Public

Attachment 1

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF OCEAN ENERGY MANAGEMENT

Gulf of Mexico OCS Region

(Insert Appropriate Regional Office)

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

(Section 11, Outer Continental Shelf Lands Act of August 7, 1953, as amended on September 18, 1978, by Public Law 95-372, 92 Statute 629, 43 U.S.C. 1340; and 30 CFR Parts 251 and 551)

Spectrum Geo Inc

Name of Applicant

16225 Park Ten Place

Number and Street

Houston, Texas 77084

City, State, and Zip Code

GOM OCS REGION
BOEM
RELEASABLE
JUL 22 2014
New Orleans, LA
OFFSHORE RESOURCE EVALUATION

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

GOM OCS REGION
BOEM
MAY 07 2014
New Orleans, LA
OFFSHORE RESOURCE EVALUATION

_____ Geological exploration for mineral resources

_____ Geological scientific research

_x_ Geophysical exploration for mineral resources

_____ Geophysical scientific research

Submit: Original plus three copies, totaling four copies, which include one digital copy, and one public information copy.

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To be completed by BOEM

Permit Number: E14-006 **Date:** 08-May-2014

A. General Information

1. The activity will be conducted by:

To Be Determined		For Spectrum Geo Inc	
Service Company Name		Purchaser(s) of the Data	
		16225 Park Ten Place	
Address		Address	
		Houston, Texas 77084	
City, State, Zip		City, State, Zip	
		(281) 647 0602	
Telephone/FAX Numbers		Telephone/FAX Numbers	Goes to Mike Saunders Knut Fostad and one other person
		Houston_ops@spectrumasa.com	
E-Mail Address		E-Mail Address	Mike, Saunders@spectrumasa.com

2. The purpose of the activity is: X Mineral exploration

   _____ Scientific research

3. Describe your proposed survey activities (i.e., vessel use, benthic impacts, acoustic sources, etc) and describe the environmental effects of the proposed activity, including potential adverse effects on marine life Describe what steps are planned to minimize these adverse effects (mitigation measures). For example: 1) Potential Effect; Excessive sound level Mitigation; Soft Start, MMOs, mammal exclusion zone or 2) Potential Effect; Bottom disturbance; Mitigation; ROV deployment/retrieval of bottom nodes) (use continuation sheets as necessary or provide a separate attachment):
   2D seismic survey with air gun array. (See attached Appendix 1 for mitigation measures)

4. The expected commencement date is: November 15th, 2014

   The expected completion date is: November 14th, 2015

5. The name of the individual(s) in charge of the field operation is:
   Knut Fostad / Mike Saunders

   May be contacted at:
   Spectrum Geo Inc / 16225 Park Ten Place / Houston, TX 77084

   Telephone (Local) (281) 647 0602 (Marine) TBD

   Email Address: Houston_ops@spectrumasa.com Radio call sign TBD

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

Name (s)	Registry Number(s)	Registered owners)
TBD	TBD	TBD

7. The port from which the vessel(s) will operate is: TBD (Various)

8. Briefly describe the navigation system (vessel navigation only):
GPS with Integrated Navigation System

(Spectra or equivalent)

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

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

(a) _____ Deep stratigraphic test, or

(b) _____ Shallow stratigraphic test with proposed total depth of _____, or

(c) _____ Other _____

2. Attach a page-size plat showing: 1) The generalized proposed location for each test, where appropriate, a polygon enclosing the test sites may be used, 2) BOEM protraction areas; coastline; point of reference; 3) Distance and direction from a point of reference to area of activity.

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

1. The type(s) of operation(s) to be employed is (are):
   a) Acquisition method (OBN, OBC, Streamer): Streamer
   b) Type of acquisition: (High Resolution Seismic, 2D Seismic, 3D Seismic, gravity, magnetic, CSEM, etc.)
   2D Seismic, Gravity and Magnetometer Data

2. Attach a page-size plat showing:
   a) The generalized proposed location of the activity with a representative polygon,
   b) BOEM protraction areas; coastline; point of reference,
   c) Distance and direction from a point of reference to area of activity.

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

4,000 in3 to 4,920 in3 air gun array

Operating Pressure: 2,000 psi

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

Type _____ Pounds _____ Equivalent Pounds of TNT _____

D. Proprietary Information Attachments

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

GOM OCS REGION
BOEM
JUN 03 2014
New Orleans, LA
OFFSHORE RESOURCE EVALUATION

E. Certification

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

Print Name: Richie Miller

SIGNED _____ **DATE** 30-Apr-2014

TITLE President

COMPANY NAME: _____

TO BE COMPLETED BY BOEM

Permit No. E14-006 **Assigned by** W. Chad Vaughan of ~~BOEM~~ **Date** 03-Jun-2014

