UNIT PLAN OF OPERATIONS APPLICATION



State of Alaska

Department of Natural Resources, Division of Oil & Gas 550 W. 7th Ave, Suite 1100, Anchorage, AK 99501-3563 Phone: 907-269-8800 Fax: 907-269-8943 Permitting Email: dog.permitting@alaska.gov



SECTION I: APPLICANT INFORMATION 2. Applicant Contact: 1. Applicant: First Jennifer Last Name: Henderson Name: Repsol E&P USA Inc. Name: Title: Permitting and Regulatory Compliance Coordinator Is the Mailing Address the same as Applicant's Mailing Address? If Mailing \boxtimes 3800 Centerpoint Drive, Suite 400 Address: "No", please provide information below: Yes Mailing City: Anchorage Enter Mailing Address. Address: Enter Zip State: Alaska Zip Code: 99503 City: Enter City. State: Zip Code: Code. State. Phone: 907-375-6917 Fax: Enter Fax. Phone: 907-375-6925 Enter Fax. Fax: Email: whardham@repsol.com Email: jennifer.henderson@repsol.com 3. Unit Name Pikka Unit 4. Unit Operator Contact: Is The Unit Operator Contact the same as the Applicant Contact? If "No", please provide information below: First Enter First Name. Last Name: Enter Last Name. Title: Enter Title. Name: Mailing Enter Mailing Address. Address: State: Enter State. City: Enter City. Zip Code: Enter Zip Code. Phone: Enter Phone. Fax: Enter Fax. Email: Enter Email. Describe the relationship between the Unit Operator and the Applicant:

SECTION II: THIRD PARTY INFORMATION	SECTION III: APPLICATION DATE AND NUMBER
(Fill out this section only if you are applying for the Applicant)	(FOR OFFICE USE ONLY)
Third Party Company Name: SLR International Corporation	Application Date:
First Michelle Last Turner Name:	
Title: Principal Scientist	
Mailing Address: 2700 Gambell Street, Suite 200	
City: Anchorage	
State: Alaska Zip Code: 99503	
Phone: 907-264-6931 Fax: Enter Fax.	
Email: mturner@slrconsulting.com	
Describe the affiliation to the Applicant:	Application Number:
Consultant	

SECTION IV: PROJECT INFORMATION

Click here to enter text.

. Project Name: 2015-2016 Winter Exploration Program					
2. Proposed Start Da	2. Proposed Start Date: 10/1/2015				
3. Project Descriptio	n:				
Is activity discussed in	the approved Pla	in of Development on file with the Division's Units Section?	☐ Yes	⊠ No	
Describe what and wh	ere:				
Repsol E&P USA Inc. (Repsol) plans to conduct a Winter Drilling Program during the 2015-2016 winter season as part of a multi-year exploration drilling program to assess oil reserves within leases operated by Repsol. Drilling activities are proposed for the Colville River Area of the North Slope, Alaska. The entire 2015-2016 Winter Exploration program includes a total of three potential drill sites, however one drill site, Qugruk 801, was included in a Plan of Operation (POO) amendment submitted separately. The two other potential drill sites are Qugruk 501 and Qugruk 701 (Q 501 and Q 701). The potential drill sites are located on State of Alaska and Arctic Slope Regional Corporation (ASRC) jointly-managed oil and gas leases on Kuukpik Corporation surface lands. Drill sites will be accessed by proposed ice roads that connect to an existing gravel road. Approximately 40 miles of ice road will be required to connect gravel roads to drill sites and to provide access to water sources. Two ice road options are proposed for ice road construction to maintain operational flexibility: however, only one ice road route will be constructed. The preferred ice road route begins near the existing Kuparuk River Unit (KRU) Drill Site 2A (DS-2A) and heads west for approximately 9.5 miles, then heads northwest ending at Drill Site Q 701. A spur road off the main ice road will head roughly southwest to Drill Site Q 501. The alternative ice road option would begin the ice road near the existing KRU DS-2M and connect to the main ice road after 4.5 miles. Ice roads will have several major river crossings on the Colville River and over a number of un-named tributaries. Most stream crossings will be located in areas sufficiently shallow to allow them to freeze naturally to the bottom during winter. An ice staging pad would be constructed near the beginning of the ice road, either near DS-2A pad (Ice Staging Pad A) or near DS-2M pad (Ice Staging Pad B). A central ice camp pad and an ice airstrip will be constructed to support drilling a					
		SECTION V: LAND STATUS			
1. State Mineral Esta	te:				
Are supplemental page	es for land status	included in Appendix C?	Yes	No	
Affected ADL: 393	Affected ADL: 393012 Date Effective: 8/1/2006 Date Assigned: 5/1/2011				
Surface Ownership: Do you have, or anticip Special Use Lands:	Do you have, or anticipate having an Access Agreement: ☐ Yes ☐ No Special Use Lands: None identified Jointly Managed Lands: ASRC Jointly Managed Lands				
Project Comp	onents	Meridian, Township, Range, And Section(s)	GP	S Coordinates	
Qugruk 501 Drill Site		Umiat, T12N, R6E, Section 26		N, 150° 32′ 1.276″W, NAD 83	
Spur Road 2		Umiat, T12N, R6E, Section 26	Various		
Click here to enter text.		Click here to enter text.	Click here to ent	er text.	
Affected ADL: 3914	54	Date Effective: 6/1/2009	Date Assigned:	5/1/2011	
Oil And Gas Lessee(s): Repsol E&P USA Inc. Surface Ownership: Kuukpik Corporatoin Do you have, or anticipate having an Access Agreement: ☑ Yes ☐ No Special Use Lands: None identified Jointly Managed Lands: ASRC Jointly Managed lands Other Considerations: None identified					
Project Con		Meridian, Township, Range, And Section(s)	GF	PS Coordinates	
Qugruk 701 Drill Site	1	Umiat, T12N, R6E, Section 17		N, 150°39′ 43.863″W, NAD	
Main Ice Road		Umiat, T12N, R6E, Section 17	Various		
Click here to enter text.		Click here to enter text.	Click here to er	nter text.	
Affected ADL: 3915	553	Date Effective: 5/1/2011	Date Assigned:	Enter Date.	

Oil And Gas Lessee(s): Repsol E&P USA Inc.					
Surface Ownership: Kuukpik Corporation					
Do you have, or anticipate having an Access Agreement: □ No					
Special Use Lands: None identified	•				
Jointly Managed Lands: ASRC Jointly Manag	ed Lands				
Other Considerations: None identified					
Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates			
Spur Road 2	Umiat, T12N, R6E, Section 25	Various			
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Affected ADL: 393006	Date Effective: 6/1/2015	Date Assigned: Enter Date.			
Oil And Gas Lessee(s): Repsol E&P USA In	c.				
Surface Ownership: Kuukpik Corporation					
Do you have, or anticipate having an Access A	greement: ⊠ Yes □ No				
Special Use Lands: None identified					
Jointly Managed Lands: ASRC Jointly Manag	ed Lands				
Other Considerations: None identified					
Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates			
Main Ice Road	Umiat, T12N, R6E, Section 16	Various			
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Click here to enter text.	Click here to enter text.	Click here to enter text.			
Affected ADL: 391453	Date Effective: 5/1/2011	Date Assigned: Enter Date.			
Oil And Gas Lessee(s): Repsol E&P USA I	nc.				
Surface Ownership: Kuukpik Corporation					
Do you have, or anticipate having an Access A	greement: ⊠ Yes □ No				
Special Use Lands: None identified					
Jointly Managed Lands: ASRC Jointly Mana	ged Lands				
Other Considerations: None identified					
Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates			
Main Ice Road					
Main Icc Noau	Umiat, T12N, R6E, Section 15	Various			
Click here to enter text.	Umiat, T12N, R6E, Section 15 Click here to enter text.	Various Click here to enter text.			
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Access Authorization(s): Click here to enter text.						
Special Use Lands: Click here to enter text.						
Jointly Managed Lands: Click here to enter text.						
Other Considerations: Click here to enter te						
Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates				
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Oil And Gas Mineral Estate Owner: Click here to enter text.						
Access Authorization(s): Click here to enter text.						
Special Use Lands: Click here to enter	text.					
Jointly Managed Lands: Click here to enter	r text.					
Other Considerations: Click here to enter tex	rt.					
Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates				
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3. Private Lands:						
Are supplemental pages for land status include	d in Appendix C?	Yes 🗵 No				
Oil And Gas Mineral Estate Owner: Click he	ere to enter text.					
Surface Ownership And Access Agreement(s):	Click here to enter text.					
Special Use Lands: Click here to enter text.						
Jointly Managed Lands: Click here to enter to	ext.					
Other Considerations: Click here to enter tex	rt.					
Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates				
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Click here to enter text.	Click here to enter text.	Click here to enter text.				
Oil And Gas Mineral Estate Owner: Click he	ere to enter text.					
Surface Ownership And Access Agreement(s):	Click here to enter text.					
Special Use Lands: Click here to enter text.						
Jointly Managed Lands: Click here to enter	text.					
Other Considerations: Click here to enter text.						
Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates				
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Oil And Gas Mineral Estate Owner: Click he Surface Ownership And Access Agreement(s):	Click here to enter text. ere to enter text. Click here to enter text.					
Oil And Gas Mineral Estate Owner: Click he Surface Ownership And Access Agreement(s): Special Use Lands: Click here to enter text.	Click here to enter text. ere to enter text. Click here to enter text. text.					

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SECTION VI: BOND INFORMATION

Bonded Company: Repsol E&P USA Inc.

Type: Statewide Oil and Gas Bond Number: 022032714 Amount: \$500,000.00

Bonding Company: Liberty Mutual Insurance Company

Mailing

175 Berkeley Street

Address:

City: Boston State: MA Zip Code: 02116

Phone: Enter Phone. Fax: Enter Fax. Email: Enter Email.

SECTION VII: SEQUENCE AND SCHEDULE OF OPERATIONS

Project Milestone #	Project Milestone	Proposed Start Date	Proposed End Date			
1.	Field Studies	7/1/2015	9/1/2015			
2.	Installation of Thermistors	8/1/2015	8/20/2015			
3.	Pre-Packing of ice roads and pads	10/1/2015	2/1/2016			
4.	Construction/Maintenance of ice roads, pads, and ice air strips	11/1/2015	5/1/2016			
5.	Exploration Drilling	1/1/2016	4/15/2016			
6.	Demobilization	4/15/2016	5/15/2016			
7.	Summer Activities	7/1/2016	9/1/2016			
8.	Enter Milestone.	Enter Date.	Enter Date.			
9.	Enter Milestone.	Enter Date.	Enter Date.			
10.	Enter Milestone.	Enter Date.	Enter Date.			

SECTION VIII: PROJECTED USE REQUIREMENTS

1. Describe the proposed operations, including the location and design, of **Well Sites**:

The proposed drilling activities are within the Colville River area of the North Slope, Alaska as shown on the attached figures in Appendix A. Typical drill site layouts are provided for Q 501 and Q 701 are provided in Appendix A. One or two sidetrack wells may also be drilled. The planned well design will be similar to that employed in previous North Slope exploration wells and in accordance with a Permit to Drill from the Alaska Oil and Gas Conservation Commission (AOGCC). Due to the exploratory nature of the well, nearly all information regarding the downhole aspect of the well is confidential. Table 1.1 in Appendix C provides drill site locations. All drilling activities will be conducted using drilling rigs suitable for arctic operation as identified in Table 1.2 in Appendix C. TESTING AND SURVEYS – Production tests may be performed as needed. Testing may include extended flow periods to determine the productivity of the well. Testing will be accomplished in accordance with approved techniques and approved by AOGCC. Vertical seismic profiles (VSP) may be acquired using off road capable vibrosis trucks. These operations will generally occur within a 2-mile radius of the surface location of the well. Repsol is planning to employ Tilt Meter (micro-deformation) fracture mapping technology in conjunction with the well stimulation and flowback activities on the Q-701 well. Tilt Meter fracture mapping is done by setting an array of highly sensitive instruments in shallow boreholes around the well trajectory. Approximately forty (40), eight (8) inch diameter boreholes will be drilled to approximately 40 feet deep in an elliptical pattern around the Q-701 wellbore trajectory. 4" PVC tubing will then be installed in the boreholes. The boreholes and installation of PVC will be performed by a 3-4 man crew that will access the area with track driven vehicles. Following the construction of the PVC cased boreholes, the 2-7/8" diameter Tilt Meters will then be run inside the PVC and then topped with 1 gallon of sand around the tools to couple them to the ID of the pipe. Following the completion of the fracturing operations, the Tilt Meters will be retrieved before pulling the PVC casing out and filling in the boreholes with the original cuttings. The Tilt Meter technology will allow Repsol to understand the azimuth orientation of the maximum principal stress within the productive reservoir. This azimuth orientation will ultimately dictate the trajectory of the horizontal laterals planned for production wells to optimize reservoir production over the life of the reservoir. Repsol will obtain a General Permit MG1 for Oil & Gas Drilling Rigs from the Alaska Department of Environmental Conservation (ADEC) for each well and will comply with the stipulation identified under the authorization.

2. Describe the proposed operations, including the location and design, of **Buildings**:

Two options are proposed for construction of an ice staging pad to maintain operational flexibility; however, only one ice staging pad will be constructed depending upon the ice road route selected. Option 1 (Preferred) – Ice Staging Pad A would be constructed near the beginning of the ice road near DS-2A gravel pad. Option 2 (Alternative) – Ice Staging Pad B would be constructed near the beginning of the ice road near DS-2M gravel pad. A central ice pad with a 360-bed camp will be constructed to support drilling activities. Repsol will also have a 125-bed camp at the Mine Site F gravel pad under either option. Each drilling pad location will include the following support facilities: a satellite office camp; storage areas; (e.g., fuel storage, drilling waste storage); and maintenance buildings. Table 2.1 in Appendix C provides locations and dimensions of the associated pads.

3. Describe the proposed operations, including the location and design, of Fuel and Hazardous Substances:

Fuel storage capacity totaling approximately 180,000 gallons is proposed as part of the 2015-2016 Winter Exploration Program as show in Table 3.1 in Appendix C. Fuel will be stored in lined and bermed fuel storage areas for secondary containment. Fuel storage, handling, transfers, and spill reporting will be conducted in accordance with Repsol's C-Plan (11-CP-5194), North Slope Environmental Field Handbook (NSEFH), and the Alaska Safety Handbook. All bulk hazardous fluid and fuel transfers will be conducted in accordance with the fluid transfer guidelines described in the NSEFH and Repsol's Fluid Transfer Checklist (found in Appendix A of Repsol's C-Plan). Fuel will be re-supplied to the site from existing North Slope oil and gas operations. Fuel stored will include unleaded gasoline and ultra-low sulfur diesel. A variety of commonly used water-based and mineral oil based drilling fluid additives will be used to provide and maintain the correct drilling mud formulation for the conditions being drilled. The various additives are either dry-bulk packaged in sacks contained in lined mud boxes or shrink wrapped pallets. Dry-bulk cement for the various casing strings are typically stored in "pneumatic-feed" silos, located adjacent to the rig. Other liquid drill fluid chemicals are provided in 55-gallon drums on a variety of different sized (250-400 gal) "chem-totes". All drill fluid additives are stored in a secure fashion, in secondary containment, where applicable, with the inventory constantly monitored for use. The secure storage and chemical containment is inspected daily by an on-site ACS spill technician. Other drill fluid chemicals that may be brought on site include specialty products required for the well stimulation and completion/flow testing. These materials are stored in a similar secure fashion and utilized in a relatively short timeframe. All unused chemical or specialty products will be returned to the supplier inventory for reuse. All used products are disposed of in accordance with Repsol's Waste

4. Describe the proposed operations, including the location and design, of **Solid Waste Sites**:

DRILLING WASTE - Waste Management activities for the Repsol 2015-2016 Winter Exploration Program will be conducted in general accordance with the best environmental practices as described in the NSEFH. Attention will be focused on waste minimization, segregation (dumpster management practices), reuse, and recycling. All drilling/completion waste, as well as any other waste materials generated at each location, will be manifested and disposed of in accordance with the North Slope Alaska Waste Disposal and Reuse Guide (Red Book, version 9, October 2013) as well as relevant ballot agreements for the Prudhoe Bay Unit (PBU) and KRU shared services equipment and facilities. Waste drilling muds and cuttings will either be hauled to the PBU Grind and Inject Facility or other approved facilities for processing and disposal, or disposed of on-site by annular injection as approved by the AOGCC. Approximately, 100 cubic yards of drilling cuttings and 400-500 barrels per day (bpd) of drilling fluid waste may be generated per well depending on the stage of drilling and local downhole conditions. Solid drilling waste may be placed in open-top metal tanks or shale bins located next to the drilling mud processing units. Waste liquid drilling fluids will be stored in closed tanks. The drilling waste can be pumped out of the tanks/bins and hauled directly offsite for disposal, or temporarily stored onsite in shale bins until frozen prior to disposal. All drilling waste will be disposed of prior to completion of winter operations. NON-DRILLING WASTES - Solid, non-burnable waste will be deposited in dumpsters located at each site. These containers will be back-hauled to the North Slope Borough (NSB) landfill at Prudhoe Bay, Alaska. The food waste that could attract wildlife either will be stored in enclosed containers awaiting periodic hauling or such wastes will be hauled each day to an approved disposal center (such as PBU). To reduce the amount of trash that must be back-hauled from the drilling location, solid-burnable waste may be incinerated at the location in accordance with 18 AAC 50 and ash back-hauled to the NSB landfill. Camp wastewater will be hauled to an approved disposal facility on the North Slope. Approximately 14,000 gallons per day of domestic wastewater (sewage) is expected to be generated for all camp facilities. PRODUCED FLUIDS - All fluids from production testing will be passed through a test separator system to separate gases and produced fluids will be stored in tanks until the testing is completed. After testing, the fluids will either be injected back into the formation from which it was produced from or hauled to North Slope oil and gas production facilities for processing and/or product recovery.

5. Describe the proposed operations, including the location and design, of Water Supplies:

Water from local lakes will be used for the construction and maintenance of ice roads, ice pads, and the ice airstrip. Water for camp use and drilling operations may also be withdrawn from local lakes. Up to an estimated 150 million gallons of fresh water is needed for the construction and maintenance of ice roads and pads, drilling operations, and camp use as outlined in Table 5.1 in Appendix C. The ice roads and pads will be constructed of snow, ice chips, and water and will have a minimum depth of 0.5 feet. Estimated water needs include contingency to address minor route variation. WATER WITHDRAWAL - Water withdrawal required for construction of the ice roads, ice pads, drilling activities, and for portable water use will be authorized under Temporary Water Use Authorizations from Alaska Department of Natural Resources, Division of Mining, Land and Water (ADNR DMLW). Water withdrawal from fish-bearing water bodies will be authorized under Fish Habitat Permits from Alaska Department of Fish and Game (ADF&G). Water sources expected to be used during the 2015-2016 winter season are provided in Table 5.2 in Appendix C. Some water sources may be brackish, especially those along the coast. All coastal lakes will be tested prior to use and if they are confirmed to be brackish they will not be used. Portable water for human use will be hauled from the NSB Service Area 10 facility in stainless steel tanker trucks.

