



May 20, 2016

Ms. Kristina Neptun
Project Manager
Jacobs Engineering Group, Inc.
4300 B. Street, Suite 600
Anchorage, Alaska 99503

**RE: LOCI 16-001, Furie Operating Alaska, LLC, Kitchen Lights Unit, Exploration
Project Unit Plan of Operations Decision**

Dear Ms. Neptun:

I. INTRODUCTION

On January 27, 2016 Furie Operating Alaska, LLC (Furie) submitted a request to the Division of Oil and Gas (Division) for approval of a Unit Plan of Operations (Plan) to continue oil and gas exploration activities in the Kitchen Lights Unit (KLU). The KLU covers approximately 130 square miles in Cook Inlet. Approval of this Plan, along with approvals from other state and federal agencies (Agencies), is necessary for Furie to carry out KLU Exploration. Any further exploration is subject to further review and approval by the Department of Natural Resources (DNR).

II. SCOPE OF DECISION

The DNR Commissioner has delegated authority for approval of Unit Plan of Operations activities to the Division under Department Order: 003 in accordance with Alaska Statute (AS) 38.05 and 11 Alaska Administrative Code (AAC) 83.346. As set forth below, the Division has evaluated the proposed Plan to determine if sufficient information as required by 11 AAC 83.346 is provided. The Division has also considered that criteria set forth in 11 AAC 83.303. In approving a Plan, the Division may require amendments that it determines are necessary to protect the State's interests (11 AAC 83.346(e)).

This decision is authorizing the unit operator, Furie, to continue oil and gas exploration activities in the KLU in the Cook Inlet, South Central Alaska as conditioned by this decision. The submitted Plan includes mobilizing a jack-up rig to the Cook Inlet and drilling up to nine new exploration wells and one well re-entry at a rate of up to two wells per year beginning in 2016 and ending in 2021. This decision authorizes the activities in the submitted plan but withholds approval to commence operations on certain wells as described below.

The Division reviewed the Plan and is approving Furie to commence activities on the following wells: KLU 4, and two wells outside the Corsair block, KLU 9 and 12.

Furie discussed development wells previously approved by LOCI 13-003 in this plan; development wells previously approved under LOCI 13-003 are not subject to this approval. Further approval is not required unless those activities fall outside the scope of LOCI 13-003.

In addition to the wells discussed above, Furie proposes to drill 7 more exploration wells: the KLU Osprey, Deep Jurassic, KLU 6, 7, 8, 10, and 11 in the KLU by October, 2021. Prior to commencing any operations on the remaining exploration wells listed in this paragraph, Furie is required, annually, to obtain Division approval via a letter of non-objection. The Division will consider and evaluate drilling progress, operations, compliance and other relevant information compared with the original plan when considering the issuance of a letter of non-objection.

The approvals necessary for Furie to complete the activities proposed in their Plan application, beginning with this Plan approval are listed below with proposed dates based off the project schedule Furie identified in the Plan application:

Approval:	Activities:	Request Date:	
Plan approval	KLU 4, 9, 12	1/27/16	Initial approval
Letter of Non-Objection	KLU Osprey, Deep Jurassic	1/1/18*	Annual review
Letter of Non-Objection	KLU 10, 11	1/1/19*	Annual review
Letter of Non-Objection	KLU 6, 8	1/1/20*	Annual review
Letter of Non-Objection	KLU 7	1/1/21*	Annual review

* Letters of non-objection are contingent on the Division's overall evaluation of the project.

Furie is encouraged to request the annual letter of non-objection, early, allowing sufficient time for any review process the Division may require for the proposed activities; particularly if they are outside the scope of the original Plan application.

[.] Annual reviews and subsequent letters of non-objection enable the Division to effectively monitor and evaluate the Plan over the proposed multi-year schedule. The Division has weighed the operational and contractual needs of the applicant with the multi-year, multi well, exploration drilling Plan and finds this approval and the letters of non-objection necessary to protect the State's interest.

This decision is not authorizing winter storage of the rig. This decision is not authorizing development wells previously authorized by LOCI 13-003. This decision does not approve Furie to commence operations on the following exploration wells without the required letter of non-objection from the Division: KLU Osprey, Deep Jurassic, KLU 6, 7, 8, 10, 11.

III. LAND STATUS

The KLU is comprised of state lands.

A. Division's Leased Lands: This section refers to Division managed oil and gas leases regardless of ownership of overlying surface lands.

Oil and Gas Lease: Alaska Division of Lands (ADL) 389514

Oil and Gas Mineral Estate Lessee(s): Cornucopia Oil & Gas Company, LLC

Surface Ownership and Access Agreement: State submerged lands and state waters.

Special Use Lands: None identified.

Jointly Managed Lands: None identified.

Other Considerations: Furie anticipates activity in this ADL during the drilling season, from April through October. Furie consulted with the United Cook Inlet Drift Association (UCIDA) to verify there would be no drift net conflict.

Project Components	Meridian, Township, Range, & Section(s)	GPS Coordinates
Wellbore (KLU#4) & Jack-up Rig	S, 010N, 010W, 8	60.97191N, 151.07608W

Oil and Gas Lease: ADL 389924

Oil and Gas Mineral Estate Lessee(s): Cornucopia Oil & Gas Company, LLC

Surface Ownership and Access Agreement: State submerged lands and state waters.

Special Use Lands: None identified.

Jointly Managed Lands: None identified.

Other Considerations: Furie anticipates activity in this ADL during the drilling season, from April through October. Furie consulted with the UCIDA to verify there would be no drift net conflict.

Project Components	Meridian, Township, Range, & Section(s)	GPS Coordinates
Wellbore (KLU#6) & Jack-up Rig	S, 009N, 011W, 17	60.87005N, 151.26767W
Wellbore (KLU#8) & Jack-up Rig	S, 009N, 011W, 18	60.86667N, 151.30780W

Oil and Gas Lease: ADL 389929

Oil and Gas Mineral Estate Lessee(s): Cornucopia Oil & Gas Company, LLC

Surface Ownership and Access Agreement: State submerged lands and state waters.

Special Use Lands: None identified.

Jointly Managed Lands: None identified.

Other Considerations: Furie anticipates activity in this ADL during the drilling season, from April through October. Furie consulted with the UCIDA to verify there would be no drift net conflict.

Project Components	Meridian, Township, Range, & Section(s)	GPS Coordinates
Wellbore (KLU#9) & Jack-up Rig	S, 009N, 011W, 25	61.01361N, 150.98000W

Oil and Gas Lease: ADL 389514

Oil and Gas Mineral Estate Lessee(s): Cornucopia Oil & Gas Company, LLC

Surface Ownership and Access Agreement: State submerged lands and state waters.

Special Use Lands: None identified.

Jointly Managed Lands: None identified.

Other Considerations: Furie anticipates activity in this ADL during the drilling season, from April through October. Furie consulted with the UCIDA to verify there would be no drift net conflict.

Project Components	Meridian, Township, Range, & Section(s)	GPS Coordinates
Wellbore (KLU#12) & Jack-up Rig	S, 010N, 010W, 7	60.96715N, 151.10787W

Oil and Gas Lease: ADL 389193

Oil and Gas Mineral Estate Lessee(s): Cornucopia Oil & Gas Company, LLC

Surface Ownership and Access Agreement: State submerged lands and state waters.

Special Use Lands: None identified.

