

WILDCAT DYNAMIC CONE LOG

Westrek Geotechnical Services Ltd.
 #34-41050 Tantalus Rd
 Squamish B.C. V8B 0M6

PROJECT NUMBER: 06-043
 DATE STARTED: 10-27-2006
 DATE COMPLETED: 10-27-2006

HOLE #: DC-1
 CREW: KJB, EM
 PROJECT: Mosquito Creek
 ADDRESS: 711 Bewicke
 LOCATION: North Vancouver, BC

SURFACE ELEVATION: _____
 WATER ON COMPLETION: _____
 HAMMER WEIGHT: 35 lbs.
 CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm ²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY	
					NON-COHESIVE	COHESIVE
-	2	8.9	••	2	VERY LOOSE	SOFT
-	17	75.5	••••••••••••••••••••	21	MEDIUM DENSE	VERY STIFF
- 1 ft	24	106.6	••••••••••••••••••••	25+	MEDIUM DENSE	VERY STIFF
-	15	66.6	••••••••••	19	MEDIUM DENSE	VERY STIFF
-	13	57.7	••••••••••	16	MEDIUM DENSE	VERY STIFF
- 2 ft	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
-	8	35.5	••••••••	10	LOOSE	STIFF
-	21	93.2	••••••••••••••••	25+	MEDIUM DENSE	VERY STIFF
- 3 ft	27	119.9	••••~	25+	DENSE	HARD
- 1 m	35	155.4	••••••••~	25+	DENSE	HARD
-	58	223.9	••••~	25+	VERY DENSE	HARD
- 4 ft	44	169.8	••••~	25+	DENSE	HARD
-	43	166.0	••••~	25+	DENSE	HARD
- 5 ft						
- 6 ft						
- 2 m						
- 7 ft						
- 8 ft						
- 9 ft						
- 3 m 10 ft						
- 11 ft						
- 12 ft						
- 4 m 13 ft						

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 #34-41050 Tantalus Rd
 Squamish B.C. V8B 0M6

PROJECT NUMBER: 06-043
 DATE STARTED: 10-27-2006
 DATE COMPLETED: 10-27-2006

HOLE #: DC-02
 CREW: KJB, EM
 PROJECT: Mosquito Creek
 ADDRESS: 2009 Westview
 LOCATION: North Vancouver, BC

SURFACE ELEVATION: _____
 WATER ON COMPLETION: _____
 HAMMER WEIGHT: 35 lbs.
 CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm ²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY	
					NON-COHESIVE	COHESIVE
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
- 1 ft	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
- 2 ft	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
- 3 ft	1	4.4	•	1	VERY LOOSE	VERY SOFT
- 1 m	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	6	23.2	•••••	6	LOOSE	MEDIUM STIFF
- 4 ft	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
-	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
-	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
- 5 ft	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
-	6	23.2	•••••	6	LOOSE	MEDIUM STIFF
-	3	11.6	•••	3	VERY LOOSE	SOFT
- 6 ft	4	15.4	••••	4	VERY LOOSE	SOFT
-	4	15.4	••••	4	VERY LOOSE	SOFT
- 2 m	6	23.2	•••••	6	LOOSE	MEDIUM STIFF
- 7 ft	6	20.5	•••••	5	LOOSE	MEDIUM STIFF
-	5	17.1	••••	4	VERY LOOSE	SOFT
-	5	17.1	••••	4	VERY LOOSE	SOFT
- 8 ft	5	17.1	••••	4	VERY LOOSE	SOFT
-	5	17.1	••••	4	VERY LOOSE	SOFT
- 9 ft	4	13.7	•••	3	VERY LOOSE	SOFT
-	4	13.7	•••	3	VERY LOOSE	SOFT
- 3 m	3	10.3	••	2	VERY LOOSE	SOFT
- 10 ft	2	6.8	•	1	VERY LOOSE	VERY SOFT
-	13	39.8	••••••••••	11	MEDIUM DENSE	STIFF
-	50	153.0	•••~	25+	DENSE	HARD
-	0	0.0		0	VERY LOOSE	VERY SOFT
- 11 ft						
- 12 ft						
- 4 m 13 ft						

WILDCAT DYNAMIC CONE LOG

Westrek Geotechnical Services Ltd.
 #34-41050 Tantalus Rd
 Squamish B.C. V8B 0M6

PROJECT NUMBER: 06-043
 DATE STARTED: 10-27-2006
 DATE COMPLETED: 10-27-2006

HOLE #: DC-04
 CREW: KJB, EM
 PROJECT: Mosquito Creek
 ADDRESS: 2017 Westview
 LOCATION: North Vancouver, BC