6. Describe the proposed operations, including the location and design, of **Utilities**:

Due to the temporary nature of exploration programs, all power will be supplied by generators. Repsol proposes to provide 24-hour phone service and internet at the field camps. Operational radio communications will be provided using fixed base stations and truck-mounted, mobile "bread-board" radios. Operational frequencies will be coordinated between the various Repsol field supervisors, ice road and support contractors, and well service providers. Small communications towers will be placed at each pad. A taller 80-foot communications tower may also be required for the project. All communication towers are temporary and will be removed at demobilization. Communication utility services will be installed, maintained, and removed by GCI.

7. Describe the proposed operations, including the location and design, of Material Sites:

Not applicable.

8. Describe the proposed operations, including the location and design, of Roads:

Two options are proposed for ice road construction to maintain operational flexibility; however, only one ice road route will be constructed. Option 1 – (Preferred) Ice road route begins near DS-2A (Ice Staging Pad A) and heads west for approximately 9.5 miles towards the central camp pad at approximately U011N007E09, then heads northwest ending at drill site Q 701. A spur road off the main ice road will head roughly west to drill site Q 501. Option 2 – (Alternative) Ice road route begins near DS-2M pad (Ice Staging Pad B) and connects to the main ice road after 4.5 miles. Access to the Ice Staging Pad A, Ice Staging Pad B, and ice route will be directly from the existing gravel access road. Each ice road option includes one central camp pad, an ice airstrip, and two well locations. Separate figures showing the features required to support drilling at Q 501 and Q 701 (e.g., ice roads, ice airstrips, and ice pads) and features required for the entire 2015-2016 Winter Exploration Program are included in Appendix A. The tables referenced in the application are included in Appendix C. Approximately 40 miles of ice road will be required to connect gravel roads to the drilling sites and camp ice pads to support drilling operations, and provide access to water sources. Roads will be approximately 32-36 feet wide and will have a minimum of 0.5 feet of ice cover over the tundra. Ice road routes were identified during summer 2015 based upon topography, and have been designed to minimize impacts to vegetation and identify appropriate stream crossing locations. The route will be surveyed to ensure that the approved route is followed during construction activities. Some minor re-routes may be required depending on site specific conditions at the time of construction. Ice roads will be built using a combination of existing snow along the route, water, and ice chips from approved water sources. Ice road and pad construction will take place from November 2015 through February 2016, including pre-packing of ice road routes and ice pad location with snow prior to tundra opening. Upon tundra opening, ice chips and water from freshwater lakes will be used to complete construction of ice roads. Ice construction activities, including pre-packing, will be performed in accordance with ADNR DMLW approvals. Additional water and ice from permitted sources will be used to maintain ice roads in good condition throughout the 2015-2016 winter exploration season. The Colville River Area ice road will have several major river crossings on the Colville River and a number of unnamed tributaries. Most stream and river crossings will be located in areas sufficiently shallow to allow them to freeze naturally to the bottom during winter. Some Colville River channel crossings will be in a location where water depth is sufficient to require construction of a floating ice bridge. Water withdrawal from the Colville River for initial construction of the ice bridges is authorized in the relevant fish habitat permits to allow safe transportation of the larger components of a drilling rig. An ice/water monitoring program will be initiated prior to water withdraw and ice thickening. The location of ice roads and ice road distance are provided in Table 8.1and Table 8.2 in Appendix C. Upon completion of use, ice road stream crossing will be slotted, breached, or weakened to facilitate breakup and minimize potential impacts to stream banks. Any snow or ice used as fill for ramps will be removed from banks in a manner that does not disturb the natural stream bank.

9. Describe the proposed operations, including the location and design, of Airstrips:

Two locations for ice airstrips have been identified: Option 1 – (Preferred) ice airstrip constructed on Lake MC7903 at approximately U011N006E 11-14, 23-24; Option 2 (Alternative) - ice airstrip constructed on Lake MC7902 at approximately U012N007E 19-20, 29-30. Although two airstrip locations have been identified, only one will be selected and constructed. The ice airstrip will facilitate transportation of materials and personnel crew changes. The ice airstrip will be approximately 300 feet by 5,000 feet and is designated to accommodate a 20 - 30 passenger aircraft. The airstrip will have appropriate lighting and control systems.

10. Describe the proposed operations, including the location and design, of All Other Facilities and Equipment:

In the event of a major medical issue or fire, resources would be mobilized from the KRU to provide additional emergency response, per an existing Ballot Agreement. Medical evacuation, if necessary, will be provided by ambulance, helicopter, or fixed-wing aircraft, directly from the Ice Airstrip (MC7902 or MC7903) to the KRU Clinic for patient stabilization and/or transfer to a Medevac jet to an Anchorage hospital facility. If the KRU Clinic and airstrips are unavailable and weather precludes fixed/rotary medevac, the patient will be transported via ambulance to Fairweather Deadhorse Aviation Center (DAC). Repsol has prepared a Medical Emergency Evacuation Plan. A list of typical equipment used to support drilling activities is provided in Table 10.1 in Appendix C. Equipment types will be typical of that used for North Slope oil and gas operations and will be obtained from existing North Slope contractors.

11. If another permit(s) is required for the above described Projected Use Requirements, provide the following information:

Are supplemental pages for land status included in Appendix C? ☐ Yes ☐ No

Agency	Permit Type	Permit Number	Application Status	Projected Use Requirement(s)
ADNR, DOG	Unit Plan of Operations	TBD	Applied	all
AOGCC	Permit to Drill	TBD	Preparing	1
USEPA	SPCC Plan	NA	Updating	3
USFWS	Letter of Authorization	TBD	Preparing	11
ADEC	Minor General Air Permit	TBD	Preparing	6
ADEC	Temporary Storage of Drilling Waste	TBD	Preparing	4
ADEC	ODPCP/C-Plan	11-CP-5194	Updating	3
ADEC	Certificate of FinancialResponsibility	TBD	Updating	1
ADF&G	Fish Habitat Permit	various	See Appendix C	11

ADF&G	Public Safety Permit	15-037 – expires 1/31/2016	Preparing	11
ADNR, DMLW - NRO	Land Use Permit – Temporary Storage of Drilling Rigs	LAS 28811	Obtained	8
ADNR, DMLW	Temporary Water Use Authorizations	various	See Appendix C	5
ADNR, OHA	Letter of Concurance	TBD	Applied	11
NSB	IHLC	TBD	Obtained	11
NSB	Development Permits / Administrative Approvals	TBD	Applied/Preparing	All
Kuukpik Corporation	Surface Access Agreement	N/A Obtained 11		11
Leaseholders	LNOs	TBD	Preparing	11
ADNR, DMLW - NRO	Land Use Permit – Ice Road &Pad Construction	LAS 28269	Obtained	8
Enter Agency.	Enter Permit Type.			Enter Projected Use Requirement(s).
Enter Agency.	Enter Permit Type.	Enter Permit Number. Enter Application Status. Enter Projected Use Requirement(s).		

SECTION IX: REHABILITATION PLAN

1. Proposed Level of Infrastructure, Facilities and Equipment Removal:

Upon completion of drilling and evaluation operations, wells will either be plugged and abandoned or suspended in accordance with AOGCC regulations. As part of the site closure activities, any remaining debris will be hauled to an approved disposal site. Any spills discovered as part of site closure activities, or ice pads and roads with containinated ice or snow, will be chipped or scraped to remove the contaminated material. This material will be transported to an appropriate facility for disposal. Cleanup operations will be conducted the summer after the winter drilling program to remove any remaining debris not identified and removed during demobilization activities and to identify any issues not identified during the winter drilling program. Agency personnel will be invited on site to verify the cleanup operations are complete and that any issues identified are addressed.

2. Description of Restoration and Rehabilitation Activities for Vegetation, Habitat, Impacted Wildlife, and Other Applicable Resources:

In the event that tundra damage is discovered at any point during the winter drilling program or during summer cleanup operations, Repsol will notify ADNR DMLW and the NSB in accordance with permit requirements. If tundra damage occurs on Kuukpik Corporation lands, they will be notified in accordance with Repsol's existing Surface Access Agreement. Reports of tundra damage will include the date, time, and location of damage, the size of the impacted area, and cause of damage (if known). Repsol will coordinate with the land owner to identify the level of tundra damage and develop a plan for restoration, rehabilitation, and monitoring. The plan will address the area, type, and extent of damage and will be developed in accordance with the Alaska Coastal Revegetation & Erosion Control Guide developed by the State of Alaska Plant Materials Center, the Streambank Revegetation and Protection Guide developed by the ADF&G, and other relevant quidance documents. Repsol will coordinate with the landowner, ADNR, and ADF&G, as relevant.

SECTION X: OPERATING PROCEDURES DESIGNED TO MINIMIZE ADVERSE EFFECTS

Describe operating procedures designed to prevent or minimize adverse effects on other natural resources and other uses of the Unit area and adjacent areas including:

Fish and Wildlife Habitats:

An Oil Discharge Prevention and Contingency Plan (C-Plan) has been developed by Repsol and approved by ADEC. The C-Plan will be amended to address Repsol's 2015-2016 exploration activities and a copy of the approved amended C-Plan will be maintained onsite. Fuel storage of more than 1,320 gallons requires that a Spill Prevention, Control, and Countermeasure (SPCC) Plan be developed and maintained onsite. The drilling contractor will maintain a SPCC Plan for fuel storage facilities associated with drilling operations. The well testing company will be covered under the Repsol SPCC Plan for their testing tanks. A Bear-Personnel Encounter Plan has been developed in accordance with the requirements for obtaining a Letter of Authorization from the U.S. Fish and Wildlife Service for incidental takes of polar bear and Pacific walrus under 50 Code of Regulations 18.124(3). The Bear-Personnel Encounter Plan outlines the steps that Repsol will take to limit human-bear interactions, increase safety, and minimize impacts to bears.

Historic and Archeological Sites:

Archaeological and cultural resource surveys will be conducted in the project area to identify any prehistoric, historic, or archaeological sites. As part of the survey, Traditional Land Use Inventory (TLUI) data will be obtained from NSB Inupiat Heritage and Language Center (IHLC) and the Alaska Heritage Resource Survey will be reviewed. The results of archaeological surveys, including potential impacts, will be submitted to the ADNR, State Historic Preservation Office and IHLC as part of the 2015-2016 Winter Exploration Program authorization process.

Public Use Areas:

Repsol ice roads and drill sites are closed to the general public to ensure their safety. Repsol will have security checkpoints at the Colville River Area ice road. All contractors, well service providers, and project personnel must follow the Repsol Journey Management Plan, observe and comply with the various Road Rules established for the PBU and KRU road network, and the Repsol Ice Road rules. Signs will be posted at the well site to alert visitors that they have approached a secure work site. Access to existing fields is controlled at existing Deadhorse/Prudhoe Bay security checkpoints. Access through security is provided for industry personnel sponsored by an operator. Repsol will provide emergency assistance to cross-country travelers, including subsistence hunters, and protection from severe weather, as necessary to ensure human safety. Nuiqsut residents will have access to Repsol's ice road once construction has been completed and

approved for travel by Repsol management. Discharge of firearms, including hunting, is prohibited within 100-foot safety buffer zone established by Repsol in the vicinity of ice roads.

Other Uses:

TRAINING - The Alaska Safety Handbook (ASH 2014 ed), the NSEFH 2011 ed., and the Red Book are adopted as guidance, reference, and standard operating procedures and "best" safety, environmental, and waste management practices for Repsol operations on the North Slope of Alaska. Repsol corporate health, safety and environmental (HSE) plans, procedure, and practices will be used to supplement ASH/NSEFH/Red Book procedures where applicable. This policy guidance is passed on as a requirement for all contractors working for Repsol. Additionally, the contractors providing services to Repsol are required, under the terms and conditions of the Master Service Agreement, to provide trained and qualified workers for each designated job and position. Repsol and contractor training records are reviewed for compliance and subject to audit under the Repsol Safety & Environmental Management System. Repsol has a comprehensive training program designed to ensure that all personnel, including contractors and subcontractors, understand corporate HSE policies and federal, state, and local safety and environmental requirements and permit stipulations. All personnel are required to attend North Slope Cooperative (NSTC) 8-hour unescorted training course. The NSTC unescorted course consists of the following six modules: ASH, Camps and Safety Orientation, Environmental Excellence, Hazard Communication (HAZCOM), HAZWOPER Awareness, and Personal Protective Equipment. All trainees will receive the NSEFH, an ASH, and a North Slope Visitors Guide. Repsol also requires all project workers to attend a drill and camp site specific HSE orientation at the time of check-in or prior to commencing work. This HSE orientation presents the camp and pad rules for operations and personal safety and hygiene. Vehicle safety and the various ice road (PBU, BRPC, KRU, and Repsol) rules, internal policies, permit stipulations (ADNR, NSB), and the various operational and surface access agreements that are in place are reviewed. As part of the camp orientation, a video on Cultural Resource and Awareness is required of all worker and "authorized" visitors to the various Reposl sites. All workers are issued a Repsol 2015-2016 Project Orientation Card that documents their attendance at the site specific safety briefing and orientation. Reposl also requires that all company representatives and third party contractors attend rig and location safety meetings (pre-tour, SIMOPS, and weekly), as well as participate in the contractor's safety practice (Risk Assessment/JSEA, PTW, STOP, etc.) on-site training orientation, and required weekly safety meetings. Topics that are discussed in safety meetings include: the various emergency action drills that are required on a weekly/monthly schedule; training and familiarizing workers with the Repsol Polar Bear Interaction Plan, warnings and hazing methods, and reporting requirements; reviewing spill (and incident) reporting requirements and spill prevention measures, reviewing fluid transfer procedures, and general hazard identification regarding the various chemicals used in drilling operations and other activities; reviewing cold weather operations and personal protection; reviewing the Repsol Bear-Personnel Encounter Plan, hazing techniques and reinforcement of the "Do Not Feed the Wildlife" policy (under threat of job loss).

SECTION XI: GLOSSARY OF TERMS			
Term #	Term	Term Definition	
1	AAC	Alaska Administrative Code	
2	ACS	Alaska Clean Seas	
3	ADEC	Alaska Department of Environmental Conservation	
4	ADF&G	Alaska Department of Fish and Game	
5	ADNR	Alaska Department of Natural Resources	
6	AOGCC	Alaska Oil and Gas Conservation Commission	
7	ASH	Alaska Safety Handbook, 2014 edition	
8	BRPC	Brooks Range Petroleum Corporation	
9	IHLC	Inupiat History, Language, and Culture	
10	KRU	Kuparuk River Unit	
	SECTION XII: CONFIDENTIALITY		

The undersigned hereby requests that each page/section of this application marked confidential be held confidential under AS 38.05.035(a)(8). APPLICANT CONTACT:

Sign here.	Enter Name.	Enter Title.	Enter Date.	
Signature	Name	Title	Date	

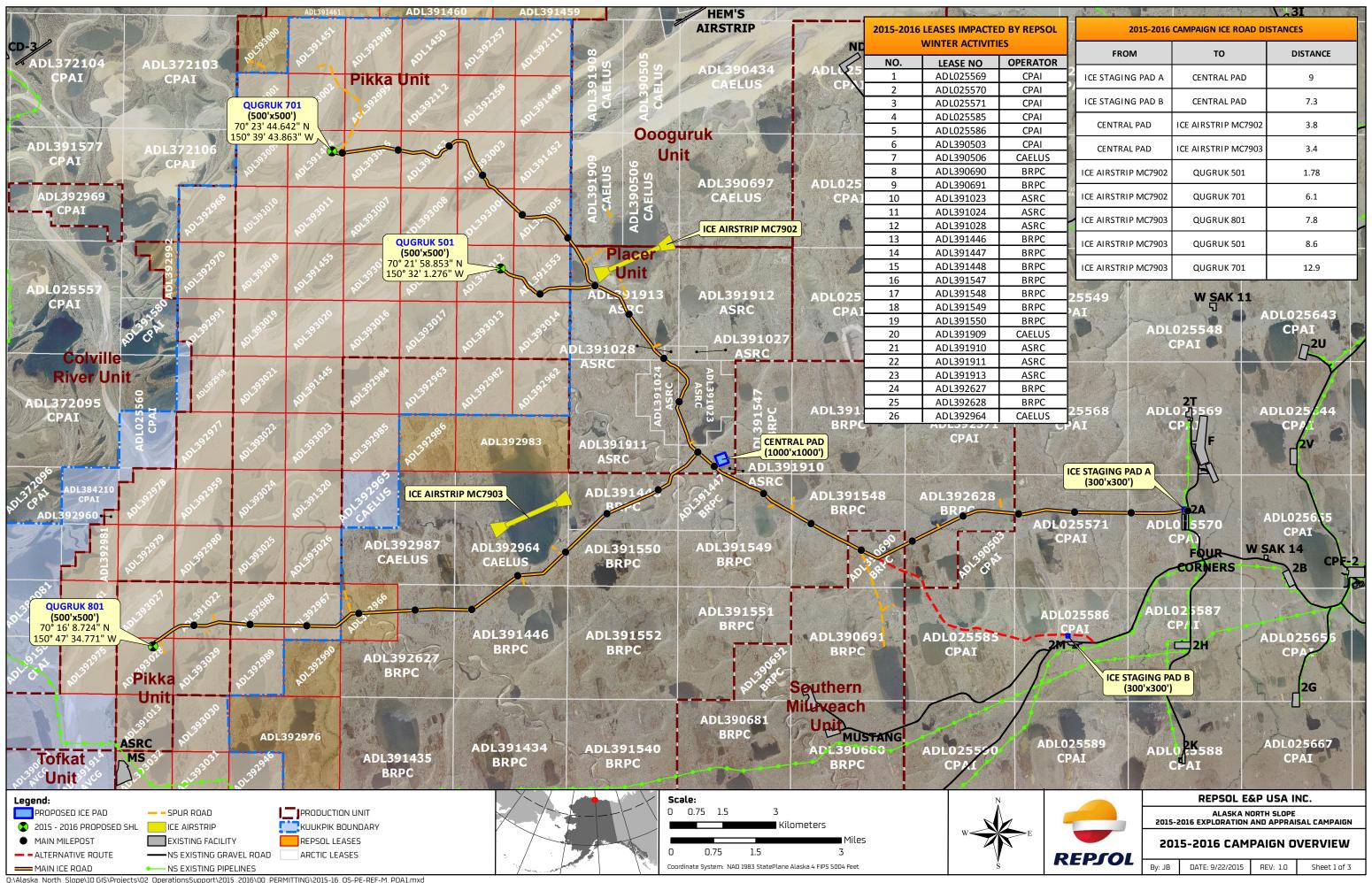
APPENDIX A: MAPS

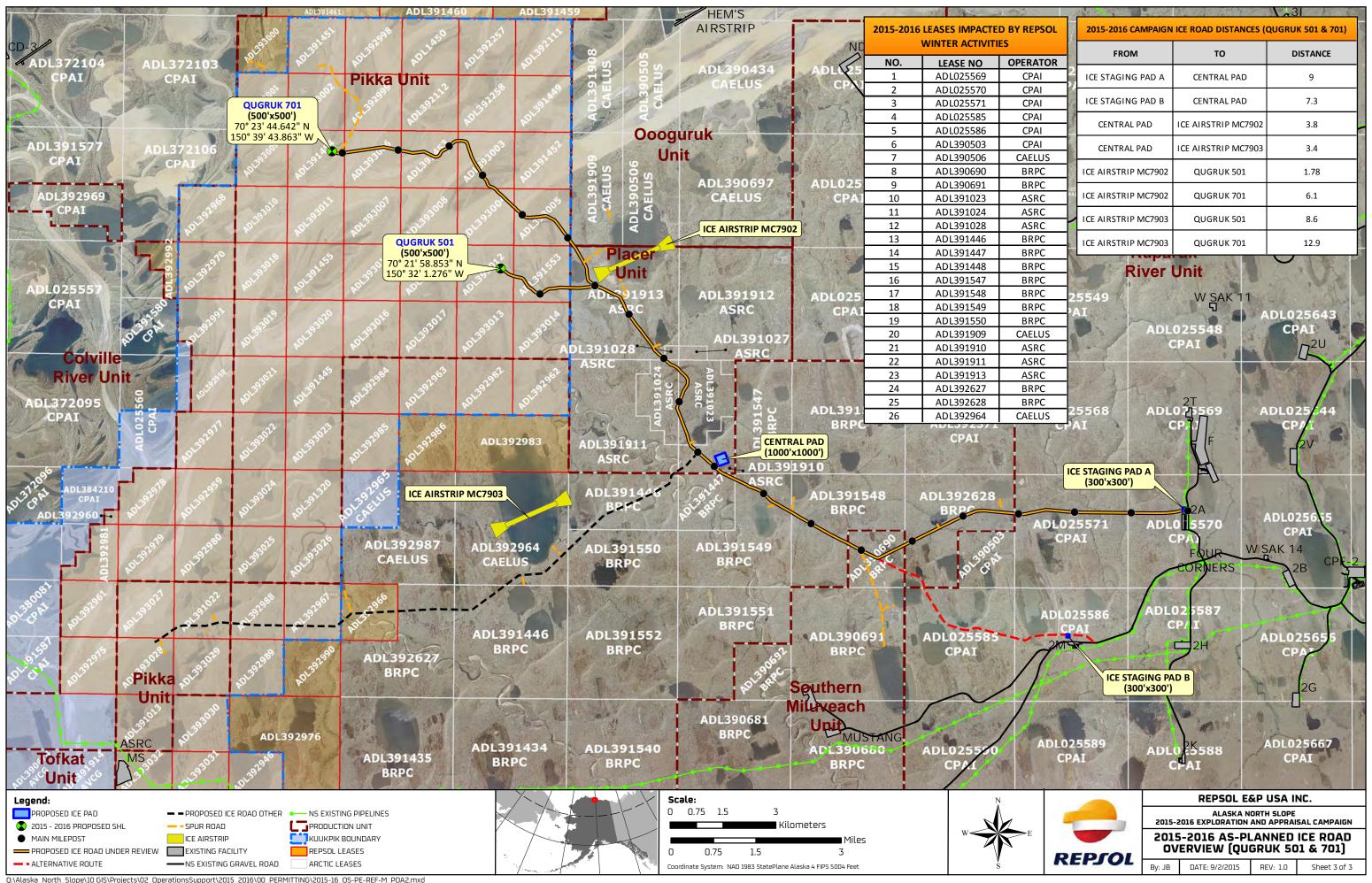
Note: relevant figures are attached.

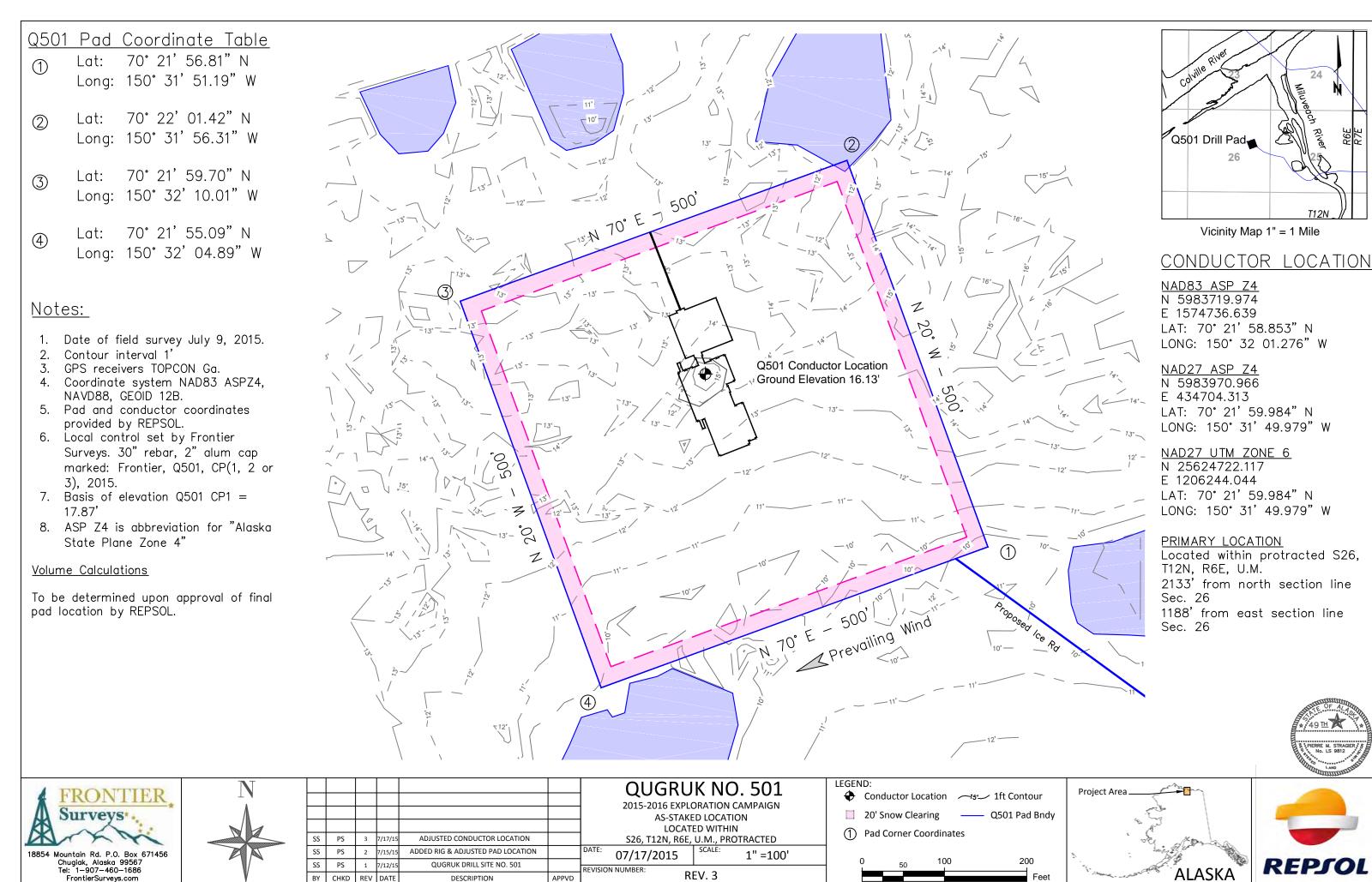
APPENDIX B: MITIGATION MEASURES

See attached.

APPENDIX C: OTHER







Q701 Pad Coordinate Table

① Lat: 70° 23′ 42.61″ N Long: 150° 39′ 33.71″ W

② Lat: 70° 23′ 47.22″ N Long: 150° 39′ 38.87″ W

3 Lat: 70° 23′ 45.48″ N Long: 150° 39′ 52.58″ W

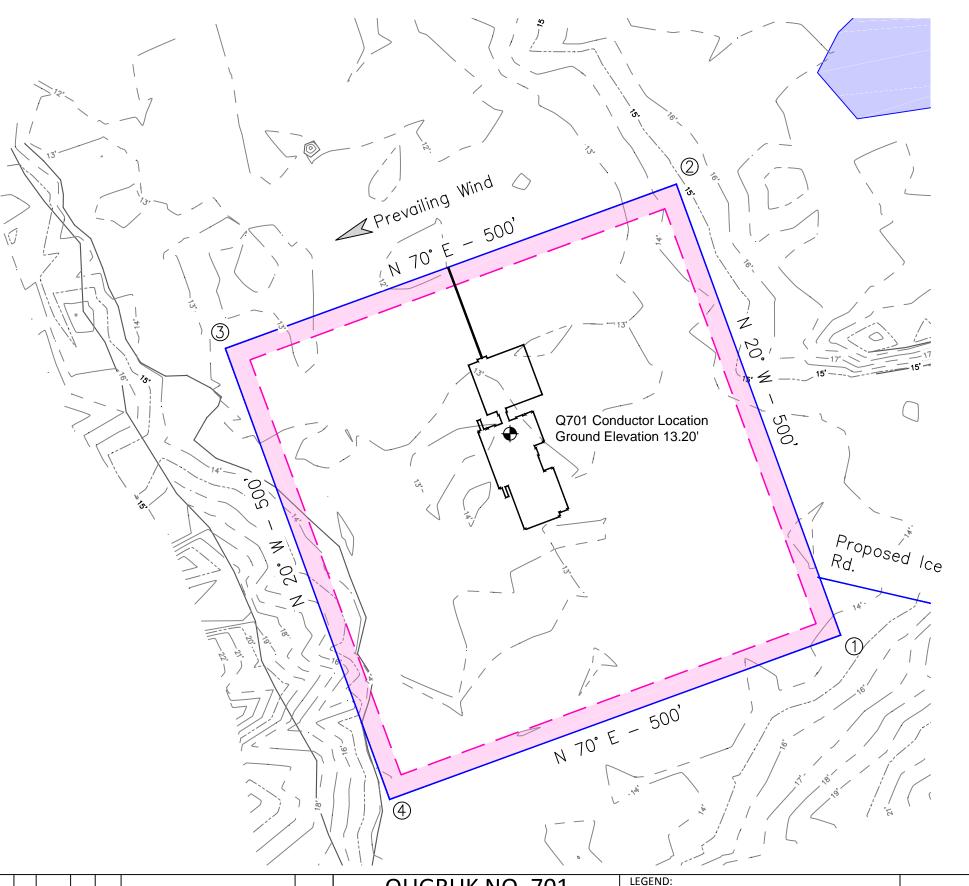
4 Lat: 70° 23' 40.88" N Long: 150° 39' 47.42" W

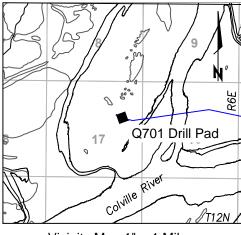
Notes:

- 1. Date of field survey July 9, 2015.
- 2. Contour interval 1'
- 3. GPS receivers TOPCON Ga.
- 4. Coordinate system NAD83 ASPZ4, NAVD88, GEOID 12B.
- 5. Pad and conductor coordinates provided by REPSOL.
- 6. Local control set by Frontier Surveys. 30" rebar, 2" alum cap marked: Frontier, Q701, CP(1,2 or 3), 2015.
- 7. Basis of elevation Q701 CP1 = 25.653'
- 8. ASP Z4 is abbreviation for "Alaska State Plane Zone 4"

Volume Calculations

To be determined upon approval of final pad location by REPSOL.





Vicinity Map 1" = 1 Mile

CONDUCTOR LOCATION

NAD83 ASP Z4 N 5994629.942 E 1559040.403 LAT: 70° 23' 44.642" N LONG: 150° 39' 43.863" W

NAD27 ASP Z4 N 5994881.513 E 419008.314 LAT: 70° 23' 45.783" N LONG: 150° 39' 32.529" W

NAD27 UTM ZONE 6 N 25636392,362 E 1191106.403 LAT: 70° 23' 45.783" N LONG: 150° 39' 32.529" W

PRIMARY LOCATION
Located within protracted
S17, T12N, R6E, U.M.
1935' from north section line
Sec. 17
1131' from east section line
Sec. 17







						QL
						2015-
						S17, 1
SS	PS	2	7/15/15	ADDED RIG & ADJUSTED PAD LOCATION		DATE: 07/15
SS	PS	1	7/09/15	QUGRUK DRILL SITE NO. 701		REVISION NUMBER:
BY	CHKD	REV	DATE	DESCRIPTION	APPVD	

QUGRUK NO. 701 2015-2016 EXPLORATION CAMPAIGN

AS-STAKED LOCATION
LOCATED WITHIN
S17, T12N, R6E, U.M., PROTRACTED

07/15/2015 | SCALE: 1" =100'

REV. 2

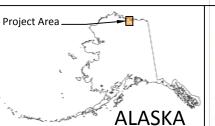
Pad Corner Coordinates

0 50 100

20' Snow Clearing

◆ Conductor Location イン 1ft Contour

— Q701 Pad Bndy





Revised: March 2013

MITIGATION MEASURE ANALYSIS: NORTH SLOPE

The following instructions are provided for guidance to adequately complete the Mitigation Measure Analysis form.

- 1. The applicant shall respond to each Mitigation Measure, and all subsets of mitigation measures; i.e. A.2.d.i should be addressed and A.2.d.ii, and so forth.
- 2. The applicant's response shall begin by clearly indicating if the <u>mitigation measure is satisfied</u>, a <u>waiver is requested</u>, or if the mitigation measure is <u>not applicable</u>.
- 3. The applicants' response shall then address how the proposed project clearly satisfies the mitigation measure, meets the intent of the mitigation measure, is not practicable, or is not applicable.
- 4. The applicant shall verify working 'in consultation with' parties other than Department of Natural Resources (DNR), Division of Oil and Gas (DO&G) by reporting meeting dates and parties present for Mitigation Measures which require consultation with parties other than DNR, DO&G; i.e. Mitigation Measure 1.b.

Please note that this form, along with the Plan of Operations Application form and the Plan of Operations, must be adequately completed before DNR DO&G will review an application for potential approval.

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NORTH SLOPE A. Mitigation Measures	Company Response	
1. Facilities and Operations		
a. A plan of operations must be submitted and approved before conducting exploration, development or production activities, and must describe the lessee's efforts to minimize impacts on residential, commercial, and recreational areas, Native allotments and subsistence use areas. At the time of application, lessee must submit a copy of the proposed plan of operations to all surface owners whose property will be entered.	A.1.a. Mitigation measure is satisfied. Repsol 2015-2016 Winter Exploration Program Lease Plan of Operations is being submitted with this analysis.	
b. Facilities must be designed and operated to minimize sight and sound impacts in areas of high residential, commercial, recreational, and subsistence use and important wildlife habitat. Methods may include providing natural buffers and screening to conceal facilities, sound insulation of facilities, or by using alternative means approved by the Director, in consultation with ADF&G and the NSB.	A.1.b. Mitigation measure is satisfied. The closest proposed exploration drilling activities are 6 miles from Nuiqsut, the nearest community. Distances from Nuiqsut are as follows: 14.61 miles from drill site Qugruk 501 14.37 miles from drill site Qugruk 701 16.2 miles from Central Camp Pad 21 miles from Ice Staging Pad B 21 miles from Ice Staging Pad A Respol coordinates activities with local subsistence users and commercial interests including the Kuukpikmiut Subsistence Oversight Panel, Inc. (KSOP) and Kuukpik Corporation to ensure that impacts to subsistence users are minimized. Repsol is obtaining applicable permits from ADNR, ADF&G, ADEC, NSB, and other federal, state, and local entities.	

c. To the extent practicable, the siting of facilities will be prohibited within 500 feet of all fish-bearing streams and waterbodies and 1,500 feet from all current surface drinking water sources. Additionally, to the extent practicable, the siting of facilities will be prohibited within one-half mile of the banks of the main channel of the Colville, Canning, Sagavanirktok, Kavik, Shaviovik, Kadleroshilik, Echooka, Ivishak, Kuparuk, Toolik, Anaktuvuk and Chandler Rivers. Facilities may be sited within these buffers if the lessee demonstrates to the satisfaction of the Director, in consultation with ADF&G, that site locations outside these buffers are not practicable or that a location inside the buffer is environmentally preferred. Road, utility, and pipeline crossings must be consolidated and aligned perpendicular or near perpendicular to watercourses.

A.1.c. Mitigation measure is satisfied.

Repsol has chosen the temporary ice pad surface locations in order to reach potential oil/gas reservoirs with the least complex well path possible, with vertical or near vertical well bores when possible, or with the lowest well bore deviation angle that is possible to reach the reservoir. In the Colville River area, the majority of the surface area is covered by lakes, rivers, streams or other areas that do not facilitate the construction of ice pads to support drilling operations. In general, the surface areas that can facilitate the construction of an ice pad may be in close proximity to these same lakes, rivers and streams. With the short winter only exploration season, it is prudent to make the well bore as "short" and least complex as possible, to be able to reach and evaluate the target reservoir with in the short winter season (longer/extended reach and/or more complex well bores can take significantly more time to drill and evaluate that there are days available for winter exploration). Additionally, the exploratory drilling rigs are not capable of drilling extended reach wells in most instances.

There are no proposed facilities located within 500 feet of a fish-bearing water body or 1,500 feet from a current surface drinking water sources.

There are no proposed facilities located within one half mile of the Colville River main channel.

Proposed operations are temporary and will be removed prior to tundra closing. No permanent facilities will be constructed as part of this exploration drilling program. Drill sites were sited to avoid, to the extent practicable, water bodies while still meeting geologic targets.

Repsol anticipates crossing a number of streams using ice roads. All stream crossings are aligned perpendicular to the stream and to the extent practicable have been located in areas that ground naturally to avoid impacts to overwintering fish. All stream crossings will be permitted by ADF&G.

d. No facilities will be sited within one-half mile of identified Dolly Varden overwintering and/or spawning areas on the Canning, Shaviovik, and Kavik rivers. Notwithstanding the previous sentence, road and pipeline crossings may only be sited within these buffers if the lessee demonstrates to the satisfaction of the Director and ADF&G in the course of obtaining their respective permits, that either (1) the scientific data indicate the proposed

A.1.d. Mitigation measure is satisfied.