Jointly Managed Lands: None identified.

Other Considerations: Furie anticipates activity in this ADL during the drilling season, from April through October. Furie consulted with the UCIDA to verify there would be no drift net conflict.

Project Components	Meridian, Township, Range, & Section(s)	GPS Coordinates
Wellbore (KLU#7) & Jack-up Rig	S, 009N, 012W, 34	60.82499N, 151.37530W

Oil and Gas Lease: ADL 389507

Oil and Gas Mineral Estate Lessee(s): Cornucopia Oil & Gas Company, LLC

Surface Ownership and Access Agreement: State submerged lands and state waters.

Special Use Lands: None identified.

Jointly Managed Lands: None identified.

Other Considerations: Furie anticipates activity in this ADL during the drilling season, from April through October. Furie consulted with the UCIDA to verify there would be no drift net conflict.

Project Components	Meridian, Township, Range, & Section(s)	GPS Coordinates
Wellbore (KLU#10) & Jack-up Rig	S, 009N, 011W, 2	60.90374N, 151.18310W
Wellbore (KLU#11) & Jack-up Rig	S, 009N, 011W, 11	60.88679N, 151.16702W

Oil and Gas Lease: ADL 389197

Oil and Gas Mineral Estate Lessee(s): Cornucopia Oil & Gas Company, LLC

Surface Ownership and Access Agreement: State submerged lands and state waters.

Special Use Lands: None identified.

Jointly Managed Lands: None identified.

Other Considerations: Furie anticipates activity in this ADL during the drilling season, from April through October. Furie consulted with the UCIDA to verify there would be no drift net conflict.

Project Components	Meridian, Township, Range, & Section(s)	GPS Coordinates
Wellbore (KLU Osprey) & Jack-up Rig	S, 010N, 011W, 24	60.93616N, 151.15856W

Oil and Gas Lease: ADL 389198

Oil and Gas Mineral Estate Lessee(s): Cornucopia Oil & Gas Company, LLC
 Surface Ownership and Access Agreement: State submerged lands and state waters.
 Special Use Lands: None identified.
 Jointly Managed Lands: None identified.

Other Considerations: Furie anticipates activity in this ADL during the drilling season, from April through October. Furie consulted with the UCIDA to verify there would be no drift net conflict.

Project Components	Meridian, Township, Range, & Section(s)	GPS Coordinates
Wellbore (KLU Deep Jurassic) & Jack-up Rig	S, 010N, 011W, 26	60.92289N, 151.17056W

B. State of Alaska Surface Lands: This section refers to State owned surface lands where no Division managed oil and gas leases exist.

Not applicable for this project.

C. Non-State Lands: This section refers to areas where the State does not own the surface land and no Division managed oil and gas leases exist.

Not applicable for this project.

IV. PROPOSED OPERATIONS

The Plan describes the proposed operations in full detail. Set forth below is a summary of the key details. All dates are approximate and may be altered by weather or logistical requirements. The dates will also change because some of them precede this decision. The Division reviewed this schedule with the expectation that dates early in the sequence would be altered as they have passed. Changes to the sequence and schedule of events will be reviewed by the Division prior to implementation in the field.

A. Sequence and Schedule of Events

Project Milestone #	Project Milestone	Proposed Start Date	Proposed End Date
1.	Permitting	11/1/2015	6/1/2016
2.	Arrival of jack-up in Cook Inlet	1/1/2016	4/1/2016
3.	Drilling of 2 development wells inside the Corsair Block (approved under a separate development Plan LOCI 13-003)	5/15/2016	10/31/2016
4.	Re-entry and evaluation of KLU#4 well to a sufficient depth	5/15/2016	10/31/2017
5.	Exploration drilling of 2 wells outside the Corsair Block (KLU#9 and KLU#12)	4/1/2017	10/31/2017

6.	Drilling of 2 development wells inside the Corsair Block (approved under a separate development Plan LOCI 13-003)	4/1/2017	10/31/2018
7.	Exploration drilling of 2 wells (KLU Osprey and KLU Deep Jurassic Prospect)	4/1/2018	10/31/2018
8.	Exploration drilling of 2 wells (KLU#10 and KLU#11)	4/1/2019	10/31/2019
9.	Exploration drilling of 2 wells (KLU#6 and KLU#8)	4/1/2020	10/31/2020
10.	Exploration drilling of 1 well (KLU#7)	4/1/2021	10/31/2021

B. Well Sites

The KLU is located in the marine waters of Cook Inlet to the North and northeast of the town of Nikiski on the Kenai Peninsula, approximately 18 miles north of the townsite of Kenai and 16 miles south of the Native Village of Tyonek (NVT). The proposed KLU exploration well sites are located approximately 10 miles north of Boulder Point offshore near Nikiski. Figure A-1 shows the vicinity and location of the KLU in Cook Inlet in relation to Boulder Point and other towns in the area.

Furie, as operator, plans to re-enter the KLU#4 exploration well to continue exploration and drill up to 9 new oil and/or gas exploration wells in the KLU using a jack-up drilling rig during the summer drilling seasons from April to October. Figure A-2 shows the planned drill locations. Drilling operations will begin as soon as the necessary permits and approvals are acquired and the jack-up rig arrives in the upper Cook Inlet waters. Furie has contracted the Randolph Yost (Yost), an independent-leg cantilever jack-up rig, to be mobilized to Cook Inlet to accomplish the drilling activities.

In the North Block, Furie plans to re-enter the KLU#4 borehole to a True Vertical Depth (TVD) of 17,858 feet, testing through the Tyonek and Hemlock formations and into the Jurassic formation. An additional 2 exploration wells will be drilled in the North Block into the Hemlock formation. Two exploration wells will be drilled in the Southwest Block to test the Beluga, Tyonek, and Hemlock formations. One proposed well will be drilled in the Central Block to test the Sterling, Beluga, Tyonek, Hemlock, and Upper Jurassic formations. Two proposed wells will be drilled in the Corsair Block. The first well will be drilled over the existing Julius R Platform to reach the Sterling formation. The second exploration well in the Corsair Block will be drilled to test through the Sterling, Beluga, Tyonek, Hemlock, and Upper Jurassic formations.

Water depth at the drilling locations is approximately 90 feet, and no site improvements are anticipated. Transportation to the rig will be provided by helicopter or support vessel. Supplies will be provided to the rig via support vessel on a regular basis. Upon completion of exploration wells, the wells will be developed, suspended, or plugged and abandoned (P&A'd), depending on the exploration results.

C. Buildings

No operations involving buildings are proposed, the drill rig is self-contained.

D. Fuel and Hazardous Substances

Fuel Storage: All fuel required for drilling exploration activities will be contained on the Yost jack-up rig in fuel storage containers. There are four fuel oil storage tanks, one dirty oil tank, and five mud tanks on the Yost. Total fuel oil capacity is 3,120.68 barrels; dirty oil capacity is 49.76 barrels. Total mud tank capacity is 1,467.04 barrels. All independent fuel and hazardous substance containers will be marked and labeled to describe the contents and include the lessee or contractor name. Fuel transfer procedures and safety precautions will be included in the drilling contractor's Spill Prevention, Control, and Countermeasures (SPCC) Plan. Fuel storage, handling, transfers, and spill reporting will be conducted in accordance with the regulatory requirements as described in the SPCC/Oil Discharge Prevention and Contingency (ODPC) Plan.

