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August 15, 2006

Electronic Notification

Alberta Energy and Utilities Board
640 - 5 Avenue S.W.
Calgary Alberta T2P 3G4

Attention: Ms. Giuseppa Bentivegna

Dear Madam:

Re: Application No. 1394112
Application to Produce Gas
Well 14-31-68-4W4M
Cold Lake Oil Sands Area Clearwater Information

Attached please find the responses of EnCana Oil and Gas Partnership to the information requests of the Alberta Energy and Utilities Board.

Yours very truly,

McCarthy Tétrault LLP

Original signed by

D. G. DAVIES

cc: Alberta Energy and Utilities Board
Attention: Mr. Ernie Smith

Canadian Natural Resources Limited
Attention: Mr. Jared Paddock

Thackray Burgess
Attention: Mr. Patrick J. McGovern

ALBERTA ENERGY and UTILITIES BOARD

APPLICATION NO. 1394112

COLD LAKE OIL SANDS AREA – CLEARWATER DEPOSITION

Responses of EnCana Oil and Gas Partnership to the

Information Requests of the Alberta Energy and Utilities Board

1. **Request:** In its submission EnCana states that the nearest production of bitumen to its application well 14-31-68-4W4M (14-31) is from the Clearwater formation in Township 67 Ranges 3 and 4 and in Section 12 Township 69 Range 5. Elaborate on the bitumen production in Section 12-69-5W4M.

   Response: A heavy oil pilot was centered in section 12-069-05W4M. The 27 wells relevant to that pilot along with their cumulative production values are listed in Table 1.

Table 1: Section 12-069-05W4M and Surrounding Pilot Cumulative Production

Well	Cumulative Oil Produced (m3)	Cumulative Water Produced (m3)	Cumulative Gas Produced (e3m3)	Cumulative Water Injected (m3)
100/11-06-069-04W4/0	4,414	9,052	0.0	16,686
100/04-07-069-04W4/0	1,201	3,704	0.0	9,945
100/05-07-069-04W4/0	698	2,658	0.0	6,626
103/05-07-069-04W4/0	545	4,115	0.0	4,166
104/05-07-069-04W4/0	1,109	5,859	0.0	6,334
100/12-07-069-04W4/0	899	3,156	0.0	6,530
100/01-12-069-05W4/0	714	3,107	0.0	9,060
102/01-12-069-05W4/0	1,558	5,515	0.0	10,267
103/01-12-069-05W4/0	1,074	10,599	0.0	10,037
104/01-12-069-05W4/0	2,866	6,848	0.0	10,186
105/01-12-069-05W4/0	1,197	4,525	0.0	10,121
100/02-12-069-05W4/0	1,982	3,700	0.0	10,004
100/07-12-069-05W4/0	7,191	18,994	0.0	22,090
102/07-12-069-05W4/0	1,097	3,791	0.0	9,462
103/07-12-069-05W4/0	1,342	4,070	0.0	9,090
104/07-12-069-05W4/0	1,677	4,993	0.0	10,203
105/07-12-069-05W4/0	2,400	8,417	0.0	9,945
102/08-12-069-05W4/0	1,011	3,613	0.0	6,699
103/08-12-069-05W4/0	1,421	4,398	0.0	10,104
104/08-12-069-05W4/0	2,958	13,368	0.0	5,275
105/08-12-069-05W4/0	794	4,389	0.0	9,912

Table 1: Continued from page 1

Well	Cumulative Oil Produced (m3)	Cumulative Water Produced (m3)	Cumulative Gas Produced (e3m3)	Cumulative Water Injected (m3)
106/08-12-069-05W4/0	1,318	5,786	0.0	9,182
102/09-12-069-05W4/0	872	2,422	0.0	6,943
103/09-12-069-05W4/0	1,076	3,705	0.0	6,351
104/09-12-069-05W4/0	704	3,288	0.0	4,087
105/09-12-069-05W4/0	1,019	3,344	0.0	5,534
100/05-13-069-05W4/0	533	61	11.1	-
Total	43,668	147,478	11	234,838

With the exception of three wells, 100/11-06-069-04W4/0, 100/07-12-069-05W4/0, 100/05-13-069-05W4/0, all production and injection for the 24 wells occurred exclusively in 1991 and 1992. The production values for the 24 wells are summarized in Table 2.

Table 2: Well Performance During Pilot

Activity during 1991-1992 for 24 wells	Oil Production	Water Production	Water Injection
Months Produced/Injected	6.8	7.8	4.0
Average Rate Produced/Injected during active months (m3/d-Cal Day)	6.2	20.5	71.8
Number of Cycles Produced	1.8	1.8	1.9
Average Months per Cycle	4.3	4.7	2.1

As illustrated in Table 2, the wells produced on average for a 4-5 month period after an approximate 2 month steaming cycle. This happened approximately two times during the 1991-92 period. The wells on average were injected with steam at rates near 70 m3/d and would produce approximately 6 m3/d oil and 20 m3/d water during the production period, with peak oil production occurring early in the production cycle.

2. **Request:** EnCana states that its net bitumen pay for the upper and lower Clearwater is based on a 27% porosity cutoff and a 20 ohm-m resistivity cutoff that roughly corresponds to a bitumen saturation of 50%. Show the parameters used in the calculation that results in a 27% porosity cutoff and a 20 ohm-m resistivity cutoff approximating a bitumen saturation of 50%.

Response: The net bitumen pay cutoffs (27% porosity and 20 ohm-m resistivity) for the upper and lower Clearwater as stated in the application #1394112

were established using the evaluation parameters documented in appendix B2 1.2 of the EUB Athabasca Wabiskaw-McMurray Geological Study (Dec. 2003, page 187). The weight percent Bitumen calculation (Appendix B2, 1.1) was entered into the Geographix software and the results documented in the application. This was only meant as an illustrative example to estimate the bitumen saturation.

Upon further evaluation of the offset core and analysis from aa/14-31-068-04W4/0 it is apparent that, in the Clearwater, porosity greater than 30% and resistivity greater than 14 ohm-m are representative of bitumen saturation greater than 50%.

3. **Request:** On page 4 of its application EnCana states that the 14-31 well has 5.5 meters of continuous bitumen pay. In CNRL's letter dated April 5, 2005 objecting to EnCana's application, CNRL states that the well has 23 meters of economically viable bitumen. Illustrate EnCana's bitumen evaluation on the well logs for the 14-31 well. If EnCana has interpreted the tight streak from 481 to 483 mkb to limit the bitumen pay, explain why this is appropriate for CSS.

Response: The EnCana statement of 5.5 meters of continuous bitumen pay was established using the cutoffs stated above. Utilizing the core analysis from aa/14-31-068-04W4 and the newly established cutoffs (30% porosity and 14 ohm-m resistivity) there is more correctly 9.5 meters of continuous bitumen pay in the EnCana well at 00/14-31-068-04W4.

There are a series of tight streaks (4 calcite stingers) from 483.4m to 492.4m in the 00/14-31-068-04W4. None of these are more than 1.0m thick. The offset aa/14-31 contains a calcite stringer from 481m to 483m. Given the nature of calcite stringers, stratigraphic discontinuity and the offsetting well data it is unlikely that, in this case, these tight streaks would represent a continuous barrier between the Clearwater bitumen above and below the calcite stringer. These discontinuous calcite stringers are not expected to act as an effective barrier to injected steam from contacting bitumen pays below or above the stringers. The stringers are also not expected to act as an effective barrier to bitumen flow to producing wells. However, the initial rate of bitumen production and efficiency of the CSS process (such as oil to steam ratios) is expected to be adversely affected when compared to same reservoir without calcite stringers.