Repsol's proposed 2015-2016 Winter Exploration Program are located a minimum of 60 miles away from identified Dolly Varden overwintering and/or spawning areas on the Canning, Shaviovik, and Kavik Rivers.

crossing is not within an overwintering and/or spawning area; or (2) the	
proposed road or pipeline crossing will have no significant adverse impact to Dolly Varden overwintering and/or spawning habitat.	
e. Impacts to important wetlands must be minimized to the satisfaction of the Director, in consultation with ADF&G and ADEC. The Director will consider whether facilities are sited in the least sensitive areas. Further, all activities within wetlands require permission from the US Army Corps of Engineers.	A.1.e. Mitigation measure is satisfied. Repsol's proposed 2015-2016 Winter Exploration Program are temporary and will take place during winter. No impacts to wetlands are expected.
f. Exploration facilities, including exploration roads and pads, must be temporary and must be constructed of ice unless the Director determines that no practicable alternative exists. Re-use of abandoned gravel structures may be permitted on a case-by-case basis by the Director, after consultation with the director, DMLW, and ADF&G. Approval for use of abandoned structures will depend on the extent and method of restoration needed to return these structures to a usable condition.	A.1.f. Mitigation measure is satisfied. Repsol's proposed 2015-2016 Winter Exploration Program will be supported by temporary ice roads and pads. No gravel roads or pads will be constructed and no use of abandoned structures is anticipated. Repsol plans to use the existing Mine Site F gravel pad as a staging pad to support Colville River area operations.
g. Pipelines must utilize existing transportation corridors where conditions permit. Pipelines must be designed to facilitate the containment and cleanup of spilled fluids. Where practicable, onshore pipelines must be located on the upslope side of roadways and construction pads, unless the director, DMLW, determines that an alternative site is environmentally acceptable. Wherever possible, onshore pipelines must utilize existing transportation corridors and be buried where soil and geophysical conditions permit. All pipelines, including flow and gathering lines, must be designed, constructed and maintained to assure integrity against climatic conditions, geophysical hazards, corrosion and other hazards as determined on a case-by-case basis.	A.1.g. Not applicable. No pipelines are proposed to be constructed as part of Repsol's proposed 2015-2016 Winter Exploration Program.
h. Pipelines shall be designed and constructed to avoid significant alteration of caribou and other large ungulate movement and migration patterns. At a minimum, above-ground pipelines shall be elevated 7 feet, as measured from the ground to the bottom of the pipe, except where the pipeline intersects a road, pad, or a ramp installed to facilitate wildlife passage. Lessees shall consider increased snow depth in the sale area in relation to pipe elevation to ensure adequate clearance for wildlife. ADNR may, after consultation with ADF&G, require additional measures to mitigate impacts to wildlife movement	A.1.h. Not applicable. No pipelines, causeways, docks, or artificial gravel islands are proposed to be constructed as part of Repsol's proposed 2015-2016 operations.

Revised: March 2013

and migration. i. The state of Alaska discourages the use of continuous-fill causeways. Environmentally preferred alternatives for field development include use of buried pipelines, onshore directional drilling, or elevated structures. Approved causeways must be designed, sited, and constructed to prevent significant changes to nearshore oceanographic circulation patterns and water quality characteristics (e.g., salinity, temperature, suspended sediments) that result in exceedances of water quality criteria, and must maintain free passage of marine and anadromous fish. ii. Causeways and docks shall not be located in river mouths or deltas. Artificial gravel islands and bottom founded structures shall not be located in river mouths or active stream channels on river deltas, except as provided for in (iii). Each proposed structure will be reviewed on a case-by-case iii. basis. Causeways, docks, artificial gravel islands and bottom founded structures may be permitted if the Director, in consultation with ADF&G, ADEC, and the NSB determines that a causeway or other structures are necessary for field development and that no practicable alternatives exist. A monitoring program may be required to address the objectives of water quality and free passage of fish, and mitigation shall be required where significant deviation from objectives occurs. i. Dismantlement, Removal and Rehabilitation (DR&R): Upon abandonment A.1.i. Mitigation measure is satisfied of material sites, drilling sites, roads, buildings or other facilities, such facilities must be removed and the site rehabilitated to the satisfaction of the Director, No permanent facilities will be constructed as a part of this exploration plan. All roads and pads constructed as part of the 2015-2016 Winter Exploration Program unless the Director, in consultation with DMLW, ADF&G, ADEC, NSB, and any non-state surface owner, determines that such removal and rehabilitation will be made of ice. Upon completion of drilling and evaluation operations, wells will either be plugged and abandoned or suspended in accordance with Alaska Oil is not in the state's interest. and Gas Conservation Commission (AOGCC) regulations. Remaining debris and potentially contaminated materials will be removed and disposed of at the

i. Gravel mining sites required for exploration and development activities will

be restricted to the minimum necessary to develop the field efficiently and with minimal environmental damage. Where practicable, gravel sites must be

appropriate facility upon site closure.

A.1.j. Not applicable

Revised: March 2013

designed and constructed to function as water reservoirs for future use. Gravel mine sites required for exploration activities must not be located within an active floodplain of a watercourse unless the director, DMLW, after consultation with ADF&G, determines that there is no practicable alternative, or that a floodplain site would enhance fish and wildlife habitat after mining operations are completed and the site is closed.

Mine site development and rehabilitation within floodplains must follow the procedures outlined in McLean, R. F. 1993, North Slope Gravel Pit Performance Guidelines, ADF&G Habitat and Restoration Division Technical Report 93-9, available from ADF&G.

No gravel mining is proposed as part of the proposed operations.

2. Fish and Wildlife Habitat	
a. Detonation of explosives within or in proximity to fish-bearing waters must not produce instantaneous pressure changes that exceed 2.7 pounds per square inch in the swim bladder of a fish. Detonation of explosives within or in close proximity to a fish spawning bed during the early stages of egg incubation must not produce a peak particle velocity greater than 0.5 inches per second. Blasting criteria have been developed by ADF&G and are available upon request from ADF&G. The location of known fish-bearing waters within the project area can also be obtained from ADF&G. The lessee will consult with the NSB prior to proposing the use of explosives for seismic surveys. The Director may approve the use of explosives for seismic surveys after consultation with the NSB.	A.2.a. Not applicable. Use of explosives is not part of the proposed operations
b. Water intake pipes used to remove water from fish-bearing waterbodies must be surrounded by a screened enclosure to prevent fish entrainment and impingement. Screen mesh size shall be no greater than 1 mm (0.04 inches), unless another size has been approved by ADF&G. The maximum water velocity at the surface of the screen enclosure may be no greater than 0.1 foot per second, unless an alternative velocity has been approved by ADF&G.	A.2.b. Mitigation measure is satisfied. Repsol will obtain Fish Habitat Permits from Alaska Department of Fish and Game (ADF&G) for water withdrawal from fish-bearing water bodies. Repsol will adhere to water intake stipulations, including screen size and velocity requirements.
c. Removal of snow from fish-bearing rivers, streams and natural lakes shall be subject to prior written approval by ADF&G. Compaction of snow cover overlying fish-bearing waterbodies is prohibited except for approved crossings. If ice thickness is not sufficient to facilitate a crossing, ice or snow bridges may be required.	A.2.c. Mitigation measure is satisfied. All activities in fish-bearing water bodies (i.e., water withdrawal and river crossings) will be authorized under ADF&G Fish Habitat Permits. Crossings of fish streams will be at approved crossing locations. Where necessary ice or snow bridges will be constructed.
d. Bears:	A.2.d. Mitigation measure is satisfied.
i. Before commencement of any activities, lessees shall consult with ADF&G (907-459-7213) to identify the locations of known brown bear den sites that are occupied in the season of proposed activities. Exploration and production activities must not be conducted within one-half mile of occupied brown bear dens, unless alternative mitigation measures are approved by	Repsol will consult with ADF&G and US Fish and Wildlife Service (USFWS) to identify locations of known brown bear and polar bear den sites. In addition a forward looking infrared (FLIR) survey of polar bear den habitat within one mile of proposed project activities, including access routes, will be conducted prior to construction of ice roads and pads.

ADF&G. A lessee who encounters an occupied brown bear den not previously identified by ADF&G must report it to the Division of Wildlife Conservation, ADF&G, within 24 hours. Mobile activities shall avoid such discovered occupied dens by one-half mile unless alternative mitigation measures are approved by the Director, with concurrence from ADF&G. Non-mobile facilities will not be required to relocate.

- ii. Before commencement of any activities, lessees shall consult with the USFWS (907-786-3800) to identify the locations of known polar bear den sites. Operations must avoid known polar bear dens by 1 mile. A lessee who encounters an occupied polar bear den not previously identified by USFWS must report it to the USFWS within 24 hours and subsequently avoid the new den by 1 mile. If a polar bear should den within an existing development, off-site activities shall be restricted to minimize disturbance.
- iii. For projects in proximity to areas frequented by bears, lessees are required to prepare and implement a human-bear interaction plan designed to minimize conflicts between bears and humans. The plan should include measures to:
 - A. minimize attraction of bears to facility sites:
 - B. organize layout of buildings and work areas to minimize interactions between humans and bears;
 - warn personnel of bears near or on facilities and the proper actions to take;
 - D. if authorized, deter bears from the drill site:
 - E. provide contingencies in the event bears do not leave the site;
 - discuss proper storage and disposal of materials that may be toxic to bears; and

If a brown bear den is located within ½ mile of exploration activities ADF&G will be notified; if a polar bear den is located within one mile, USFWS will be notified. Repsol will work with the relevant agency to identify and implement the appropriate mitigation measures.

A Letter of Authorization (LOA) for impacts to polar bear will be requested from USFWS. As part of the LOA application, a human-bear interaction plan will be developed which will identify measures to:

- A. minimize attraction of bears to facility sites:
- B. organize layout of buildings and work areas to minimize interactions between humans and bears:
- warn personnel of bears near or on facilities and the proper actions to take;
- D. deter bears from the drill site and other facilities:
- E. provide contingencies in the event bears do not leave the site;
- F. discuss proper storage and disposal of materials that may be toxic to bears; and
- G. provide a systematic record of bears on the site and in the immediate area.

G. provide a systematic record of bears on the site and in the immediate area.	
e. Permanent, staffed facilities must be sited to the extent practicable outside identified brant, white-fronted goose, snow goose, tundra swan, king eider, common eider, Steller's eider, spectacled eider, and yellow-billed loon nesting and brood rearing areas.	

3. Subsistence, Commercial and Sport Harvest Activities

a.

- i. Exploration, development and production operations shall be conducted in a manner that prevents unreasonable conflicts between lease-related activities and subsistence activities. Lease-related use will be restricted when the Director determines it is necessary to prevent conflicts with local subsistence, commercial and sport harvest activities. In enforcing this term DO&G will consult with other agencies, the affected local borough(s) and the public to identify and avoid potential conflicts that are brought to the division's attention both in the planning and operational phases of lease-related activities. In order to avoid conflicts with subsistence, commercial and sport harvest activities, restrictions may include alternative site selection, requiring directional drilling, seasonal drilling restrictions, and other technologies deemed appropriate by the Director.
- ii. Prior to submitting a plan of operations for either onshore or offshore activities which have the potential to disrupt subsistence activities, the lessee shall consult with the potentially affected subsistence communities and the NSB (collectively "parties") to discuss the siting, timing, and methods of proposed operations and safeguards or mitigating measures which could be implemented by the operator to prevent unreasonable conflicts. The parties shall also discuss the reasonably foreseeable effect on subsistence activities of any other operations in the area that they know will occur during the lessee's proposed operations. Through this consultation, the lessee shall make reasonable efforts to assure that exploration, development, and production activities are compatible with subsistence hunting and fishing activities and will not result in unreasonable interference with subsistence harvests.
- iii. A discussion of agreements reached or not reached during the consultation process and any plans for continued consultation shall be included in the plan of operations. The lessee shall

A.3.a. Mitigation measure is satisfied.

Repsol has an ongoing stakeholder engagement program to inform the residents of Nuiqsut, including subsistence users, of proposed activities and to obtain feedback and recommendations on how these activities can be performed and to avoid conflicts with subsistence activities. Repsol will present the proposed 2015-2016 Winter Exploration Program to the North Slope Borough (NSB) planning commission as part of obtaining NSB Development Permits for these activities. A description of the consultation process, including plans for continued consultation is included in the Scope of Operations.

Repsol and Kuukpik Corporation, the surface land owner for a portion of the project area and village Native corporation for Nuiqsut, have entered into a Surface Access Agreement (SAA) for exploration activities. Exploration activities will be coordinated with Kuukpik Corporation in accordance with the SAA.

A Community Liaison is employed by Repsol to provide updates of planned and ongoing activities to local residents. Subsistence Representatives will be employed by Repsol during the 2015-2016 Winter Exploration Program to ensure that activities are conducted in a manner to minimize potential impacts to local subsistence activities. Records of all concerns expressed by subsistence hunters during Repsol operations will be maintained.

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identify who participated in the consultation and send copies of the plan to participating communities and the NSB when it is submitted to the division.

- iv. If the parties cannot agree, then any of them may request the Commissioner of DNR or his/her designee to intercede. The commissioner may assemble the parties or take other measures to resolve conflicts among the parties.
- The lessee shall notify the Director of all concerns expressed by subsistence hunters during operations and of steps taken to address such concerns.
- b. Traditional and customary access to subsistence areas shall be maintained unless reasonable alternative access is provided to subsistence users. "Reasonable access" is access using means generally available to subsistence users. Lessees will consult the NSB, nearby communities, and native organizations for assistance in identifying and contacting local subsistence users.

A.3.b. Mitigation measure is satisfied.

Repsol is requesting a 100 ft safety buffer zone around ice roads and ice pads. Traditional and customary access to subsistence areas will not be interfered with by Repsol.

Repsol has an ongoing stakeholder engagement program to inform the residents of Nuiqsut, including subsistence users, of proposed activities and to obtain feedback and recommendations on how these activities can be performed and to avoid conflicts with subsistence activities. Cindy Bailey, Alaska Public Affairs Manager, is employed by Repsol to provide updates of planned and ongoing activities to local residents and Subsistence Representatives to ensure that activities are conducted in a manner to minimize potential impacts to local subsistence activities.

4. Fuel, Hazardous Substances and Waste	
a. Secondary containment shall be provided for the storage of fuel or hazardous substances.	A.4.a. Mitigation measure is satisfied. Fuel and hazardous substances will be stored within lined and diked secondary containment that is able to hold greater than 110% of the largest tank, plus precipitation. Secondary containment is discussed in Repsol's Oil Discharge Prevention and Contingency Plan (C-Plan) No. 11-CP-5194 and Spill Prevention Control and Countermeasure (SPCC) Plans.
b. Containers with an aggregate storage capacity of greater than 55 gallons which contain fuel or hazardous substances shall not be stored within 100 feet of a waterbody, or within 1,500 feet of a current surface drinking water source.	A.4.b. Mitigation measure is satisfied. Fuel and hazardous substances will be stored at least 100 foot from any water body. No known surface drinking water sources are in the vicinity of proposed project operations.
c. During equipment storage or maintenance, the site shall be protected from leaking or dripping fuel and hazardous substances by the placement of drip pans or other surface liners designed to catch and hold fluids under the equipment, or by creating an area for storage or maintenance using an impermeable liner or other suitable containment mechanism.	A.4.c. Mitigation measure is satisfied. Repsol has adopted the Alaska Safety Handbook, the North Slope Environmental Field Handbook, and the Alaska Waste Disposal and Reuse Guide (Red Book) as guidance for standard operating procedures and "best management practices" for workplace health, safety, and environmental (HSE), and waste management. Drip pans or liners will be placed under parked vehicles or equipment to capture fluids.
d. During fuel or hazardous substance transfer, 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. Appropriate spill response equipment, sufficient to respond to a spill of up to five gallons, must be on hand during any transfer or handling of fuel or hazardous substances. Trained personnel shall attend transfer operations at all times.	A.4.d. Mitigation measure is satisfied. Fuel and hazardous substance transfers will be performed in accordance with Repsol's Fluid Transfer Procedures included in the Repsol C-Plan and the Fluid Transfer Guidelines in the North Slope Environmental Field Handbook. This plan includes the use of surface liners under all potential spill points, verification that adequate sorbents are on hand during fuel transfers, and ensuring that personnel are property trained and understand proper procedures for handling

	flammable and combustible fluids.
e. Vehicle refueling shall not occur within the annual floodplain, except as addressed and approved in the plan of operations. This measure does not apply to water-borne vessels.	A.4.e. Waiver is requested. All of the proposed drilling locations are located in the Colville River floodplain and refueling in the floodplain cannot be avoided. Refueling within the Colville River floodplain will be limited to drill and camp pads and will be conducted in accordance with procedures included in the C-Plan.
f. All independent fuel and hazardous substance containers shall be marked with the contents and the lessee's or contractor's name using paint or a permanent label.	A.4.f. Mitigation measure is satisfied. All containers with fuel or hazardous substances will be labeled with the contents and lessee's/contractor's name.
g. A fresh water aquifer monitoring well, and quarterly water quality monitoring, is required down gradient of a permanent storage facility, unless alternative acceptable technology is approved by ADEC.	A.4.g. Not applicable. No permanent storage facilities are proposed as part of Repsol's 2015-2016 Winter Exploration Program.
h. Waste from operations must be reduced, reused, or recycled to the maximum extent practicable. Garbage and domestic combustibles must be incinerated whenever possible or disposed of at an approved site in accordance with 18 AAC 60.	A.4.h. Mitigation measure is satisfied. Waste management activities for the Repsol 2015-2016 Winter Exploration Program will be conducted in general accordance with best environmental practices as described in the North Slope Environmental Field Handbook. Attention will be focused on waste minimization, segregation, reuse, and recycling. Solid burnable waste may be incinerated in location as per 18 AAC 50. All wastes generated as part of operations will be hauled offsite for disposal at an approved facility.
i. New solid waste disposal sites, other than for drilling waste, will not be approved or located on state property during the exploration phase of lease activities. Disposal sites may be provided for drilling waste if the facility complies with 18 AAC 60.	A.4.i. Mitigation measure is satisfied. No new solid waste disposal sites will be developed as part of Repsol's 2015-2016 Winter Exploration Program. All waste generated as part of operations will be hauled offsite for disposal at an approved facility.

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j. The preferred method for disposal of muds and cuttings from oil and gas activities is by underground injection. Drilling mud and cuttings cannot be discharged into lakes, streams, rivers, or important wetlands. On pad temporary cuttings storage will be allowed as necessary to facilitate annular injection and/or backhaul operations. Impermeable lining and diking, or equivalent measures, will be required for reserve pits. Surface discharge of drilling muds and cuttings into reserve pits shall be allowed only when the Director, in consultation with ADF&G, determines that alternative disposal methods are not practicable. Injection of non-hazardous oilfield wastes is regulated by AOGCC through its Underground Injection Control (UIC) Program for oil and gas wells. See also Mitigation Measure 8.a.vi.

A.4.j. Mitigation measures satisfied.

