



# LEASE 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](mailto:dog.permitting@alaska.gov)



## SECTION I: APPLICANT INFORMATION

### 1. Applicant:

Name: Hilcorp Alaska, LLC

Mailing Address: 3800 Centerpoint Dr., Ste. 1400

City: Anchorage

State: AK Zip Code: 99503

Phone: 907-777-8300 Fax: 907-777-8560

Email: Enter Email.

### 2. Applicant Contact:

First Name: Keegan Last Name: Fleming

Title: Environmental Specialist

Is the Mailing Address the same as Applicant's Mailing Address? If "No", please provide information below: ☒ Yes

Mailing Address: Enter Mailing Address.

City: Enter City. State: Enter State. Zip Code: Enter Zip Code.

Phone: 907-777-8477 Fax: Enter Fax.

Email: [kfleming@hilcorp.com](mailto:kfleming@hilcorp.com)

## SECTION II: THIRD PARTY INFORMATION

(Fill out this section only if you are applying for the Applicant)

Third Party Company Name: Enter 3rd Party Company Name.

First Name: Enter First Name. Last Name: Enter Last Name.

Title: Enter Title.

Mailing Address: Enter Mailing Address.

City: Enter City.

State: Enter State. Zip Code: Enter Zip Code.

Phone: Enter Phone. Fax: Enter Fax.

Email: Enter Email.

Describe the affiliation to the Applicant:

Describe your affiliation to the Applicant.

## SECTION III: APPLICATION DATE AND NUMBER

(FOR OFFICE USE ONLY)

Application Date:

Application Number:

## SECTION IV: PROJECT INFORMATION

1. Project Name: Seaview Exploration - Pad and Drill Wells

2. Proposed Start Date: 7/15/2018

### 3. Project Description:

Describe what and where:

Construct/prepare a new gravel pad (Seaview Pad) in an existing gravel minesite on non-unitized private land near Anchor River, Alaska, and drill one combination gas and oil exploration wells and one gas only exploration well from the newly constructed/prepared pad. Potential production from the Seaview Pad

will be addressed and permitted in a Unit Plan of Operations Application based on the successful unitization of the area and success of the exploration drilling program.

## SECTION V: LAND STATUS

### 1. State Mineral Estate:

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

Affected ADL: 392667 Date Effective: 3/1/2015 Date Assigned: N/A

Oil And Gas Lessee(s): Hilcorp Alaska, LLC

Surface Ownership: Private

Do you have, or anticipate having an Access Agreement: ☒ Yes ☐ No

Special Use Lands: None

Jointly Managed Lands: None

Other Considerations: None

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Seaview #8 Well – Wellbore/Completion	T5S, R15W, S.M., AK, Section 9: SE1/4NE1/4	TBD
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 enter text.

Surface Ownership: Click here to enter text.

Do you have, or anticipate having an Access Agreement: ☐ Yes ☐ No

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.

Affected ADL: Enter ADL. Date Effective: Enter Date. Date Assigned: Enter Date.

Oil And Gas Lessee(s): Click here to enter text.

Surface Ownership: Click here to enter text.

Do you have, or anticipate having an Access Agreement: ☐ Yes ☐ No

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.

Affected ADL: Enter ADL. Date Effective: Enter Date. Date Assigned: Enter Date.

Oil And Gas Lessee(s): Click here to enter text.

Surface Ownership: Click here to enter text.

Do you have, or anticipate having an Access Agreement: ☐ Yes ☐ No

Special Use Lands: Click here to enter text.

Jointly Managed Lands: <a href="#">Click here to enter text.</a>		
Other Considerations: <a href="#">Click here to enter text.</a>		
Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
<a href="#">Click here to enter text.</a>	<a href="#">Click here to enter text.</a>	<a href="#">Click here to enter text.</a>
<a href="#">Click here to enter text.</a>	<a href="#">Click here to enter text.</a>	<a href="#">Click here to enter text.</a>
<a href="#">Click here to enter text.</a>	<a href="#">Click here to enter text.</a>	<a href="#">Click here to enter text.</a>
Affected ADL: <a href="#">Enter ADL.</a> Date Effective: <a href="#">Enter Date.</a> Date Assigned: <a href="#">Enter Date.</a> Oil And Gas Lessee(s): <a href="#">Click here to enter text.</a> Surface Ownership: <a href="#">Click here to enter text.</a> Do you have, or anticipate having an Access Agreement: <input type="checkbox"/> Yes <input type="checkbox"/> No Special Use Lands: <a href="#">Click here to enter text.</a> Jointly Managed Lands: <a href="#">Click here to enter text.</a> Other Considerations: <a href="#">Click here to enter text.</a>		
Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
<a href="#">Click here to enter text.</a>	<a href="#">Click here to enter text.</a>	<a href="#">Click here to enter text.</a>
<a href="#">Click here to enter text.</a>	<a href="#">Click here to enter text.</a>	<a href="#">Click here to enter text.</a>
<a href="#">Click here to enter text.</a>	<a href="#">Click here to enter text.</a>	<a href="#">Click here to enter text.</a>
<b>2. State of Alaska Surface Lands:</b>		
Are supplemental pages for land status included in Appendix C? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Oil And Gas Mineral Estate Owner:    None Access Authorization(s):    None Special Use Lands:    None Jointly Managed Lands:    None Other Considerations:    None		
Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
None	None	None
<a href="#">Click here to enter text.</a>	<a href="#">Click here to enter text.</a>	<a href="#">Click here to enter text.</a>
<a href="#">Click here to enter text.</a>	<a href="#">Click here to enter text.</a>	<a href="#">Click here to enter text.</a>
Oil And Gas Mineral Estate Owner: <a href="#">Click here to enter text.</a> Access Authorization(s): <a href="#">Click here to enter text.</a> Special Use Lands: <a href="#">Click here to enter text.</a> Jointly Managed Lands: <a href="#">Click here to enter text.</a> Other Considerations: <a href="#">Click here to enter text.</a>		
Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
<a href="#">Click here to enter text.</a>	<a href="#">Click here to enter text.</a>	<a href="#">Click here to enter text.</a>
<a href="#">Click here to enter text.</a>	<a href="#">Click here to enter text.</a>	<a href="#">Click here to enter text.</a>
<a href="#">Click here to enter text.</a>	<a href="#">Click here to enter text.</a>	<a href="#">Click here to enter text.</a>
Oil And Gas Mineral Estate Owner: <a href="#">Click here to enter text.</a> Access Authorization(s): <a href="#">Click here to enter text.</a> Special Use Lands: <a href="#">Click here to enter text.</a> Jointly Managed Lands: <a href="#">Click here to enter text.</a> Other Considerations: <a href="#">Click here to enter text.</a>		
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:**

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

Oil And Gas Mineral Estate Owner: State of Alaska, Department of Natural Resources  
Surface Ownership And Access Agreement(s): Thomas H. Clark, KPB Tax Parcels 16910237 & 16936040 (recorded Doc. No. 2018-000458-0)  
Special Use Lands: None  
Jointly Managed Lands: None  
Other Considerations: None

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Seaview Pad Site (KPB Parcel 16910237)	T5S, R15W, S.M., AK, Sections 9 & 10	Varies
Access road (KPB Parcels 16910237 & 16936040)	T5S, R15W, S.M., AK, Sections 9 & 10	Varies
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.

