

Appendix D Packer Testing Photographs

LIGHTHORSE LANDFILL SITE PACKER TESTING AND PIEZOMETER INSTALLATION PHOTOGRAPHS



Flushing dirty water with cuttings into pits prior to packer testing



Packer on rack with pump and 200 litre water tank at rear



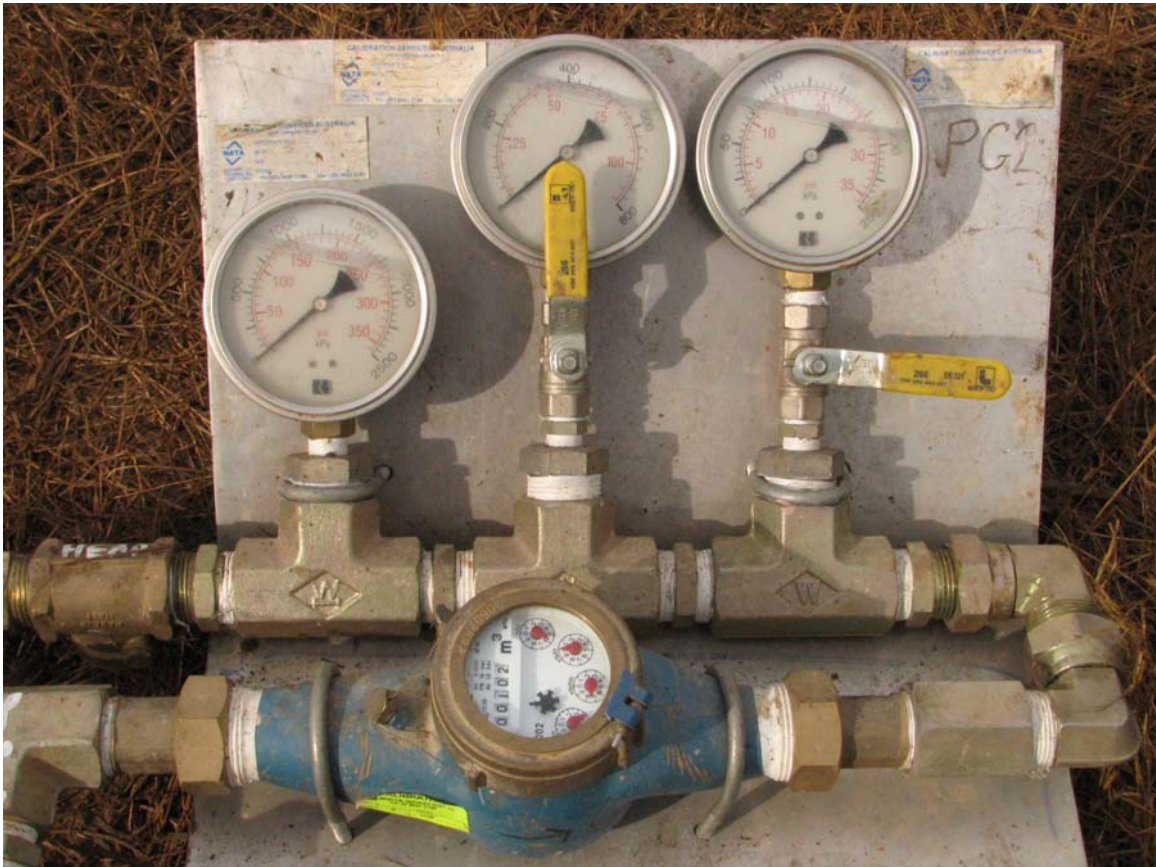
Compressed air source to inflate the packer down hole – packer inflation hose is visible on the reel



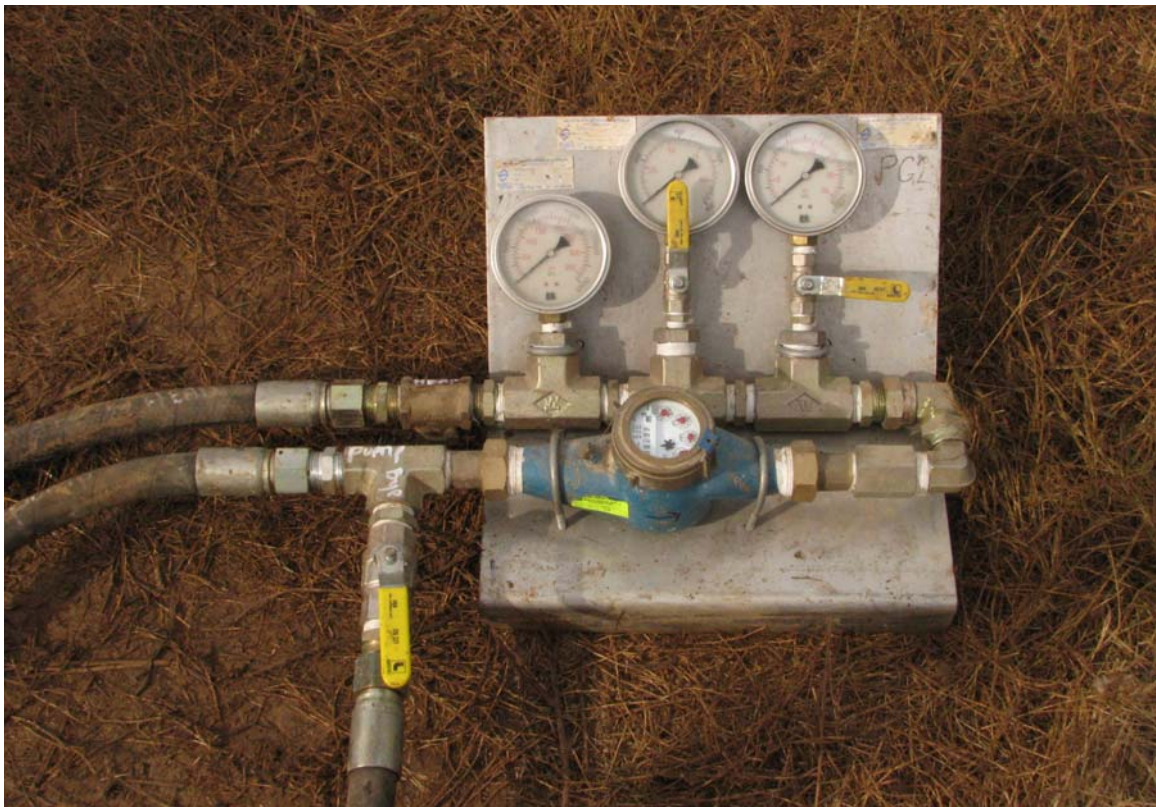
Feeding packer air hose down hole with the packer assembly. The air hose is taped to the cable suspending the packer.



Packer setup with packer suspended by cable and the compressed air inflation hose passing through the fitting at the top of the rods. Water under pressure from the pump is supplied via the hose fitting on the right.



Pressure gauges for measurement located 10 and 20 cm above ground level. Gauges are oil damped. The low metre in the foreground records water flow to increments of 50ml.



Water comes from the pump via lower hose to the left. Bypass valve on lower hose allows control of flow (diverting water back to tank). Water flows through the meter and out the upper hose to the rods and packer



The pump and drum used to hold clean water for packer testing, after the hole has been flushed with water from pits to remove silt that might prevent sealing of the packer.



Core holes where packer testing was conducted were reamed to a 150 mm diameter using an open hole hammer. The hole was then flushed prior to piezometer installation.



Drill cuttings from hammer drilling. Cuttings were collected on a metre basis and geologically logged for comparison with the core holes and to assess areas of groundwater inflow, together with the driller's observations.



Holes were flushed with water and with biodegradable foam, to remove remaining cuttings, prior to filling holes with water and installing the piezometers



Clean municipal supply water was used to fill drill holes prior to installation of piezometers.



Piezometer materials for installation. Class 19 screwed PVC was used, with plastic centralisers used every 9 to 12 metres to keep pipe central in the hole. A lifting sub was used to lower pipe into the hole.









Appendix E

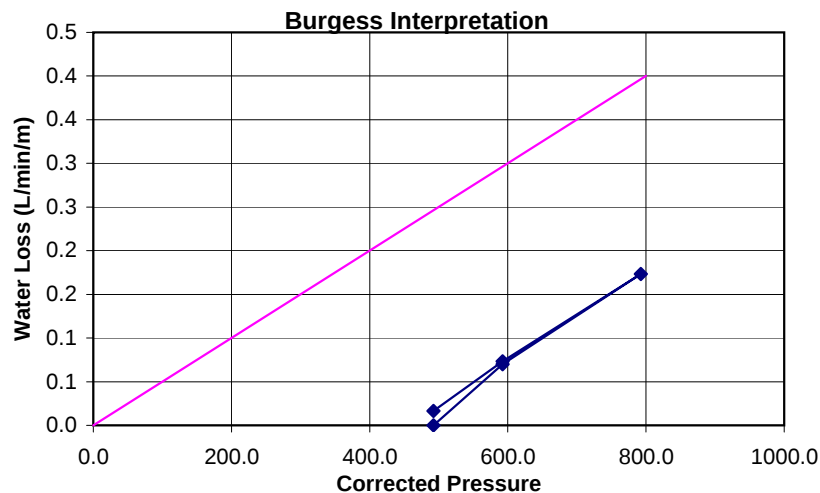
Packer Test Analyses

BOREHOLE WATER PRESSURE TEST

Job No: **BJ07**
Office: **Syd**

Client: LHL	Location: Eastern Creek	Reduced By: IG	Borehole no: BH10d
Project: Light Horse Landfill	Test Date: 13-May-09	Checked By: MB	
Test Details: Packer Type: End	Borehole Diameter: 100	Depth from: 34.00 m	
Type of Pump:	Borehole Inclination: 90	Depth to: 40.00 m	
Pressure Gauge & Serial No:	Borehole Azimuth: 0 0	Test Depth Interval: 6.00 m	
Pressure gauge height: 0 m	Static Pressure: 392.4 kPa	Test Midpoint (m): 37.00 m	
Depth to g'water: 40 m			

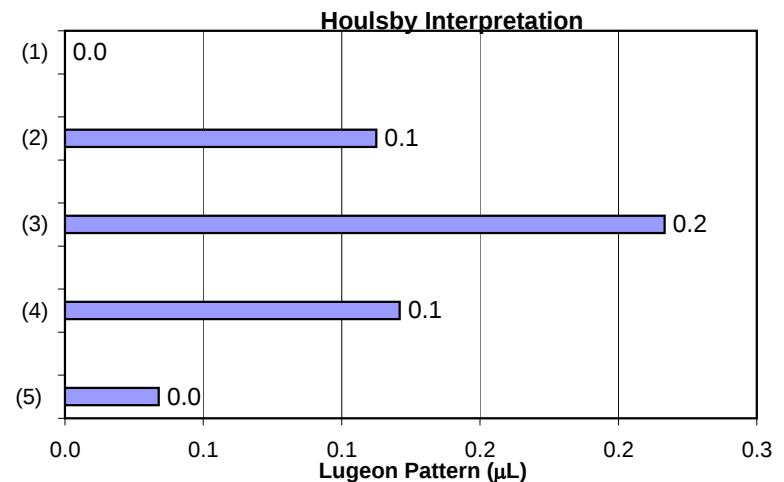
Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	100	880.2	880.2	0	0.00	0.0	492.4	0.00
5	100	880.2	880.2	0	0.00	0.0	492.4	0.00
5	200	880.2	882.3	2.1	0.42	0.0	592.4	0.07
5	200	882.3	884.2	1.9	0.38	0.0	592.4	0.06
5	400	884.2	889.4	5.2	1.04	0.0	792.4	0.17
5	400	889.4	894.5	5.1	1.02	0.0	792.4	0.17
5	200	894.5	896.6	2.1	0.42	0.0	592.4	0.07
5	200	896.6	898.8	2.2	0.44	0.0	592.4	0.07
5	100	898.8	899.3	0.5	0.10	0.0	492.4	0.02
5	100	899.3	899.8	0.5	0.10	0.0	492.4	0.02



Interpreted Burgess Permeability :

Based on Burgess, 1983

1 μ L
5E-07 m/d



Interpreted Houlsby Permeability :

Based on Houlsby, 1976

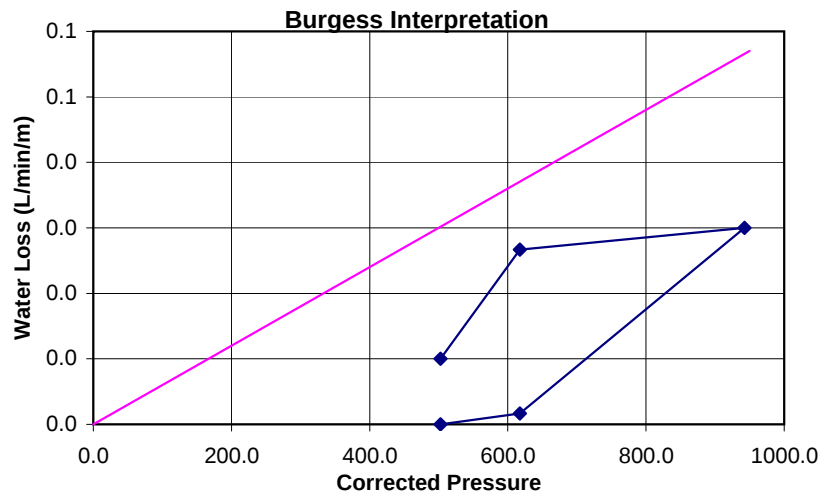
<0.5 μ L
m/d

BOREHOLE WATER PRESSURE TEST

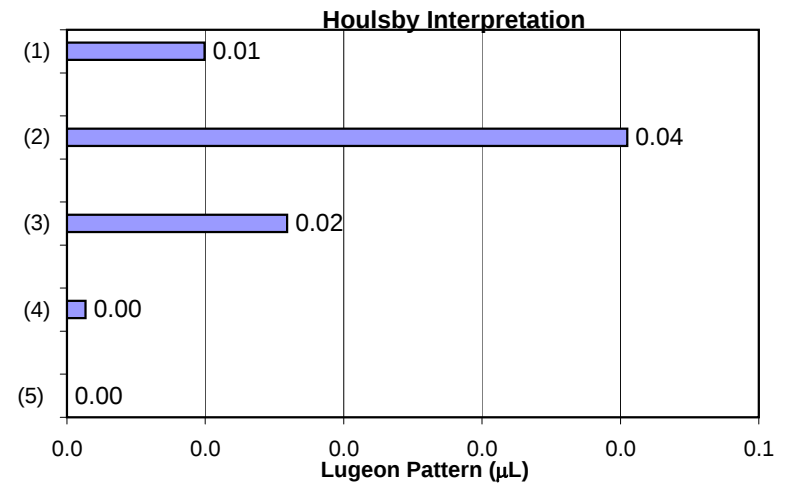
Job No: **BJ07**
Office: **Syd**

Client: LHL	Location: Eastern Creek	Reduced By: IG	Borehole no: BH10d
Project: Light Horse Landfill	Test Date: 13-May-09	Checked By: MB	
Test Details: Packer Type: End	Borehole Diameter: 100	Depth from: 44.00 m	
Type of Pump:	Borehole Inclination: 90	Depth to: 50.00 m	
Pressure Gauge & Serial No:	Borehole Azimuth: 0 0	Test Depth Interval: 6.00 m	
Pressure gauge height: 0 m	Static Pressure: 392.4 kPa	Test Midpoint (m): 47.00 m	
Depth to g'water: 40 m			

Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	110	916.8	916.8	0	0.00	0.0	502.4	0.00
5	110	916.8	917.1	0.3	0.06	0.0	502.4	0.01
5	225	921.7	922.4	0.7	0.14	0.0	617.4	0.02
5	225	922.4	923.2	0.8	0.16	0.0	617.4	0.03
5	550	929.7	930.6	0.9	0.18	0.0	942.4	0.03
5	550	930.3	930.3	0	0.00	0.0	942.4	0.00
5	225	930.3	930.35	0.05	0.01	0.0	617.4	0.00
5	225	930.35	930.35	0	0.00	0.0	617.4	0.00
5	110	930.35	930.35	0	0.00	0.0	502.4	0.00
5	110	930.35	930.35	0	0.00	0.0	502.4	0.00



Interpreted Burgess Permeability : **<0.5 μL m/d**
Based on Burgess, 1983



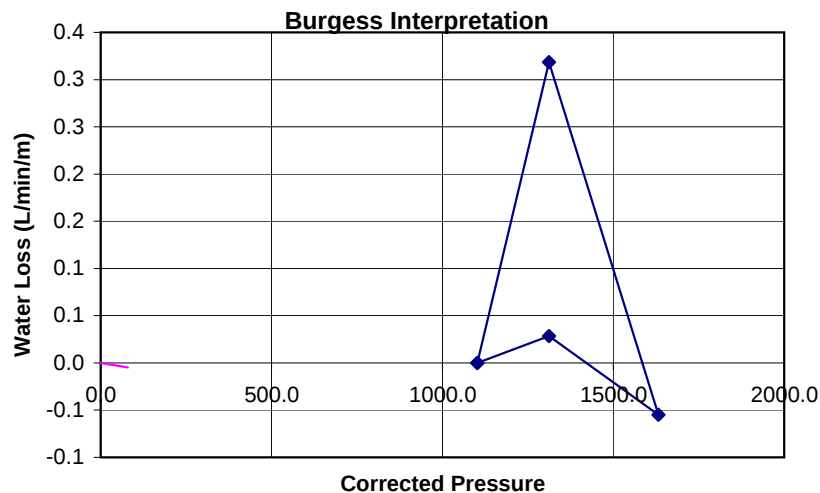
Interpreted Houlsby Permeability : **<0.5 μL m/d**
Based on Houlsby, 1976

