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DIVISION OF  
OIL AND GAS

January 31, 2017

Ms. Chantal Walsh, Director  
Alaska Division of Oil and Gas  
550 W. 7<sup>th</sup> Ave., Suite 1100  
Anchorage, AK 99501-3560

**Re: Submittal of West McArthur River Unit 26<sup>th</sup> Plan of Development and Redoubt Unit 17<sup>th</sup> Plan of Development**

Ms. Walsh:

Cook Inlet Energy, LLC, a Glacier Oil and Gas company ("GLA") hereby provides its Unit Plans of Development as required under 11 AAC 83.343 to the Division of Oil and Gas ("Division").

A technical meeting with Division staff will be scheduled in February for GLA to present technical information to support the operations proposed in the enclosed plans.

GLA has been diligently working to meet its obligations under its leases and unit agreements.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Tim Jones', written over a horizontal line.

Tim Jones  
Senior Landman

CC: Becky Kruse, Unit Manager

## Redoubt Unit

### 17<sup>th</sup> Plan of Development

#### Overview

The 17<sup>th</sup> Plan of Development (“POD”) shall cover the period from May 1, 2017 through April 30, 2018.

By letter dated March 22, 2016 the Division approved the 16<sup>th</sup> POD submitted by Cook Inlet Energy, LLC (“GLA”) as Operator of the Redoubt Unit. The 16<sup>th</sup> POD approval was for the period May 1, 2016 through April 30, 2017.

#### Annual Report

The following is GLA’s annual report under 11 AAC 83.343 (d).

The development plans contained in the 16<sup>th</sup> POD consisted of:

- GLA plans to sidetrack the RU 7A well as RU 7B, which may include a hydraulic fracture stimulation.
- In addition, GLA plans to use Rig 35 to continue well maintenance and optimization for all Redoubt Unit wells as necessary and appropriate, including electric submersible pump (“ESP”) changeouts in either RU 1A, RU 5B, or both. If the first hydraulic fracture stimulation on RU 7B is successful, CIE may also stimulate one or both wells to increase production.
- GLA intends to examine the various options for continuing the exploration and development of the South Stepout and arrive at a preferred course of action.
- GLA will schedule a technical meeting in the 1Q17 to present any updates to its geologic interpretation of the reservoir(s) within the Redoubt Unit.

*(1) the extent to which the requirements of the previously approved plan were achieved*

- GLA completed a sidetrack drilling program of RU 7A as RU 7B. GLA completed a hydraulic fracture stimulation of the RU 7B well. GLA recently brought the well into production and is waiting for production to stabilize.
- GLA completed upgrades to the Osprey platform to lower costs and create efficiencies, including the replacement of the gas-fired boiler used for space heating to an electric heating system, which uses excess

powered generated at GLA's Kustatan Production Facility ("KPF"). GLA also completed modifications to the platform for new production from RU 7B.

*(2) actual operations that deviated from or did not comply with the previously approved plan and an explanation of the deviation or noncompliance*

- GLA is still in the process of evaluating additional exploration and development options. GLA is waiting for definitive results and data received as a result of the RU 7B sidetrack and stimulation operation to determine the best path forward.

### **Updated Plan of Development**

The following components of the 17<sup>th</sup> POD follow the outline contained 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 17<sup>th</sup> POD meet the requirements contained in 11 AAC 83.343 (c).

*(1) long-range proposed development activities for the unit, including plans to delineate all underlying oil or gas reservoirs, bring the reservoirs into production, and maintain and enhance production once established*

- GLA plans to continue drilling operations, including further delineation and development drilling within the Central, Southern and Northern FBs.
- GLA intends to examine the results of its current and planned enhanced recovery waterflood efforts, and if appropriate, convert non-producing wells to water injection wells.

*(2) plans for the exploration or delineation of any land in the unit not included in a participating area*

- GLA hopes to evaluate the oil and gas potential of the areas north of the Northern FB with exploration wells to test these areas. GLA is still working on plans for these wells. When favorable economic conditions warrant, GLA intends to resume plans to drill wells into these areas.
- GLA intends to change out the failed ESP in the RU 9 well. Pending favorable results of the RU 7B hydraulic fracture stimulation, GLA may stimulate the RU 9 well using hydraulic fracturing.

*(3) details of the proposed operations for at least one year following submission of the plan*

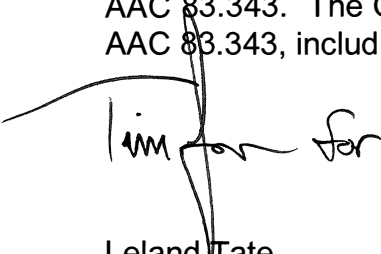
- GLA plans to drill and hydraulically fracture a sidetrack of the RU 3 well and use it as a waterflood injection well to enhance production.
- GLA plans to change out the failed ESP's in RU 1A and RU 5B. GLA is awaiting final results of the hydraulic fracture stimulation of RU 7B. If the stimulation technique produces satisfactory results in the RU 7B well, GLA may complete similar hydraulic fracture stimulations of 1A and 5B to enhance production.

*(4) 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*

GLA has no plans for additional facilities, etc. at this time.

### **Statement of Operator**

Cook Inlet Energy, LLC, a Glacier Oil and Gas company, as Redoubt Unit Operator, submits this annual report and update to the Redoubt Unit Plan of Development under 11 AAC 83.343. The Operator believes that this 17<sup>th</sup> POD satisfies the requirements of 11 AAC 83.343, including compliance with the provisions of 11 AAC 83.303.

A handwritten signature in black ink, appearing to read "Leland Tate", is written over a vertical line that extends from the signature down to the printed name below.

Leland Tate  
Chief Operating Officer

Attachments: Redoubt Unit Production  
Well Status

<b>Redoubt</b>			
<b>Date</b>	<b>Produced Oil (bbls)</b>	<b>Produced Water (bbls)</b>	<b>Produced Gas (MMCF)</b>
Jan-16	20,298	13,923	4,651
Feb-16	18,168	12,208	4,252
Mar-16	19,247	13,838	4,541
Apr-16	18,604	13,678	4,178
May-16	19,744	13,979	4,360
Jun-16	18,867	14,204	4,416
Jul-16	18,253	14,804	4,377
Aug-16	20,460	14,915	4,719
Sep-16	19,897	14,120	4,617
Oct-16	19,783	13,727	4,498
Nov-16	18,762	12,932	4,181
Dec-16	20,218	13,807	4,381
<b>TOTALS</b>	<b>232,301</b>	<b>166,135</b>	<b>53,171</b>

## CURRENT WELL STATUS - Redoubt

WELL	STATUS	DATE	REASON
RU #1A	Shut-in	12/2015	ESP failure
RU #2A	Producing	6/2013	Hemlock PA - Oil
RU #3	Shut-in	6/2014	Pending sidetrack for waterflood
RU #4A	Shut-in	9/2014	Water loading issues
RU #5B	Shut-in	3/2015	ESP failure
RU #6 WF	In Service	12/2014	Waterflood
RU #7A	Inactive	<del>11/2014</del>	<del>sidetracked to RU-7B</del>
RU #7B	Producing	1/2017	Hemlock PA - Oil
RU #9	Shut-in	11/2014	ESP failure
RU #D1	In Service	4/2011	Class 1 Disposal