proposed Action may establish a precedent for future actions or represents a decision in principle about a future consideration does not render the potential impacts significant.
7. **Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.** The EA considered the potential cumulative effects of the Proposed Action and other expected activities in 2012. The EA concludes that the Proposed Action is not reasonably anticipated to produce significant impacts or to incrementally add to the effects of other activities to the extent of producing significant effects. The Proposed Action is not directly or causally related to other actions with cumulatively significant impacts. Therefore,

the degree to which the potential effects of the Proposed Action may be related to other actions with individually insignificant but cumulatively significant impacts does not render the potential impacts significant.

8. **The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.** The Proposed Action does not include seafloor-disturbing activities (e.g., anchoring). Allowable discharges and emissions are not expected to affect the coastal area. The Proposed Action is not expected to adversely affect, or cause the loss of, any scientific, cultural, or historic resources. Therefore, the degree to which the Proposed Action may adversely affect historic resources does not render the potential impacts significant.
9. **The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.** ION's Proposed Action is within the scope of the activities covered in the current ESA consultations.

The NMFS July 17, 2008, Biological Opinion concluded that OCS exploration activities, including seismic surveying, in the U.S. Arctic Ocean are not likely to jeopardize the continued existence of the fin, humpback, or bowhead whale

The Proposed Action likely would result in a negligible level of impact to bowhead whales. Few bowheads are likely to be encountered in the East Survey Area of the Beaufort Sea in mid-October. The survey is designed to move westward after the bowhead whale population has migrated out of the area, greatly reducing the number of bowheads that might be encountered. Fin and humpback whales migrate out of the Arctic earlier than bowhead whales and the Proposed Action is not expected to adversely affect these species.

BOEM completed formal programmatic consultation on May 8, 2012, on the spectacled eider, the Steller's eider, the Ledyard Bay Critical Habitat Unit, the polar bear, and polar bear critical habitat with the FWS. The May 8 programmatic consultation included in-ice seismic surveying. The FWS Biological Opinion concluded that OCS exploration activities, including seismic surveying, in the Beaufort Sea and Chukchi Sea are not likely to jeopardize the continued existence of the polar bear, the Steller's eider, or the spectacled eider, nor will they destroy or adversely modify critical habitat. The Biological Opinion provided incidental take authorization for listed eiders, and required that incidental take of polar bears be authorized under the Marine Mammal Protection Act (MMPA), at which time an ESA Incidental Take Statement (ITS) will be issued.

The best available information indicates that few threatened eiders would be present in the proposed survey area during the time of the proposed operations. Eiders could be disturbed or displaced by vessel traffic associated with the Proposed Action, but the effects would be minor and temporary.

Polar bears may be impacted by noise and disturbance from seismic and icebreaker activities or from changes to their sea ice habitat from icebreaking. Most impacts to polar bears from the Proposed Action are likely to be limited to disturbance. The survey is scheduled to occur early in the denning season; therefore impacts to the polar bear are anticipated to be minor.

Polar bear critical habitat is made up of three units: terrestrial denning habitat, barrier islands and sea ice. The Proposed Action will be  $\geq 20$  km (13 mi) from the barrier islands and shorelines, therefore no effects to terrestrial denning habitats or barrier islands are anticipated. The Proposed Action overlaps only with sea ice and would affect relatively small areas of critical habitat at any given time, as the ice will re-freeze behind the icebreaker and survey ship within a few hours to a

few days. No long-term or widespread effects on the areal extent and distribution of critical habitat are anticipated because the ice is likely to be constantly shifting and moving during transit. Any adverse effects from ice breaking are expected to be short term and localized. No adverse modification of critical habitat is anticipated.

Therefore, the degree to which the Proposed Action may adversely affect endangered or threatened species or designated critical habitat does not render the potential impacts significant.

- 10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.** In determining whether the Proposed Action may violate Federal, State, or local law or requirements imposed for the protection of the environment, BOEM considered documentation in ION's G&G permit application #12-01 and support documentation. BOEM determined that the Proposed Action complies with OCS regulations at 30 CFR 551. BOEM requires compliance with all applicable Federal, State, and local laws and requirements. ION has committed through the Proposed Action to obtaining incidental take authorizations (ITA) from NMFS and FWS. Any approval of ION's permit would be a conditional approval. Under the conditional approval, ION Geophysical may not commence survey activities prior to the receipt of all necessary permits and authorizations, including ESA and MMPA authorizations from NMFS and FWS. Therefore, the Proposed Action does not threaten a violation of Federal, State, or local law or requirement imposed for the protection of the environment.

#### Required Additional Mitigation

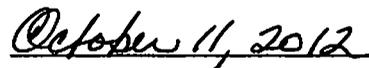
- The vessels must remain at least 30 miles from whaling activities when transiting the West Survey Area to begin operations in the East Survey Area. Vessels shall maintain communication with the Alaska Eskimo Whaling Commission and the Barrow Whaling Captains' Association during the eastward transit around Pt. Barrow.

#### Finding of No Significant Impact

I have considered the evaluation of (1) the potential effects of the Proposed Action in the attached EA; (2) the mitigation measures incorporated into the Proposed Action to assure that potential adverse effects are mitigated to the extent possible; (3) the additional required mitigation measure; and (4) major disputes over the effects of the Proposed Action are avoided, and the review of 40 CFR 1508.27 significance factors. It is my determination that no substantial questions remain regarding potentially significant impacts and that no potentially significant impacts are expected to occur as a result of the Proposed Action. It is my determination that implementing the Proposed Action does not constitute a major federal action significantly affecting the quality of the human environment within the meaning of Section 102(2)(c) of the National Environmental Policy Act of 1969.



Sharon E. Warren  
Regional Supervisor, Office of Environment  
Alaska OCS Region



Date

Attachment: Environmental Assessment, ION Geophysical, 2012 Seismic Survey, Beaufort Sea and Chukchi Sea, Alaska. OCS EIS/EA BOEM 2011-081.

Copies of the EA can be obtained by request to Bureau of Ocean Energy Management, Alaska OCS Region, 3801 Centerpoint Drive, Suite 500, Anchorage, AK 99503-5823 or (800) 764-2627, or by accessing [www.boem.gov](http://www.boem.gov).