

October 27, 2020

8000-6200/1713-59070-20

Russel Gonie Manager Production & Operations Pavilion Energy Corp. 2150, 736 - 6th Ave SW Calgary, AB T2P 3T7

Dear Mr. Gonie:

RE: COMMINGLED PRODUCTION SPECIAL PROJECT AMENDMENT #1 PAVILION ET AL STODDART 6-29-85-18 (WA #2262) STODDART FIELD – BELLOY 'A' POOL & BASE OF FISH SCALES

The Commission has reviewed your application received October 16th, 2020, requesting approval to continue commingled gas production from the Base of Fish Scales with the Belloy 'A' pool in the subject well.

The subject well was drilled in January 1968 as a Belloy gas well and to date the well has produced 498 e⁶m³ of gas. On July 15, 2020 a surface casing vent flow test was done on the well and gas flow was detected. The buildup pressure on the surface casing indicated a buildup pressure of 2,647 kPa over 15 hours. In order to avoid excessive pressure at the surface casing shoe and to mitigate the safety risk presented by elevated atmospheric methane concentrations, temporary comingled production of the vent flow with produced has from the Belloy 'A' pool was approved on July 27th, 2020. An isotopic analysis of vent gas has not been received and the source of the gas continues to be unknown but may be identified once additional evidence is obtained. The source of the gas shall continue be tentatively denoted as the Base of Fish Scales zone.

Attached please find temporary **Order 20-20-001 Amendment #1**, designating an area in the Stoddart field – Belloy 'A' pool and Base of Fish Scales formation as a Special Project under section 75 of the *Oil and Gas Activities Act*, for Commingled Production. Provincial records indicate three (3) water supply wells are located within 1 km of the subject well and imagery indicates residential dwellings are nearby. As per Order condition 2e), the permit holder shall take reasonable measures to contact residents within 1 km of the subject well to confirm water well locations and, where permission can be obtained, collect samples of the groundwater from the wells for laboratory analysis of dissolved gases (C1 to C3). Documentation of attempts to contact residents, sampling locations and methods, and the laboratory analytical results for samples collected shall be submitted to the Commission by January 31, 2021. Order Condition 2f) requires that a shallow gas survey be conducted prior to May 31st, 2021 and Order condition 2g) requires that an isotopic analysis but performed and submitted to the commission by January 31st, 2021. Oder condition 2h) requires that a fell test of wellhead seals be done, to confirm this is not the source of the SCVF.

Should you have any questions, please contact Logan Gray at (250) 419-4465 or the undersigned at (250) 419-4430.

Sincerely,

Ron Stefik, Eng.L.

Supervisor, Reservoir Engineering

Oil and Gas Commission

Attachment



IN THE MATTER of an application from Pavilion Energy Corp. to the Oil and Gas Commission received October 16th, 2020 for an amendment to the existing temporary commingled production approval.

ORDER 20-20-001 Amendment #1

- 1 Under Section 75(1)(a) of the *Oil and Gas Activities Act*, the Commission designates the operation commingling of production from the Stoddard field Belloy 'A' and Base of Fish Scales pools as a special project for the enhanced recovery of natural gas by commingling production within the following area:
 - DLS Twp 85 Rge 18 W6M Section 29
- 2 Under section 75(2) of the Oil and Gas Activities Act, the special project designation in this Order is subject to the following conditions. The Permit Holder shall:
 - a) Produce gas from the Base of Fish Scales through the surface casing vent, with the Belloy 'A' gas flowing through tubing; commingled at surface through the well Pavilion et al Stoddart 6-29-85-18 (WA # 2262)
 - b) Install two check valves between the surface casing vent and the production line to prevent flow from the production line into the surface casing vent.
 - c) Install a pressure relief valve on the surface casing vent to avoid excessive pressure at the surface casing shoe in case the flow line is shut down
 - d) Gas, condensate and water production from the commingled well must be allocated in Petrinex on the basis of Base of Fish Scales 15% and Belloy 'A' 85%. The allocation factors may be amended to reflect results of any future tests.
 - e) Take reasonable measures to contact residents within 1 km of Pavilion et al Stoddart 6-29-85-18 (WA # 2262) to confirm water well locations and, where permission can be obtained, collect samples of the groundwater from the wells for laboratory analysis of dissolved gases (C1 to C3). Documentation of attempts to contact residents, sampling locations and methods, and the laboratory analytical results for samples collected shall be submitted to the Commission by January 31, 2021 unless an alternate date is approved the Commission (contact Reservoir@bcogc.ca).
 - f) The permit holder shall conduct a shallow gas survey for Pavilion et al Stoddart 6-29-85-18 (WA # 2262) in accordance with technical guidance for Shallow Gas Surveys described in Chapter 9 (section 9.8.6) of the Commission's Oil and Gas Activities Operations Manual. The shallow gas survey must be conducted in a frost free period prior to May 31, 2021. A description of shallow gas survey methods and results shall be submitted to the Commission by June 15, 2021.
 - g) The permit holder shall collect a sample of gas from the surface casing vent for isotopic analysis and source interpretation. The results of this testing must be submitted to Reservoir@bcogc.ca by January 31, 2021.
 - h) Complete a full test of wellhead seals on Pavilion et al Stoddart 6-29-85-18 (WA # 2262) and submit results to Reservoir@bcogc.ca by January 31, 2021.

Ron Stefik, Eng.L.

Supervisor, Reservoir Engineering

Oil and Gas Commission