December 18, 2009

U.S. Department of the Interior
Minerals Management Service
Alaska OCS Region
Attention: Mr. Rance Wall, Regional Supervisor
Resource Evaluation
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

Re: Request for Geological and Geophysical Permit; Statoil USA E&P Inc.; 2010 3D Seismic Acquisition; Chukchi Sea, Alaska

Dear Mr. Wall:

Statoil USA E&P Inc. (Statoil) plans to conduct a three-dimensional (3D) marine seismic survey in the Chukchi Sea during the 2010 open water season using a towed airgun and hydrophone streamer array. Additional stand alone two-dimensional (2D) lines designed to tie into surrounding regional geology and existing well control are a secondary priority. The seismic survey is designed to collect 3D data of the deep sub-surface in the area of Statoil's lease holdings obtained in the Minerals Management Service Outer Continental Shelf Lease Sale 193 in the Chukchi Sea Planning Area. This project is designed to support future oil and gas exploration within the area of coverage. Although data acquisition is expected to take 60 days, all permits will be requested from July 15 to November 30, 2010 to allow for contingencies and weather delays. The proposed seismic survey will be conducted by Fugro-Geoteam, Inc.

Attached please find Statoil's Geological and Geophysical (G&G) Permit Application with supporting documentation as listed below:

- Plan of Operations
  - Figure 1 – Project Area
  - Figure 2 – Seismic Survey Area
  - 3D seismic line layout (proprietary)
- Forms MMS-327 & 328
  - Form MMS-327
  - Form MMS-328
- Figures
  - Figure 1 – Project Area
  - Figure 2 – Project Location
  - Figure 3 – Seismic Survey Area
  - Figure 4 – Preplot (proprietary)
  - Figure 5 – Preplot (proprietary)
  - Figure 6 – Preplot (proprietary)
  - Figure 7 – Preplot (proprietary)
- Receipt for MMS G&G permit application fee (paid through on-line Pay.gov tracking No. 74093223452)

Company	Address	Telephone	Telefax	Internet
Statoil USA E&P Inc.	2103 CityWest Blvd., Suite 800 Houston, TX 77042	713-918-8200	713-918-8290	www.statoil.com

The Draft Plan of Cooperation will be submitted under separate cover.

Please contact us if you have questions or need additional information.

Sincerely,

Martin Cohen
Alaska Exploration Manager
Statoil USA E&P Inc.

Enclosures:

cc: Candace Nachman, National Marine Fisheries Service
Pete Sloan, MMS Resource Evaluation
Jeff Walker, Field Operations Supervisor, MMS
Craig Perham, U.S. Fish and Wildlife Service (USFWS)
Karin Berentsen, HSE and Stakeholder Advisor, Statoil
Sigbjorn Vigeland, Fugro-Geoteam, Inc.
Jon Kare Hovde, Statoil
Caren Mathis, AES
Lisanne Aerts, LGL
AES Project File
Administrative Record

SW/MT/MA

15325-01-09-003/09-136

Company Statoil USA E&P Inc.
Address 2103 CityWest Blvd., Suite 800 Houston, TX 77042
Telephone 713-918-8200
Telefax 713-918-8290
Internet www.statoil.com

Plan of Operations
2010 3D Seismic Acquisition
Chukchi Sea, Alaska

December 2009

Prepared for

Statoil USA E&P Inc.
2103 CityWest Boulevard, Suite 800
Houston, TX 77042

Prepared by

ASRC Energy Services
a subsidiary of Arctic Slope Regional Corporation
Regulatory and Technical Services

2700 Gambell Street, Suite 200
Anchorage, Alaska 99503

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ACRONYMS AND ABBREVIATIONS

2D	two-dimensional
3D	three-dimensional
cu in	cubic inch
ft	foot/feet
Fugro	Fugro-Geoteam, Inc.
km	kilometer(s)
m	meter(s)
mi	mile(s)
MMO	Marine Mammal Observer
MMS	U.S. Department of the Interior, Minerals Management Service
M/V	marine vessel
NMFS	National Marine Fisheries Service
OCS	Outer Continental Shelf
POC	Plan of Cooperation
SAR	search and rescue
sq km	square kilometer(s)
sq mi	square mile(s)
Statoil	Statoil USA E&P Inc.
USFWS	U.S. Fish and Wildlife Service

1.0 INTRODUCTION

Statoil USA E&P Inc. (Statoil) plans to conduct a three-dimensional (3D) marine seismic survey in the Chukchi Sea approximately 100 miles (mi) northwest of Wainwright during the 2010 open water season using a towed airgun array. Some two-dimensional (2D) lines designed to tie the 3D data to the surrounding regional geology are a secondary priority for the 2010 seismic acquisition. The program is designed to support future oil and gas exploration within the area of coverage.

2.0 PURPOSE

Statoil acquired 16 leases in the Chukchi Sea during Lease Sale 193 held in February 2008. The lease areas in which the proposed 2010 3D seismic survey is planned are located in the Alaskan Chukchi Sea northwest of Wainwright and west of Barrow (Figures 1 and 2).

The purpose of the proposed seismic survey is to collect seismic reflection data to reveal the sub-bottom profile for assessments of petroleum reserves in the area. Ultra-deep 3D lines will be used to better evaluate the evolution of the petroleum system at the basin level, including identifying source rocks, migration pathways, and play types.

Obtaining some stand alone 2D lines that tie the details of high resolution 3D imagery to the surrounding regional geology is a secondary priority. The limited 2D program has been designed to allow the acquisition of useful information in the region.

3.0 PROJECT OVERVIEW

Geophysical data acquisition activities will be conducted by Fugro-Geoteam, Inc. (Fugro), Statoil's seismic contractor. Three vessels – including a seismic vessel and two support vessels will mobilize out of Dutch Harbor, Alaska, to the project area in mid-July 2010, depending upon ice and weather. It is anticipated that transit time to the project area will be roughly five days. Upon arriving at the project area sound source verification measurements will be collected to determine radii for marine mammal monitoring. Data acquisition is expected to take 60 days. Upon completion of data acquisition, all vessels will demobilize to Dutch Harbor. Although data acquisition is expected to take 60 days, all permits will be requested from July 15 to November 30, 2010 to allow for contingencies and weather delays.

3.1 Vessels and Equipment

The vessels involved in the seismic survey activities will consist of the three vessels listed below. Details of these vessels (or equivalent vessels if availability changes) are provided in Appendix A.

- One (1) seismic vessel, the marine vessel (M/V) *Geo Celtic* or similar equipped vessel, towing a 3,000 cubic inch (cu in) airgun array of airgun and hydrophone streamers for data acquisition
- One (1) support/environmental monitoring vessel, the M/V *Thor Alpha* or similarly equipped vessel for marine mammal monitoring, support, and supply duties
- One (1) support/environmental monitoring/crew transfer vessel, the seismic support vessel *Gulf Provider* or similarly equipped boat for marine mammal monitoring, crew transfer, support, and supply duties.

Vessel duties will be under the supervision of the Master on M/V *Geo Celtic*. Changes will be made to adjust to the operational requirements.

Either the M/V *Thor Alpha* or seismic support vessel *Gulf Provider* will be available for deployment and retrieval of acoustic recorders for sound source verification measurements. Vessel photographs and equipment specifications are presented in Appendix A.

3.2 Operations Information

The seismic source vessel and support vessels will be self-contained and the crew will live aboard the vessels. Crew changes are planned to be conducted primarily by boat at least once during the project. Nome will be the main port for resupply and crew changes during the survey. Emergencies will be covered by a search and rescue (SAR) helicopter stationed in Barrow. However, if necessary, personnel or equipment may be transferred through Barrow or Wainwright in case of emergency or other unforeseen circumstances.

Refueling is anticipated to take place at Nome, though it is possible that fuel re-supply could occur at sea if necessary. Helicopter operations are not planned as a part of the seismic survey, although it is possible that individuals could be transported to and from vessels via helicopter. In general, helicopter operations are expected to occur only in the case of an emergency.

Marine mammal observers (MMOs) will be located on the bridge or weatherdecks of M/V *Geo Celtic* to watch for marine mammals during the transit to the survey area, seismic data acquisition, and transit back to Dutch Harbor. One or more support/environmental monitoring vessels will be used to protect the streamers from damage; for supply; and for monitoring activities, as required. All support/environmental monitoring vessels will have MMOs onboard and will be responsible for marine mammal monitoring and mitigation as required by permit stipulations. Support/environmental monitoring vessels will not be introducing sounds into the water beyond those associated with normal vessel operations.

4.0 PROJECT DETAILS

4.1 3D Seismic Survey

The 3D data acquisition will use a towed airgun array consisting of 26 active airguns with a maximum discharge volume of 3,000 cu in. The survey area has been reduced to the maximum extent possible and covers 2,368 square kilometers (sq km) area (915 square miles [sq mi]).

The M/V *Geo Celtic* has two identical airgun three-string arrays. The arrays will be discharged in an alternating mode, starting with the starboard array. The port array will be discharged eight seconds later (18.75 meters (m) [61.52 feet (ft)] along the line), and then the pattern repeats. The array will consist of 26 (plus 10 spare) Soldera G-guns (four 60 cu in, eight 70 cu in, six 100 cu in, four 150 cu in, and four 250 cu in) with a total discharge volume of 3,000 cu in. One of the smallest guns in the array (60 cu in) will be used as the mitigation gun. The airgun array will be towed at 6 m (20 ft) depth and at a distance of roughly 275 m (900 ft) behind the vessel. More details of the airgun array are the sound signature are described in Appendix B.

The vessel will travel along pre-determined lines at between 4 knots to 5 knots while the airgun array discharges at 8 second intervals (shot interval 18.75 m [61.5 ft]). The hydrophone streamer array will consist of twelve streamers of up to 4,050 m (2.5 mi) in length, with a total of 20,000 to 25,000 hydrophones spaced 2 m (6.5 ft) apart. This large hydrophone streamer receiver array is designed to maximize efficiency, minimize the number of source points, and to minimize environmental effects. The hydrophones will receive the reflected signals from the airgun array and transfer the data to an on-board processing system. A several pinger (ION DigiRANGEII acoustic) system will be used to position the streamer relative to the vessel.

The entire 3D seismic survey program will consist of 5,000 km (3,100 mi) of production line, not including transits. 3D seismic line layout scenarios are provided in Appendix C. Water depth within the survey area is roughly 30 m to 50 m (100 ft to 165 ft).

4.2 2D Seismic Survey

The 2D data acquisition will be dependent upon the 2010 open water season's weather conditions and ice coverage. Obtaining 2D seismic data is a secondary priority. 2D seismic survey data will be obtained if ice conditions restrict access to the 3D seismic survey area or if 3D seismic survey data acquisition progresses better than anticipated.

A maximum of four 2D survey lines will be collected and 2D data acquisition will not exceed 675 linear km (420 mi). 2D data acquisition will use the same vessel, airgun array, and streamer configuration as used for the 3D data acquisition. The vessel will travel along pre-determined lines at 4 knots to 5 knots while the airgun array discharges at 8 second intervals (shot interval 18.75 m [61.5 ft]).

4.3 Project Location

The proposed 3D marine survey will be conducted in the Chukchi Sea in the area of Statoil lease holdings obtained in U.S. Department of the Interior, Minerals Management Service (MMS) Outer Continental Shelf (OCS) Lease Sale 193. The lease areas are located approximately 160 km (100 mi) northwest of Wainwright and 240 km (150 mi) west of Barrow in the Alaskan Chukchi Sea (Figures 1 and 2). The 3D marine survey will take place within a 2,385 sq km (915 sq mi) area, minimum of 145 km (90 mi). The water depth in the survey area varies from 30 m to 50 m (100 ft to 165 ft). 2D survey activities will take place a minimum of 72 km (45 mi) off the coast.

