

**UNDERTAKINGS BY NEXEN PANEL, EUB GB 2003-28 PHASE III
PROCEEDINGS**

DELIVERED MARCH 29, 2004

As requested by Mr. Perkins, Board Staff:

UNDERTAKING #1: TO PROVIDE RESPONSE TO THE FOLLOWING QUESTION: DOES NEXEN CONSIDER ANY OF THE PRESSURES IN PARAMOUNT'S TABLE 2 TO BE VIRGIN PRESSURES, AND IF SO, CAN YOU INDICATE WHICH ONES. (Transcript page 1274, Lines 17-21)

UNDERTAKING #2: WITH REFERENCE TO THE PREVIOUS UNDERTAKING, IN THE CASES WHERE NEXEN BELIEVED THEM TO BE VIRGIN PRESSURES OR NOT TO BE VIRGIN PRESSURES, TO INDICATE THE BASIS FOR THAT DETERMINATION. (Transcript page 1275, Lines 3-8)

Response by Nexen panel:

Nexen responds to the two undertakings requested by Board Staff as follows:

Nexen derives its determination of virgin pressure in the Leismer area from a comprehensive study performed by Rakhit Petroleum Consulting Ltd., entitled "Athabasca Oil Sands Area Regional Hydrogeological Evaluation", completed in March, 1999. The study was commissioned by Petro-Canada on behalf of itself, and oil sands joint venture partners, including Nexen. One of the objectives of the study was "to establish the undisturbed hydrogeological conditions prior to gas production (the hydrogeological baseline conditions)". The study was previously entered as evidence into the Surmont Hearing.

With respect to Paramount's Table No. 2 in the February 23rd, 2004 Leismer Wabiskaw-McMurray A Pool submission, the Rakhit study examined pressures that were available prior to the study delivery date in March, 1999, and denoted the following 3 pressures in the Wabiskaw-McMurray as virgin pressures:

6-16-78-7w4	DST: 1719 kPa + 93 kPa = 1812 kPaa
11-8-79-7W4	DST: 1736 kPaa + 93 kPa = 1829 kPaa
3-9-78-8W4	AOF: 2104 kPaa

The following is a reproduction of Paramount's Table No. 2 from the Leismer Wabiskaw-McMurray A Pool discussion, with an additional column added on the right hand side for comments from the Rakhit study:

From Paramount Table 2			Rakhit Study (March, 1999)
Well	Zone	Virgin Pressure	
16-32-77-7W4	Wab C	1929	Pressure taken after study date.
08-34-77-7W4	Wab C	1909	Pressure taken after study date.
09-34-77-8W4	Wab C	1997	Pressure taken after study date.
11-36-77-8W4	Wab C	1915	Production-induced drawdown.
06-16-78-07W4	Wab C	1813	Virgin Pressure
5-22-78-07W4	Wab C	1818	Production-induced drawdown.
6-30-78-07W4	Wab C	1927	Pressure taken after study date.
03-09-78-08W4	Wab C	2008	Virgin Pressure
10-25-79-07W4	Wab C+A	1749	Production-induced drawdown.
7-3-79-8W4	Wab C	1846	Pressure taken after study date.
9-13-79-8W4	Wab C	2115	Production-induced drawdown.
15-26-78-7W4	Wab C+A2	1797	Production-induced drawdown.
7-35-78-7W4	Wab C+A2	1755	Production-induced drawdown.
11-08-79-06W4	MCM A2	1676	Virgin Pressure
11-06-79-06W4	MCM A2	1772	Production-induced drawdown.
10-11-79-07W4	MCM A2	1769	Production-induced drawdown.
13-36-78-07W4	MCM A2	1634	Production-induced drawdown.
11-08-79-07W4	MCM A1	1786	Production-induced drawdown.
13-16-79-07W4	MCM A1	1780	Pressure taken after study date.
13-16-79-07W4	MCM B1	1918	Pressure taken after study date.
12-35-79-07W4	MCM B1	1775	Production-induced drawdown.
12-36-79-07W4	MCM channel	1700	Production-induced drawdown.