During equipment storage or maintenance, the area will be protected from leaking or dripping fuel and hazardous substances using drip pans or other liners designed to catch and hold fluids under the equipment or by creating a specialized area using an impermeable liner or other suitable containment mechanism. During fuel or hazardous substance transfers, secondary containment or a surface liner will be placed under all container fuel tank inlet and outlet points, hose connections, and hose ends.

The jack-up rig will be equipped with appropriate spill kits and absorbent material to immediately contain and clean up product in the event of a spill. Trained personnel will attend transfer operations at all times. Fuel will be periodically transferred to the jack-up rig via support vessel. Any transfer or bunkering of fuel for offshore activities will comply with United States Coast Guard (USCG) bunkering at sea regulations. Contractors associated with this project will maintain SPCC plans for drilling and fuel storage and transfer activities.

E. Solid Waste Sites

Solid wastes generated on the jack-up rig will be containerized appropriately as they are generated. Solid wastes include hazardous waste (glycol, lube oil, hydraulic fluid, batteries, and chemicals), oily rags, scrap metal, welding scrap, food wastes, and general refuse. Other solid waste (packaging, domestic trash) from the platform will be containerized in plastic bags and placed in a trash compactor on the facility.

When the compactor container is full, it will be taken ashore via the supply boat for disposal at the Kenai Peninsula Borough (KPB) Central Peninsula Landfill. Wastes will be stored in appropriate containers and periodically removed from the jack-up rig by support vessel and transported to an appropriately permitted disposal facility. Domestic and sanitary wastewater will be treated using a marine sanitation device and discharged into Cook Inlet per Alaska Pollutant Discharge Elimination System (APDES) permit AKG315100. Drilling wastes (drilling mud and cuttings) will be discharged to Cook Inlet in accordance with the APDES Permit.

F. Water Supplies

Potable water will be transferred to the jack-up rig by support vessel. Drill water will be pumped from Cook Inlet in accordance with the APDES permit.

G. Utilities

The jack-up rig is a self-contained unit that will supply all of its own utilities. The rig will be powered by three diesel engines and three AC generators. One emergency engine and AC generator are on standby in case of emergency. Utility and instrument air is provided by three medium-pressure air compressors and one cold start air compressor. The rig also uses three boilers, six air conditioning units, and one water distillation unit.

H. Material Sites

No operations involving material sites are proposed.

I. Roads

No operations involving roads are proposed.

J. Airstrips

An airstrip will not be used for this project; however, the jack-up rig contains a helicopter landing deck.

K. All Other Facilities and Equipment

A variety of offshore support vessels and helicopters will be used throughout exploration activities. The vessels may support the rig at any time and will originate from Nikiski, from either the Offshore Systems Kenai (OSK) Dock or Rig Tender's Dock. No other facilities will be used for this project. Outside the drilling season, the jack-up rig is proposed to over-winter in Homer.

L. Rehabilitation Plan

Furie's Plan states that the jack-up rig will be the only equipment used in support of drilling exploration activities. Upon completion of exploration activities, the Yost jack-up rig will be removed from Cook Inlet.

Any impact to habitat or wildlife resulting from the planned activities will only exist during drilling activities. Upon completion of site activities, no residual impacts will remain. Wells will be P&A'd within one year of closure. Site restoration activities are not anticipated as no permanent infrastructure is associated with the proposed exploration activities.

M. Operating Procedures Designed to Minimize Adverse Effects

In approving a Plan, DNR may require amendments necessary to protect the State's interest (11 AAC 83.346(e)). The Division has determined that to protect the State's interest, it is necessary to incorporate into the Plan the 2009 Cook Inlet Areawide Oil and Gas Lease Sale Final Finding Mitigation Measures. Furie addressed these mitigation measures in the application process, but it is necessary to amend the Plan to make clear that the Plan incorporates the 2009 Cook Inlet Areawide Oil and Gas Lease Sale Final Finding Mitigation Measures.

All plan applicants must complete a mitigation measure analysis demonstrating that each mitigation measure is satisfied or inapplicable to the proposed Plan, or that the applicant is seeking an exception. The 2009 Cook Inlet Areawide Oil and Gas Lease Sale Final Finding Mitigation Measures allow for the Division to grant an exception if the applicant shows that compliance with the measure is not practicable or that the applicant will undertake an equal or better alternative to satisfy the intent of the mitigation measure. Furie completed the mitigation measure analysis for the Cook Inlet Areawide and seeks exceptions to the mitigation measures discussed below.

1. Mitigation Measure A.4.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.

Furie provided the below request and explanation for the exception:

The jack-up rig requires storage of fuel and hazardous substances over water in quantities greater than 55 gallons. To mitigate risks associated with over-water storage of fuel, all fuel required during mobilization activities will be contained within the support vessels or heavy equipment. All vessels and structures will be equipped with spill kits and absorbent material to allow immediate containment and cleanup of spills. The SPCC Plan provides additional details for storage and containment of fuel and hazardous materials.

The Division finds that compliance with the measure is not practicable. Furie's proposal necessitates storing fuel and hazardous substances over water in quantities greater than 55 gallons. The rig proposed for use was built to operate in marine environments and has been engineered to do so safely and mitigate spill risks. Furie additionally states that all vessels and structures will be equipped with spill kits and absorbent material to allow immediate containment and cleanup of spills. The Division grants an exception to this mitigation measure to allow for the Applicant's alternative as set forth in the Plan. This exception does not apply to activities that the Applicant may propose in future or amended plans of operations.

2. Mitigation Measure A.4.j.:

Wherever practicable, the preferred method for disposal of muds and cuttings from oil and gas activities is by underground injection. Other methods of disposal shall be allowed only upon approval by the Director, in consultation with Alaska Department of Environmental Conservation (ADEC) and Alaska Department of Fish and Game (ADFG).

Furie provided the below request and explanation for the exception:

The KLU does not include an underground injection well. Furie requests the Director's approval to discharge drilling mud, cuttings and fluids from the KLU Project to Cook Inlet in accordance with the ADEC APDES permit.

The Division finds that Furie has shown rationale that proposed activities in the Plan equally satisfy the intent of this mitigation measure. Furie's proposal requests the Director's approval to discharge drilling mud, cuttings and fluids from the KLU Project to Cook Inlet in accordance with the ADEC APDES permit. According to ADEC, Furie has applied for coverage under AKG315100 - Mobile Oil and Gas Exploration Facilities in State Waters in Cook Inlet. Under this authorization, Furie will be allowed to discharge water-based drilling fluids. ADEC concurs with the waiver. ADFG has no specific comments regarding the proposed exploration project, provided that Furie follows the established Cook Inlet Mitigation Measures for Habitat, Fish, and Wildlife, Subsistence, and Other Fish and Wildlife Uses, and Other ADFG Regulatory Requirements (Lessee Advisories).

After consultation with ADEC and ADFG, the Division grants an exception to this mitigation measure to allow for the Applicants alternative as set forth in the Plan. This exception does not apply to activities that the Applicant may propose in future or amended plans of operations.

The Division has determined that to protect the State's interest, it is necessary to incorporate into the Plan the 2009 Cook Inlet Areawide Oil and Gas Lease Sale Final Finding Mitigation Measures as amendments and stipulations to this Plan (11 AAC 83.346(e)).