4.4 Project Timeline

Statoil plans to conduct the marine seismic survey between July 15 and November 30, 2010, ice and weather permitting. Project vessels, including the source vessel and all support vessels, will arrive in Dutch Harbor by mid-July 2010. The vessels will be supplied, and the crew, including MMOs, will board at this port. Depending on ice conditions, the vessels will depart Dutch Harbor about mid- to late July and travel to the Chukchi Sea survey area. The anticipated transit time is five days (weather depending).

Upon arrival in the survey area, the source vessel will deploy the airgun array and hydrophone streamers and start operating their guns for the purpose of sound source verification measurements as required by permit stipulations. Data acquisition will take place as soon as possible. Seismic data acquisition is expected to continue for 60 days and be completed in the first half of October, weather depending. This includes seismic data acquisition and anticipated downtime. Data acquisition is expected to occur 24-hours per day. Upon completion of data acquisition, project vessels will demobilize to Dutch Harbor.

5.0 STAKEHOLDER ENGAGEMENT

Statoil intends to maintain an open and transparent process with all stakeholders throughout the life-cycle of activities in the Chukchi Sea. Statoil began the stakeholder engagement process in 2009 with meetings with Chukchi Sea community leaders at the tribal, city, and corporate level. Statoil will continue to engage with leaders, community members, and subsistence groups (as well as local, state, and federal regulatory agencies) throughout the exploration process.

As part of stakeholder engagement, Statoil is developing a Plan of Cooperation (POC) for the proposed 2010 3D seismic acquisition. The POC identifies the actions Statoil will take to identify important subsistence activities, inform subsistence users of the proposed survey activities, and obtain feedback

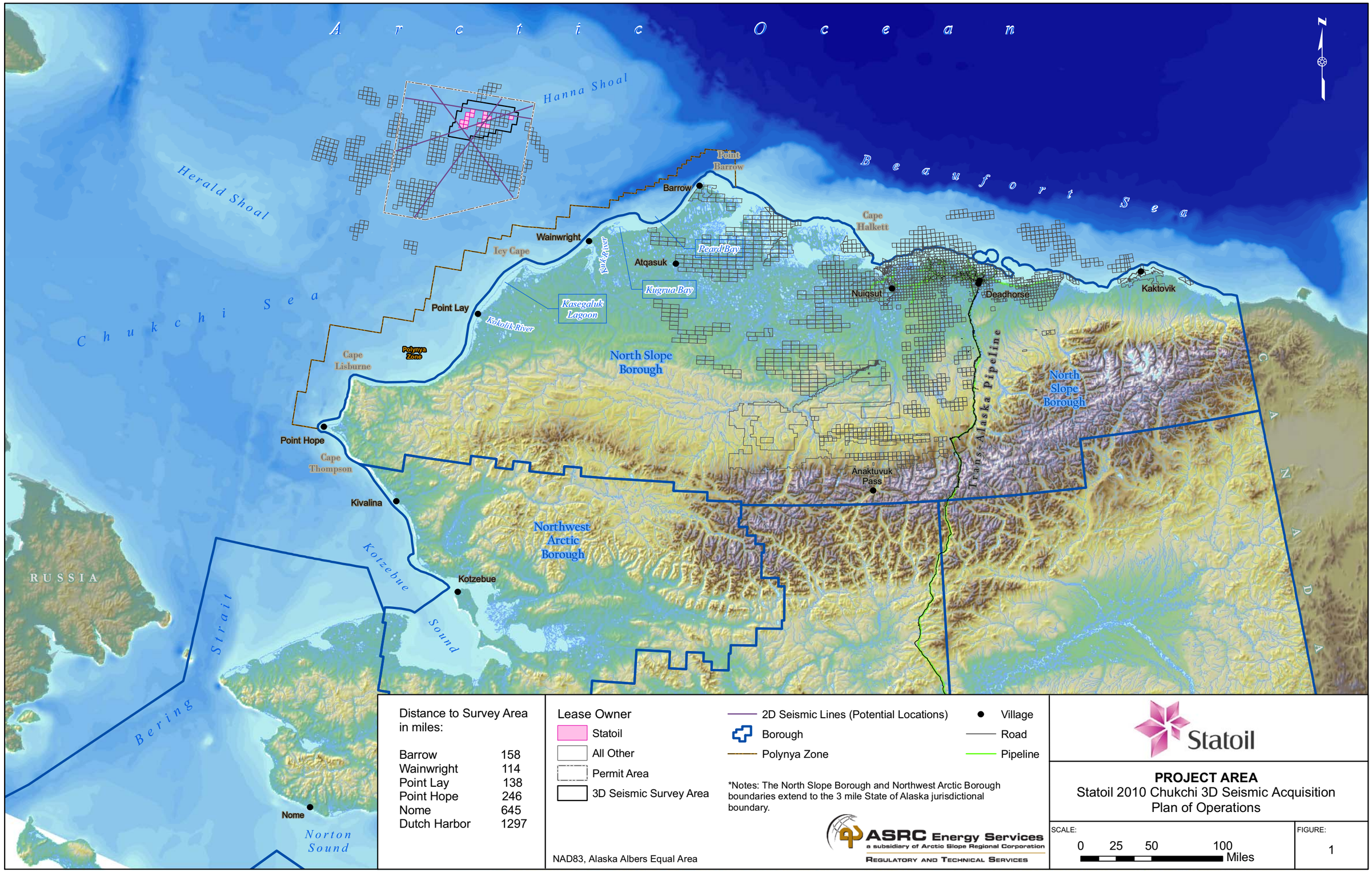
from subsistence users regarding how to provide cooperation between subsistence activities and the Statoil program.

A POC is required to comply with OCS Lease Sale 193 stipulations (Stipulation No. 5) and federal regulatory requirements [50 CFR 216.104(a)(12)ii)]. The POC also fulfills the requirements of three major federal permits: the National Marine Fisheries Service (NMFS) Incidental Harassment Authorization, the U.S. Fish and Wildlife Service (USFWS) Letter of Authorization, and the MMS Geophysical and Geological permit.

Statoil met with leadership from the communities of Barrow, Wainwright, Point Lay, Point Hope, and Kotzebue during the last week of October and the first week of November 2009. Statoil met with leaders both in small groups and a one-on-one basis. These meetings enabled Statoil to introduce themselves and the 2010 3D marine seismic acquisition program to community leaders and to discuss local concerns regarding subsistence activities, timing of operations, and local hire and workforce development.

Based upon these meetings, a draft POC document is being developed. Upon completion, the draft POC will be submitted to each member of the leadership Statoil met with during their October/November leadership meetings as well as a few other community members. Statoil will also submit the draft POC to NMFS, USFWS, and MMS as part of the permit application process. Public POC meetings will be held in January in the communities of Barrow, Point Hope, Point Lay, and Wainwright to obtain input from the general public and individual subsistence hunters within these communities.

A final POC that documents all consultations with community leadership, subsistence users groups, individual subsistence users, and community members will be submitted to NMFS, USFWS, and MMS upon completion of consultation. The final POC will include feedback from the leadership meetings and POC meetings. Statoil will continue to document all consultation with the communities and subsistence stakeholders.



Distance to Survey Area in miles:	
Barrow	158
Wainwright	114
Point Lay	138
Point Hope	246
Nome	645
Dutch Harbor	1297

Lease Owner
- Statoil
- All Other
- Permit Area
- 3D Seismic Survey Area

- 2D Seismic Lines (Potential Locations)
- Borough
- Polynya Zone
- Village
- Road
- Pipeline

*Notes: The North Slope Borough and Northwest Arctic Borough boundaries extend to the 3 mile State of Alaska jurisdictional boundary.

NAD83, Alaska Albers Equal Area

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Regulatory and Technical Services

Statoil

PROJECT AREA
Statoil 2010 Chukchi 3D Seismic Acquisition
Plan of Operations

SCALE: 0 25 50 100 Miles

FIGURE: 1

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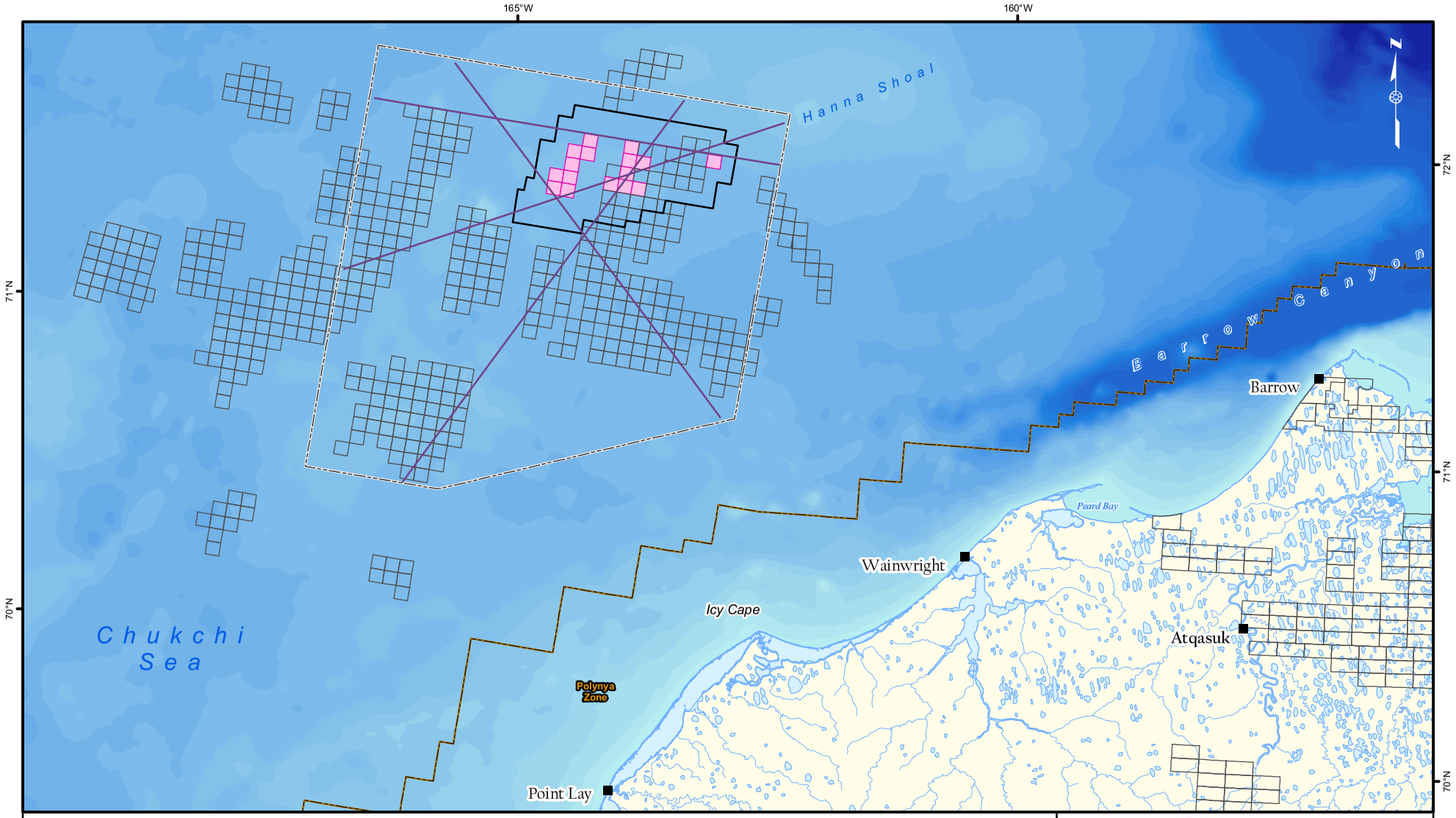