**SECTION VI: BOND INFORMATION**

Bonded Company: Hilcorp Alaska, LLC  
Type: Surety Bond      Number: 022035257      Amount: \$500,000

Bonding Company: Liberty Mutual Insurance Company  
Mailing Address: 175 Berkley Street  
City: Boston      State: MA      Zip Code: 02117  
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.	Prepare Gravel Pad and Construct Berms	7/15/2018	7/31/2018
2.	Drill first well, Expected Development Zones, and Exploration Zones	8/1/2018	9/5/2018
3.	Well testing	9/5/2018	9/20/2018
4.	Shut-In Well	9/20/2018	9/23/2018
5.	Drill Second well, Expected Development Zones, and Exploration Zones	9/23/2018	10/24/2018
6.	Well testing	10/24/2018	11/8/2018
7.	Shut-In Well	11/8/2018	11/11/2018
8.	Enter Milestone.	Enter Date.	Enter Date.
9.	Enter Milestone.	Enter Date.	Enter Date.
10.	Note: Project is expected to begin as soon as all applicable permits and authorizations are received. Project schedule may change and dates may move forward or back. Project milestone 1 start date depends on weather, permitting, and company schedule.	-	-

## SECTION VIII: PROJECTED USE REQUIREMENTS

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

New pad construction is required to reach potential targets in the Anchor Point area, and as such Hilcorp proposes constructing a 280' x 300' (1.92-acre) gravel pad (to be known as Seaview Pad) within Section 9, Township 5 South, Range 15 West, Seward Meridian located off of the Old Sterling Highway in Anchor Point (see Figure 1 in "Appendix A: Maps"). Seaview pad is proposed within an existing gravel mine site on private lands. Access to the pad is provided by existing mine site access roads. Pad construction activities will include leveling/preparing the mine site in the area of the pad footprint, placement of geotextile liner on the pad footprint, and placement of approximately 5,000 cubic yards (cy) of gravel fill over the liner. Gravel fill will be compacted and a containment berm will be built around the edge of the pad. Preliminary project engineering design drawings are included in "Appendix C: Other". Up to two gas exploration wells (Seaview 8 and Seaview 9) will be drilled from the pad. Seaview 8 will be drilled approximately 10,000' (measure depth) to the West-Southwest of Seaview Pad. The first 5,500' of wellbore (partially within ADL 392667) will be perforated to evaluate gas zones, and the bottom-hole location (private subsurface) will be evaluated for oil resources, the testing of this bottom-hole location does not trigger correlative rights because it is not being produced, and is more than 500' from the nearest ADL (392667) to the south of the bottom-hole location. Seaview 9 will extend approximately 10,000' (measure depth) to the Northwest of Seaview Pad, and is a gas exploration well only (no oil exploration targets have been identified). Approximate surface locations and well paths for Seaview 8 and 9 Figure 6 in "Appendix A: Maps". If drilling proves successful, Unitization, and subsequent permitting of facilities and further development wells will be conducted separately.

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

NA – This authorization pertains to pad construction and exploration drilling activities only. No permanent facilities are proposed as part of this authorization. All permanent facilities will be permitted separately as needed.

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

A diesel fuel storage tank (~5,000 gallons) for equipment refueling will be onsite temporarily to support drilling efforts. Production related hazardous substance storage will be facilities will be permitted separately as needed.

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

Waste will be handled consistent with Hilcorp waste management practices as outlined below: • Waste will be properly segregated and containers labeled to ensure proper disposal. • Closed-top dumpsters will be onsite for food trash and household waste and will be hauled away from the site regularly to prevent overfilling. • Household waste/paper trash will be sent to the Kenai Peninsula Borough Landfill for disposal. • Oily waste will be segregated and sent to a specialty waste contractor for offsite disposal. • Waste drilling mud and cuttings will be hauled via vacuum truck or supersucker directly from the rig process tank to an offsite, permitted underground injection disposal facility. The only anticipated storage of drilling waste on location would be in the event of an issue at the disposal facility that prevented immediate shipment, in which case Hilcorp would obtain Alaska Department of Environmental Conservation (ADEC) Temporary Drilling Waste Storage plan approval.

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

Approximately 100 barrels (bbls) per day of freshwater will be used for drilling each well. Hilcorp does not intend to drill a water source well at the Seaview Pad Location. Freshwater will be purchased from the City of Anchor Point or withdrawn from existing and permitted water wells at Paxton Pad or other nearby Hilcorp operated locations.

<b>6. Describe the proposed operations, including the location and design, of <b>Utilities</b>:</b>				
NA – This authorization pertains to pad construction and exploration drilling activities only. No utilities are proposed as part of this authorization. All utilities will be permitted separately as needed.				
<b>7. Describe the proposed operations, including the location and design, of <b>Material Sites</b>:</b>				
The construction contractor or Hilcorp will identify a material source suitable to support gravel needs associated with gravel road and pad construction. Clean fill material will be purchased by Hilcorp or through the construction contract for improvement/construction of the road and pad.				
<b>8. Describe the proposed operations, including the location and design, of <b>Roads</b>:</b>				
The proposed pad is located within an existing gravel mine site with existing access roads. No new roads will be constructed as part of this authorization. Minor road improvements including grading and fill in areas of need will be required, but road footprint expansion is not needed.				
<b>9. Describe the proposed operations, including the location and design, of <b>Airstrips</b>:</b>				
NA				
<b>10. Describe the proposed operations, including the location and design, of <b>All Other Facilities and Equipment</b>:</b>				
Drilling activities will be conducted by Hilcorp Drilling under the direction of Monty Myers, Hilcorp's Drilling Manager (907-777-8431). Figure 7 shows typical layouts for the Hilcorp Rig 169 and associated equipment. Major components include the following: Equipment, including the drilling rig and pipe, the completion rig, mud tanks and mud pumps, boilers, drilling foreman/toolpusher trailer, light plants, generators, cement silo(s), and other miscellaneous equipment will be onsite temporarily to support drilling efforts. Well testing will be conducted for approximately 7 days for each well. The temporary testing equipment will include a line heater, liquids/gas separator, flare, and 400-bbl water storage tank.				
<b>11. If another permit(s) is required for the above described Projected Use Requirements, provide the following information:</b>				
Agency	Permit Type	Permit Number	Application Status	Projected Use Requirement(s)
SHPO	Archeological Clearance	TBD	TBD If Needed	Pad Preparation
ADEC	MG1 Authorization for POGO	MG1	In Process	Drilling Activities
ADEC	C-Plan Inclusion	NA	In Process	Drilling Activities
ADEC	SPCC Inclusion	NA	In Process	Drilling Activities
Enter Agency.	Enter Permit Type.	Enter Permit Number.	Enter Application Status.	Enter Projected Use Requirement(s).
Enter Agency.	Enter Permit Type.	Enter Permit Number.	Enter Application Status.	Enter Projected Use Requirement(s).
Enter Agency.	Enter Permit Type.	Enter Permit Number.	Enter Application Status.	Enter Projected Use Requirement(s).
Enter Agency.	Enter Permit Type.	Enter Permit Number.	Enter Application Status.	Enter Projected Use Requirement(s).
Enter Agency.	Enter Permit Type.	Enter Permit Number.	Enter Application Status.	Enter Projected Use Requirement(s).
Enter Agency.	Enter Permit Type.	Enter Permit Number.	Enter Application Status.	Enter Projected Use Requirement(s).
Enter Agency.	Enter Permit Type.	Enter Permit Number.	Enter Application Status.	Enter Projected Use Requirement(s).
Enter Agency.	Enter Permit Type.	Enter Permit Number.	Enter Application Status.	Enter Projected Use Requirement(s).

Enter Agency.	Enter Permit Type.	Enter Permit Number.	Enter Application Status.	Enter Projected Use Requirement(s).
Enter Agency.	Enter Permit Type.	Enter Permit Number.	Enter Application Status.	Enter Projected Use Requirement(s).
Enter Agency.	Enter Permit Type.	Enter Permit Number.	Enter Application Status.	Enter Projected Use Requirement(s).
Enter Agency.	Enter Permit Type.	Enter Permit Number.	Enter Application Status.	Enter Projected Use Requirement(s).
Enter Agency.	Enter Permit Type.	Enter Permit Number.	Enter Application Status.	Enter Projected Use Requirement(s).
Enter Agency.	Enter Permit Type.	Enter Permit Number.	Enter Application Status.	Enter Projected Use Requirement(s).
Enter Agency.	Enter Permit Type.	Enter Permit Number.	Enter Application Status.	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:

No permanent infrastructure, facilities, or equipment are proposed as part of this authorization. All materials and equipment will be removed at the conclusion of the drilling program to the satisfaction of the private land owner.

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

No rehabilitation activities are planned. All equipment and materials will be removed, and the gravel pad will remain within the mine site area for use of the private land owner. Although no impact to vegetation, habitat, wildlife, or resources is anticipated, any inadvertent impact the aforementioned will be rehabilitated to the satisfaction of the private land owner and any applicable agencies and/or stakeholders.

#### 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 Lease area and adjacent areas including:

**Fish and Wildlife Habitats:** Because the project intends to utilize existing access roads, and will construction a pad within an active mine site, no fish or wildlife habitats are anticipated to be impacted. All project activities will occur in accordance to any laws, regulations, and stipulations issued to Hilcorp, as well as all Hilcorp Wildlife Interaction plans, Procedures, and Best Management Practices.

