8120-2010-59240-09



May 11, 2022

Kolton Chapman P.L.(Eng.) ARC Resources Ltd. Suite 1200, 308 – 4th Ave SW Calgary, AB T2P 0H7

Dear Mr. Chapman:

RE: PRODUCED WATER DISPOSAL SPECIAL PROJECT APPROVAL HYDRAULIC FRACTURE STIMULATION ARCRES SUNRISE C13-30-78-17; WA# 30475 SUNRISE FIELD – PADDY-CADOTTE FORMATION

Approval for disposal of produced water, Order 19-02-004 as a Special Project under section 75 of the Oil and Gas Activities Act (OGAA), was issued for the subject well, Paddy-Cadotte formation, on March 7, 2019 and was amended on February 19th, 2020.

An application was received via email, dated April 28th, 2022, to stimulate the reservoir via hydraulic fracture following the addition of perforations below the existing perforations, all within the Paddy-Cadotte, to improve injectivity performance.

Condition 2k) of Order 19-02-004 Amendment #1 states:

j) Not conduct a hydraulic fracture stimulation on any formation in the subject well without prior Commission approval.

Simulation results of the hydraulic fracture program indicate that resulting fractures should not extend into any other porous zones or be detrimental to caprock fluid containment.

The Commission hereby approves the proposed 45T hydraulic fracture stimulation. This approval is conditional upon the requirement that <u>a hydraulic isolation temperature log be conducted following fracture stimulation</u> and prior to the resumption of disposal operation. A limited volume may be injected as required to provide diagnostic results for the temperature log. Log results and interpretation must be submitted to the Commission once available. The Commission strongly recommends notification of permit holders of proximal wells completed in the disposal formation, such as the Paddy-Cadotte source well OVV CRP HZ Sunrise A13-33-78-17 (WA 26471).

Note that an outcome of loss of formation isolation can result in cancelation of the disposal approval, under OGAA section 75(2)(b)(iv), and where a risk to the environment, safety or resource recovery may result, the Commission may issue an order necessitating remedial actions, which can include formation fluid flowback to reduce pressure.

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

Sincerely,

Ron Stefik, P.L.Eng Supervisor, Reservoir Engineering Oil and Gas Commission

Reservoir Engineering Department #600 – 2950 Jutland Rd. Victoria BC V8T 5K2 T 250.419-4400 F 250.419-4402 www.bcogc.ca