



THE STATE  
of **ALASKA**  
GOVERNOR SEAN PARNELL

**Department of Natural Resources**

Division of Oil & Gas

550 W. 7<sup>th</sup> Avenue Suite 1100  
Anchorage, Alaska 99501-3560  
Main: 907.269.8800  
Fax: 907.269.8939

November 10, 2014

Chuck Robinson  
Operations Supervisor  
Global Geophysical Services, Inc.  
7720 King Street  
Anchorage, AK 99518

**RE: MLUP/AK 14-005, Global Geophysical Services, Exploration Permit, Glennallen 2D Seismic Survey Permit Approval**

Dear Mr. Robinson:

The Division of Oil and Gas (Division) approves the Global Geophysical Services, Inc. (Global) Glennallen 2D Seismic Survey Miscellaneous Land Use Permit (MLUP) application, dated September 22, 2014, to conduct geophysical exploration on State of Alaska lands in the south central region of Alaska. The enclosed permit, MLUP/AK 14-005, authorizes Global to conduct a land seismic survey on State of Alaska land in the Glennallen area within the Copper River Basin subject to the conditions of the permit.

This permit is effective November 10, 2014 to January 31, 2015.

Issuance of a permit under 11 AAC 96 is not a disposal of an interest in land and does not grant a preference right to a lease or other disposal. The permit is revocable for cause for violation of a permit stipulation of this chapter, and is revocable at will if the department determines that the revocation is in the state's interest. Each permit issued is subject to any stipulations the department determines necessary to assure compliance with this chapter, to minimize conflicts with other uses, to minimize environmental impacts, or otherwise to be in the interests of the state. Public notice of any miscellaneous land use application is discretionary under 11 AAC 96.030(c). The Director of the Division of Oil and Gas (Director) has the right at any time to amend or modify any provisions of this permit, or revoke this permit.

**Project Description Proposed Activity, Associated Structures, Type of Equipment:**

Global plans to conduct a two-dimensional (2D) seismic survey in the Glennallen area within the Copper River Basin, for Ahtna, Incorporated, an Alaska Native Corporation. The objective of this survey is to acquire high quality 2D seismic data, to support the mapping of multiple reservoir targets.

**Scope of Decision:**

The seismic survey will be conducted in the Glennallen Area within the Copper River Basin on lands within the Unorganized Borough. The survey will cover approximately 40 linear miles on predominately state lands as shown on Exhibit 1.

**Land Status:**

The proposed Glennallen 2D Seismic Survey program is located on state land in the South Central Region within the Unorganized Borough (Exhibit 1&2). Global plans to acquire approximately 40 linear miles of data within the following locations:

Survey Line Locations by Meridian, Township, Range, & Section(s)

Meridian: Copper River

Township: 003N	Range: 004W	Section(s):4-7
	Range: 005W	Section(s):1-3, 10-11
Township: 004N	Range: 004W	Section(s):8-9, 12-18, 20-25, 27-32, 34-35
	Range: 005W	Section(s):12-13, 22-23, 25-27, 34-36

Affected ADL(s):

The Tolsona Oil and Gas Exploration License ADL 392209 is adjacent and overlaps the proposed area of Global's Glennallen 2D survey as shown in Exhibit 3.

In April 2012, the Division received a solicitation to determine whether issuing an oil and gas exploration license in the Tolsona Lake area serves the state's best interests. After considering the applicable laws and regulations, and balancing the potential positive and negative effects known in the area the Director issued the exclusive right for exploration activities on December 1, 2103 to Ahtna Inc. for exploration within the Tolsona Exploration License area.

On September 23, 2014 Ahtna delivered a letter to the Division asserting that Global Geophysical Service, Inc. can perform a 2D survey within the Tolsona Oil and Gas Exploration License area.

Other third party interests identified by DNR MLW Southcentral Regional Land Office (SCRO):

ADL 229183 - Crosswind Lake Trail System  
 ADL 224752 - Material Sale  
 ADL 230669 - Alascom Easement  
 ADL 218872 - Land Sale  
 ADL 392209 - Public Use Timber  
 ADL 229297 - ANGDA ROW  
 ADL 231406 - Preliminary Decision for purchase of state land parcel

**Agency Review:**

The Division provided an Agency review and comment opportunity for the activities considered for authorization under this decision. The following government entities were notified on September 25, 2014 for comment on the Plan: Alaska Department of Fish and Game (ADFG), Alaska Department of Environmental Conservation, Alaska Oil and Gas Conservation Commission (AOGCC) and Alaska Department of Natural Resources (DNR): State Pipeline Coordinator's Office, Division of Mining Land and Water, Office of Project Management and Permitting, and Division of Oil and Gas. The comment deadline was 4:30 pm Alaska time on October 6, 2014. Comments were received by the SCRO and DNR Land Sales & Contract Administration. Agency comments and Global's responses are summarized in Appendix A. The comments were general in nature; therefore, the Plan did not require modification for public notice. The Plan was then publicly noticed.