Lease Owner
- Statoil
- All Other

- 3D Seismic Survey
- Permit Area
- 2D Seismic Lines (Potential Locations)
- Polynya Zone
- Village

Statoil

SEISMIC SURVEY AREA
Statoil 2010 Chukchi 3D Seismic Acquisition Plan of Operations

ASRC Energy Services
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SCALE: 0 10 20 40 Miles

FIGURE: 2

NAD83, Alaska Albers Equal Area

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APPENDIX A

Vessel Specifications

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M/V GEO CELTIC

TECHNICAL SPECIFICATIONS

C O N T E N T S

1. VESSEL

1.1. VESSEL GENERAL

Name	M/V Geo Celtic
Operator	Fugro-Geoteam AS
Owner	E Forland AS
Seismic Management	Fugro Norway Marine Services AS
Maritime Management	E Forland AS
Type	3D seismic survey vessel
Port of registration	Bergen, Norway
Flag	Norwegian
Class	DNV = 1A1 ICE-C SF COMF-V(3)C(3) HELDK-SH RP E0 CLEAN DK
Class registration no.	D26988
Call sign	LAKF6
IMO	9376995
MMSI	258966000
Year built/rebuilt	2006/2007
Length overall	100.80 m
Breadth moulded	24 m
Breadth maximum	28 m
Draught, loaded	7.5 m
Tonnage	12109 gross tons, 3633 net tons
Cruising speed	16.0 knots
Operation range	World wide
Endurance seismic days max load	60 days
Main engine	4 x generating set continues engine rating MCR 3780 kW 750 RPM (660 V, 3-phase, 60 Hz)
Gearbox	2 x reduction gear boxes, low noise type for driving C.P. propellers
Propulsion	2 x C.P. propellers of low noise design. Fixed nozzle
Rudder	2 x free hanging type with rope-guard fitted in lower end
Steering gear	2 x Rolls-Royce
Azimuth thruster	1 x retractable, 1500kW with complete electric AC drive
Bow thrusters	1 x fixed pitch, 1200 kW with complete electric AC drive.
Stern thruster	None
Main engine monitoring	Kongsberg-Simrad IAS
Electrical power	690V 60 Hz 3ph, 220V 50 Hz 1ph
Emergency generator	1 x 575 kW
Clean power	100 kW UPS
Fuel capacity	HFO capacity 1825 m^3
Fuel consumption	40 tons per day
Fresh water capacity	257 m^3
Fresh water consumption	15 tons per day
Fresh water generator	2 off FW generators with capacity 15 ton/day
Sewage treatment plant	Yes; for 69 persons
Incinerator	Yes; for 69 persons
Black water	Holding tank cap 32 m^3

Grey water	Holding tank cap 29 m^3
Bilge water	Bilge water separator with 3 m^3/h capacity
Sludge	Holding tank cap 33 m^3
Dirty oil	Holding tank cap 13 m^3
Stabilising system	2 off passive anti-rolling tanks
Deck machinery	
Crane	1 x 5 ton SWL, 16 m knuckle arm handling crane on hangar deck aft cl. 1 x 10 ton SWL, 16 m knuckle arm handling crane on hangar deck stb. 1 x 10 ton SWL, 16 m knuckle arm handling crane on hangar deck ps.
Source handling beams	2 x Odim gun booms with el. drive
Streamer winch	5 x Odim double streamer winch with el. drive 2 x Odim double streamer winch with PF: 12T BF 33 outer & el. drive
Lead-in winch	None
Storage winch	5 x Odim storage winch with el. drive
Spread rope winch	4 x Odim with el. drive
Source winch	8 x Odim capacity 800 m cable, el. drive
Wide-tow winch	2 x Odim wide tow winch 60 ton pulling
Auxiliary winch	5 x Auxiliary winches with el. drive
Drum handling	Electric/hydraulic drum spooling rack
Tow points	12 towing points with blocks
Wide tow shock absorbers	2 x Vestdavit 160 ton
Paravane	Barovane 48
Paravane handling	Odim handling davit
Transverse towing point	2 x Odim 5 ton winches
Hydraulic power pack	Dimo 2 x 305 l/min @ 250 bar
Accommodation	For 69 persons+hospital. All cabins with separate toilets/showers. Some cabins with radio/cd player and some with IMac CD/DVD player
Galley store	Facilities for 70 persons
Mess	Seating for 60 persons
Day rooms	Lounges for smokers and non-smokers with seating for 65 persons
Exercise room	Large exercise room with saunas
Air condition	Air condition with chilled water system for world wide conditions
Helicopter landing zone	Dimensioned and arranged for the operation of Sikorsky S61 helicopters. Deck to be arranged and equipped according to CAA rules CAP 437 / ICAO requirements

1.2. VESSEL NAVIGATION AIDS

Auto pilot	Kongsberg cJoy
DGPS	Furuno
Differential GPS	Furuno
Radar no. 1	Furuno 10 cm ARPA-radar with daylight monitor. Antenna with built-in transmitter
Radar no. 2	Furuno 3 cm ARPA-radar with daylight- and performance monitor. Antenna with built-in transmitter
Gyros	SG Brown Meridian Surveyor with • 1 x digital gyro repeater auto pilot, • 2 x digital gyro repeaters for mounting in bridge wing consoles • 1 x steering repeater • 1 x digital gyro repeater for each steering gear room • 1 x class A magnetic compass • Binnacle, reflector compass, azimuth device, straight vertical reflection tube and hood
Speed log	Furuno DS 80 2-axis doppler log
VHF direction finder	Helicopter beacon
Wind sensor	Seatex 100 HMS
Navigation echo sounder	Furuno FE 700
Electronic chart	TECDIS
Navtex	Furuno
Weather fax	Furuno

1.3. VESSEL COMMUNICATION

GMDSS	Furuno FS-2570 / 1570
Inmarsat C	2 x Furuno
Inmarsat B	Sailor
NorSat	Telenor
M/F and H/F	Furuno
VHF stationary	VHF radio, Icom IC-M401E
VHF portable	VHF radio, Entel HT640
UHF portable	UHF radio, Entel HT780
VHF helicopter communication	1 x VHF/AM 1 x portable VHF/AM with headset
Helicopter non-directional beacon	410 kHz helicopter beacon
Internal communication	PABX telephone system with 120 lines
Telephone numbers	
Inmarsat bridge	+871 600 859066
NorSat bridge	+47 23 25 42 91
NorSat captain office	+47 23 25 42 95
NorSat party chief	+47 23 25 42 92
NorSat client office	+47 23 25 42 97
Fax numbers	
Bridge	+47 23 25 42 90
Internet access via NorSat	
E-mail addresses	
Captain	geoceltic-captain@forlandship.no
Party chief	pc@celtic.fugro.geoteam.no
Client	client1@celtic.fugro.geoteam.no.

1.4. VESSEL SAFETY

Safety manning level	69
Covered lifeboat	2 x 90 persons, one each side
Rescue / FRC	750 Magnum
Workboat / MOB boat	1 MOB boat, fast rescue craft, 7 m long, 200 HP inboard engine and water jet drive. 1 x 9.6 m Westplast workboat, twin water jets, twin streamer winches
Inflatable life rafts	3 x 25 persons
Man overboard life raft	JonBuoy (1 man) with remote release
Survival suits	73 pcs Helly Hansen
Life jackets	73
Life rings	18
Smoke hoods	Draeger “Parat C”
Work vest	Crewsaver 275N
Emergency radios	Jotron TR20
EPIRB	Jotron 45SX
Radar transponders	Jotron Tron SART
Fire detection system	Eltek
Fire pumps	3
Fire suits	4+spares
Halon systems	No
Argonite	Yes
CO2 systems	Yes
Foam deluge system	Yes, in engine room
Lg. portable foam extinguishers	Yes

2. SEISMIC

2.1. SEISMIC RECORDING INSTRUMENT

Type	Sercel Seal, 24 bit digital system
Number of channels	8000
Number of waterbreaks	1 pr. streamer (in HESA Section)
Auxiliary channels	36 channels
Sample rate	¼, ½, 1, 2 and 4 ms
Filters	
Low cut	3 Hz analogue 6 dB/octave plus configurable digital low cut (between 2.5 Hz and 15 Hz @ 6dB/octave). Combined filter slope 12 dB/octave
High cut	Depending on sample rate 0.8 Nyquist @ 370dB/octave linear or min phase
Recording format	SEGD 8058 or 8036
Recording medium	IBM 3592
Raid system	Argus by Profocus
QC system	Argus by Profocus
On-line display	Argus by Profocus
Single channel recorder	Argus by Profocus

2.2. STREAMERS

Type	Sercel Sentinel solid streamer
Length	12 x 6000 m
	Max 1000 channels pr. streamer @ 2ms sampling
Available group interval	12.5 m
Section length	150 m
Groups pr. section	12
Hydrophone type	Sercel Flexible Hydrophone
No. of hydrophones/group	8
Streamer diameter	59.5mm
Streamer sensitivity	19.73 V/Bar @ 22°C
Fault locator	Sercel Seal Digital System
Compasses	ION Model 5011 Compass Bird
Streamer control	ION DigiFIN
	ION Model 5011 Compass Bird
Acoustics	ION DigiRANGE II

2.3. ENERGY SOURCE

Type	Sodera G-Gun
Size of guns	Up to 250 cu. inch
Typical volume	Single source up to 9000 cu. inch Dual source up to 5100 cu. inch
Maximum output @6 m, 0-206 Hz	
Number of sub-arrays	2 x 3 sub-arrays
Configuration	Single source or dual source
Tow width	Typically 10 m between sub-arrays
Firing control	Seamap GunLink 4000 Digital Gun Controller
QC	Seamap GunLink 4000 Digital Gun Controller
Depth transducers	Seamap Digital, Integrated on GFSM Module
Tow system	Sercel rigid gun floats. Self deflecting
Offset	< 600m from stern of ship
Compressor	3 x LMF high pressure compressor units, each 1700 SCFM
Compressor capacity	48 m^3
Air pressure	138 bar = 2000 psig as well as 207 bar = 3000 psig

2.4. NAVIGATION EQUIPMENT

On-line navigation system	Concept Systems Orca
Primary navigation	Fugro Skyfix-XP DGPS
Demodulator	Fugro 4100LRS
GPS receiver	Fugro SPM2000 with internal Novatel
Secondary navigation	Fugro Starfix.HP DGPS with SPM software
Demodulator	Fugro 4100LRS
GPS receiver	Fugro SPM2000 with internal Novatel
Tailbuoy tracking	Kongsberg Seatex Seatrack 220 RGPS
Gun array tracking	Kongsberg Seatex Seatrack 320 RGPS
Gyro	2 x SG Brown Meridian Surveyor
GPS azimuth	Applanix POS MV 320
Motion sensor	Applanix POS MV 320
Echosounder	Kongsberg Simrad EA600
Echosounder transducers	12, 38, 200 kHz
Acoustic doppler profiler	RDI ADCP Mariner 600kHz type Workhorse
SVP/CTD probe	Valeport Midas SVX2
Moving vessel profiler	Odim MVP300-3400
Streamer mounted speed log	ION Model 7500 Speed Log
Streamer mounted velocity meter	ION Model 7000 Velocimeter
Streamer positioning	ION Model 5011 Compass Bird
	ION DigiRANGEII acoustics:
	Up to 180 x CMX unit
	2 x CTX transducer flanged - hull
	6 x CTX pinger towed - gun
Navigation processing	Concept Systems Sprint
	Concept Systems NRT
Binning	Concept Systems Reflex

