

# **APPENDIX 'A'**

# **GEOTECHNICAL REPORT**

## APPENDIX 'A' - GEOTECHNICAL REPORT

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The geotechnical report is provided to aid in the Contractor's evaluation of the existing pavement structure and/or soil conditions. The information presented is considered accurate at the locations shown on the Drawings and at the time of drilling. However, variations in pavement structure and/or soil conditions may exist between test holes and fluctuations in groundwater levels can be expected seasonally and may occur as a result of construction activities. The nature and extent of variations may not become evident until construction commences.

### Geotechnical Report for McCreary Road

#### Test Hole Locations



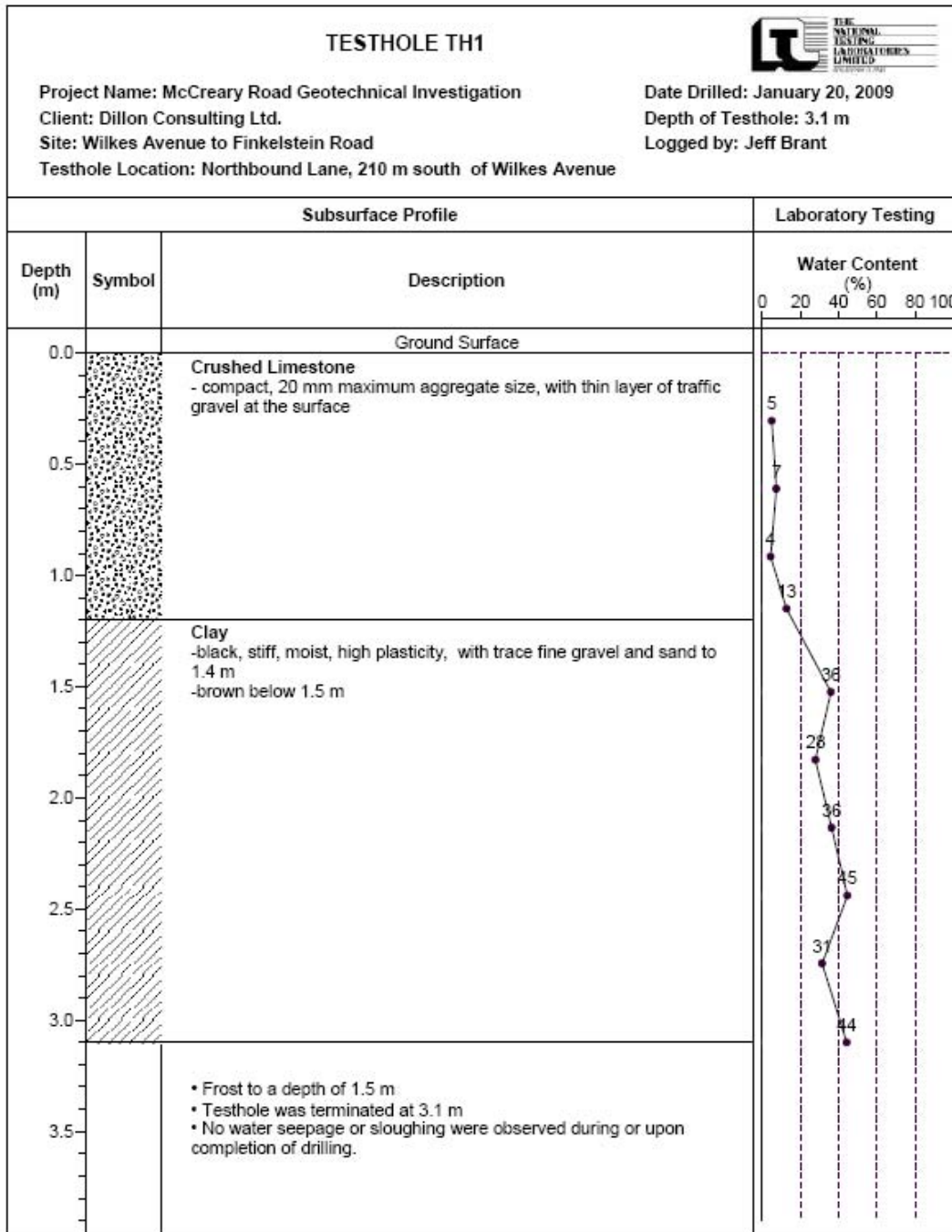
	Project No.: DIL-814	Drawn by: KK	Figure: 1	Testhole Location Plan McCreary Road Geotechnical Investigation Wilkes Avenue to Finkelstein Road
	Date: Feb. 17, 2009	Reviewed by: DF	Scale: NTS	