SURFACE ELEVATION: _____
 WATER ON COMPLETION: _____
 HAMMER WEIGHT: 35 lbs.
 CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm ²	GRAPH OF CONE RESISTANCE				N'	TESTED CONSISTENCY	
			0	50	100	150		NON-COHESIVE	COHESIVE
-	1	4.4	•				1	VERY LOOSE	VERY SOFT
-	1	4.4	•				1	VERY LOOSE	VERY SOFT
-	1 ft	3	•••				3	VERY LOOSE	SOFT
-		3	•••				3	VERY LOOSE	SOFT
-	2 ft	2	••				2	VERY LOOSE	SOFT
-		1	•				1	VERY LOOSE	VERY SOFT
-		1	•				1	VERY LOOSE	VERY SOFT
-		2	••				2	VERY LOOSE	SOFT
-	3 ft	1	•				1	VERY LOOSE	VERY SOFT
-	1 m	2	••				2	VERY LOOSE	SOFT
-		3	•••				3	VERY LOOSE	SOFT
-	4 ft	2	••				2	VERY LOOSE	SOFT
-		1	•				1	VERY LOOSE	VERY SOFT
-		1	•				1	VERY LOOSE	VERY SOFT
-	5 ft	1	•				1	VERY LOOSE	VERY SOFT
-		1	•				1	VERY LOOSE	VERY SOFT
-		1	•				1	VERY LOOSE	VERY SOFT
-	6 ft	1	•				1	VERY LOOSE	VERY SOFT
-		1	•				1	VERY LOOSE	VERY SOFT
-	2 m	1	•				1	VERY LOOSE	VERY SOFT
-	7 ft	4	•••				3	VERY LOOSE	SOFT
-		6	••••				5	LOOSE	MEDIUM STIFF
-		6	••••				5	LOOSE	MEDIUM STIFF
-	8 ft	7	•••••				6	LOOSE	MEDIUM STIFF
-		19	••••••••••				18	MEDIUM DENSE	VERY STIFF
-		11	•••••••				10	LOOSE	STIFF
-	9 ft	15	•••••••••				14	MEDIUM DENSE	STIFF
-		16	•••••••••				15	MEDIUM DENSE	STIFF
-		8	•••••				7	LOOSE	MEDIUM STIFF
-	3 m	10 ft	••••				5	LOOSE	MEDIUM STIFF
-		9	•••••				7	LOOSE	MEDIUM STIFF
-		6	••••				5	LOOSE	MEDIUM STIFF
-		2	•				1	VERY LOOSE	VERY SOFT
-	11 ft	2	•				1	VERY LOOSE	VERY SOFT
-		3	••				2	VERY LOOSE	SOFT
-		3	••				2	VERY LOOSE	SOFT
-	12 ft	5	••••				4	VERY LOOSE	SOFT
-		4	•••				3	VERY LOOSE	SOFT
-		4	•••				3	VERY LOOSE	SOFT
-	4 m	13 ft	•••				3	VERY LOOSE	SOFT

WILDCAT DYNAMIC CONE LOG

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 #34-41050 Tantalus Rd
 Squamish B.C. V8B 0M6

PROJECT NUMBER: 06-043
 DATE STARTED: 10-27-2006
 DATE COMPLETED: 10-27-2006

HOLE #: DC-06
 CREW: KJB, EM
 PROJECT: Mosquito Creek
 ADDRESS: 632 W.23rd
 LOCATION: North Vancouver, BC

SURFACE ELEVATION: _____
 WATER ON COMPLETION: _____
 HAMMER WEIGHT: 35 lbs.
 CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm ²	GRAPH OF CONE RESISTANCE				N'	TESTED CONSISTENCY	
			0	50	100	150		NON-COHESIVE	COHESIVE
-	1	4.4	•				1	VERY LOOSE	VERY SOFT
-	1	4.4	•				1	VERY LOOSE	VERY SOFT
-	1 ft	4.4	•				1	VERY LOOSE	VERY SOFT
-	1	4.4	•				1	VERY LOOSE	VERY SOFT
-	1	4.4	•				1	VERY LOOSE	VERY SOFT
-	2 ft	4.4	•				1	VERY LOOSE	VERY SOFT
-	1	4.4	•				1	VERY LOOSE	VERY SOFT
-	1	4.4	•				1	VERY LOOSE	VERY SOFT
-	3 ft	4.4	•				1	VERY LOOSE	VERY SOFT
-	1 m	2	••				2	VERY LOOSE	SOFT
-	2	7.7	••				2	VERY LOOSE	SOFT
-	4 ft	7.7	••				2	VERY LOOSE	SOFT
-	2	7.7	••				2	VERY LOOSE	SOFT
-	2	7.7	••				2	VERY LOOSE	SOFT
-	5 ft	7.7	••				2	VERY LOOSE	SOFT
-	2	7.7	••				2	VERY LOOSE	SOFT
-	1	3.9	•				1	VERY LOOSE	VERY SOFT
-	2	7.7	••				2	VERY LOOSE	SOFT
-	6 ft	7.7	••				2	VERY LOOSE	SOFT
-	2	7.7	••				2	VERY LOOSE	SOFT
-	2 m	2	••				2	VERY LOOSE	SOFT
-	7 ft	2	•				1	VERY LOOSE	VERY SOFT
-	2	6.8	•				1	VERY LOOSE	VERY SOFT
-	2	6.8	•				1	VERY LOOSE	VERY SOFT
-	8 ft	5	••••				4	VERY LOOSE	SOFT
-	7	23.9	•••••				6	LOOSE	MEDIUM STIFF
-	6	20.5	•••••				5	LOOSE	MEDIUM STIFF
-	9 ft	7	•••••				6	LOOSE	MEDIUM STIFF
-	6	20.5	•••••				5	LOOSE	MEDIUM STIFF
-	5	17.1	••••				4	VERY LOOSE	SOFT
-	3 m	10 ft	5	••••			4	VERY LOOSE	SOFT
-	7	21.4	•••••				6	LOOSE	MEDIUM STIFF
-	7	21.4	•••••				6	LOOSE	MEDIUM STIFF
-	9	27.5	••••••				7	LOOSE	MEDIUM STIFF
-	11 ft	9	••••••				7	LOOSE	MEDIUM STIFF
-	11	33.7	•••••••				9	LOOSE	STIFF
-	8	24.5	••••••				6	LOOSE	MEDIUM STIFF
-	12 ft	11	•••••••				9	LOOSE	STIFF
-	8	24.5	••••••				6	LOOSE	MEDIUM STIFF
-	7	21.4	••••••				6	LOOSE	MEDIUM STIFF
-	4 m	13 ft	11	•••••••			9	LOOSE	STIFF