2.5. ONBOARD PROCESSING

Hardware	16 x 2 Quad Core CPU nodes HP BLc7000 Linux cluster (total 128 CPUs), 16 GB RAM per node 2 HP Proliant DL580G4 servers on Linux, 4 x dual core CPUs, 16 GB RAM per server 3 x dual monitor HP xw6400 work stations 44 TB disk space
Software	Paradigm Focus 5.4 FSI Uniseis 0804 64 bit and 32 bit RedHat Enterprise 4 Linux
Capabilities	Full 3D QC processing, fast track full fold cube at acquisition speed
Tape drives	4 x IBM Magstar 3590E 4 x IBM Jaguar-2 3592
Plotters	HP 1050C A0 plotter OYO GS 36'' thermal plotter
Data compression software	Aware Seispact v 3.61

Fugro-Geoteam AS, P.O. Box 490 Skøyen, 0213 Oslo, Norway. Tel:+ 47 22 13 46 00
E-mail: geoteam@fugro.geoteam.no Web page: www.fugro.geoteam.no

"M/V Thor Alpha"

General Information

Name	M/V Thor Alpha
Call sign	OZ 2070
Flag	Faroese
Class	DNV + 1A1 E0 SF
IMO no.	9458559
Built	2008
Length overall	55,10 m
Length bp.	50,56 m
Breath moulded	12,50 m
Depth boat deck	8,00 m
Depth main deck	5,50 m
Gross tonnage, 1969	1051 GT
Net tonnage, 1969	315 NT
Deadweight	1600 ton
Light ship weight	700 ton
Draught	4.85 m
Speed	13 knots
Speed water jet	4,5 knots
Accommodation (crew)	6 persons
Berths for passengers	10 persons
Sleeping seats	34 persons

Machinery/Diesel-electric:

Generators	Nordhavn GASI 16-07 4 x 440 kw / 1800 o/min 3 x 440 Volt 60 Hz
Engines	Scania Type DI16 44M – 469 kw

Propulsion

Azimuth	2 x Rolls-Royce, Aquamaster
Type	US 105 CRP
Power	2 x 650 KW
Bollard pull	19,3 ton

Pump Jet

Type	Schottel, SPJ 82 SD
Power	1 x 360 KW
Thrust	2,5 ton

Cargo Discharge Pump

Cargo pumps	2 x 120 m^2 / 15 m hight

Capacities

Heavy fuel oil	992 m^3
Diesel oil	556 m^3
Fresh Water	69 m^3
Cargo on deck	320 m^2 / 100 ton
Sludge tank on deck	Tank for seismic sludge
Cargo hold on deck	31 m^2 cooling room
	22 m^2 freezing room

Deck Equipment

Deck crane	ABAS
Type	5 ton SWL 1,8 – 16 m
Rope winch	1,5 ton
capstan	4 x 5 ton
Anchor winches	2
Towing hook	30 ton
Davits	1 pc Vestdavit PLR-10002 for workboat – SWL 10000 kg
	1 pc Vestdavit PL – 1500 for rescueboat – SWL 1500 kg

Rescue Boat:

Norsafe MIDGET 530 MK II Diesel Jet Rescue Boat

Capacity	6 persons
Standard	72 Hp inboard diesel engine with waterjet propulsion

Pumps

Fuel Oil	2 x 120 m^3 / hour
Fresh water	1 x 50 m^3 / hour

A3 GMDSS – Equipment:

Furuno FS-1570 150W MF/HF SSB Transceiver

Furuno FM-8800S VHF-DSC Transceiver

Radio Ocean RO 4700 VHF Transceiver

Furuno NX-700-B Navtex Receiver

Furuno Felcom-15 Inmarsat-C

SSAS UPG for Furuno Felcom-15

McMurdo E-5-A EPIRB

McMurdo E-5-M EPIRB

McMurdo G4 SART

McMurdo R-2 portable GMDSS VHF Transceiver

2 pc. Furuno Radar:

FAR-2137S/IMO S-band 30 kW with 12 fot antenna

FAR-2117/IMO X-band 12 kW with 6.5 fot antenna

Echosounder and Speed-log:

Furuno FE-700/200 IMO

Furuno DS-80 speed-log

Navigation:

Furuno FA-150 AIS Transceiver

Furuno GP-150 GPS- Professional navigator

MaxSea Commander software

MaxSea tracking-modul for Arpa og AIS-traget

Computer for MaxSea

Gyro / Autopilot and Bridge-Alarm:

Anschuetz Standard 22 Gyro-compass

Anschuetz Digital Autopilot Pilotstar D

Furuno SC-110 Satellite-compass

RD-30 Remote display

UniSafe Bridge-alarm

Communication:

Emergency communication system wheelhouse / engine
Communication system round the ship
Telular SX5D gsm-phone with telefax
Icom portable UHF-transceiver
Safety helmet, with Peltor head-set

Camera and Sound Signal Reception System + Wind Sensor:

Camera monitoring system thruster room and deck
Vingtor VSS-111 sound signal reception system
RO-wind sensor

Safety Equipment:

Liferafts	Viking 25 DK SOLAS – 6 x 25 persons
Life-jackets	Merman 16 A SOLAS – 104 pcs
Immersion suits	Viking PS 5002 SOLAS – 54 pcs

FRC Safety Equipment:

FRC working suits	PS 5041 SOLAS – 3 pcs
Inflatable life-jackets	PV 9308 SOLAS – 3 pcs
Jofa 390 R helmets	3 pcs

Communication:

Telephone	+44 20 78 58 56 99 SevSat
Telephone	+871 764 812 338 Mini-M
E-mail	thoralpha@thor.fo
E-mail	bridge.thoralpha@skyfile.com

gulffleet.com

Gulf Provider

190' SSV

Gulf Provider

MAIN PARTICULARS

LENGTH OVERALL	190 ft	57.9 m
BEAM	38 ft	11.58 m
DEPTH	14 ft	4.27 m
LOADED DRAFT	12.33 ft	3.76 m
LIGHTSHIP	824.57 LT	838 MT

CAPACITIES

BALLAST	66,050 USG	250 m^3
FUEL	161,162 USG	610 m^3
POTABLE WATER	26,9481 USG	102 m^3

SERVICE EQUIPMENT

DECK CRANE #1	Seattle Crane MCF-493 2755 lbs. 1250 kg
INCEINERATOR	Elastek Smart Ash
WATERMAKERS	(2) Sea Recover SC800 800 USG/Day 3.03 m^3/Day Reverse Osmosis
REFRIGERATED CONTAINERS	(2) 8 ft/2.44 m x 20 ft/6.1m
DRY CONTAINER	8 ft/2.44 m x 20 ft/6.1m
STREAMER REEL	6000 m
SMALL FENDERS	(4) 7 ft/2.13 m x 5 ft/1.52 m
LARGE FENDER	12 ft/3.66 m x 7 ft/2.13 m
BUNKER HOSE with Dry Break	4 in/10.16 cm x 100 ft/30.48 m

TONNAGE

	USA	ITC
GRT	367	926
NRT	277	

MACHINERY

MAIN ENGINES	(2) Caterpillar D399 @ 1250 BHP
REDUCTION GEARS	Reintjes WGV481
GEAR RATIO	4.22:1
GENSETS	(2) Caterpillar 3406 @ 315 KW
PROPELLERS	78 x 72 Stainless Steel 4-Blade
RUDDERS	Spade Type

PERFORMANCE

MAXIMUM SPEED	12 Knots	
CRUISING SPEED	10 Knots	
MAXIMUM FUEL CONSUMPTION	110 USG/Hr.	10 m^3/Day
CRUISING FUEL CONSUMPTION	77 USG/Hr.	7 m^3/Day

DISCHARGE RATES

	GPM @ FT		M^3/min @ M	
FUEL	500	100	1.9	30
POTABLE WATER	420	100	1.6	30

ACCOMMODATIONS

CABINS/BERTHS	16/52
EXERCISE ROOM	Exercise Machine & Weights
LOUNGE	10
MESS	22
CERTIFIED TO CARRY	60

ELECTRONICS

RADARS	(1) Furuno FR-1525 MK III & (1) Furuno FR-2125-ARPA
GPS	(1) Garmin GP-80 & (1) Garmin GP-90D
GYRO COMPASS	Tokimec GM21
AUTOPILOT	Sperry GyroPilot
WEATHER FAX	Furuno FAX-108
NAVTEX	Furuno NX-500
RADAR TRANSPONDER	(2) Tron SART
SSB	Furuno FS-1562-15
GMDSS	Furuno Felcom-15 Inmarsat C w/ Furuno DP-6 NBD
VHF	(2) Furuno FM-8500
AIS	Bridgemate MT
FAX	Brother Intellifax 775
COPIER	Brother MFC-7820N
SHIP SECURITY ALERT	Satamatics SAT-101
E-MAIL & COMMUNICATIONS	Nera Mini-M & Iridium (Client & Crew Addressing Available)

DOCUMENTATION

CLASS	ABS A1+AMS+Load Line; SOLAS-MARPOL
FLAG	Panama
OFFICIAL NUMBER	22269-95-C
CLASS NUMBER	77901855
YEAR BUILT/REBUILT	1979/2003
BUILDER	Zigler Shipyard, Inc. Jennings, LA

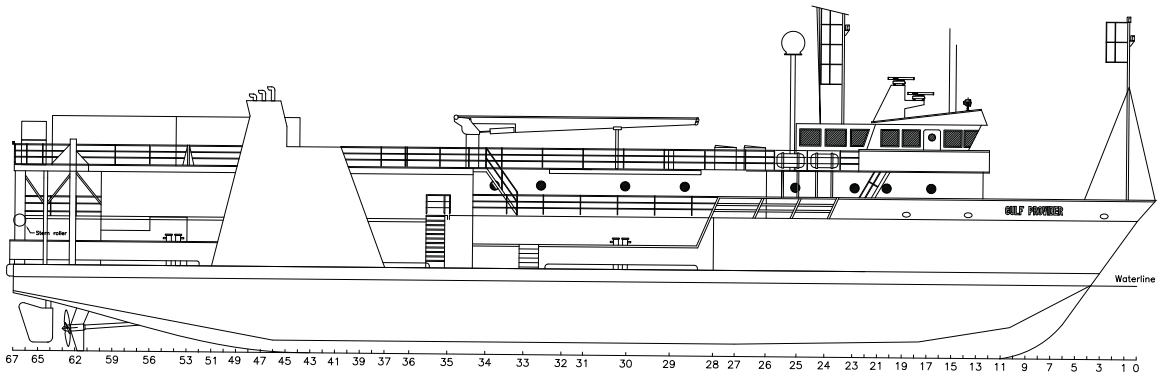
GULF FLEET HOLDINGS
2623 SE Evangeline Thwy Lafayette, LA 70508 • P.O. Box 80707 Lafayette, LA 70598-0707
Office 337-210-2600 • Fax 337-210-1648 • Toll Free 866-857-9900

