



## Hilcorp Alaska, LLC

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May 24, 2017

Ms. Chantal Walsh, Director  
Oil and Gas Division  
Alaska Department of Natural Resources  
550 W. 7<sup>th</sup> Avenue, Suite 1100  
Anchorage, AK 99501

Re: Revised Proposed 36<sup>th</sup> Milne Point Unit Plan of Development

Dear Ms. Walsh,

Hilcorp Alaska, LLC (“Hilcorp”), as Operator of the Milne Point Unit (“MPU”), hereby submits the revised proposed 36<sup>th</sup> Milne Point Unit Plan of Development (“POD”). This plan will be effective August 1, 2017 through July 31, 2018.

### **I. FIELD OVERVIEW**

The MPU consists of the Kuparuk Reservoir in the Kuparuk Participating Area (“PA”), the Schrader Bluff Reservoir in the Schrader Bluff PA, the Sag River Reservoir in the Sag River PA, C-15A Tract Operations, S-90 Tract Operations, C-23 Tract Operations, K-33 Tract Operations, and the Ugnu MPS-37, MPS-39, MPS-41, and MPS-43 Tract Operations.

### **II. 35<sup>th</sup> PLAN REVIEW**

#### **A. 35<sup>th</sup> POD Production Summary**

During calendar year 2016, the MPU produced approximately 4,943 million cubic feet (“MMcf”) of gas and 7,148 thousand barrels (“Mbbbl”) of oil.<sup>1</sup> From January 1, 2017 through April 31, 2017, the average daily production rate was 20,203 barrels of oil per day (“BOPD”).

#### **B. 35<sup>th</sup> POD Drilling Program**

Hilcorp anticipated to drill up to ten new wells in the under the 35<sup>th</sup> POD. During the 35<sup>th</sup> POD period to date, Hilcorp has drilled six new wells, including:

- C-15A Sidetrack Producer targeting Sag River.
- L-50 Lateral Injector targeting Schrader OA Lower Lobe
- J-24A Sidetrack Lateral Injector targeting Schrader NB

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<sup>1</sup> Milne Point Unit has not historically and is not currently equipped to sell natural gas liquids (“NGL’s”). All of the oil produced/sold from the Milne Point field is conventional black oil.

- B-34 Grind and Inject into Ugnu
- B-32 Lateral Producer in Schrader NC
- B-33 Lateral Injector in Schrader NC

Hilcorp anticipates drilling the following wells during the remainder of the 35<sup>th</sup> POD period:

- B-30 Vertical Producer targeting Sag River
- C-46 Vertical Producer targeting Sag River
- C-47 Horizontal C-sand Kuparuk Producer

#### **C. 35<sup>th</sup> POD Workover Program**

Hilcorp anticipated completing up to sixteen (16) workovers under the 35<sup>th</sup> POD period. During the 35<sup>th</sup> POD period to date, Hilcorp has completed twenty five (25) workovers, including:

##### Prince Creek (Ugnu)

- 3 Water source well repairs
- 1 Convert to water source well

##### Schrader Bluff

- 5 ESP Change-outs
- 3 Jet Pump Repair
- 1 Convert to Jet Pump

##### Kuparuk

- 8 ESP Change-outs
- 1 New ESP Install
- 1 Convert to Jet Pump

##### Sag River

- 1 Convert to Jet Pump
- 1 Casing Leak Repair

In addition, Hilcorp plans to complete up to an additional (6) workovers (all Kuparuk wells, ESP change outs) during the remainder of the 35<sup>th</sup> POD period.

#### **D. 35<sup>th</sup> POD Major Facility Projects**

Hilcorp completed all anticipated facility projects outlined in the 35<sup>th</sup> POD, plus additional work, including:

- Routine facility maintenance and minor equipment replacement.
- Mechanical integrity activities included facility piping, vessels, tanks, and valve inspection and repair.

