THE STATE of ALASKA
GOVERNOR BILL WALKER

Department of Natural Resources

Division of Oil & Gas

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

January 15, 2015

Sam Widmer
Environmental Coordinator
ConocoPhillips Alaska, Inc.
PO Box 100360
Anchorage, AK 99510

RE: **LONS 14-008, KRU, Moraine Appraisal Well Test, Unit Plan of Operations Decision**

Dear Mr. Widmer:

I. INTRODUCTION

On September 24, 2014 ConocoPhillips Alaska, Inc. (CPAI) submitted a request to the Division of Oil and Gas (Division) for approval of a Unit Plan of Operations (Plan) to carry out the Moraine Appraisal Well Test in the Kuparuk River Unit (KRU). The Moraine Appraisal Well is approximately two miles northwest of Drill Site 3S (DS-3S). Approval of this Plan, along with approvals from other state and federal agencies (Agencies), is necessary for CPAI to carry out Moraine Appraisal Well Test. 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 approving 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 the 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)).

Agency authorizations for this project include the following:

☐ ADEC Air Permit – Minor General Permit MG1
☐ ADEC ODCPC Supplemental Information
☐ ADEC Temporary Drilling Waste Storage Authorization
☐ ADNR Division of Oil & Gas Lease Operations
☐ ADNR Division of Land, Mining, and Water Tundra Travel Authorization
☐ ADNR Division of Land, Mining, and Water Use Permits

☐ North Slope Borough – Administrative Approval

III. LAND STATUS

The KRU is comprised of state lands.

A. State Mineral Estate:
ADL: 025528
Oil and Gas Mineral Estate Lessee(s): ConocoPhillips Alaska, Inc.
Surface Ownership and Access Agreement: The State of Alaska owns the land within this ADL
Special Use Lands: North Slope Area under ADL 50666
Jointly Managed Lands: N/A
Other Considerations: N/A

Major Components	Meridian, Township, Range, & Section(s)	GPS Coordinates
ADL 025528	Township 12N, Range 7E, Section 12, Umiat Meridian	70’24’32.0”, -150’16’06.0”

B. State of Alaska Surface Lands:
Oil and Gas Mineral Estate Owner and Relationship with Applicant: N/A
Access Agreement: N/A
Special Use Lands: N/A
Jointly Managed Lands: N/A
Other Considerations: N/A

Major Components	Meridian, Township, Range, & Section(s)	GPS Coordinates
N/A	N/A	N/A

C. Private Lands:
Oil and Gas Mineral Estate Owner and Relationship with Applicant: N/A
Surface Ownership and Access Agreement: N/A
Special Use Lands: N/A
Jointly Managed Lands: N/A
Other Considerations: N/A

Major Components	Meridian, Township, Range, & Section(s)	GPS Coordinates
N/A	N/A	N/A

IV. PROPOSED OPERATIONS

The Plan describes the proposed operations in full detail. Set forth below is a summary of the key details.

A. Sequence and Schedule of Events

Table 1 displays the proposed schedule for the 2014-2015 drilling season. All dates are approximate and may be altered by weather or logistic requirements. The dates will also change because some of them precede this decision. The schedule nonetheless provides the Division with an overall idea of the sequence and schedule of events. The Division reviewed this schedule with the expectation that dates early in the sequence would move back, but that later dates for finishing drilling, demobilization, and clean up would remain the same.

Project Milestone #	Project Milestone	Proposed Start Date	Proposed End Date
1	Pre Pack route and pad	12/19/2014	12/20/2014
2	Construct ice road and pad	1/1/2015	1/15/2015
3	Install Cellar and conductor	1/16/2015	1/18/2015
4	Move drill rig to location	1/28/2015	1/28/2015
5	Drill/Core/P&A Moraine #1 well	1/29/2015	2/22/2015
6	Move drill rig back to Kuparuk	2/23/2015	2/23/2015
7	Close out road and pad	2/24/2015	3/1/2015

B. Well Sites

The proposed Moraine appraisal well is located west of the Kuparuk River and east of the Colville River, and it is approximately 22 miles northeast of the Village of Nuiqsut and approximately 45 miles northwest of Deadhorse. The ice pad will be located on State of Alaska land, State Lease ADL 025528. The planned well bore design will be similar to those employed in North Slope exploratory wells. The actual well bore design is a part of the Drilling Permit issued by the Alaska Oil and Gas Conservation Commission (AOGCC). A single reservoir penetration is planned.