Other operating procedures designed to minimize adverse effects include:

Fish and Wildlife Habitats: "Primary, secondary, and tertiary containment will be implemented to mitigate risks of a spill from storage tanks, process equipment, or fuel lines. Primary containment includes process skid drains and lined berms around tanks; secondary containment includes a sump collection system; and tertiary containment includes deck coaming. Wildlife impact due to noise will be minimized during drilling by implementing a buffer zone encompassing the 120-decibel sound pressure level isopleth. At least one Protected Species Observer (PSO) with stop-work authority will monitor the buffer zone during daylight hours. All platform, helicopter, and vessel crews will be instructed to assist with the detection of Cook Inlet beluga whales and Stellar sea lions. Drilling fluids will be water-based, following the Drill Fluid Plan approved by ADEC. Furie contacted the ADFG, Invasive Species Section for analysis of marine growth samples collected from the jack-up rig legs. The Department (ADFG) determined that there would be no introduction of invasive species into the waters of Cook Inlet."

Historic and Archeological Sites: No historic or archeological sites will be disturbed during project activities. A review of the Alaska Heritage Resources Survey database was conducted in November 2012. The database did not contain any surveys conducted in the KLU Project Area. In addition, the Bureau of Ocean Energy Management Alaskan Shipwreck Table was reviewed and it was determined that there are no shipwrecks on the sea floor in the vicinity of the planned well locations. A high-resolution bathymetry and side-scan sonar survey of the sea floor was conducted in 2011, which yielded no evidence of shipwrecks or cultural resources in the area.

Public Use Areas: The sites proposed for exploration are not sited on and will not impact any residential, commercial, or recreational areas, native allotments, subsistence use areas, or private lands. The Cook Inlet Drift Net Area is below the East/West Forelands and Furie Consulted with the UCIDA to verify there would be no drift net conflicts. The set net fishing areas are 2 miles or more from the KLU boundary and the drill sites are farther away within the KLU boundary. To minimize support vessel impacts, Furie will coordinate the use of offshore supply vessels (OSVs) and helicopters with other companies operating in the area.

Other Uses: A programmable logic controller-based system will monitor process safety devices and initiate isolated equipment shutdowns. All enclosures will have gas detection equipment. Fire suppression will be installed, as required, and will use a non-hazardous suppression agent.

V. CONSIDERATION OF UNIT PLAN OF OPERATIONS REQUIREMENTS UNDER 11 AAC 83.346(c-d) and 11 AAC 83.390

A. Full Payment of Damages to the Surface Owner 11 AAC 83.346(c)

The State owns the surface and full payment of damages to the State are accomplished through a bond posted by the applicant discussed in subsection C below.

B. Plan Sufficiency 11 AAC 83.346(d)

A proposed plan must include statements, maps, or drawings setting forth

- (1) the sequence and schedule of operations;
- (2) the projected use requirements directly associated with the proposed operations;
- (3) plans for rehabilitation;
- (4) a description of operating procedures to prevent or minimize adverse effects on natural resources and concurrent uses of the area (11 AAC 83.346(d)).

The information in section IV. Proposed Operations, above, and additional information contained in Furie's proposed Plan satisfy the requirements for a plan under 11 AAC 83.346(d) and thus provide the Division with sufficient information available at this time to determine the surface use requirements and impacts directly associated with the proposed operations.

C. Oil and Gas Lease Bond 11 AAC 83.390

The State owns all the surface land where the proposed Plan activities will be located. The State owns all the mineral estate the Plan proposes to explore. For the State, a lessee provides for payment of damages by posting a bond, and remains liable for full damages under the lease. Furie has a Statewide Oil and Gas Bond in the amount of \$500,000.00 and continuing liability under the lease.

VI. CONSIDERATION 11 AAC 83.303 CRITERIA

A. Protection of Public Interest

The Division has considered the public interest, considering statutory provisions that provide for conserving natural resources through unitized development (11 AAC 83.303(a); AS 38.05.180(p)). The legislature has declared the public's interest in oil and gas development as an interest in developing oil and gas resources to maximize economic and physical recovery, maximize competition, and maximize use of Alaska's human resources (AS 38.05.180(a)(1)).

This Plan addresses the means for carrying out the KLU exploration activities as described in the approved 3rd KLU Plan of Development (POD). Additionally, development under this Plan may contribute to the market by increasing overall gas production in the area.

The proposed Plan provides for use of Alaska's human resources by pledging to provide local employment and contracting opportunities and to encourage its contractors to do the same (Proposed Plan Mitigation Measure Analysis A.7.a).

B. Conservation of Natural Resources

The Division has considered whether the Plan promotes conservation of all natural resources, including all or part of an oil or gas Plan, field, or area (11 AAC 83.303(a)(1)). Conservation, in this context, means maximizing the efficient recovery of oil and gas and minimizing the adverse impacts on the surface and other resources (11 AAC 83.395(1)). Development within a unit is intended to provide more efficient development than on the individual leases that make up the unit, and this Plan considers the development of the Unit, not single leases. Efficient development creates less impact on the land and promotes maximum use of all natural resources in the area, consistent with the public interest.

There are a number of ways in which the Plan seeks to minimize adverse impacts on natural resources. This Plan incorporates the mitigation measures set forth in the 2009 Cook Inlet Areawide Oil and Gas Lease Sale Final Finding (Cook Inlet Mitigation Measures). These mitigation measures include measures to protect habitat, fish, and wildlife, protect subsistence resources, and limit the impact from fuel and hazardous substances (2009 Cook Inlet Areawide Final Finding at Chapter 9 sections 9-3 to 9-6). The Plan also includes operating procedures to prevent or minimize adverse effects, including effects on the environment, wildlife, and subsistence resources discussed in section IV.M of this decision.

C. Prevention of Economic and Physical Waste

The Division has considered whether the Plan promotes the prevention of economic and physical waste (11 AAC 83.303(a)(2)). Issues of economic and physical waste are considered during unitization and annually thereafter in the approved POD; this Plan conforms to the approved 3rd KLU POD.

D. Protection of All Parties of Interest, Including the State

The Division has considered whether the Plan provides for the protection of all parties of interest, including the State (11 AAC 83.303(a)(3)). The parties of interest to a unit plan are the unit operator and working interest owners. The State has an economic interest in the oil and gas resources because it receives royalties from production. It is further in the State's best interest to encourage assessment of oil and gas resources, recognize the costs of exploring in varied geographic regions, and minimize the adverse impact of exploration, development, production, and transportation activity (AS 38.05.180(a)(2)).

Without approval of a Plan, Furie cannot perform KLU exploration, and the State cannot recover royalties that may come from future development. The Plan thus protects the Unit Operators, working interest owners' and the State's interests in developing the resources.

E. Environmental Costs and Benefits

The Division has considered the environmental costs and benefits of unitized development outlined in this Plan and through the approved 3rd KLU POD (11 AAC 83.303(b)(1)); this Plan conforms to the approved 3rd KLU POD.

The Cook Inlet Mitigation Measures, incorporated into this Plan by amendment, include measures to protect habitat, fish, and wildlife (2009 Cook Inlet Areawide Final Finding at Chapter 9 sections 9-3 to 9-5). Additional operating procedures designed to minimize adverse effects on other natural resources and other uses of the unit area and adjacent areas are discussed in section IV.M of this decision.

F. Geological and Engineering Characteristics of Hydrocarbons

DNR previously considered the geological and engineering characteristics of a potential hydrocarbon accumulation or reservoir when it approved the unit agreement (11 AAC 83.303(b)(2)); this Plan conforms to the approved 3rd KLU POD.