- Pipeline and flowline maintenance pigging, integrity inspections, analysis, and corrosion mitigation measures. Including four in-line inspections (i.e., “smart pig” runs) and pig launcher upgrades.
- Completed numerous fire and gas upgrade projects, including sprinkler systems at the main camp process areas and individual pads to address obsolescence and compliance issues.
- Grind and Inject (“G&I”) facility Programmable Logic Controllers (“PLC”) were upgraded to address obsolescence and reliability issues.
- Repaired and commissioned the B pad test separator vessel. Decommissioned the B pad VSRD test meter.
- Expanded existing production headers on B and C pads in preparation for future expansion.
- B Pad Gravel Expansion was completed to accommodate disposal well B-34.
- Camp repairs were completed to the roof, HVAC, and camp freezer.
- Approximately 80 rooms were opened up after camp upgrades were completed.
- Rig shore power tie-ins were installed for B-Pad, J-Pad, C-Pad, K-Pad, and D-Pad.
- Demolished and removed the cold storage building to make more useable storage space on the central facilities pad.
- Signed letter of intent committing to purchase agreement for an LM6000 power generator (42 megawatt generator package).
- Expanded existing Milne Point Mine Site (ADL 416092) by 22.4 acres.
- Constructed 2.7 mile road and initial gravel placement for 13 acre Moose Pad and progressed conceptual design and permitting of facilities to provide up to 76 new well slots and facilities. The Moose Pad project is ahead of the schedule outlined in the 35<sup>th</sup> POD.
- Placed gravel to expand E (1.3 acres) and F (3.3 acres) pads to allow up to 8 and 15 well slots, respectively.

In addition, Hilcorp anticipates completing HVAC upgrades at the MPU G&I facilities prior to the end of the current POD period.

### **III. 36<sup>th</sup> PLAN OF DEVELOPMENT AND OPERATIONS**

#### **A. Proposed Drilling Program**

Hilcorp anticipates drilling up to eighteen (18) new wells during the 36<sup>th</sup> POD period. Potential drilling candidates include:

- 5 wells from L Pad (Schrader NB Sands: 2 prod + 2 inj; Sag River: 1 prod)
- 2 wells from E pad (Schrader: 1 producer + 1 Inj)
- 10 wells from F pad (Schrader OA Sands: 4 prod + 5 inj; Sag River: 1 Producer); and
- One well from C pad (Kuparuk: 1 injector)

## **B. Proposed Workover Program**

During the 36<sup>th</sup> POD Period, Hilcorp anticipates completing up to sixteen (16) well workovers with the ASR1 rig.

## **C. Major Facility Projects**

Key facility projects anticipated to be undertaken during the 36<sup>th</sup> POD period may include:

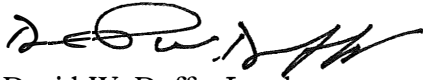
- Routine facility maintenance and minor equipment replacement.
- Mechanical integrity activities included facility piping, vessels, tanks, and valve inspection and repair.
- Pipeline and flowline maintenance pigging, smart pig runs, integrity inspections, analysis, and corrosion mitigation measures.
- Complete fire and gas upgrade projects at the main camp, process areas, and individual pads.
- LM2500 turbine swap and major overhaul.
- PLC upgrade to support upcoming drill wells on F Pad.
- Complete additional pad expansions to allow new drilling and well completions utilizing existing infrastructure.
- Complete facility upgrades to allow new drilling.
- Rig shore power tie-ins for E-Pad and repairs to F-Pad.
- Construct new 60-foot by 100-foot welding shop.
- Construct new 40-foot by 60-foot mechanics and valve shop.
- Construct meeting area at the Milne Point camp
- Progressed Moose Pad conceptual design and permitting activities.
- Submit progress payments to General Electric for an LM6000 power generator and engineer the installation package.
- Purchase new facility switch gear to support the LM6000 package.
- Procure, construct, and install surface facilities and pipeline for Moose Pad.
- Permit and initiate construction on a new pad to allow additional drilling and/or facilities.

Other projects may include, but are not limited to:

- Add additional compression at existing surface facilities to support existing wells and increased production achieved through Hilcorp's workover and drilling program.
- Increase the capacity of the existing surface equipment at unit pads for processing by adding additional line heaters, gas dehydration modules, and/or liquid separation vessels with associated piping and controls.

Your approval of the submitted plan is respectfully requested. Should you have questions, please contact the undersigned at 777-8414.

Sincerely,

A handwritten signature in black ink, appearing to read 'David W. Duffy', with a stylized flourish at the end.

David W. Duffy, Landman  
Hilcorp Alaska, LLC

cc: Division of Oil and Gas (via [rebecca.kruse@alaska.gov](mailto:rebecca.kruse@alaska.gov))

BP Exploration (Alaska)