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 #34-41050 Tantalus Rd
 Squamish B.C. V8B 0M6

PROJECT NUMBER: 06-043
 DATE STARTED: 10-27-2006
 DATE COMPLETED: 10-27-2006

HOLE #: DC-11
 CREW: KJB, EM
 PROJECT: Mosquito Creek
 ADDRESS: 2059 Westview
 LOCATION: North Vancouver, BC

SURFACE ELEVATION: _____
 WATER ON COMPLETION: _____
 HAMMER WEIGHT: 35 lbs.
 CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm ²	GRAPH OF CONE RESISTANCE				N'	TESTED CONSISTENCY	
			0	50	100	150		NON-COHESIVE	COHESIVE
-	1	4.4	•				1	VERY LOOSE	VERY SOFT
-	2	8.9	••				2	VERY LOOSE	SOFT
-	1 ft 2	8.9	••				2	VERY LOOSE	SOFT
-	7	31.1	••••••••				8	LOOSE	MEDIUM STIFF
-	2	8.9	••				2	VERY LOOSE	SOFT
-	2 ft 1	4.4	•				1	VERY LOOSE	VERY SOFT
-	1	4.4	•				1	VERY LOOSE	VERY SOFT
-	1	4.4	•				1	VERY LOOSE	VERY SOFT
-	3 ft 1	4.4	•				1	VERY LOOSE	VERY SOFT
-	1 m 1	4.4	•				1	VERY LOOSE	VERY SOFT
-	1	3.9	•				1	VERY LOOSE	VERY SOFT
-	4 ft 1	3.9	•				1	VERY LOOSE	VERY SOFT
-	1	3.9	•				1	VERY LOOSE	VERY SOFT
-	1	3.9	•				1	VERY LOOSE	VERY SOFT
-	5 ft 1	3.9	•				1	VERY LOOSE	VERY SOFT
-	1	3.9	•				1	VERY LOOSE	VERY SOFT
-	3	11.6	•••				3	VERY LOOSE	SOFT
-	6 ft 3	11.6	•••				3	VERY LOOSE	SOFT
-	4	15.4	••••				4	VERY LOOSE	SOFT
-	2 m 7	27.0	••••••••				7	LOOSE	MEDIUM STIFF
-	7 ft 3	10.3	••				2	VERY LOOSE	SOFT
-	5	17.1	••••				4	VERY LOOSE	SOFT
-	5	17.1	••••				4	VERY LOOSE	SOFT
-	8 ft 5	17.1	••••				4	VERY LOOSE	SOFT
-	5	17.1	••••				4	VERY LOOSE	SOFT
-	3	10.3	••				2	VERY LOOSE	SOFT
-	9 ft 3	10.3	••				2	VERY LOOSE	SOFT
-	2	6.8	•				1	VERY LOOSE	VERY SOFT
-	3	10.3	••				2	VERY LOOSE	SOFT
-	3 m 10 ft 4	13.7	•••				3	VERY LOOSE	SOFT
-	6	18.4	••••				5	LOOSE	MEDIUM STIFF
-	5	15.3	••••				4	VERY LOOSE	SOFT
-	6	18.4	••••				5	LOOSE	MEDIUM STIFF
-	11 ft 10	30.6	••••••••				8	LOOSE	MEDIUM STIFF
-	15	45.9	••••••••••				13	MEDIUM DENSE	STIFF
-	19	58.1	••••••••••••				16	MEDIUM DENSE	VERY STIFF
-	12 ft 18	55.1	••••••••••				15	MEDIUM DENSE	STIFF
-	20	61.2	••••••~••••••				17	MEDIUM DENSE	VERY STIFF
-	15	45.9	••••••••				13	MEDIUM DENSE	STIFF
-	4 m 13 ft 16	49.0	••••~••••••				13	MEDIUM DENSE	STIFF