gulffleet.com

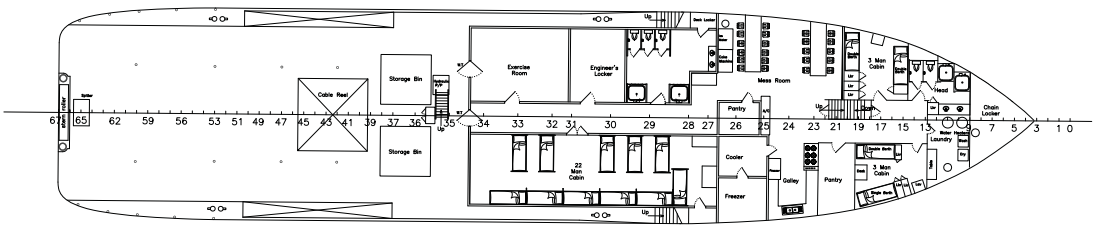
Gulf Provider

190' SSV

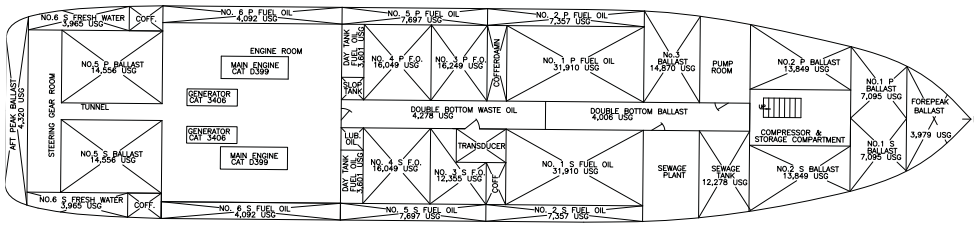
Gulf Provider



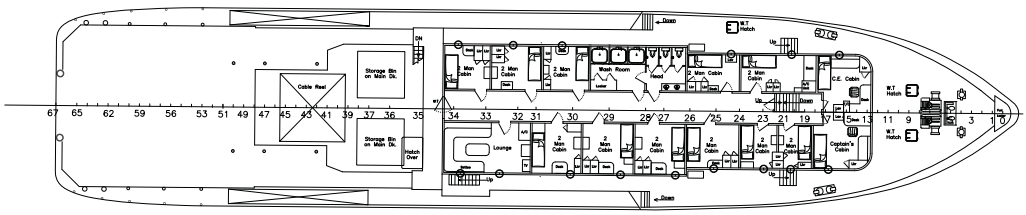
PROFILE



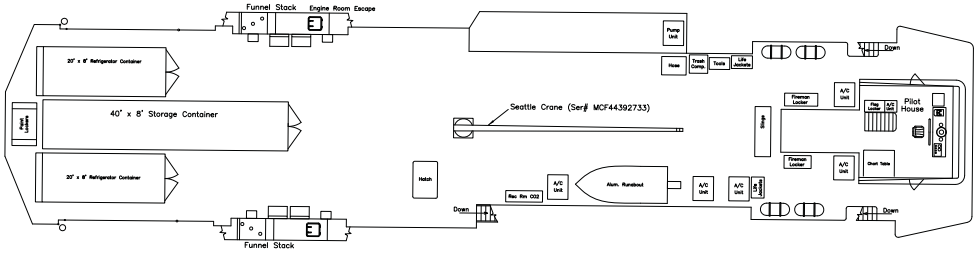
MAIN DECK



HOLD PLAN



FORECASTLE DECK



PILOT HOUSE/UPPER DECK

GULF FLEET HOLDINGS
2623 SE Evangeline Thwy Lafayette, LA 70508 • P.O. Box 80707 Lafayette, LA 70598-0707
Office 337-210-2600 • Fax 337-210-1648 • Toll Free 866-857-9900

APPENDIX B

Signature and Acoustic Radiation Patterns

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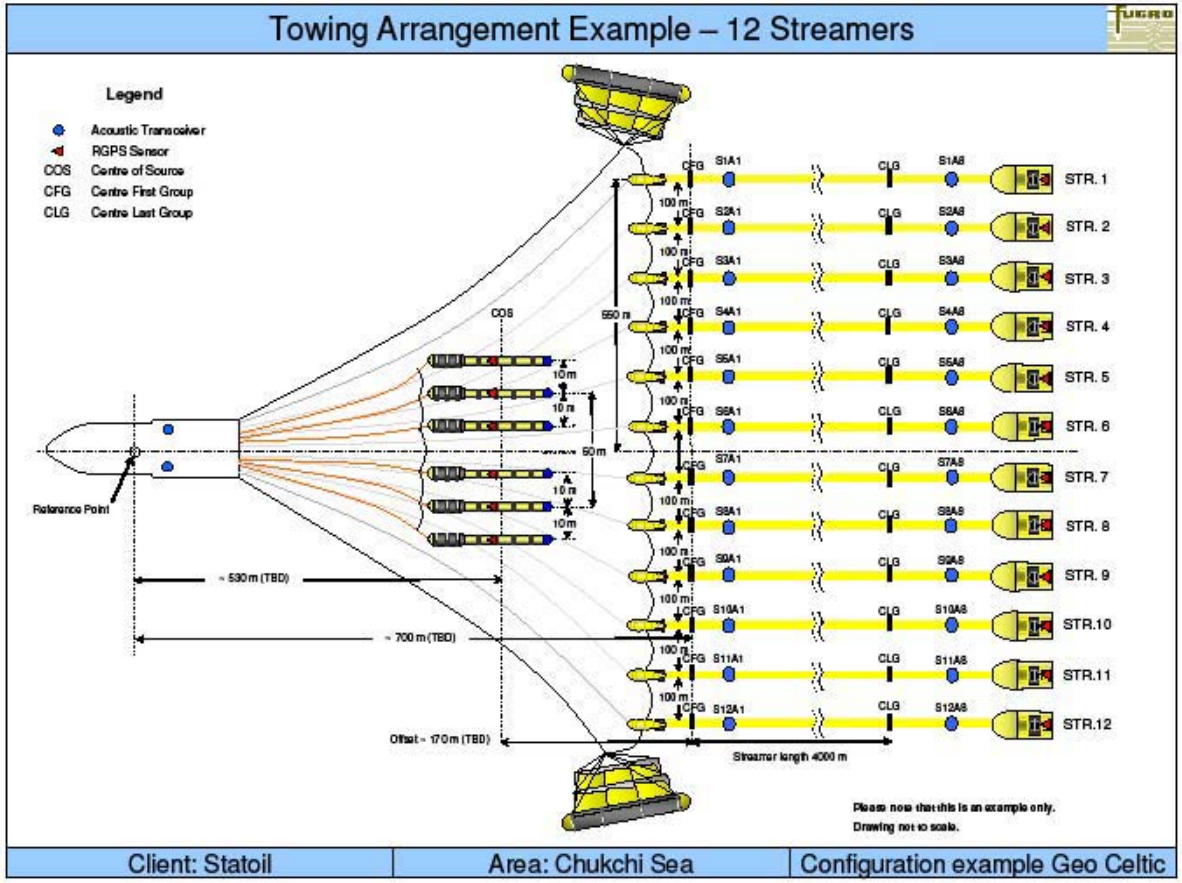
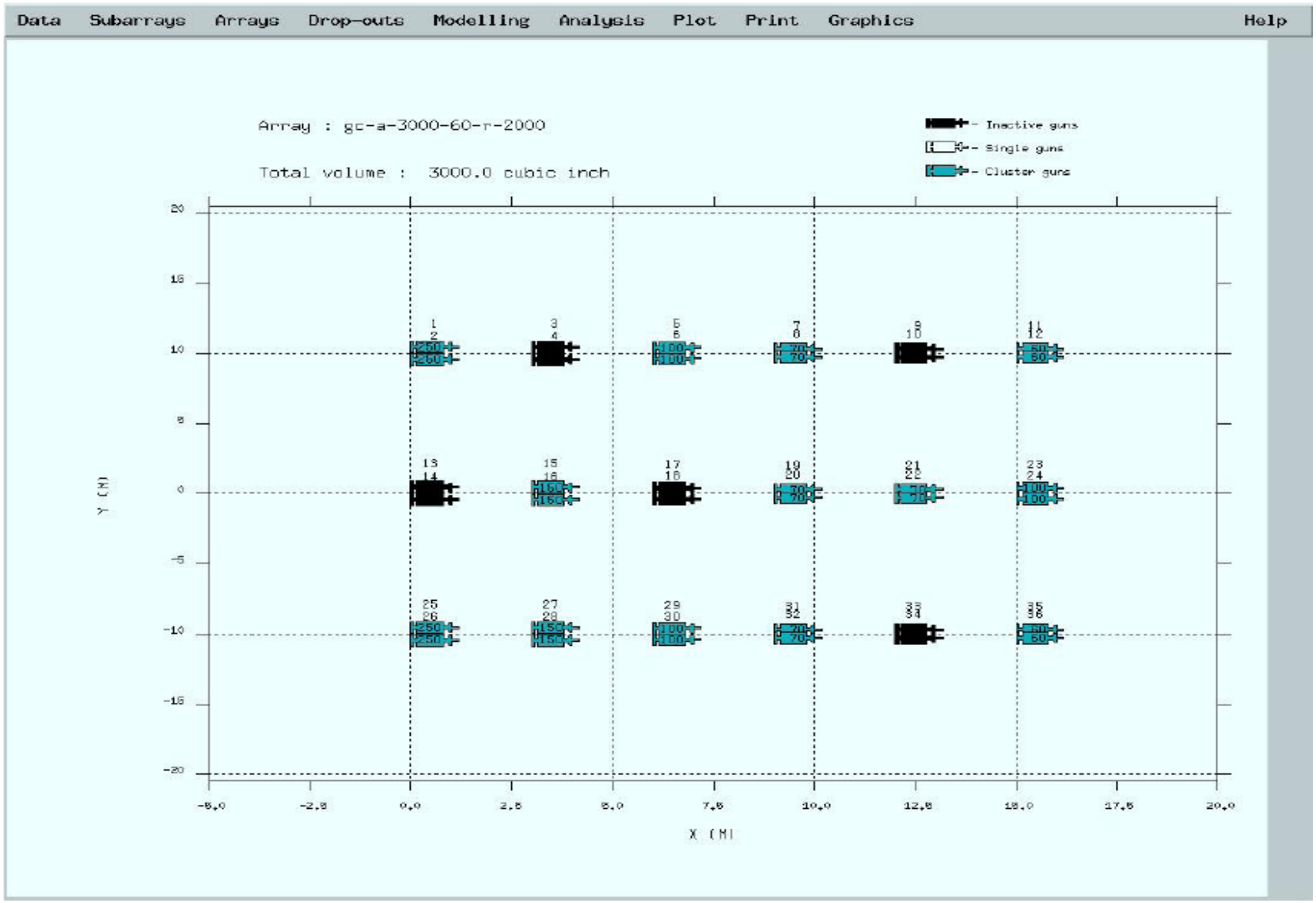
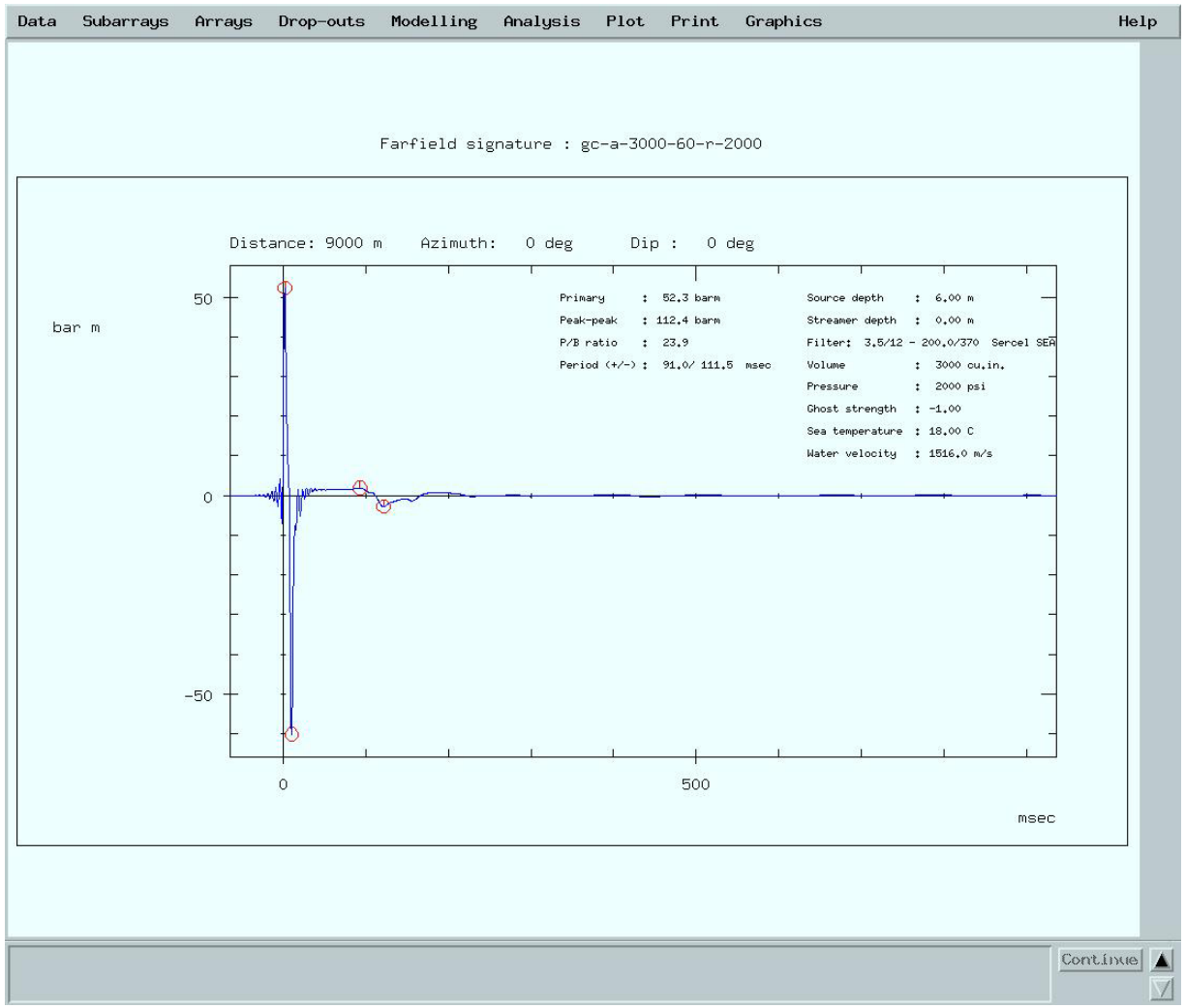
Towing Configuration



