UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF OCEAN ENERGY MANAGEMENT

ALASKA OCS REGION
(Insert Appropriate Regional Office)

APPLICATION FOR PERMIT TO CONDUCT GEOLOGICAL OR GEOPHYSICAL PROSPECTING FOR MINERAL RESOURCES OR SCIENTIFIC RESEARCH ON THE OUTER CONTINENTAL SHELF RELATED TO MINERALS OTHER THAN OIL, GAS, AND SULPHUR

(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)

	AuruMar Alaska, Inc.			
_	Name of Applicant			
	4710 Business Park Blvd Suite F-40			
_	Number and Street			
	Anchorage, AK 99503			
-	City, State, and Zip Code			
-				
- Application is mad	le for the following activity: (check one)			
	_Geological prospecting for mineral resources			
	_Geological scientific research			
Geophysical prospecting for mineral resources				
	_Geophysical scientific research			
Submit: Original prints of the submit of the	olus three copies, totaling four copies, which include one digital copy, and one public			
	To be completed by BOEM			
Permit Number:	12-02 Date:AUG 3 1 2012			

A. General Information

1.	The activity will be conducted by:	
	C&C Technologies, West Coast	For AuruMar Alaska, Inc
	Service Company Name	Purchaser(s) of the Data
	17706 Brickyard Road	4710 Business Park Blvd Suite F-40
	Number and Street	Number and Street
	Bothell, WA 98011	Anchorage, AK 99503
	City, State, and Zip Code	City, State, and Zip Code
	+1 425.408.9190/+1 425.408.9189	+27 21 658 3239/ +27 21 658 3354
	Telephone/FAX Numbers	Telephone/FAX Numbers
	Laurie.zaleski@cctechnol.com	gary.vaneck@aurumar.co.za
	E-Mail Address	E-Mail Address
2.	The purpose of the activity is:	Mineral prospecting Scientific research
3.	describe the environmental effects of the promarine life. Describe what steps are planned For example: 1) Potential Effect: Excessive exclusion zone or 2) Potential Effect: Bottom bottom nodes (use continuation sheets as need to be a supplemental effect).	e., vessel use, benthic impacts, acoustic sources, etc) and posed activity, including potential adverse effects on a to minimize these adverse effects (mitigation measure sound level Mitigation: Soft Start, MMOs, mammal in disturbance: Mitigation: ROV deployment/retrieval or cessary or provide a separate attachment): platform. The primary geophysical data to be
		athymetry, Chirp & S-Boom Seismics. Details attache
4. The expected commencement date is: 30 July 2012		ıly 2012
	The expected completion date is: 31 Decem	nber 2012
5.	cu cu cu cu cu cu cu cu laurie Zaleski	
May be contacted at: C&C Technologies, V		Vest Coast
	Telephone (Local) +1 425.408.9190	(Marine)
	Email Address: Laurie.zaleski@cctechnol.c	Radio call sign
6.	The vessel(s) to be used in the operation is (are):
	Name (s) Registry Number(s mv Thunder	Registered owners)

	7.	The port from which the vessel(s) will operate is: Nome
	8.	Briefly describe the navigation system (vessel navigation only): C&C C-Nav DGPS
		Hypack Navigation
3.		omplete for Geological Prospecting for Mineral Resources or eological Scientific Research
	1.	The type of operation(s) to be used is: (check one)
	(a)	Deep stratigraphic test, or
	(b)	Shallow stratigraphic test with proposed total depth of, or
	(c)	Other N/A
	app	Attach a page-size plat showing: 1) The generalized proposed location for each test. Where propriate, a polygon enclosing the test sites may be used and 2) BOEM protraction areas; coastline; int of reference
	3.	Distance and direction from a point of reference to area of activity N/A
C. Complete for Geophysical Prospecting for Mineral Resources or Geophysical Scientific Research		
	a) b)	The type(s) of operation(s) to be used is (are): Acquisition method (OBN, OBC, Streamer): High resolution shallow seismics, swath bathymetry Type of acquisition: (High Resolution Seismic, 2D Seismic, 3D Seismic, gravity, magnetic, CSEM, side Scan Sonar
	a) b)	Attach a page-size plat showing: The generalized proposed location of the activity with a representative polygon BOEM protraction areas; coastline; point of reference Distance and direction from a point of reference to area of activity
		List all energy source types to be used in the operation(s): (Air gun, air gun array(s), sub-bottom ofiler, sparker, towed dipole, side scan sonar, etc.): See Attached Technical Note
	4. an	Explosive charges will will not be used. If applicable, indicate the type of explosive d 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 BOEM-0134 to apply for each geological or geophysical prospecting permit.