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm ²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY	
					NON-COHESIVE	COHESIVE
-	16	44.3	.....	12	MEDIUM DENSE	STIFF
-	15	41.6	.....	11	MEDIUM DENSE	STIFF
- 14 ft	22	60.9	.....	17	MEDIUM DENSE	VERY STIFF
-	18	49.9	.....	14	MEDIUM DENSE	STIFF
-	13	36.0	.....	10	LOOSE	STIFF
- 15 ft	15	41.6	.....	11	MEDIUM DENSE	STIFF
-	9	24.9	.....	7	LOOSE	MEDIUM STIFF
- 16 ft	12	33.2	.....	9	LOOSE	STIFF
- 5 m						
- 17 ft						
- 18 ft						
- 19 ft						
- 6 m						
- 20 ft						
- 21 ft						
- 22 ft						
- 7 m						
- 23 ft						
- 24 ft						
- 25 ft						
- 26 ft						
- 8 m						
- 27 ft						
- 28 ft						
- 29 ft						
- 9 m						

WILDCAT DYNAMIC CONE LOG

Westrek Geotechnical Services Ltd.
 #34-41050 Tantalus Rd
 Squamish B.C. V8B 0M6

PROJECT NUMBER: 06-043
 DATE STARTED: 10-27-2006
 DATE COMPLETED: 10-27-2006

HOLE #: DC-12
 CREW: KJB, EM
 PROJECT: Mosquito Creek
 ADDRESS: 2059 Westview (on slope)
 LOCATION: North Vancouver, BC

SURFACE ELEVATION: _____
 WATER ON COMPLETION: _____
 HAMMER WEIGHT: 35 lbs.
 CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm ²	GRAPH OF CONE RESISTANCE	N'	TESTED CONSISTENCY	
					NON-COHESIVE	COHESIVE
	1	4.4	•	1	VERY LOOSE	VERY SOFT
	1	4.4	•	1	VERY LOOSE	VERY SOFT
1 ft	1	4.4	•	1	VERY LOOSE	VERY SOFT
	1	4.4	•	1	VERY LOOSE	VERY SOFT
	1	4.4	•	1	VERY LOOSE	VERY SOFT
2 ft	1	4.4	•	1	VERY LOOSE	VERY SOFT
	1	4.4	•	1	VERY LOOSE	VERY SOFT
	1	4.4	•	1	VERY LOOSE	VERY SOFT
3 ft	1	4.4	•	1	VERY LOOSE	VERY SOFT
1 m	3	13.3	•••	3	VERY LOOSE	SOFT
	3	11.6	•••	3	VERY LOOSE	SOFT
4 ft	2	7.7	••	2	VERY LOOSE	SOFT
	3	11.6	•••	3	VERY LOOSE	SOFT
	4	15.4	••••	4	VERY LOOSE	SOFT
5 ft	2	7.7	••	2	VERY LOOSE	SOFT
	3	11.6	•••	3	VERY LOOSE	SOFT
	2	7.7	••	2	VERY LOOSE	SOFT
6 ft	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
	6	23.2	••••••	6	LOOSE	MEDIUM STIFF
2 m	3	11.6	•••	3	VERY LOOSE	SOFT
7 ft	1	3.4	•	0	VERY LOOSE	VERY SOFT
	3	10.3	••	2	VERY LOOSE	SOFT
	3	10.3	••	2	VERY LOOSE	SOFT
8 ft	50	171.0	•••~	25+	DENSE	HARD
9 ft						
3 m 10 ft						
11 ft						
12 ft						
4 m 13 ft						

TEST HOLE 05-1

Sheet 2

Depth (m)	Soil Description and Comments	Water Level	Sample Type	Sample #	DCPT (N)	Instrumentation	USC	Moist %	P.L.	L.L.
7.0	Silty CLAY: soft, grey, wet. - low plastic		grab	1-2	5		CL			
8.0	Auger and DCPT refusal at 8.8 m depth End of Test Hole				3					
8.8	Auger and DCPT refusal at 8.8 m depth End of Test Hole				4					
9.0	Auger and DCPT refusal at 8.8 m depth End of Test Hole				5					
10.0	Auger and DCPT refusal at 8.8 m depth End of Test Hole				6					
11.0	Auger and DCPT refusal at 8.8 m depth End of Test Hole				100					
12.0	Auger and DCPT refusal at 8.8 m depth End of Test Hole				+					
12.7	Auger and DCPT refusal at 8.8 m depth End of Test Hole									
13.0	Auger and DCPT refusal at 8.8 m depth End of Test Hole									
14.0	Auger and DCPT refusal at 8.8 m depth End of Test Hole									

INSTALLATIONS: Piezometer - 25 mm PVC. Solid pipe from 0 to 4.6 m; slotted pipe from 4.6 to 6.1 m.
Bentonite seal from 1.5 to 2.2 m. Flush-mount cap.