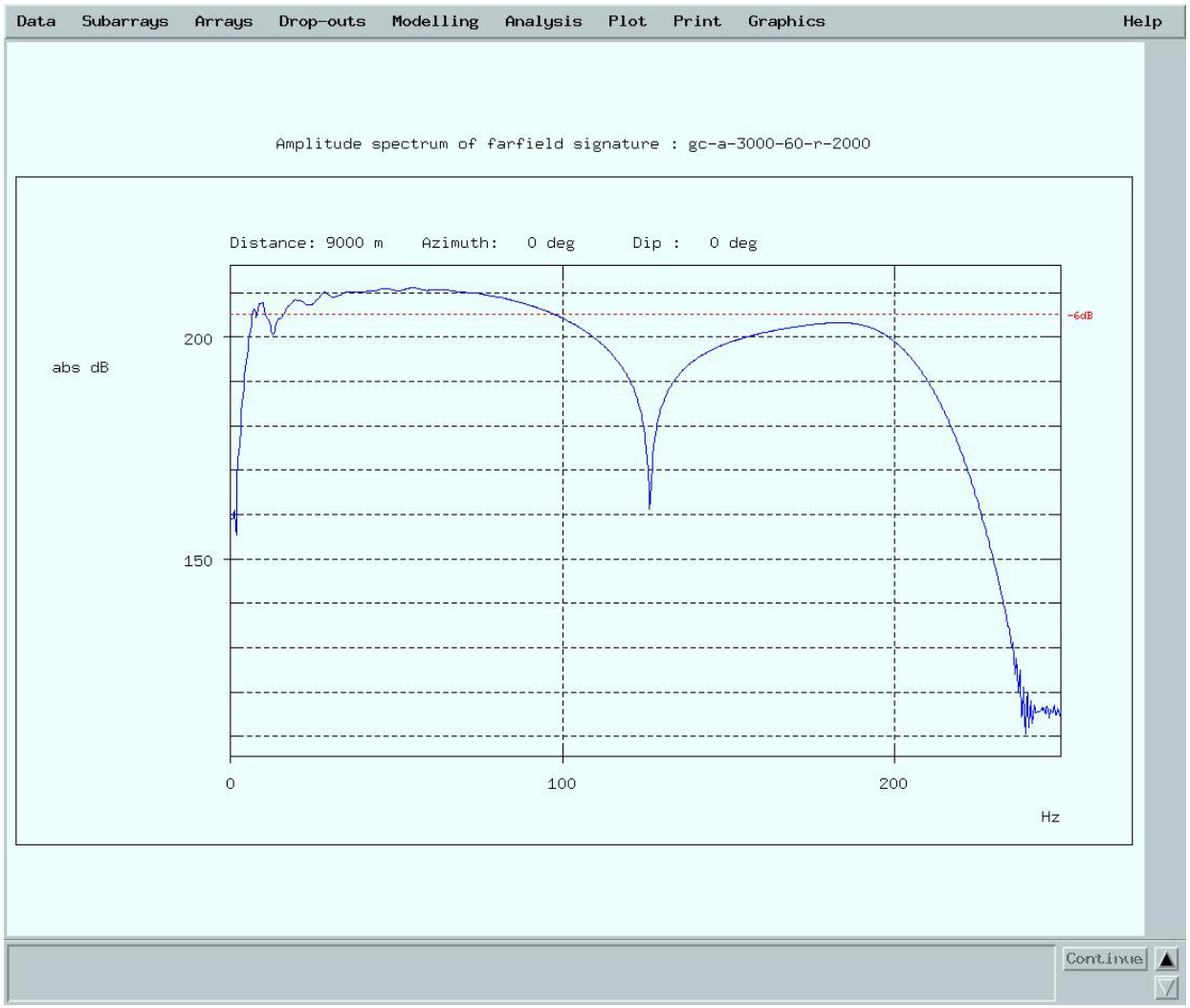
Airgun Configuration



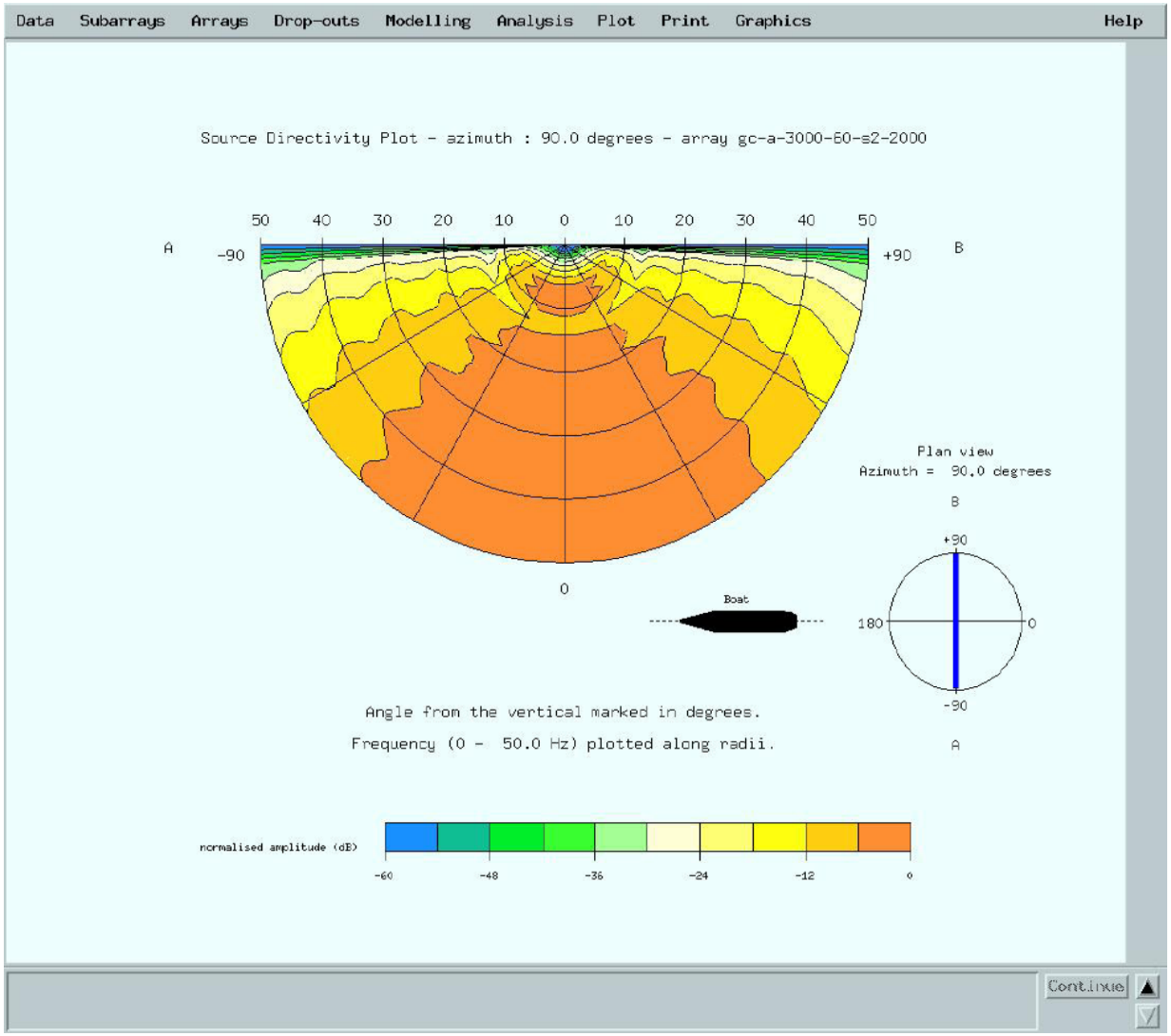
Source Signature



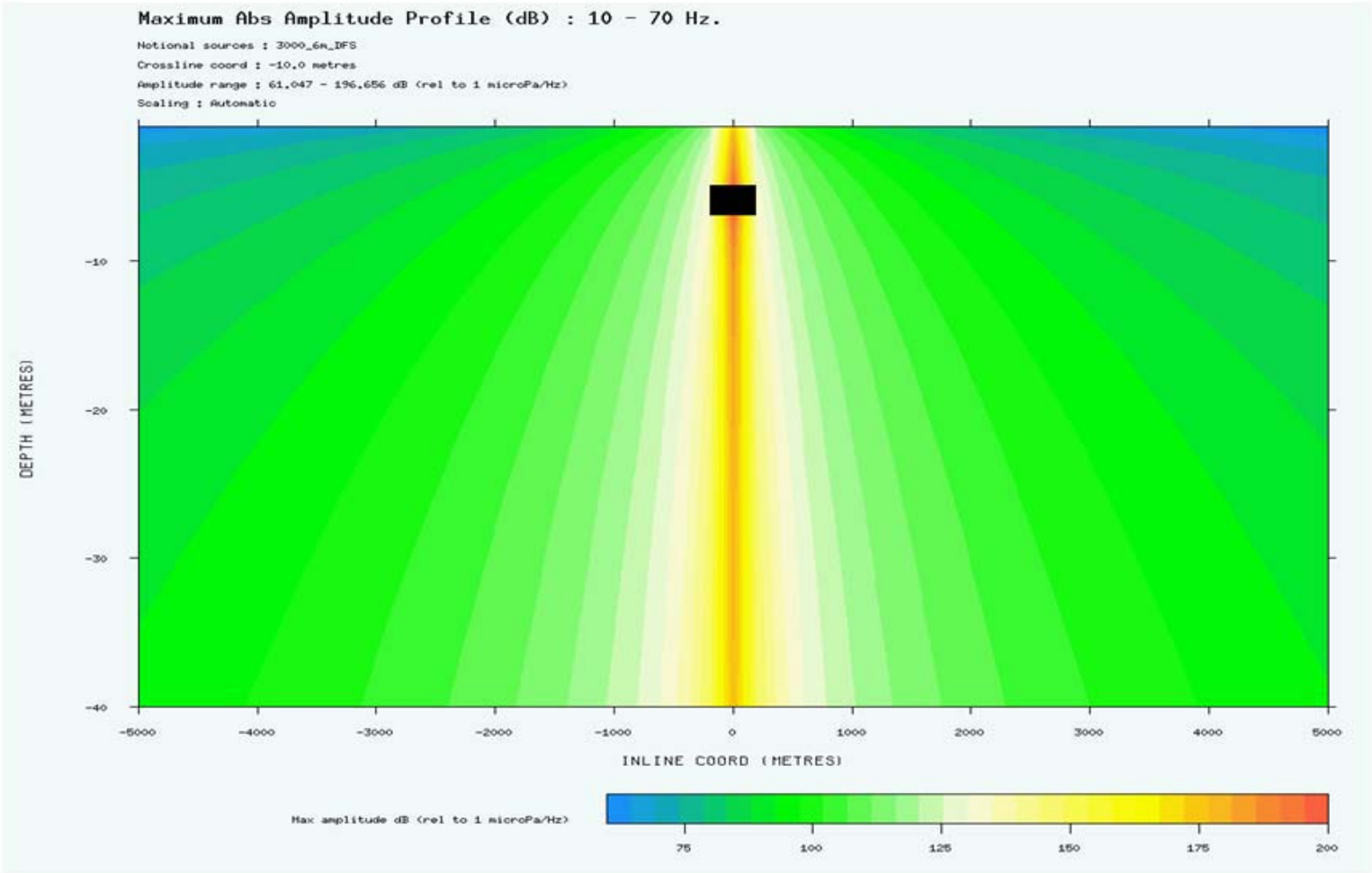
Source Signature



Energy Source Directivity



Energy Source Directivity



APPENDIX C

3D Seismic Line Layout Scenarios

THE INFORMATION IN THIS SECTION CONTAINS CONFIDENTIAL/PROPRIETARY INFORMATION AND IS NOT AVAILABLE IN THIS PUBLIC COPY OF THE PLAN OF OPERATIONS

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QUALITY CONTROL REVIEWER
Elizabeth Benson

Technical Editor: Nikishka Stewart

MMS FORM 327

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
MINERALS MANAGEMENT SERVICE

Alaska OCS Region

(Insert Appropriate Regional Office)

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

Alaska OCS Region

(Insert Appropriate Regional Office)

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 USA E&P Inc.
Name of Applicant

2103 CityWest Boulevard, Suite 800
Number and Street

Houston, TX 77042
City, State, and Zip Code

Fugro-Geoteam, Inc.
Name of Service Company or Purchaser
(if different from above)

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, two copies, and one public information copy.

==========

To be completed by MMS

Permit Number: _____ **Date:** _____

A. General Information

1. The activity will be conducted by:

Fugro-Geoteam, Inc.	For Statoil USA E&P Inc.
Service Company Name	Purchaser(s) of the Data
6100 Hillcroft	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
( ) Scientific research

3. Describe the environmental effects of the proposed activity, including potential adverse effects on marine life and what steps are planned to minimize these adverse effects (use continuation sheets as necessary):
No anticipated adverse effects. Marine mammal monitoring and mitigation are included in IHA application (NMFS) and LOA application (USFWS).

4. The expected commencement date is: July 15, 2010

   The expected completion date is: November 30, 2010

5. The name of the individual in charge of the field operation is: Sigbjorn Vigeland, Project Manager

   May be contacted at: Fugro Geoscience Division, 6100 Hillcroft, Houston, TX 77081

   Telephone (Local) 713-778-6823/713-456-9191 cell (Marine) +47 23 25 42 92 (On board Party Chief)

   Radio call sign LAKF6

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

   Name M/V Geo Celtic (seismic source vessel) Registry number D26988 Bergen, Norway

   Registered owner E Forland AS

7. The port from which the vessel(s) will operate is: Dutch Harbor, Alaska: Nome, Alaska

8. Briefly describe the navigation system (vessel navigation only):
Furuno FE 700 echosounde; Furuno 10cm ARPA-radar; Furuno 3cm ARPA-radar

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 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 ○ 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 10 for a "geophysical" permit application. You must submit a separate Form MMS-327 to apply for each geological or geophysical permit.

E. Certification

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