G. Prior Exploration Activities

The Division has considered prior exploration activities in the Plan area pursuant to 11 AAC 83.303(b)(3). The KLU is an 83,394 acre unit that is divided into four blocks: the Corsair, North, Southwest, and Central blocks. Furie's drilling activities to date have occurred in

the North and Corsair blocks. In 2015, Furie completed construction and installation of its offshore platform in the Corsair block and onshore processing facilities, pipelines are laid, and pre-commissioning is underway. It has contracted use of a workover rig to complete the KLU#3 well. Furie anticipates first gas production before the end of 2015. Additionally, Furie has entered into a gas supply agreement with Homer Electric Association beginning in April 2016.

H. Plan of Development

The Division has considered the plans for development set forth in and approved by DNR in the POD (11 AAC 83.303(b)(4)). The 3rd KLU POD approved on December 16, 2015, supports the operations Furie identifies in the proposed Plan.

I. Economic Costs and Benefits to the State

The Division has considered the economic costs and benefits to the State (11 AAC 83.303(b)(5)). Without approval of a plan, Furie will be unable to proceed with further KLU Exploration, which will cost the State the economic benefit of the royalties, as well as other economic benefits that flow from production.

J. Other Relevant Factors to Protect the Public Interest

The Division has considered other relevant factors necessary or advisable to protect the public interest (11 AAC 83.303(b)(6)). These other factors consist of the mitigation measures (section IV.M of this document) that will apply to this Plan; and the necessity to obtain other permits and approvals by different Agencies and landowners.

VII. CONSULTATION WITH OTHER GOVERNMENT ENTITIES

In reviewing the proposed Plan, the Division considered the fact that Furie may require approvals from Agencies for other elements of its project. Although mentioned in the Plan and above, these aspects of the project are not operations being approved by this decision and the Division offers no opinion on whether an agency should or should not approve these activities.

In addition to considering the approvals required by Agencies as they relate to this decision, the Division provided an Agency review and comment opportunity for the activities proposed for authorization under this decision. The following government entities were notified on February 19, 2016 for comment on the Plan: ADFG, ADEC, KPB, USCG, United States Army Corps of Engineers (USACE), Alaska Oil and Gas Conservation Commission (AOGCC), Department of Transportation and Public Facilities (DOTPF), City of Kenai, Cook Inlet Region, Incorporated (CIRI), National Oceanic and Atmospheric Administration (NOAA), United States Fish and Wildlife Service (USFWS), and DNR: Division of Mining, Land and Water (DMLW), Office of History and Archaeology (OHA), Office of Project Management and Permitting OPMP, Division of Parks and Outdoor Recreation (DPOR), and Division of Oil and Gas. The comment deadline was 4:30 pm Alaska time on March 4, 2016. Comments were received and the Division, Applicant, and commenting agencies reconciled the comments without modifying the Plan; Agency comments and Division's responses are summarized in Appendix B. The Plan was then publicly noticed.

VIII. PUBLIC NOTICE

Public notice of the Plan and opportunity to comment, per AS 38.05.035, was published in the Alaska Dispatch News (ADN) and Peninsula Clarion on March 8, 2016 with a deadline for comments of April 6, 2016 at 4:30 pm Alaska time. Additionally, a copy of the notice was

posted on DNR's web site and faxes of the public notice were sent to the Kasilof, Kenai, Nikiski, Soldotna and Tyonek post offices. Timely comment was received by the Division. No modifications to the Plan were made as a result of the comments; public comment and the Division's and the applicant's responses are summarized in Appendix B.

IX. CONDITIONS OF APPROVAL

Having considered the proposed project, the Division approves the Plan as amended and modified by this decision and subject to the below conditions of approval and project specific stipulations:

To protect the State's interest, the Division finds that it is necessary to amend the Plan to incorporate the following Conditions of Approval:

- a) The applicant shall defend, indemnify and hold the State of Alaska harmless from and against any and all claims, damages, suits, losses, liabilities and expenses for injury to or death of persons and damage to or loss of property arising out of or in connection with the entry on and use of State lands authorized under this approval by the applicant, its contractors, subcontractors and their employees.
- b) The applicant shall inform and ensure compliance with any and all conditions of this approval by its employees, agents and contractors, including subcontractors at any level.
- c) Unless pre-authorized by a general permit, amendments and modifications to this approval require advance notice and must be approved in writing by the DNR.
- d) The Commissioner of the DNR may require that an authorized representative be on-site during any operations conducted under this approval. This stipulation is required to ensure that the Divisions of Oil and Gas and Mining, Land and Water meet their statutory responsibilities for monitoring activities taking place on State-owned lands.
- e) A status report for the activities conducted under this approval must be filed with this office on May 1 and November 1 each year, from the date this approval is issued and until a final completion report is filed with the Division. If a lessee requests an assignment, a status report must also be submitted during the assignment process. Failure to file in a timely manner may result in revocation of this approval.
 - a. Each status report shall include a statement describing and map(s) depicting all operations actually conducted on the leased area as of the date the report is prepared, which includes the location, design and completion status of well sites, material sites, water supplies, solid waste sites, buildings, roads, utilities, airstrips, and all other facilities and equipment installed.
 - b. Upon completion of operations, the applicant will submit a completion report which will include all information required of a status report described in (a) above as well as a statement indicating the date of operations completion, any noncompliance with the terms of this plan approval of which a reasonable lessee would have knowledge of, clean-up activities conducted, the method of debris disposal, and a narrative description of known incidents of surface damage.
- f) Notification. The applicant shall notify the DNR of all spills that must be reported under 18 AAC 75.300 under the timelines of 18 AAC 75.300. All fires and explosions must be reported to DNR immediately. The DNR 24 hour spill report number is (907) 451-2678; the fax number is (907) 451-2751. The ADEC oil spill report number is (800) 478-9300. DNR and ADEC shall be supplied with all follow-up incident reports.

- g) A certified As-Built survey of the improvement shall be provided within one year of placement of the improvement. This As-Built must be submitted in both electronic and physical format.

To protect the State's interest, the Division finds that it is necessary to amend the Plan to incorporate the following Project Specific Stipulations:

- 1.) Furie is required to notify ADFG if the proposed activities will expand to the west in any manner that would affect the Trading Bay State Game Refuge or the Redoubt Bay Critical Habitat Area.
- 2.) Furie is required to request and obtain a letter of non-objection from the Division prior to commencing operations on the following wells: KLU Osprey, Deep Jurassic, KLU 6, 7, 8, 10, 11.

X. FINDINGS AND DECISION

Having considered the proposed project and based on the foregoing discussion and consideration of issues and conditions of approval, the Division makes the following findings:

1. The Plan provides sufficient information, based on reasonably available data, for the Division to determine the surface use requirements and impacts directly associated with the proposed operations.
2. The Plan includes statements, maps, or drawings setting forth the sequence and schedule of operations, projected use requirements, description of operating procedures, and a plan of rehabilitation designed to prevent or minimize adverse effects.
3. To protect the State's interest and mitigate potential adverse social and environmental effects associated with the Plan, the Division finds it necessary to amend the Plan to incorporate the mitigation measures set forth in the 2009 Cook Inlet Areawide Oil and Gas Lease Sale Final Finding.
4. All oil and gas activities conducted under oil and gas leases are subject to numerous local, state and federal laws and regulations with which Furie is expected to comply.
5. The people of Alaska have an interest in developing the state's oil and gas resources and maximizing the economic and physical recovery of those resources. AS 38.05.180(a).
6. Alaska's economy depends heavily on revenues related to oil and gas production and government spending resulting from those revenues. The related revenue sources include bonus payments, rentals, royalties, production taxes, income taxes, and oil and gas property taxes.
7. The potential benefits of approving this Plan outweigh the possible adverse effects, which have been minimized through imposition of mitigation measures, conditions of approval, and project specific stipulations, and thus approval of this Plan as modified is in the State's best interest.

