

**Canadian Natural Resources Ltd.**

RAX Newby

100/10-15-081-05W4/2

2005 02 16

03-Static Gradient

McMurray : 200.0 - 200.5mKB LOG

**Test By:** Remote Wireline Services

Report By: Pressure Data Services Inc.

Ref. No. 05021805

# Remote Wireline Services

## REPORT OF SUBSURFACE PRESSURE MEASUREMENTS - 03-Static Gradient Test

Customer: **Canadian Natural Resources Ltd.**  
 Address: **Calgary, Alberta**  
 Well Type Indicator: **Vertical**  
 Type of Test: **03-Static Gradient**  
 Date of Test: **2005 02 16**  
 Elevations:m(KB) **469.1** (GL): **465.9** (CF):  
 Flow Type: **Tubular**  
 TBG Indicator: **Y** TBG Size(OD): **38.1 mm**  
 Dwt.TBG Pres.(Inital /Final): **760.00 / 760.00 kpa**  
 Packer Indicator: **Y**  
 H2S Indicator: **N**

Well Name: **RAX Newby**  
 Location: **100/10-15-081-05W4/2**  
 EUB License No.: **0120359**  
 Formation: **McMurray**  
 Perfs/O.H. Interval: **200.0 To 200.5 mKB LOG**  
**To mKB TVD**  
 M.P.P. : **200.3 mKB LOG / mKB TVD**  
 Well Fluid Status: **02 - Gas**  
 Dwt.CSG Pres.(Inital /Final): **757.00 / 756.00 kpa**  
 Casing Size(OD): **114.3 mm**  
 Shut In Date/Time: **2005 02 10 1900** Duration: **130.0hrs**

### PRESSURE SENSOR 2 DATA

Pressure Sensor S/N: **6534**  
 Pressure Range: 0 To **5516.00 kpa**  
 Sensor Type/Model: **Pioneer 19mm OD**  
 Last Calibration: **2004 03 12**  
 Sensor ON: **2005 02 16 1020:00**  
 Sample Rate: **20 sec.**  
 Accuracy **0.024 %F.S.**  
 Resolution: **0.0003 %F.S.**  
 ON Bottom: **2005 02 16 1116:55**  
 OFF Bottom: **2005 02 16 1343:55**  
                                   @LOG Depth           @TVD Depth  
 Calc. Pres.@ MPP: (kpa) **770.56**  
 Run Depth (mKB): **199.7**  
 Pres. @ Run Depth: (kpa) **770.52**  
 Grad.@ Run Depth: (kpa/m) **0.067**  
 Temp.@ Run Depth:(degC) **6.3**  
 Calc. Fluid Level:(mKB) **N/A**                   **N/A**

### PRESSURE SENSOR 1 DATA

**6533**  
**5516.00 kpa**  
**Pioneer 19mm OD**  
**2004 03 12**  
**2005 02 16 1020:00**  
**20 sec.**  
**0.024 %F.S.**  
**0.0003 %F.S.**  
**2005 02 16 1116:55**  
**2005 02 16 1343:55**  
 @LOG Depth           @TVD Depth  
**772.28**  
**200.2**  
**772.27**  
**0.063**  
**6.3**  
**N/A**                   **N/A**