C. Buildings

All facilities are temporary. Temporary structures consisting of a shop, rig camp, drill cuttings storage, drill pipe storage, light plants, and spill response equipment will be located on the ice pad.

D. Fuel and Hazardous Substances

Up to 18,500 gallons of diesel for the drill rig and for the rig camp may be stored on-site. Fueling and transfer operations are required to be performed in accordance with applicable fluid transfer procedures. Fluids produced during flow testing will be held in tanks until testing is completed. Produced oil will either be injected back into the formation or hauled to a Kuparuk facility for processing. The Oil Discharge Prevention and Contingency Plan, ADEC Plan Number 12-CP-5096 is in place for this project.

E. Solid Waste Sites

Solid non-burnable waste will be deposited in large dumpsters located at the drill site. These containers will be back-hauled to the NSB landfill at Prudhoe Bay. Food waste that could attract wildlife will either be stored in enclosed conex containers awaiting periodic hauling, or such waste will be placed in a secured wildlife proof container while waiting for pickup.

Excess drilling muds and drill cuttings will be disposed of by injection into an approved Class II well at Kuparuk or through the grind and inject facility (Drill Site 4) at Prudhoe Bay. Prior to hauling, the cuttings and liquids may be temporarily stored in metal storage bins within an ice-bermed storage cell.

Ice-Bermed Storage Cell:
The cuttings and liquids may be temporarily stored in metal storage bins (also known as cutting boxes) in an ice-bermed drilling waste storage cell on the ice pad. It is anticipated that up to 15,000 cubic feet of cuttings could be generated drilling the well. The cell dimensions will be approximately 100 feet x 150 feet x 3 feet high, giving a gross volume of 45,000 cubic feet. The State of Alaska Department of Environmental Conservation has a requirement for 2 feet of freeboard, therefore the usable storage volume is one third the gross or 15,000 cubic feet. The storage cell may be constructed with different dimensions as long as there is 2 feet of freeboard above the cuttings and conforms to the Alaska Department of Environmental Conservation *Temporary Storage of Drilling Waste in Ice Cells* requirements. The volume of waste placed in the storage cell will be minimized as will snow accumulation in the cell. Visual site inspections will be conducted following removal of the drilling waste to assure all waste has been removed. An additional inspection is typically performed during the summer “stick picking” work.

Metal Storage Bins:
CPAI may stage up to two 60 cubic yard metal bins in the lined containment area. As the bins become filled with cuttings, the contents will be removed by vacuum truck and transported to an approved Class II injection well or to the Grind and Inject Facility at Drill Site 4 in the Eastern Operating Area of Prudhoe Bay.

F. Water Supplies

Fresh water is needed for construction of the ice road and ice pad and for the maintenance of these structures. An ice road approximately 2-1/2 miles in length will be constructed from Drill Site 3S (DS-3S). Approximately 1 mile of ice road can be constructed per day and the fresh water requirement for ice road construction is approximately 1,000,000 gallons per mile of ice road for a total of approximately 2,500,000 gallons. Construction of the ice pad will require approximately 3,000,000 gallons of water. It will take approximately 14 days to construct the ice road and pad. The ice pad and ice road may be scarified with equipment to reduce slickness for safety purposes.