Based upon the Plan, supporting information provided by the applicant and the Division's review, determination of applicable statutes and regulations, consultation with other agencies, relevant entities and individuals, public comment, and the above findings related to that Plan, the Division hereby approves the Plan as modified.

Sincerely,



Kim Kruse
Permitting Section Manager
Division of Oil and Gas

5/20/2016

Date

Appeal

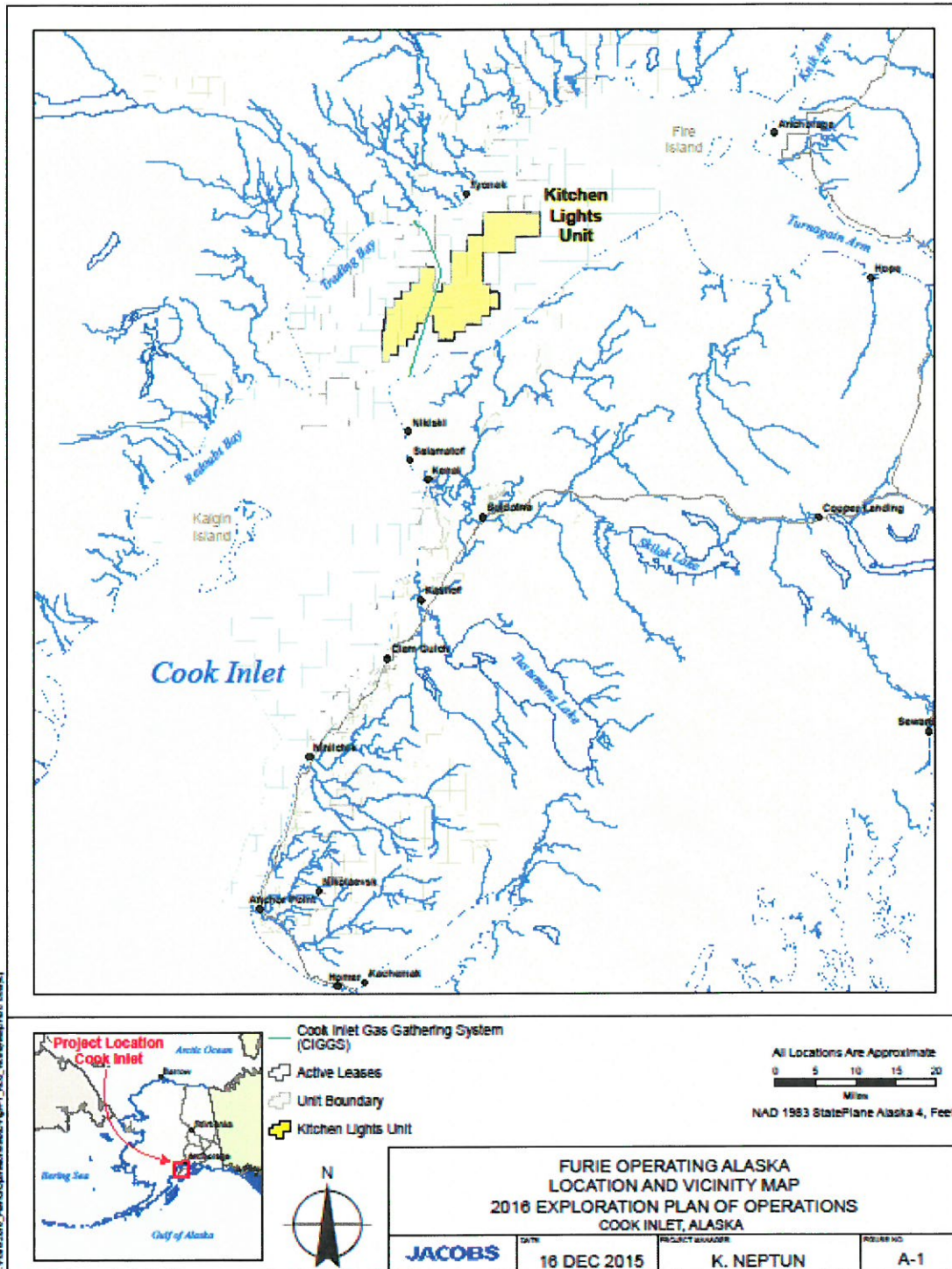
An eligible person affected by this decision may appeal it, in accordance with 11 AAC 02. Any appeal must be received within 20 calendar days after the date of issuance of this decision, as defined in 11 AAC 02.040(c) and (d), and may be mailed or delivered to the Commissioner, Department of Natural Resources, 550 W. 7th Avenue, Suite 1400, Anchorage, Alaska 99501; faxed to 1-907-269-8918; or sent by electronic mail to dnr.appeals@alaska.gov. This decision takes effect immediately. An eligible person must first appeal this decision in accordance with 11 AAC 02 before appealing this decision to Superior Court. A copy of 11 AAC 02 may be obtained from any regional information office of the Department of Natural Resources.