			P 10074	
_	_	rtifi		
_		PTITI	Cati	nn

I hereby certify that foregoing and attached information are true a	and correct.		
Print Name: William R. Jeffress			
SIGNED William R Aff	DATE July 25, 2012		
TITLE Designated Agent			
COMPANY NAME: AuruMar Alaska, Inc.			
TO BE COMPLETED BY BOEM			
Permit No. 1202 Assigned by 1. Hoffman of B	Date 7/25/2012		
This application is hereby:			
a Accepted			
b Returned for reasons in the attached			
The approved permit is:			
a. X Attached			
b Will be forwarded at a later date			
SIGNED Regional Su	pervisor DATE \$\begin{array}{ c c c c c c c c c c c c c c c c c c c		

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF OCEAN ENERGY MANAGEMENT

ALASKA OCS REGION
(Insert Appropriate Regional Office)

RECEIVED
Resource Evaluation

JUL 2 5 2012

PERMIT FOR GEOPHYSICAL PROSPECTING of Ocean Energy Mgmt.
FOR MINERAL RESOURCES OR SCIENTIFIC RESEARCH OCS Region
ON THE OUTER CONTINENTAL SHELF RELATED TO
MINERALS OTHER THAN OIL, GAS, AND SULPHUR

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 Bureau of Ocean Energy Management (BOEM) of the Department of the Interior, and

		Mar Alaska, Inc.	
4710 Business Park Blvd Suite F-40 (Number and Street) Anchorage, AK 99503			F-40
	(City, State, and Zip Code)		
PERMIT NUMBER:	12-02	DATE:	AUG 3 1 2012

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 580 (Prospecting for Minerals Other Than Oil, Gas, and Sulphur on the Outer Continental Shelf).

Paperwork Reduction Act of 1995 (PRA) Statement: This permit refers to information collection requirements contained in 30 CFR part 580 regulations. The Office of Management and Budget (OMB) has approved those reporting requirements under OMB Control Number 1010-0072.

Section I. <u>Authorization</u>

Th	e Government authorizes the permittee to conduct:				
>	Geophysical prospecting for mineral resources as defined in 30 CFR 580.1.				
	Geophysical scientific research as defined in 30 CFR 580.1. 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.				
Th	This permit authorizes the permittee to conduct the above geophysical activity during the period from				
	AUG 3 1 2012 to 31 December 2012 in the following area(s):				
Of	f shore Nome as per attached diagram				
wil rep scie 580 The	tensions of the time period specified above must be requested in writing. A permit plus extensions for activities I be limited to a period of not more than 3 years from the original issuance date of the permit. Inspection and orting of geophysical exploration activities, suspension and cancellation of authority to conduct exploration or entific research activities under permit, and penalties and appeals will be carried out in accordance with 30 CFR 0.23 through 580.28, 580.32, and 580.33. The authority of the Regional Director may be delegated to the Regional Supervisor for Resource Evaluation for purposes of this permit.				
Section	on II. Type(s) of Operations and Technique(s)				
A.	The permittee will employ the following type(s) of operations: Off shore geophysical data aquisition				
	;				
	and will utilize the following instruments and/or technique(s) in such operations: Swath Bathymetry, Side Scan Sonar, Chrip and S-Boom Seismics (shallow penetration)				
В.	The permittee will conduct all activities in compliance with the terms and conditions of this permit, including the "Stipulations," "Special Provisions," and the approved "Application for Permit," which are attached to and incorporated into this permit.				
C.	The permittee will conduct all geophysical exploration or scientific research activities in compliance with the Act, the regulations in 30 CFR Part 580, 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 580 are restated in this permit for emphasis. However, all of the provisions of 30 CFR Part 580 apply to this permit.				

