

3800 Centerpoint Drive Suite 1400 Anchorage, AK 99503

Phone: 907/777-8414 Fax: 907/777-8301 dduffy@hilcorp.com

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

Kevin J. Pendergast, PE CPG Deputy Regional Director, Alaska Region Bureau of Safety and Environmental Enforcement 3801 Centerpoint Drive, Ste 500 Anchorage, AK 99503

Re: Revised Proposed 14<sup>th</sup> Northstar Unit Plan of Development

Dear Ms. Walsh,

Hilcorp Alaska, LLC ("Hilcorp"), as Operator of the Northstar Unit ("NU"), hereby submits this revised proposed 14<sup>th</sup> Northstar Unit Plan of Development ("POD"). This plan will be effective August 1, 2017 through July 31, 2018.

#### I. FIELD OVERVIEW

The Alaska Department of Natural Resources Division of Oil and Gas ("DNR") and the U.S. Department of Interior, Bureau of Safety and Environmental Enforcement ("BSEE") jointly manage the NU. On December 4, 2014, DNR approved Hilcorp as successor operator.

The NU is comprised of three oil sand accumulations: the Ivishak sands in the Northstar Participating Area ("PA"); the Ivishak sands in the Fido PA; and the Kuparuk sands in the Hooligan PA.

### II. 13<sup>th</sup> PLAN REVIEW

### A. 13th POD Production Summary

During calendar year 2016, the NU produced approximately 197,883,727 million cubic feet ("MMcf") of gas and 3,291 thousand barrels ("Mbbl") of oil. From January 1, 2017 through April 30, 2017, the average daily production rate is approximately 10,458 barrels of oil per day ("BOPD").

<sup>&</sup>lt;sup>1</sup> For production reporting purposes, "oil" includes black oil and NGLs.

## B. 13<sup>th</sup> POD Drilling Program

No new grassroots wells or sidetrack projects were planned or drilled at the Northstar Unit during the 13<sup>th</sup> POD period.

## C. 13th POD Wellwork and Workover Program

Hilcorp planned and completed the following well projects during the 13<sup>th</sup> POD period:

- Northstar PA
  - NS-18 Performed rig workover ("RWO") recompletion from the Ivishak reservoir to the Kuparuk (August 2016)
  - o NS-15 Surface casing excavation/repair. (April 2017)
  - NS-13 Convert the well to a gas injector in the Ivishak reservoir. Planned for Q2 2017.
- Fido PA
  - o NS-34A Plan to optimize gas lift design. Project to coincide with gas lift surface system uprating. Planned for Q2 2017.
- Hooligan PA
  - NS-18 Performed RWO recompletion from the Ivishak reservoir to the Kuparuk A sands (August 2016)
  - NS-18 Added perforations in the Kuparuk C to commingle the Kuparuk A sands (December 2016)

# D. 13<sup>th</sup> POD Major Facility Projects

Key activities included:

- Upgraded the HP-B compressor's controls.
- Swapped out the HP-B compressor's LM2500 Gas Generator.
- Rebuilt the HP-B compressor's Power Turbine.
- Fit NS-8 and NS-18 with larger Production Chokes with the objective of increasing production rates (completion is planned for Q2 2017).
- Uprate the surface system to facilitate higher gas lift pressures (completion is planned for Q2 2017).

## III. 14th PLAN OF DEVELOPMENT AND OPERATIONS

Throughout the 14<sup>th</sup> POD Period, Hilcorp anticipates current unit production will be maintained and increased through the following activities:

### A. Proposed Drilling Program

No new grass-roots wells or sidetracks are anticipated during the 14th POD Period.

### B. Proposed Wellwork and Workover Program

During the 14<sup>th</sup> POD Period, Hilcorp anticipates the following workover projects:

- Northstar PA
  - No current workovers are anticipated during the 14<sup>th</sup> POD period.
- Fido PA
  - o No new well projects are anticipated during the 14<sup>th</sup> POD period.
- Hooligan PA
  - NS-15 Perform RWO recompletion from the Ivishak reservoir to the Kuparuk

Hilcorp will evaluate and execute additional well work opportunities as they arise. During the 14<sup>th</sup> POD period, Hilcorp will continue to pursue efficiencies through various well optimizations, including the evaluation of shut-in wells utility and their potential return to service.

### C. Major Facility Projects

Anticipated facility projects planned during the 14<sup>th</sup> POD period will include:

- HP-A and LP compressor controls will be upgraded during Q3 2017.
- HP-A Power Turbine will be rebuilt during Q3 2017.
- In Line Inspection (Smart Pig) on the Crude Export line is planned for summer 2017.

Hilcorp, as Unit Operator, reserves the right to propose modifications to this Plan should conditions so warrant; however, no modifications will be made without first obtaining necessary approval from the appropriate governmental agencies.

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

Sincerely,

David W. Duffy, Landman

Hilcorp Alaska, LLC

cc: Division of Oil and Gas (via email to rebecca.kruse@alaska.gov);

BSEE (kevin.pendergast@bsee.gov)