BRITISH COLUMBIA ENERGY REGULATOR

August 9, 2023 3400-2010-32640-02

Lance Gosselin, P.Eng.
Sr. Well Operations Engineer
Secure Energy Services Inc.
2300, 225 – 6th Ave SW
Calgary, AB T2P 1N2

Dear Mr. Gosselin,

RE: NON-HAZARDOUS WASTE AND PRODUCED WATER DISPOSAL
SPECIAL PROJECT APPROVAL
HYDRAULIC FRACTURE STIMULATION
SECURE DAWSON B11-4-79-14; WA# 27084
DAWSON CREEK FIELD – PADDY-CADOTTE FORMATION

The subject well was drilled and completed in the Paddy-Cadotte for disposal in May of 2011. Approval for disposal of non-hazardous waste and produced water, Order 11-02-008, was issued for the Paddy-Cadotte formation on September 6, 2011, and the Order has been amended several times to bring the well up to current requirements, to alter the reservoir pressure testing frequency, and to approve additional perforations and a fracture stimulation.

An application was received via email, dated August 2nd, 2023, to stimulate the reservoir via hydraulic fracture in order to bypass formation damage that was resulting in decreased injectivity and pressure buildup in the near wellbore reservoir.

Condition 2m) of Order 11-02-008 Amendment #3 states:

m) 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 BCER hereby approves the proposed 60T hydraulic fracture stimulation. This approval is conditional upon the requirement that a hydraulic isolation temperature log be conducted following fracture stimulation 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 BCER once available.

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 BCER 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
Energy Regulator

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