## Summary of Core Samples

### McCreary Road Geotechnical Investigation Wilkes Avenue to Finkelstein Road

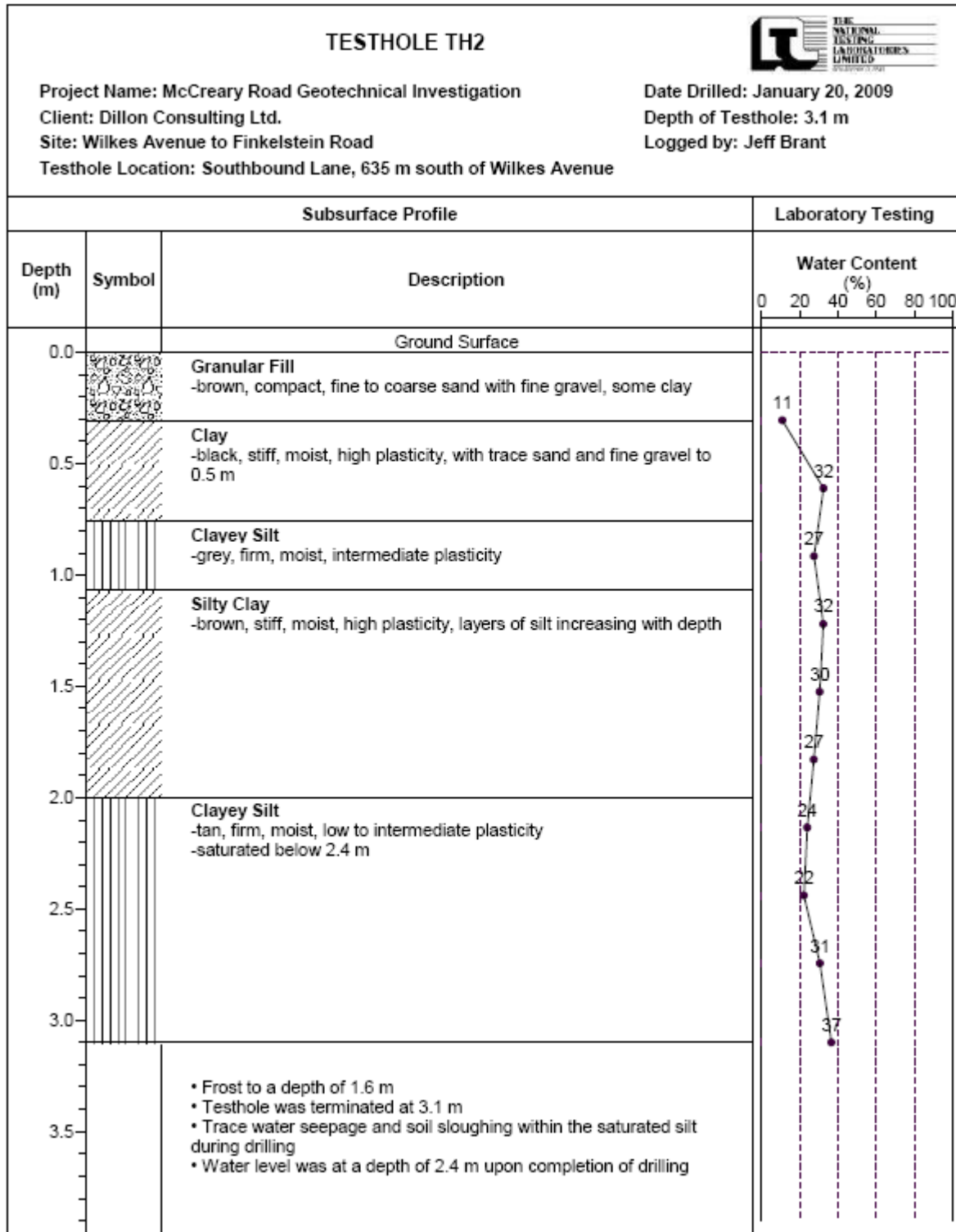
Testhole ID	Testhole Location	Pavement Structure Material		Sample Description	Sample Depth (m)	Moisture Content (%)	Particle Size Analysis				Atterberg Limits		
		Type	Thickness (mm)				Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticity Index
TH1	Northbound lane 210 m south of Wilkes Avenue	Crushed Limestone	1200	-	-	-	-	-	-	-	-	-	-
TH2	Southbound lane 835 m south of Wilkes Avenue	Granular Fill	300	-	-	-	-	-	-	-	-	-	-
TH3	Northbound lane 1060 m south of Wilkes Avenue	Granular Fill	150	-	-	-	-	-	-	-	-	-	-
TH4	Southbound lane 1487 m south of Wilkes Avenue	Granular Fill	350	Clay	0.6	35	0.6	8.2	23.8	67.4	60	17	43
TH5	Northbound lane 1910 m south of Wilkes Avenue	Granular Fill	150	-	-	-	-	-	-	-	-	-	-
TH6	Southbound lane 2342 m south of Wilkes Avenue	Granular Fill	200	-	-	-	-	-	-	-	-	-	-
TH7	Northbound lane 2760 m south of Wilkes Avenue	Granular Fill	500	-	-	-	-	-	-	-	-	-	-
TH8	Southbound lane 3185 m south of Wilkes Avenue	Granular Fill	300	Clayey silt	0.9	22	0.1	11.8	52.8	36.3	33	14	19