Waste drilling muds and cuttings will either be hauled to the Prudhoe Bay Unit (PBU) Grind and Inject (G&I) Facility or other approved facilities for processing and disposal, or disposed of on-site by annular injection as approved by the AOGCC. Materials disposed of at the PBU G&I Facility will be handled in accordance with the terms of the G&I and Inject User Agreement between Repsol and PBU. Drilling waste will be transported as it is generated to the extent practicable. Temporary Storage Permits will be obtained from ADEC for temporary storage of drilling waste if necessary. No surface discharge of drilling waste is proposed.

k. Proper disposal of garbage and putrescible waste is essential to minimize attraction of wildlife. The lessee must use the most appropriate and efficient method to achieve this goal. The primary method of garbage and putrescible waste is prompt, on-site incineration in compliance with state of Alaska air quality regulations. The secondary method of disposal is on-site frozen storage in animal-proof containers with backhaul to an approved waste disposal facility. The tertiary method of disposal is on-site non-frozen storage in animal proof containers with backhaul to an approved waste disposal facility. Daily backhauling of non-frozen waste must be achieved unless safety considerations prevent it.

A.4.k. Mitigation measure is satisfied.

Solid, non-burnable waste will be deposited in dumpsters located at each site. These containers will be back-hauled to the NSB landfill at Prudhoe Bay. The food waste that could attract wildlife either will be stored in enclosed containers awaiting periodic hauling or such wastes will be hauled each day to an approved disposal center (such as PBU).

To reduce the amount of trash that must be back-hauled from the drilling location, solid, burnable waste may be incinerated at the location in accordance with 18 AAC 50 and ash back-hauled to the NSB landfill.

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5. Access

a. Except for approved off-road travel, exploration activities must be supported only by ice roads, winter trails, existing road systems or air service. Wintertime off-road travel across tundra and wetlands may be approved in areas where snow and frost depths are sufficient to protect the ground surface. Summertime off-road travel across tundra and wetlands may be authorized subject to time periods and vehicle types approved by DMLW. Exceptions may be granted by the director of the DMLW, and the Director, if an emergency condition exists; or, if it is determined, after consulting with ADF&G that travel can be accomplished without damaging vegetation or the ground surface. Exceptions, including the use of gravel, may also be granted on a site specific basis, if it is determined, after consulting with ADF&G and DMLW, that no practicable alternatives exist for constructing an exploration road or pad in the area south of the boundary described below and depicted in the map below:

A.5.a. Mitigation measure satisfied.

Access to drill sites and the central camp pad will be via ice roads as detailed in the Plan of Operations and as authorized under LAS 28269. Water for ice road and pad construction will be withdrawn from local lakes and will be permitted under Temporary Water Use Authorizations (TWUAs) and Fish Habitat Permits as necessary.

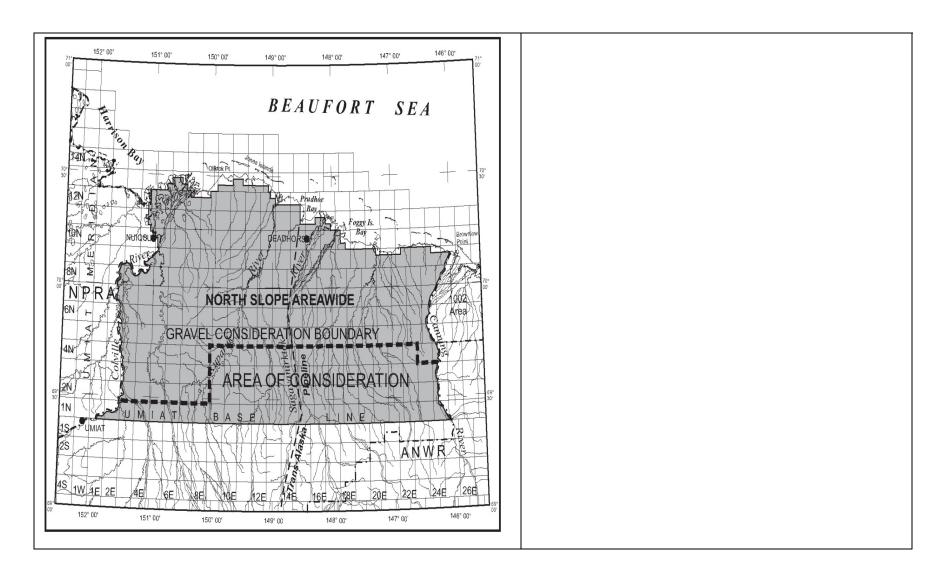


Figure 7.1: Gravel Consideration Boundary	
 Beginning at the NPR-A boundary, from the northeast corner of T 1N, R 2E, east to the northwest corner of T 1N, R 9E, then north to the northwest corner of T 4N, R 9E, then east to the northwest corner of T 4N, R 23E, then south to the southwest corner of T 4N, R 23E, and then east along the top of T 3N to the ANWR boundary. 	
b. Public access to, or use of, the lease area may not be restricted except within the immediate vicinity of drill sites, buildings, and other related facilities. Areas of restricted access must be identified in the plan of operations. Lease facilities and operations shall not be located so as to block access to or along navigable or public waters as defined in AS 38.05.	A.5.b. Mitigation measure is satisfied. Repsol is requesting a 100 ft safety buffer zone around ice roads and ice pads. Public access to the lease area will not be interfered with by Repsol. Exploration operations will be located so that access to public waters is not blocked.

6. Prehistoric, Historic, and Archeological Sites	
a. Prior to the construction or placement of any structure, road, or facility resulting from exploration, development, or production activities, the lessee must conduct an inventory of prehistoric, historic, and archeological sites within the area affected by an activity. The inventory must include consideration of literature provided by the NSB, nearby communities, Native organizations, and local residents; documentation of oral history regarding prehistoric and historic uses of such sites; evidence of consultation with the Alaska Heritage Resources Survey and the National Register of Historic Places; and site surveys. The inventory must also include a detailed analysis of the effects that might result from the activity.	A.6.a. Mitigation measure is satisfied. Archaeological and cultural resource surveys were conducted in the project area to identify any prehistoric, historic, or archaeological sites. As part of the survey, Traditional Land Use Inventory (TLUI) data was obtained from NSB Inupiat Heritage and Language Center (IHLC) and data was obtained from the Alaska Heritage Resources Survey from ADNR, State Historic Preservation Office (SHPO). As part of stakeholder engagement, local residents will be consulted about the presence of historic or cultural resources in the project area. Results of archaeological surveys, including potential impacts, will be submitted to ADNR, SHPO and NSB as part of the 2015-2016 Winter Exploration Program authorization process.
b. The inventory of prehistoric, historic, and archeological sites must be submitted to the Director, and to SHPO who will coordinate with the NSB for review and comment. If a prehistoric, historic, or archeological site or area could be adversely affected by a lease activity, the Director, after consultation with SHPO and the NSB, will direct the lessee as to the course of action to take to avoid or minimize adverse effects.	A.6.b. Mitigation measure is satisfied. Results of archaeological surveys, including potential impacts, will be submitted to ADNR, SHPO and NSB as part of the 2015-2016 Winter Exploration Program authorization process.
c. If a site, structure, or object of prehistoric, historic, or archaeological significance is discovered during lease operations, the lessee must report the discovery to the Director as soon as possible. The lessee must make reasonable efforts to preserve and protect the discovered site, structure, or object from damage until the Director, after consultation with the SHPO and the NSB, has directed the lessee as to the course of action to take for its preservation.	A.6.c. Mitigation measure is satisfied. If prehistoric, historic, or archaeological resources are discovered during Repsol operations, all work in the vicinity of the discovery will cease and ADNR, SHPO and NSB, IHLC will be notified. Measures to mitigate impacts to archeological, historic, and cultural resources identified by the archaeologist, ADNR, SHPO, and NSB, IHLC will be implemented.

7. Local Hire, Communication, and Training	
a. Lessees are encouraged to employ local and Alaska residents and contractors, to the extent they are available and qualified, for work performed in the lease area. Lessees shall submit, as part of the plan of operations, a proposal detailing the means by which the lessee will comply with the measure. The proposal must include a description of the operator's plans for partnering with local communities to recruit, hire and train local and Alaska residents and contractors. The lessee is encouraged, in formulating this proposal, to coordinate with employment and training services offered by the State of Alaska and local communities to train and recruit employees from local communities.	A.7.a. Mitigation measure is satisfied. Repsol has a program to hire and train residents of the NSB, Nuiqsut, and Alaska Natives. Respol works with the Village of Nuiqsut and Kuukpik Corporation to obtain their assistance in determining if qualified personnel, or if local personnel who could be employed for on-the-job training, are available.
b. A plan of operations application must describe the lessee's past and prospective efforts to communicate with local communities and interested local community groups.	A.7.b. Mitigation measure is satisfied. Repsol has an ongoing stakeholder engagement program to inform the residents of Nuiqsut, including subsistence users, of proposed activities and to obtain feedback and recommendations on how these activities can be performed and to avoid conflicts with subsistence activities. A description of the consultation process, including plans for continued consultation is included in NSB Development Permit Application Scope of Operations.
c. A plan of operations application must include a training program for all personnel including contractors and subcontractors. The program must be designed to inform each person working on the project of environmental, social, and cultural concerns that relate to that person's job. The program must use methods to ensure that personnel understand and use techniques necessary to preserve geological, archeological, and biological resources. In addition, the program must be designed to help personnel increase their sensitivity and understanding of community values, customs, and lifestyles in areas where they will be operating.	A.7.c. Mitigation measure is satisfied. All personnel will attend North Slope Training Cooperative (NSTC) 8-hour unescorted training. NSTC training will address the following topics: camps and safety orientation, use of personal protective equipment, hazard communication, pipeline awareness, environmental excellence, and hazardous waste awareness. A Cultural Resource and Awareness video presentation ("Balancing the Use – NPRA", CPAI) is required of all workers and authorized visitors to the various Repsol sites. Repsol's training program is included in Section X: Operating Procedure Design to Minimize Adverse Effects in the Other Uses section of the Plan of Operations.
8. Definitions	

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a. In this document:

- i. "Facilities" means any structure, equipment, or improvement to the surface, whether temporary or permanent, including, but not limited to, roads, pads, pits, pipelines, power lines, generators, utilities, airstrips, wells, compressors, drill rigs, camps and buildings;
- ii. "Important wetlands" means those wetlands that are of high value to fish, waterfowl, and shorebirds because of their unique characteristics or scarcity in the region or that have been determined to function at a high level using the hydrogeomorphic approach;
- iii. "Minimize" means to reduce adverse impacts to the smallest amount, extent, duration, size, or degree reasonable in light of the environmental, social, or economic costs of further reduction:
- iv. "Plan of operations" means a lease Plan of operations under 11 AAC 83.158 and a unit Plan of operations under 11 AAC 83.346;
- v. "Practicable" means feasible in light of overall project purposes after considering cost, existing technology, and logistics of compliance with the standard;
- vi. "Secondary containment" means an impermeable diked area or portable impermeable containment structure capable of containing 110 percent of the volume of the largest independent container plus 12 inches of freeboard. Double walled tanks do not qualify as Secondary Containment unless an exception is granted for a particular tank.
- vii. "Temporary" means no more than 12 months.

LOCAL HIRE & COMMUNITY RELATIONS

Repsol is committed to performing exploration and development activities in accordance with best industry practices and maintaining good relations with local residents. As part of this commitment, Repsol has developed a stakeholder engagement program and a program to mitigate impacts to subsistence activities. Repsol has an ongoing stakeholder engagement program to inform members of the Nuiqsut community, including subsistence users, of proposed activities. Repsol solicits feedback from community members on how their exploration drilling activities can be performed in a manner that minimizes impacts on subsistence activities. Table 1 identifies meetings that have, or will take place, with local stakeholders as part of Repsol's 2015-2016 Winter Drilling Program.

Table 1 - Stakeholder Engagement Meetings

TYPE OF MEETING	DATE	LOCATION
Community Meeting	August 2015	Nuiqsut
Nalukatiq	June 2015	Nuiqsut

Repsol is committed to identifying and mitigating impacts to subsistence species and activities. Repsol works directly with Kuukpikmiut Subsistence Oversight Panel to coordinate activities so that subsistence hunters are aware of Repsol's planned activities. A Community Liaison is employed by Repsol to provide updates of planned and ongoing activities to local residents. Subsistence Representatives will be employed by Repsol during the 2015-2016 Winter Drilling Program to ensure that activities are conducted in a manner to minimize potential impacts to local subsistence activities.

Repsol has also developed a Plan of Cooperation to mitigate potential conflicts between their exploration program and subsistence hunting of polar bears.

Repsol is committed to local hire and has instituted a program to hire and train residents of Nuiqsut and the NSB. Repsol maintains open communication with the Village of Nuiqsut and Kuukpik Corporation to obtain their assistance identifying qualified personnel, or local personnel who could be employed for on-the-job training, are available.

SECTION 1 - WELLS

Table 1.1 - Drill Site Locations

	DRILL SITE LEASE				
	DRILL SITE	NUMBER	MTRS	LATITUDE	LONGITUDE
1.	Qugruk 501	ADL 391322	U012N006E26	70° 21' 58.444"N	150° 32' 1.273"W
2.	Qugruk 701	ADL 391454	U012N006E17	70° 23′ 44.642″N	150° 39' 43.863"W

Table 1.2 - Rig Assignments

DRILL SITE	RIG ASSIGNMENT
Qugruk No. 501 Qugruk No. 701	 Nabors Rig 105 Nabors Rig 99 Nabors Rig 106 Doyon 14 Doyon 16 Doyon Arctic Fox
Note: Six potential rigs are listed, but only t 501 and 701.	two will be selected for use at Qugruk

SECTION 2 – BUILDINGS

Table 2.1 - Pad Locations & Dimensions

PAD	APPROXIMATE DIMENSIONS	LOCATION	LATITUDE	LONGITUDE
Ice Staging Pad A	600 feet by 600 feet	U011N008E13, 14	70° 18' 20.769"N	150° 0' 58.297"W
Ice Staging Pad B	600 feet by 600 feet	U011N008E28	70° 16' 24.472"N	150° 6' 13.667"W
Central Camp Pad	1,500 feet by 1,500 feet	U011N007E09	70° 19' 5.074"N	150° 21' 55.316"W
Mine Site F Pad	330 feet by 670 feet	U011N008E12	70° 19' 0.366"N	149° 59' 46.635"W

Note:

Drill Site 2A (DS-2A), DS-2M, and Mine Site F Pad are existing gravel pads. Dimensions shown for Mine Site F pad is the area used by Repsol.

SECTION 3 – FUEL AND HAZARDOUS SUBSTANCE

Table 3.1- Expected Fuel Storage

	NUMBER OF TANKS		QUANTITY	TOTAL
LOCATION	GASOLINE	DIESEL FUEL	PER TANK (GAL)	AMOUNT (GAL)
Ice Staging Pad A (Preferred)	1	2	9,999	29,997
Ice Staging Pad B (Alternative)	1	2	9,999	29,997
Central Camp Pad	1	6	9,999	69,993
Mine Site F Pad	1	2	9,999	29,997
Q501 Drill Pad	0	1	9,999	9,999
Q701 Drill Pad	0	1	9,999	9,999
TOTAL	4	14		179,982

Note:

Fuel stored will include unleaded gasoline and ultralow sulfur diesel fuel.

SECTION 5 – WATER SUPPLIES

Table 5.1 - Estimated Water Needs

LOCATION	WATER REQUIRED (MILLION GALLON)
Ice Staging Pad A (Preferred)	15
Ice Staging Pad B (Alternative)	15
Central Camp Pad	30
Q501 Drill Pad	15
Q701 Drill Pad	15
Ice Airstrips (MC7903 or MC7902)	5
Main Ice Road (Ice Staging Pad A To Q701 Drill Site)	50
Spur Roads	5
TOTAL PROJECT NEEDS	150

Note: Estimated water needs include water requirements for construction and maintenance of ice roads and pads including two camp pads, drilling operations, and camp use. It also includes contingency to address minor route variations.

Table 5.2 - Potential Water Sources

ICE/WATER SOURCE	LOCATION	FISH SENSITIVITY	WATER PERMITTED (MILLION GALLONS)	FISH HABITAT PERMIT	TEMPORARY WATER USE AUTHORIZATION
M1403	U011N006E22, 23, 26, 27	None	17	N/A	A2014-115
M1407	U011N006E25, 36	None	23.90	N/A	A2014-115
M1408	U011N006E24, 25, 26	None	13.42	N/A	A2014-115
MC7903	U011N006E11-14, 23-14	Sensitive	42.23 (75.37 ice chips)	FH14-III-0224	A2014-115
M1406	U011N007E19, 30	None	28.80	N/A	A2014-116
L9109	U012N006E06, 07 U012N005E01, 12	Sensitive	15.94 (13.76 ice chips)	FH14-III-0226	A2014-116
M9614	U010N006E05	Resistant	0.436 (22.08 ice chips)	FH14-III-0227	A2014-116
M9617	U010N006E03, 03, 09, 10	Resistant	7.55 (45.23 ice chips)	FH14-III-0228	A2014-116
M1401	U010N006E06	Resistant	16.67 ice chips only	FH14-III-0229	A2014-117
M1405	U012N006E08	Sensitive	5.00 (4.89 ice chips)	FH14-III-0231	A2014-119
M9502	U011N005E25 U011N006E30	Sensitive	0.502 (2.12 ice chips)	FH14-III-0232	A2014-119
M9505	U011N005E25, 36	Sensitive	1.01 (30.86 ice chips)	FH14-III-0233	A2014-119
M9528	U010N006E06 U011N006E31	Resistant	0.074 (45.86 ice chips)	FH14-III-0234	A2014-119
M9601*	U010N005E12 U010N006E06, 07	Resistant	3.27 (41.78 ice chips)	FH14-III-0235	A2014-119
M1402	U011N006E20, 21, 28, 29	Sensitive	0.020 (7.34 ice chips)	FH14-III-0236	A2014-120
L9334	U010N005E01, 02, 11, 12 U011N005E35, 36	Sensitive	21.33 (141.37 ice chips)	FH14-III-0239	A2014-120
L9335	U011N005E35 U010N005E02	Sensitive	2.13 (5.31 ice chips)	FH14-III-0237	A2014-120
M9501	U011N006E19, 30	Sensitive	0.305 (21.81 ice chips)	FH14-III-0238	A2014-120
M1321	U012N006E04, 09	Sensitive	1.10	FH13-III-0361	A2013-181
M1322	U012N006E22-23	Sensitive	0.171	FH13-III-0362	A2013-181
M1323	U012N006E14-15, 22-23	Sensitive	0.044	FH13-III-0363	A2013-181
M1324	U012N006E13-14	Sensitive	0.983	FH13-III-0364	A2013-181
M1326	U011N006E08-09, 16-17	Sensitive	1.4	FH13-III-0366	A2013-182
M1327	U011N006E24	Sensitive	3.7	FH13-III-0367	A2013-182