**Public Review:**

Public notice of the Plan and opportunity to comment was published in the Alaska Dispatch News on October 9, 2014 and the Copper River Recorder on October 16, 2014 with a deadline for comments of November 7, 2014 at 4:30 pm Alaska time. Additionally, a copy of the notice was posted on DNR's web site and a fax of the public notice was sent to the Glennallen post office. No public comments were received.

**Performance Guarantee:**

The permittee has provided the Division with a performance guarantee under 11 AAC 96.060 in the amount of a \$100,000 bond.

**Modification Approved:**

Should any unforeseen issues arise, the Division has authority to revoke and amend this permit. As detailed in this authorization, the Division shall be notified if, during the conduct of operations, a surface use conflict occurs. All operations conducted under this permit are subject to inspection by the Division, and if damage occurs, appropriate interest holders will be engaged, and corrective action will be prescribed. The Division will impose additional provisions as necessary under 11 AAC 96.040 at any time during the activity approved under this authorization to minimize impacts and conflicts.

The Division considered all facts material to this application including the permit provisions contained in this authorization per 11 AAC 96.040(b). The Division has determined that this permit and attached provisions for this non-permanent activity as conditioned is in the state's interest. Stipulations in this permit authorization are necessary to protect the state's interest and the public interest.

An eligible person affected by this decision may appeal it, in accordance with 11 AAC 02. Any appeal must be received within 20 calendar days after the date of issuance of this decision, as defined in 11 AAC 02.040 (c) and (d), and may be mailed or delivered to the Commissioner, Department of Natural Resources, 550 W. 7<sup>th</sup> Avenue, Suite 1400, Anchorage, Alaska 99501; faxed to 1-907-269-8918; or sent by electronic mail to [dnr.appeals@alaska.gov](mailto:dnr.appeals@alaska.gov). This decision

takes effect immediately. If no appeal is filed by the appeal deadline, this decision becomes a final administrative order and decision of the department on the 31<sup>st</sup> day after issuance. An eligible person must first appeal this decision in accordance with 11 AAC 02 before appealing this decision to Superior Court. A copy of 11 AAC 02 may be obtained from any regional information office of the Department of Natural Resources.

Sincerely,



Kim Kruse  
Petroleum Land Manager  
Division of Oil and Gas

Attachments: Miscellaneous Land Use Permit For Geophysical/Seismic Stipulations  
Location Map  
Geophysical Permit Conditions

ecc: SLR International Corporation, Michelle Tuner, Jolene Lekanof  
Ahtna Incorporated: Joe Bovee  
ADFG: Ronald Benkert, James Durst, Michael Bethe,  
DEC: Lori Aldrich, Timothy Pilon, Tim Law  
DMLW: Eric Moore, Lauren Rouen, Cliff Larson  
Division: Kim Kruse, Thomas Barrett, John Easton, Jeanne Frazier

**ATTACHMENT A: MISCELLANEOUS LAND USE PERMIT FOR GEOPHYSICAL /SEISMIC STIPULATIONS**

Geophysical and Seismic activities are subject to the following permit stipulations:

**Standard Stipulations:**

1. The permittee shall defend, indemnify and hold the State of Alaska harmless from and against any and all claims, damages, suits, losses, liabilities and expenses for injury to or death of persons and damage to or loss of property arising out of or in connection with the entry on and use of State lands authorized under this permit by the permittee, its contractors, subcontractors and their employees.
2. A copy of the permit and stipulations must be posted in a prominent location where other permits and safety information are displayed for crew members. The permittee shall make available a copy of the application, all subsequent modifications, and a copy of this permit and all its attachments to any interested party upon request and in a reasonable time.
3. The permittee shall notify and obtain a modification from the Division of Oil and Gas (Division) in advance of any activities which deviate from the approved permit. Any action taken by the permittee or his agent which increases the overall scope of the project or which negates, alters, or minimizes the implied intent of any stipulation contained in this permit will be considered a significant deviation from the approved permit.
4. The permittee and its contractors shall not begin any seismic operations until receiving all necessary local, state and federal permits and approvals.
5. The permittee shall inform and ensure compliance with all conditions of this permit by its employees, agents and contractors, including subcontractors at any level.
6. Reservation of Rights: The Division reserves the right to grant additional authorizations to third parties for compatible uses on or adjacent to the land under this authorization. Authorized concurrent users of state land, their agents, employees, contractors, subcontractors, and licensees, shall not interfere with the operation or maintenance activities of each user.
7. Valid Existing Rights: This authorization is subject to all valid existing rights and to the land. The State of Alaska makes no representations or warranties whatsoever, either expressed or implied, as to the existence, number, or nature of such valid existing rights.
8. The Commissioner of the Department of Natural Resources (DNR) may require that an authorized state representative be present during any oil and gas activities described in or conducted under this permit.
9. The Alaska Historic Preservation Act (AS 41.35.200) prohibits the appropriation, excavation, removal, injury, or destruction of any state-owned historic, prehistoric (paleontological) or archaeological site without a permit from the commissioner. All state permits require consultation with the State Historic Preservation Office (SHPO) (907 269 8722) so that consultation per section 106 of the National Historic Preservation Act may proceed. Should

any sites be discovered during the course of field operations, activities that may damage the site will cease and the Office of History and Archaeology in the Division of Parks and Outdoor Recreation (907-269-8721) shall be notified immediately.