Section III. Reports on Operations

A.	The permittee must submit status reports on a	weekly	basis in a mann	ier approved
	or prescribed by the Regional Supervisor, Resour	ce Evaluation (he	ereinafter referred to as Supervi	sor). The
	report must include a daily log of operations and	a map (preferably	y on a scale of 1:250,000)
	showing traverse lines according to Bureau of Oc	ean Energy Man	agement (BOEM) area and bloo	k 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 prospecting 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 prospecting or scientific research activities were performed;
 - 4. A narrative summary of any: (a) hydrocarbon and/or mineral occurrences or environmental hazards observed and (b) adverse effects of the geophysical prospecting 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 BOEM;
 - 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 location 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 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 a prospecting 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:
 - 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 550, Subpart N as administered by the Bureau of Safety and Environmental Enforcement (BSEE); 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 BOEM that the requested reimbursement is proper, BOEM 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 BOEM's request, BOEM 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 BOEM 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 Parts 250 and 550 (Oil and Gas and Sulphur Operations in the Outer Continental Shelf), 30 CFR Parts 252 and 552 (Outer Continental Shelf (OCS) Oil and Gas Information Program) and 30 CFR Part 580.
- B. Except as specified in this section, or Section VIII, or in 30 CFR Parts 250, 252, 550, and 552, no data or information determined by BOEM 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 BOEM, will be disclosed as follows:

- 1. Except for deep stratigraphic tests, the BOEM will make available to the public geophysical data 50 years after the date on which the data are submitted.
- 2. Except for deep stratigraphic tests, the BOEM will make available to the public processed geophysical information and interpreted geophysical information 25 years after the date on which the information is submitted. It is the policy of BOEM that the "date of submission" of geophysical data or information obtained under geophysical permits will be the date that the BOEM contracting officer or his/her representative signs the contract/delivery order or purchase order to reimburse the permittee for reproduction and, if appropriate, processing of the geophysical information. In the absence of a contract, delivery order, or purchase order, the date of receipt by BOEM is the date of submission.
- 3. BOEM 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 580.12 or 580.51, 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, BOEM, 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 580.24 and determined by BOEM 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 580.71, unless the Director, BOEM, determines that earlier release is necessary for the proper development of the area permitted. The executed permit will be considered as "PROPRIETARY" except the public information copy which will be available to the public upon request.
- F. The identities of third party recipients of data and information collected under a permit will be kept confidential. The identities will not be released unless the permittee and the third parties agree to the disclosure.

Section VII. <u>Disclosure to Independent Contractors</u>

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

Section VIII. Sharing of Information with Affected States

- A. BOEM will make proprietary data, information, and samples submitted to BOEM by permittees to adjacent State(s) upon request by the Governor(s) in accordance with the following:
 - 1. The person who submitted the data and information will be notified and will have at least 5 working days to comment on the action;
 - 2. When the Regional Director advises the person who submitted the data and information, all other owners of the data or information will be considered to have been so notified; and
 - 3. Before disclosure, the Governor must sign a written commitment not to sell, trade, license, or disclose data or information to anyone without the Regional Director's consent.
- B. Disclosure will occur only after the Governor and the Secretary have entered into an agreement providing that:
 - 1. The confidentiality of the information shall be maintained;
 - 2. In any action commenced against the Federal Government or the State for the failure to protect the confidentiality of proprietary information, the Federal Government or the States, as the case may be, may not raise as a defense any claim of sovereign immunity or any claim that the employee who revealed the proprietary information, which is the basis of the suit, was acting outside the scope of the person's employment in revealing the information;
 - 3. The State agrees to hold the United States harmless for any violation by the State or its employees or contractors of the agreement to protect the confidentiality of proprietary data and information and samples; and
 - 4. The materials containing the proprietary data, information, and samples will remain the property of the United States.
- C. The data, information, and samples available to the State(s) pursuant to an agreement will be related to leased lands.
- D. The materials containing the proprietary data, information, and samples must be returned to BOEM when they are no longer needed by the State or when requested by the Director.
- E. Information received and knowledge gained by a State official under paragraph (d) of this section is subject to applicable confidentiality requirements of:
 - 1. The Act; and
 - 2. The regulations at 30 CFR Parts 580, 581, 582.

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 Regional Supervisor.

PERMITTEE:	THE UNITED STATES OF AMERICA:
(Signature of Permittee)	(Signature of Regional Supervisor)
William R. Jeffress (Type or Print Name of Permittee)	Rance R. Wall (Type or Print Name of Regional Supervisor)
Designated Agent (Title)	$\frac{8/31/12}{\text{(Date)}}$
Tuly 25, 2012 (Date)	