ICE/WATER SOURCE	LOCATION FISH SENSITIVIT		WATER PERMITTED (MILLION GALLONS)	FISH HABITAT PERMIT	TEMPORARY WATER USE AUTHORIZATION
L9332	U011N005E18	Sensitive	9.8	FH13-III-0368	A2013-182
B8540	U012N006E02-03, 10	Sensitive	2.66	FH12-III-0297	A2012-147
K201	U011N008E13	None	15.14	N/A	A2012-147
K210/L9123	U010N007E01 U010N008E06 U011N007E36 U011N008E31	None	22.4	N/A	A2012-140
K214	U011N009E19-20, 29	Resistant	2.0	FH11-III-0324	A2011-134
L9113	U012N007E30	None	7.15	N/A	A2011-132
L9117	U011N007E10-11, 14-15	None	14.15	N/A	A2012-130
L9118	U011N007E11, 12	Sensitive	0.075	FH12-III-0299	A2012-145
L9119	U011N008E18	Sensitive	0.004	FH12-III-0300	A2012-145
L9120	U011N008E19- 20	None	20.85	N/A	A2012-144
L9121	U011N007E 24-25 U011N008E19, 30	Resistant	1.21	FH12-III-0301	A2012-144
L9202/B5843	U013N006E28, 33	Sensitive	2.08	FH11-III-0327	A2011-130
M9512/MB9512	U011N008E17	Resistant	0.108	FH12-III-0313	A2012-146
M9514	U011N008E21, 28	None	21.61	N/A	A2012-140
M9515	U011N008E20, 29	None	12.28	N/A	A2012-140
M9516	U011N008E29	None	8.35	N/A	A2012-140
MB1201	U011N008E22, 27	Resistant	2.44	FH12-III-0293	A2012-140
MB1202	U012N007E32	None	8.92	N/A	A2012-145
MB1203	U012N007E18-19	Sensitive	3.83	FH12-III-0308	A2012-146
MB1204	U012N006E24 U012N007E19	Resistant	0.29	FH12-III-0309	A2012-146
MB1205	U012N006E25-26	Sensitive	0.23	FH12-III-0310	A2012-146
MB1206	U012N007E16, 21	None	17.159	N/A	A2012-146
MB1208	U010N008E04	None	9.96	N/A	A2012-145
MB1209	U010N008E02-03 U011N008E34-35	Resistant	5.32	FH12-III-0312	A2012-145
MC7902	U012N007E19-20, 29-30	None [*]	116.00	FH11-III-0337	A2011-132
MC7920	U012N006E05-08	Sensitive	40.24	FH12-III-0314	A2012-130
K202	U011N009E07	Resistant	0.206	FH11-III-0323	A2011-132
M0249	U011N007E03	None	18.6	N/A	A2011-134
M0253	U011N007E01, 12 U011N008E06-07 U012N007E36 U012N008E31	Resistant	10.37	FH11-III-0335	A2011-134

ICE/WATER SOURCE	LOCATION	FISH SENSITIVITY	WATER PERMITTED (MILLION GALLONS)	FISH HABITAT PERMIT	TEMPORARY WATER USE AUTHORIZATION
M9302	U012N006E U013N006E28,33	Sensitive	4.14	FH12-III-0315	A2011-133
M1325	U012N006E13 U012N005E18	Sensitive	6.6	FH13-III-0365	A2013-182
M0248	U012N007E19-20,29-30	None	13.92	N/A	A2011-131
M0250	U011N007E4,9	Resistant	0.021	FH12-III-0316	A2012-144
M0251	U011N007E15, 22	Resistant	1.53	FH12-III-0317	A2012-144
L9211	U011N006E4	Sensitive	6.85	FH11-III-0337	A2012-132
Lake Coleen	U010N014E13, 24 U010N015E18, 19	None	109	N/A	A2013-170
L9333	U011N005E25	Sensitive	TBD	TBD	TBD
M1501	U011N005E25	Resistant	TBD	TBD	TBD
M1502	U011N007E18	Resistant	TBD	TBD	TBD
M1503	U011N008E19	Resistant	TBD	TBD	TBD

Notes:

Volume of water requested reflects the assumed total volume of water and ice that can be taken from a lake based on fish sensitivity. ADF&G generally allows the following:
15% of the winter water volume deeper than 7 feet may be used when sensitive fish are present

30% of the water volume below 5 feet may be used when resistant fish are present

20% of the total lake volume may be used when there no fish are present.

Additional water in the form of ice chips from areas of grounded ice have been requested up to 20% of lake volume total water withdrawal.

^{*} Arctic grayling have been captured in this water body; however, the depth is less than 4.5 feet and is not viable overwintering habitat as per ADF&G FH11-III-0337.

^{*} This water has not been permitted.

^{*}The TWUA A2014-119 identifies lake M9601 as L9601 in the permit.

SECTION 8 - ROADS

Table 8.1 - Ice Roads

ROAD NAME	LENGTH (miles)	ORIGIN AND TERMINUS	LOCATION
		Ice Road Option 1 – (Preferred)	
Main Ice Road	18.9	From ice staging pad A to Qugruk 701	U011N007E - U011N008E U012N006E – U011N007E
Spur Road 1	11.2	From central camp pad to Qugruk 801	U011N005E – U011N007E
Spur Road 2	1.7	From main ice road to Qugruk 501	U012N006E – U012N007E
Spur Roads to Lakes	8.62	From main ice road to spur roads	U011N005E – U011N008E U012N006E - U012N007E
		Ice Road Option 2 – (Alternative)	
Alternative Route	4.5	From ice staging pad B to main ice road	U011N008E19, 27-30 U011N007E24
Main Ice Road	12.7	From western terminus (U011N007E24) of alternative route to Qugruk 701	U011N007E - U011N007E U012N006E – U011N007E
Spur Road 1	11.2	From central camp pad to Qugruk 801	U011N005E – U011N007E
Spur Road 2	1.7	From main ice road to Qugruk 501	U012N006E – U012N007E
Spur Roads to Lakes	8.62	From main ice road to spur roads	U011N005E – U011N008E U012N006E - U012N007E

Table 8.2 - Ice Road Distance

FROM	то	DISTANCE (miles)		
Ice Roa	ad Option 1 – (Preferred)		
Ice Staging Pad A	Central Camp Pad	9		
Central Camp Pad	Airstrip MC7902	3.8		
Central Camp Pad	Airstrip MC7903	3.4		
Airstrip MC7902	Qugruk 501	1.78		
Central Camp Pad	Qugruk 501	5.6		
Central Camp Pad	Qugruk 701	9.9		
Ice Road Option 2 – (Alternative)				
Ice Staging Pad B	Central Camp Pad	7.3		

Note: all lengths are approximate.

SECTION 10 - ALL OTHER FACILITIES AND EQUIPMENT

Table 10.1 - Typical Equipment List

OPERATIONS	RIG / CAMP SUPPORT AND MOBILIZATION	CONDUCTOR INSTALLATION
 14 G Motor Grader Trimmer 966 Loader TerraGator Heater 700,000 btu 275/325 bbl Tanker Tucker Water Buffalo 730 Rock truck Snow Blower Pump House Portable Shop T-800 Tractor Fuel Service Truck Mechanic Truck Crew Bus Portable Office Envirovac Light Plants Pick-up 	 Fuel Truck Water Trucks ATV Vehicles Loaders Cement Pump Unit Bulk Cement Truck Vac Truck Super Sucker Side Dump Tractor Trailers Bed Truck Crane 	 Conductor Auger Crane Cement Truck Welding Truck Excavator Tractor Trailer

	LAND STATUS: SUPPLEMENTAL SECTION		
1. State Mineral Estate:			
Affected ADL: 393003	Date Effective: 5/1/2011 Date	e Assigned: Enter Date.	
Oil And Gas Lessee(s): Repsol E	&P USA, Inc.		
Surface Ownership: Kuukpik Corp	poration		
Do you have, or anticipate having a	n Access Agreement: ⊠ Yes □ No)	
Special Use Lands: None identific	ed		
•	lointly Managed Lands		
Other Considerations: None ident	ified		
Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates	
Main Ice Road	Umiat, T12N, R6E, Section 14	Various	
Click here to enter text.	Click here to enter text.	Click here to enter text.	
Click here to enter text.	Click here to enter text.	Click here to enter text.	
Affected ADL: 393004	Date Effective: 6/1/2015 Da	ite Assigned: Enter Date.	
Oil And Gas Lessee(s): Repsol I	E&P USA, Inc.		
Surface Ownership: Kuukpik Corp	poration		
Do you have, or anticipate having a	n Access Agreement: ⊠ Yes □ N	lo	
Special Use Lands: None identifie	ed		
Jointly Managed Lands: ASRC Jo	ointly Managed Lands		
Other Considerations: None ident	ified		
Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates	
Main Ice Road	Umiat, T12N, R6E, Section 23	Various	
Click here to enter text.	Click here to enter text.	Click here to enter text.	
Click here to enter text.	Click here to enter text.	Click here to enter text.	
Affected ADL: 393005	Date Effective: 6/1/2015	Date Assigned: Enter Date.	
Oil And Gas Lessee(s): Repsol E	&P USA, Inc.		
Surface Ownership: Kuukpik Corp	poration		
Do you have, or anticipate having an Access Agreement: ✓ Yes ✓ No			
טס you have, or anticipate having a	17/1000337/grooment. 2 103	lo	
, , ,	o	lo	
Special Use Lands: None iden	o	lo	
Special Use Lands: None iden	ointly Managed Lands	lo	
Special Use Lands: None iden Jointly Managed Lands: ASRC	ointly Managed Lands	GPS Coordinates	
Special Use Lands: None iden Jointly Managed Lands: ASRC Other Considerations: None iden Project Components	ified ointly Managed Lands ntified		
Special Use Lands: None iden Jointly Managed Lands: ASRC . Other Considerations: None ide Project Components Main Ice Road	ointly Managed Lands ntified Meridian, Township, Range, And Section(s)	GPS Coordinates	
Special Use Lands: None iden Jointly Managed Lands: ASRC Other Considerations: None iden	ointly Managed Lands ntified Meridian, Township, Range, And Section(s) Umiat, T12N, R6E, Section 24	GPS Coordinates Various	
Special Use Lands: None iden Jointly Managed Lands: ASRC Other Considerations: None ide Project Components Main Ice Road Click here to enter text.	ified lointly Managed Lands Intified Meridian, Township, Range, And Section(s) Umiat, T12N, R6E, Section 24 Click here to enter text. Click here to enter text.	GPS Coordinates Various Click here to enter text.	

Supplemental 1 of 6

State of Alaska Surface Ownership: Do you have, or anticipate having an Access Agreement: ☐ Yes ⊠ No Special Use Lands: None identified Jointly Managed Lands: **ASRC Jointly Managed Lands** Other Considerations: None identified **Project Components** Meridian, Township, Range, And Section(s) **GPS Coordinates** Ice road - water withdrawal access Umiat, T12N, R6E, Section 6 Various

 Ice road – water withdrawal access
 Umiat, T12N, R6E, Section 6
 Various

 Click here to enter text.
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 Click here to enter text.

 Click here to enter text.
 Click here to enter text.
 Click here to enter text.

Affected ADL: 391451 Date Effective: 6/1/2015 Date Assigned: Enter Date.

Oil And Gas Lessee(s): Repsol E&P USA, Inc.
Surface Ownership: Kuukpik Corporation

Do you have, or anticipate having an Access Agreement:

☐ No

Special Use Lands: None identified

Jointly Managed Lands: ASRC Jointly Managed Lands

Other Considerations: None identified

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Ice road – water withdrawal access	Umiat, T12N, R6E, Section 5	Various
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

2. State of Alaska Surface Lands:

Oil And Gas Mineral Estate Owner: Click here to enter text.

Access Authorization(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Access Authorization(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Supplemental 1 of 6

Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Access Authorization(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Access Authorization(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

3. Private Lands:

Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Click here to enter text.	Click here to enter text.	Click here to enter text.

Supplemental 1 of 6

Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

LAND STATUS: SUPPLEMENTAL SECTION				
1. State Mineral Estate:				
Affected ADL: 393002	Date Effective: 6/1/2015 Dat	e Assigned: Enter Date.		
Oil And Gas Lessee(s): Repsol E	E&P USA, Inc.	· ·		
Surface Ownership: Kuukpik Corp	• • • • • • • • • • • • • • • • • • • •			
Do you have, or anticipate having an Access Agreement: ✓ Yes ✓ No				
Special Use Lands: None identified				
	Jointly Managed Lands			
Other Considerations: None ident	•			
Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates		
Ice road – water withdrawal access	Umiat, T12N, R6E, Section 8	Various		
Click here to enter text.	Click here to enter text.	Click here to enter text.		
Click here to enter text.	Click here to enter text.	Click here to enter text.		
Affected ADL: 392999	Date Effective: 6/1/2015 Date	ate Assigned: Enter Date.		
Oil And Gas Lessee(s): Repsol I	E&P USA, Inc.			
Surface Ownership: Kuukpik Corp	poration			
Do you have, or anticipate having a	n Access Agreement: ⊠ Yes □ N	No		
Special Use Lands: None identifi	ed			
Jointly Managed Lands: ASRC Jo	pintly Managed Lands			
Other Considerations: None iden	fified			
	Maridian Township Danga And Saction(s)	0000 " '		
Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates		
Project Components Ice road – water withdrawal access	Umiat, T12N, R6E, Section 9	Various Various		
Ice road – water withdrawal access	Umiat, T12N, R6E, Section 9	Various		
Ice road – water withdrawal access Click here to enter text.	Umiat, T12N, R6E, Section 9 Click here to enter text. Click here to enter text.	Various Click here to enter text.		
Ice road – water withdrawal access Click here to enter text. Click here to enter text.	Umiat, T12N, R6E, Section 9 Click here to enter text. Click here to enter text.	Various Click here to enter text. Click here to enter text.		
Ice road – water withdrawal access Click here to enter text. Click here to enter text. Affected ADL: 391913	Umiat, T12N, R6E, Section 9 Click here to enter text. Click here to enter text. Date Effective: 1/30/2014	Various Click here to enter text. Click here to enter text.		
Ice road – water withdrawal access Click here to enter text. Click here to enter text. Affected ADL: 391913 Oil And Gas Lessee(s): ASRC	Umiat, T12N, R6E, Section 9 Click here to enter text. Click here to enter text. Date Effective: 1/30/2014	Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date.		
Ice road – water withdrawal access Click here to enter text. Click here to enter text. Affected ADL: 391913 Oil And Gas Lessee(s): ASRC Surface Ownership: State of Alas Do you have, or anticipate having a	Umiat, T12N, R6E, Section 9 Click here to enter text. Click here to enter text. Date Effective: 1/30/2014	Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date.		
Ice road – water withdrawal access Click here to enter text. Click here to enter text. Affected ADL: 391913 Oil And Gas Lessee(s): ASRC Surface Ownership: State of Alas Do you have, or anticipate having a Special Use Lands: LAS 28260	Umiat, T12N, R6E, Section 9 Click here to enter text. Click here to enter text. Date Effective: 1/30/2014 [ka n Access Agreement: □ Yes □ I	Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date.		
Ice road – water withdrawal access Click here to enter text. Click here to enter text. Affected ADL: 391913 Oil And Gas Lessee(s): ASRC Surface Ownership: State of Alas Do you have, or anticipate having a Special Use Lands: LAS 28260	Umiat, T12N, R6E, Section 9 Click here to enter text. Click here to enter text. Date Effective: 1/30/2014 [A comparison of the compari	Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date.		
Ice road – water withdrawal access Click here to enter text. Click here to enter text. Affected ADL: 391913 Oil And Gas Lessee(s): ASRC Surface Ownership: State of Alas Do you have, or anticipate having a Special Use Lands: LAS 28266 Jointly Managed Lands: LNO fro	Umiat, T12N, R6E, Section 9 Click here to enter text. Click here to enter text. Date Effective: 1/30/2014 [A comparison of the compari	Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date.		
Ice road – water withdrawal access Click here to enter text. Click here to enter text. Affected ADL: 391913 Oil And Gas Lessee(s): ASRC Surface Ownership: State of Alas Do you have, or anticipate having a Special Use Lands: LAS 28260 Jointly Managed Lands: LNO fro Other Considerations: None ide	Umiat, T12N, R6E, Section 9 Click here to enter text. Click here to enter text. Date Effective: 1/30/2014 ka n Access Agreement:	Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date. No el pads		
Ice road – water withdrawal access Click here to enter text. Click here to enter text. Affected ADL: 391913 Oil And Gas Lessee(s): ASRC Surface Ownership: State of Alas Do you have, or anticipate having a Special Use Lands: LAS 28266 Jointly Managed Lands: LNO fro Other Considerations: None ide Project Components Main ice road & Ice road – water	Umiat, T12N, R6E, Section 9 Click here to enter text. Click here to enter text. Date Effective: 1/30/2014 ka n Access Agreement:	Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date. No el pads GPS Coordinates		
Ice road – water withdrawal access Click here to enter text. Click here to enter text. Affected ADL: 391913 Oil And Gas Lessee(s): ASRC Surface Ownership: State of Alas Do you have, or anticipate having a Special Use Lands: LAS 28260 Jointly Managed Lands: LNO fro Other Considerations: None ide Project Components Main ice road & Ice road – water withdrawal access	Umiat, T12N, R6E, Section 9 Click here to enter text. Click here to enter text. Date Effective: 1/30/2014 ka In Access Agreement: Yes If the proof of the	Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date. No el pads GPS Coordinates Various		

Supplemental 2 of 6

Oil And Gas Lessee(s): Caelus Surface Ownership: State of Alaska Do you have, or anticipate having an Access Agreement: \square Yes ⊠ No Special Use Lands: LAS 28269 - Ice road and pad construction & LAS 28811 - Existing gravel pads Jointly Managed Lands: LNO from Caelus Other Considerations: None identified **Project Components** Meridian, Township, Range, And Section(s) **GPS Coordinates** Spur road 1 Umiat, T11N, R6E Section 23, 24 Various Ice Road - water withdrawal access Umiat, T11N, R6E Section 24 Various Ice airstrip MC7903 Umiat, T11N, R6E Section 13-14, 23-24 Various Affected ADL: 391909 Date Effective: 4/1/2014 Enter Date. Date Assigned: Oil And Gas Lessee(s): Caelus Surface Ownership: State of Alaska Do you have, or anticipate having an Access Agreement: ⊠ No ☐ Yes LAS 28269 – Ice road and pad construction & LAS 28811 – Existing gravel pads Special Use Lands: Jointly Managed Lands: LNO from Caelus Non identified Other Considerations: **GPS Coordinates Project Components** Meridian, Township, Range, And Section(s) Main ice road Umiat, T12N, R7E Section 19 Various Umiat, T12N, R7E Section 19 Various Ice Airstrip MC7902 Ice road- water withdrawal access Umiat, T12N, R7E Section 19 Various 2. State of Alaska Surface Lands: Oil And Gas Mineral Estate Owner: Click here to enter text. Access Authorization(s): Click here to enter text. Special Use Lands: Click here to enter text. Jointly Managed Lands: Click here to enter text. Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Access Authorization(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components Meridian, Township, Range, And Section(s) GPS Coordinates

Supplemental 2 of 6

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Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Access Authorization(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Access Authorization(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

3. Private Lands:

Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
i roject components	wertalan, rewiship, range, raid econom(s)	or o oooramates

Revised 06/01/2015

Supplemental 2 of 6

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Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

