

PUBLIC

Attachment I

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF OCEAN ENERGY MANAGEMENT

Gulf of Mexico
(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)

ARKeX Limited

Name of Applicant

c/o 11490 Westheimer, Suite 850

Number and Street

Houston, TX 77077

City, State, and Zip Code

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

Geological exploration for mineral resources

Geological scientific research

Geophysical exploration for mineral resources

Geophysical scientific research

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

To be completed by BOEM

Permit Number: E14-008

Date: 25-June-2014

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

A. General Information

1. The activity will be conducted by:

<u>ARKeX Limited</u> Service Company Name	For	<u>ARKeX Limited</u> Purchaser(s) of the Data
<u>c/o 11490 Westheimer, Suite 850</u> Address		<u>c/o 11490 Westheimer, Suite 850</u> Address
<u>Houston, TX 77077</u> City, State, Zip		<u>Houston, TX 77077</u> City, State, Zip
<u>713 425 6351</u> Telephone/FAX Numbers		<u>713 425 6351</u> Telephone/FAX Numbers
<u>ian.lambert@arkex.com</u> E-Mail Address		<u>ian.lambert@arkex.com</u> E-Mail Address

2. The purpose of the activity is: Mineral exploration
 Scientific research

3. Describe your proposed survey activities (i.e., vessel use, benthic impacts, acoustic sources, etc) and describe the environmental effects of the proposed activity, including potential adverse effects on marine life. Describe what steps are planned to minimize these adverse effects (mitigation measures). For example: 1) Potential Effect; Excessive sound level Mitigation; Soft Start, 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):
Airborne Gravity Gradient and Magnetic Survey. Passive measurements only. Aircraft will fly
a grid pattern at an altitude of approximately 400ft, with lines spaced approximately 1-2 km apart.

4. The expected commencement date is: August 2014
The expected completion date is: August 2015

5. The name of the individual(s) in charge of the field operation is:
Ian Lambert
May be contacted at:
ARKeX Limited, Cambridge, UK
Telephone (Local) +44 1223 427400 (Marine) _____
Email Address: ian.lambert@arkex.com Radio call sign _____

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

Name (s)	Registry Number(s)	Registered owners)
DHC6-200	N181CS	Rampart Aviation, LLC
DHC6-300	N162DE	Rampart Aviation, LLC
DHC6-300	N344CS	Rampart Aviation, LLC

7. The port from which the vessel(s) will operate is: North Raleigh Airport, Franklinton, NC

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

Aircraft equipped with dual IFR

certified GPS navigation units in addition to being equipped with DME, ADF, VOR and Radar Altimeter.

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): Airborne, fixed wing aircraft

b) Type of acquisition: (High Resolution Seismic, 2D Seismic, 3D Seismic, gravity, magnetic, CSEM, etc.)

Gravity, magnetic

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.).

No energy sources will be used, survey is a passive measurement only

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

Type _____ Pounds _____ Equivalent Pounds of TNT _____

D. Proprietary Information Attachments

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

E. Certification

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

Print Name: Richard Foster-Turner

SIGNED  DATE JUN 25, 2014

TITLE Chief Operating Officer

COMPANY NAME: ARKeX Limited

TO BE COMPLETED BY BOEM

Permit No. E14-008 Assigned by Terece C. Campbell Date 26 June 14
of BOEM

This application is hereby:

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

SIGNED  TITLE Regional Supervisor DATE 6/26/14