10. The permittee shall make available, to the Division, all records relating to the survey operations and landowner approvals upon request.
11. The permittee shall apply the International Association of Geophysical Contractors Setback Guidelines to activities approved under this authorization. Alternative setback distances may be employed to protect coastal uses and resources, water wells, structures, private property including livestock, and other resources if it is determined that a particular guideline is insufficient.
12. Trails, campsites and work areas must be kept clean. Trash, survey lath, markers, and other debris that accumulates in camps, along seismic lines, and travel routes, that are not recovered during the initial cleanup, shall be picked up and properly disposed of within one calendar year.
13. The Director has the right at any time to modify or revoke this permit.
14. All wastewater must be disposed of in a manner acceptable to Department of Environmental Conservation (DEC) and drinking water must meet Alaska drinking water standards.
15. The permittee shall be responsible for all equipment used in association with the seismic survey. Equipment lost or abandoned during operations shall be recovered and reported. If the lost equipment is not recovered, the report will include a detailed explanation of the circumstances of the loss and the recovery effort that includes Global Positioning System (GPS) location coordinates.

**Land and Access Stipulations:**

1. The permit authorizes the Permittee to conduct geophysical/seismic exploration activity upon lands owned by the State of Alaska. No person may engage in mineral exploratory activity on land, the surface of which has been granted or leased by the State of Alaska, or on land for which the state has received the reserved interest of the United States.
2. Approval of this permit does not constitute the approval required for surface entry on non-state land without an agreement with the surface owner. This permit does not approve entry on private land.
3. This approval does not authorize activity on Mental Health Trust Lands, School Trust Lands, Park Lands, or Lands of the University of Alaska.
4. The seismic exploration activities granted under this permit must not diminish the use and enjoyment of lands encompassed within a Native Allotment. Before entering a pending or approved Native Allotment, the permittee shall contact the Bureau of Indian Affairs and Bureau of Land Management and comply with applicable federal law.

**Public Safety and Program Outreach Stipulations:**

1. **Public safety:** Appropriate signage will be deployed on all access routes and roadways in the project area. The Department of Transportation or Right of Way Lessee may advise permittee on appropriate measures to maintain safe conditions where appropriate. The permittee must watch for, provide verbal warning to and document people or vehicles entering potentially dangerous areas of the project. Lighting and marking with lath or fluorescent tape of some project work areas is advised for operations that occur during periods of sustained darkness or where conditions are unsafe for humans or animals.
2. **Notices:** To avoid unintended conflicts with other users, the permittee shall post a Notice of this project at conspicuous locations including key travel intersection crossings, areas of public use and in a prominent location in any operators or contractors staging area or camp. The Notice shall include the Division's contact number (907-269-8800), project title and permit number, names and contact telephone numbers of the permittee and all operators. The permittee shall provide notices on behalf of the Division to all upland owners involving shoreland, tideland, or submerged land adjacent to the upland owner's property if no notice or agreement is made with the owner by the permittee as required under 11 AAC 96.030(c). All forms of public outreach must be documented and reported to the Division as they occur.
3. In areas of subsistence and personal use harvesting, the permittee will coordinate survey activity with local users to prevent unnecessary conflicts. The permittee shall make a good faith attempt to coordinate survey activities with the owners of trap lines if known. Existing snowmachine, dogsled, or other trails, should be marked with survey lath where they intersect receiver and source lines. The permittee is required to post notice of potentially dangerous or hazardous project activities at these locations.
4. If operations approved by this permit have not commenced within 6 months of issuance of this permit, the permittee must provide notice and/or public outreach at least 30 days prior to commencing operations. Proof of notice and/or public outreach must be submitted to the Division by the applicant in hard copy format. In this stipulation, operations is defined to mean placing signage, mobilizing crews to the project area, placing sources and receivers, conducting the seismic shoot.

#### **Fuel and Hazardous Substances Stipulations:**

1. **Fuel and hazardous substances.** Secondary containment shall be provided for fuel or hazardous substances, as defined under AS 46.03.826 (5) or under 42 U.S.C. 9601(14)F.
  - a. **Fuel or hazardous substance transfers.** Secondary containment or a surface liner must be placed under all container or vehicle fuel tank inlet and outlet points, hose connections, and hose ends during fuel or hazardous substance transfers. Appropriate spill response equipment to respond to a spill of up to five gallons must be on hand during any transfer or handling of fuel or hazardous substances. Transfer operations shall be attended by trained personnel at all times.
  - b. **Fuel or hazardous substances container(s)** with a total combined capacity larger than 55 gallons shall not be stored within 100 feet of a waterbody.