Fresh water is also needed for drilling operations and camp use. Approximately 20,000 gallons per day (gpd) of water will be required for drilling operations and the camp will need about 5,000 gpd of fresh water. This is a total of approximately 25,000 gpd of fresh water for drilling and camp needs while drilling operations are underway. Approximately 40,000 gallons of water per day will be required to maintain each mile of ice road during the winter season. The drilling operation is expected to take approximately 30 days from beginning of drilling to finish. A table at the end of this section details the estimated water requirements. Water and ice chips will be obtained from permitted sources. Snow cover will be removed from all sources approved for water withdrawal and/or ice mining. The purpose of snow removal is to provide access for water trucks and ice chippers, installation of temporary water houses, and truck turnaround areas. Additional snow may be removed from any non fish-bearing lakes and lakes less than 7 feet deep for the purpose of ice road and pad construction. Additional snow removal from fish-bearing

lakes, beyond the minimal amount required for vehicle access and water/ice withdrawal, must be approved by the Alaska Department of Fish and Game on a case by case basis. Water may be hauled from additional approved sources but will not be taken from any rivers. Water for construction and drilling will be pumped from the sources and transported by tank trucks. Water for human use will be hauled from the Kuparuk Operations Center (KOC) water treatment facility. Wastewater from the camp will be hauled to the KOC wastewater treatment facility for disposal.

G. Utilities

No utilities will be required or constructed for this project.

H. Material Sites

No material sites will be required or constructed for this project.

I. Roads

The ice road will start at DS-3S and proceed northwest to the well location. The ice road generally will be 35 feet wide and 6 inches thick. Rig mats or other similar items may be used depending on conditions encountered during ice road construction or during equipment movement. Such devices will be removed prior to the end of the operating season. Ice pullout areas or widened sections of the ice road may be constructed at certain locations depending on field conditions. Any widened sections of ice road will be documented in the end of season completion reports.

The drilling operations will utilize a single drill pad with approximate dimensions of 800 feet x 800 feet. The pad will average approximately 6 inches in thickness except under the drill rig where the thickness will be a minimum of 1 foot, and the cuttings storage area where the thickness will be 2 feet.

J. Airstrips

No airstrips will be required or constructed for this project.

K. All Other Facilities and Equipment

Light plants will be placed on frozen lakes at the water houses and on access roads for safety purposes.

L. Rehabilitation Plan

Upon completion of drilling and evaluation operations, all debris will be hauled to an approved disposal site. The ice pad will be chipped or scraped to pick up any spills and the scrapings will be hauled to an approved disposal well. Current plans are to plug and abandon the well prior to the end of the winter drilling season. Final site closure will be approved by all appropriate agencies.

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). The Division has determined that to protect the State's interest, it is necessary to incorporate into the Plan the North Slope Areawide Best Interest Finding (BIF) Mitigation Measures. CPAI addressed these mitigation measures in the application process, and it is necessary to amend the Plan to make clear that the Plan incorporates the North Slope Areawide

Mitigation Measures. All plan applicants must complete a mitigation measure analysis form demonstrating that each mitigation measure is satisfied or inapplicable to its proposed Plan, or that the applicant is seeking an exception. The North Slope Areawide 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. CPAI completed the mitigation measure analysis for the North Slope Areawide and no exceptions were requested.

The Division has determined that to protect the State's interest, it is necessary to incorporate into the Plan the North Slope Areawide Mitigation Measures as amendments and stipulations to this Plan (11 AAC 83.346).

N. Local Hire, Communication and Training

The CPAI employment process places a priority on local hire. The intent of the process is to search for competitive local candidates. This includes: posting the ConocoPhillips Job Posting; notifying the Alaska Job Service of vacancies; maintaining a network of Alaska community organizations which receive notices of vacancies; recruiting at local universities and advertising in newspapers such as the *Alaska Dispatch News, Peninsula Clarion* and the *Fairbanks Daily News-Miner,* as appropriate.

In previous years CPAI has participated in job fairs held in the village of Nuiqsut. The job fairs are an opportunity for CPAI to inform Nuiqsut and other North Slope residents about jobs available with CPAI's winter activities on the North Slope. Attendees can gather information on the specific jobs available with CPAI and its contractors, the time period the jobs will be available, and the pay scales. The job fair is an excellent opportunity for local residents to become familiar with the planned winter operations and to talk with the people who will be hiring residents.