TEST HOLE 05-2

Sheet 2

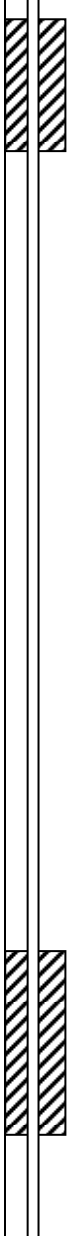
Depth (m)	Soil Description and Comments	Water Level	Sample Type	Sample #	DCPT (N)	Instrumentation	USC	Moist %	P.L.	L.L.
7.0	Sandy SILT: compact, grey-brown, wet, fine grained sand. - non-plastic - finer grained with depth - turns grey @ 7.9 m		grab	2-2	30		ML			
8.0					15					
					16					
					15					
					18					
					14					
9.0	silty CLAY: firm, grey, wet. - low plastic - fine sandy seam		grab	2-3	10		CL			
10.0					10					
					15					
					18					
					9					
11.0					8					
					10					
					11					
					11					
					12					
					11					
					12					
					13					
					100+					
13.0										
13.9	Auger and DCPT refusal at 13.9 m depth END OF TEST HOLE									

INSTALLATIONS: No piezometer.

WESTREK GEOTECHNICAL SERVICES LTD.

TEST HOLE 05-3

Project: Mosquito Creek		Client: City of North Vancouver	Date: November 29, 2005
Logged by: EJM	Elevation: Ground	Location: West end of alley between W22 nd St. & W23rd St.	
Contractor: Downrite	Equip: Bombardier	Method: Solid Stem Auger / Dynamic Cone Penetration Test	

Depth (m)	Soil Description and Comments	Water Level	Sample Type	Sample #	DCPT (N)	Instrumentation	USC	Moist %	P.L.	L.L.								
0.0	SAND & GRAVEL(FILL): loose, grey, damp.				13													
					9													
0.6					SAND & GRAVEL: loose, dark brown, moist, some silt						5							
1.0					6													
1.2	SAND: compact, light brown, damp, some gravel, medium grain. - decreasing gravel content with depth - cobble or small boulder				45													
					19													
					20													
					25													
2.0																		
2.4	Silty fine SAND to sandy SILT: compact, grey-brown, moist.				19													
					24													
					21													
					13													
					12													
4.0	- becomes wet, grey, and loose - mostly SILT		grab	3-1	18		ML											
					11													
					9													
					9													
5.0																		
5.2	- Sandier seam				17													
					31													
5.8	Very fine sandy SILT: compact, grey, wet. - non-plastic				23													
					42													
6.0																		
														39				
														24				
6.7																		

▼
14/01/06

TEST HOLE 05-3

Sheet 2

Depth (m)	Soil Description and Comments	Water Level	Sample Type	Sample #	DCPT (N)	Instrumentation	USC	Moist %	P.L.	L.L.	
7.0	Very fine sandy SILT: compact, grey, wet. - non-plastic				14						
						20					
						13					
						11					
8.0						16					
						13					
8.8				grab	3-2	15		ML			
9.0		- becoming finer grained and loose/firm.				10					
							10				
							8				
10.0						11					
10.1	Clayey SILT to silty CLAY: firm, grey, wet. - low plastic - some thin sandy seams					20					
							13				
11.0							8				
							11				
							13				
12.0					grab	3-3	14		CL		
						19					
12.7						27					
13.0						44					
13.3		Auger and DCPT refusal at 13.3 m depth				100+					
14.0											

INSTALLATIONS: Piezometer - 25 mm PVC. Solid pipe from 0 to 9.1 m; slotted pipe from 9.1 to 10.7 m. Bentonite seals from 0.9 to 1.5 m and from 5.5 to 6.4 m. Flush-mount cap.

WESTREK GEOTECHNICAL SERVICES LTD.