BOREHOLE WATER PRESSURE TEST

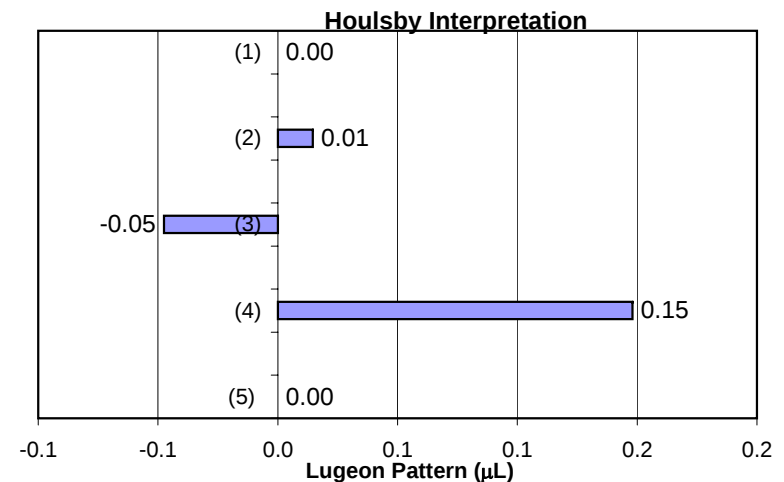
Job No:
Office:

Client: Dial a Dump		Location:		Reduced By: MRB	Borehole no: BH10d
Project: Lighthouse Landfill Site		Test Date: 14-May-09		Checked By:	
Test Details:	Packer Type: Single	Borehole Diameter: 100			Depth from: 54.00 m
	Type of Pump:	Borehole Inclination: 90			Depth to: 60.00 m
	Pressure Gauge & Serial No: 800kPa max	Borehole Azimuth:			Test Depth Interval: 6.00 m
Pressure gauge height: 0.1 m	Depth to g'water: 100 m	Static Pressure: 982.0 kPa			Test Midpoint (m): 57.00 m

Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	120	951.7	951.7	0	0.00	0.0	1102.0	0.00
5	120	951.7	951.7	0	0.00	0.0	1102.0	0.00
5	330	959.45	960.3	0.85	0.17	0.0	1312.0	0.03
5	330	960.3	960.6	0.3	0.06	0.0	1312.0	0.01
5	650	964.65	963	-1.65	-0.33	0.0	1632.0	-0.05
5	650	963	960	-3	-0.60	0.0	1632.0	-0.10
5	330	957.7	967.25	9.55	1.91	0.0	1312.0	0.32
5	330	967.25	969.35	2.1	0.42	0.0	1312.0	0.07
5	120	979.35	979.35	0	0.00	0.0	1102.0	0.00
5	120	979.35	979.35	0	0.00	0.0	1102.0	0.00



Interpreted Burgess Permeability : **<0.5 μL**
Based on Burgess, 1983



Interpreted Houlsby Permeability : **<0.5 μL**
Based on Houlsby, 1976

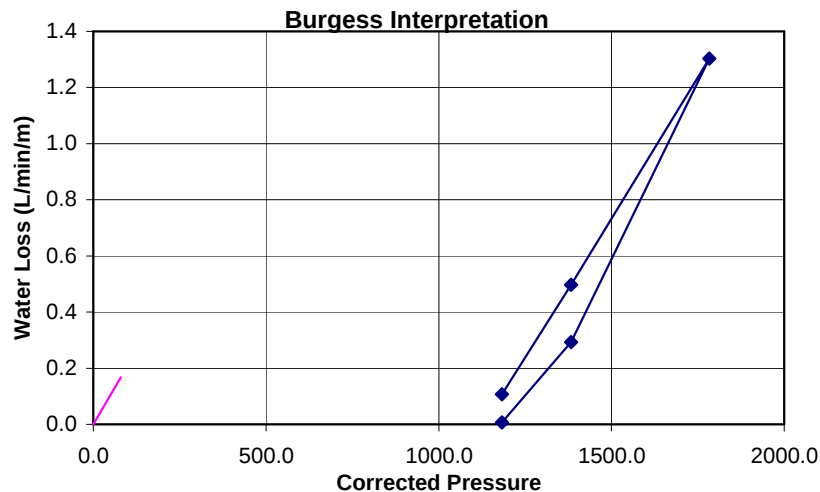
BOREHOLE WATER PRESSURE TEST

Job No:

Office:

Client: Dial a Dump	Location:	Reduced By: MRB	Borehole no: BH10d
Project: Lighthouse Landfill Site	Test Date: 15-May-09	Checked By:	
Test Details: Packer Type: Single	Borehole Diameter: 0.1	Depth from:	64.00 m
Type of Pump:	Borehole Inclination: 90	Depth to:	70.00 m
Pressure Gauge & Serial No: 800kPa	PG2	Borehole Azimuth:	Test Depth Interval: 6.00 m
Pressure gauge height: 0.2 m	Depth to g'water: 100 m	Static Pressure: 983.0 kPa	Test Midpoint (m): 67.00 m

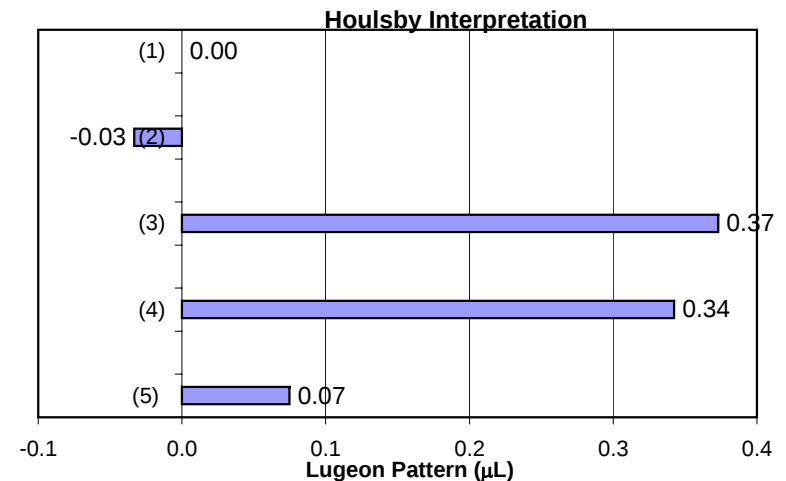
Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	200	1995.55	1995.35	-0.2	-0.04	0.0	1183.0	-0.01
5	200	1995.35	1995.55	0.2	0.04	0.0	1183.0	0.01
5	400	2000.5	2009.3	8.8	1.76	0.0	1383.0	0.29
5	400	2009.3	1997.75	-11.55	-2.31	0.0	1383.0	-0.38
5	800	2002	2002.8	0.8	0.16	0.0	1783.0	0.03
5	800	2002.8	2041.9	39.1	7.82	0.0	1783.0	1.30
5	400	2043.2	2056.7	13.5	2.70	0.0	1383.0	0.45
5	400	2056.7	2071.6	14.9	2.98	0.0	1383.0	0.50
5	200	2071.6	2073.7	2.1	0.42	0.0	1183.0	0.07
5	200	2073.7	2076.9	3.2	0.64	0.0	1183.0	0.11



Interpreted Burgess Permeability :

2 μL

Based on Burgess, 1983



Interpreted Houlsby Permeability :

<0.5 μL

Based on Houlsby, 1976

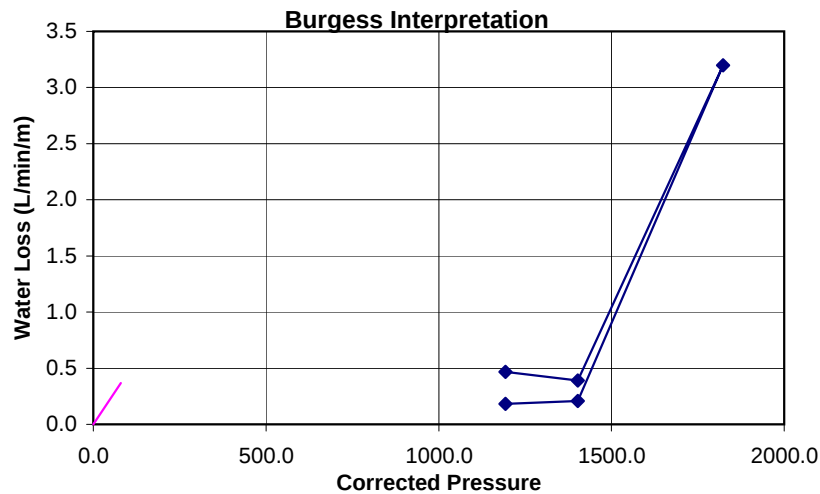
BOREHOLE WATER PRESSURE TEST

Job No:

Office:

Client: Dial a Dump		Location:		Reduced By: MRB	Borehole no: BH10d
Project: Lighthouse Landfill Site		Test Date: 15-May-09		Checked By:	
Test Details: Packer Type: Single		Borehole Diameter: 0.1		Depth from:	74.00 m
Type of Pump:		Borehole Inclination: -90		Depth to:	80.00 m
Pressure Gauge & Serial No: PG2		Borehole Azimuth:		Test Depth Interval:	6.00 m
Pressure gauge height: 0.2 m		Depth to g'water: 100 m		Test Midpoint (m):	77.00 m
		Static Pressure: 983.0 kPa			

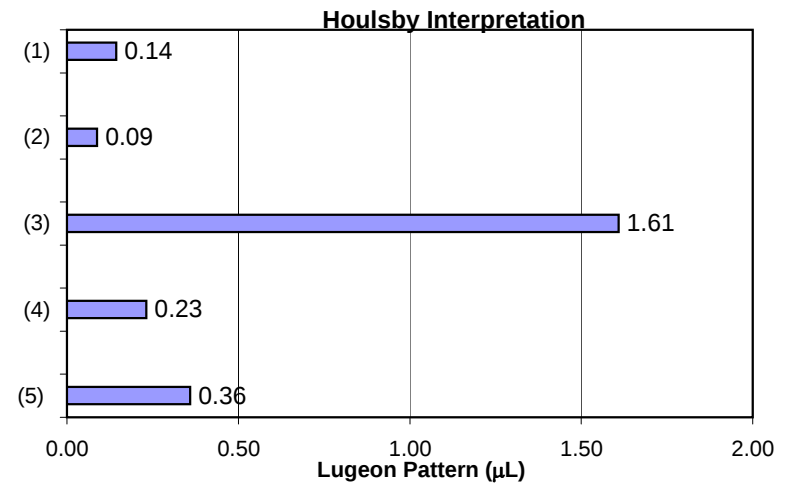
Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	210	112.6	117.45	4.85	0.97	0.0	1193.0	0.16
5	210	117.45	122.9	5.45	1.09	0.0	1193.0	0.18
5	420	124	130.2	6.2	1.24	0.0	1403.0	0.21
5	420	130.2	131.35	1.15	0.23	0.0	1403.0	0.04
5	840	148	228.1	80.1	16.02	0.0	1823.0	2.67
5	840	228.1	324	95.9	19.18	0.0	1823.0	3.20
5	420	343	354.7	11.7	2.34	0.0	1403.0	0.39
5	420	354.7	362.45	7.75	1.55	0.0	1403.0	0.26
5	210	362.45	376.45	14	2.80	0.0	1193.0	0.47
5	210	376.45	388.2	11.75	2.35	0.0	1193.0	0.39



Interpreted Burgess Permeability :

5 μ L

Based on Burgess, 1983



Interpreted Houlsby Permeability :

<0.5 μ L

Based on Houlsby, 1976

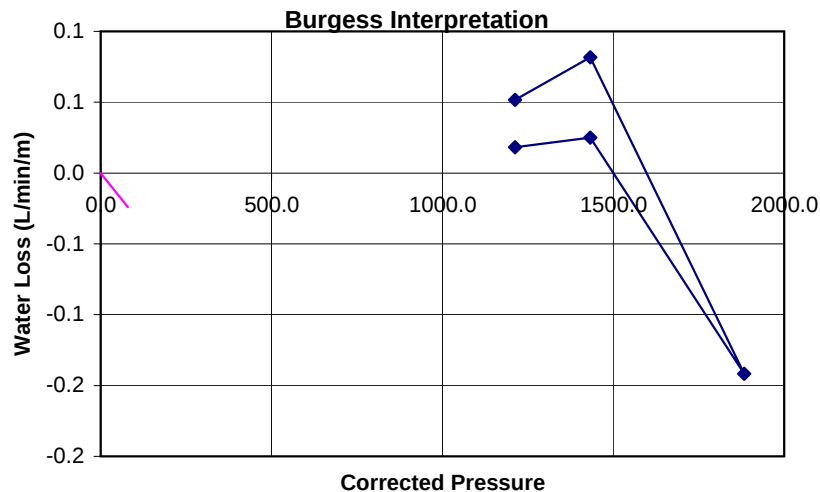
BOREHOLE WATER PRESSURE TEST

Job No:

Office:

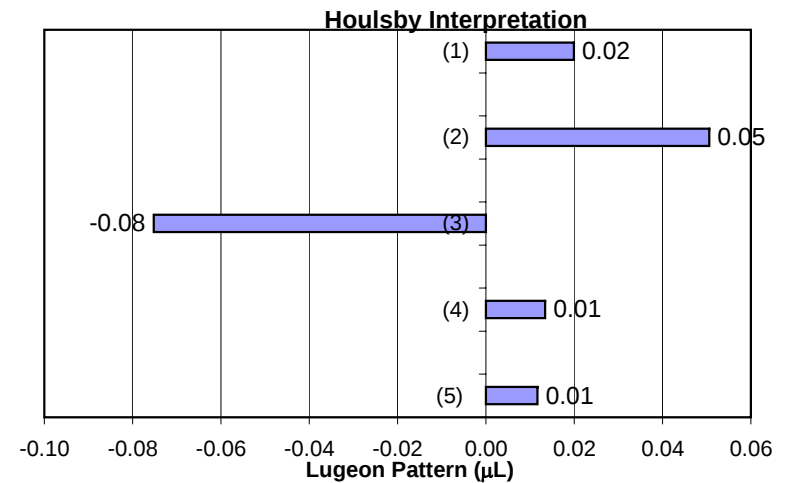
Client: Dial a Dump	Location:	Reduced By: MRB	Borehole no: BH10d
Project: Lighthouse Landfill Site	Test Date: 18-May-09	Checked By:	
Test Details: Packer Type: single	Borehole Diameter: 100 mm	Depth from: 84.00 m	
Type of Pump:	Borehole Inclination: -90	Depth to: 90.00 m	
Pressure Gauge & Serial No: 3 Dial set	Borehole Azimuth:	Test Depth Interval: 6.00 m	
Pressure gauge height: 0.2 m	Static Pressure: 983.0 kPa	Test Midpoint (m): 87.00 m	
Depth to g'water: 100 m			

Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	230	446.15	446.05	-0.1	-0.02	0.0	1213.0	0.00
5	230	446.05	447.6	1.55	0.31	0.0	1213.0	0.05
5	450	450.75	452.65	1.9	0.38	0.0	1433.0	0.06
5	450	452.65	455.1	2.45	0.49	0.0	1433.0	0.08
5	900	563.4	559.15	-4.25	-0.85	0.0	1883.0	-0.14
5	900	563.4	559.15	-4.25	-0.85	0.0	1883.0	-0.14
5	450	558.65	559.4	0.75	0.15	0.0	1433.0	0.03
5	450	559.4	559.8	0.4	0.08	0.0	1433.0	0.01
5	230	559.8	560.1	0.3	0.06	0.0	1213.0	0.01
5	230	560.1	560.65	0.55	0.11	0.0	1213.0	0.02



Interpreted Burgess Permeability : **<0.5 μL**

Based on Burgess, 1983



Interpreted Houlsby Permeability : **<0.5 μL**

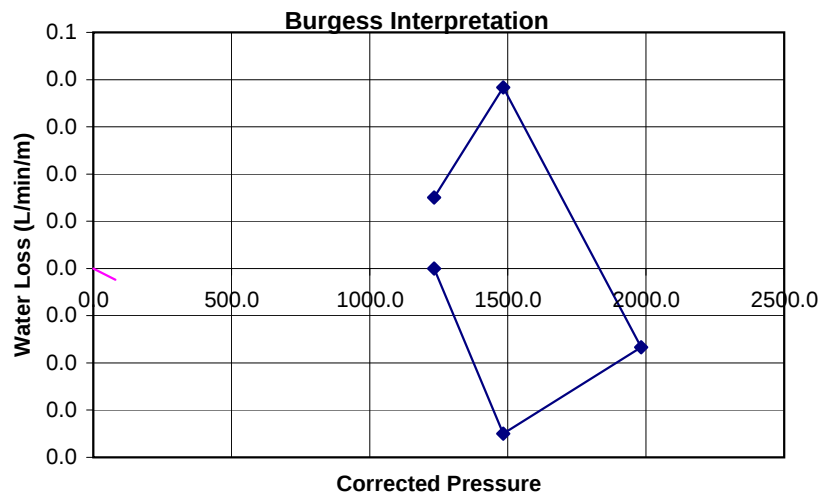
Based on Houlsby, 1976

BOREHOLE WATER PRESSURE TEST

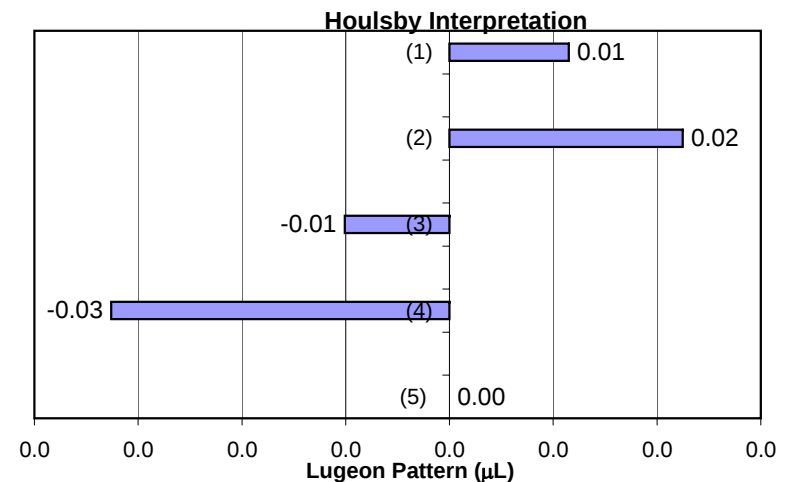
Job No:
Office:

Client: Dial a Dump	Location:	Reduced By: MRB	Borehole no: BH10d
Project: Lighthouse Landfill Site	Test Date: 19-May-09	Checked By:	
Test Details: Packer Type: Single	Borehole Diameter: 100 mm	Depth from: 94.00 m	
Type of Pump:	Borehole Inclination: 90	Depth to: 100.00 m	
Pressure Gauge & Serial No: PG2	Borehole Azimuth:	Test Depth Interval: 6.00 m	
Pressure gauge height: 0.2 m	Static Pressure: 983.0 kPa	Test Midpoint (m): 97.00 m	
Depth to g'water: 100 m			

Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	250	592.25	592.7	0.45	0.09	0.0	1233.0	0.02
5	250	592.7	593.1	0.4	0.08	0.0	1233.0	0.01
5	500	597.8	598.65	0.85	0.17	0.0	1483.0	0.03
5	500	598.65	599.8	1.15	0.23	0.0	1483.0	0.04
5	1000	603.5	602.8	-0.7	-0.14	0.0	1983.0	-0.02
5	1000	602.8	602.3	-0.5	-0.10	0.0	1983.0	-0.02
5	500	600.7	599.65	-1.05	-0.21	0.0	1483.0	-0.04
5	500	599.65	597.8	-1.85	-0.37	0.0	1483.0	-0.06
5	250	592.2	592.2	0	0.00	0.0	1233.0	0.00
5	250	592.2	592.2	0	0.00	0.0	1233.0	0.00



Interpreted Burgess Permeability : **<0.5 μ L**
Based on Burgess, 1983



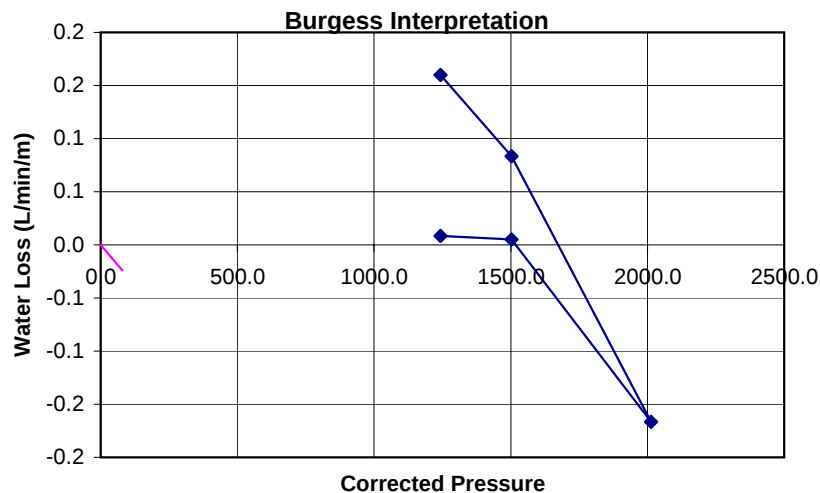
Interpreted Houlsby Permeability : **<0.5 μ L**
Based on Houlsby, 1976

BOREHOLE WATER PRESSURE TEST

Job No:
Office:

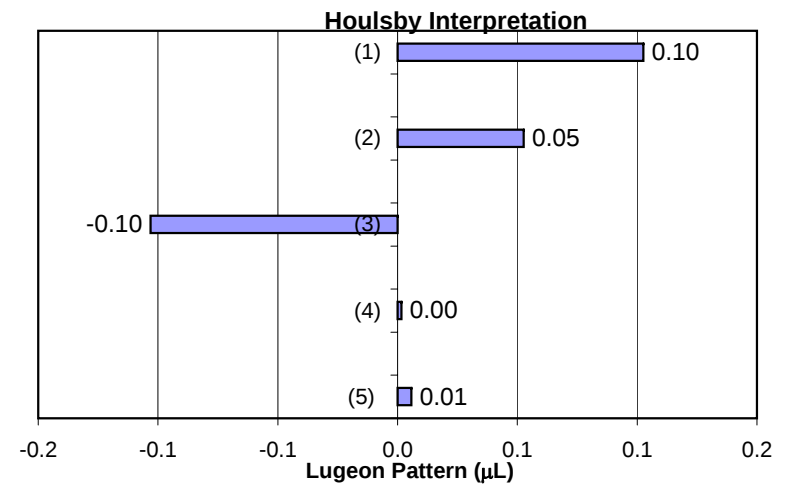
Client: Dial a Dump	Location:	Reduced By: MRB	Borehole no: BH10d
Project: Light Horse Landfill Site	Test Date: 19-May-09	Checked By:	
Test Details: Packer Type: Single	Borehole Diameter: 100	Depth from: 104.00 m	
Type of Pump: Rotary surface	Borehole Inclination: -90	Depth to: 110.00 m	
Pressure Gauge & Serial No: Analogue dial PG2	Borehole Azimuth:	Test Depth Interval: 6.00 m	
Pressure gauge height: 0.2 m	Depth to g'water: 100 m	Static Pressure: 983.0 kPa	Test Midpoint (m): 107.00 m

Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	260	620.7	625.5	4.8	0.96	0.0	1243.0	0.16
5	260	625.5	628.35	2.85	0.57	0.0	1243.0	0.10
5	520	631.45	633.95	2.5	0.50	0.0	1503.0	0.08
5	520	633.95	636.2	2.25	0.45	0.0	1503.0	0.08
5	1030	643.2	638.2	-5	-1.00	0.0	2013.0	-0.17
5	1030	638.2	630.75	-7.45	-1.49	0.0	2013.0	-0.25
5	520	629.8	629.95	0.15	0.03	0.0	1503.0	0.01
5	520	629.95	629.95	0	0.00	0.0	1503.0	0.00
5	260	628.65	628.9	0.25	0.05	0.0	1243.0	0.01
5	260	628.9	629.08	0.18	0.04	0.0	1243.0	0.01



Interpreted Burgess Permeability : **<0.5 μL**

Based on Burgess, 1983



Interpreted Houlsby Permeability : **<0.5 μL**

Based on Houlsby, 1976

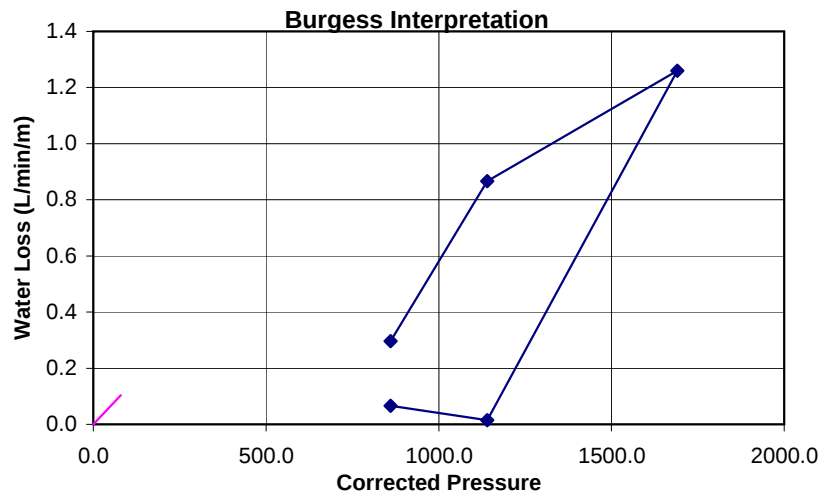
BOREHOLE WATER PRESSURE TEST

Job No:

Office:

Client: Dial a Dump	Location:	Reduced By: MRB	Borehole no: BH10d
Project: Lighthores landfill site	Test Date: 20-May-09	Checked By:	
Test Details: Packer Type: Single	Borehole Diameter: 0.1 m	Depth from:	114.00 m
Type of Pump:	Borehole Inclination: -90	Depth to:	120.00 m
Pressure Gauge & Serial No: PG2	Borehole Azimuth:	Test Depth Interval:	6.00 m
Pressure gauge height: 0.2 m	Depth to g'water: 60 m	Static Pressure: 590.6 kPa	Test Midpoint (m): 117.00 m

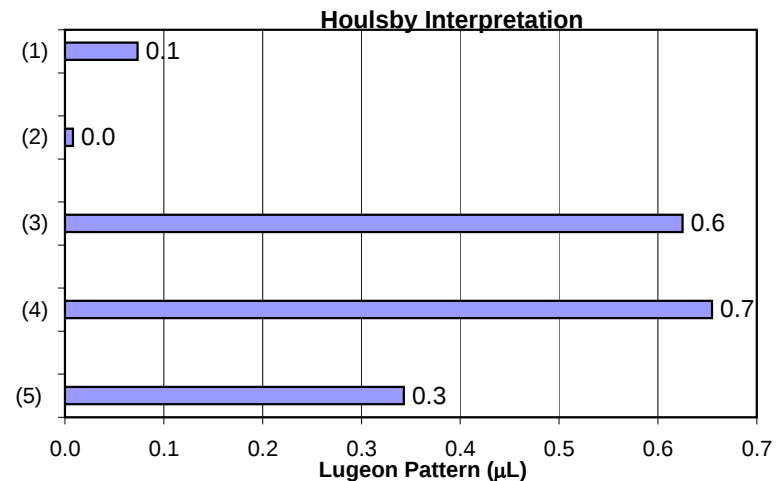
Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	270	656.4	658.4	2	0.40	0.0	860.6	0.07
5	270	658.4	660.2	1.8	0.36	0.0	860.6	0.06
5	550	666.35	666.8	0.45	0.09	0.0	1140.6	0.01
5	550	666.8	666.9	0.1	0.02	0.0	1140.6	0.00
5	1100	686.8	712.4	25.6	5.12	0.0	1690.6	0.85
5	1100	712.4	750.2	37.8	7.56	0.0	1690.6	1.26
5	550	752	778	26	5.20	0.0	1140.6	0.87
5	550	778	796.8	18.8	3.76	0.0	1140.6	0.63
5	270	795.7	804.5	8.8	1.76	0.0	860.6	0.29
5	270	804.5	813.4	8.9	1.78	0.0	860.6	0.30



Interpreted Burgess Permeability :

1 μ L

Based on Burgess, 1983



Interpreted Houlsby Permeability :

1 μ L

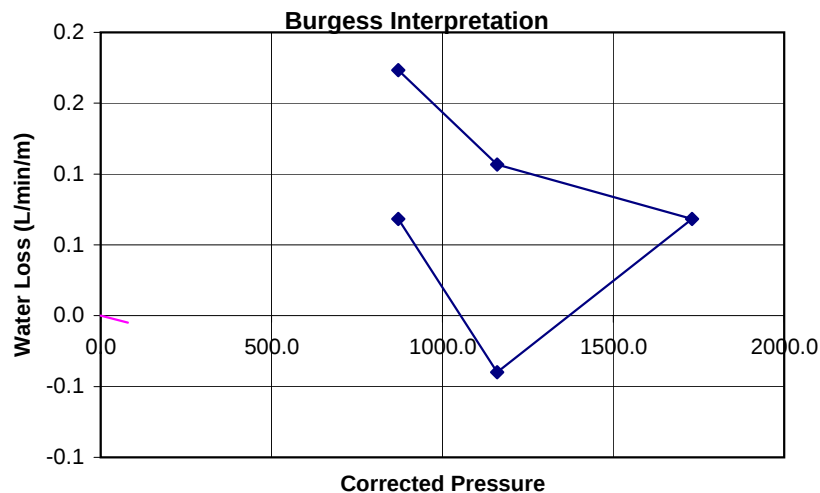
Based on Houlsby, 1976

BOREHOLE WATER PRESSURE TEST

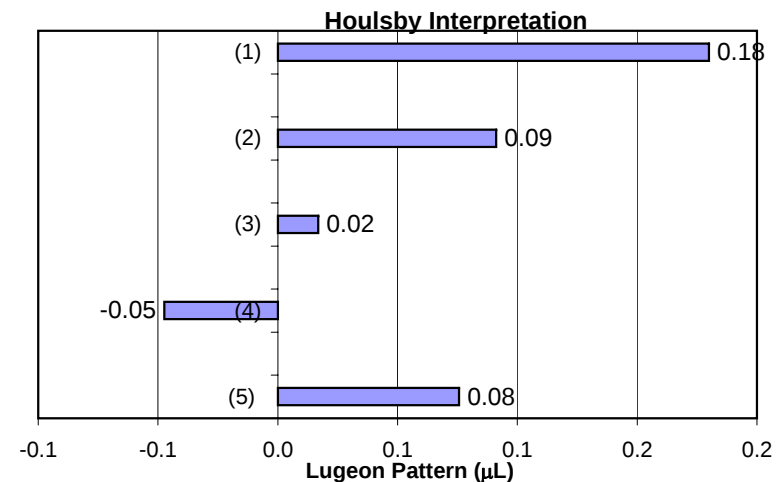
Job No:
Office:

Client: Dial a Dump	Location:	Reduced By: MRB	Borehole no: BH10d
Project: Light Horse Landfill Site	Test Date: 21-May-09	Checked By:	
Test Details: Packer Type: Single	Borehole Diameter: 0.1	Depth from: 124.00 m	
Type of Pump:	Borehole Inclination: -90	Depth to: 130.00 m	
Pressure Gauge & Serial No: PG2	Borehole Azimuth:	Test Depth Interval: 6.00 m	
Pressure gauge height: 0.2 m	Depth to g'water: 60 m	Static Pressure: 590.6 kPa	Test Midpoint (m): 127.00 m

Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	280	892.8	898	5.2	1.04	0.0	870.6	0.17
5	280	898	902.2	4.2	0.84	0.0	870.6	0.14
5	570	911.15	914.35	3.2	0.64	0.0	1160.6	0.11
5	570	914.35	917.5	3.15	0.63	0.0	1160.6	0.10
5	1140	929.1	931.15	2.05	0.41	0.0	1730.6	0.07
5	1140	931.15	930.85	-0.3	-0.06	0.0	1730.6	-0.01
5	570	932.4	931.2	-1.2	-0.24	0.0	1160.6	-0.04
5	570	931.2	929.1	-2.1	-0.42	0.0	1160.6	-0.07
5	280	927.65	929.7	2.05	0.41	0.0	870.6	0.07
5	280	929.7	931.6	1.9	0.38	0.0	870.6	0.06



Interpreted Burgess Permeability : **<0.5 μL**
Based on Burgess, 1983



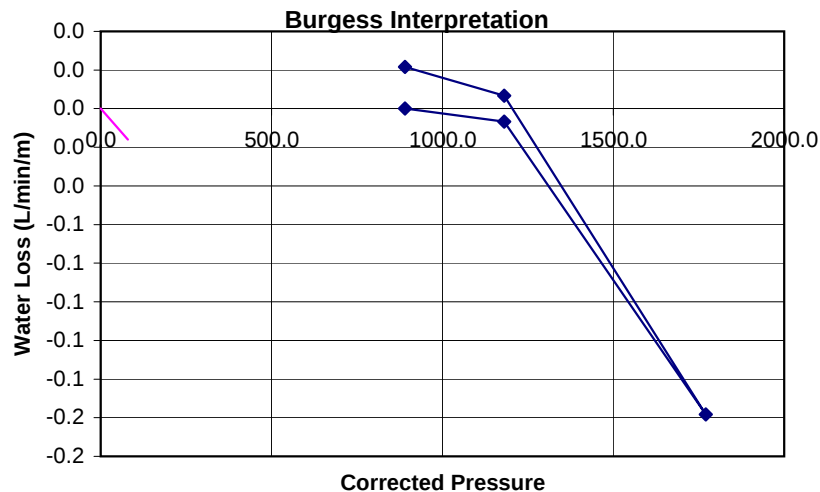
Interpreted Houlsby Permeability : **<0.5 μL**
Based on Houlsby, 1976

BOREHOLE WATER PRESSURE TEST

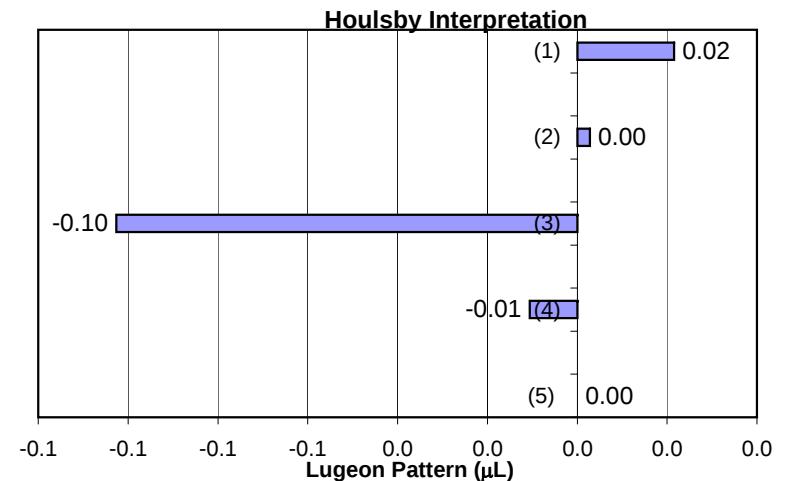
Job No:
Office:

Client: Dial a Dump	Location:	Reduced By: MRB	Borehole no: BH10d
Project: Light Horse Landfill site	Test Date: 21-May-09	Checked By:	
Test Details: Packer Type: Single	Borehole Diameter: 0.1 m	Depth from: 134.00 m	
Type of Pump:	Borehole Inclination: -90	Depth to: 140.00 m	
Pressure Gauge & Serial No: PG2	Borehole Azimuth:	Test Depth Interval: 6.00 m	
Pressure gauge height: 0.2 m	Depth to g'water: 60 m	Static Pressure: 590.6 kPa	Test Midpoint (m): 137.00 m

Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	300	948	948.65	0.65	0.13	0.0	890.6	0.02
5	300	951.5	952	0.5	0.10	0.0	890.6	0.02
5	590	952	952.2	0.2	0.04	0.0	1180.6	0.01
5	590	952.2	952.2	0	0.00	0.0	1180.6	0.00
5	1180	953.9	949.15	-4.75	-0.95	0.0	1770.6	-0.16
5	1180	949.15	943	-6.15	-1.23	0.0	1770.6	-0.20
5	590	942.65	942.45	-0.2	-0.04	0.0	1180.6	-0.01
5	590	942.45	941.9	-0.55	-0.11	0.0	1180.6	-0.02
5	300	940.9	940.9	0	0.00	0.0	890.6	0.00
5	300	940.9	940.9	0	0.00	0.0	890.6	0.00



Interpreted Burgess Permeability : **<0.5 μL**
Based on Burgess, 1983



Interpreted Houlsby Permeability : **<0.5 μL**
Based on Houlsby, 1976

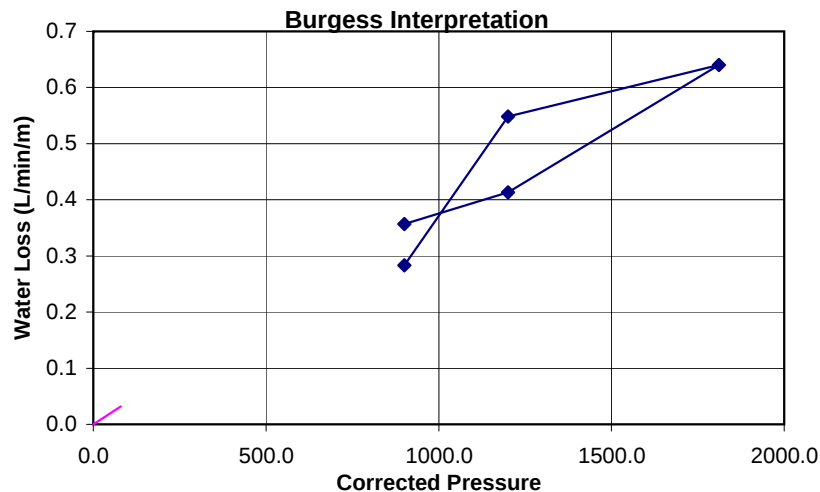
BOREHOLE WATER PRESSURE TEST

Job No:

Office:

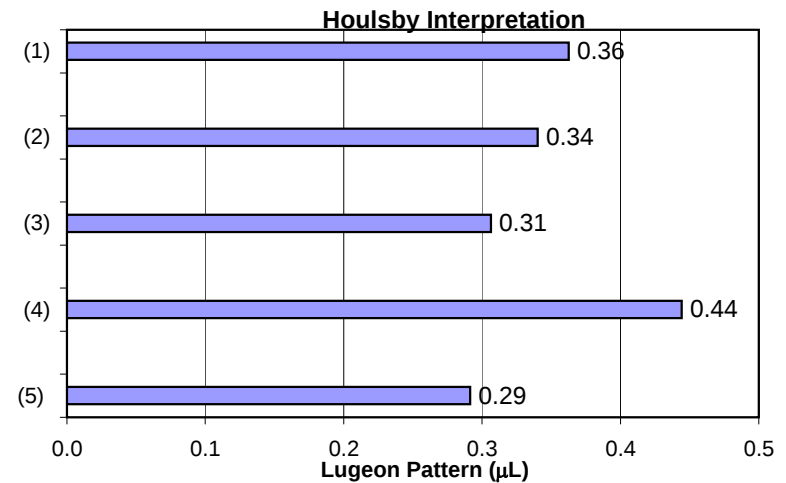
Client: Dial a Dump		Location:		Reduced By: MRB	Borehole no: BH10d
Project: Lighthouse Landfill Site		Test Date: 22-May-09		Checked By:	
Test Details:	Packer Type: Single	Borehole Diameter: 0.1		Depth from:	144.00 m
	Type of Pump:	Borehole Inclination: -90		Depth to:	150.00 m
	Pressure Gauge & Serial No:	PG2		Test Depth Interval:	6.00 m
Pressure gauge height:	0.2 m	Depth to g'water:	60 m	Test Midpoint (m):	147.00 m
			Static Pressure:	590.6 kPa	

Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	310	102993.5	103004.2	10.7	2.14	0.0	900.6	0.36
5	310	103004.2	103013.1	8.9	1.78	0.0	900.6	0.30
5	610	103017.4	103029.5	12.1	2.42	0.0	1200.6	0.40
5	610	103029.5	103041.9	12.4	2.48	0.0	1200.6	0.41
5	1220	103269.6	103288.8	19.2	3.84	0.0	1810.6	0.64
5	1220	103288.8	103302.9	14.1	2.82	0.0	1810.6	0.47
5	610	103308.4	103324.9	16.45	3.29	0.0	1200.6	0.55
5	610	103324.9	103340.4	15.55	3.11	0.0	1200.6	0.52
5	310	103351.1	103359.6	8.5	1.70	0.0	900.6	0.28
5	310	103359.6	103366.9	7.25	1.45	0.0	900.6	0.24



Interpreted Burgess Permeability : **<0.5 μL**

Based on Burgess, 1983



Interpreted Houlsby Permeability : **<0.5 μL**

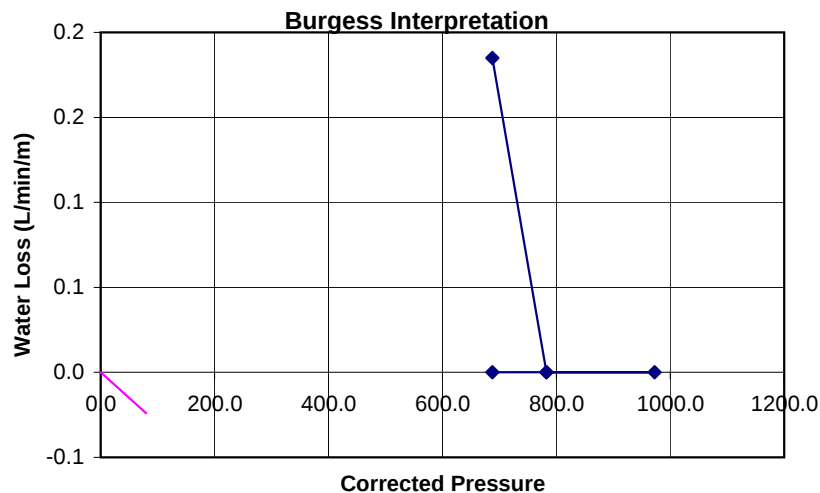
Based on Houlsby, 1976

BOREHOLE WATER PRESSURE TEST

Job No:
Office:

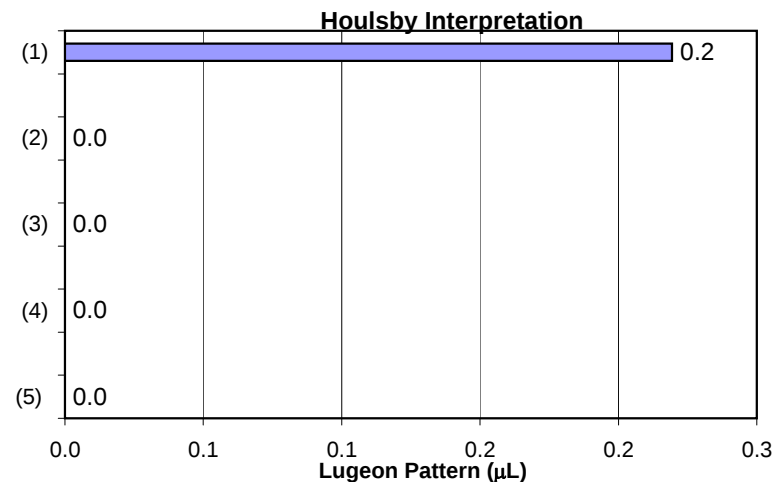
Client: Dial a dump	Location:	Reduced By: MRB	Borehole no:
Project: Light Horse Landfill Site	Test Date: 28-May-09	Checked By:	BH12d
Test Details: Packer Type: Single	Borehole Diameter: 93 mm	Depth from:	34.00 m
Type of Pump: Rotary	Borehole Inclination: -90	Depth to:	40.00 m
Pressure Gauge & Serial No: PG2	Borehole Azimuth:	Test Depth Interval:	6.00 m
Pressure gauge height: 0.4 m	Depth to g'water: 60 m	Static Pressure: 592.5 kPa	Test Midpoint (m): 37.00 m

Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	95	379.05	382.55	3.5	0.70	0.0	687.5	0.12
5	95	382.55	388.1	5.55	1.11	0.0	687.5	0.19
5	190	407	407	0	0.00	0.0	782.5	0.00
5	190	407	407	0	0.00	0.0	782.5	0.00
5	380	407.2	407.2	0	0.00	0.0	972.5	0.00
5	380	407.2	407.2	0	0.00	0.0	972.5	0.00
5	190	407.2	407.2	0	0.00	0.0	782.5	0.00
5	190	407.2	407.2	0	0.00	0.0	782.5	0.00
5	95	407.25	407.25	0	0.00	0.0	687.5	0.00
5	95	407.25	407.25	0	0.00	0.0	687.5	0.00



Interpreted Burgess Permeability : **<0.5 μL**

Based on Burgess, 1983



Interpreted Houlsby Permeability : **<0.5 μL**

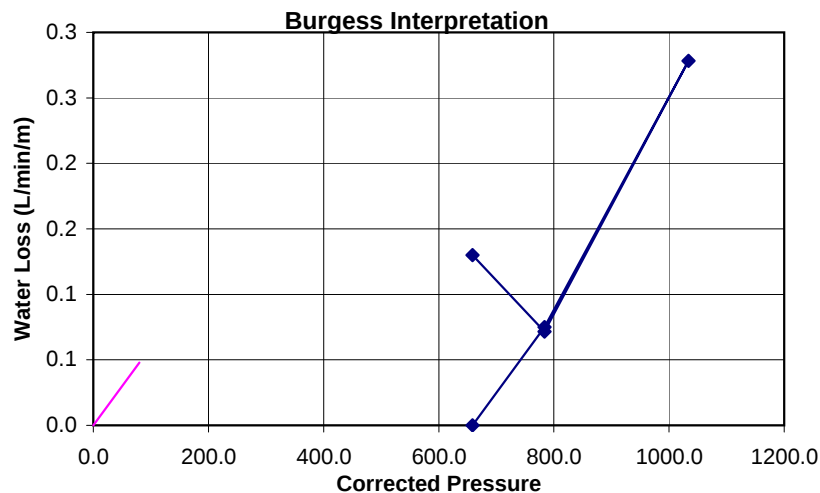
Based on Houlsby, 1976

BOREHOLE WATER PRESSURE TEST

Job No:
Office:

Client: Dial a Dump	Location:	Reduced By: MRB	Borehole no: BH12d
Project: Lighthouse Landfill Site	Test Date: 28-May-09	Checked By:	
Test Details: Packer Type: Single	Borehole Diameter: 93 mm	Depth from:	44.00 m
Type of Pump: Rotary	Borehole Inclination: -90	Depth to:	50.00 m
Pressure Gauge & Serial No: PG2	Borehole Azimuth:	Test Depth Interval:	6.00 m
Pressure gauge height: 0.4 m	Depth to g'water: 54 m	Static Pressure: 533.7 kPa	Test Midpoint (m): 47.00 m

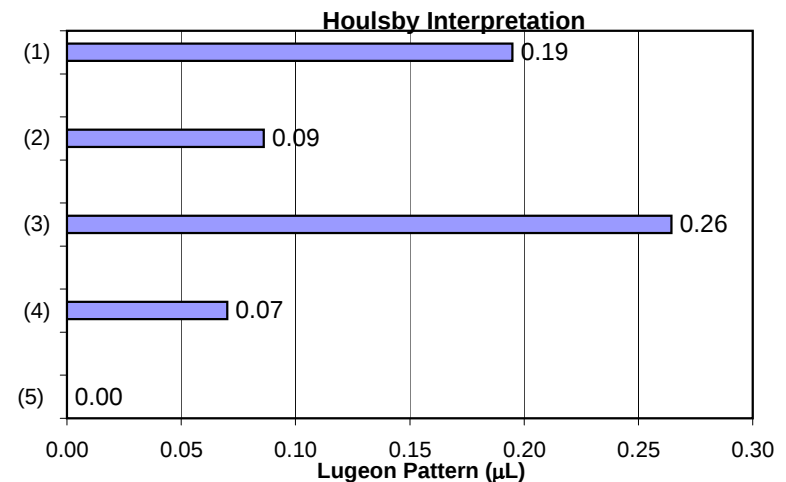
Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	125	439.4	443.3	3.9	0.78	0.0	658.7	0.13
5	125	443.3	447.1	3.8	0.76	0.0	658.7	0.13
5	250	476.6	478.5	1.9	0.38	0.0	783.7	0.06
5	250	478.5	480.65	2.15	0.43	0.0	783.7	0.07
5	500	484.15	492.5	8.35	1.67	0.0	1033.7	0.28
5	500	492.5	500.55	8.05	1.61	0.0	1033.7	0.27
5	250	502.15	504.4	2.25	0.45	0.0	783.7	0.08
5	250	504.4	505.45	1.05	0.21	0.0	783.7	0.04
5	125	505.45	505.45	0	0.00	0.0	658.7	0.00
5	125	505.45	505.45	0	0.00	0.0	658.7	0.00



Interpreted Burgess Permeability :

1 μL

Based on Burgess, 1983



Interpreted Houlsby Permeability :

<0.5 μL

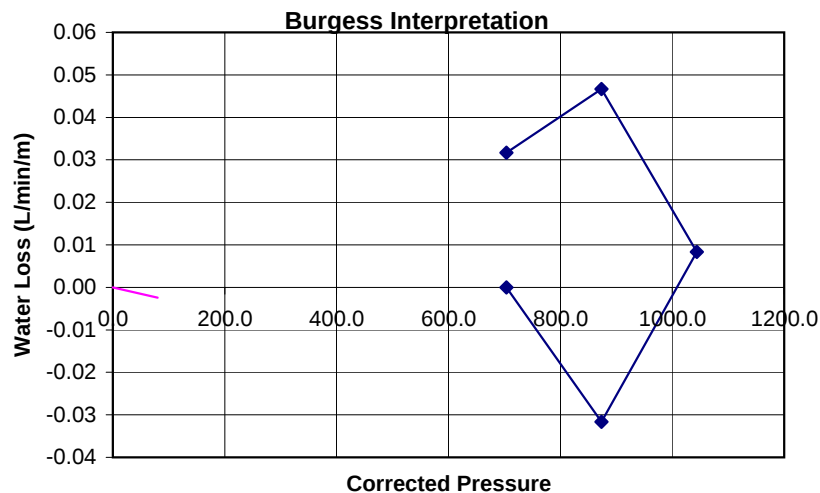
Based on Houlsby, 1976

BOREHOLE WATER PRESSURE TEST

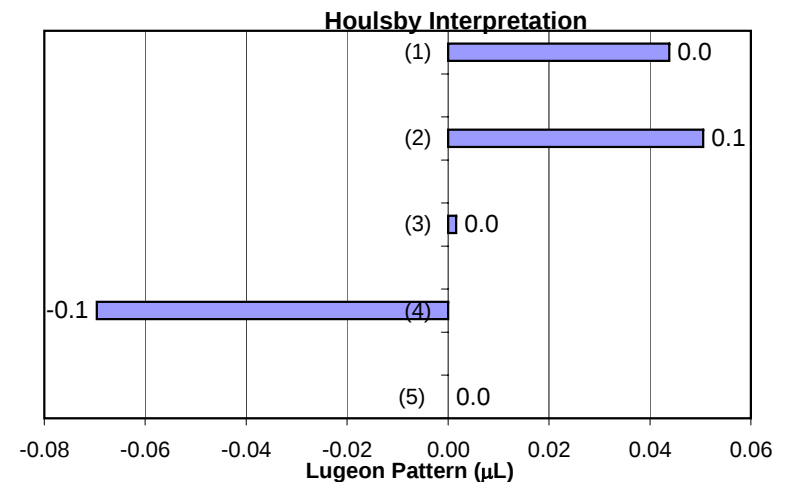
Job No:
Office:

Client: Dial a Dump		Location:		Reduced By: MRB	Borehole no: BH12d
Project: Lighthouse Landfill Site		Test Date: 29-May-09		Checked By:	
Test Details: Packer Type: Single		Borehole Diameter: 93 mm		Depth from:	54.00 m
Type of Pump: Rotary		Borehole Inclination: -90		Depth to:	60.00 m
Pressure Gauge & Serial No:		Borehole Azimuth:		Test Depth Interval:	6.00 m
Pressure gauge height: 0.4 m		Depth to g'water: 54 m		Test Midpoint (m):	57.00 m
		Static Pressure: 533.7 kPa			

Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	170	560.5	561.45	0.95	0.19	0.0	703.7	0.03
5	170	561.45	562.35	0.9	0.18	0.0	703.7	0.03
5	340	568.6	570	1.4	0.28	0.0	873.7	0.05
5	340	570	571.25	1.25	0.25	0.0	873.7	0.04
5	510	574.4	574.25	-0.15	-0.03	0.0	1043.7	0.00
5	510	574.25	574.5	0.25	0.05	0.0	1043.7	0.01
5	340	574.25	573.3	-0.95	-0.19	0.0	873.7	-0.03
5	340	573.3	570.6	-2.7	-0.54	0.0	873.7	-0.09
5	170	568.6	568.6	0	0.00	0.0	703.7	0.00
5	170	568.6	568.6	0	0.00	0.0	703.7	0.00



Interpreted Burgess Permeability : **<0.5 μ L**
Based on Burgess, 1983



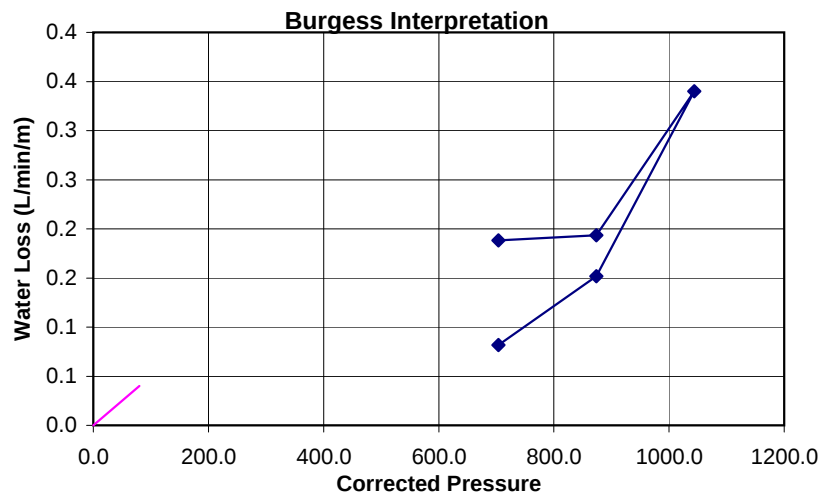
Interpreted Houlsby Permeability : **<0.5 μ L**
Based on Houlsby, 1976

BOREHOLE WATER PRESSURE TEST

Job No:
Office:

Client: Dial a Dump	Location:	Reduced By: MRB	Borehole no: BH12d
Project: Lighthouse Landfill Site	Test Date: 01-Jun-09	Checked By:	
Test Details: Packer Type: Single	Borehole Diameter: 93 mm	Depth from:	64.00 m
Type of Pump: Rotary	Borehole Inclination: -90	Depth to:	70.00 m
Pressure Gauge & Serial No: PG2	Borehole Azimuth:	Test Depth Interval:	6.00 m
Pressure gauge height: 0.4 m	Depth to g'water: 54 m	Static Pressure: 533.7 kPa	Test Midpoint (m): 67.00 m

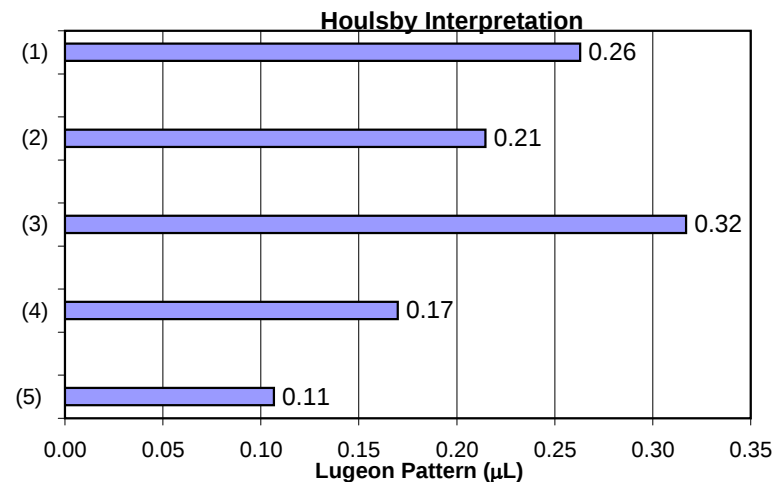
Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	170	616.3	621.95	5.65	1.13	0.0	703.7	0.19
5	170	621.95	627.4	5.45	1.09	0.0	703.7	0.18
5	340	628.35	634.15	5.8	1.16	0.0	873.7	0.19
5	340	634.15	639.6	5.45	1.09	0.0	873.7	0.18
5	510	641.6	651.8	10.2	2.04	0.0	1043.7	0.34
5	510	651.8	661.45	9.65	1.93	0.0	1043.7	0.32
5	340	661.45	666	4.55	0.91	0.0	873.7	0.15
5	340	666	670.35	4.35	0.87	0.0	873.7	0.15
5	170	670.35	672.4	2.05	0.41	0.0	703.7	0.07
5	170	672.4	674.85	2.45	0.49	0.0	703.7	0.08



Interpreted Burgess Permeability :

1 μL

Based on Burgess, 1983



Interpreted Houlsby Permeability :

<0.5 μL

Based on Houlsby, 1976

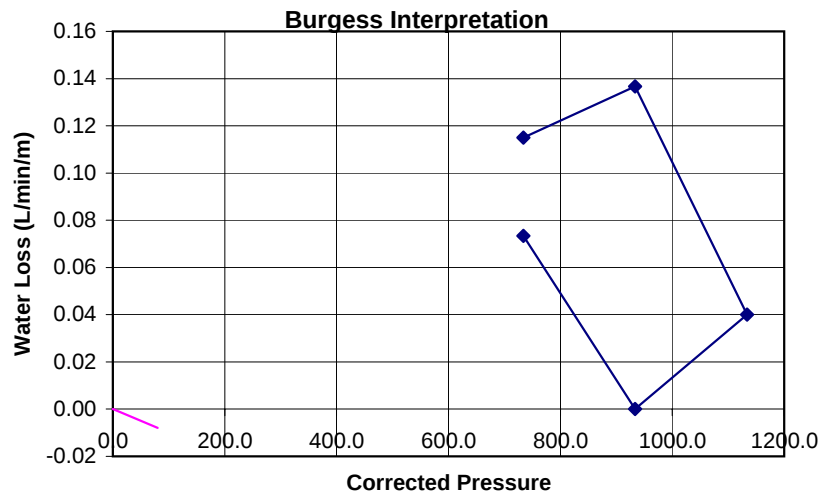
BOREHOLE WATER PRESSURE TEST

Job No:

Office:

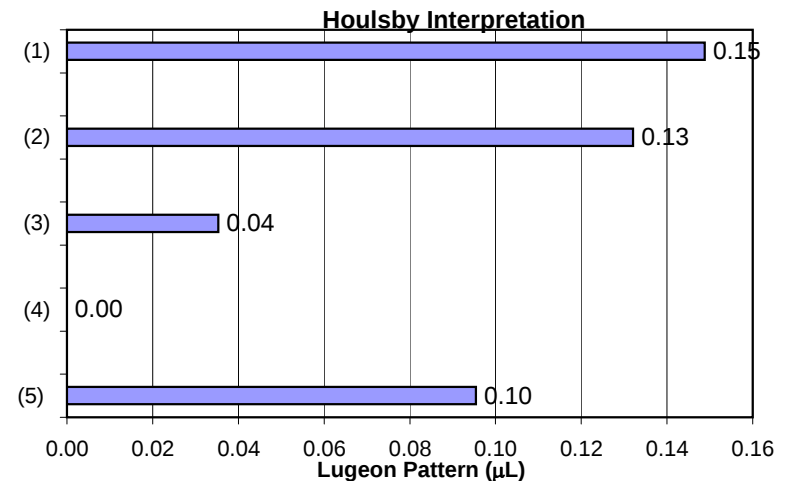
Client: Dial a Dump	Location:	Reduced By: MRB	Borehole no: BH12d
Project: Lighthouse Landfill Site	Test Date: 02-Jun-09	Checked By:	
Test Details: Packer Type: Single	Borehole Diameter: 93 mm	Depth from:	74.00 m
Type of Pump: Rotary	Borehole Inclination: -90	Depth to:	80.00 m
Pressure Gauge & Serial No: PG2	Borehole Azimuth:	Test Depth Interval:	6.00 m
Pressure gauge height: 0.4 m	Depth to g'water: 54 m	Static Pressure: 533.7 kPa	Test Midpoint (m): 77.00 m

Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	200	792.05	795.5	3.45	0.69	0.0	733.7	0.12
5	200	795.5	798.6	3.1	0.62	0.0	733.7	0.10
5	400	816.7	820.8	4.1	0.82	0.0	933.7	0.14
5	400	820.8	824.1	3.3	0.66	0.0	933.7	0.11
5	600	843.4	844.6	1.2	0.24	0.0	1133.7	0.04
5	600	843.4	844.6	1.2	0.24	0.0	1133.7	0.04
5	400	838.1	838.1	0	0.00	0.0	933.7	0.00
5	400	838.1	838.1	0	0.00	0.0	933.7	0.00
5	200	835	837	2	0.40	0.0	733.7	0.07
5	200	837	839.2	2.2	0.44	0.0	733.7	0.07



Interpreted Burgess Permeability : **<0.5 μL**

Based on Burgess, 1983



Interpreted Houlsby Permeability : **<0.5 μL**

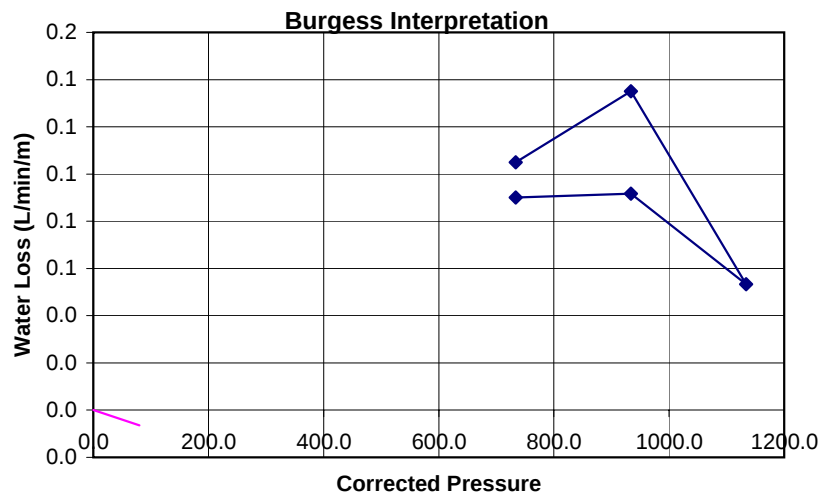
Based on Houlsby, 1976

BOREHOLE WATER PRESSURE TEST

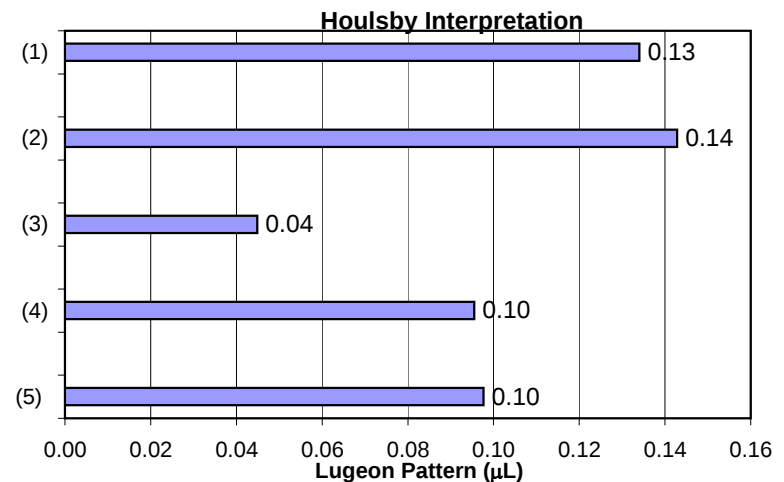
Job No:
Office:

Client: Dial a Dump	Location:	Reduced By: MRB	Borehole no: BH12d
Project: Lighthouse Landfill Site	Test Date: 02-Jun-09	Checked By:	
Test Details: Packer Type: Single	Borehole Diameter: 93 mm	Depth from:	84.00 m
Type of Pump: Rotary	Borehole Inclination: -90	Depth to:	90.00 m
Pressure Gauge & Serial No: PG2	Borehole Azimuth:	Test Depth Interval:	6.00 m
Pressure gauge height: 0.4 m	Depth to g'water: 54 m	Static Pressure: 533.7 kPa	Test Midpoint (m): 87.00 m

Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	200	884.25	887.4	3.15	0.63	0.0	733.7	0.10
5	200	887.4	890.15	2.75	0.55	0.0	733.7	0.09
5	400	897.55	901.6	4.05	0.81	0.0	933.7	0.14
5	400	901.6	905.55	3.95	0.79	0.0	933.7	0.13
5	600	910	911.6	1.6	0.32	0.0	1133.7	0.05
5	600	911.6	913.05	1.45	0.29	0.0	1133.7	0.05
5	400	912.9	915.65	2.75	0.55	0.0	933.7	0.09
5	400	915.65	918.25	2.6	0.52	0.0	933.7	0.09
5	200	916.5	918.1	1.6	0.32	0.0	733.7	0.05
5	200	918.1	920.8	2.7	0.54	0.0	733.7	0.09



Interpreted Burgess Permeability : **<0.5 μL**
Based on Burgess, 1983



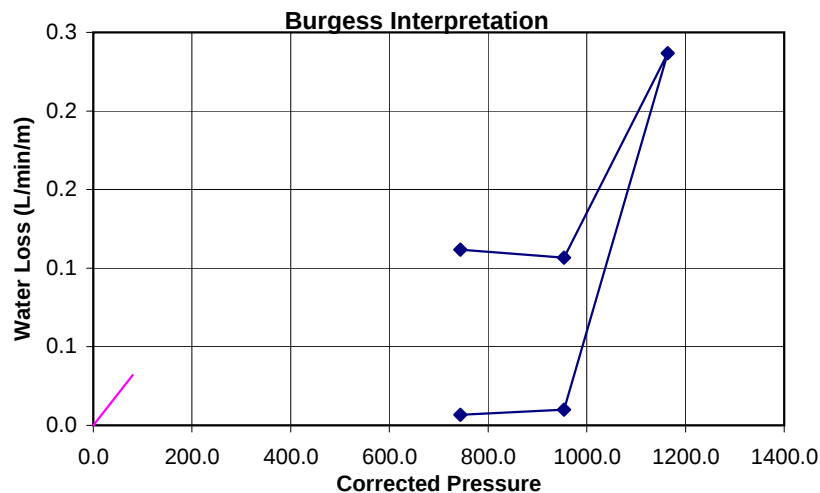
Interpreted Houlsby Permeability : **<0.5 μL**
Based on Houlsby, 1976

BOREHOLE WATER PRESSURE TEST

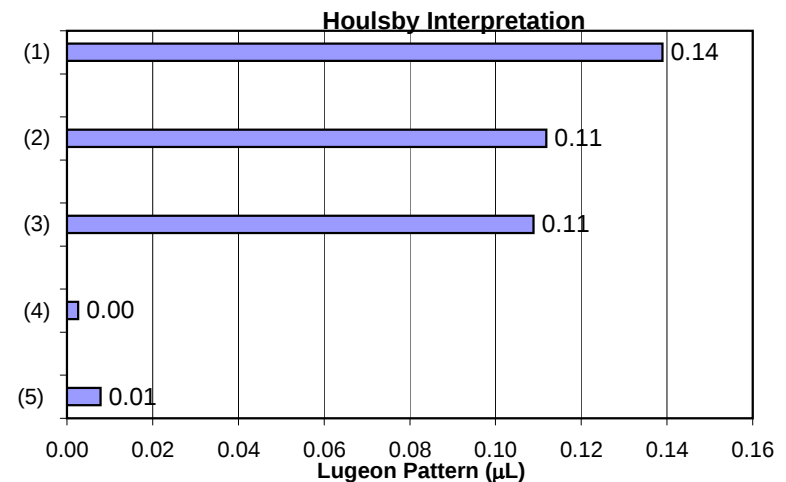
Job No:
Office:

Client: Dial a Dump	Location:	Reduced By: MRB	Borehole no: BH12d
Project: Lighthouse Landfill Site	Test Date: 04-Jun-09	Checked By:	
Test Details: Packer Type: Single	Borehole Diameter: 93 mm	Depth from: 94.00 m	
Type of Pump: Rotary	Borehole Inclination: -90	Depth to: 100.00 m	
Pressure Gauge & Serial No: PG2	Borehole Azimuth:	Test Depth Interval: 6.00 m	
Pressure gauge height: 0.4 m	Depth to g'water: 54 m	Static Pressure: 533.7 kPa	Test Midpoint (m): 97.00 m

Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	210	3978.2	3981.55	3.35	0.67	0.0	743.7	0.11
5	210	3981.55	3984.4	2.85	0.57	0.0	743.7	0.09
5	420	3995.3	3998.5	3.2	0.64	0.0	953.7	0.11
5	420	3998.5	4001.7	3.2	0.64	0.0	953.7	0.11
5	630	4001.7	4008.8	7.1	1.42	0.0	1163.7	0.24
5	630	4008.8	4009.3	0.5	0.10	0.0	1163.7	0.02
5	420	4009.15	4009	-0.15	-0.03	0.0	953.7	-0.01
5	420	4009	4009.3	0.3	0.06	0.0	953.7	0.01
5	210	4007.4	4007.6	0.2	0.04	0.0	743.7	0.01
5	210	4007.6	4007.75	0.15	0.03	0.0	743.7	0.01



