

July 4, 2019

8120-2010-32640-02

Brett Ferguson
 Senior Development Engineer, Canadian Operations
 Encana Services Company Ltd.
 500 Centre Street SE, PO Box 2850
 Calgary, Alberta T2P 2S5

Dear Mr. Ferguson,

**RE: ENCANA RESERVOIR PRESSURE MANAGEMENT
 SUNRISE FIELD – PADDY-CADOTTE FORMATION**

The Commission has reviewed the letter from Encana Corporation (Encana), dated May 31, 2019, regarding the results of the full field pressure survey conducted in the Paddy-Cadotte formation between February 21, 2019 and March 7, 2019. The 'quiet' pressure survey reports pressure measured at Encana operated disposal and source wells. The results of the survey provide confirmation that all wells in the pool are in communication and that offsetting disposal activity influenced the results of reservoir pressure tests conducted in 2018.

The results of the pressure survey show that three of four disposal wells were above their maximum approved formation pressures at the end of the test periods. Furthermore, the pressure extrapolations completed predict the pressure would remain above the approved limit at sixty days, as summarized in the following table:

WA #	MPP (mKB)	Initial Pressure (kPaa)	Maximum Formation Pressure Approved (kPaa)	Last Measured Pressure (LMP) (kPaa)	LMP as % of Initial Pressure	60-Day Extrapolated Pressure (kPaa)	60-Day Extrapolated Pressure as % of Initial Pressure
10677	1001.8	5242	6290	7289	139.0	6450	123.0
29140	894.2	5051	6060	7344	145.4	6750	133.6
34056	944.2	5092	6110	6861	134.7	6861	134.7
29739	1008.6	5719	6900	6647	116.2	6647	116.2

Encana has further analyzed the reservoir pressure data and predicts that the average reservoir pressure, extrapolated to infinite time, is approximately 107% of initial value.

Encana considers the 60 day extrapolation required for disposal wells insufficient to demonstrate pressure dissipation across the pool. As stated in previous correspondence, the Commission acknowledges that the 60-day pressure extrapolation may not be representative of the average reservoir pressure. The intent of the 60-day value is assurance that dissipation is sufficient to prevent the creation of a zone of excessive pressure at the injection location.

The Commission notes that WA 10677, ECA CRP Sunrise 14-35-78-17, and WA 29140, ECA CRP HZ Sunrise B13-33-78-17, were active in March and April 2019, following the end of the reservoir pressure survey.

The Commission accepts your offer of a meeting, in Victoria, to present the results of the survey in further detail and to discuss Encana's understanding of the Cadotte reservoir. The Commission would like to discuss opportunities for future monitoring, required to provide confidence in the continued viability of disposal operations the reservoir. Considerations may include forecasted disposal activity levels, future water sourcing, influence from ARC disposal wells located to the West, and more frequent reporting of pressure measurements in source wells.

The Commission requests that, in advance of the meeting, Encana please submit the following via eSubmission:

- The pressure extrapolations for the four disposal wells including 60-day and infinite time extrapolations, and
- Any available ESP pressure measurements for 2017 and 2018.

The Commission proposes that the meeting take place prior to July 22, 2019. Please contact us, via email, to set up a meeting date and time.

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

Sincerely,



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

Cc: Roy Fournier, Manager – Regulatory, Encana Corporation