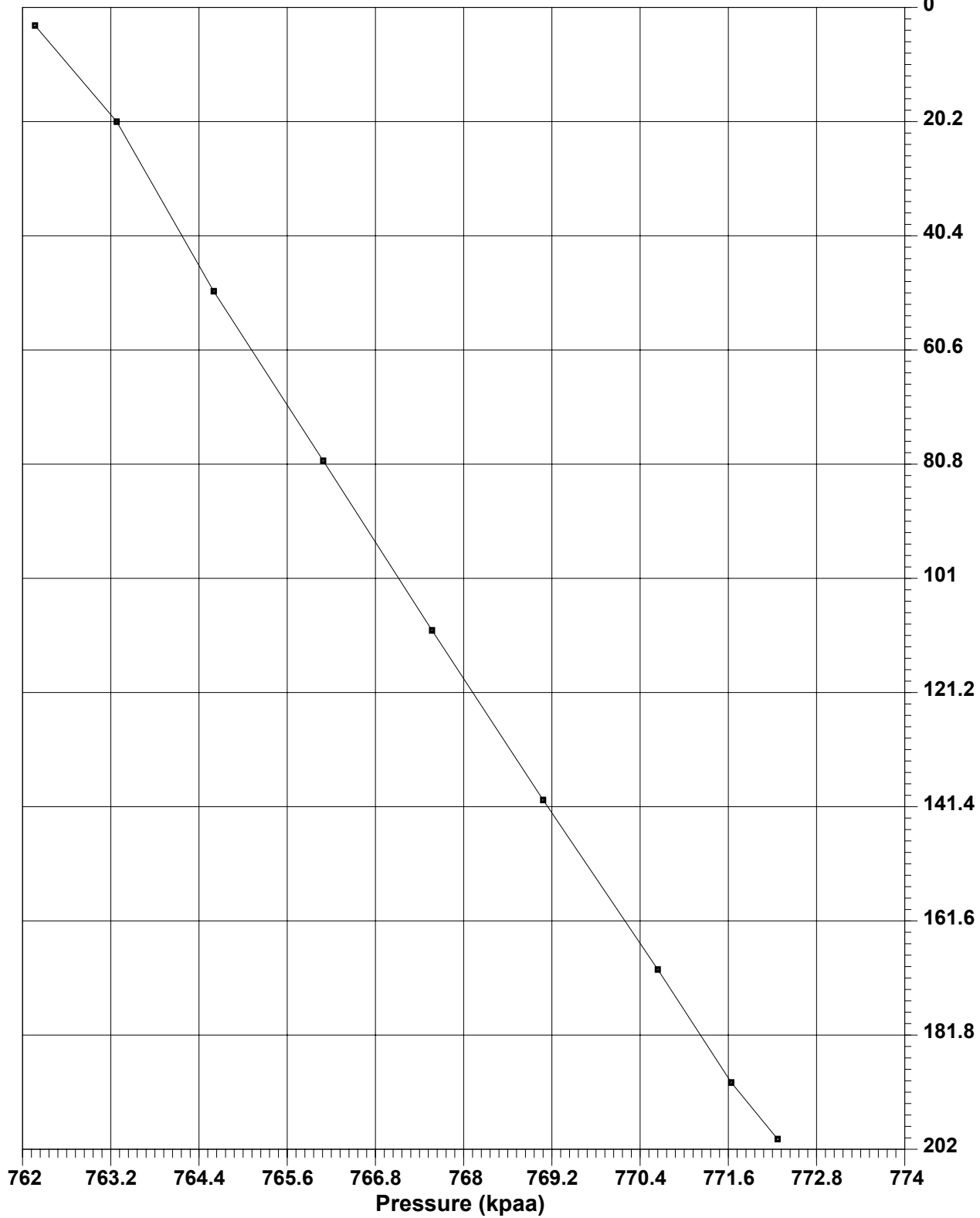
Depth (mKB) (LOG) (TVD)	Time (hrs)	Temp. (C)	Pres. (kpa)	Grad. (kpa/m) (LOG) (TVD)	Depth (mKB) (LOG) (TVD)	Time (hrs)	Temp. (C)	Pres. (kpa)	Grad. (kpa/m) (LOG) (TVD)
2.7	0.1486	0.45	760.02	0.000	3.2	0.1431	1.45	762.17	0.000
19.7	0.2875	1.08	761.08	0.062	20.2	0.2819	1.28	763.28	0.065
49.7	0.3708	2.27	762.59	0.050	50.2	0.3653	2.51	764.60	0.044
79.7	0.4875	3.06	764.03	0.048	80.2	0.4764	3.03	766.09	0.050
109.7	0.5931	3.77	765.57	0.051	110.2	0.5931	3.66	767.57	0.049
139.7	0.7042	4.52	767.24	0.056	140.2	0.6986	4.22	769.08	0.050
169.7	0.7931	5.17	768.78	0.051	170.2	0.7986	5.02	770.64	0.052
189.7	0.8708	5.61	769.85	0.054	190.2	0.8819	5.40	771.64	0.050
199.7	3.3986	6.27	770.52	0.067	200.2	3.3986	6.26	772.27	0.063

### COMMENTS:

Sensor 1 on bottom 2.4500hrs. Initial p = 772.13kpa / Final p = 772.27kpa. Delta p = 0.1 kpa.