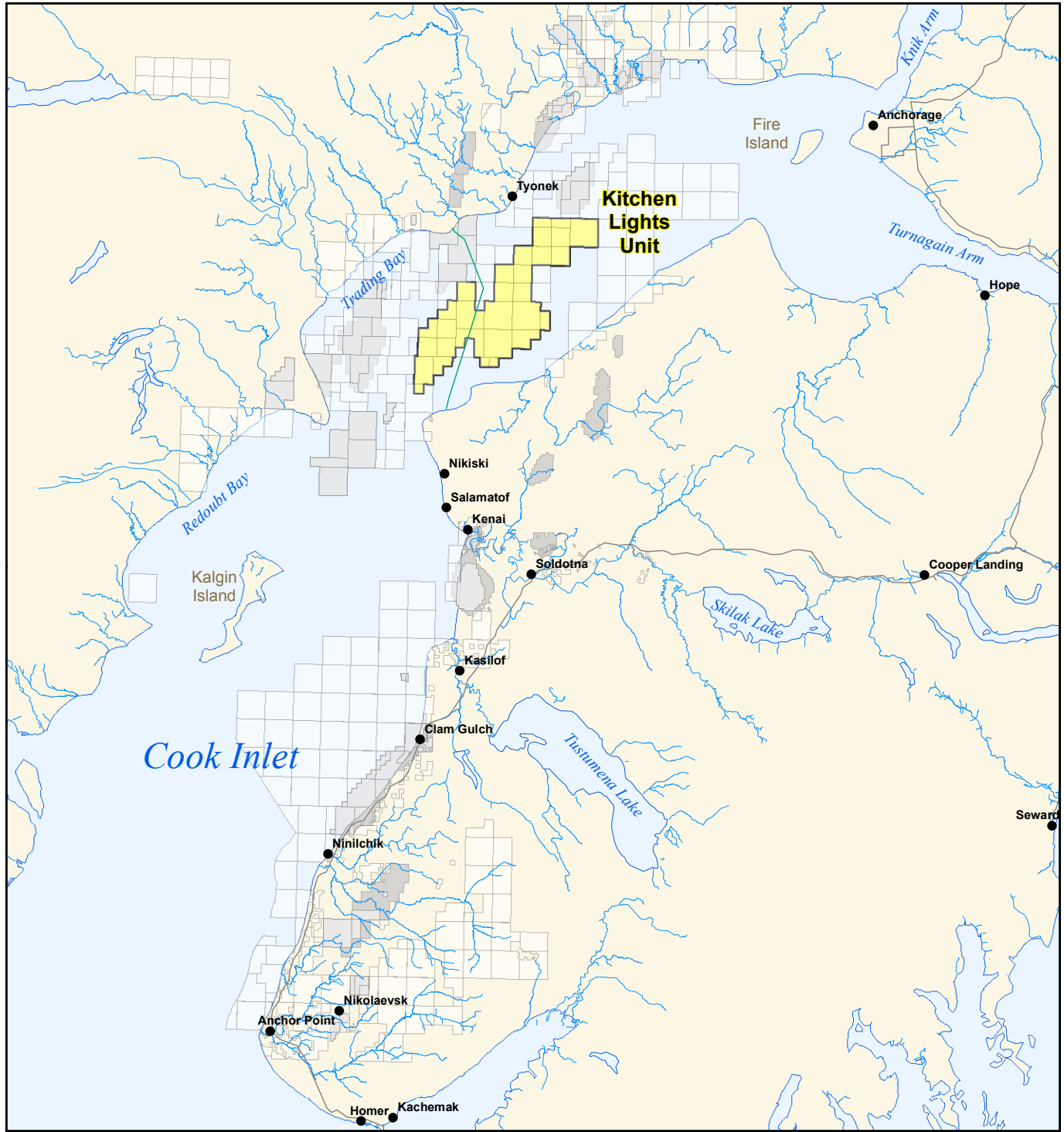
Attachments:





- Appendix A: Maps and Figures
- Appendix B: Agency and Public Comments

ecc: Division: Kim Kruse, Thomas Barrett, John Easton, Hak Dickenson and Jeanne Frazier
DMLW: Project Development Team, Clifford Larson, James Sowerwine, Eric Moore and Henry Brooks
OHA: ohaacc@alaska.gov
ADFG: Marla Carter, Mark Fink, Virginia Litchfield and Michael Daigneault
ADEC: dec.water.oilandgas@alaska.gov, Gary Evans, Mike Evans, Graham Wood, Young Ha, Tim Law, Gerry Brown and Natalie Wagner
OPMP: Sara Taylor, Mark Morones, Sara Longan and Jeff Bruno
KPB: Marcus Mueller, Johni Blankenship, Julie Denison, Dan Nelson and Karyn Noyes
AOGCC: James Regg
DOTPF: David Post
DPOR: Pamela Russell and Ryan Thomas
Other: jack.j.hewitt@usace.army.mil, HCD.Anchorage@noaa.gov, regpagemaster@usace.army.mil, CEPOA-RD-Kenai@usace.army.mil, CIRI, Barbara Mahoney, Kimberly Klein, Lynnda Kahn, Linda Speerstra, Sandra Modigh, Lisa Fox, Mark Ridgway, Joe Meade, Phil North and Gary Lawley

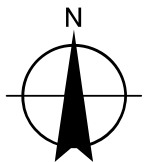
Appendix A: Maps and Figures





-  Cook Inlet Gas Gathering System (CIGGS)
-  Active Leases
-  Unit Boundary
-  Kitchen Lights Unit

All Locations Are Approximate
 0 5 10 15 20
 Miles
 NAD 1983 StatePlane Alaska 4, Feet



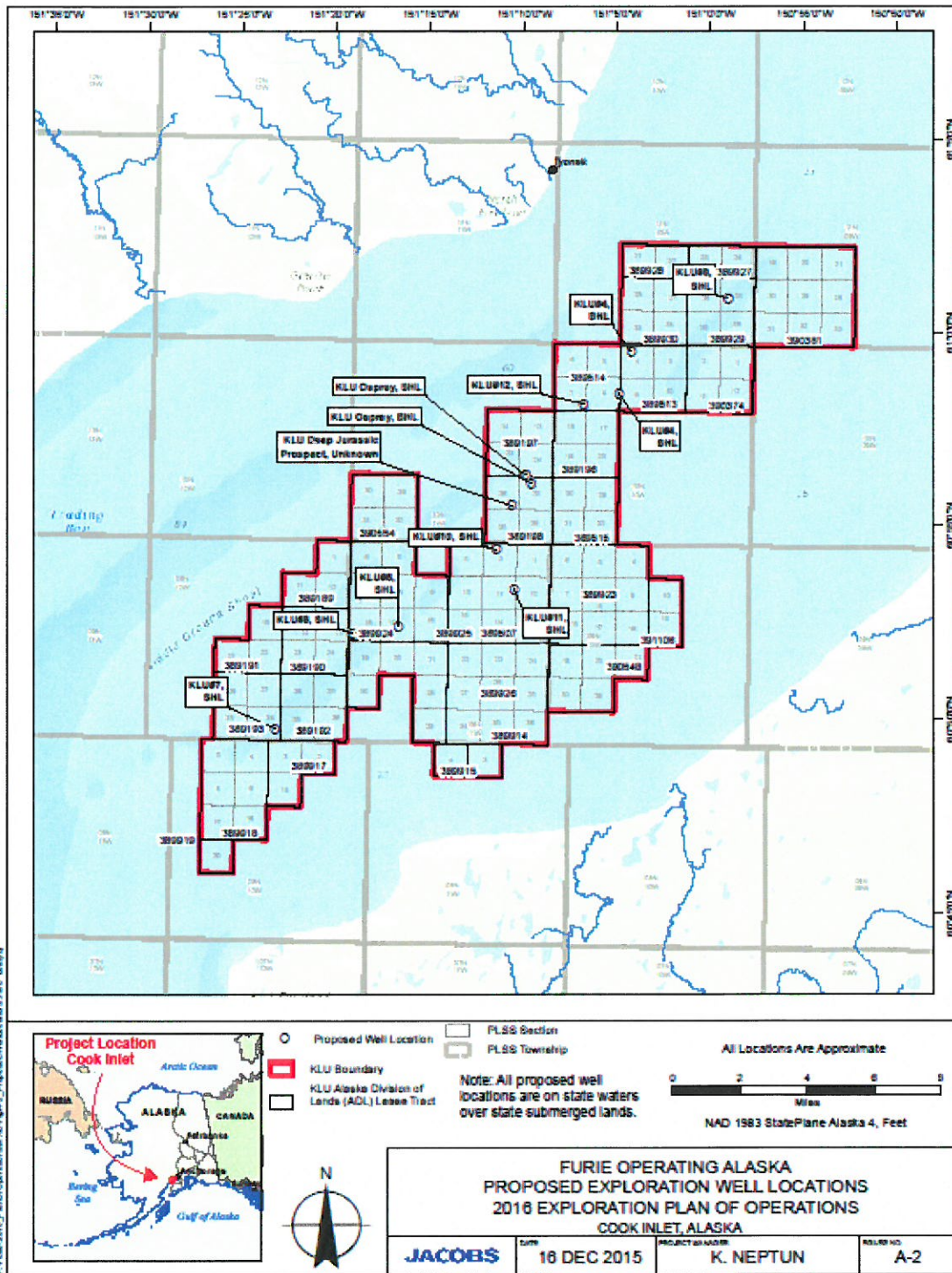
FURIE OPERATING ALASKA
 LOCATION AND VICINITY MAP
 2016 EXPLORATION PLAN OF OPERATIONS
 COOK INLET, ALASKA

