



Hilcorp Alaska, LLC

3800 Centerpoint Drive
Suite 1400
Anchorage, AK 99503

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

May 1, 2017

RECEIVED

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**DIVISION OF
OIL AND GAS**

Ms. Chantal Walsh, Director
Oil and Gas Division
Alaska Department of Natural Resources
550 W. 7th 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: Proposed 14th Northstar Unit Plan of Development

Dear Ms. Walsh,

Hilcorp Alaska, LLC ("Hilcorp"), as Operator of the Northstar Unit ("NU"), hereby submits this revised proposed 14th 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.

The NU is comprised of three oil sand accumulations: the Ivishak sands in the Northstar PA; the Ivishak sands in the Fido PA; and the Kuparuk sands in the Hooligan PA. To date, 30 wells have been drilled. There are 17 producing wells (two shut in), seven gas injection wells (zero shut in), two disposal wells and one suspended well (NS-26).

II. 13th PLAN REVIEW

On December 4, 2014, DNR approved Hilcorp as successor operator. On July 5, 2016, DNR approved Hilcorp's proposed 13th POD. On March 1, 2017, the DNR and BSEE approved Hilcorp's application to vertically expand the NU Hooligan PA effective August 1, 2016.

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 (Mbbbl) of oil. The field entered 2016 producing 328,806 barrels of oil per month (BOPM) in January and exited 2016 producing

313,688 BOPM in December. During 2017 year-to-date (YTD), the average daily production rate is approximately 10,478 barrels of oil per day (BOPD).

B. 13th POD Drilling Program

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

C. 13th POD Workover Program

Hilcorp planned and completed the following well projects:

- Northstar PA
 - NS-22 - Surface casing excavation/repair completed. (April 2016)
 - NS-16A – Re-perforate Ivishak with indications of scale, provided minimal benefit. (July 2016)
 - NS-18 - Performed RWO recompletion from the Ivishak reservoir to the Kuparuk (August 2016)
 - NS-15 - Surface casing excavation/repair. (April 2017)
 - Convert the NS-13 well to a gas injector in the Ivishak reservoir. Planned for Q1 2017.
- Fido PA
 - No new well projects occurred for the Fido PA during the 13th POD period.
- 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. 13th 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).
- Update the surface system to facilitate higher gas lift pressures (completion is planned for Q2 2017).

III. 14th PLAN OF DEVELOPMENT AND OPERATIONS

Throughout the 14th 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 pending POD Period.

B. Proposed Workover Program

During the 14th POD Period, Hilcorp anticipates the following workover projects:

- Northstar PA
 - NS-13 - Convert into a gas injector in the Ivishak reservoir. This project will reduce injection pressure in the field and allow for compressor horsepower optimization.
- Fido PA
 - NS-34A – Plan to optimize gas lift design. Project to coincide with gas lift surface system uprating.
- Hooligan PA
 - NS-15 - Perform RWO recompletion from the Ivishak reservoir to the Kuparuk

In addition to maintaining unit and PA production, Hilcorp will evaluate and execute additional well work opportunities as they arise. During the 14th 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

Facility projects anticipated to be planned during the 14th POD period will include the following activities:

- HP-A and LP compressor controls will be upgraded during summer 2017.
- HP-A Power Turbine will be rebuilt during summer 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,

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 email to rebecca.kruse@alaska.gov);
BSEE (kevin.pendergast@bsee.gov)