Interpreted Burgess Permeability : **<0.5 μL**
Based on Burgess, 1983



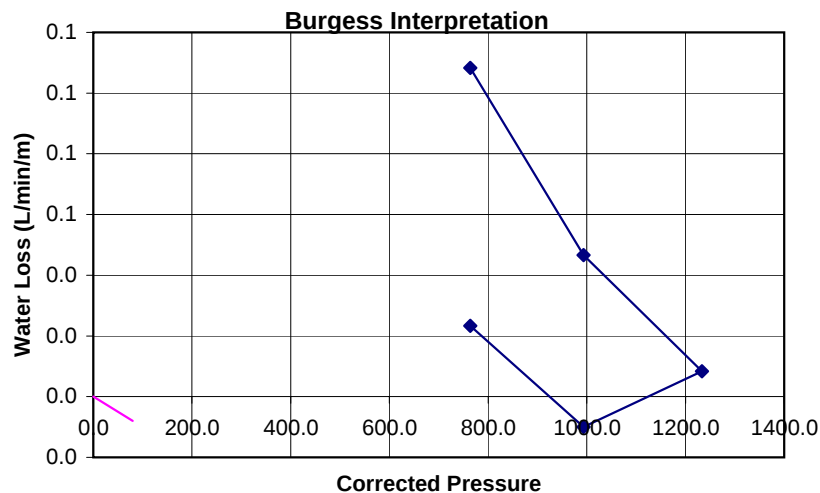
Interpreted Houlsby Permeability : **<0.5 μL**
Based on Houlsby, 1976

BOREHOLE WATER PRESSURE TEST

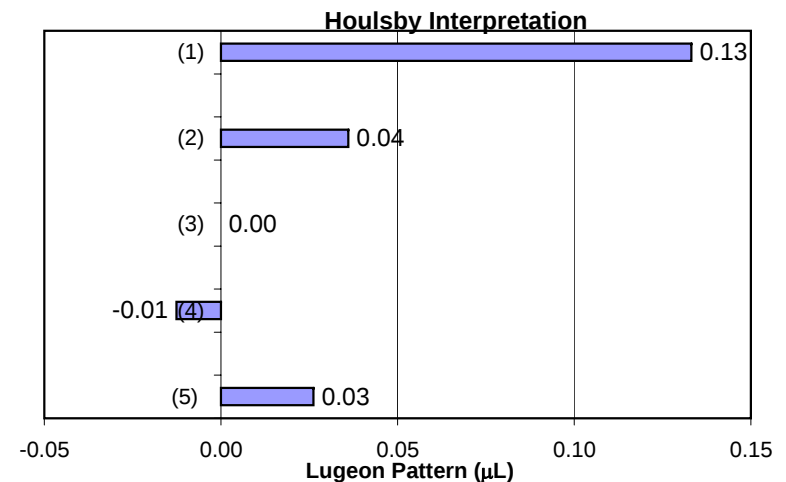
Job No:
Office:

Client: Dial a Dump	Location:	Reduced By: MRB	Borehole no:
Project: Lighthouse Landfill Site	Test Date: 05-Jun-09	Checked By:	BH12d
Test Details:	Packer Type: Single	Borehole Diameter: 93 mm	Depth from: 104.00 m
	Type of Pump: Rotary	Borehole Inclination: -90	Depth to: 110.00 m
	Pressure Gauge & Serial No: PG2	Borehole Azimuth:	Test Depth Interval: 6.00 m
Pressure gauge height: 0.4 m	Depth to g'water: 54 m	Static Pressure: 533.7 kPa	Test Midpoint (m): 107.00 m

Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	230	165.9	169.15	3.25	0.65	0.0	763.7	0.11
5	230	169.15	172	2.85	0.57	0.0	763.7	0.09
5	460	179.1	180.5	1.4	0.28	0.0	993.7	0.05
5	460	180.5	181.25	0.75	0.15	0.0	993.7	0.03
5	700	185.8	186.05	0.25	0.05	0.0	1233.7	0.01
5	700	186.05	185.8	-0.25	-0.05	0.0	1233.7	-0.01
5	460	185.45	185.15	-0.3	-0.06	0.0	993.7	-0.01
5	460	185.15	184.7	-0.45	-0.09	0.0	993.7	-0.02
5	230	184.3	184.8	0.5	0.10	0.0	763.7	0.02
5	230	184.8	185.5	0.7	0.14	0.0	763.7	0.02



Interpreted Burgess Permeability : **<0.5 μL**
Based on Burgess, 1983



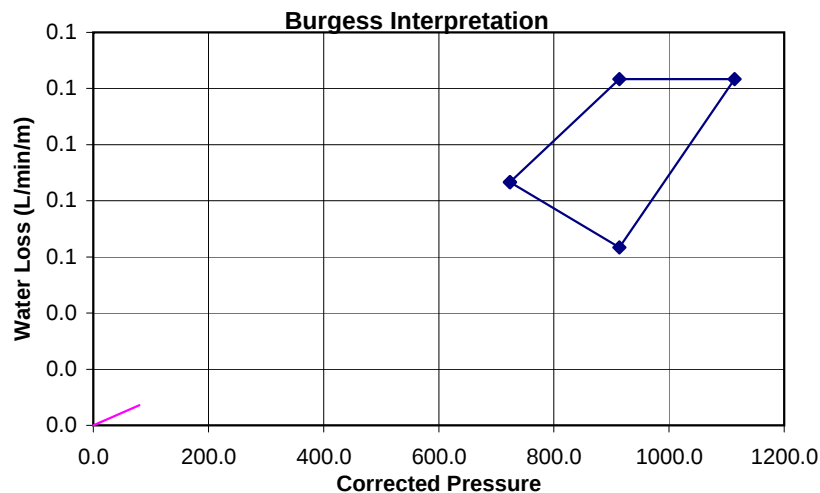
Interpreted Houlsby Permeability : **<0.5 μL**
Based on Houlsby, 1976

BOREHOLE WATER PRESSURE TEST

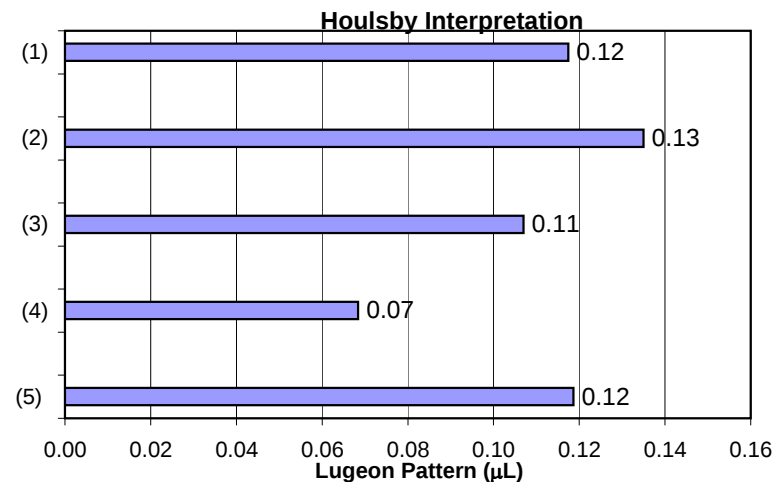
Job No:
Office:

Client: Dial a Dump	Location:	Reduced By: MRB	Borehole no: BH12d
Project: Lighthouse Landfill Site	Test Date: 09-Jun-09	Checked By:	
Test Details:	Packer Type: Single	Borehole Diameter: 93 mm	Depth from: 114.00 m
	Type of Pump: Rotary	Borehole Inclination: -90	Depth to: 120.00 m
	Pressure Gauge & Serial No: PG2	Borehole Azimuth:	Test Depth Interval: 6.00 m
Pressure gauge height: 0.4 m	Depth to g'water: 54 m	Static Pressure: 533.7 kPa	Test Midpoint (m): 117.00 m

Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	190	403.2	405.7	2.5	0.50	0.0	723.7	0.08
5	190	405.7	408.3	2.6	0.52	0.0	723.7	0.09
5	380	413.6	417.3	3.7	0.74	0.0	913.7	0.12
5	380	417.3	421	3.7	0.74	0.0	913.7	0.12
5	580	428.75	432.45	3.7	0.74	0.0	1113.7	0.12
5	580	432.45	435.9	3.45	0.69	0.0	1113.7	0.12
5	380	435.8	437.7	1.9	0.38	0.0	913.7	0.06
5	380	437.7	439.55	1.85	0.37	0.0	913.7	0.06
5	190	437.6	440.2	2.6	0.52	0.0	723.7	0.09
5	190	442.65	445.2	2.55	0.51	0.0	723.7	0.09



Interpreted Burgess Permeability : **<0.5 μL**
Based on Burgess, 1983



Interpreted Houlsby Permeability : **<0.5 μL**
Based on Houlsby, 1976

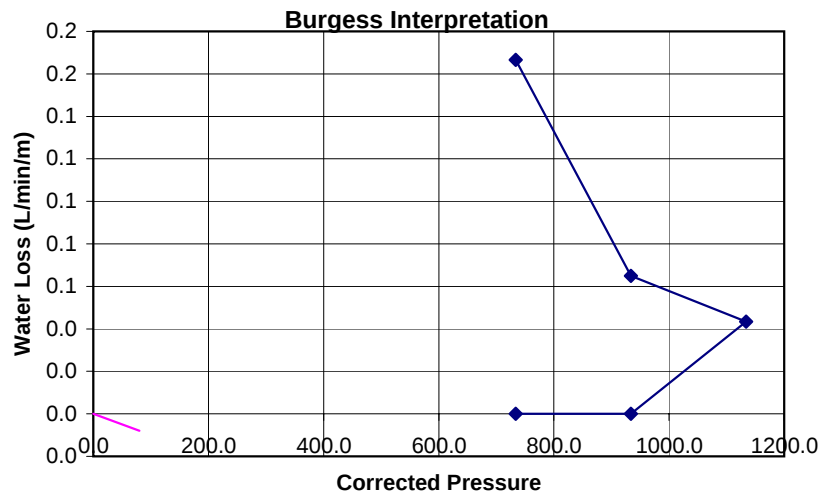
BOREHOLE WATER PRESSURE TEST

Job No:

Office:

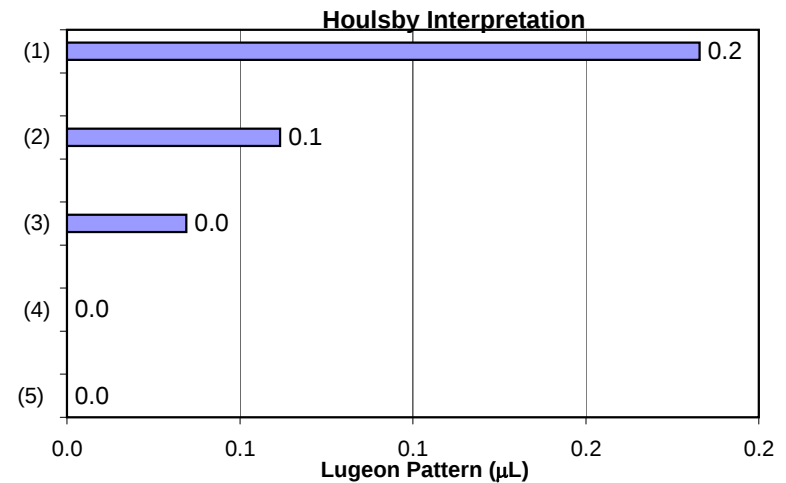
Client: Dial a Dump		Location:		Reduced By: MRB	Borehole no: BH12d
Project: Lighthouse Landfill Site		Test Date: 10-Jun-09		Checked By:	
Test Details: Packer Type: Single		Borehole Diameter: 93 mm		Depth from:	124.00 m
Type of Pump: Rotary		Borehole Inclination: -90		Depth to:	130.00 m
Pressure Gauge & Serial No:		PG2		Test Depth Interval:	6.00 m
Pressure gauge height: 0.4 m		Depth to g'water: 54 m		Test Midpoint (m):	127.00 m
		Static Pressure: 533.7 kPa			

Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	200	526.1	531.1	5	1.00	0.0	733.7	0.17
5	200	531.1	534.15	3.05	0.61	0.0	733.7	0.10
5	400	545.2	547.15	1.95	0.39	0.0	933.7	0.06
5	400	547.15	548.65	1.5	0.30	0.0	933.7	0.05
5	600	551.6	552.9	1.3	0.26	0.0	1133.7	0.04
5	600	552.9	553.95	1.05	0.21	0.0	1133.7	0.04
5	400	552.55	552.55	0	0.00	0.0	933.7	0.00
5	400	552.55	552.55	0	0.00	0.0	933.7	0.00
5	200	552.2	552.2	0	0.00	0.0	733.7	0.00
5	200	552.2	552.2	0	0.00	0.0	733.7	0.00



Interpreted Burgess Permeability : **<0.5 μL**

Based on Burgess, 1983



Interpreted Houlsby Permeability : **<0.5 μL**

Based on Houlsby, 1976

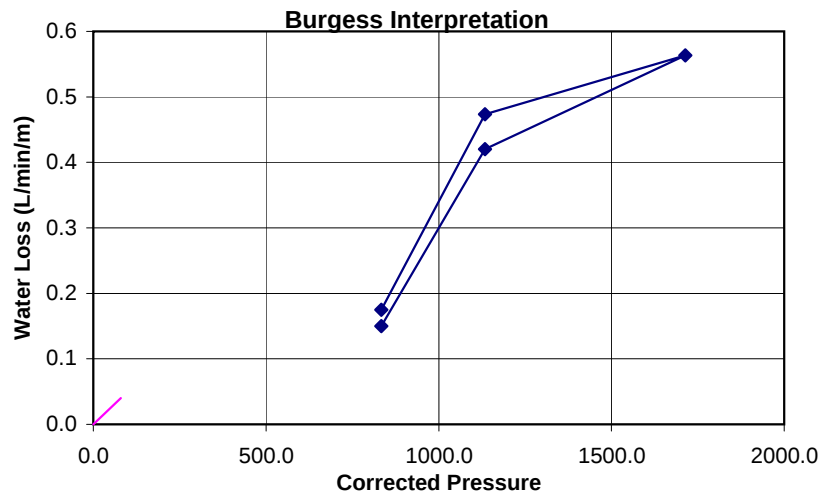
BOREHOLE WATER PRESSURE TEST

Job No:

Office:

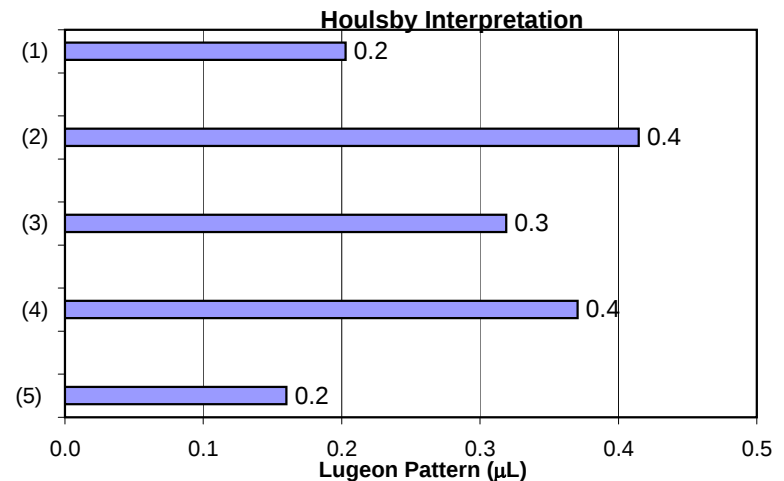
Client: Dial a Dump		Location:		Reduced By: MRB	Borehole no: BH12d
Project: Lighthouse Landfill Site		Test Date: 10-Jun-09		Checked By:	
Test Details: Packer Type: Single		Borehole Diameter: 93 mm		Depth from:	134.00 m
Type of Pump: Rotary		Borehole Inclination: -90		Depth to:	140.00 m
Pressure Gauge & Serial No:		Borehole Azimuth:		Test Depth Interval:	6.00 m
Pressure gauge height: 0.4 m	Depth to g'water: 54 m	Static Pressure: 533.7 kPa		Test Midpoint (m):	137.00 m

Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	300	574.85	580.1	5.25	1.05	0.0	833.7	0.18
5	300	580.1	585	4.9	0.98	0.0	833.7	0.16
5	600	601.2	615.2	14	2.80	0.0	1133.7	0.47
5	600	615.2	629.4	14.2	2.84	0.0	1133.7	0.47
5	1180	650.6	667.5	16.9	3.38	0.0	1713.7	0.56
5	1180	667.5	683.4	15.9	3.18	0.0	1713.7	0.53
5	600	701.4	714	12.6	2.52	0.0	1133.7	0.42
5	600	701.4	714	12.6	2.52	0.0	1133.7	0.42
5	300	722.7	727.2	4.5	0.90	0.0	833.7	0.15
5	300	727.2	730.7	3.5	0.70	0.0	833.7	0.12