LAND STATUS: SUPPLEMENTAL SECTION			
1. State Mineral Estate:			
Affected ADL: 390506	Date Effective: 4/1/2014 Da	nte Assigned: Enter Date.	
Oil And Gas Lessee(s): Caelus	S		
Surface Ownership: State of Ala	aska		
Do you have, or anticipate having	an Access Agreement: $\ \square$ Yes $\ \boxtimes$ N	No	
Special Use Lands: LAS 28269	9 – Ice road and pad construction & LAS 28811 – Existing grave	l pads	
Jointly Managed Lands: LNO	from Caelus		
Other Considerations: Non iden	ntified		
Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates	
Ice Airstrip MC7902	Umiat, T12N, R7E Section 20	Various	
Click here to enter text.	Click here to enter text.	Click here to enter text.	
Click here to enter text.	Click here to enter text.	Click here to enter text.	
Affected ADL: 391028	Date Effective: 9/8/2011 E	Date Assigned: Enter Date.	
Oil And Gas Lessee(s): ASRC			
Surface Ownership: State of Ala	aska		
Do you have, or anticipate having	an Access Agreement: $\ \square$ Yes $\ \boxtimes$	No	
Special Use Lands: LAS 28269	9 – Ice road and pad construction & LAS 28811 – Existing grave		
oposiai Oso Larias. Lito 20207	r – Ice Idau anu pau construction & LAS 20011 – Existing grave	l pads	
·	om ASRC	I pads	
Jointly Managed Lands: LNO fr	om ASRC	l pads	
Jointly Managed Lands: LNO fr	om ASRC	GPS Coordinates	
Jointly Managed Lands: LNO fr Other Considerations: None ide Project Components	om ASRC		
Jointly Managed Lands: LNO fr Other Considerations: None ide Project Components Main ice road	om ASRC entified Meridian, Township, Range, And Section(s)	GPS Coordinates	
Jointly Managed Lands: LNO fr Other Considerations: None ide Project Components Main ice road Click here to enter text.	om ASRC entified Meridian, Township, Range, And Section(s) Umiat, T12N, R7E Section 32	GPS Coordinates Various	
Jointly Managed Lands: LNO fr Other Considerations: None ide Project Components Main ice road Click here to enter text. Click here to enter text.	om ASRC entified Meridian, Township, Range, And Section(s) Umiat, T12N, R7E Section 32 Click here to enter text.	GPS Coordinates Various Click here to enter text.	
Jointly Managed Lands: LNO fr Other Considerations: None ide Project Components Main ice road Click here to enter text. Click here to enter text. Affected ADL: 391024	om ASRC entified Meridian, Township, Range, And Section(s) Umiat, T12N, R7E Section 32 Click here to enter text. Click here to enter text.	GPS Coordinates Various Click here to enter text. Click here to enter text.	
Jointly Managed Lands: LNO fr Other Considerations: None ide Project Components Main ice road Click here to enter text. Click here to enter text. Affected ADL: 391024 Oil And Gas Lessee(s): ASRC	om ASRC entified Meridian, Township, Range, And Section(s) Umiat, T12N, R7E Section 32 Click here to enter text. Click here to enter text. Date Effective: 9/8/2011	GPS Coordinates Various Click here to enter text. Click here to enter text.	
Jointly Managed Lands: LNO fr Other Considerations: None ide Project Components Main ice road Click here to enter text. Click here to enter text. Affected ADL: 391024 Oil And Gas Lessee(s): ASRC Surface Ownership: State of Ala	om ASRC entified Meridian, Township, Range, And Section(s) Umiat, T12N, R7E Section 32 Click here to enter text. Click here to enter text. Date Effective: 9/8/2011	GPS Coordinates Various Click here to enter text. Click here to enter text.	
Jointly Managed Lands: LNO fr Other Considerations: None ide Project Components Main ice road Click here to enter text. Click here to enter text. Affected ADL: 391024 Oil And Gas Lessee(s): ASRC Surface Ownership: State of Ala Do you have, or anticipate having	om ASRC entified Meridian, Township, Range, And Section(s) Umiat, T12N, R7E Section 32 Click here to enter text. Click here to enter text. Date Effective: 9/8/2011	GPS Coordinates Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date.	
Jointly Managed Lands: LNO fr Other Considerations: None ide Project Components Main ice road Click here to enter text. Click here to enter text. Affected ADL: 391024 Oil And Gas Lessee(s): ASRC Surface Ownership: State of Ala Do you have, or anticipate having Special Use Lands: LAS 282	om ASRC entified Meridian, Township, Range, And Section(s) Umiat, T12N, R7E Section 32 Click here to enter text. Click here to enter text. Date Effective: 9/8/2011 aska an Access Agreement: Yes	GPS Coordinates Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date.	
Jointly Managed Lands: LNO fr Other Considerations: None ide Project Components Main ice road Click here to enter text. Click here to enter text. Affected ADL: 391024 Oil And Gas Lessee(s): ASRC Surface Ownership: State of Ala Do you have, or anticipate having Special Use Lands: LAS 282 Jointly Managed Lands: LNO 1	om ASRC entified Meridian, Township, Range, And Section(s) Umiat, T12N, R7E Section 32 Click here to enter text. Click here to enter text. Date Effective: 9/8/2011 aska an Access Agreement: Yes 469 – Ice road and pad construction & LAS 28811 – Existing gra	GPS Coordinates Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date.	
Jointly Managed Lands: LNO fr Other Considerations: None ide Project Components Main ice road Click here to enter text. Click here to enter text. Affected ADL: 391024 Oil And Gas Lessee(s): ASRC Surface Ownership: State of Ala Do you have, or anticipate having Special Use Lands: LAS 282 Jointly Managed Lands: LNO 1	Meridian, Township, Range, And Section(s) Umiat, T12N, R7E Section 32 Click here to enter text. Click here to enter text. Date Effective: 9/8/2011 aska an Access Agreement: Yes Yes Geo – Ice road and pad construction & LAS 28811 – Existing graffrom ASRC	GPS Coordinates Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date.	
Jointly Managed Lands: LNO fr Other Considerations: None ide Project Components Main ice road Click here to enter text. Click here to enter text. Affected ADL: 391024 Oil And Gas Lessee(s): ASRC Surface Ownership: State of Ala Do you have, or anticipate having Special Use Lands: LAS 282 Jointly Managed Lands: LNO fr	Meridian, Township, Range, And Section(s) Umiat, T12N, R7E Section 32 Click here to enter text. Click here to enter text. Date Effective: 9/8/2011 aska an Access Agreement: □ Yes □ from ASRC dentified	GPS Coordinates Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date. No vel pads	
Jointly Managed Lands: LNO fr Other Considerations: None ide Project Components Main ice road Click here to enter text. Click here to enter text. Affected ADL: 391024 Oil And Gas Lessee(s): ASRC Surface Ownership: State of Ala Do you have, or anticipate having Special Use Lands: LAS 282 Jointly Managed Lands: LNO fr Other Considerations: None ice	Meridian, Township, Range, And Section(s) Umiat, T12N, R7E Section 32 Click here to enter text. Click here to enter text. Date Effective: 9/8/2011 aska an Access Agreement: □ Yes □ 169 – Ice road and pad construction & LAS 28811 – Existing grafom ASRC dentified Meridian, Township, Range, And Section(s)	GPS Coordinates Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date. No vel pads GPS Coordinates	
Jointly Managed Lands: LNO fr Other Considerations: None ide Project Components Main ice road Click here to enter text. Click here to enter text. Affected ADL: 391024 Oil And Gas Lessee(s): ASRC Surface Ownership: State of Ala Do you have, or anticipate having Special Use Lands: LAS 282 Jointly Managed Lands: LNO to Other Considerations: None ic Project Components Main ice road	Meridian, Township, Range, And Section(s) Umiat, T12N, R7E Section 32 Click here to enter text. Click here to enter text. Date Effective: 9/8/2011 aska an Access Agreement: Yes Yes Yes Meridian, Township, Range, And Section(s) Umiat, T11N, R7E Section 5	GPS Coordinates Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date. No vel pads GPS Coordinates Various	
Jointly Managed Lands: LNO fr Other Considerations: None ide Project Components Main ice road Click here to enter text. Click here to enter text. Affected ADL: 391024 Oil And Gas Lessee(s): ASRC Surface Ownership: State of Ala Do you have, or anticipate having Special Use Lands: LAS 282 Jointly Managed Lands: LNO 6 Other Considerations: None ic Project Components Main ice road Click here to enter text.	Meridian, Township, Range, And Section(s) Umiat, T12N, R7E Section 32 Click here to enter text. Click here to enter text. Date Effective: 9/8/2011 aska an Access Agreement: Yes 469 – Ice road and pad construction & LAS 28811 – Existing graform ASRC dentified Meridian, Township, Range, And Section(s) Umiat, T11N, R7E Section 5 Click here to enter text.	GPS Coordinates Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date. No vel pads GPS Coordinates Various Click here to enter text.	

Supplemental 3 of 6

Surface Ownership: State of Alaska

Do you have, or anticipate having an Access Agreement: $\ \square$ Yes $\ \boxtimes$ No

Special Use Lands: LAS 28269 – Ice road and pad construction & LAS 28811 – Existing gravel pads

Jointly Managed Lands: LNO from ASRC
Other Considerations: None identified

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Main ice road	Umiat, T11N, R7E Section 4	Various
Ice road – water withdrawal access	Umiat, T11N, R7E Section 4, 9	Various
Click here to enter text.	Click here to enter text.	Click here to enter text.

Affected ADL: 391910 Date Effective: 1/30/2014 Date Assigned: Enter Date.

Oil And Gas Lessee(s): ASRC
Surface Ownership: State of Alaska

Do you have, or anticipate having an Access Agreement: \square Yes \boxtimes No

Special Use Lands: LAS 28269 – Ice road and pad construction & LAS 28811 – Existing gravel pads

Jointly Managed Lands: LNO from ASRC
Other Considerations: None identified

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Main ice road	Umiat, T11N, R7E Section 9	Various
Central Pad	Umiat, T11N, R7E Section 9	70° 19′ 5.074″N; 150° 21′ 55.316″W
Spur road 1	Umiat, T11N, R7E Section 9	Various

2. State of Alaska Surface Lands:

Oil And Gas Mineral Estate Owner: Click here to enter text.

Access Authorization(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Access Authorization(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components Meridian, Township, Range, And Section(s) GPS Coordinates

Supplemental 3 of 6

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Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Access Authorization(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Access Authorization(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

3. Private Lands:

Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Supplemental 3 of 6

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Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

	LAND STATUS: SUPPLEMENTAL SECTION	
1. State Mineral Estate:		
Affected ADL: 391911	Date Effective: 1/30/2014 Dat	e Assigned: Enter Date.
Oil And Gas Lessee(s): ASRC		
Surface Ownership: State of Ala	ska	
Do you have, or anticipate having	an Access Agreement: ☐ Yes ☐ No)
Special Use Lands: LAS 28269	– Ice road and pad construction & LAS 28811 – Existing gravel	pads
Jointly Managed Lands: LNO fi	rom ASRC	
Other Considerations: None iden	ntified	
Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Spur road 1	Umiat, T11N, R7E Section 8	Various
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.
Affected ADL: 391447	Date Effective: 8/1/2014 Da	ate Assigned: Enter Date.
Oil And Gas Lessee(s): BRPC		
Surface Ownership: State of Ala	ska	
Do you have, or anticipate having	an Access Agreement: ☐ Yes	lo
Special Use Lands: LAS 28269	- Ice road and pad construction & LAS 28811 - Existing gravel	pads
Jointly Managed Lands: LNO fro	om BRPC	
Other Considerations: None identified		
Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
<u> </u>	Meridian, Township, Range, And Section(s) Umiat, T11N, R7E Section 16	GPS Coordinates Various
Main ice road		
Main ice road Click here to enter text.	Umiat, T11N, R7E Section 16	Various
Main ice road Click here to enter text. Click here to enter text. Affected ADL: 391549	Umiat, T11N, R7E Section 16 Click here to enter text. Click here to enter text.	Various Click here to enter text.
Main ice road Click here to enter text. Click here to enter text. Affected ADL: 391549	Umiat, T11N, R7E Section 16 Click here to enter text. Click here to enter text.	Various Click here to enter text. Click here to enter text.
Main ice road Click here to enter text. Click here to enter text. Affected ADL: 391549 Oil And Gas Lessee(s): BRPC	Umiat, T11N, R7E Section 16 Click here to enter text. Click here to enter text. Date Effective: 8/1/2014	Various Click here to enter text. Click here to enter text.
Main ice road Click here to enter text. Click here to enter text. Affected ADL: 391549 Oil And Gas Lessee(s): BRPC Surface Ownership: State of Ala	Umiat, T11N, R7E Section 16 Click here to enter text. Click here to enter text. Date Effective: 8/1/2014	Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date.
Main ice road Click here to enter text. Click here to enter text. Affected ADL: 391549 Oil And Gas Lessee(s): BRPC Surface Ownership: State of Ala Do you have, or anticipate having a	Umiat, T11N, R7E Section 16 Click here to enter text. Click here to enter text. Date Effective: 8/1/2014	Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date.
Main ice road Click here to enter text. Click here to enter text. Affected ADL: 391549 Oil And Gas Lessee(s): BRPC Surface Ownership: State of Ala Do you have, or anticipate having a Special Use Lands: LAS 2826	Umiat, T11N, R7E Section 16 Click here to enter text. Click here to enter text. Date Effective: 8/1/2014 Eska an Access Agreement: Yes	Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date.
Main ice road Click here to enter text. Click here to enter text. Affected ADL: 391549 Oil And Gas Lessee(s): BRPC Surface Ownership: State of Ala Do you have, or anticipate having a Special Use Lands: LAS 2826 Jointly Managed Lands: LNO fr	Umiat, T11N, R7E Section 16 Click here to enter text. Click here to enter text. Date Effective: 8/1/2014 Ska an Access Agreement: Yes Yes Yes OF - Ice road and pad construction & LAS 28811 - Existing grave from BRPC	Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date.
Main ice road Click here to enter text. Click here to enter text. Affected ADL: 391549 Oil And Gas Lessee(s): BRPC Surface Ownership: State of Ala Do you have, or anticipate having a Special Use Lands: LAS 2826 Jointly Managed Lands: LNO fr	Umiat, T11N, R7E Section 16 Click here to enter text. Click here to enter text. Date Effective: 8/1/2014 Ska an Access Agreement: Yes Yes Yes OF - Ice road and pad construction & LAS 28811 - Existing grave from BRPC	Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date.
Main ice road Click here to enter text. Click here to enter text. Affected ADL: 391549 Oil And Gas Lessee(s): BRPC Surface Ownership: State of Ala Do you have, or anticipate having a Special Use Lands: LAS 2826 Jointly Managed Lands: LNO fr Other Considerations: None ide	Umiat, T11N, R7E Section 16 Click here to enter text. Click here to enter text. Date Effective: 8/1/2014 Ska an Access Agreement: Yes Yes On BRPC Pentified	Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date. No el pads
Main ice road Click here to enter text. Click here to enter text. Affected ADL: 391549 Oil And Gas Lessee(s): BRPC Surface Ownership: State of Ala Do you have, or anticipate having a Special Use Lands: LAS 2826 Jointly Managed Lands: LNO fr Other Considerations: None ide Project Components Main ice road	Umiat, T11N, R7E Section 16 Click here to enter text. Click here to enter text. Date Effective: 8/1/2014 Ska an Access Agreement: Yes In 199 - Ice road and pad construction & LAS 28811 - Existing grave from BRPC entified Meridian, Township, Range, And Section(s)	Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date. No el pads GPS Coordinates
Main ice road Click here to enter text. Click here to enter text. Affected ADL: 391549 Oil And Gas Lessee(s): BRPC Surface Ownership: State of Ala Do you have, or anticipate having a Special Use Lands: LAS 2826 Jointly Managed Lands: LNO fr Other Considerations: None ide	Umiat, T11N, R7E Section 16 Click here to enter text. Click here to enter text. Date Effective: 8/1/2014 Ska an Access Agreement: Yes Yes On BRPC entified Meridian, Township, Range, And Section(s) Umiat, T11N, R7E Section 15	Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date. No el pads GPS Coordinates Various
Main ice road Click here to enter text. Click here to enter text. Affected ADL: 391549 Oil And Gas Lessee(s): BRPC Surface Ownership: State of Ala Do you have, or anticipate having a Special Use Lands: LAS 2826 Jointly Managed Lands: LNO fr Other Considerations: None ide Project Components Main ice road Ice road – water withdrawal access	Umiat, T11N, R7E Section 16 Click here to enter text. Click here to enter text. Date Effective: 8/1/2014 Ska an Access Agreement: □ Yes □ Yes OP – Ice road and pad construction & LAS 28811 – Existing grave om BRPC entified Meridian, Township, Range, And Section(s) Umiat, T11N, R7E Section 15 Umiat, T11N, R7E Section 15 Click here to enter text.	Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date. No el pads GPS Coordinates Various Various

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Surface Ownership: State of Alaska

Do you have, or anticipate having an Access Agreement: $\hfill \square$ Yes $\hfill \boxtimes$ No

Special Use Lands: LAS 28269 – Ice road and pad construction & LAS 28811 – Existing gravel pads

Jointly Managed Lands: LNO from BRPC
Other Considerations: None identified

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Main ice road	Umiat, T11N, R7E Section 14, 23	Various
Ice road – water withdrawal access	Umiat, T11N, R7E Section 14	Various
Click here to enter text.	Click here to enter text.	Click here to enter text.

Affected ADL: 390690 Date Effective: 10/1/2014 Date Assigned: Enter Date.

Oil And Gas Lessee(s): BRPC
Surface Ownership: State of Alaska

Do you have, or anticipate having an Access Agreement: \square Yes \boxtimes No

Special Use Lands: LAS 28269 – Ice road and pad construction & LAS 28811 – Existing gravel pads

Jointly Managed Lands: LNO from BRPC
Other Considerations: None identified

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Main ice road	Umiat, T11N, R7E Section 24	Various
Ice road – alternative route	Umiat, T11N, R7E Section 24	Various
Ice road – water withdrawal access	Umiat, T11N, R7E Section 24	Various

2. State of Alaska Surface Lands:

Oil And Gas Mineral Estate Owner: Click here to enter text.

Access Authorization(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Access Authorization(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Supplemental 4 of 6

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Oil And Gas Mineral Estate Owner: Click here to enter text.

Access Authorization(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Access Authorization(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

3. Private Lands:

Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Click here to enter text.	Click here to enter text.	Click here to enter text.