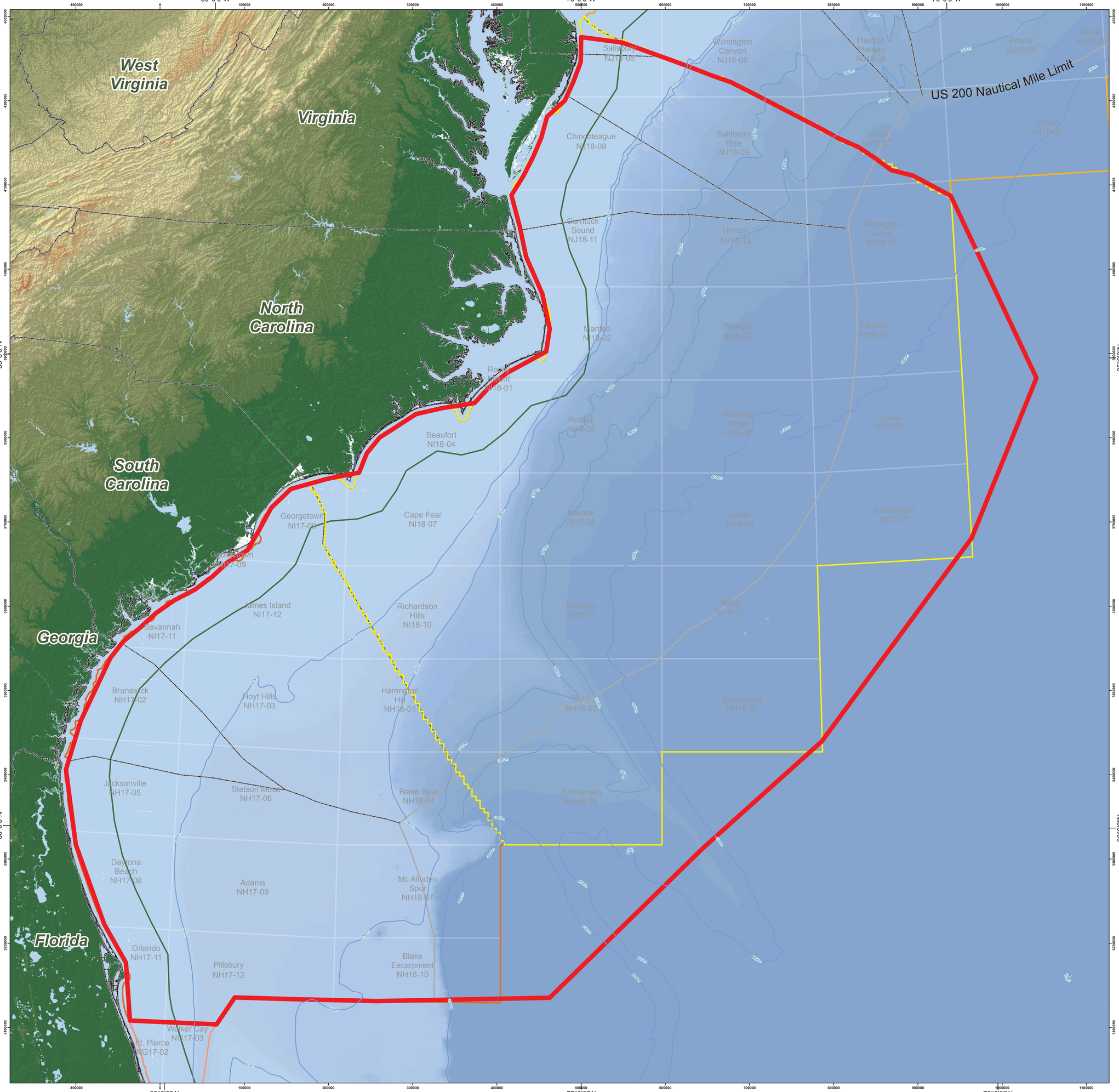
This application is hereby:

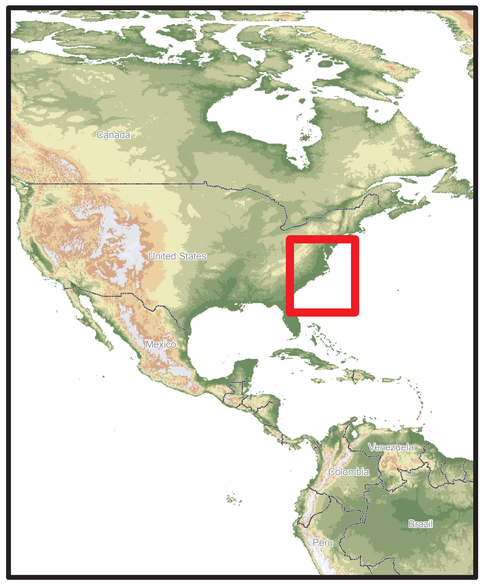
a. ✓ Accepted

b. _____ Returned for reasons in the attached

SIGNED _____ **TITLE** Regional Supervisor **DATE** 6/3/14

US Atlantic Phase 1 Survey





Legend

- Permit Polygon
- Atlantic Administrative Boundaries
- 50 km seaward of the fedstate line
- US 200 Nautical Mile Limit
- SLA

Planning Areas

- NOA - North Atlantic
- MDA - Mid Atlantic
- SOA - South Atlantic
- FLS - Straits of Florida

N

W E

S

1:1,500,000

0 25 50 100
Nautical Miles

0 25 50 100 150 200
Kilometers

Coordinate System: WGS 1984 UTM Zone 18N
Central Meridian: 75°0'0"W

WGS_1984_UTM_Zone_18N
WKID: 32618 Authority: EPSG

Projection: Transverse Mercator
False Easting: 500000.0
False Northing: 0.0
Central Meridian: -75.0
Scale Factor: 0.9996
Latitude Of Origin: 0.0
Linear Unit: Meter (1.0)

Spectrum

Multi-Client Division Spectrum Geo
US Atlantic Phase 1 Survey
Proposed Plot

Author:	Date:	Document Name:
Spectrum Geo Inc. - Houston	04/01/2014	US Atlantic Phase I Plot.pdf