**Historic and Archeological Sites:** Because the project intends to utilize existing access roads, and will construction a pad within an active mine site, no Historic or Archeological sites will be impacted. All project activities will occur on improved or disturbed land, and no new land clearing, preparation, or construction will occur. Additionally, a desktop review was conducted by Charles M. Mobley & Associates on 10/27/2017, noting that there are no known cultural resources within the project area. If cultural resources are encountered, the Private Land Owner and the State Historical Preservation Office will be contacted immediately.

**Public Use Areas:** Public use areas will not be impacted by the proposed project, as this project occurs on private lands. While public access to Seaview Pad will be restricted, other areas around the pad will not be restricted.

**Other Uses:** None

#### SECTION XI: GLOSSARY OF TERMS

Term #	Term	Term Definition
1.	ADEC	Alaska Department of Environmental Conservation
2.	ADNR	Alaska Department of Natural Resources
3.	bbl	barrels
4.	CIRI	Cook Inlet Region Inc.
5.	cy	cubic yards
6.	KBPL	Kenai Beluga Pipeline
7.	OHA	Office of History and Archaeology
8.	SRB&A	Stephen R. Braund & Associates
9.	TWUA	Temporary Water Use Authorization
10.	USACE	United States Army Corps of Engineers

**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

Include maps here.

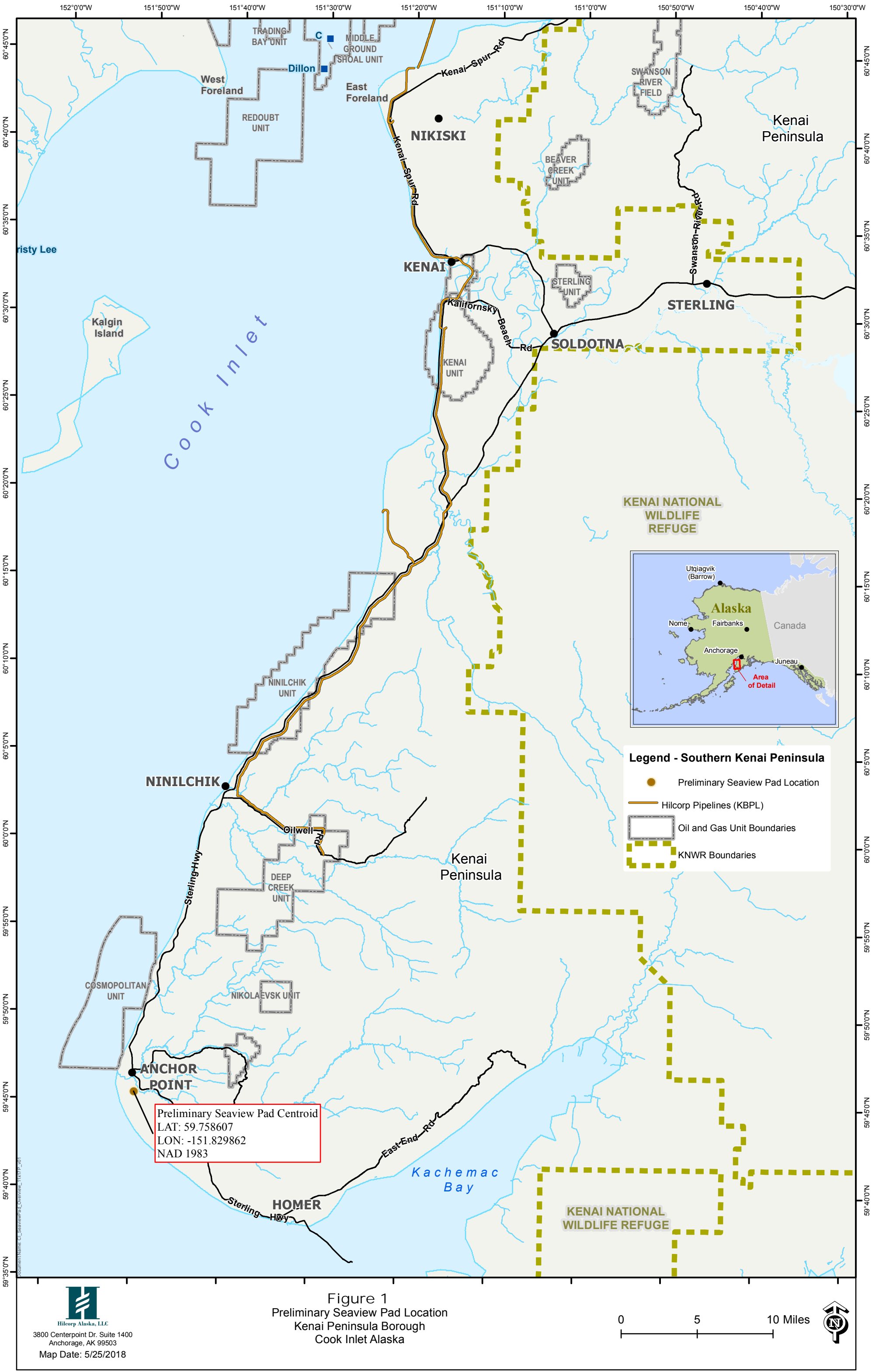






Figure 2  
Proposed Seaview Pad  
Preliminary Location

- Preliminary Access Road
- Preliminary Seaview Pad Location
- KPB Parcels (Surface Ownership)