2. Sorbent material in sufficient quantity to handle operation spills must be on hand at all times for use in the event of an oil or fuel spill.
3. Explosives shall not be detonated within, beneath, or adjacent to marine, estuarine, or fresh waters that support fish and wildlife during periods when fish or marine mammals are present unless the detonation of the explosive produces an instantaneous pressure rise in the water body of no more than 2.5 psi or unless the water body, including its substrate, is frozen. Explosives must not produce a peak particle velocity greater than 0.5 inches per second in a spawning bed during the early stages of egg incubation.
  - a. For the shallow hole explosive technique the minimum offset from fish-bearing stream and lakes is:
 

Minimum Charge Offset		
1 lb.	37 feet	(11.2 meters)
2 lbs.	52 feet	(15.84 meters)
5 lbs.	82 feet	(24.99 meters)
10 lbs.	116 feet	(35.35 meters)
25 lbs.	184 feet	(50.08 meters)
50 lbs.	200 feet	(64.10meters)(unconsolidated substrate)
50 lbs.	250 feet	(80.13 meters)(bedrock)
100 lbs.	368 feet	(112.16 meters)
  - b. For quantities (lbs.) of charge between the categories, use the minimum offset for the next higher category. Exceptions to this setback, or new categories, may be approved by the DNR, Division in consultation with Alaska Department of Fish and Game (DFG).
  - c. Minimum offsets for shallow hole explosives are based upon the use of explosives with detonation delays of 8 milliseconds or greater occurring between each charge such that no explosion or combination of explosions will produce an instantaneous pressure in fish bearing waters which exceeds 2.5 psi.)
4. Stationary fuel storage facilities must not be placed within the annual floodplain of a watercourse or closer than 100 ft. to a waterbody. There shall be no fueling, servicing or repair of vehicles or equipment, and no vehicles shall be left unattended within the floodplain or below the ordinary high water line of any river, lake or stream or closer than 100 ft. to a waterbody or wetland.

#### **Wildlife Stipulations:**

1. All activities shall be conducted in a manner to minimize or avoid disturbance to wildlife and their habitat. Hazing of wildlife is prohibited unless a Health Safety and Environment concern is present.
2. Operations must avoid occupied grizzly bear dens and black bear dens, by one-half mile unless alternative mitigation measures to minimize disturbance are authorized by the Division after consultation with DFG. Known den locations shall be obtained from the DFG Division of Wildlife Conservation, Fairbanks 907-459-7213; prior to starting operations. Occupied dens encountered in the field must be reported to the above, and subsequently avoided.

3. The permittee shall abide by the provisions of Alaska's wildlife feeding regulation, 5 AAC 92.230. This regulation provides that it is unlawful to negligently or intentionally feed moose, deer, elk sheep, bear, wolf, coyote, fox, wolverine or deleterious exotic wildlife human food, animal food, mineral supplements or garbage in such a manner that it attracts such animals. Intentional harassment, disturbance or displacement of wildlife (including winter concentrations of moose and denning bears) is prohibited.

**Interior Stipulations:**

1. If flowing or artesian water is encountered during the drilling of shot holes, the DMLW shall be contacted at 907-269-8645. Action may be required to stop the flow.
2. On-site refuse disposal is prohibited. The permittee will remove and dispose of all waste generated during operation and termination activities under this authorization to an off-site DEC approved disposal facility. Waste, in this stipulation, means all discarded matter, including but not limited to human waste, trash, garbage, refuse, oil drums, petroleum products, ash and discarded equipment. Unattended vehicles and equipment will not be parked or left on the traveled surface of existing off- line trails or access routes.
3. Snow ramps, snow bridges or approved cribbing may be used as appropriate to provide access across over flows so as to preclude cutting, erosion or degradation to any watercourse. Ice or snow bridges and approach ramps constructed at stream, river or slough crossings shall not contain extraneous material (i.e., soil, rock, brush, or vegetation). Ice or snow bridges shall be removed immediately after use or prior to breakup or breached to facilitate water flow during breakup.
4. Existing roads, trails, and natural clearings must be used wherever possible. Trail widths and clearing shall be kept to a minimum. Trail surfaces may be cleared of brush, stumps, and snags. Site disturbance shall be kept to a minimum to protect local habitats. All activities at the site shall be conducted in a manner that will minimize the disturbance of soil and vegetation and changes in the character of natural drainage systems. Additionally, any ground disturbance which may have occurred shall be restored to its original condition contoured to blend with the natural topography to protect human and wildlife health and safety. Particular attention must be paid to prevent pollution and siltation of streams, lakes, ponds, waterholes seeps and marshes, and disturbances to wetlands.
5. All forest clearing operations must be designed to reduce the likelihood of increased insect infestation and disease infections that threaten forest resources. All slash and cull logs four inches in diameter and larger should be disposed of by burning, burying, chipping, or peeling, or removed off-site.
6. The completion report shall include a map depicting all mulched trails.
7. Track vehicles (Drill Rigs and Mulchers) shall operate within areas of adequate snow cover and frost to mitigate any damages and to prevent breaking through the vegetative mat.