# Gradient Test Plot

Depth (mKB) LOG



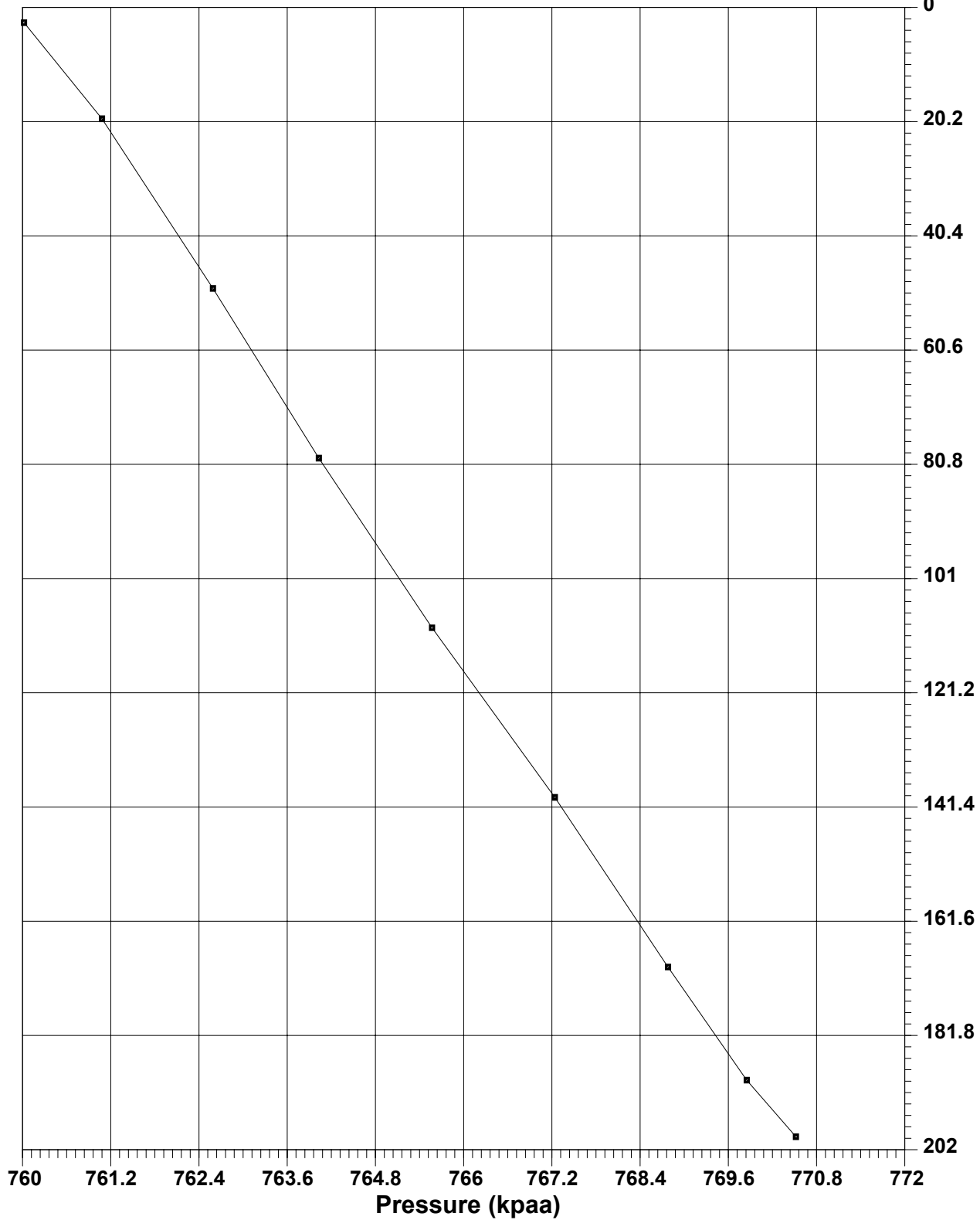
Company: <b>Canadian Natural Resources Ltd.</b>	Well Name: <b>RAX Newby</b>
Test Date: <b>2005 02 16</b>	Location: <b>100/10-15-081-05W4/2</b>
Sensor S/N: <b>6533</b>	Sensor Position: <b>Primary</b>
Run Depth Pressure: <b>772.27 kpa</b>	Fluid Level: <b>N/A</b>
Run Depth: <b>200.2 mKB LOG</b>	Ref. No.: <b>05021805</b>

**Remote Wireline Services**

Plot By: **Pressure Data Services Inc.**

# Gradient Test Plot

Depth (mKB) LOG



Company: <b>Canadian Natural Resources Ltd.</b>	Well Name: <b>RAX Newby</b>
Test Date: <b>2005 02 16</b>	Location: <b>100/10-15-081-05W4/2</b>
Sensor S/N: <b>6534</b>	Sensor Position: <b>Secondary</b>
Run Depth Pressure: <b>770.52 kpa</b>	Fluid Level: <b>N/A</b>
Run Depth: <b>199.7 mKB LOG</b>	Ref. No.: <b>05021805</b>

**Remote Wireline Services**

Plot By: **Pressure Data Services Inc.**