Map Scale:  
0 50 100 150 200 feet  
1 inch = 200 feet

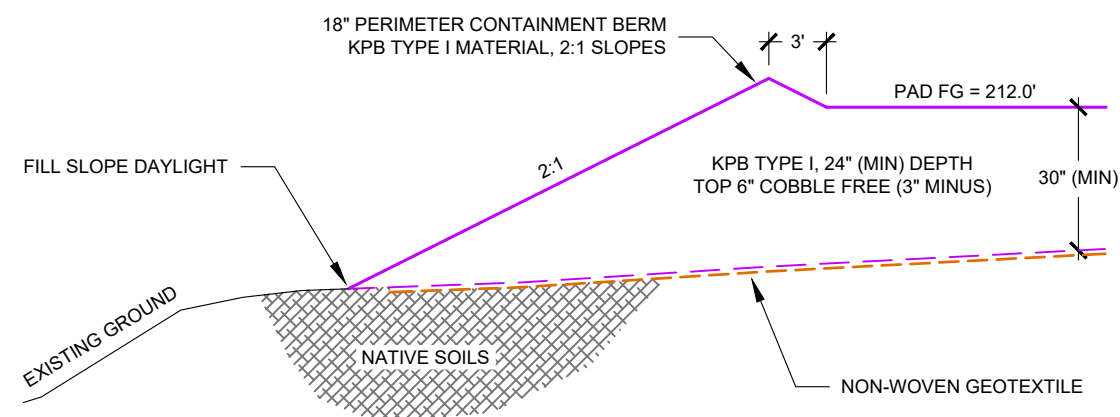




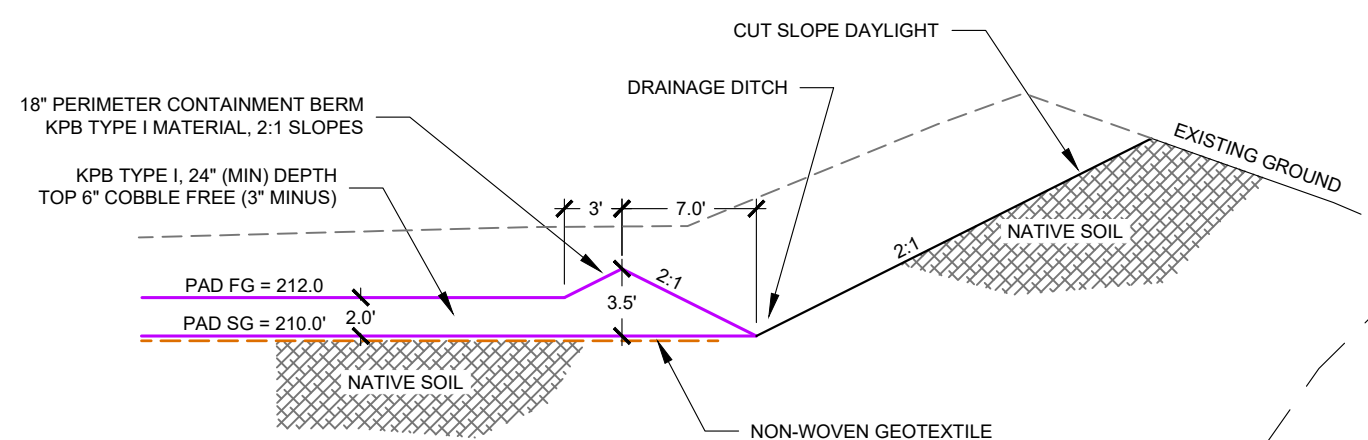




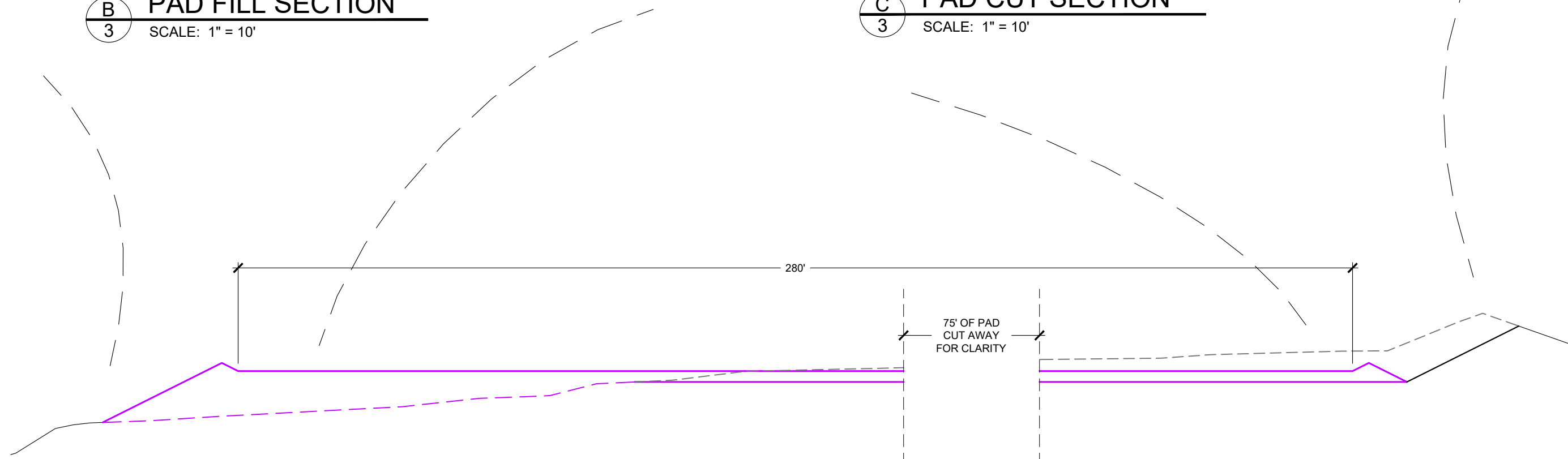




**B** **PAD FILL SECTION**  
3 SCALE: 1" = 10'



**C**  
**3** **PAD CUT SECTION**  
SCALE: 1" = 10'



**3** **PAD TYPICAL SECTION**  
SCALE: 1" = 20'

[illegible]

**HILCORP ALASKA LLC  
SEAVIEW PAD  
TYPICAL SECTIONS**



**Consulting Inc**

ENGINEERING - TESTING  
SURVEYING - MAPPING  
P.O. BOX 468  
SOLDOTNA, AK. 99669  
VOICE: (907) 283-4218  
FAX: (907) 283-3265  
WWW.MCLANECG.COM