**Project Specific Stipulations:**

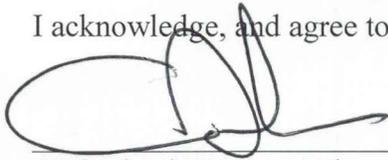
1. Existing roads, trails, and natural clearings must be used wherever possible. The applicant will be required to prevent or repair any damage which occurs as a result of their site access or exploration activities. Trail surfaces may be cleared of brush, stumps, and snags, and the debris scattered.
2. Trail clearing shall be kept to a minimum width not to exceed 15 feet.
3. Salvageable timber greater than 4" in diameter shall be cut into no more than 8' lengths and placed in locations that are publicly accessible by motor vehicle.

**Reporting Stipulations:**

1. Spill Notifications: The permittee shall comply with the Department of Environmental Conservation (ADEC) requirements for reporting the unauthorized discharge, leak, or spill of hydrocarbons or toxic or hazardous substances. The permittee shall notify the Department of Natural Resources of all spills that must be reported under 18 AAC 75.300 under timelines of 18 AAC 75.300. All unintentional fires and explosions must be reported to DNR immediately. The DNR 24 hour spill number is (907) 451-2678; the fax number is (907) 451-2751. DNR and DEC shall be supplied with all follow-up incident reports.
2. Blowouts, as defined as the detonation of source points that caused surface damaged, are reportable if the surface damaged is larger than 36 inches. The report must include the location (Lat./Long. In WGS 84) and pictures of the blowout. All blowouts will need to be reclaimed or rehabilitated to the satisfaction of the Alaska DNR.
3. As a stipulation of the issuance of this MLUP for Geophysical Exploration, the permittee acknowledges the requirements of 11 AAC 96.210 (1) and agrees to notify the Director of the Division and submit seismic exploration data. The Geophysical Data Submission Requirements can be found on the DNR Division's Website <http://dog.dnr.alaska.gov/Permitting/permittingForms.htm>. Your signature acknowledges your obligation to fulfill the Data Submittal requirements.
4. The permittee must complete and return a Geophysical Activity Completion Report form for each set of 3D data acquired. Please submit a separate form for each sub-program data submittal. A non-confidential public completion report will be placed into the permit file each time a sub-program is completed. Completion reports must be submitted to our office by July 1, 2014. For in depth instruction on how to complete the form please refer to the Division's permitting website <http://dog.dnr.alaska.gov/Permitting/PermittingForms.htm>.
5. A summary record of all surface impacts, lost equipment, spills, fires, and unintended explosions, shall be included in the completion report. Rehabilitation, if required, shall be completed to the satisfaction of the DNR.
6. All fires and explosions that require a response to protect life and property must be reported to DNR and Department of Environmental Conservation (DEC) immediately and shall be supplied with all follow-up incident reports.

7. The Division's Permitting Section shall be notified in Anchorage by telephone at 907-269-8800 and by email at [dog.permitting@alaska.gov](mailto:dog.permitting@alaska.gov) if, during the conduct of operations, state resources are damaged or a conflict occurs.
8. Annual Reports: if the term of the MLUP exceeds on calendar year from the date of approval an annual report must be submitted and discuss the project timeline, progress, project work and continued public outreach.
9. Completion Statement: Upon expiration of the MLUP or completing all operations authorized under the MLUP, whichever occurs first, a completion report must be submitted and discuss a summary of operations, equipment trails, camps and staging areas, damages to State lands, spills, land-use conflicts and work completed.
10. The permittee shall make available a copy of the seismic plan of operations, all subsequent modifications, and a copy of this permit and all its attachments to any interested party upon request and in a reasonable time.

I acknowledge, and agree to these Permit terms, conditions and stipulations.