CPAI requires all North Slope employees and contractors to complete an 8-hour unescorted training program established by the North Slope Training Cooperative (NSTC). All employees receive a Field Environmental Handbook and the Alaska Safety Handbook.

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)

This project does not occur on non-State surface lands; therefore this regulation does not apply.

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 CPAI's proposed Plan satisfy the requirements for a plan under 11 AAC 83.346(d) and thus

provides 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 Unit Bond 11 AAC 83.390

The State owns both the surface and subsurface estates in the project area. A lessee provides for payment of damages by posting a bond, and remains liable for full damages under the lease. CPAI has a Statewide Oil and Gas Bond in the amount of $500,000 and continuing liability under the lease.

VI. CONSIDERATION of 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 activities for carrying out the Moraine Appraisal Well Test which, as determined by the 2014 Kuparuk River Plan of Development (POD) approval, is necessary for maximizing recovery of the oil resources. Additionally, development under this Plan will contribute positively to the market by increasing overall oil 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.7a)

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, rather than 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 North Slope Areawide Oil and Gas Lease Sale Final Finding North Slope Areawide 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 at North Slope Areawide sections 7:A.2-4. 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 carefully considered

during Unitization and annually thereafter in the Kuparuk River POD approval This Plan conforms to the current 2014 Kuparuk River POD approval.

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, CPAI cannot develop Kuparuk reservoir, and the State cannot recover royalties from that 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 2014 Kuparuk River POD approval, and annual updates, on file with the Units Section (11 AAC 83.303(b)(1)); this Plan conforms to the current Kuparuk River POD on file with the Divisions Units Section.

The North Slope Areawide Mitigation Measures, incorporated into this Plan by amendment, include measures to protect habitat, fish, and wildlife (North Slope Areawide Final Finding at relevant areawide sections i.e.: A.2a – A2e). 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 current 2014 Kuparuk River POD approval on file with the Division's Units Section.

G. Prior Exploration Activities

The Division has considered prior exploration activities in the Plan area. Extensive exploratory drilling, geophysical exploration, and development has occurred in the Kuparuk River Unit since its inception in 1982.

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 2014 Kuparuk River POD approved on 7/28/2014 is consistent with the operations proposed in this 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, CPAI will be unable to proceed with developing the Moraine area in

the northwest portion of the Kuparuk Reservoir development area, 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 existence of other approvals by different Agencies (section IV of this document).

VII. CONSULTATION WITH OTHER GOVERNMENT ENTITIES

In reviewing the proposed Plan, the Division considered the fact that CPAI may require approvals from Agencies for other elements of its project. Although mentioned in the Plan and above in section IV. M Proposed Operations, 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 reviewing the approvals required by Agencies, as they relate to this decision, the Division provided an Agency review and comment opportunity for the activities considered for authorization under this decision. The following government entities were notified on 10/3/2014 for comment on the Plan: National Oceanic Atmospheric Administration; U.S. Army Corps of Engineers; NSB; ADF&G; ADEC; and DNR: State Pipeline Coordinator's Office (SPCO), DMLW, Office of History and Archaeology (OHA), and the Division of Oil and Gas. The comment deadline was 4:30 pm Alaska time on 10/17/2014. No Agency comments were received. The Plan was then publicly noticed.

VIII. PUBLIC NOTICE

Public notice of the Plan and opportunity to comment was published in the Alaska Dispatch News on 10/24/2014 and Arctic Sounder on 10/30/2014 with a deadline for comments of 11/24/2014 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 Barrow, Nuiqsut, and Prudhoe Bay post office(s). No public comments were received by the Division.

IX. FINDINGS AND DECISION

Having considered the proposed project and based on the foregoing discussion and consideration of issues, 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 on natural resources.
3. Approval of this Plan is in the State's best interest.
4. 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) 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 1st and November 1st each year, from the date this approval is issued and until a 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. The completion report shall contain a statement describing 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 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 Department of Environmental Conservation (DEC) oil spill report number is (800) 478-9300. DNR and DEC 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.

