



## Hilcorp Alaska, LLC

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March 3, 2016

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

**RECEIVED**

**MAR - 3 2016**

**DIVISION OF  
OIL AND GAS**

**Re: 2016 Plan of Development and Operations for the Ninilchik Unit**

Dear Mrs. Feige:

Hilcorp Alaska, LLC ("Hilcorp") as Operator, hereby submits the 2016 Plan of Development and Operations for the Ninilchik Unit. This plan will be effective from June 1, 2016 through May 31, 2017.

### **I. FIELD OVERVIEW**

The Ninilchik Unit was formed in 2001. In 2003, the unit was expanded to include the federal Falls Creek Unit. At that same time, the DNR approved the formation of three Participating Areas ("PA's") including: Falls Creek, Grassim Oskolkoff, and Susan Dionne. In 2007, the DNR approved expansion of the Susan Dionne PA to include tract operations drilled from the Paxton Pad in the southern portion of the Unit ("SD-PAX PA").

On February 1, 2013, Hilcorp acquired the Ninilchik Unit from former unit operator, Marathon Oil Company. Since that time, Hilcorp has actively pursued various exploratory and development drilling projects. In addition, Hilcorp has implemented workovers and facility improvements designed to expand and optimize production. This exploration and development strategy will continue throughout the 2016 POD cycle, and will ultimately transition the unit from its current exploratory stage.

No oil is produced from the Unit. The Unit's existing PAs are limited to production of gas from the Tyonek formation. However, gas is produced outside of existing Participating Areas from both the Beluga and the Tyonek formations on a Tract Basis.

In total, 35 wells have been drilled to date in the Ninilchik Unit. Cumulative production exceeds 155.2 bcf. There are currently 28 wells online, 6 are shut-in and 9 are either suspended or plugged and abandoned.

Following the completion of Hilcorp's exploratory drilling program, Hilcorp will be begin vertically and geographically expand existing Participating Areas.

During the 2016 POD period, and following completion of a comprehensive field study of the Beluga and Tyonek Formations, Hilcorp will prepare a proposal to reconfigure the current Falls Creek PA boundary. This will also require modification of the Unit boundary. Hilcorp anticipates submission of these PA and Unit boundary adjustments during the Third Quarter or Fourth Quarter of 2016.

Hilcorp has additional exploratory and field study work to accomplish prior to reconfigure the current Grassim Oskolkoff and SD-PAX PAs. As such, Hilcorp anticipates undertaking these steps during the 2017 POD period.

**As a result, Hilcorp requests DNR to defer mandatory unit contraction until at least May 31, 2017.**

## **II. 2015 PLAN REVIEW**

### **A. 2015 Production Summary**

- Falls Creek PA (Undefined Tyonek Pool) Production: There are currently 4 active PA wells at the Falls Creek Pad. In 2015, production was 3.611 MMSCF/D.
- Grassim Oskolkoff PA (Undefined Tyonek Pool) Production: There are currently 4 active PA wells. In 2015, production was 3.436 MMSCF/D.
- Susan-Dionne-Paxton PA (Undefined Tyonek Pool) Production: There are currently 8 active PA wells. In 2015, production was 16.618 MMSCF/D.
- Ninilchik Tract Operation (Undefined Beluga/Tyonek Pools) Production: There are currently 9 active tract wells and three shut-in wells. In 2015, production from these tract operations was 16.356 MMSCF/D.

### **B. 2015 Drilling Program:**

- Hilcorp successfully drilled the GO 8 well during the 2015 POD period.
- Hilcorp also drilled the Blossom No. 1 from the Blossom Pad during 2015. Further testing and analysis is required to evaluate future utility of this wellbore.

### **C. 2015 Workover Program:**

- FC-06: perf add
- GO 04 coil tubing cleanout and perf add
- GO-1 coil tubing cleanout and perf add
- PAX-7 perf add

### **D. 2015 Major Facility Projects**

- **Blossom Pad:** Completed construction of pad and road.

- **Kalotsa Pad:** During 2015, Hilcorp completed the civil engineering and design work required to build the proposed Kalotsa Pad. This project has been delayed by permitting issues and will be continued in 2016.

### **III. 2016 PLAN OF DEVELOPMENT AND OPERATIONS**

Hilcorp anticipates current Unit production will be maintained and increased throughout the 2016 POD period. Hilcorp also plans to complete ongoing structural field studies of the GO, SD-PAX and Falls Creek structures. More technical information is needed to quantify the amount of gas in both the Beluga and Tyonek Formations.

#### **1. 2016 Drilling Program**

- **Kalotsa #1:** Originally planned for 2015, this ~9,000' development well has been designed to target production from the Beluga and Tyonek formations. This well will be drilled from the proposed Kalotsa pad located between the Paxton and Susan Dionne pads. New road, pad and facility construction is required.
- **GO 9:** Planned as a high angle development gas well targeting the Upper Tyonek reservoirs in the GO PA. Because of the high angle this well will also gather potential in the even shallower Beluga Sands.

- 2. 2016 Workover Program:** Based on the results of the ongoing field studies, Hilcorp will identify future rig workover projects. During 2016, Hilcorp anticipates adding perforations in PAX-8 well and will evaluate the utility of adding velocity strings in various wellbores to enhance production.

In addition to the above, Hilcorp will evaluate and execute additional well work and drilling opportunities as they arise. Throughout 2016, Hilcorp will continue to pursue efficiencies through various well, infrastructure and facility repairs, including evaluation of shut-in wells for potential return to service or utility.

#### **3. 2016 Major Facility Projects**

To the extent that Hilcorp's exploratory and development activities are successful, existing infrastructure and facilities will require expansion to accommodate increased production. Anticipated projects include:

- **Kalotsa Pad:** Due to the well geometry, a new pad is currently planned to be constructed to successfully develop the shallow gas at the SD/Paxton area of Ninilchik.
- **Compression:** To maintain and enhance production, compression will likely be installed at the GO and Francis pads.

Other project 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 2016 workover and drilling program.
- Increase the capacity of the existing surface equipment at unit pads for gas processing by adding additional line heaters, a gas dehydration module, and liquid separation vessels with associated piping and controls.
- As required, expand the pad(s) for the drilling program and production equipment explained above.
- To the extent required, expand other infrastructure requirements, including construction or expansion of access roads, pipelines, flow lines, metering, processing and storage vessels, etc.

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: Kyle Smith, Division of Oil and Gas (via email to [kyle.smith@alaska.gov](mailto:kyle.smith@alaska.gov))