\_\_\_\_\_  
Authorized Representative

11/10/14

\_\_\_\_\_  
Date

## Appendix A

<b><i>SCRO Comments</i></b>	<b><i>Applicant Responses</i></b>
<p><u>Public Access:</u>            Within the proposed exploration area, public access should not be blocked with the exception of temporary measures taken in the interest of public safety. Currently, public access is protected within Section Line Easements, easements reserved under AS 38.05.127 for access to navigable or public water, the RS 2477 Right-of-Way for the Copper Center – Nelchina Trail (RST 565) and the Crosswind Lake Trail System (ADL 229183). In addition to allowing the continued public use of these routes, the applicant should be required to prevent or repair any damage which occurs as a result of their site access or exploration activities.</p>	<p>One seismic line will cross the Crosswind Lake Trail System (ADL 229183) and two seismic lines will cross the Copper Center Nelchina Trail (RST 565) as shown in Figure 2. Public right-of-way (ROW) easements are shown in Figure 2. Public access within the project area will not be limited as part of the Glennallen 2D seismic survey, except around survey activities as necessary to ensure the health and safety of workers and the public. Public access to navigable or public waters will not be blocked as part of the Glennallen 2D seismic survey.</p>
<p><u>Material Sale:</u>            ADL 224752 is a Material Sale issued to the Alaska Department of Transportation and Public Facilities, located within portions of Sections 20, 21, 28 and 29 of Township 4 North, Range 4 West of the Copper River Meridian. An active contract for the removal of 150,000 cubic yards of material is in effect for this site through 2016.</p>	<p>A seismic line is proposed to cross the materials site as shown on Figure 4. Global is in communication with ADOT&amp;PF and will coordinate with ADOT&amp;PF to ensure that survey activities in this area do not conflict with material extraction and associated activities.</p>
<p><u>Fiber Optic Telecommunications Cable:</u>            ADL 230669 is an easement file for Alascom, Inc.'s Fiber-Optic Telecommunications Cable which traverses the proposed exploration area. SCRO's records indicate that the cable is to be co-located with a federally authorized electric transmission line operated and maintained by Copper Valley Electric Association, but do not indicate whether or not the fiber-</p>	<p>Global is in communication with Alascom, Inc (AT&amp;T), Copper Valley Electric Association, and Copper Valley Telecom in regards to seismic survey activities along their ROWs. Global will adhere to recommendation from the utilities to avoid damage to cable/transmission lines. Global will avoid any existing infrastructure (e.g. transformers, poles) in the project area and there will be no ground disturbing activities as part of line clearing and data acquisition.</p>

optic cable has been installed at the present time.	
<p><u>Land Conveyance:</u> ADL 218872 is a land sale conveyed to Mr. Graham Keith Ward by State Patent No. 15309 for a campground along the Tolsona River in Section 21 of Township 4 North, Range 4 West of the Copper River Meridian. The subject lands, shown in Plat 92-7 recorded in the Chitina Recording District, are no longer in State ownership.</p>	Global has entered into a contract with Graham Keith Ward to access his land to conduct the survey.
<p><u>Public Use Timber:</u> Where any land clearing activities authorized under ADL 392209 result in the cutting of salvageable timber, DOG should require the applicant to make such timber available for public use. SCRO recommends that logs greater than 4" in diameter be cut into no more than 8' lengths and placed in locations that are publicly accessible by motor vehicle.</p>	Line clearing will be performed by the use of mulchers, which does not leave logs suitable for public use.
<p><u>Natural Gas Pipeline:</u> ADL 229297 is a lease issued to the Alaska Natural Gas Development Authority (ANGDA) and administered by the Alaska State Pipeline Coordinator's Office (SPCO). DOG and the applicant should coordinate with SPCO regarding activities near ADL 229297.</p>	A seismic line is proposed to cross ANGDA's ROW as shown on Figure 5. Global is in communication with SPCO to ensure that seismic survey activities in this area do not conflict with activities along the ANGDA ROW.
<p><b>DMLW, Land Sales &amp; Contract Administration Comment</b></p>	
<p>ADL 231406. The Tolsona Community Corporation applied to purchase a parcel of state land approximately five acres in size located along the Tolsona Lake Road on which the community firehall is located under AS 38.05.810. Preliminary decision was issued on August 13, 2014 for ADL 231406.</p>	The Tolsona Firehall is approximately 0.6 miles from the nearest seismic line as shown in Figure 1. No impacts to the Firehall are expected.

