

June 3, 2013

5810-7400-32640-02

Mr. Davin Yee Progress Energy Canada Ltd. 1200, 205 – 5th Avenue S.W. Calgary, AB T2P 2V7

Dear Mr. Yee:

RE:

PRODUCED WATER DISPOSAL SPECIAL PROJECT

PROGRESS LILY a-A32-K/94-G-2; WA# 23212

LILY LAKE FIELD - DEBOLT "A" POOL

Oil and Gas Commission (Commission) staff have reviewed the application, dated April 11, 2012, requesting approval to dispose of produced water and fracture flowback fluid into the Debolt formation of the subject well. A step rate injectivity test, OGC approval Order 12-02-013, was conducted in March, 2012 and additional data supplied after that date.

Attached please find **Order 13-02-002**, designating an area in the Lily Lake field – Debolt formation a Special Project under section 75 of the <u>Oil and Gas Activities Act</u>, for use of a storage reservoir for the disposal of produced water and flowback from fracture operations generated from oil and gas operations, specifically, development of area shale gas resources in the Montney formation. Previously produced as a 2 well gas pool, the Debolt "A" is now depleted of economic reserves.

Should you have any questions, please contact Curtis Kitchen at (250) 419-4443 or Ron Stefik at (250) 419-4430.

Sincerely,

Richard Slocomb, P.Eng

Deputy Commissioner, Engineering

Oil and Gas Commission

Attachment

IN THE MATTER of the application from Progress Energy Canada Ltd., to the Oil and Gas Commission (Commission) dated April 30, 2012 for the operation and use of a storage reservoir.

ORDER 13-02-002

1 Under Section 75(1)(d) of the *Oil and Gas Activities Act*, the Commission designates the operation and use of a storage reservoir for the disposal of produced salt water and flowback from fracturing operations into the Debolt "A"pool – Lily Lake field as a special project in the following area:

NTS 94-G-02 Block K Unit 32.

- 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) Inject produced water, including flowback fluids, only into the well Progress Lily a-A32-K/094-G-02 (Well Permit # 23212), Debolt "A" pool (2413.0 mKB to 2476.0 mKB).
 - b) Not exceed an injection pressure, measured at the wellhead on the subject well, of 23,600 kPag or the pressure required to fracture the formation, whichever is lesser.
 - c) Inject only through tubing.
 - d) Continually measure and record the wellhead casing and tubing pressures.
 - e) Cease injection and notify the Commission immediately if hydraulic isolation is lost in the wellbore or formation.
 - f) Submit the annual packer isolation test report to the Commission within 30 days of the completion of the test.
 - g) Submit to the Oil and Gas Commission a record of volume disposed of through this well, as well as disposal operating hours and the maximum injection pressure values, on a Monthly Injection/Disposal Statement, in the prescribed form (BC-S18) not later than the 25th day of the month following the reported month.
 - h) Cease injection upon reaching a maximum formation pressure of 24,160 kPaa.
 - i) Conduct an annual reservoir pressure test on the formation in the subject well, with a shut-in period of sufficient length to provide data for calculation of the reservoir pressure, and submit a report of the test within 60 days of the end of the test.
 - j) i) Perform a casing inspection log on the subject well and submit results to the Commission within 30 days of the completion of logging, at an interval of not more than 10 years.
 - ii) Perform a hydraulic isolation temperature log on the subject well if one has not been run in the last 5 years, within six months of the date of this Order and submit results to the Commission within 30 days of the completion of logging, and thereafter at an interval of not more than 5 years.

- k) Not conduct a hydraulic fracture stimulation on any formation in the subject well without prior Commission approval.
- Submit to the Ministry of Finance a BC11 form to notify of commencement of operations and update the well status.

Richard Stocomb, P.Eng

Deputy Commissioner, Engineering

Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this ³ day of June, 2013.