



## Hilcorp Alaska, LLC

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May 1, 2017

**RECEIVED**

**MAY - 1 2017**

**DIVISION OF  
OIL AND GAS**

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: Proposed 2017-2018 Duck Island Unit Plan of Development

Dear Ms. Walsh,

Hilcorp Alaska, LLC ("Hilcorp"), as Operator, hereby submits the proposed 2017-2018 Duck Island Unit Plan of Development ("POD"). This plan will be effective July 1, 2017 through July 31, 2018.

### **I. FIELD OVERVIEW**

Production from the Duck Island Unit is associated with the Kekiktuk Reservoir in the Endicott Participating Area, the Ivishak Reservoir in the Sag Delta North Participating Area, the Ivishak Reservoir, the Sag River Reservoir Eider Participating Area, and the Sag River Reservoir in the Minke Tract Operation.

As of December 31, 113 unit wells have been drilled, including: 73 producer wells (19 shut in); 31 injection wells (11 shut in); six gas injection wells (two shut in); one disposal well (2-02); and two suspended wells (1-53 and 1-59).

### **II. 2016-2017 PLAN REVIEW**

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

During calendar year 2016, the Duck Island Unit produced approximately 114,067 million cubic feet (MMcf) gas and 2,728 thousand barrels (Mbbl) oil. The field entered 2016 producing 266,585 barrels of oil per month (BOPM) and exited 2016 producing 257,991 BOPM. During 2017 year-to-date (YTD), the average daily production rate is 8,762 barrels of oil per day (BOPD).

#### **B. Drilling Program**

No new grassroots or sidetrack drilling projects were proposed or undertaken during the 2016-2017 POD period.

### **C. Workover Program**

During the 2016-2017 POD Period, Hilcorp anticipated completing up to 6 rig workovers, plus various rate add projects. In review, Hilcorp met and exceeded this estimate through the completion of the following:

- SDI 4-14A (Prod): patch tubing, returned to production (“RTP”), avoided planned Rig Work Over (“RWO”) (+60 bopd) (April 2016)
- MPI 2-46B (Prod): perf add of UPSZ FIV/FV laminated pay, project was unsuccessful (May 2016)
- SDI 3-09A (Prod): gaslift redesign (May 2016)
- SDI 3-21 (Prod): gaslift redesign (May 2016)
- MPI 2-52 (Prod): RWO, tubing swap, & RTP well (+220 bopd) (June 2016)
- MPI 2-38 (Prod): RWO, tubing swap, & RTP well (+220 bopd) (June 2016)
- SDI 4-42 (Prod): Perf add of UPSZ FII near tar prior to WINJ Conversion, pre-produced (+50 bopd) (Oct 2016)
- SDI 4-02 (Prod): Perf add of UPSZ FIV traditional pay, project was successful (+65bopd) (October 2016)
- SDI 4-10A (Prod): Perf add of S3A2 traditional pay, project was successful (+650bopd) (November 2016)
- MPI 1-65A (Prod): Fished stuck SSSV with Coil and RTP, success (+150 bopd) (December 2016)
- SDI 3-41 (WINJ): CTCO to improve injectivity into K2A (December 2016)
- SDI 4-46 (Prod): Perf add of UPSZ FI laminated pay, project was unsuccessful (December 2016)

**In addition, the following well work is in progress and is anticipated to be completed prior to July 1, 2017:**

- SDI 4-42 (PROD): convert to injection to improve pattern support
- SDI 3-25B (PROD): perf K2A & S3A2
- SDI 3-29 (PROD): dump cement on existing plug (installed 2015) to shut off water from K2B
- MPI 1-09A (GINJ): regain well integrity (TxIA communication) through non-rig wellwork
- SDI 4-04A (PROD): convert to injection to improve pattern support to well MPI 4-18 (PROD)
- MPI 5-03 (WINJ): coil tubing cleanout (“CTC”) to improve injectivity in Ivishak - Sag Delta North Oil Pool
- MPI 1-21 (WINJ): perform CTC and add perms to improve injectivity in the K2A
- MPI 2-22 (WINJ): perf UPSZ FV to support existing MPI 2-26 (PROD)
- MPI 2-60 (PROD): perform surface casing repair and RTP
- MPI 2-14 (PROD): perform surface casing repair and RTP

**Other pending well work anticipated to extend beyond July 1, 2017 includes:**

- MPI 2-50 RWO and conversion to WINJ was delayed to rig availability
- MPI 1-11 RWO was delayed due to delays regarding to coil tubing cleanout of the 5-03 (WINJ)
- SDI 3-23 conversion to water injection has been cancelled in favor of sidetracking this well in 2018

**D. Major Facility Projects:**

**During the 2016-2017 POD Period, Hilcorp anticipated and completed the following projects:**

- 30 day full facility turnaround (TAR) 30 day full facility turnaround (TAR) completed in July 2016. Projects included:
  - 1802 Water Pump turbine swap
  - Propane turbine repair.
  - A/B Main compressor anti-surge controls upgrade
  - Waste water tank and CPI A/B vessel internal inspections and repairs
  - 35 discreet O&M projects
- Turbine rebuild – the turbine from 1802 was rebuilt during 3rd quarter 2016

**Other facility work anticipated to be completed prior to July 1<sup>st</sup> 2017 includes:**

- In Line Inspection (Smart Pig) on the Crude Export line is planned for summer 2017.

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

Throughout the proposed 2017-2018 POD Period, Hilcorp anticipates that unit production will be maintained and enhanced through the following activities:

**A. Proposed Drilling Program**

During the 2017-2018 POD Period, Hilcorp anticipates completing and least one (1), and possibly up to six (6) additional sidetrack drilling projects:

- SDI 3-23A (Prod) Sidetrack – Endicott Oil Pool - Kekiktuk S3A4/S3A3/S3A2/K2B
- Additional MPI & SDI sidetrack(s) opportunities will be evaluated, and possibly drilled pending initial drilling and well work results. Donor well(s) planned for sidetracks will likely be long term shut in well(s).

**B. Proposed Workover Program**

During the 2017-2018 POD Period, Hilcorp anticipates undertaking the following projects:

- MPI 2-50 (PROD): RWO - Endicott Oil Pool - Kekiktuk UPSZ
  - Conversion to WINJ to support active MPI 2-58 (PROD) & MPI 2-46B (PROD)
  - Patch casing, replace tubing, and return to production.
- MPI 1-29 (PROD): RWO - Endicott Oil Pool - Kekiktuk
  - Pull completion, patch liner - GSO, run completion, and return to production.

Throughout the 2017-2018 POD Period, Hilcorp will continue to evaluate and execute additional development opportunities as they arise, including the evaluation of shut-in wells for their potential return to service.

**C. Major Facility Projects**

Key facility projects anticipated to be undertaken during the 2017-2018 POD Period include:

- Separation train water removal improvements
- Inspection of Slurry Tank and Potable H2O Tank
- Main Gas Compressor B-Train Turbine Overhaul
- Inter-Island Gas Lift Pipeline Pig Traps Installation

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](mailto:rebecca.kruse@alaska.gov))  
DIU WIOs (via email)