

# ***INTERDRILL***

***LIMITED***

5 May 2008

**Taranaki Regional Council  
47 Clotan Road  
Private Bag 713  
Stratford**

Att: Mr Shane Reynolds

**PATEA FREEZING WORKS  
Monitoring Wells**

**BORE LOG**

**Driller: Curtis Leatherby**

**Hole No. 1.**

<b>1.0m</b>	<b>to</b>	<b>2.00m</b>	<b>Gravel Fill.</b>
<b>2.00m</b>	<b>to</b>	<b>2.50m</b>	<b>Gritty Fine Gravel Fill ( Moist )</b>
<b>2.50m</b>	<b>to</b>	<b>4.40m</b>	<b>Silty Sticky Grey Clay.</b>

**Installed Piezo to 4.4m SWL. 1.5m**

**Hole No. 2.**

Abandoned first hole due to Difficult Drilling Large Gravels Cave In.

<b>0.0m</b>	<b>to</b>	<b>1.00m</b>	<b>Large Gravel /Fill.</b>
<b>1.00m</b>	<b>to</b>	<b>3.00m</b>	<b>Large Gravels / bricks, glass / Fill</b>
<b>3.00m</b>	<b>to</b>	<b>3.50m</b>	<b>Gritty Fill puggy Clay.</b>
<b>3.50m</b>	<b>to</b>	<b>4.50m</b>	<b>Gritty grey clay /Fill ( wet )</b>
<b>4.50m</b>	<b>to</b>	<b>6.00m</b>	<b>Grey Clay ( wet )</b>

**Installed Piezo to 5.2m SWL. 3.0m**

**Hole No.3.**

<b>1.00m</b>	<b>to</b>	<b>1.50m</b>	<b>Wood Log</b>
<b>1.50m</b>	<b>to</b>	<b>3.00m</b>	<b>Clay</b>
<b>3.00m</b>	<b>to</b>	<b>4.50m</b>	<b>Blue Papa Like Clay /Fine Sands</b>
<b>4.50m</b>	<b>to</b>	<b>6.00m</b>	<b>Blue Papa Like Clay /Fine Sands ( wet )</b>

**Installed Piezo to 5.9m      SWL. 4.8m**

**Hole No. 4.**

<b>0.0m</b>	<b>to</b>	<b>0.50m</b>	<b>Large Gravel /Fill.</b>
<b>0.50m</b>	<b>to</b>	<b>2.00m</b>	<b>Clay</b>
<b>2.00m</b>	<b>to</b>	<b>3.00m</b>	<b>Clay, Gravels ( Moist )</b>
<b>3.00m</b>	<b>to</b>	<b>5.00m</b>	<b>grey clay ( wet )</b>
<b>5.00m</b>	<b>to</b>	<b>6.00m</b>	<b>Silty Grey Clay ( wet ) Running Sands</b>

**Installed Piezo to 5.3m      SWL. 3.3m**

**Hole No. 5.**

<b>1.0m</b>	<b>to</b>	<b>3.00m</b>	<b>Clay.</b>
<b>3.00m</b>	<b>to</b>	<b>4.50m</b>	<b>Wood/ Clay</b>
<b>4.50m</b>	<b>to</b>	<b>6.00m</b>	<b>Puggy Grey Clay. ( Moist )</b>

**1/4/08      SWL 2.0m**

**2/4/08      Installed Piezo to 5.2m      SWL. 0.7m**

**Construction:**

Well Dia 150mm, install 50mm PVC screen and Filter Sock, Gravel Pack, place Bentonite seal, supply and grout- below Ground Toby Boxes.

The Monitoring wells are be Drilled and constructed to the Ministry for the Environment Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand 1999.

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## File note

13 May 2008

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## Groundwater sampling

### 10.04.08

Contents of each well were removed in 3 runs using a disposable bailer.

HT=1230 (HT at Port Taranaki -10 minutes to adjust to Patea River mouth)

Well	Location	Depth (m)	Water level (m) Run start 0930	Water level (m) Run start 1100	Water level (m) Run start 1230
MW1	2637472-6159353	4.4	1.8	1.9	1.8
MW2	2637421-6159366	5.2	3.3	5.0	5.0
MW3	2637361-6159383	5.9	5.3	5.7	5.6
MW4	2637323-6159391	5.3	4.0	4.4	3.5
MW5	2637490-6159528	4.8	1.2	1.4	1.4

MW2 was not recharging in 1.5 hrs

MW3 is too shallow

Other wells appear to be recharging fairly quickly.

### 21.04.08

Contents of each well were removed in 3 runs using a dedicated disposable bailer for each well, prior to collecting samples

HT=1614

Well	Depth (m)	Purging 1		Purging 2		Purging 3		Sampling	
		Time	Water level (m)	Time	Water level (m)	Time	Water level (m)	Time	Water level (m)
MW1	4.4	1115	1.8	1255	1.8	1412	1.8	1515	1.8
MW2	5.2	1125	3.4	1259	4.9	1418	5.0	1525	5.0
MW3	5.9	1135	5.0	1303	5.4	1421	5.5	1545	5.5
MW4	5.3	1143	3.3	1307	3.3	1424	3.4	1600	3.6
MW5	4.9	1156	1.1	1315	1.4	1431	1.4	1615	1.4

MW1 fairly clean & clear sample, water dirty at bottom.

MW2 very slow recharge, not enough for PAH sample, very dirty at bottom.

MW3 fairly clean & clear sample to bottom.

MW4 yellowish, fairly clean sample, slightly dirty at bottom.

MW5 fairly clean & clear sample, dirty at bottom.

No HC odour /sheen observed in any samples.

Shane Reynolds  
Scientific Officer