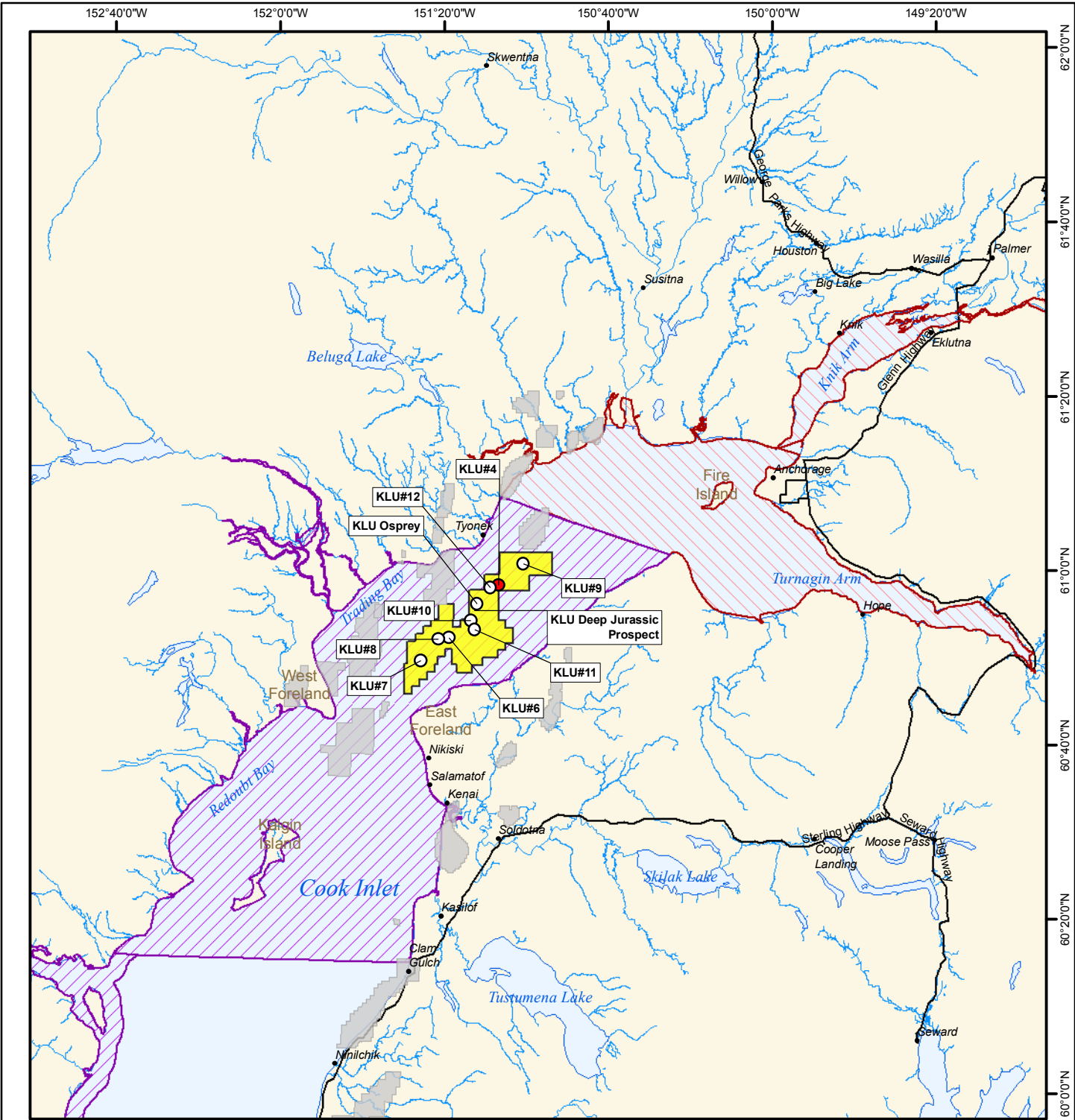
JACOBS

DATE:
16 DEC 2015

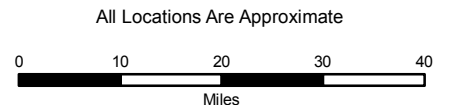
PROJECT MANAGER:
K. NEPTUN

FIGURE NO:
A-1

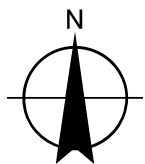




- Existing Well Location
- Proposed Well Location
- Unit Boundary
- Kitchen Lights Unit
- ▨ Beluga Critica Habitat Area 1
- ▨ Beluga Critical Habitat Area 2



NAD 1983 StatePlane Alaska 4, Feet



FURIE OPERATING ALASKA
 CRITICAL BELUGA HABITAT LOCATIONS
 2016 EXPLORATION PLAN OF OPERATIONS
 COOK INLET, ALASKA

JACOBS

DATE: 14 JAN 2016

PROJECT MANAGER: K. NEPTUN

FIGURE NO: A-3

Appendix B: Agency and Public Comments

Agency Comments:

The proposed Furie Kitchen Lights Unit Exploration project was circulated for agency review on February 19, 2016. The comment period was for 14 days which ended on March 4, 2016. Two agencies commented:

1. Ms. Pamela Russell with DPOR, February 22, 2016.
Ms. Russell stated "State Parks does not have any comments for this project."

Division's Response:

Comment noted and forwarded to the applicant for their information.

2. Mr. Michael Daigneault with ADFG, March 4, 2016.
ADFG has no specific comments regarding the proposed exploration project, provided that the applicant follows the establish Cook Inlet mitigation measures for Habitat, Fish, and Wildlife (Chapter 9, A2), Subsistence, and Other Fish and Wildlife Uses (Chapter 9, A3), and Other ADFG Regulatory Requirements (Chapter 9, B3). If the proposed activities will expand to the west in any manner that would affect the Trading Bay State Game Refuge or the Redoubt Bay Critical Habitat Area, please notify ADFG immediately.

Division's Response:

Comment noted and forwarded to the applicant. See Project Specific Stipulation # 1.

Public Comment:

Public notice of the Plan and opportunity to comment was published in ADN and Peninsula Clarion on March 8, 2016, with a deadline for comments on April 6, 2016 at 4:30 pm Alaska time. One public commenter submitted timely comment:

1. Mr. Gary Lawley with Kinnetic Labs Inc., March 29, 2016.
Mr. Lawley stated "The application references a Biological Assessment (BA) as being available upon request. Could we receive an electronic copy of this document please?"

Applicant's Response:

Furie emailed the Division an electronic copy of the 2012 BA produced by Furie for activities in Cook Inlet. It covers Beluga whales, sea lions, and fish. Furie also emailed the 2011 Biological Evaluation which covers Beluga whales as well.

Division's Response:

The Division provided Furie's electronic version of BA to the commenter.