SIGNED Martin Cohen **DATE** 12/17/2009.

Martin Cohen, Alaska Exploration Manager

TITLE Martin Cohen, Alaska Exploration Manager

==========

TO BE COMPLETED BY MMS

Permit No._____ **Assigned by** _____ **Date** _____
of MMS

This application is hereby:

a. _____ Approved

b. _____ Returned for reasons in the attached

The approved permit is:

a. _____ Attached

b. _____ Will be forwarded at a later date

SIGNED _____ **TITLE** Regional Supervisor **DATE** _____

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

7. Estimated date on which samples, logs, and analyzed and/or processed data will be ready for inspecti 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

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: _____

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 activity :

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 STATES
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

A. 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

_____

_____

_____

_____

_____

B. _____ (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.

MMS FORM 328

UNITED STATES
DEPARTMENT OF THE INTERIOR
MINERALS MANAGEMENT SERVICE

ALASKA OCS REGION

(Insert Appropriate Regional Office)

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

Statoil USA E&P Inc.

(Name of Permittee)

2103 CityWest Boulevard, Suite 800

(Number and Street)

Houston, TX 77042

(City, State, and Zip Code)

PERMIT NUMBER: _____ **DATE:** _____

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

The Government authorizes the permittee to conduct:

__X__ 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.

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): Chukchi Sea, Alaska (see attached figures and Plan of Operations). 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 251.8, 251.9, and 251.10.

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)

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.

B. 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 III. Reports on Operations

A. The permittee must submit status reports on a ____weekly_____ 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.l2, 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. Disclosure to Independent Contractors

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:

Martin Cohen

(Signature of Permittee)

Martin Cohen

(Type or Print Name of Permittee)

Alaska Exploration Manager

(Title)

12/17/2009.

(Date)

THE UNITED STATES OF AMERICA:

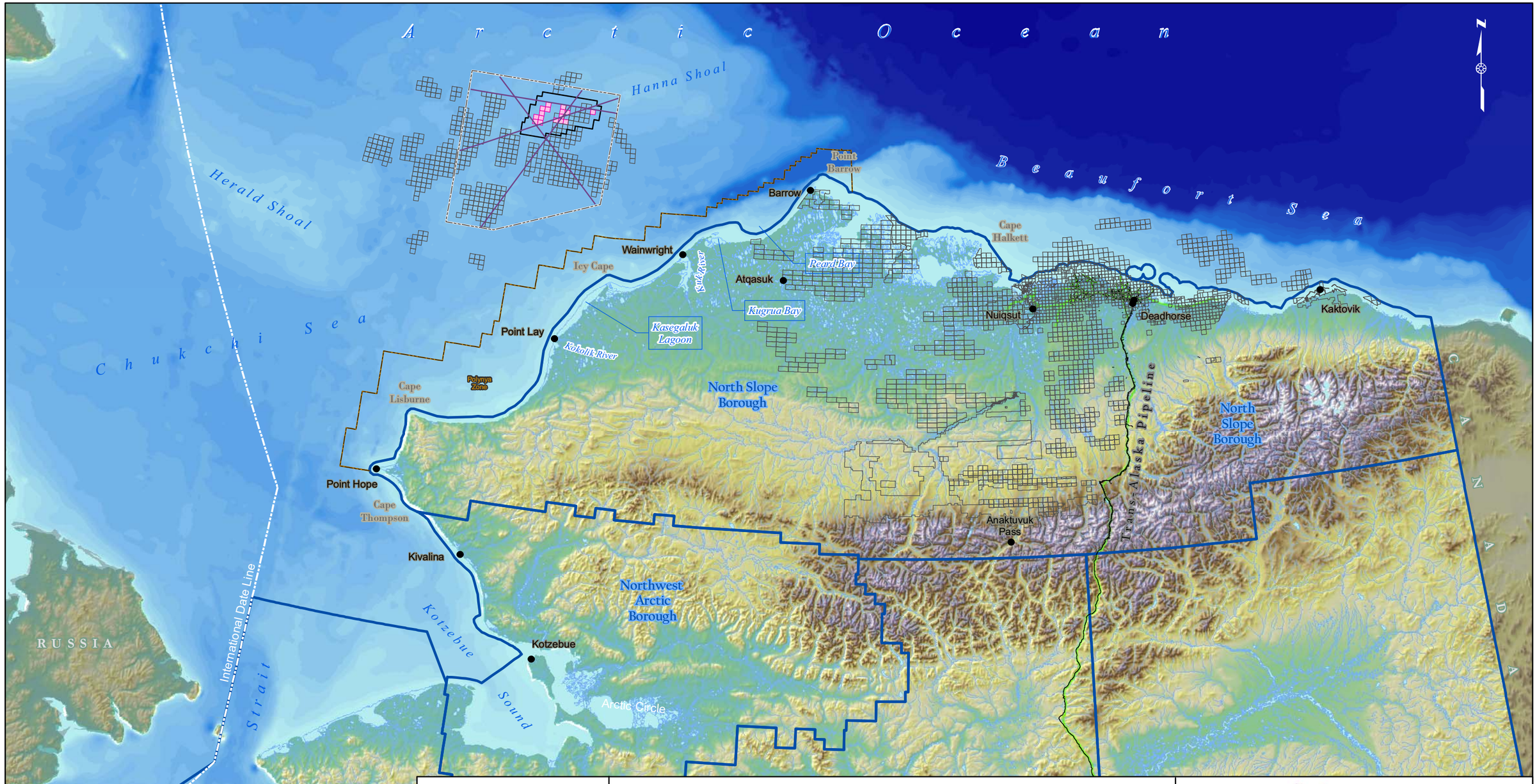
(Signature of Regional Supervisor)

Rance R. Wall

(Type or Print Name of Regional Supervisor)

(Date)

FIGURE 1
Chukchi Seismic Acquisitions



Distance to Survey Area in miles:	
Barrow	158
Wainwright	114
Point Lay	138
Point Hope	246
Nome	645
Dutch Harbor	1297

Lease Owner
- Statoil
- All Other
- Permit Area
- 3D Seismic Survey Area

- 2D Seismic Lines (Potential Locations)
- Borough
- Polynya Zone
- Village
- Road
- Pipeline

*Notes: The North Slope Borough and Northwest Arctic Borough boundaries extend to the 3 mile State of Alaska jurisdictional boundary.