TEST HOLE 06-01

Project: Mosquito Creek		Client: City of North Vancouver	Date: October 19, 2006
Logged by: KB	Elevation: Ground	Location: 1845 Bewicke; NW corner	
Contractor: Mud Bay	Equip: Track MT5	Method: Solid Stem Auger / Dynamic Cone Penetration Test	

Depth (m)	Soil Description and Comments	Water Level	Sample Type	Sample #	DCPT (N)	Pocket Pen (kg/cm ²)	Fines	Moist	P.L.	L.L.
							oz	%		
0.0	TOPSOIL / FILL - Silty (dark brown); roots and rootlets, trace sand, soft, moist									
0.3	Possible NATIVE – SAND (tan); trace gravel, occasional cobble, loose, damp				3					
					1					
					8			4.6		
1.0				S-1	8					
					8					
	- becoming compact				21					
					16					
2.0					14					
2.25	SAND (grey); fine to medium grain, trace subangular gravel, loose to compact, damp - Finer grained with depth				14					
					10					
					9			5.4		
3.0				S-2	9					
					15					
	- Trace to some silt by 3.6 m				19					
					15			27.7		
4.0				S-3	15					
4.1	SAND (grey – tan); fine grain, compact, wet				26					
					26					
4.7	SAND (grey); medium to coarse grain, trace silt, compact, wet				15					
					17			26.1		
5.0				S-4	17					
	- Oxidized at 5.4 m				12					
					19					
5.7	SAND (grey); fine grain, trace silt, compact, wet				19					
					13			24.5		
6.0	End of Auger Hole AH-01 at 6.0 m No standing water observed while auger hole remained open.			S-5						

WESTREK GEOTECHNICAL SERVICES LTD.

TEST HOLE 06-02

Project: Mosquito Creek		Client: City of North Vancouver	Date: October 19, 2006
Logged by: KB	Elevation: Ground	Location: West end of ROW North of 1821 Bewicke	
Contractor: Mud Bay	Equip: Track MT5	Method: Solid Stem Auger / Dynamic Cone Penetration Test	

Depth (m)	Soil Description and Comments	Water Level	Sample Type	Sample #	DCPT (N)	Pocket Pen (kg/cm ²)	Fines %	Moist %	P.L.	L.L.
0.0	TOPSOIL / FILL - Silt (dark brown); roots and rootlets, trace sand, soft, moist				12					
0.45					2					
1.0	FILL – SAND (grey); some silt, trace gravel, loose, moist			S-1	1		9.7			
					1					
						1				
						3				
1.8	Possible Native – TOPSOIL/ ORGANICS (dark brown); rootlets, soft, moist				9					
2.0	SAND (tan- brown); trace silt, trace gravel, loose to compact, damp				8					
					10					
				S-2	17		16.0			
					17					
3.4	SAND (grey); fine grain, trace silt, compact, moist - Becomes moist at 4.0 m - Siltier with depth				21					
					28					
4.0				S-3	24		26.5			
					21					
4.8	Silty SAND (grey); loose to compact, wet				20					
				S-4	20		27.5			
					16					
					10					
6.0	End Auger Hole 06-02 at 6.0 m No standing groundwater observed while auger hole remained open				8					

WESTREK GEOTECHNICAL SERVICES LTD.

TEST HOLE 06-03

Project: Mosquito Creek		Client: City of North Vancouver	Date: October 19, 2006
Logged by: KB	Elevation: Ground	Location: 710 Bewicke; W. side of residence	
Contractor: Mud Bay	Equip: Track MT5	Method: Solid Stem Auger / Dynamic Cone Penetration Test	

Depth (m)	Soil Description and Comments	Water Level	Sample Type	Sample #	DCPT (N)	Pocket Pen (kg/cm ²)	Fines	Moist	P.L.	L.L.
							%	%		
0.0	TOPSOIL - Sand (dark brown); roots and rootlets, trace silt soft, moist									
0.1	Native - SAND (tan); coarse to medium grain, trace gravel, loose to compact, moist				P					
					12					
					16			7.5		
				S-1	17					
1.0					10					
					11					
					10					
2.0					12			6.1		
	- Alternating layers of fine sand and medium grain sand			S-2	14					
					17					
3.0					21					
					18					
	- Oxidation at 4.2 m				18			21.2		
4.0				S-3	17					
					18					
					22					
5.0					18					
5.1	SILT (tan); trace to some fine grain sand, compact, moist to wet				17			27.4		
				S-4	16					
					17					
6.0	SILT (grey); trace to some fine grain sand, loose/firm, moist to wet				7					
					10					
				S-5	9			37.1		

WESTREK GEOTECHNICAL SERVICES LTD.

TEST HOLE 06-04

Project: Mosquito Creek		Client: City of North Vancouver	Date: October 19, 2006
Logged by: KB	Elevation: Ground	Location: 710 Bewicke; S. side of residence	
Contractor: Mud Bay	Equip: Track MT5	Method: Solid Stem Auger / Dynamic Cone Penetration Test	

Depth (m)	Soil Description and Comments	Water Level	Sample Type	Sample #	DCPT (N)	Pocket Pen (kg/cm ²)	Fines	Moist	P.L.	L.L.
							%	%		
0.0	TOPSOIL - Sand (dark brown); roots and rootlets, trace silt soft, moist									
0.1	Possible Native – SAND (rust brown); coarse to medium grain, some gravel, loose, moist				P					
					4					
					3					
0.9	SAND (tan); coarse grain, trace gravel, very loose, damp - Finer grain with depth									
1.0				S-1	2		4.8			
					2					
					3					
2.0				S-2	2		5.0			
					1					
					1					
					1					
3.0					1					
					1					
3.6	SAND (grey); medium grain, compact, moist			S-3	1		6.3			
4.0					12					
					21					
					27					
					29					
5.0	- Wet at 5.1 m				30					
	SILT (grey); some fine sand, compact, wet			S-4	27		24.3			
					25					
						25				
6.0				S-5			31.5			