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

Sincerely,

Kim Kruse 1/15/2015

Kim Kruse
Permitting Manager
Division of Oil and Gas

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;

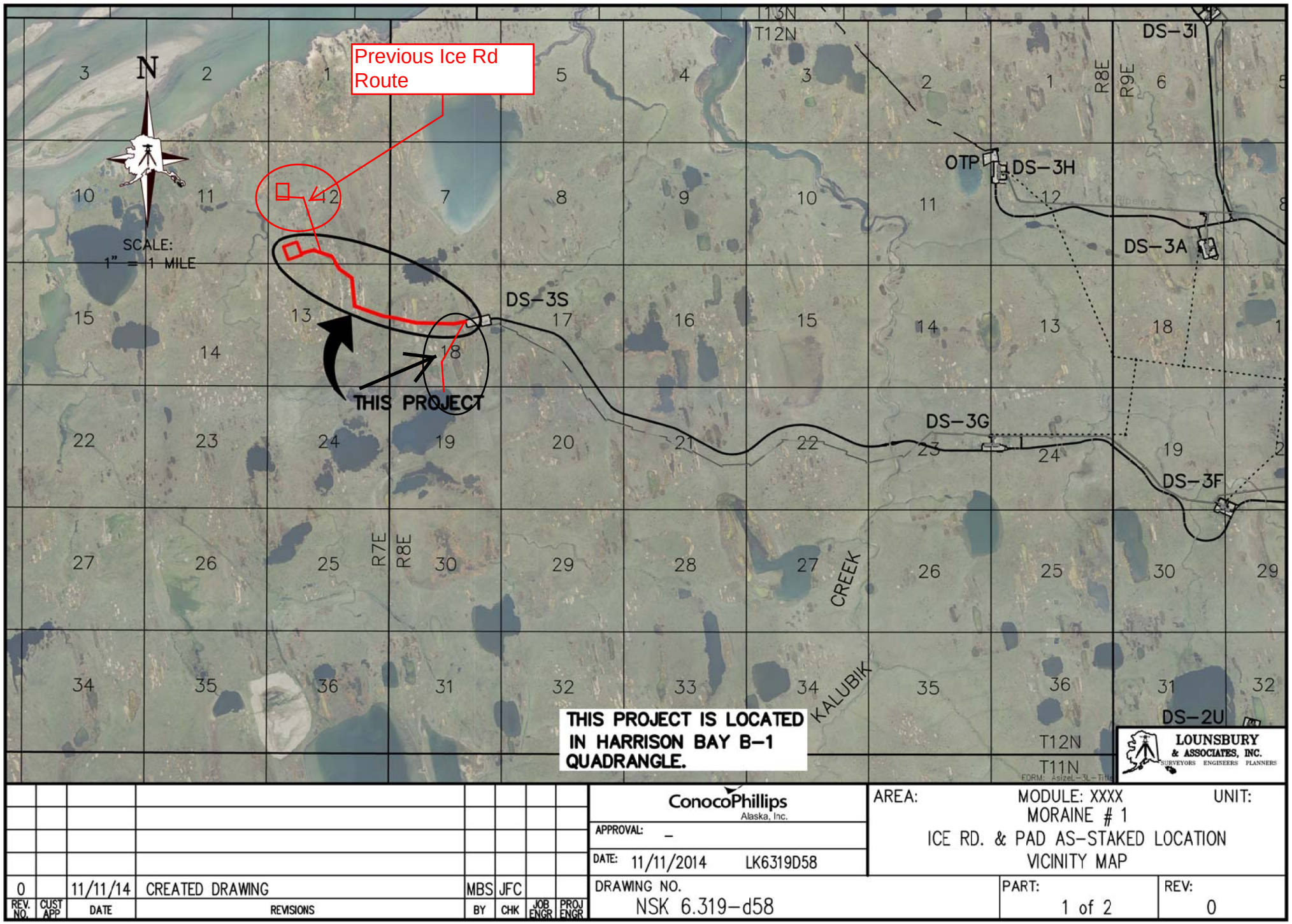
faxed to 1-907-269-8918; or sent by electronic mail to dnr.appeals@alaska.gov. This decision takes effect immediately. An eligible person must first appeal this decision in accordance with 11 AAC 02 before appealing this decision to Superior Court. A copy of 11 AAC 02 may be obtained from any regional information office of the Department of Natural Resources.

