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

## 48<sup>th</sup> PLAN OF DEVELOPMENT FOR THE IVAN RIVER UNIT

Hilcorp Alaska, LLC ("Hilcorp"), as Operator of the Ivan River Unit ("IRU"), hereby submits the proposed 48<sup>th</sup> Plan of Development for the IRU ("2018 POD") to the State of Alaska, Department of Natural Resources ("DNR"), pursuant 11 AAC 83.343.

On April 17<sup>th</sup>, 2017, DNR approved the 47<sup>th</sup> Plan of Development and Operations for the IRU ("2017 POD"), submitted by Hilcorp. The 2017 POD was approved for the period of June 1, 2017 through May 31, 2018.

## A. <u>PERIOD</u>

This plan will be effective from June 1, 2018 through May 31, 2019. The 2019 POD will be submitted on or before March 1, 2019.

## B. 2017 ANNUAL REPORT

The following is Hilcorp's annual report of the 2017 POD period, pursuant 11 AAC 83.343 (d):

- 1) 2017 POD Approved Development Plans: The 2017 POD consisted of the following development plans:
  - a) Maintain/Enhance Production: Hilcorp will continue to produce from the Sterling-Beluga and Tyonek PAs. Hilcorp will continue to utilize IRU disposal wells. Hilcorp will pursue efficiencies through various well, infrastructure and facility repairs, including evaluation of shut-in wells for potential return to service or utility.
  - b) **Drilling Program:** At this time, no grassroots or sidetrack drilling projects are anticipated or required.
  - c) Workover Program: At this time, no workovers are anticipated or required. Such work will be implemented as needed to maintain or enhance unit production.
  - d) Facility Projects: At this time, no major facility upgrades are planned for the IRU in 2017. Hilcorp will, as needed:

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- Increase the capacity of the existing surface equipment at the pad for gas processing by adding additional line heaters, liquid separation vessels with associate piping and controls, and if necessary modify compressors.
- 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.
- 2) 2017 POD Development Plans Achieved: The extent to which the requirements of the previously approved plan were achieved is as follows:
  - a) Maintain/Enhance Production: During 2017, cumulative gas production from the IRU was 249.1 million standard cubic feet ("MMcf"). Well production and service from the IRU are detailed as follows:
    - Sterling-Beluga Gas PA (Undefined Pool) Production. During 2017, there was no production from the Sterling-Beluga Gas PA.
    - **Tyonek Participating Area (Undefined Pool) Production.** During 2017, the average daily production from the Tyonek PA was 0.682 million standard cubic feet per day ("MMSCF/D").
    - **Disposal Wells.** IRU 14-31 and 13-31 are currently used as the disposal wells for Hilcorp's West-side operated fields (Lewis River, Pretty Creek, Ivan River and Stump Lake).

During the 2017 POD period, Hilcorp began a comprehensive field study that would lead to possibly enhancing production. Hilcorp evaluated the Sterling, Beluga and Tyonek reservoirs for further development. This field study included pursuing efficiencies through various well, infrastructure and facility repairs, including evaluation of shut-in wells for potential return to service or utility.

- **b) Drilling Program:** Hilcorp did not complete any grassroots or sidetrack drilling projects during the 2017 POD period, as planned.
- c) Workover Program: Hilcorp did not complete any workovers during the 2017 POD period, as planned.
- **d)** Facility Improvements: Hilcorp did not complete any major facility improvements during the 2017 POD period, as planned. The need for the following facilities projects did not occur, as mentioned in the approved 2017 POD:

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- Increase the capacity of the existing surface equipment at the pad for gas processing by adding additional line heaters, liquid separation vessels with associate piping and controls, and if necessary a gas dehydration module.
- 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.
- **3) 2017 POD Development Plans Not Achieved:** The following are actual operations that deviated from or did not comply with the previously approved plan and an explanation of the deviation or noncompliance:
  - a) Hilcorp completed all development plans in the approved 2017 POD.

## C. 2018 PLAN OF DEVELOPMENT

The following activities included in the 2018 POD follow the outline provided in 11 AAC 83.343 (a) and incorporate all planned development activities anticipated based on all data reasonably available at this time. The following components of the 2018 POD meet the requirements contained in 11 AAC 83.343 (c).

- 1) Long-Range Development Activities: The following are long-range proposed development activities for the unit, including plans to delineate all underlying oil or gas reservoirs into production, and maintain and enhance production once established:
  - a) Hilcorp does not have any long-range proposed development activities for the unit during the 2018 POD period.
- 2) Exploration/Delineation Plans: The following are plans for the exploration or delineation of any land in the unit not included in a participating area:
  - a) Hilcorp does not have any planned exploration or delineation activities during the 2018 POD period.
- **3) Proposed Operations:** The following are details of the proposed operations for at least one year following submission of the plan:
  - a) Maintain Production: Hilcorp will continue to produce from the Sterling-Beluga and Tyonek Participating Areas as needed, while continuing to utilize IRU disposal wells.
  - **b) Drill Program:** Hilcorp does not have any drill wells planned for the 2018 POD period.

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- c) Workover Program: Hilcorp does not have any workovers planned for the 2018 POD period.
- 4) Surface Location of Proposed Facilities: The following are the surface location of proposed facilities, drill pads, roads, docks causeways, material sites, base camps, waste disposal sites, water supplies, airstrips, and any other operation or facility necessary for unit operations:
  - a) Facility Projects: At this time, no major facility upgrades are planned for the 2018 POD period. However, as the need arises, Hilcorp will pursue improvements through various well, infrastructure and facility repairs.

Your approval of this proposed 2018 POD is respectfully requested. Hilcorp believes that this 2018 POD satisfies the requirements of 11 AAC 83.343 and is in compliance with the provisions of 11 AAC 83.303. Should you have questions, please contact the undersigned at 777-8432.

Sincerely,

T. Tenell

Cody T. Terrell, Landman Hilcorp Alaska, LLC

cc: Kevin Pike, Division of Oil and Gas (via email) Sean Clifton, Division of Oil and Gas (via email)