**Test Hole Log for Testhole 1 TH1**

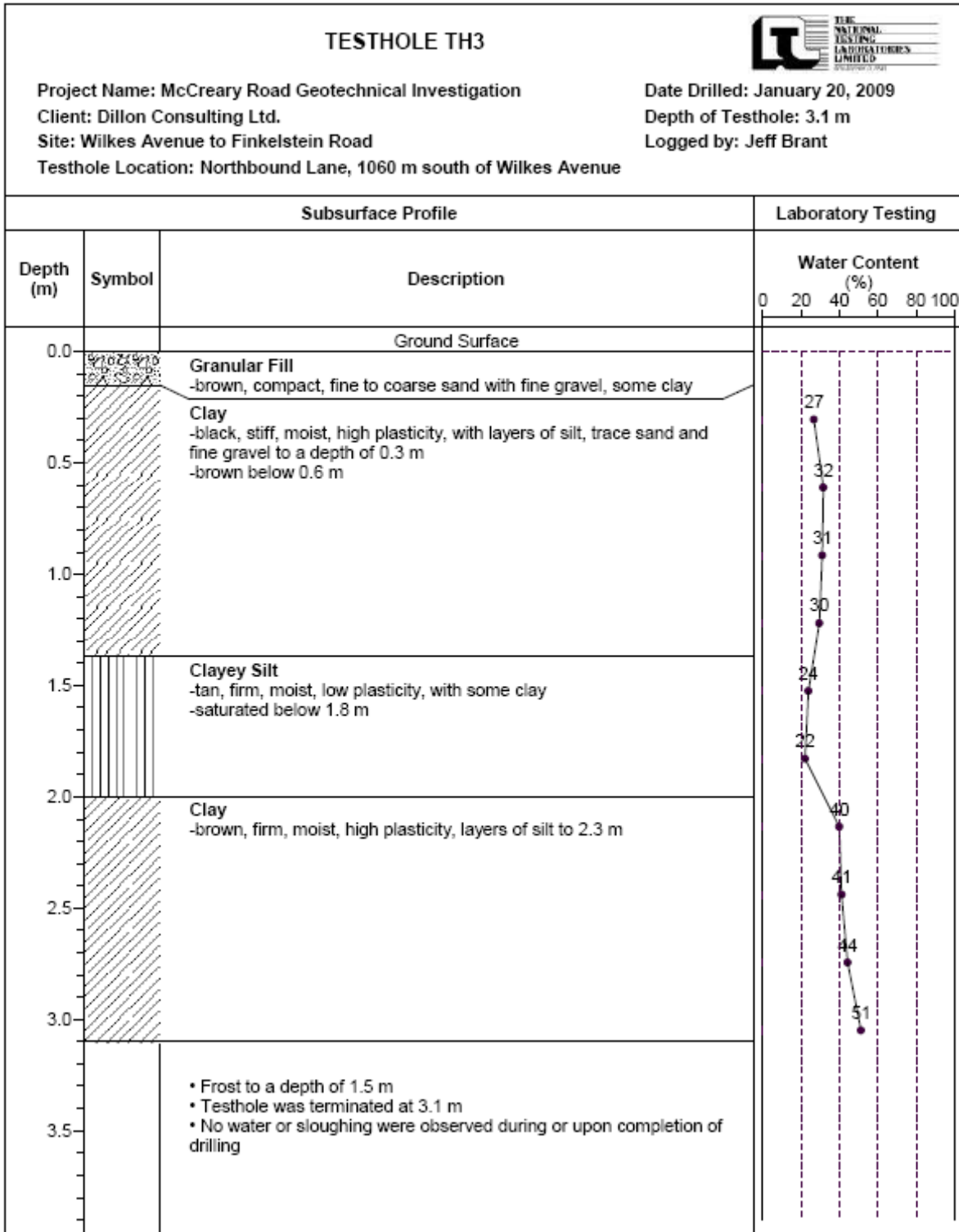


Template Version: C420081212 - RW




**Test Hole Log for Testhole 2 TH2**



**Test Hole Log for Testhole 3 TH3**

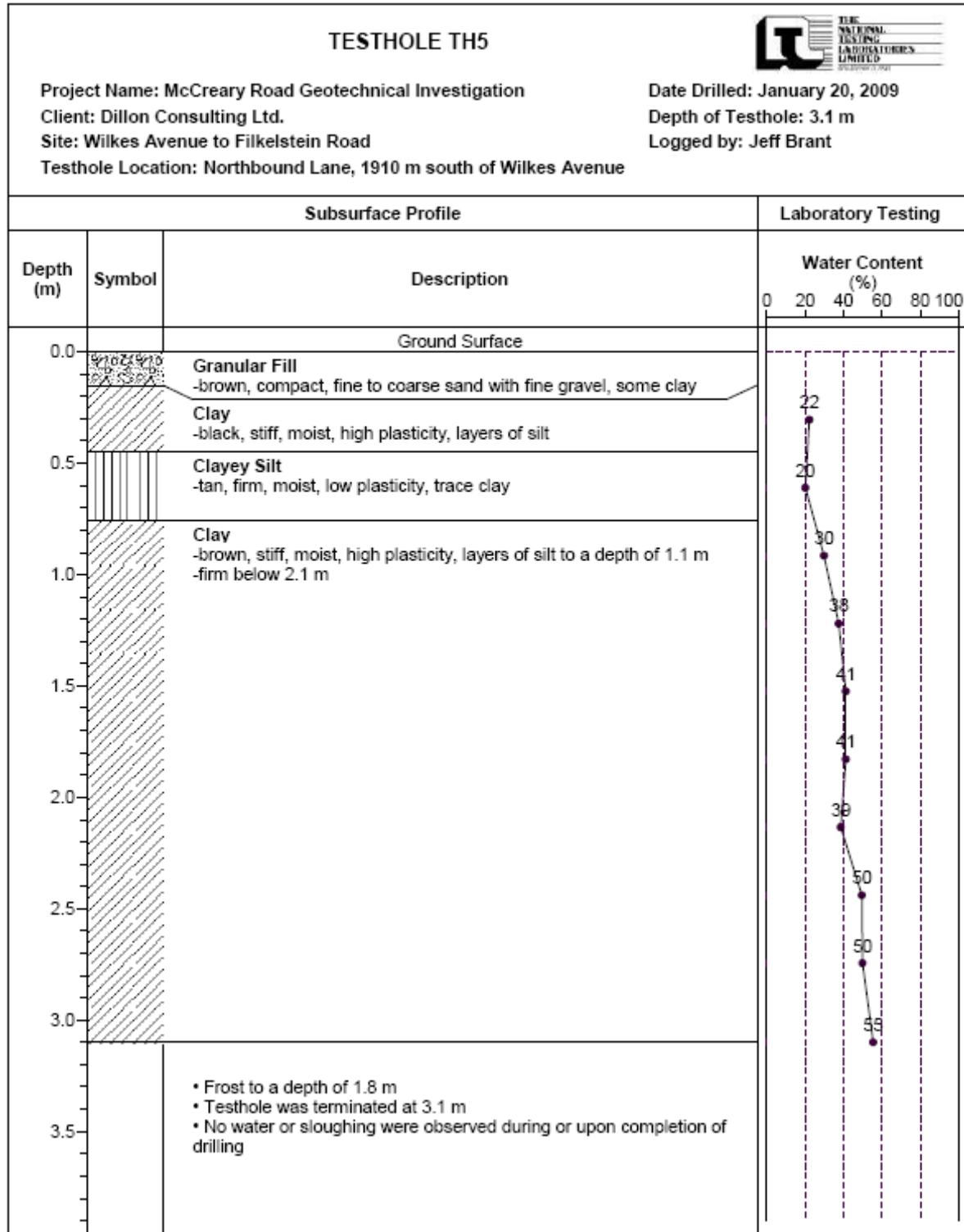


**Test Hole Log for Testhole 4 TH4**

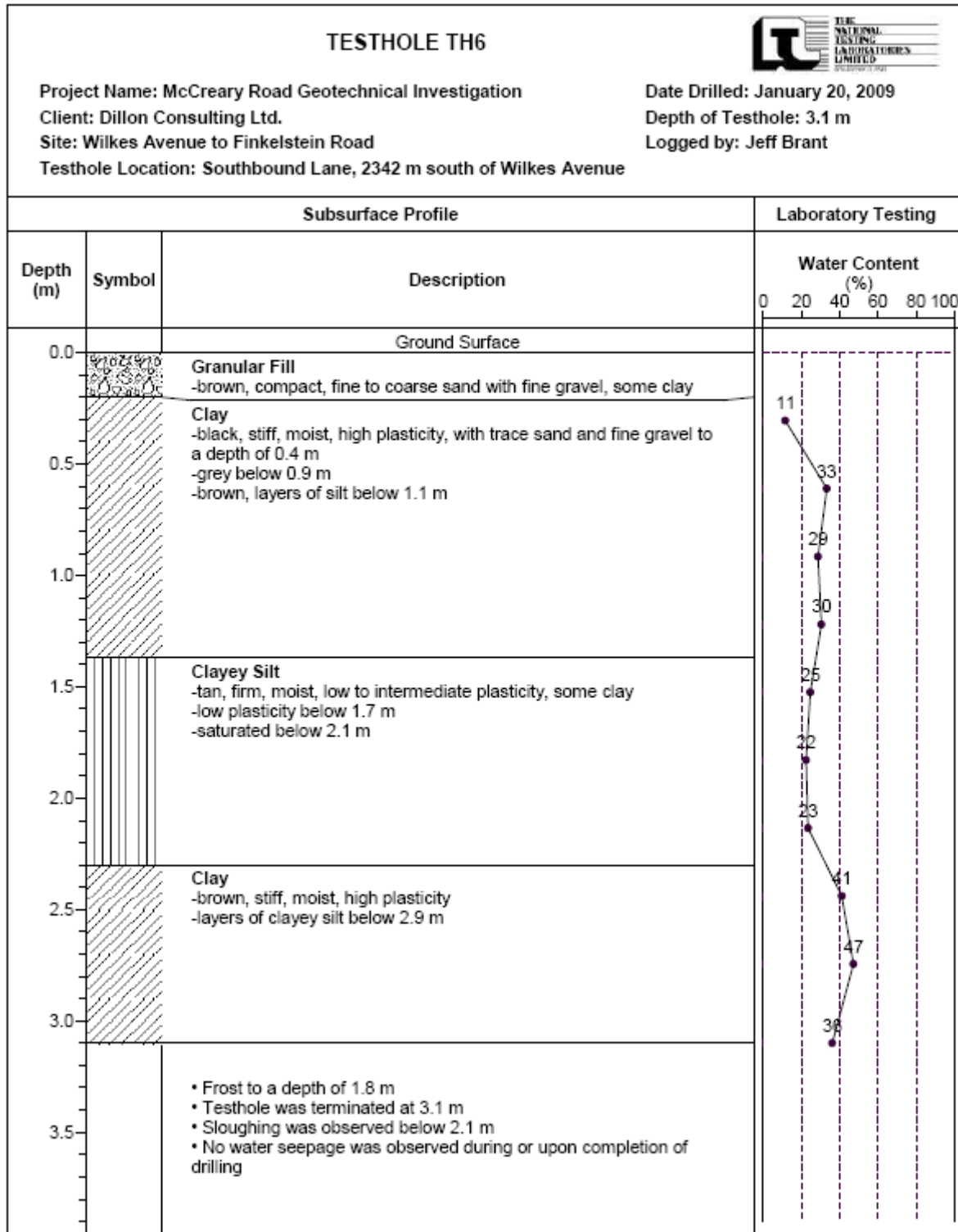
TESTHOLE TH4								
Project Name: McCreary Road Geotechnical Investigation Client: Dillon Consulting Ltd. Site: Wilkes Avenue to Finkelstein Road Testhole Location: Southbound Lane, 1487 m south of Wilkes Avenue			Date Drilled: January 20, 2009 Depth of Testhole: 3.1 m Logged by: Jeff Brant					
Subsurface Profile			Laboratory Testing					
Depth (m)	Symbol	Description	Water Content (%)		Gravel (%)	Sand (%)	Silt (%)	Clay (%)
			PL	LL				
0.0		Ground Surface						
0.0 - 0.4		Granular Fill -brown, compact, fine to coarse sand with fine gravel, some clay						
0.4 - 3.1		Clay -black/grey, stiff, moist, high plasticity, with trace sand and fine gravel to 0.4 m -brown below 1.2 m			0.6	8.2	23.8	67.4
0.0			9					
0.4			35					
0.8			33					
1.2			34					
1.6			36					
2.0			40					
2.4			43					
2.8			48					
3.0			49					
3.1			53					
3.5		<ul style="list-style-type: none"> <li>Frost to a depth of 1.8 m</li> <li>Testhole was terminated at 3.1 m</li> <li>No water or sloughing were observed during or upon completion of drilling.</li> </ul>						