Attachments:

Appendix A: Maps and Figure(s)
Appendix B: Agency and Public Comments
Appendix C: Other

ecc: DOG: Kim Kruse, Nathaniel Emery, Amy Karn, Conor Williamson, Jeanne Frazier, Kathleen King;
DMLW: Henry Brooks, Jeanne Proulx, Alexander Wait, Melissa Head, Sean Willison, Brian Jackson;
ADF&G: William Morris, Jack Winters;
ADEC: Fathima Siddeek, Sharon Morgan, Gerry Brown
OPMP: N/A
Borough: Gordon Brower, Rhoda Ahmaogak, Bart Ahsogeak, Waska Williams, Thomas Brower III
Other: USACE, NOAA

Appendix A: Maps and Figure(s)



REV. NO.	CUST APP	DATE	REVISIONS	BY	CHK	JOB ENGR	PROJ ENGR
0		11/11/14	CREATED DRAWING	MBS	JFC		

ConocoPhillips Alaska, Inc.

APPROVAL: –

DATE: 11/11/2014 LK6319D58

AREA: MODULE: XXXX UNIT:

MORAINE # 1

ICE RD. & PAD AS-STAKED LOCATION VICINITY MAP

DRAWING NO. NSK 6.319-d58

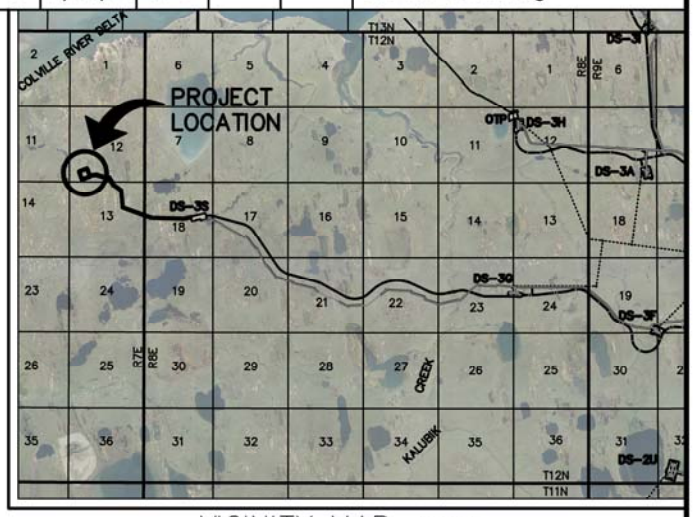
PART: 1 of 2

REV: 0

REV	DATE	BY	CK	APP	DESCRIPTION	REV	DATE	BY	CK	APP	DESCRIPTION
						0	11/27/14	JFC			Create Drawing

NOTES:

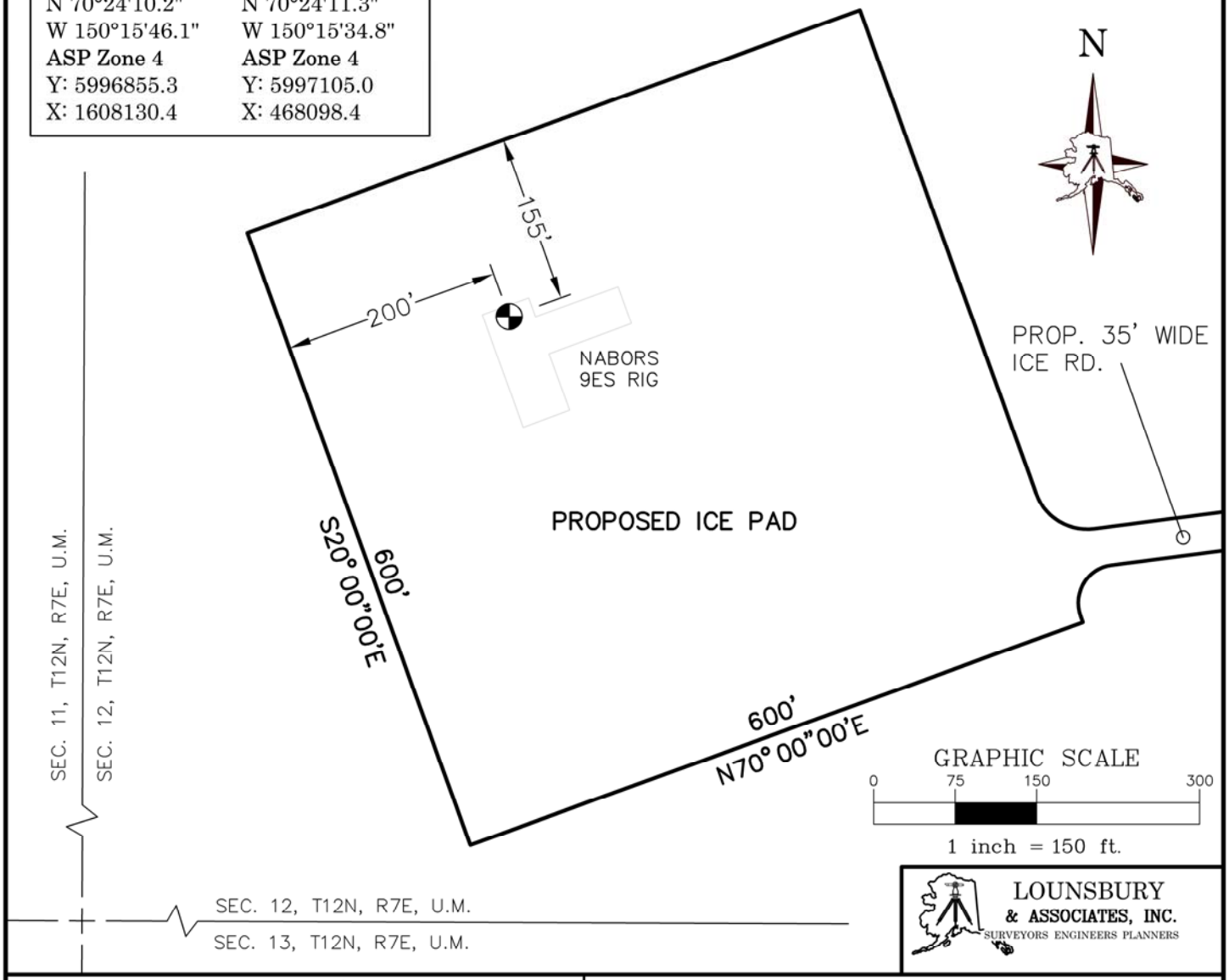
1. BASIS OF COORDINATES ARE FROM DS3S MONUMENTS.
2. ELEVATIONS ARE BPMSL DATUM.
3. ALL DISTANCES ARE TRUE.
4. DATE OF SURVEY: 11/27/14.



VICINITY MAP N.T.S.

MORAINE 1
LOCATED WITHIN PROTRACTED
SECTION 12, T12N, R7E
UMIAT MERIDIAN, ALASKA
659' FSL, 912' FWL
GND ELEV. 11.4' BPMSL

NAD83 Datum	NAD27 Datum
N 70°24'10.2"	N 70°24'11.3"
W 150°15'46.1"	W 150°15'34.8"
ASP Zone 4	ASP Zone 4
Y: 5996855.3	Y: 5997105.0
X: 1608130.4	X: 468098.4



LOUNSBURY & ASSOCIATES, INC.
SURVEYORS ENGINEERS PLANNERS

ConocoPhillips Alaska, Inc.

AREA: M1 MODULE: XXXX UNIT: M1

MORAINE 1
EXPLORATORY WELL CONDUCTOR
AS-STAKED LOCATION

CADD FILE NO.		DRAWING NO.	PART:	REV:
LK6319D60	11/27/14	NSK 6.319-d60	1 OF 1	0