DRAWN BY: BGB

CHECKED BY: CRM

HORZ. SCALE: N/A

VERT. SCALE: N/A

SHEET: **D1**



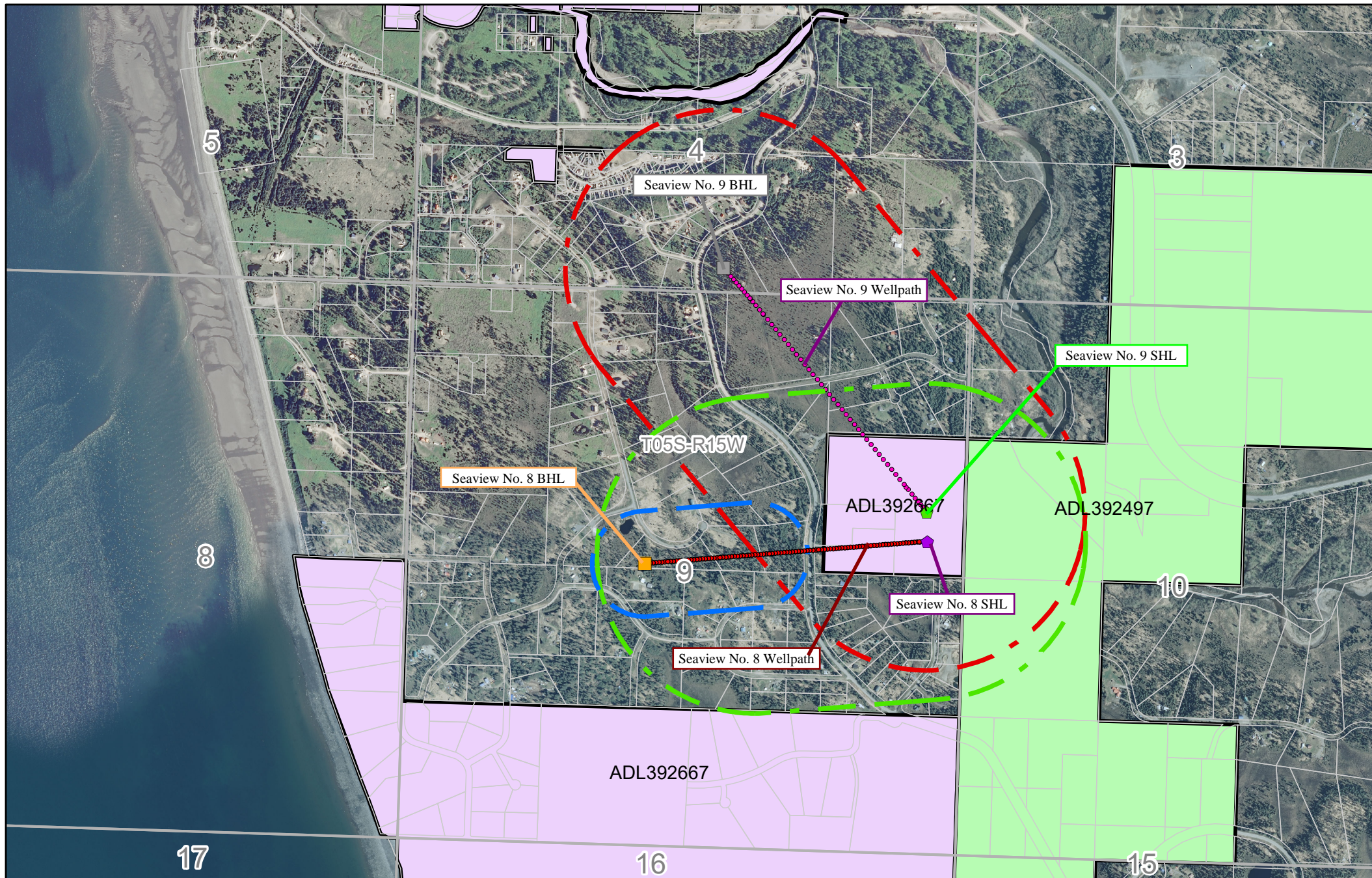


Figure 6  
Seaview No. 8 and No. 9 Well Overview  
Oil and Gas Zone Buffers

**Legend**

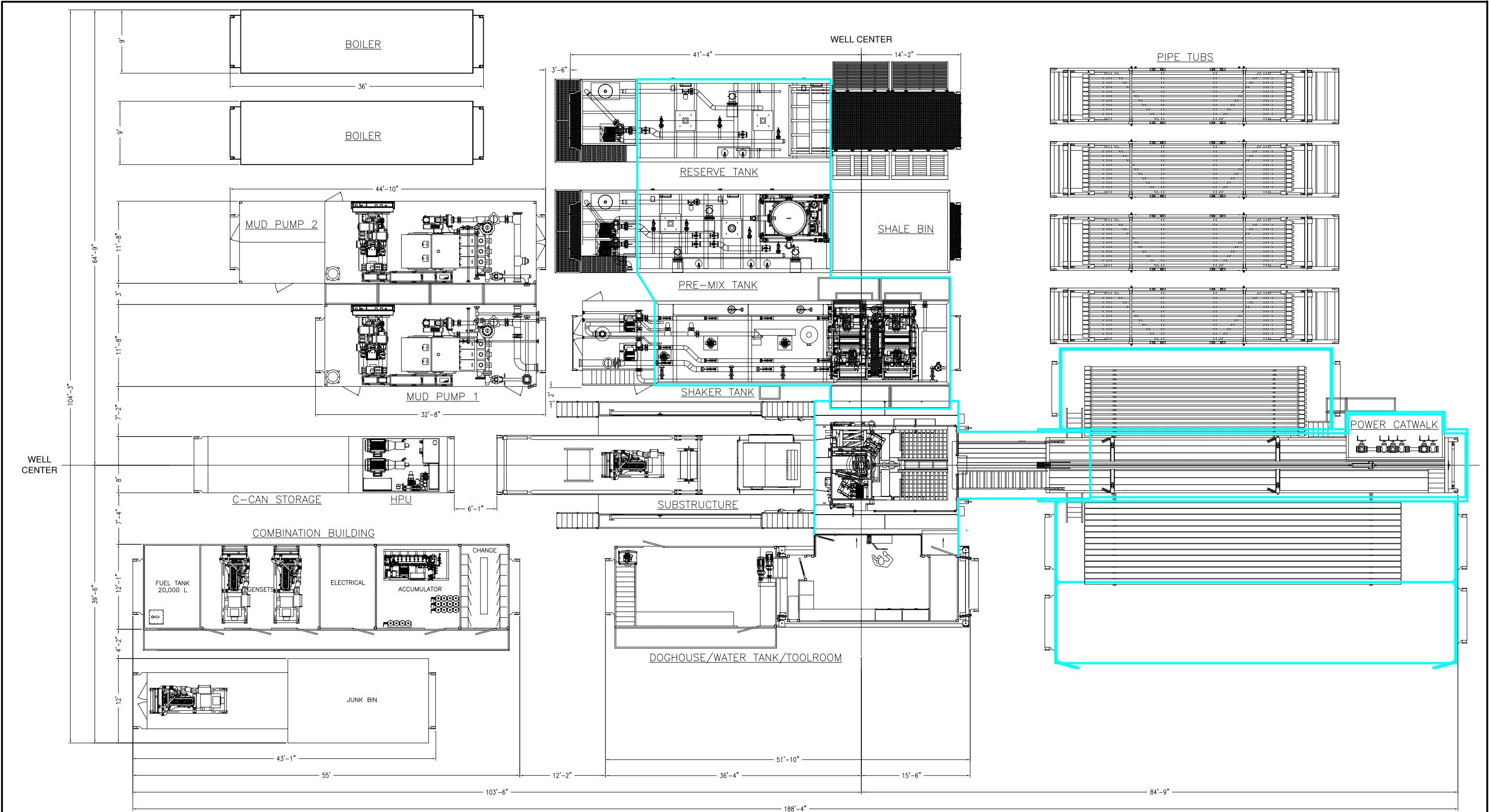
- KPB Parcel Boundaries
- Seaview No. 8 Oil Buffer (500ft)
- Seaview No. 8 Gas Buffer (1500ft)
- Seaview No. 9 Gas Buffer (1500ft)
- ADL 392497
- ADL 392667

0 875 1,750 3,500 Feet



Alaska State Plane, Zone 4, NAD27  
Map Date: May 25, 2018





REVISIONS				DRAWING REFERENCES		SCALE:	SHEET SIZE:	THE DESIGN AND PRINT SHOWN THEREON ARE THE INVENTION AND PROPERTY OF SAXON ENERGY SERVICES INC. ALL RIGHTS OF THE INVENTION, DESIGN AND REPRODUCTION ARE RESERVED BY SAXON ENERGY SERVICES INC. CUSTOMER LOGO	<div><div><div>Saxon</div></div><div>PROJECT: HILCORP ALASKA</div><div>EQUIPMENT: SAXON MECHANICAL TELESCOPIC DOUBLE</div><div>DWG TITLE: WINTER RIG LAYOUT</div><div>DRAWING NO.: SES-AB-169-RL02-02</div><div>RIG NO.: 169</div></div>
NO.	BY	DATE	REVISION DESCRIPTION	DRAWING NO.	DRAWING TITLE	N.T.S.	B		
0	NPS	13/04/08	ISSUED FOR REVIEW			DRAWN BY: NPS	DATE: 13/04/08		
						CHECKED BY:	DATE:		
						APPROVED BY:	DATE:		
						REV: 0	JOB/FILE#: S-263-ENG		

## APPENDIX B: MITIGATION MEASURES

Include mitigation measures here.

## **MITIGATION MEASURE ANALYSIS: COOK INLET**

**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 **mitigation measure is satisfied**, an **exception is requested**, or if the mitigation measure is **not applicable**.
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.**

Cook Inlet	<b>Company Response</b>
<b>A. Mitigation Measures</b>	
<b>1. Facilities and Operations</b>	
<p>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, and adjacent private lands. 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.</p>	<p>A.1.a. Mitigation measure satisfied: The project will occur on Hilcorp leased Private land. No native allotments, designated recreation/subsistence use areas, or adjacent private surface lands will be entered for this project. This completed Mitigation Measures Analysis form and the accompanying completed Plan of Operations Application form are submitted in accordance with ADNRR DOG guidance.</p>
<p>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&amp;G.</p>	<p>A.1.b. The gravel drill pad will be constructed as close to the western extent of the parcel as is practicable to minimize both the distance from the Anchor River (to the East) visual and sound impacts to landowners to the South and West. The pad design takes advantage of existing berms and topography to provide a natural elevation buffer between the pad and landowners to the South and West. Trees and brush will be kept in place to between neighboring landowners and drilling operations to augment this topography buffer and further mitigate visual and sound impacts. Impacts from pad and road construction, as well as drilling, will be temporary. Pad and road construction will last approximately 6 weeks, as will drilling. Construction will occur on a daytime 12-hour shift, likely between 7AM and 7PM, to minimize noise during evening and nighttime hours. It is not practicable to operate the drilling rig on a schedule other than around the clock; however, steps will be taken to minimize visual and sound impacts during operation. Except where safety concerns dictate otherwise, lights on the drill rig and mobile light plants will be pointed down toward activities occurring on the pad. The typical use of loudspeakers to communicate during drilling will be replaced by the use of handheld radios. Additionally, drilling vehicles and heavy equipment will use broadband "white noise" backup alarms, instead of the typical louder and more annoying single-tone backup alarms.</p>
<p>c. The siting of onshore facilities, other than roads, docks, utility or pipeline corridors, or terminal facilities will be prohibited within one-half mile of the mean high water of Cook Inlet, except where land use plans classify an area for development, or established usage and use history show development. The</p>	<p>A.1.c. Mitigation measure waiver is requested: The proposed Seaview Pad will be located within one-half mile of the banks of Anchor River. The distance from the Pad center to the nearest bank of the Anchor River is approximately 1,250-feet. The exploration target that Seaview 8 and Seaview 9 wells look to explore is bounded by the ½ mile Cook Inlet Buffer to the West and the ½ Mile Anchor</p>

Revised: March 2013

siting of facilities other than docks, roads, utility, and pipeline crossings will also be prohibited within 500 feet of all fish bearing streams and waterbodies and 1,500 feet of 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 Harriet, Alexander, Lake, Deep, and Stariski creeks, and the Drift, Big, Kustatan, McArthur, Chuitna, Lewis, Theodore, Beluga, Susitna, Little Susitna, Kenai, Kasilof, Ninilchik, and Anchor 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.