Interpreted Burgess Permeability : **0.5 μ L**

Based on Burgess, 1983



Interpreted Houlsby Permeability : **<0.5 μ L**

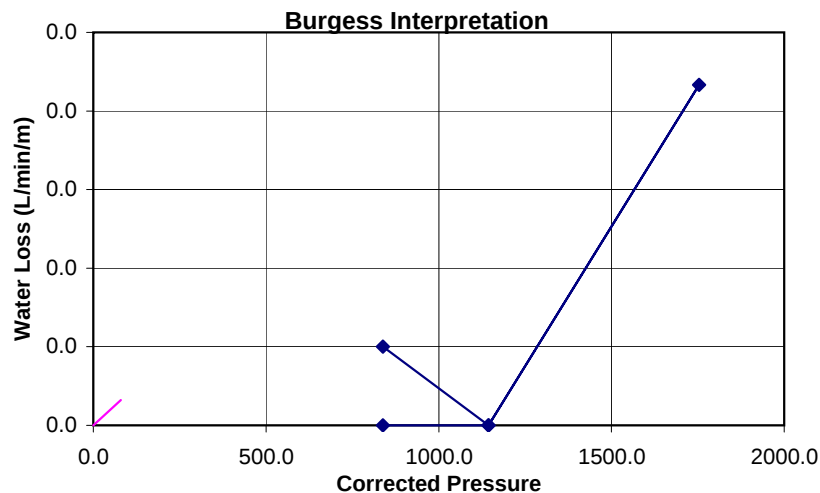
Based on Houlsby, 1976

BOREHOLE WATER PRESSURE TEST

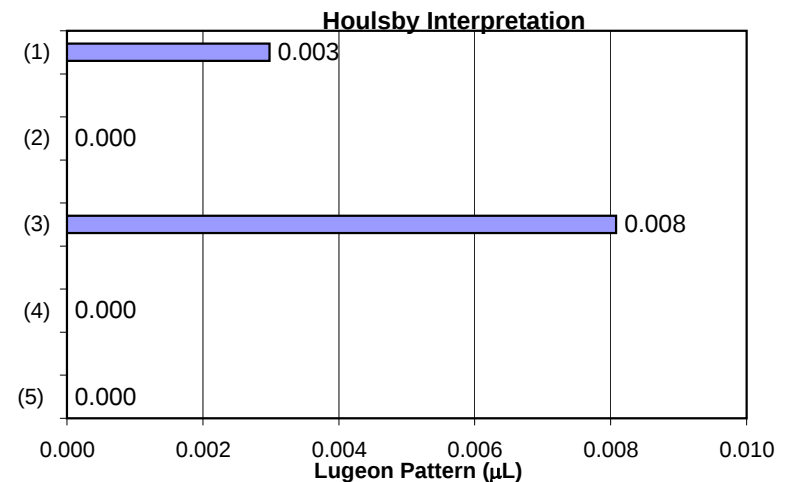
Job No:
Office:

Client: Dial a Dump	Location:	Reduced By: MRB	Borehole no: BH12d
Project: Lighthouse Landfill Site	Test Date: 12-Jun-09	Checked By:	
Test Details: Packer Type: Single	Borehole Diameter: 93 mm	Depth from: 144.00 m	
Type of Pump: Rotary	Borehole Inclination: -90	Depth to: 150.00 m	
Pressure Gauge & Serial No: PG2	Borehole Azimuth:	Test Depth Interval: 6.00 m	
Pressure gauge height: 0.4 m	Depth to g'water: 54 m	Static Pressure: 533.7 kPa	Test Midpoint (m): 147.00 m

Time Interval (minutes)	Gauge Pressure (kPa)	Water Loss (litres - from flow meter)			Flow Rate (Litres/minute)	Head Loss (kPa)	Corrected Pressure (kPa)	Water Loss Rate (L/min/m)
		Start (L)	Finish (L)	Total (L)				
5	305	765.6	765.75	0.15	0.03	0.0	838.7	0.00
5	305	765.75	765.75	0	0.00	0.0	838.7	0.00
5	610	768.8	768.8	0	0.00	0.0	1143.7	0.00
5	610	768.8	768.8	0	0.00	0.0	1143.7	0.00
5	1220	774.55	774.75	0.2	0.04	0.0	1753.7	0.01
5	1220	774.75	775.4	0.65	0.13	0.0	1753.7	0.02
5	610	775.15	775.15	0	0.00	0.0	1143.7	0.00
5	610	775.15	775.15	0	0.00	0.0	1143.7	0.00
5	305	766.85	766.85	0	0.00	0.0	838.7	0.00
5	305	766.85	766.85	0	0.00	0.0	838.7	0.00



