

Department of Natural Resources

DIVISION OF OIL & GAS

550 W 7th Avenue, Suite 1100 Anchorage, AK 99501-3560 Main: 907.269.8800 Fax: 907.269.8939

July 27, 2017

CERTIFIED MAIL
RETURN SERVICE REQUESTED

Alicia Showalter Hilcorp Alaska, LLC 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503

RE: Duck Island Unit 2017 14th Plan of Development—Approved

Dear Ms. Showalter:

Hilcorp Alaska, LLC (Hilcorp) submitted a proposed Duck Island Unit 14th Plan of Development to the Department of Natural Resources, Division of Oil and Gas (Division) on May 1, 2017. The Division identified areas in the proposed Plan needing correction or clarification, and on that basis found it incomplete. Hilcorp provided a technical presentation to the Division on May 15, 2017. Hilcorp submitted a revised proposed Plan of Development (2017 POD) on May 24, 2017. The 2017 POD provided the requested clarifications, and overall provides information about development and operational activities, as prescribed by 11 AAC 83.343. Accordingly, the Division notified Hilcorp by email on June 1, 2017, that the 2017 POD was complete. This decision approves the 2017 POD.

For the 2016 (35th) POD period, Hilcorp committed to numerous well workover activities:

- 1. Replace tubing or install tubing patch in SDI 4-14A;
- 2. Add perforations to MPI 4-46;
- 3. Patch casing, replace tubing, and convert MPI 2-50 to a water injector;
- 4. Patch casing, replace tubing, and return MPI 1-11 to injection;
- 5. Convert SDI 4-42 to a water injector;
- 6. Convert SDI 3-23 to a water injector.

Hilcorp reported completing the first two well workover activities, but it deferred numbers three and four, and cancelled number six, and number five is in progress. Hilcorp clarified that several of the well workover activities it listed as future activities in its 2016 POD had actually been completed under the 2015 (34th) POD. Hilcorp also completed additional well workover activities that it did not include in its 2016 POD, including adding perforations to numerous wells.

Hilcorp committed to several facility projects in its 2016 POD, including:

- 1802 Water Pump turbine swap;
- Propane turbine repair;
- Upgrade of A/B main compressor antisurge controls;
- Inspections and repairs of the wastewater tank and CPI A/B vessel;
- 35 operations and maintenance projects;
- Rebuilding the Turbine from 1802.

Hilcorp reported completing these facility projects during the 2016 POD period.

During calendar year 2016, Hilcorp produced 114,638 MMcf gas and 2,728 Mbbl oil. While reviewing the 2017 POD, the Division identified some discrepancies between the gas production volumes Hilcorp specified in the POD and AOGCC records for production. Hilcorp determined that it had misreported the volume for August 2016. According to Hilcorp it has corrected the AOGCC reporting and will correct its royalty reports with the Division.

For the 2017 POD, Hilcorp commits to:

- Drill SKI 3-23A sidetrack.
- Evaluate shut-in wells to drill up to six additional sidetracks.
- Undertake two rig workover projects and several non-rig well work projects, including returning shut-in wells to production, recompleting wells, and well conversions for pressure maintenance.
- Improve separation train water removal.
- Inspect the slurry and potable water tanks.
- Overhaul the main gas compressor B-train turbine.
- Install inter-island gas lift pipeline pig traps.

When considering a POD, the Division considers the public interest, conservation of natural resources, prevention of economic and physical waste, protection of all interested parties, including the state, environmental costs and benefits, geological and engineering characteristics of reservoirs or potential hydrocarbon accumulations, prior exploration activities, plans for exploration or development, economic costs and benefits to the state, and any other relevant factors, including mitigation measures. 11 AAC 83.303(a), (b). The Division previously considered these factors in approving earlier PODs, and incorporates those findings by reference.

Continued production along with Hilcorp's drilling, workover, and maintenance plans protect the State's economic interests in developing its natural resources. Hilcorp's planned activities should not increase the impact to the land, further demonstrating the conservation and environmental

benefits of unitized development. Hilcorp's facility maintenance plans should also help to prevent potential environmental loss.

Considering the 11 AAC 83.303 criteria and the continued production and activities proposed with this POD, the Division approves the 2017 POD.

At the May 15, 2017, technical meeting, Hilcorp requested that its PODs be due in the fourth quarter going forward. Based on current staffing levels and schedules, the Division can accommodate this request. Thus the 2017 POD is approved for the period August 1, 2017 through February 12, 2019, with future POD periods to run from February 13 to February 12. The 2019 POD is due 90 days before the 2017 POD expires, on or before November 15, 2018. Because this POD period is longer than originally planned, the Division anticipates that Hilcorp will need to later amend the POD with additional activities. Hilcorp may submit an amendment at any time, but should plan to submit one before August 1, 2018 to address activities for August 2018 through February 2019. Please also provide a copy of the Surveillance Report and any presentation material that you provide to the AOGCC in April 2018.

A person affected by this decision may appeal it, in accordance with 11 AAC 02. Any appeal must be received within 20 calendar days after the date of "issuance" of this decision, as defined in 11 AAC 02.040(c) and (d) and may be mailed or delivered to Andrew T. Mack, Commissioner, Department of Natural Resources, 550 W. 7th Avenue, Suite 1400, Anchorage, Alaska 99501; faxed to 1-907-269-8918, or sent by electronic mail to dnr.appeals@alaska.gov. This decision takes effect immediately. An eligible person must first appeal this decision in accordance with 11 AAC 02 before appealing this decision to Superior Court. A copy of 11 AAC 02 may be obtained from any regional information office of the Department of Natural Resources.

If you have questions regarding this decision, contact Ken Diemer with the Division at 907-269-8784 or via email at Ken.Diemer@Alaska.gov.

Sincerely,

Chantal Walsh

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Director