River Buffer to the East. Remaining is a narrow (approximately ¼ mile wide) area, largely consisting of residential properties and wetlands. The proposed Seaview location attempts to mitigate environmental and social impact by selecting a pad location that has already been disturbed, is an active mine-site with current ongoing activities, will result in no loss of wetlands or wildlife habitat, and has slight natural topography and vegetative cover between itself and neighboring landowners. The intent of this mitigation measure is to protect important fisheries from liquid hydrocarbon releases, which Hilcorp feels it can successfully do within the ½ mile buffer from Anchor River due to the proposed sequence of exploration activities, and by utilizing current well control technology and proven best management practices while drilling. The Primary target of the Seaview 8 well is Gas and the only identified target for the Seaview 9 well is Gas. The Seaview 8 well will ultimately extend beyond State lease areas to explore for Oil. The wellbore section that aims to search for oil resources is more than 500' radius from any state leases thus not triggering correlative rights for oil production (Appendix A-Figure 6). While drilling, Hilcorp will maintain multiple barriers of protection against well control events including, but not limited to, hydrostatic overbalance of estimated reservoir pressure, and Blow-Out Prevention Equipment (BOPE). Additionally, an intermediate casing string will be set and cemented in-place between the gas zones and potential oil bearing zones, providing the ability to shut in the well at depth without any potential for liquid hydrocarbons to return to surface. Well control and well safety related aspects of the drilling program are permitted with the Alaska Oil and Gas Conservation Commission (AOGCC) to ensure operations follow all safety controls and regulatory measures that have been developed to mitigate the risks of an uncontrolled well event. During drilling, temporary fuel tanks and produced water storage tanks will be placed within lined, bermed secondary containment areas to reduce risk of an off-pad release. In addition, the pad will be constructed with an 18-inch berm around the entire pad perimeter to further reduce risk of hydrocarbon-impacted runoff. Only stormwater will be discharged from Seaview Pad and all such discharges will adhere to stormwater pollution prevention regulations under the Clean Water Act. No point source or direct discharges will occur and no hydrocarbon or chemical discharges are authorized or planned. Hilcorp adheres to state and federal regulations governing pollution prevention and has a robust integrity management program dedicated to preventing releases. Should an unplanned release occur, Hilcorp follows internal and local, state and federal agency protocols for spill reporting and response to ensure potential impacts are minimized. Hilcorp also maintains a contract and close working relationship with Cook Inlet Spill Prevention & Response, Inc. (CISPRI) to ensure Hilcorp's internal spill response capabilities



Revised: March 2013

	<p>can be augmented timely and efficiently for the protection of people, the environment, and property. Proposed activities at Seaview Pad will not affect Anchor River or access to Anchor River recreation areas.</p> <p>Seaview Pad is not sited within the remaining buffer areas specified in this mitigation measure.</p>
<p>d. Impacts to identified wetlands must be minimized to the satisfaction of the director, in consultation with ADF&amp;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 U.S. Army Corps of Engineers.</p>	<p>A.1.d. Mitigation measure satisfied: Hilcorp has selected the private parcel and drilling location for this project specifically to avoid and minimize impacts to wetlands and other waters of the United States. The proposed drill pad is planned to be constructed on disturbed lands, outside of identified wetlands, within the limits of an active, and permitted commercial mine site. A wetlands study of the private parcel was by Borderline Environmental Consultants in 2007, and the data was reviewed by Weston Solution in 2017, confirming that the proposed pad location is on uplands areas only.</p>
<p>e. Exploration activities must be supported by air service, an existing road system or port facility, ice roads, or by off-road vehicles that do not cause significant damage to the vegetation or ground surface. Construction of temporary drill pads, airstrips, and roads may be allowed. Construction of permanent roads may be allowed upon approval by the director. Unrestricted surface travel may be permitted by the director and DMLW, if an emergency condition exists.</p>	<p>A.1.e. Mitigation measure satisfied: The project is accessible via the Old Sterling Highway. The drill pad built within an active and disturbed mine site footprint on Private land. The gravel access road is existing.</p>
<p>f. With the exception of drill pads, airstrips, and roads permitted under A1e, exploration facilities must be consolidated, temporary, and must not be constructed of gravel. Use of abandoned gravel structures may be permitted on a case-by-case basis.</p>	<p>A.1.f. Mitigation measure satisfied: Access to the proposed Seaview pad will be on existing access roads, the proposed drill pad and access road will be built within the boundaries of an active gravel mine site on Privately owned land. All other facilities associated with this exploration program are temporary and will be removed after the program has been completed as described in the ADNRR Lease POO Application.</p>
<p>g. Pipelines must utilize existing transportation corridors and be buried where conditions permit. Pipelines and gravel pads must be designed to facilitate the containment and cleanup of spilled fluids. Pipelines, flowlines, and gathering lines must be designed and constructed to assure integrity against climatic conditions and geologic hazards.</p> <p>In areas with above ground placement, pipelines must be designed, sited, and constructed to allow for the free movement of wildlife. Where practicable,</p>	<p>A.1.g. Mitigation measure not applicable: This project does not include pipeline construction. The gravel pad will have an 18-inch-high containment berm around the pad perimeter.</p>

pipelines must be located on the upslope side of roadways and construction pads, unless DMLW determines that an alternative site is environmentally acceptable.	
h. Pipelines that must cross marine waters will be constructed beneath the marine waters using directional drilling techniques, unless the director, in consultation with ADF&G and the local borough and Coastal Resource Service Areas, approves an alternative method based on technical, environmental, and economic justification. Offshore pipelines must be located and constructed to prevent obstruction to marine navigation and fishing operations.	A.1.h. Mitigation measure not applicable: Project does not include pipeline construction across marine waters.
i. Gravel mining sites required for exploration and development activities will be restricted to the minimum necessary to develop the field efficiently and to minimize environmental damage. Gravel mine sites required for exploration activities must not be located within an active floodplain of a watercourse unless DMLW, after consultation with ADF&G, determines that there is no practicable alternative, or that a floodplain site would be compatible with fish and wildlife habitat after mining operations are completed and the site is closed.	A.1.i. Mitigation measure not applicable: Gravel required for pad and access road construction will be obtained from the private property owner's onsite and existing commercial gravel mine site.
<b>2. Habitat, Fish, and Wildlife</b>	
a. Detonation of explosives will be prohibited in open water areas of fish bearing streams and lakes. Explosives must not be detonated beneath, or in close proximity to, fish-bearing streams and lakes if the detonation of the explosive produces a pressure rise in the water body of greater than 2.7 pounds per-square-inch, or unless the water body, including its substrate, is solidly frozen. 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 from ADF&G upon request. The location of known fish bearing waters within the project area can be obtained from ADF&G.	A.2.a. Mitigation measure not applicable: Explosives will not be detonated for this project.
b. Compaction or removal of snow cover overlying fish bearing water bodies is prohibited except for approved crossings. If ice thickness is not sufficient to facilitate a crossing, ice and/or snow bridges may be required.	A.2.b. Mitigation measure not applicable: No fish-bearing water bodies are in the project area.
c. Removal of water from fishbearing rivers, streams and natural lakes shall be	A.2.c. Mitigation measure not applicable: Water use will be from ADN-

<p>subject to prior written approval by DMLW and ADF&amp;G. 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&amp;G. The maximum water velocity at the surface of the screen enclosure may be no greater than 0.4 feet per second, unless an alternative velocity has been approved by ADF&amp;G. Screen material must be corrosion resistant, and must be adequately supported to prevent excessive sagging which could result in unusable intake surface. The intake structure must be designed and installed to avoid excessive fouling from floating debris, and a minimum of eight square feet of effective wetted screen surface must be provided for each multiple of a 450-gallon per minute (one cubic foot per second) pumping rate. The pump intake opening must be placed equidistant from all effective wetted screen surfaces.</p>	<p>permitted wells located on the Hilcorp-operated Paxton Pad, or purchased from the City of Anchor Point.</p>
<p>d. Surface entry will be prohibited in parcels that are within the Kenai River Special Management Area.</p> <p>Surface entry, other than access, will be prohibited on state lands within the Kenai National Wildlife refuge.</p> <p>Lessees are prohibited from placing drilling rigs and lease-related facilities and structures within an area near the Kenai River composed of: all land within Section 36 in T6N, R11W that is located south of a line drawn from the protracted NE corner to the protracted SW corner of the section; all land within the western half of Section 31 in T6N, R10W and Section 6 in T5N, R10W; and all land within Section 1 in T5N, R11W.</p>	<p>A.2.d. The project area is not within the Kenai River Special Management Area, the Kenai National Wildlife Refuge, or near the Kenai River.</p>
<p>e. Surface entry into the critical waterfowl habitat along the Kasilof River is prohibited. Directional drilling from adjacent sites may be allowed.</p>	<p>A.2.e. The project area is not near the Kasilof River.</p>
<p>f. Surface entry will be prohibited within one-quarter mile of trumpeter swan nesting sites between April 1 and August 31. The siting of permanent facilities, including roads, material sites, storage areas, powerlines, and above ground pipelines will be prohibited within one-quarter mile of known nesting sites. Trumpeter swan nesting sites will be identified by ADF&amp;G at the request of the lessee.</p>	<p>A.2.f. There are no known trumpeter swan nesting sites in the area.</p>
<p>g. The director, in consultation with ADF&amp;G, shall restrict or modify lease</p>	<p>A.2.g. Mitigation measure satisfied: Steller's eiders are known to overwinter</p>