Supplemental 4 of 6

Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

	LAND STATUS: SUPPLEMENTAL SECTION	
1. State Mineral Estate:		
Affected ADL: 390691	Date Effective: 10/1/2014 Dat	re Assigned: Enter Date.
Oil And Gas Lessee(s): BRPC		
Surface Ownership: State of Alas	ka	
Do you have, or anticipate having a	n Access Agreement: ☐ Yes ☐ No	0
Special Use Lands: LAS 28269 -	- Ice road and pad construction & LAS 28811 – Existing gravel	pads
Jointly Managed Lands: LNO fro	om BRPC	
Other Considerations: None iden	tified	
Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Ice road – water withdrawal access	Umiat, T11N, R7E Section 25, 36	Various
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.
Affected ADL: 025585	Date Effective: 3/1/2011 Date	ate Assigned: Enter Date.
Oil And Gas Lessee(s): CPAI		
Surface Ownership: State of Alas	ka	
Do you have, or anticipate having a	n Access Agreement: ☐ Yes	No
Special Use Lands: LAS 28269 -	- Ice road and pad construction & LAS 28811 – Existing gravel	pads
Special Use Lands: LAS 28269 - Jointly Managed Lands: LNO from		pads
·	m CPAI	pads
Jointly Managed Lands: LNO from	m CPAI	GPS Coordinates
Jointly Managed Lands: LNO from Other Considerations: None iden Project Components	m CPAI tified	
Jointly Managed Lands: LNO from the Considerations: None iden Project Components Ice road – alternative route	m CPAI tified Meridian, Township, Range, And Section(s)	GPS Coordinates
Jointly Managed Lands: LNO from Other Considerations: None iden Project Components Ice road – alternative route Click here to enter text.	m CPAI tified Meridian, Township, Range, And Section(s) Umiat, T11N, R8E Section 29, 30	GPS Coordinates Various
Jointly Managed Lands: LNO from Other Considerations: None iden Project Components Ice road – alternative route Click here to enter text. Click here to enter text.	Meridian, Township, Range, And Section(s) Umiat, T11N, R8E Section 29, 30 Click here to enter text. Click here to enter text.	GPS Coordinates Various Click here to enter text.
Jointly Managed Lands: LNO from Other Considerations: None iden Project Components Ice road – alternative route Click here to enter text. Click here to enter text. Affected ADL: 025586	Meridian, Township, Range, And Section(s) Umiat, T11N, R8E Section 29, 30 Click here to enter text. Click here to enter text.	GPS Coordinates Various Click here to enter text. Click here to enter text.
Other Considerations: None iden Project Components Ice road – alternative route Click here to enter text. Click here to enter text. Affected ADL: 025586 Oil And Gas Lessee(s): CPAI	Meridian, Township, Range, And Section(s) Umiat, T11N, R8E Section 29, 30 Click here to enter text. Click here to enter text. Date Effective: 12/1/2010	GPS Coordinates Various Click here to enter text. Click here to enter text.
Jointly Managed Lands: LNO from Other Considerations: None iden Project Components Ice road – alternative route Click here to enter text. Click here to enter text. Affected ADL: 025586 Oil And Gas Lessee(s): CPAI Surface Ownership: State of Alas	Meridian, Township, Range, And Section(s) Umiat, T11N, R8E Section 29, 30 Click here to enter text. Click here to enter text. Date Effective: 12/1/2010	GPS Coordinates Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date.
Other Considerations: None iden Project Components Ice road – alternative route Click here to enter text. Click here to enter text. Affected ADL: 025586 Oil And Gas Lessee(s): CPAI Surface Ownership: State of Alas Do you have, or anticipate having a	Meridian, Township, Range, And Section(s) Umiat, T11N, R8E Section 29, 30 Click here to enter text. Click here to enter text. Date Effective: 12/1/2010	GPS Coordinates Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date.
Other Considerations: None iden Project Components Ice road – alternative route Click here to enter text. Click here to enter text. Affected ADL: 025586 Oil And Gas Lessee(s): CPAI Surface Ownership: State of Alas Do you have, or anticipate having a Special Use Lands: LAS 28266	Meridian, Township, Range, And Section(s) Umiat, T11N, R8E Section 29, 30 Click here to enter text. Click here to enter text. Date Effective: 12/1/2010 Ika n Access Agreement: □ Yes ☑ I	GPS Coordinates Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date.
Other Considerations: None iden Project Components Ice road – alternative route Click here to enter text. Click here to enter text. Affected ADL: 025586 Oil And Gas Lessee(s): CPAI Surface Ownership: State of Alas Do you have, or anticipate having a Special Use Lands: LAS 28266 Jointly Managed Lands: LNO fro	Meridian, Township, Range, And Section(s) Umiat, T11N, R8E Section 29, 30 Click here to enter text. Click here to enter text. Date Effective: 12/1/2010 Ika In Access Agreement: Yes 9 - Ice road and pad construction & LAS 28811 – Existing gravium CPAI	GPS Coordinates Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date.
Dointly Managed Lands: LNO from Other Considerations: None iden Project Components Ice road – alternative route Click here to enter text. Click here to enter text. Affected ADL: 025586 Oil And Gas Lessee(s): CPAI Surface Ownership: State of Alasto you have, or anticipate having a Special Use Lands: LAS 28266 Jointly Managed Lands: LNO from	Meridian, Township, Range, And Section(s) Umiat, T11N, R8E Section 29, 30 Click here to enter text. Click here to enter text. Date Effective: 12/1/2010 Ika In Access Agreement: Yes 9 - Ice road and pad construction & LAS 28811 – Existing gravium CPAI	GPS Coordinates Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date.
Jointly Managed Lands: LNO from Other Considerations: None iden Project Components Ice road – alternative route Click here to enter text. Click here to enter text. Affected ADL: 025586 Oil And Gas Lessee(s): CPAI Surface Ownership: State of Alast Do you have, or anticipate having a Special Use Lands: LAS 28266 Jointly Managed Lands: LNO from Other Considerations: None iden	Meridian, Township, Range, And Section(s) Umiat, T11N, R8E Section 29, 30 Click here to enter text. Click here to enter text. Date Effective: 12/1/2010 Ika In Access Agreement: Yes In Indicate the content of	GPS Coordinates Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date. No el pads
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Jointly Managed Lands: LNO from Other Considerations: None iden Project Components Ice road – alternative route Click here to enter text. Click here to enter text. Affected ADL: 025586 Oil And Gas Lessee(s): CPAI Surface Ownership: State of Alast Do you have, or anticipate having a Special Use Lands: LAS 28266 Jointly Managed Lands: LNO from Other Considerations: None iden Project Components Ice road – alternative route	Meridian, Township, Range, And Section(s) Umiat, T11N, R8E Section 29, 30 Click here to enter text. Click here to enter text. Date Effective: 12/1/2010 Ika In Access Agreement: Yes Section 29, 30 Click here to enter text. Date Effective: 12/1/2010 Ika Meridian, Township, Range, And Section(s) Umiat, T11N, R8E Section 27, 28	GPS Coordinates Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date. No el pads GPS Coordinates Various 70° 16′ 24.472″N; 150° 6′

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Oil And Gas Lessee(s): **BRPC** Surface Ownership: State of Alaska Do you have, or anticipate having an Access Agreement: ☐ Yes ⊠ No Special Use Lands: LAS 28269 - Ice road and pad construction & LAS 28811 - Existing gravel pads Jointly Managed Lands: LNO from BRPC Other Considerations: None identified **Project Components** Meridian, Township, Range, And Section(s) **GPS Coordinates** Main ice road Umiat, T11N, R8E Section 17-19 Various Ice road - alternative route Umiat, T11N, R8E Section 19 Various Umiat, T11N, R8E Section 17, 18 Ice road - water withdrawal access Various Affected ADL: 025571 Date Effective: 12/1/2010 Enter Date. Date Assigned: Oil And Gas Lessee(s): CPAI Surface Ownership: State of Alaska Do you have, or anticipate having an Access Agreement: ⊠ No ☐ Yes LAS 28269 – Ice road and pad construction & LAS 28811 – Existing gravel pads Special Use Lands: Jointly Managed Lands: LNO from CPAI None identified Other Considerations: **Project Components** Meridian, Township, Range, And Section(s) **GPS Coordinates** Main ice road Umiat, T11N, R8E Section 15, 16 Various Click here to enter text. 2. State of Alaska Surface Lands: Oil And Gas Mineral Estate Owner: Click here to enter text. Access Authorization(s): Click here to enter text. Special Use Lands: Click here to enter text. Jointly Managed Lands: Click here to enter text. Other Considerations: Click here to enter text. **Project Components** Meridian, Township, Range, And Section(s) **GPS Coordinates** Click here to enter text. Oil And Gas Mineral Estate Owner: Click here to enter text. Access Authorization(s): Click here to enter text.

Land Status: Supplemental Section V1.0 Revised 06/01/2015

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Special Use Lands:

Jointly Managed Lands:

Other Considerations:

GPS Coordinates

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Oil And Gas Mineral Estate Owner: Click here to enter text.

Access Authorization(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Oil And Gas Mineral Estate Owner: Click here to enter text.

Access Authorization(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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3. Private Lands:

Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Supplemental 5 of 6

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Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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	LAND STATUS: SUPPLEMENTAL SECTION		
1. State Mineral Estate:			
Affected ADL: 025570	Date Effective: 12/1/2010 Da	te Assigned: Enter Date.	
Oil And Gas Lessee(s): CPAI			
Surface Ownership: State of Ala	aska		
Do you have, or anticipate having	an Access Agreement: ☐ Yes ☒ N	lo	
Special Use Lands: LAS 28269	- Ice road and pad construction & LAS 28811 - Existing gravel	l pads	
Jointly Managed Lands: LNO fi	rom CPAI		
Other Considerations: None idea	ntified		
Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates	
Main ice road	Umiat, T11N, R8E Section 14	Various	
	U. J. TANK BOE O. H. AS AS	70° 18′ 20.769″N, 150° 0′	
Ice Staging Pad A	Umiat, T11N, R8E Section 13, 14	58.297"W	
Click here to enter text.	Click here to enter text.	Click here to enter text.	
Affected ADL: 391448	Date Effective: 8/1/2014 D	Pate Assigned: Enter Date.	
Oil And Gas Lessee(s): BRPC			
Surface Ownership: State of Ala	nska		
·			
Do you have, or anticipate having	an Access Agreement: ☐ Yes	No I pads	
Do you have, or anticipate having a Special Use Lands: LAS 28269	 Ice road and pad construction & LAS 28811 – Existing gravel Dom BRPC 		
Do you have, or anticipate having a Special Use Lands: LAS 28269 Jointly Managed Lands: LNO fro	 Ice road and pad construction & LAS 28811 – Existing gravel Dom BRPC 		
Do you have, or anticipate having a Special Use Lands: LAS 28269 Jointly Managed Lands: LNO fro Other Considerations: None idea Project Components	 Ice road and pad construction & LAS 28811 – Existing gravel pm BRPC ntified 	l pads	
Do you have, or anticipate having a Special Use Lands: LAS 28269 Jointly Managed Lands: LNO fro Other Considerations: None idea Project Components Spur road 1	lce road and pad construction & LAS 28811 – Existing gravelom BRPC ntified Meridian, Township, Range, And Section(s)	GPS Coordinates	
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Do you have, or anticipate having a Special Use Lands: LAS 28269 Jointly Managed Lands: LNO from the Considerations: None idea Project Components Spur road 1 Click here to enter text. Click here to enter text. Affected ADL: 391550	Ice road and pad construction & LAS 28811 – Existing gravel om BRPC Meridian, Township, Range, And Section(s) Umiat, T11N, R7E Section 17, 18 Click here to enter text. Click here to enter text.	GPS Coordinates Various Click here to enter text. Click here to enter text.	
Do you have, or anticipate having a Special Use Lands: LAS 28269 Jointly Managed Lands: LNO fro Other Considerations: None idea Project Components Spur road 1 Click here to enter text. Click here to enter text. Affected ADL: 391550 Dil And Gas Lessee(s): BRPC	- Ice road and pad construction & LAS 28811 - Existing gravel om BRPC ntified Meridian, Township, Range, And Section(s) Umiat, T11N, R7E Section 17, 18 Click here to enter text. Click here to enter text. Date Effective: 8/1/2014	GPS Coordinates Various Click here to enter text. Click here to enter text.	
Do you have, or anticipate having a Special Use Lands: LAS 28269 Jointly Managed Lands: LNO fro Other Considerations: None idea Project Components Spur road 1 Click here to enter text. Click here to enter text. Affected ADL: 391550 Dil And Gas Lessee(s): BRPC Surface Ownership: State of Ala	Lice road and pad construction & LAS 28811 – Existing gravel om BRPC Intified Meridian, Township, Range, And Section(s) Umiat, T11N, R7E Section 17, 18 Click here to enter text. Click here to enter text. Date Effective: 8/1/2014	GPS Coordinates Various Click here to enter text. Click here to enter text.	
Do you have, or anticipate having a Special Use Lands: LAS 28269 Jointly Managed Lands: LNO fro Other Considerations: None idea Project Components Spur road 1 Click here to enter text. Click here to enter text. Affected ADL: 391550 Dil And Gas Lessee(s): BRPC Surface Ownership: State of Ala Do you have, or anticipate having a	Lice road and pad construction & LAS 28811 – Existing gravel om BRPC Intified Meridian, Township, Range, And Section(s) Umiat, T11N, R7E Section 17, 18 Click here to enter text. Click here to enter text. Date Effective: 8/1/2014	GPS Coordinates Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date.	
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Do you have, or anticipate having a Special Use Lands: LAS 28269 Jointly Managed Lands: LNO from Other Considerations: None identification of the Project Components Spur road 1 Click here to enter text. Click here to enter text. Affected ADL: 391550 Oil And Gas Lessee(s): BRPC Surface Ownership: State of Ala Do you have, or anticipate having a Special Use Lands: LAS 2826 Jointly Managed Lands: LNO from Special Use Lno from Special Use Lands: LNO from Special Use L	- Ice road and pad construction & LAS 28811 - Existing gravel om BRPC ntified Meridian, Township, Range, And Section(s) Umiat, T11N, R7E Section 17, 18 Click here to enter text. Click here to enter text. Date Effective: 8/1/2014 ska an Access Agreement: □ Yes □ 69 - Ice road and pad construction & LAS 28811 - Existing graverom BRPC	GPS Coordinates Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date.	
Do you have, or anticipate having a Special Use Lands: LAS 28269 Jointly Managed Lands: LNO from Other Considerations: None identification of the Project Components Spur road 1 Click here to enter text. Click here to enter text. Affected ADL: 391550 Oil And Gas Lessee(s): BRPC Surface Ownership: State of Ala Do you have, or anticipate having a Special Use Lands: LAS 2826 Jointly Managed Lands: LNO from Special Use Lno from Special Use Lands: LNO from Special Use L	- Ice road and pad construction & LAS 28811 - Existing gravel om BRPC ntified Meridian, Township, Range, And Section(s) Umiat, T11N, R7E Section 17, 18 Click here to enter text. Click here to enter text. Date Effective: 8/1/2014 ska an Access Agreement: □ Yes □ 69 - Ice road and pad construction & LAS 28811 - Existing graverom BRPC	GPS Coordinates Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date.	
Do you have, or anticipate having a Special Use Lands: LAS 28269 Jointly Managed Lands: LNO from Other Considerations: None identification of the Project Components Spur road 1 Click here to enter text. Click here to enter text. Affected ADL: 391550 Oil And Gas Lessee(s): BRPC Surface Ownership: State of Alato Do you have, or anticipate having a Special Use Lands: LAS 2826 Jointly Managed Lands: LNO from Other Considerations: None identification of the Position of the Pos	- Ice road and pad construction & LAS 28811 - Existing gravel om BRPC ntified Meridian, Township, Range, And Section(s) Umiat, T11N, R7E Section 17, 18 Click here to enter text. Click here to enter text. Date Effective: 8/1/2014 aska an Access Agreement: □ Yes ☑ 69 - Ice road and pad construction & LAS 28811 - Existing graverom BRPC entified	GPS Coordinates Various Click here to enter text. Click here to enter text. Date Assigned: Enter Date. No vel pads	
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Oil And Gas Lessee(s): CPAI			
Surface Ownership: NSB			
Do you have, or anticipate having an Access Agreement: ✓ Yes ✓ No			
Special Use Lands: None identified			
Jointly Managed Lands: None identific	ed		
Other Considerations: None identified			
Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates	
Mine Site F Pad	Umiat, T11N, R08E, Section 12	70° 19′ 0.366″ N, 149° 59′ 46.635″W	
Click here to enter text.	Click here to enter text.	Click here to enter text.	
Click here to enter text.	Click here to enter text.	Click here to enter text.	
Affected ADL: Enter ADL.	Date Effective: Enter Date.	Date Assigned: Enter Date.	
Oil And Gas Lessee(s): Click here to e	enter text.		
Surface Ownership: Click here to enter	text.		
Do you have, or anticipate having an Aco	cess Agreement:] No	
Special Use Lands: Click here to en	ter text.		
Jointly Managed Lands: Click here to	enter text.		
Other Considerations: Click here to en	ter text.		
Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates	
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2. State of Alaska Surface Lands:			
Oil And Gas Mineral Estate Owner: Click here to enter text.			
Access Authorization(s): Click here to enter text.			
Special Use Lands: Click here to enter	text.		
Jointly Managed Lands: Click here to	enter text.		
Other Considerations: Click here to en	er text.		
Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates	
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Click here to enter text.	Click here to enter text.	Click here to enter text.	
Oil And Gas Mineral Estate Owner:	Click here to enter text.		
Access Authorization(s): Click here to enter text.			
Special Use Lands: Click here to enter text.			
Jointly Managed Lands: Click here to enter text.			
Other Considerations: Click here to enter text.			

Land Status: Supplemental Section V1.0 Revised 06/01/2015

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Oil And Gas Mineral Estate Owner: Click here to enter text.

Access Authorization(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Oil And Gas Mineral Estate Owner: Click here to enter text.

Access Authorization(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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3. Private Lands:

Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Revised 06/01/2015

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Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Oil And Gas Mineral Estate Owner: Click here to enter text.

Surface Ownership And Access Agreement(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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	GLOSSARY OF TERMS: SUPPLEMENTAL SECTION		
Term #	Term Term Definition		
11	DAC	Deadhorse Aviation Center	
12	DMLW	Division of Mining, Land, and Water	
13	ASRC	Arctic Slope Regional Corporation	
14	LAS	Land Administration System	
15	P00	Plan of Operations	
16	NSB	North Slope Borough	
17	NSEFH	North Slope Environmental Field Handbook, 2011 edition	
18	NSTC	North Slope Training Cooperative	
19	PBU	Prudhoe Bay Unit	
20	Red Book	Alaska Waste Disposal & Reuse Guide, revision 9, October 2013	
21	Repsol	Repsol E&P USA Inc.	
22	SPCC	Spill Prevention, Control, and Countermeasure	
23	TLUI	Traditional Land Use Inventory	
24	VSP	Vertical Seismic Profiles	
25	DS	Drill Site	
26	PVC	polyvinylchloride	
27	ID	Inner diameter	
28	HSE	Health, Safety, and Environment	
29	HAZCOM	Hazard Communication	
30	SIMOPS	Simultaneous Operations	
31	JSEA	Job Safety Environmental Analysis	
32	PTW	Permit to Work	
33	STOP	Safety Training Observation Program	
34	LNO	Letter of Non-Objection	