TEST HOLE 06-04

Sheet 2

Depth (m)	Soil Description and Comments	Water Level	Sample Type	Sample #	DCPT (N)	Pocket Pen (kg/cm ²)	Fines	Moist	P.L.	L.L.
							%	%		
7.0	End of Auger Hole 06-04 at 7.5 m									
7.5										
8.0										
8.5										
9.0										
9.5										
10.0										
10.5										
11.0										
11.5										
12.0										
12.5										
13.0										
13.5										
14.0										

WESTREK GEOTECHNICAL SERVICES LTD.

TEST HOLE 06-05

Project: Mosquito Creek		Client: City of North Vancouver	Date: October 19, 2006
Logged by: KB	Elevation: Ground	Location: 710 Bewicke; South of residence	
Contractor: Mud Bay	Equip: Track MT5	Method: Solid Stem Auger / Dynamic Cone Penetration Test	

Depth (m)	Soil Description and Comments	Water Level	Sample Type	Sample #	DCPT (N)	Pocket Pen (kg/cm ²)	Fines	Moist	P.L.	L.L.
							oz	%		
0.0	TOPSOIL - Sand (dark brown); roots and rootlets, trace silt soft, moist									
0.3	FILL - SAND (brown); trace gravel, trace silt, rootlets, very loose to loose, damp - Occasional cobble, color mixed; dark and lighter brown				P P P			17.6		
1.0					2 2 2					
2.0					6					
				S-2	3			9.4		
					1 1					
3.0					3					
					8					
				S-3	5			10.3		
4.0					5 8					
					10					
4.8	ORGANIC SILT (dark brown); trace woody debris, soft, moist. Possibly original topsoil.			S-4				39.5		
5.0	SAND (brown); trace gravel, trace silt, loose to compact, moist.			S-5	12			49.1		
					2					
5.4	SAND (tan-grey); trace to some silt, loose, wet				5					
5.9	SILT (grey); trace fine grain sand, firm, moist				10					
6.0					10					
				S-6	8			26.5		
					5					

WESTREK GEOTECHNICAL SERVICES LTD.

TEST HOLE 06-06

Project: Mosquito Creek		Client: City of North Vancouver	Date: October 20, 2006
Logged by: KB	Elevation: Ground	Location: 1815 Bewicke; center of rear yard of residence	
Contractor: Mud Bay	Equip: Track MT5	Method: Solid Stem Auger / Dynamic Cone Penetration Test	

Depth (m)	Soil Description and Comments	Water Level	Sample Type	Sample #	DCPT (N)	Pocket Pen (kg/cm ²)	Fines	Moist	P.L.	L.L.
							oz	%		
0.0	TOPSOIL - Sand (dark brown); roots and rootlets, trace silt soft, moist									
0.1	FILL - SILT (brown); trace to some sand, trace gravel, loose/firm, moist				1					
	- Wood / Concrete / Glass Debris				7					
				S-1	9		29.4			
1.0					10					
					8					
					5					
2.0					3					
				S-2	5		37.5			
					2					
					1					
3.0					8					
					5					
3.5	Possible NATIVE - SAND (tan-rust brown); trace gravel, trace silt, loose, moist				4		18.8			
				S-3	4					
4.0					6					
					6					
					4					
4.8	SAND (tan); medium grain, trace to some silt, trace gravel, loose, moist				2		27			
	- finer grain with depth			S-4	2					
5.0					9					
5.4	SILT (grey); trace fine grain sand, firm to stiff, wet				16		32.9			
				S-5	16					
6.0	End of Auger Hole 06-06 at 6.0 m No standing water observed while auger hole remained open				15					

WESTREK GEOTECHNICAL SERVICES LTD.

TEST HOLE 06-10

Project: Mosquito Creek		Client: City of North Vancouver	Date: October 23, 2006
Logged by: KB	Elevation: Ground	Location: 1931 Westview; NW corner, rear yard	
Contractor: Mud Bay	Equip: Porta-Auger	Method: Solid Stem Auger / Dynamic Cone Penetration Test	

Depth (m)	Soil Description and Comments	Water Level	Sample Type	Sample #	DCPT (N)	Pocket Pen (kg/cm ²)	Fines	Moist	P.L.	L.L.
							%	%		
0.0	FILL / TOPSOIL - Silty SAND (dark brown); roots and rootlets, soft, moist		█	S-1	2			39.7		
					4					
0.6	Possible Native – SAND (tan-rust); trace silt, trace gravel, loose, moist - Finer grain with depth				4					
					4					
1.0	SILT (grey); some fine grain sand, very stiff / dense, moist		█	S-2	3			26.3		
1.1					27					
					43					
2.0	End auger hole 06-10 at 2.1 m No standing water observed while auger hole remained open		█	S-3	26			29.1		
2.1					30					
					38					
					52					
3.0										
4.0										
5.0										
6.0										

WESTREK GEOTECHNICAL SERVICES LTD.