Revised: March 2013

<p>related activities if scientific evidence documents the presence of Steller's eiders from the Alaska breeding population in the lease area and it is determined that oil and gas exploration and development will impact them or their over-wintering habitat in the near-shore waters of Cook Inlet.</p>	<p>offshore from the pad location, on Cook Inlet waters. Proposed activities are onshore, landward of the bluff, and do not have high risk of hydrocarbon releases to the inlet. Impacts to Steller's eider or other waterfowl species or their nearshore overwintering habitats are not anticipated.</p>
<p>h. The director, in consultation with ADF&amp;G, may impose seasonal restrictions on activities located in and adjacent to important waterfowl and shorebird habitat during the plan of operations approval stage.</p>	<p>A.2.h. Mitigation measure not applicable: Project activities will occur landward of the bluff and will not impact important waterfowl and shorebird habitat.</p>
<p>Bears:</p> <p>i. Lessees are required to prepare and implement a human-bear interaction plan designed to minimize conflicts between bears and humans. The plan shall include measures to:</p> <ul style="list-style-type: none"> <li>i. minimize attraction of bears to facility sites, including garbage and food waste;</li> <li>ii. organize layout of buildings and work areas to minimize interactions between humans and bears such as including the use of electric fencing;</li> <li>iii. warn personnel of bears near or on facilities and the proper actions to take;</li> <li>iv. if authorized, deter bears from the drill site;</li> <li>v. provide contingencies in the event bears do not leave the site;</li> <li>vi. provide for proper storage and disposal of materials that may be toxic to bears; and</li> <li>vii. document and communicate the sighting of bears onsite or in the immediate area to all shift employees.</li> </ul>	<p>A.2.i. Mitigation measure satisfied: Hilcorp has an Interaction and Avoidance Plan in place. Hilcorp policy is to require best management practices that minimize attractants to bears and other wildlife. EH&amp;S training conducted for site workers will include training for wildlife interactions.</p> <p>A.2.i.i. Sections 2.0 and 10.0 of the Wildlife Interaction and Avoidance Plan describe food and waste management procedures that help eliminate the potential for bears to associate humans and facilities with food.</p> <p>A.2.i.ii. Facility operators will visually scan the pad for the presence of bears before getting out of their vehicle or exiting a structure.</p> <p>A.2.i.iii. Sections 1.4 and 10.0 of the Wildlife Interaction and Avoidance Plan describe notification procedures for bear sighting at or near a facility.</p> <p>A.2.iv. Section 10.2.1 of the Wildlife Interaction and Avoidance Plan describes bear deterrence activities for Hilcorp.</p> <p>A.2.v. Section 10.2 of the Wildlife Interaction and Avoidance Plan describes procedures for sighting communication and bear deterrence; if a bear is encountered at the site and the bear will not leave the site, work will cease until measures are taken for work to continue safely.</p> <p>A.2.i.vi. Storage and handling of materials will be such that materials are not left exposed to bears.</p> <p>A.2.i.vii. Sections 1.4 and 10.0 of the Wildlife Interaction and Avoidance Plan describe notification and documentation procedures for bear sightings at or near a facility.</p>
<p>j. Before commencement of any activities, lessees shall consult with ADF&amp;G to</p>	<p>A.2.j. Mitigation measure not applicable: Exploration activities are intended to</p>

Revised: March 2013

identify the locations of known bear den sites that are occupied in the season of proposed activities. Exploration and development activities started between November 15 and March 31 may not be conducted within one-half mile of known occupied brown bear dens, unless alternative mitigation measures are approved by the ADF&G. A lessee who encounters an occupied 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 DO&G with concurrence from ADF&G. Non-mobile facilities will not be required to be relocated.	begin prior to the November 15 to March 31 Window. This requirement window is noted, and if schedule or permitting requirements push the start of exploration activities past November 15, a bear den site consultation will be conducted prior to commencing operations.
k. Recognizing the importance of sufficient vegetative cover and access by Kenai Peninsula brown bears feeding at streams, the director, in consultation with ADF&G, may require lessees to locate exploration and development facilities beyond the 500-foot buffer along anadromous streams during the plan of operations approval stage, except as provided in A1c.	A.2.k. Mitigation measure not applicable: The facility is not located within 500 feet of an anadromous stream.
Caribou:  l. Surface entry within the core calving area of the Kenai Lowlands Caribou Herd is prohibited, except that surface entry for seismic exploration will be allowed from October 16 to March 31.	A.2.l. Mitigation measure not applicable: Project area is not located within the Kenai Lowlands Caribou Herd core calving area.
m. Exploration and development activities will be restricted or prohibited between April 1 and October 15 within the core summer habitat of the Kenai Lowlands Caribou Herd, except that maintenance and operation of production wells will be allowed year-round. Permanent roads, or facilities other than production wells, will also be restricted or prohibited within this area. Facilities within the core summer habitat of the Kenai Lowlands Caribou Herd that require year-round access must be located in forested areas, where practical.	A.2.m. Mitigation measure not applicable: Project area is not located within the Kenai Lowlands Caribou Herd core calving area.
n. Pipelines must be buried within the core summer habitat of the Kenai Lowlands Caribou Herd.	A.2.n. Mitigation measure not applicable: Project area is not located within the Kenai Lowlands Caribou Herd core calving area and no pipelines are proposed as part of this project.
o. The director, in consultation with ADF&G, may impose seasonal restrictions on activities located in, or requiring travel through or overflight of, important moose or caribou calving and wintering areas during the plan of operations	A.2.o. Mitigation measure not applicable: Project area is not located within the Kenai Lowlands Caribou Herd core calving area.

Revised: March 2013

approval stage.	
<p>Beluga Whales:</p> <p>p. No permanent or temporary oil and gas exploration or development may occur within High Value/High Sensitivity (Type 1) beluga whale habitat areas, unless it occurs on upland areas (above Mean Higher Water datum). Type 1 habitat areas include the following tracts: 320-334, 391-409, 410, 462, 464-475, 476-481, 483, 484, 485, 486, 493, 494, 497, 498, 522, 524-537, 538, 539, 540, 541, 542, 543, 544, 547-552, 559, 575-577, 579, 581, 582, 585, 586, 590, 593, 594, 598, 616-618, 620-623, 627, 655-658, and 662.</p>	<p>A.2.p. Mitigation measure not applicable: Project is not located within and has no impact on Cook Inlet beluga whale habitat, including type 1, 2 and 3 critical habitat areas.</p>
<p>q. The director will assess oil and gas-related activities within all High Value (Type 2) beluga whale habitat areas on a case-by-case basis. No permanent surface entry or structures are allowed, and temporary activities and structures, for example exploration drilling, will only be allowed between November 1 and April 1 of each year, unless it occurs on upland areas, within the following tracts: 021, 022, 126, 127, 129-132, 161, 162, 175, 177, 211, 218, 257, 301, 302, 373, 376, 377, and 384.</p>	<p>A.2.q. Mitigation measure not applicable: Project is not located within and has no impact on Cook Inlet beluga whale habitat, including type 1, 2 and 3 critical habitat areas.</p>
<p>r. The director will assess oil and gas-related activities within the remaining tracts (Type 3 habitat areas) on a case-by-case basis.</p>	<p>A.2.r. Mitigation measure not applicable: Project is not located within and has no impact on Cook Inlet beluga whale habitat, including type 1, 2 and 3 critical habitat areas.</p>
<b>3. Subsistence, and Other Fish and Wildlife Uses</b>	
<p>a. Lease-related use will be restricted when DO&amp;G determines it is necessary to prevent unreasonable conflicts between lease-related activities and subsistence, and commercial, sport, personal use, and educational harvest activities. In enforcing this term DO&amp;G, during review of plans of operation, will consult with other agencies, the affected local borough(s) and the public to identify and avoid potential conflicts. In order to avoid conflicts with subsistence, commercial, sport and educational harvest activities, restrictions may include alternative site selection, requiring directional drilling, seasonal drilling restrictions, and other technologies deemed appropriate by DO&amp;G.</p>	<p>A.3.a. Mitigation measure satisfied: Project is located on private land and will have no impact to subsistence and other fish and wildlife uses. The potential for restrictions is noted.</p>
<b>4. Fuel, Hazardous Substances, and Waste</b>	