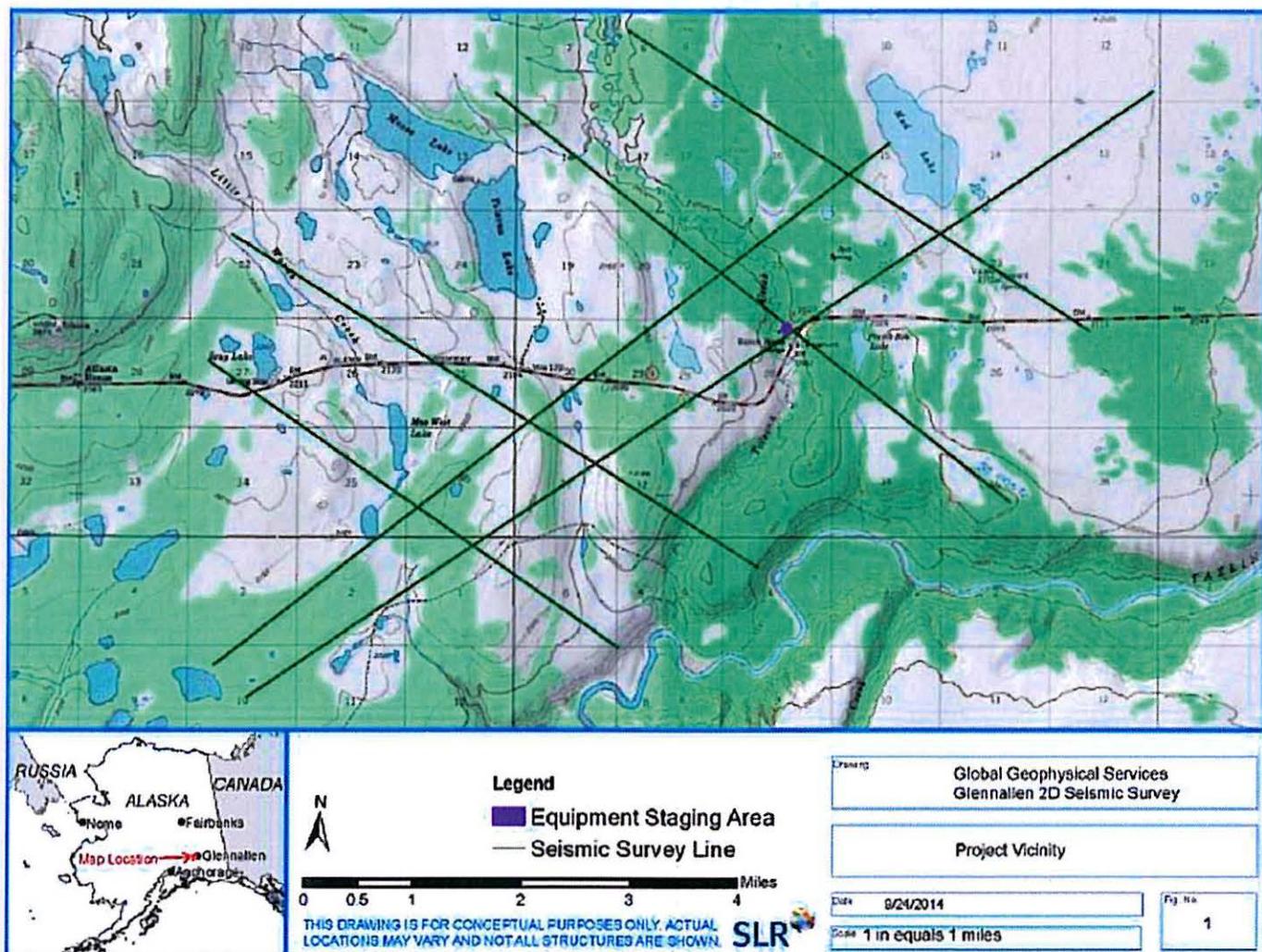


Exhibit 1

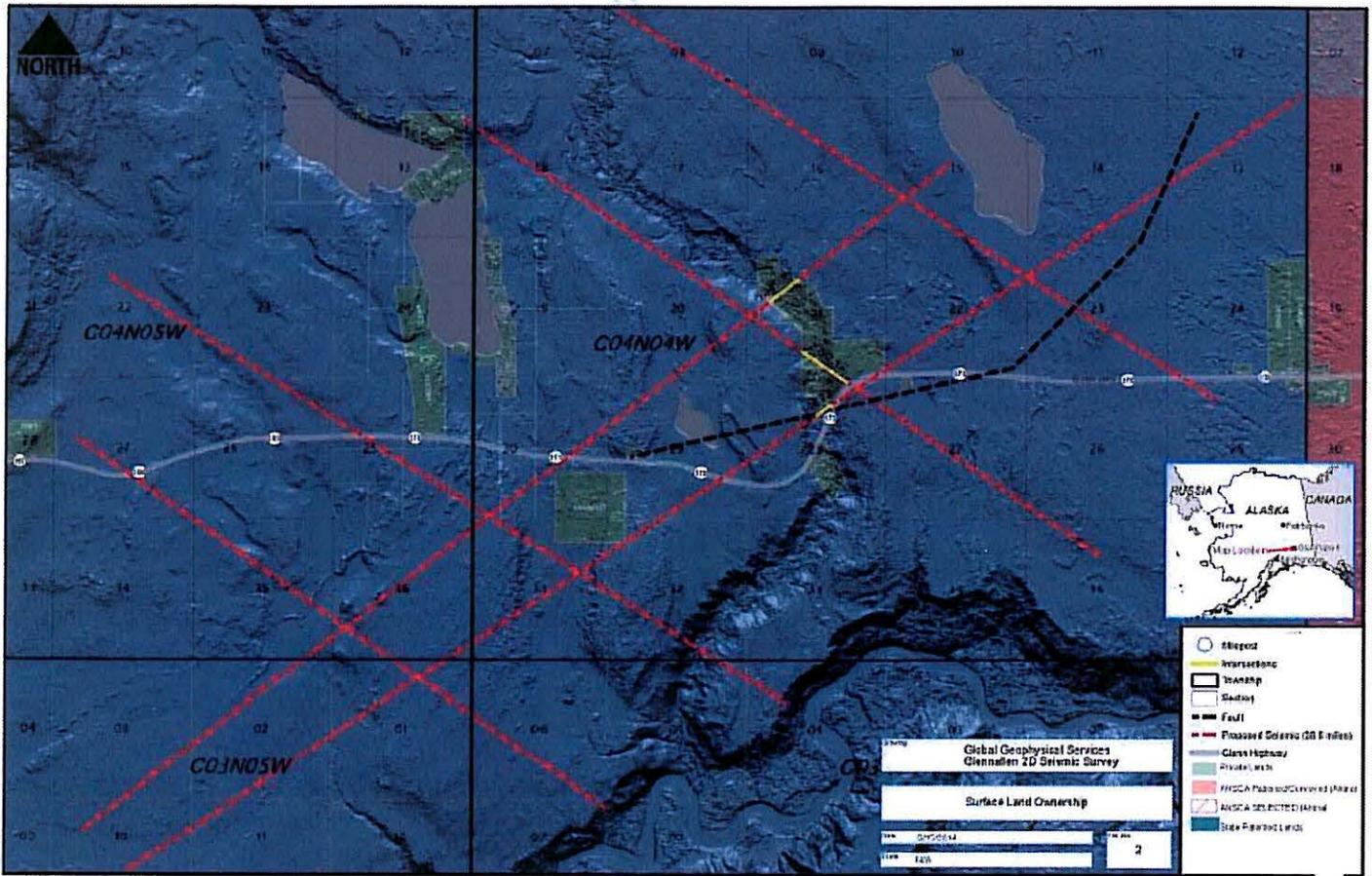