NAD83, Alaska Albers Equal Area

ASRC Energy Services
a subsidiary of Arctic Slope Regional Corporation
Regulatory and Technical Services

Statoil

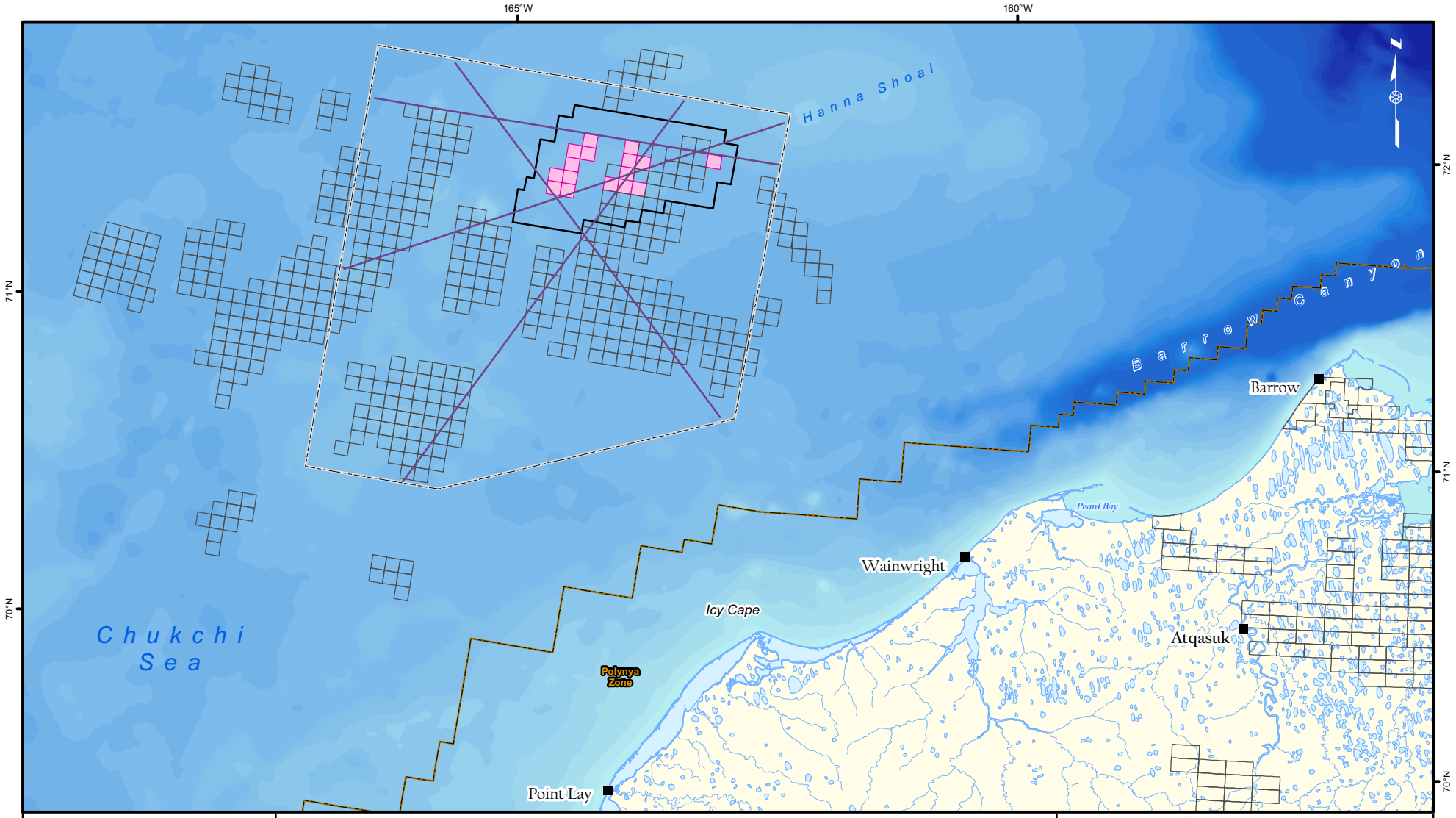
STATOIL 2010 CHUKCHI SEISMIC ACQUISITIONS
Project Area
Geological and Geophysical Permit
Public Information

SCALE: 0 25 50 100 Miles

FIGURE: 1

AES-RTS: 09-136-001.mxd, 12/22/09, R00

FIGURE 2
Chukchi Seismic Acquisitions Project Area



Distance to Survey Area in miles:

Barrow	158
Wainwright	114
Point Lay	138
Point Hope	246
Nome	645
Dutch Harbor	1297

Lease Owner
- Statoil
- All Other

- 3D Seismic Survey
- Permit Area
- 2D Seismic Lines (Potential Locations)
- Polynya Zone
- Village

NAD83, Alaska Albers Equal Area

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Regulatory and Technical Services

Statoil

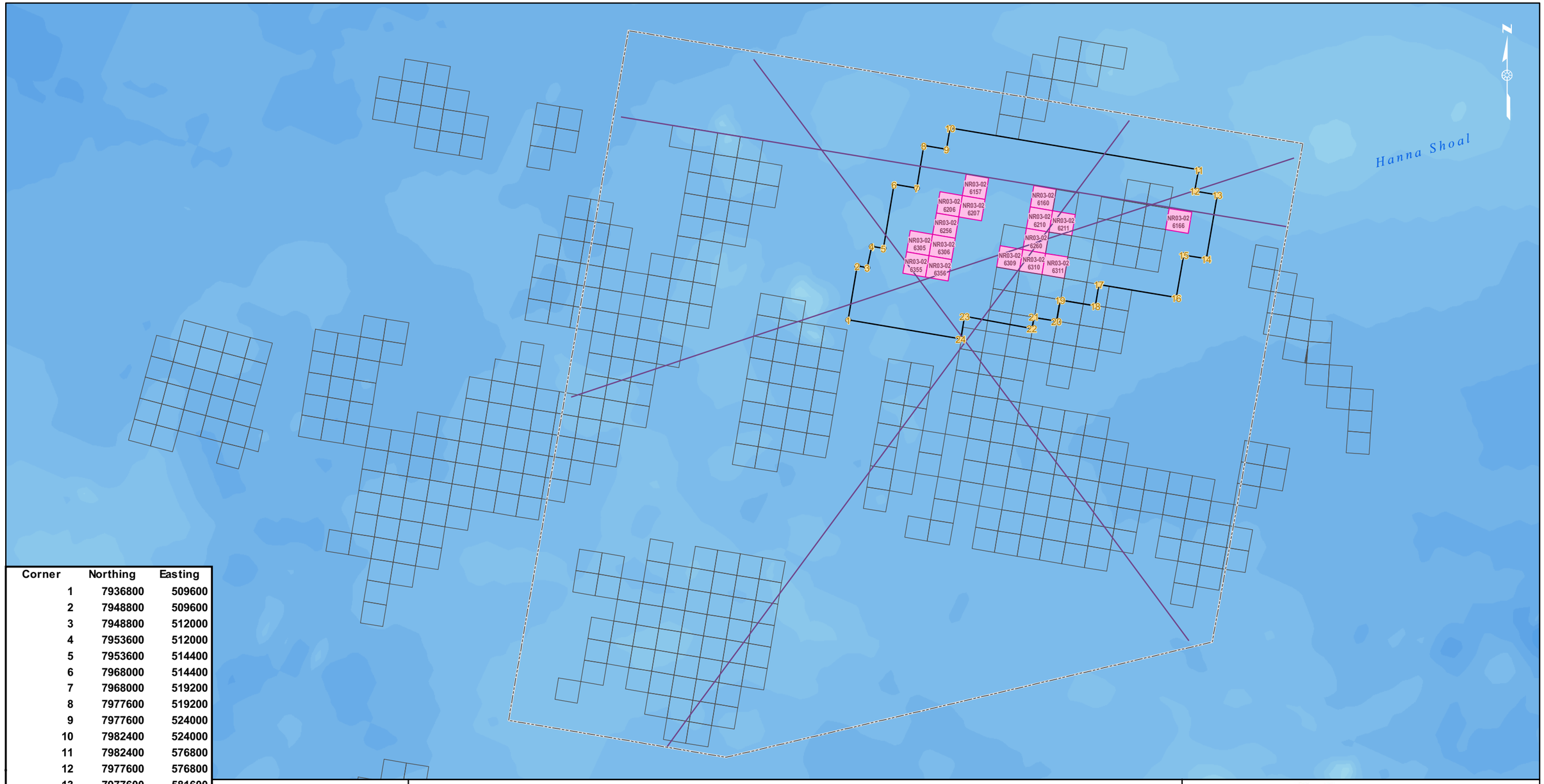
STATOIL 2010 CHUKCHI SEISMIC ACQUISITIONS
Project Location
Geological and Geophysical Permit
Public Information

SCALE: 0 10 20 40 Miles

FIGURE: 2

AES-RTS: 09-136-002.mxd, 12/22/09, R00

FIGURE 3
Seismic Survey Area



Corner	Northing	Easting
1	7936800	509600
2	7948800	509600
3	7948800	512000
4	7953600	512000
5	7953600	514400
6	7968000	514400
7	7968000	519200
8	7977600	519200
9	7977600	524000
10	7982400	524000
11	7982400	576800
12	7977600	576800
13	7977600	581600
14	7963200	581600
15	7963200	576800
16	7953600	576800
17	7953600	560000
18	7948800	560001
19	7948800	552800
20	7944000	552800
21	7944000	548000
22	7944000	548100
23	7944000	533600
24	7936800	533600

Distance to Survey Area in miles:

Barrow	158
Wainwright	114
Point Lay	138
Point Hope	246
Nome	645
Dutch Harbor	1297

Lease Owner
- Statoil
- All Other

Permit Area

3D Seismic Survey Area

2D Seismic Lines (Potential Locations)

NAD83, Alaska Albers Equal Area

NOTE: The North Slope Borough and Northwest Arctic Borough boundaries extend to the 3 mile State of Alaska jurisdictional boundary.

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Regulatory and Technical Services

Statoil

STATOIL 2010 CHUKCHI SEISMIC ACQUISITIONS PROJECT AREA
Seismic Survey Area
Geological and Geophysical Permit
Public Information

SCALE: 0 5 10 20 Miles

FIGURE: 3

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FIGURE 4
Preplot

THE INFORMATION IN THIS SECTION CONTAINS CONFIDENTIAL/PROPRIETARY INFORMATION AND IS NOT AVAILABLE IN THIS PUBLIC COPY OF THE PLAN OF OPERATIONS

FIGURE 5
Preplot

THE INFORMATION IN THIS SECTION CONTAINS CONFIDENTIAL/PROPRIETARY INFORMATION AND IS NOT AVAILABLE IN THIS PUBLIC COPY OF THE PLAN OF OPERATIONS

FIGURE 6
Preplot

THE INFORMATION IN THIS SECTION CONTAINS CONFIDENTIAL/PROPRIETARY INFORMATION AND IS NOT AVAILABLE IN THIS PUBLIC COPY OF THE PLAN OF OPERATIONS

FIGURE 7
Preplot

THE INFORMATION IN THIS SECTION CONTAINS CONFIDENTIAL/PROPRIETARY INFORMATION AND IS NOT AVAILABLE IN THIS PUBLIC COPY OF THE PLAN OF OPERATIONS

RECEIPT FOR
MMS G & G PERMIT

THE INFORMATION IN THIS SECTION CONTAINS CONFIDENTIAL/PROPRIETARY INFORMATION AND IS NOT AVAILABLE IN THIS PUBLIC COPY OF THE PLAN OF OPERATIONS