a. Secondary containment (see definitions) shall be provided for the storage of fuel or hazardous substances.	A.4.a. Mitigation measure satisfied: All fuel and other hazardous substances will have impermeable secondary containment.
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 satisfied: No fuel, hazardous substances or waste will be stored within 100 feet of a water body or 1,500 feet of a current surface drinking water source.
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 satisfied: Limited equipment maintenance may occur on pad and will be conducted above impermeable secondary containment.
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 5 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 satisfied: Duck ponds or bermed liners will be placed beneath connections during fuel and other fluid transfers, and fluid transfer operations will be continuously monitored. During drilling operations, spill response equipment will be staged at the pad. During any fuel or other hazardous fluid transfers, spill response equipment to clean up a minimum of a 5-gallon spill will be kept with the vehicle used for the substance transfer.
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. Mitigation measure satisfied: No vehicle fueling will be conducted within an annual floodplain.
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 satisfied: Fuel and hazardous substance containers will be marked as required.
g. A freshwater aquifer monitoring well, and quarterly water quality monitoring, may be required down gradient of a permanent above-ground liquid hydrocarbon storage facility.	A.4.g. Mitigation measure not applicable: Facility is not an above-ground liquid hydrocarbon storage facility.
h. Waste from operations must be reduced, reused, or recycled to the maximum extent practicable. Garbage and domestic combustibles must be incinerated or disposed of at an approved site in accordance with 18 AAC 60. (See also Section B2, below.)	A.4.h. Mitigation measure satisfied: Waste will be reduced, reused, or recycled whenever practicable. During construction and drilling activities, closed top dumpsters will be on site for food trash and household waste and will be hauled away from the site regularly to prevent overfilling. Garbage will be disposed of at the Kenai Peninsula Borough landfill. Oily waste will be segregated and sent

Revised: March 2013

	to an offsite contractor for disposal.
i. New solid waste disposal sites will not be approved or located on state property during the exploratory phase. Exceptions may be provided for drilling waste if the facility will comply with the applicable provisions of 18 AAC 60.	A.4.i. Mitigation measure not applicable: A solid waste disposal site will not be constructed for this project.
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 ADEC and ADF&G.	A.4.j. Mitigation measure satisfied: Mud and cuttings generated by activities will be hauled via vacuum truck or supersucker directly from the rig process tank to an offsite, permitted underground injection disposal facility. Hilcorp will request an ADEC Temporary Drilling Waste Storage plan authorization in the unlikely event drilling waste cannot be delivered directly for disposal.



Revised: March 2013

<b>5. Access</b>	
a. 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 38.05.965.	A.5.a. Mitigation measure satisfied: Seaview Pad access will be restricted. No access to public waters is blocked.
<b>6. Prehistoric, Historic, and Archaeological Sites</b>	
a. Before the construction or placement of any gravel, or other 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 affected borough 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 satisfied: Hilcorp does not intend to place gravel for pad or road surfaces in Ares that have not already been disturbed by recent gravel mining activity. The proposed pad will be constructed within disturbed areas of the gravel mine site that exists on the property, and access to the gravel pad will be via existing access roads. Additionally, Hilcorp contracted Charles M. Mobley & Associates to conduct an archaeological field study of the proposed project area in October 2017. Mr. Mobley detailed his methods, findings, and determination of project impacts in <i>Cultural Resource Assessment of the [property owner name omitted] Property, Kenai Peninsula Borough, Alaska, 2017</i> . A copy of the report will be provided to ADNRS's Office of History and Archaeology. In the document, Mr. Mobley concluded that there are "no known cultural resources in the study area" and that "The expectation for discovering significant cultural resources would be low".
b. The inventory of prehistoric, historic, and archeological sites must be submitted to the director, and to DPOR Office of History and Archaeology, who will coordinate with the affected borough 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 DPOR Office of History and Archaeology and the affected borough, will direct the lessee as to the course of action to take to avoid or minimize adverse effects.	A.6.b. Mitigation measure satisfied: See response to A.6.a.
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	A.6.c. Mitigation measure satisfied: EH&S training includes instruction to site workers to stop work if any archaeological/historic sites or artifacts are discovered. Discovery of archeological/historic sites or artifacts will be reported

Revised: March 2013

<p>object from damage until the director, after consultation with DPOR Office of History and Archaeology and the affected borough, has directed the lessee as to the course of action to take for its preservation.</p>	<p>as soon as possible, as required, to the appropriate agencies.</p>
<p><b>7. Local Hire, Communication, and Training</b></p>	
<p>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.</p>	<p>A.7.a. Mitigation measure satisfied: More than 89 percent of Hilcorp's workforce is comprised of Alaskan residents. Hilcorp works with local organizations, such as the Alaska Support Industry Alliance and the Kenai Peninsula Economic Development District, and local Chambers of Commerce to encourage growth in the local service sector. While not all contracted services are awarded to local/in-state providers, Hilcorp strives to do business locally whenever possible. To the extent they are available and qualified, locally based contractors will provide construction support for this and other projects.</p>
<p>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.</p>	<p>A.7.b. Mitigation measure satisfied: Hilcorp employees are actively engaged with regulators and stakeholders on all activities within the state. Hilcorp community outreach to date has included correspondence and/or presentations to Anchor Point Chamber of Commerce, the Alaska Support Industry Alliance, Cook Inlet Regional Citizens Advisory Council, and the Kenai Peninsula Economic Development District. Hilcorp personnel have been in contact with local land owners and area businesses regarding the activity associated with Seaview pad construction and proposed drilling program.</p> <p>Hilcorp's Alaska-based External Affairs Manager ensures that Hilcorp remains in open communication with stakeholders, regulators and the general public in Alaska. Hilcorp will continue to keep community members informed of planned activities by bulk mailings, posting targeted informational flyers in local information repositories (e.g., post offices), and evaluating projects on a case-by-case basis to hold public meetings.</p>
<p>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</p>	<p>A.7.c. Mitigation measure satisfied: Company and contract personnel will participate in project kickoff meetings that will include discussion of environmental, social, cultural, and community impacts, as well as impact mitigation practices that must be followed.</p>

<p>understanding of community values, customs, and lifestyles in areas where they will be operating.</p>	
<p><b>8. Definitions</b></p>	
<p><b><u>Facilities</u></b> 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.</p> <p><b><u>Hazardous substance</u></b> means: (A) an element or compound that, when it enters into or on the surface or subsurface land or water of the state, presents an imminent and substantial danger to the public health or welfare, or to fish, animals, vegetation, or any part of the natural habitat in which fish, animals, or wildlife may be found; or (B) a substance defined as a hazardous substance under 42 U.S.C. 9601 - 9657 (Comprehensive Environmental Response, Compensation, and Liability Act of 1980); "hazardous substance" does not include uncontaminated crude oil or uncontaminated refined oil; (AS 46.09.900).</p> <p><b><u>Identified wetlands</u></b> are those areas that have been identified as wetlands by the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act.<sup>1</sup></p> <p><b><u>Minimize</u></b> 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.</p> <p><b><u>Plan of operations</u></b> means a lease Plan of operations under 11 AAC 83.158 and a unit Plan of operations under 11 AAC 83.346.</p> <p><b><u>Practicable</u></b> means feasible in light of overall project purposes after considering cost, existing technology, and logistics of compliance with the standard.</p> <p><b><u>Secondary containment</u></b> means an impermeable diked area or portable</p>	

<sup>1</sup> *Wetlands means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas (40 CFR Parts 122.2, 230.3, and 232.2).*

impermeable containment structure capable of containing 110 percent of the volume of the largest independent container. Double walled tanks do not qualify as Secondary Containment unless an exception is granted for a particular tank.

**Temporary** means no more than 12 months.

## APPENDIX C: OTHER

Insert other information here.