Interpreted Burgess Permeability : **<0.5 μL**
Based on Burgess, 1983



Interpreted Houlsby Permeability : **<0.5 μL**
Based on Houlsby, 1976

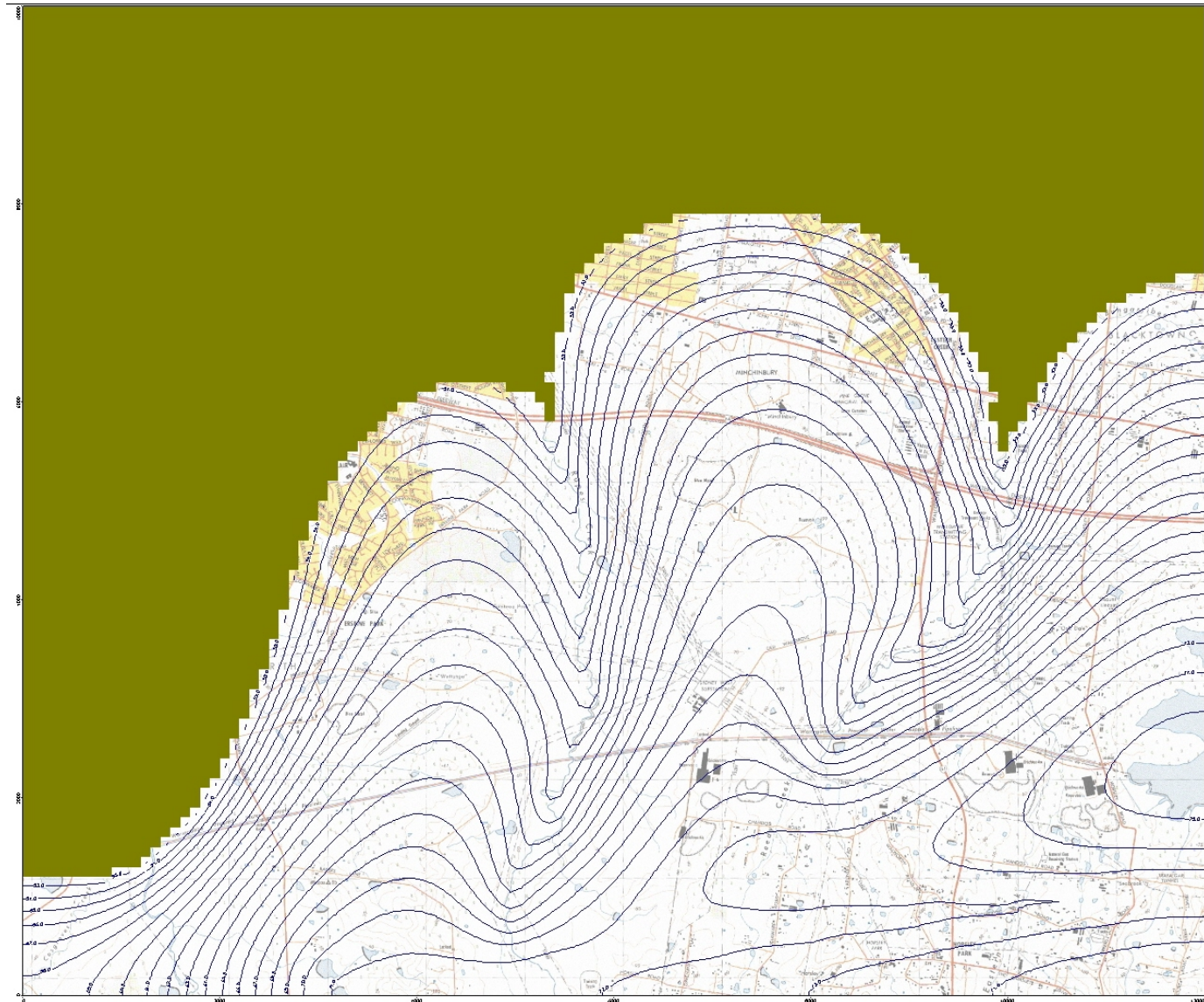
Appendix F

Numerical Model

Outputs

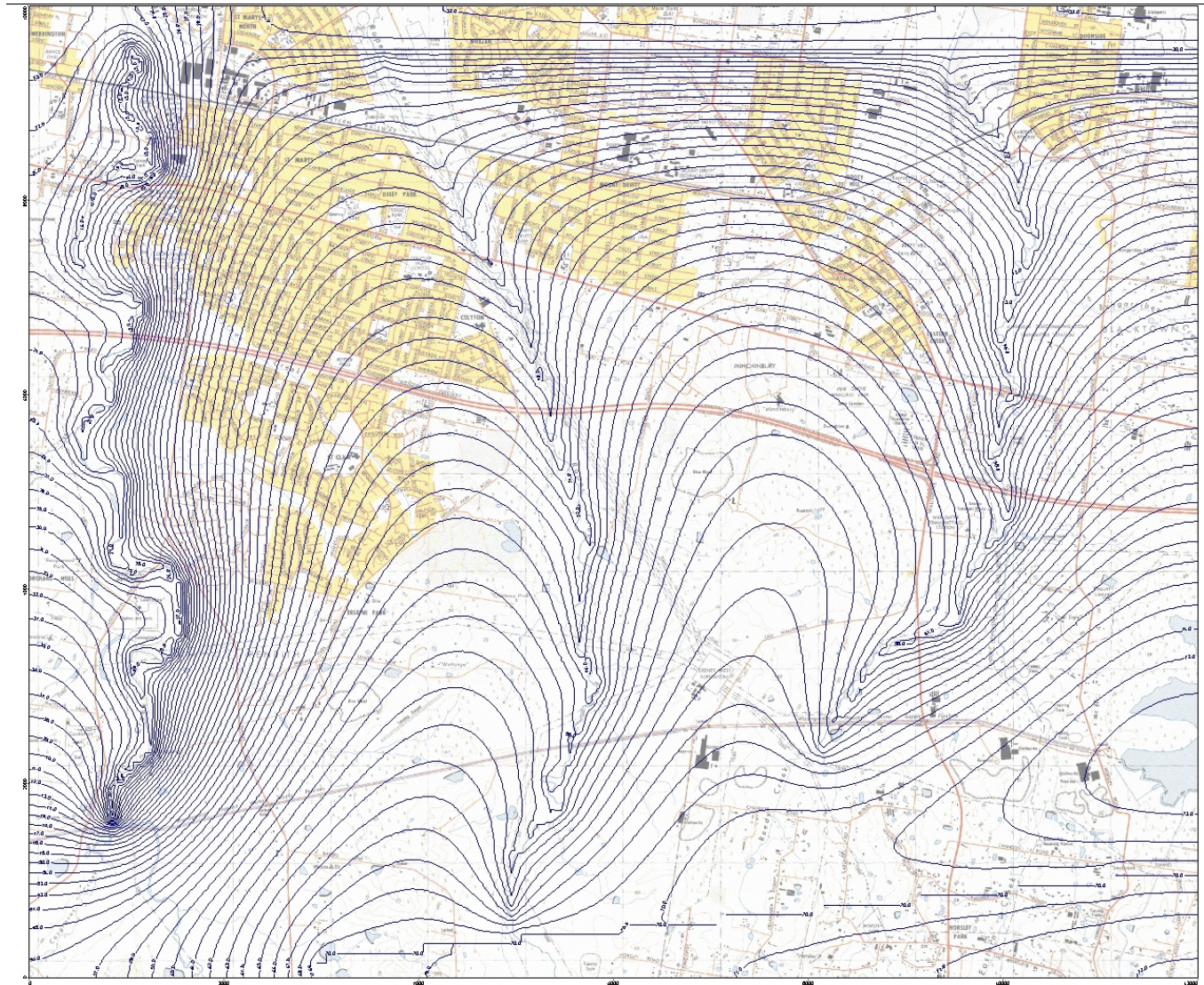


Pre-Quarry Conditions – Layer 1 – 1m Contour Intervals



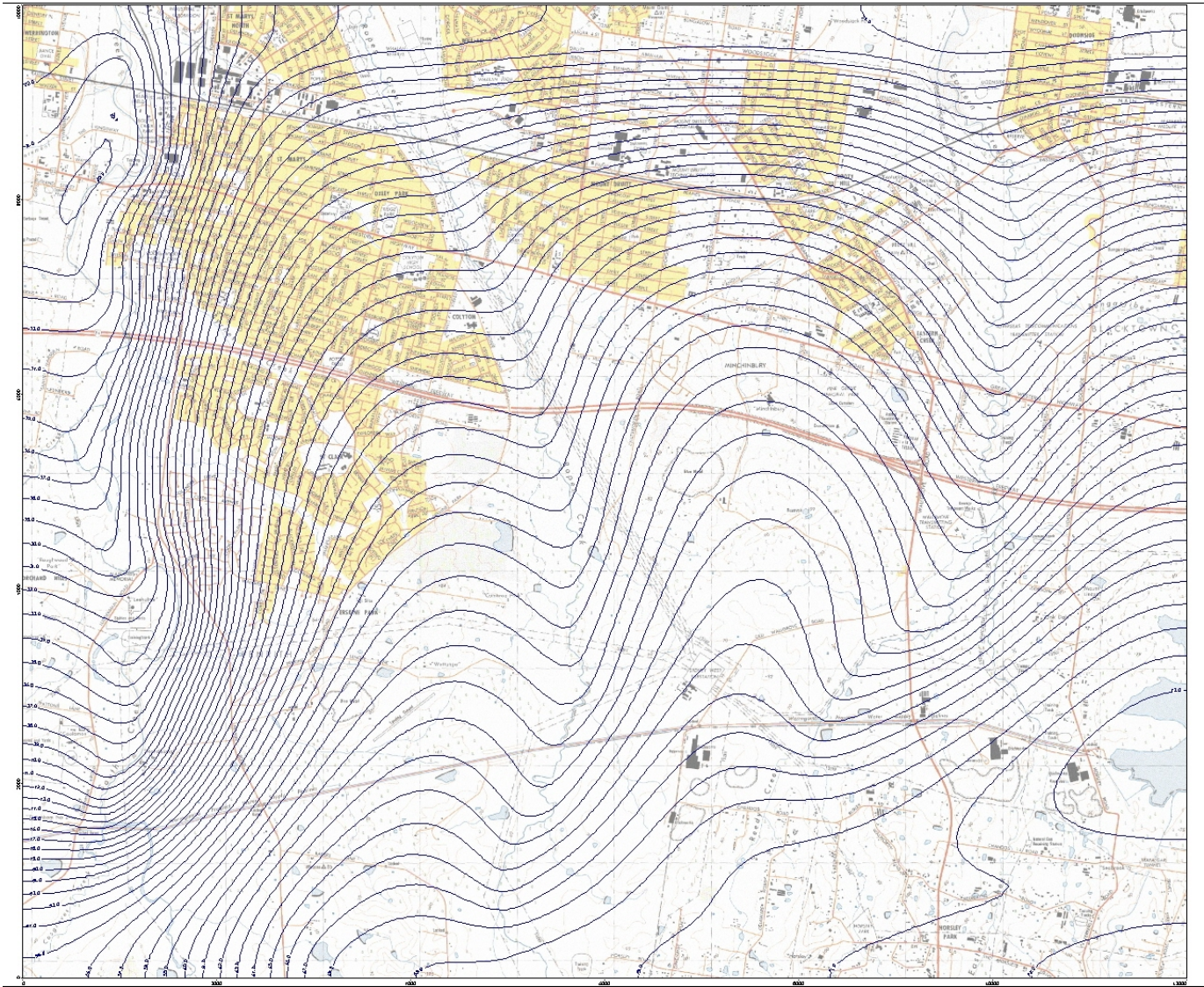


Pre-Quarry Conditions – Layer 5 – 1m Contour Intervals



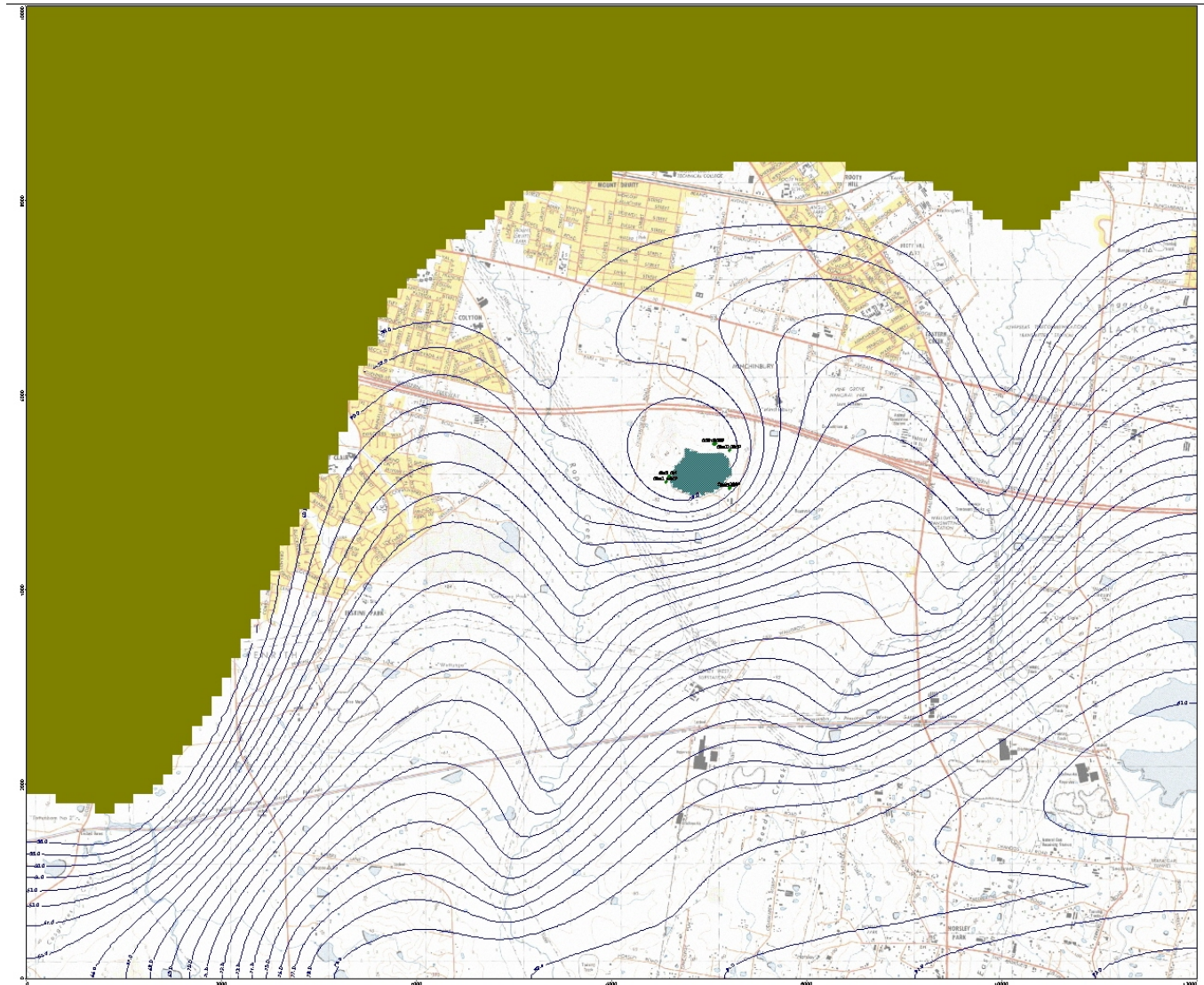


Pre-Quarry Conditions – Layer 10 – 1m Contour Intervals



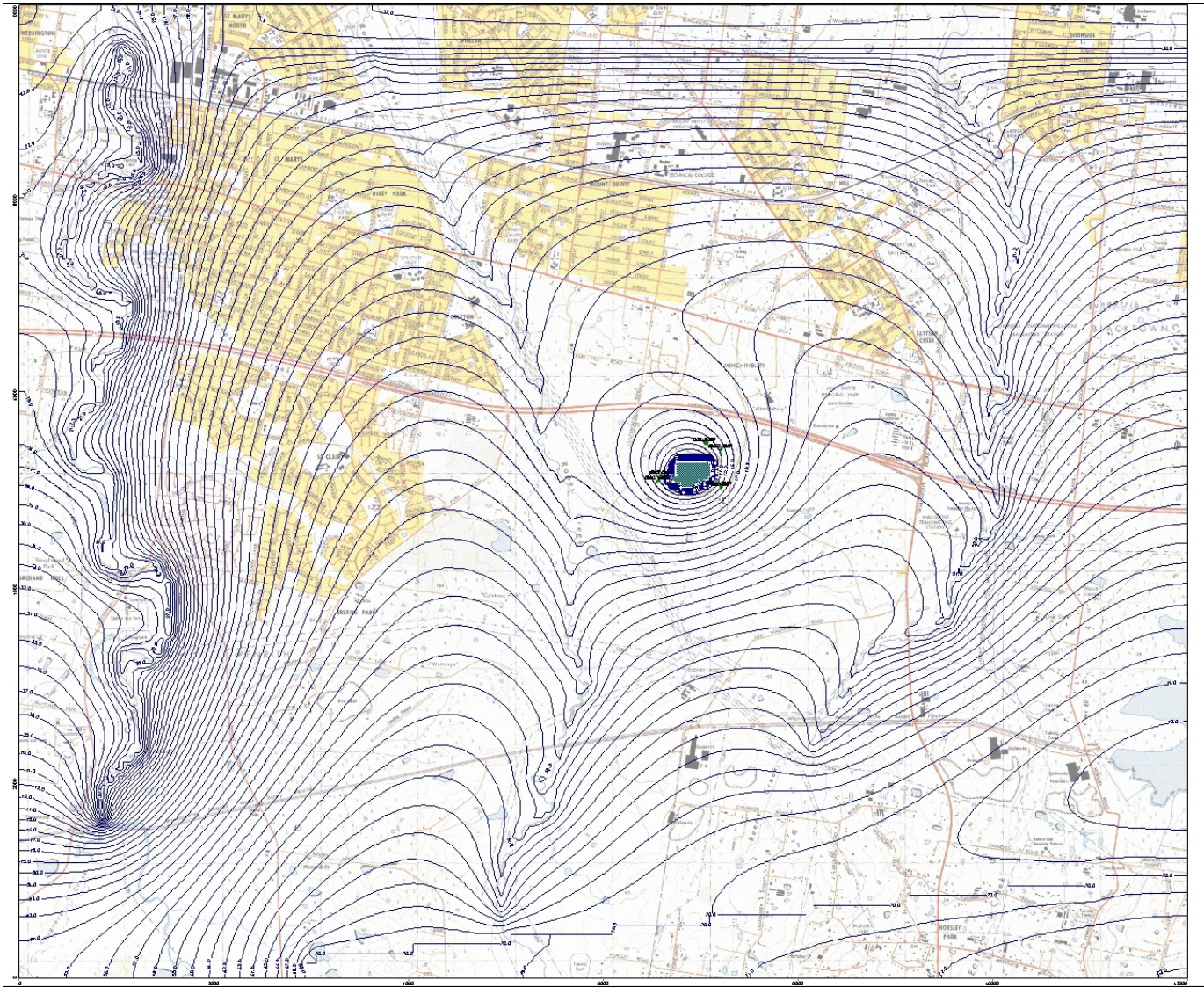


Existing Conditions – Layer 1 – 1m Contour Intervals



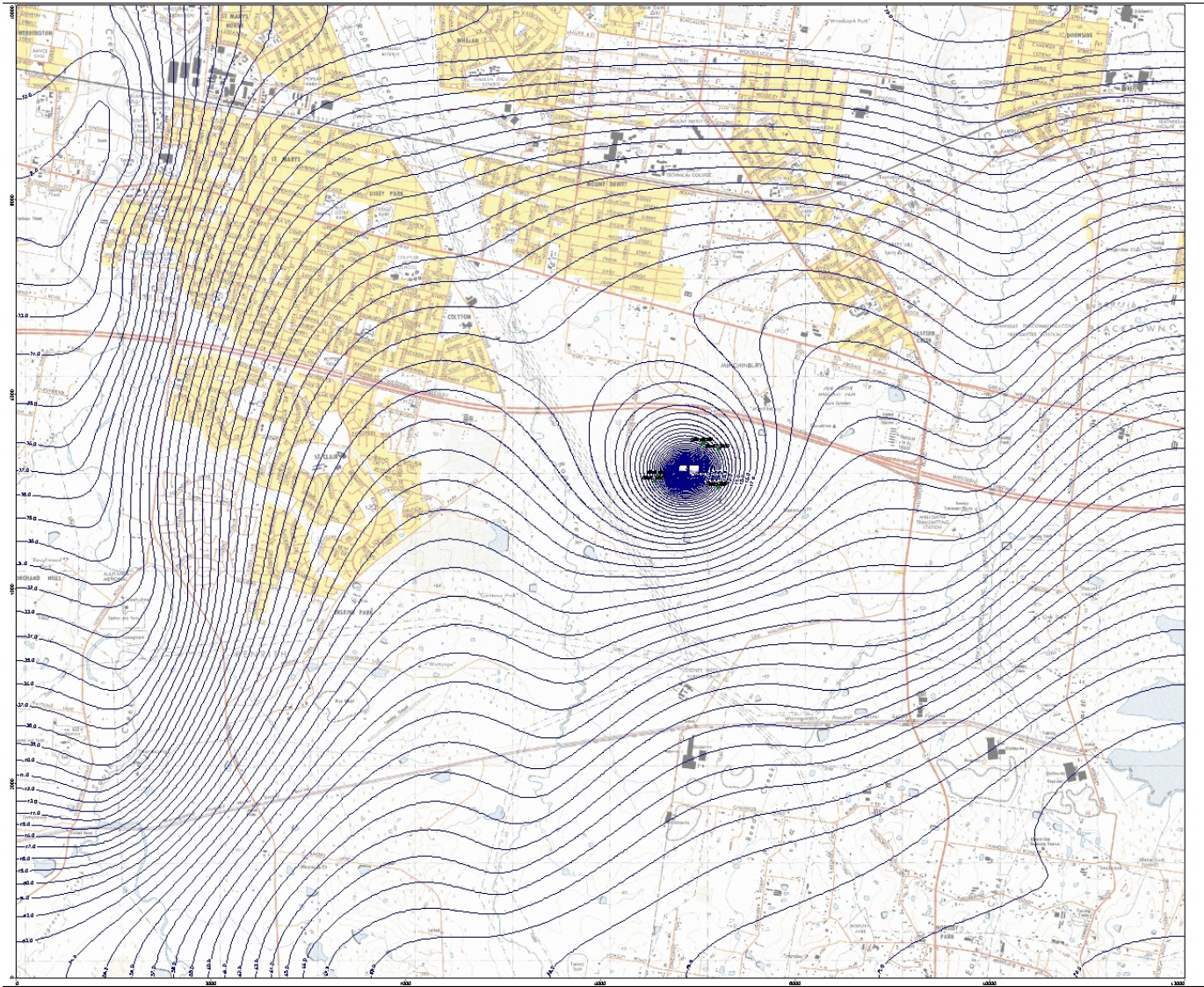


Existing Conditions – Layer 5 – 1m Contour Intervals



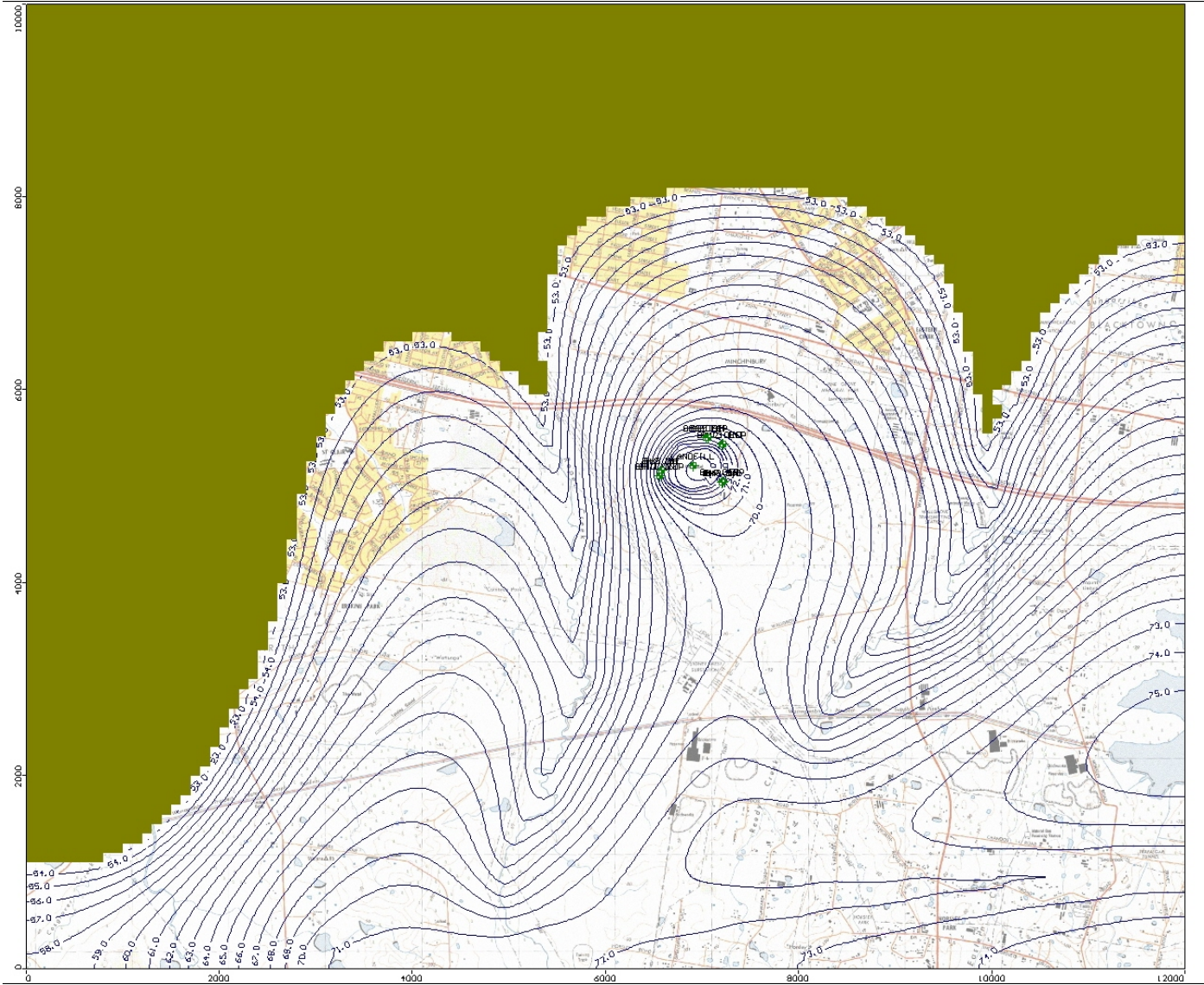


Existing Conditions – Layer 10 – 1m Contour Intervals



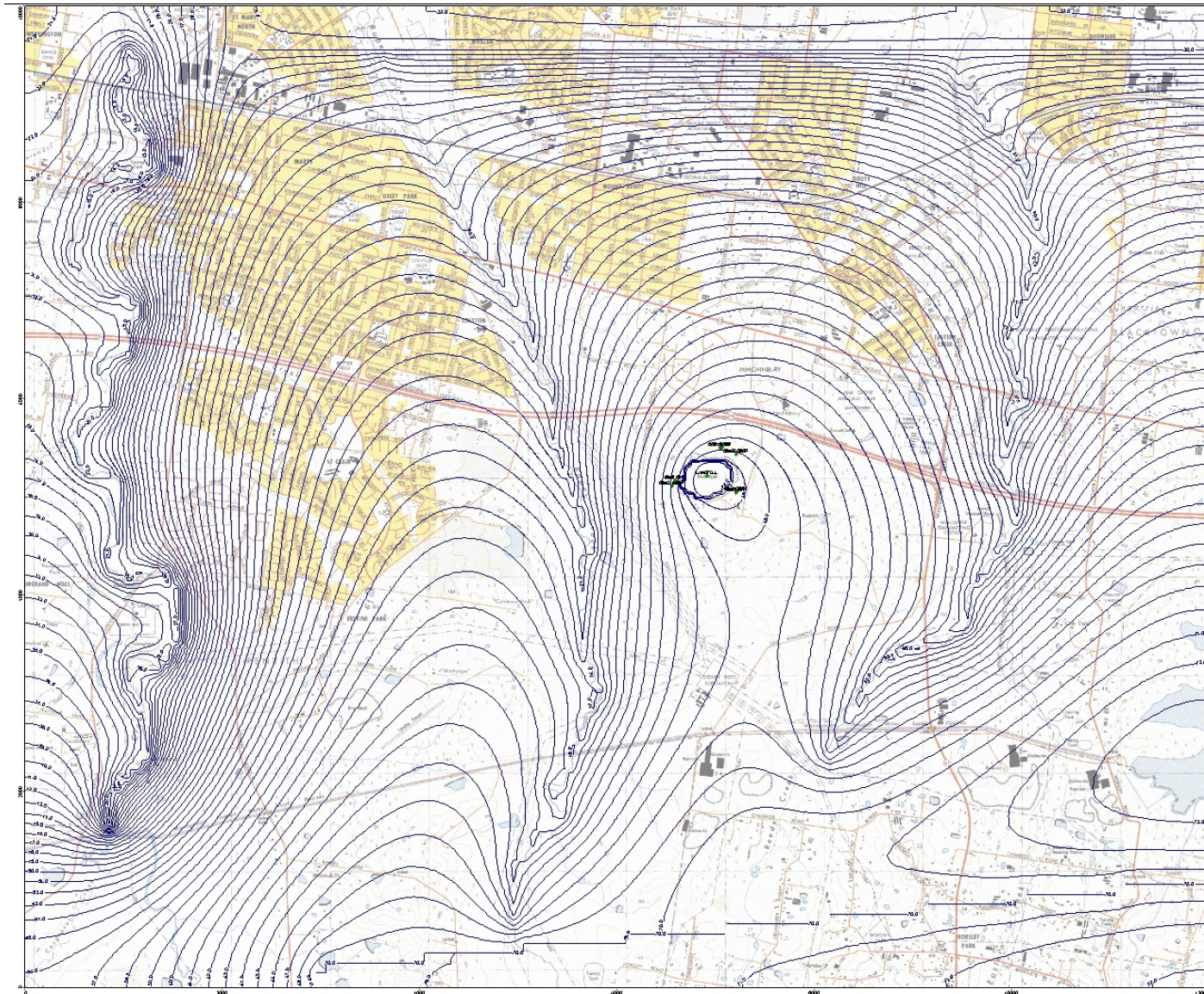


Final Repressurisation – Layer 1 – 1m Contour Intervals





Final Repressurisation – Layer 5 – 1m Contour Intervals





Final Repressurisation – Layer 10 – 1m Contour Intervals