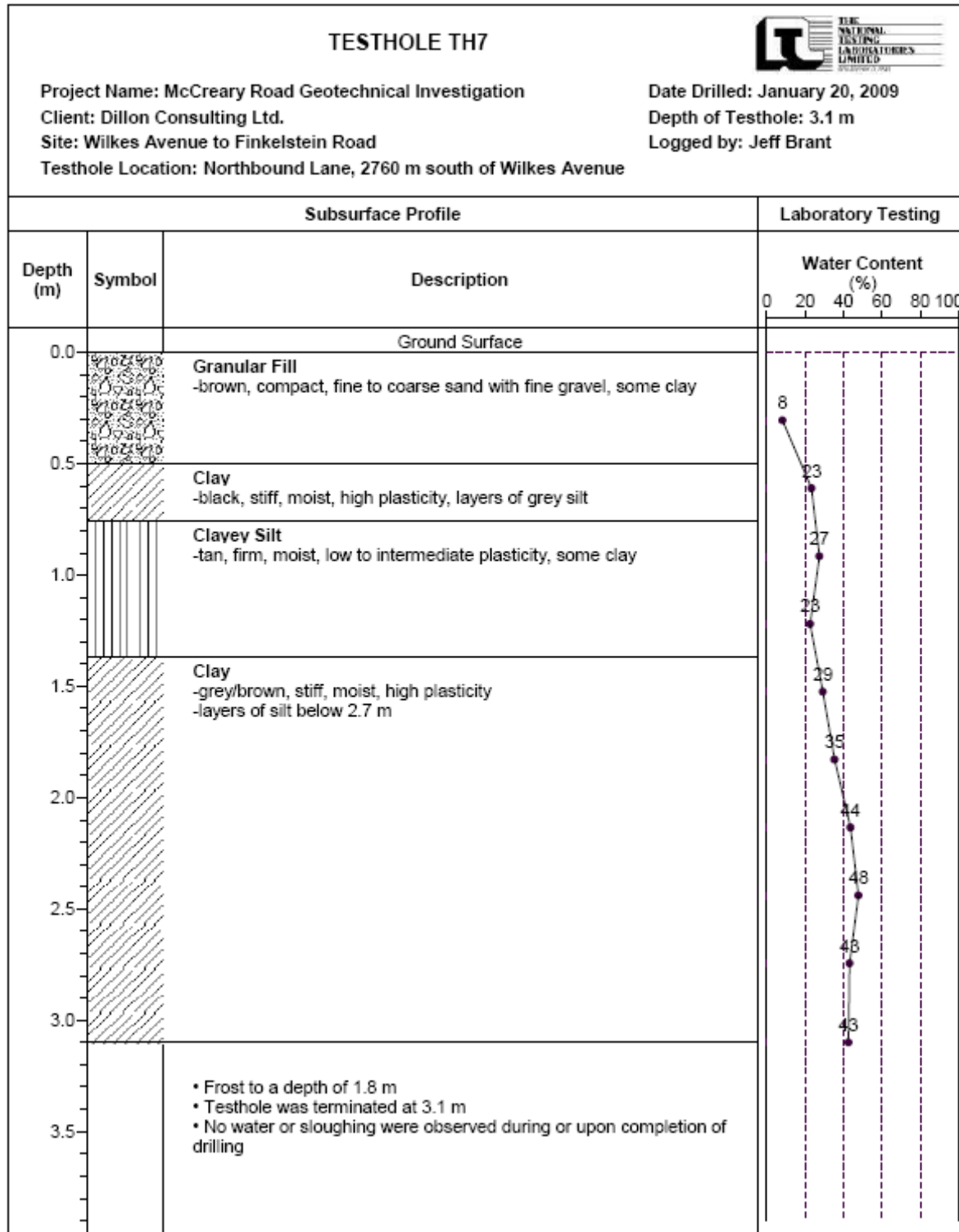
**Test Hole Log for Testhole 5 TH5**







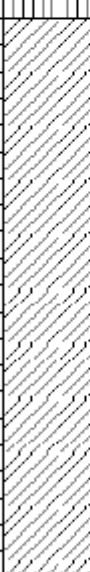
**Test Hole Log for Testhole 6 TH6**



**Test Hole Log for Testhole 7 TH7**



**Test Hole Log for Testhole 8 TH8**

TESTHOLE TH8								
Project Name: McCreary Road Geotechnical Investigation Client: Dillon Consulting Ltd. Site: Wilkes Avenue to Finkelstein Road Testhole Location: Southbound Lane, 3185 m south of Wilkes Avenue			Date Drilled: January 20, 2009 Depth of Testhole: 3.1 m Logged by: Jeff Brant					
Subsurface Profile			Laboratory Testing					
Depth (m)	Symbol	Description	Water Content (%)		Gravel (%)	Sand (%)	Silt (%)	Clay (%)
			PL	LL				
0.0		Ground Surface						
0.0 - 0.4		<b>Granular Fill</b> -brown, compact, fine to coarse sand with fine gravel, some clay	9					
0.4 - 0.6		<b>Clay</b> -black, stiff, moist, high plasticity, with layers of silt	21					
0.6 - 1.0		<b>Clayey Silt</b> -tan, firm, moist, low to intermediate plasticity, some clay	22		0.1	11.8	52.8	35.3
1.0 - 3.1		<b>Clay</b> -brown/grey, stiff, moist, high plasticity, layers of silt between 2.3 and 2.6 m -firm below 2.6 m	84					
			40					
			41					
			44					
			41					
			57					
			52					
3.5		<ul style="list-style-type: none"> <li>• Frost to a depth of 1.8 m</li> <li>• Testhole was terminated at 3.1 m</li> <li>• No water or sloughing were observed during or upon completion of drilling</li> </ul>						