Exhibit 2

### 3 Ahtna Exploration License Area

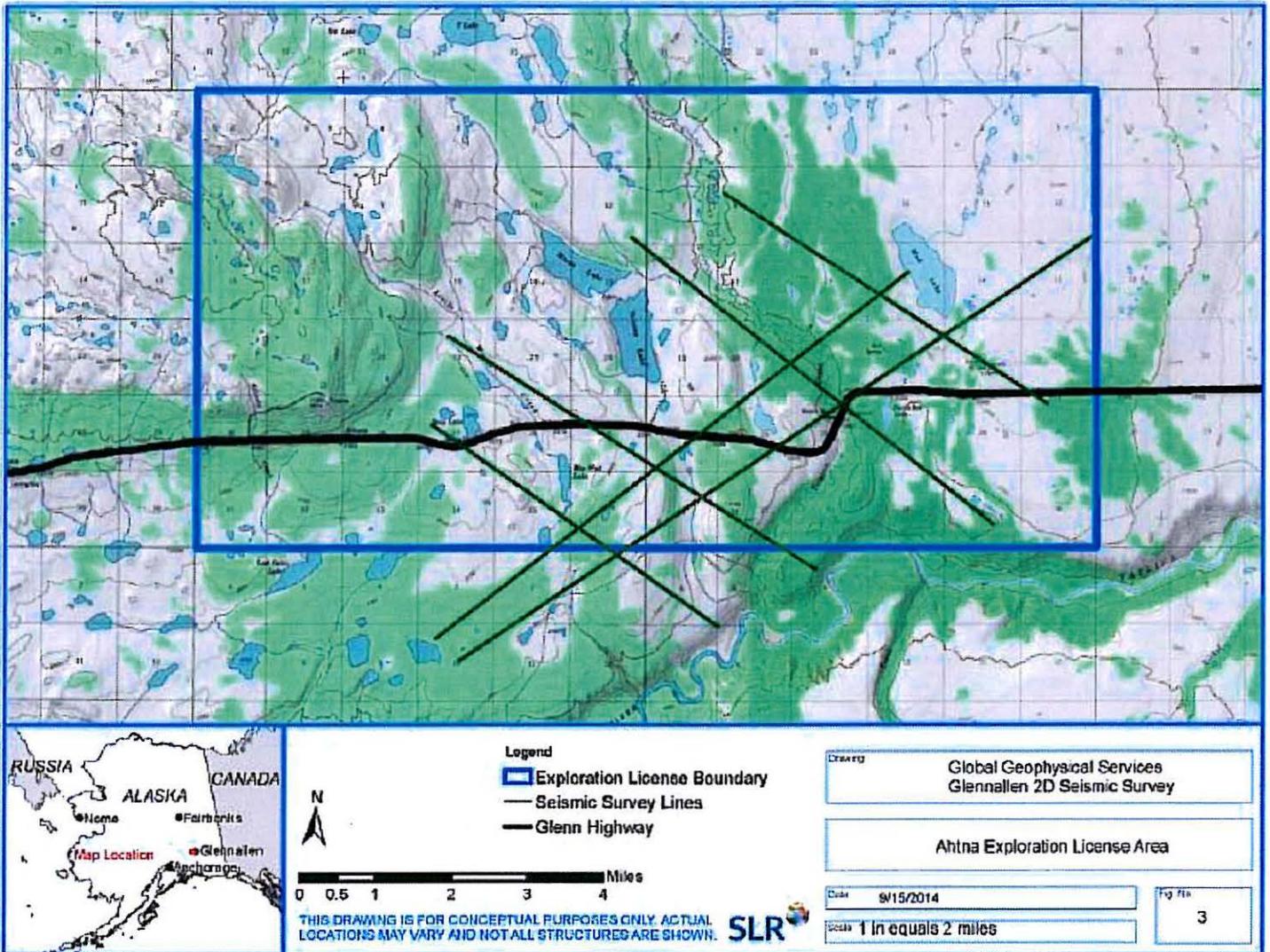


Exhibit 3