TEST HOLE 06-11

Project: Mosquito Creek		Client: City of North Vancouver	Date: October 23, 2006
Logged by: KB	Elevation: Ground	Location: W end of ROW on Westview; at W 20 th St.	
Contractor: Mud Bay	Equip: Porta-Auger	Method: Solid Stem Auger / Dynamic Cone Penetration Test	

Depth (m)	Soil Description and Comments	Water Level	Sample Type	Sample #	DCPT (N)	Pocket Pen (kg/cm ²)				
							Fines %	Moist %	P.L.	L.L.
0.0	TOPSOIL - Silty SAND (dark brown); roots and rootlets, soft, moist									
	Native – SAND (tan); some gravel, trace cobbles, trace silt, loose, moist				4					
	- finer grain and less gravel with depth				3					
					2					
1.0										
1.2	SAND (tan-grey); fine grain, some silt to silty, compact, moist			S-1	13		14.5			
	- becomes grey colored by 1.8 m				33					
					18					
2.0				S-2	15		17.0			
2.2	SILT (tan); trace fine grain sand, stiff, moist				19					
	- intermittent layers of firm to soft				18					
	- becomes grey colored by 2.7 m				14					
3.0				S-3	5		24.0			
	- trace clay with depth			S-4	7		23.6			
					9					
4.0					4					
					10					
					11					
5.0				S-5	4		32.3			
					5					
5.5	Clayey SILT (grey); firm, moist to wet				6					
6.0	End auger hole 06-11 at 4.5 m No standing water observed while auger hole remained open			S-6	5		34.1			
	7.2 m / N = 24				6					
	7.5 m / N = 80				7					
					7					

WESTREK GEOTECHNICAL SERVICES LTD.

TEST HOLE 06-16





Project: Mosquito Creek		Client: City of North Vancouver	Date: October 25, 2006
Logged by: KB	Elevation: Ground	Location: 625 W. 23 rd St., crest of failure, rear yard	
Contractor: Mud Bay	Equip: Porta-Auger	Method: Solid Stem Auger / Dynamic Cone Penetration Test	

Depth (m)	Soil Description and Comments	Water Level	Sample Type	Sample #	DCPT (N)	Pocket Pen (kg/cm ²)	Fines	Moist	P.L.	L.L.
							%	%		
0.0	TOPSOIL – SILT (dark brown); some sand, soft, moist			S-1				12.3		
0.2	SAND (rust-tan); medium grain, trace gravel, loose to very loose, moist - becomes tan colored at 0.75 m - finer grain with depth			S-2	1			9.0		
					1					
					2					
1.0					8					
					5					
1.8	SAND (tan); fine grain, some silt, very loose to loose, moist to wet - becoming compact			S-3	4			34.2		
2.0					3					
					1					
					6					
3.0					16					
3.9	SAND (grey); medium grain, trace silt, compact, wet			S-4	12			35.2		
4.0										
4.1	SILT (grey); trace fine grain sand, compact / stiff, moist to wet			S-5	13			31.9		
					10					
					14					
5.0					11					
5.1	SAND (tan); fine grain, some silt, compact to dense, moist			S-6	18			22.4		
					29					
					34					
6.0		End auger hole 06-16 at 6.0 m No standing water observed while auger hole remained open				27				
					26					
					75					

WESTREK GEOTECHNICAL SERVICES LTD.

TEST HOLE 06-18

Project: Mosquito Creek		Client: City of North Vancouver	Date: October 25, 2006
Logged by: KB	Elevation: Ground	Location: 622 W22 nd St., West side of house at slope crest	
Contractor: Mud Bay	Equip: Porta-Auger	Method: Solid Stem Auger / Dynamic Cone Penetration Test	

Depth (m)	Soil Description and Comments	Water Level	Sample Type	Sample #	DCPT (N)	Pocket Pen (kg/cm ²)	Fines	Moist	P.L.	L.L.	
							oz	%			
0.0	FILL – SAND (rust-tan); medium grain, trace gravel, very loose, moist			S-1	1			12.0			
				1							
0.75				ORGANICS (dark brown); trace sand, soft, moist			1				
0.9	SAND (tan); medium grain, very loose, moist			S-2	1			15.3			
1.0				1							
1.2	SILT (tan); some sand to sandy, trace gravel, loose to compact, moist			S-3	1			23.0			
				2							
				11							
				15							
				17							
2.7	Silty SAND (tan); mottled, fine grain, compact, moist				18						
3.0					18						
					15				25.0		
					16						
3.9	End of auger hole 06-18 at 3.9 m No standing water observed while auger hole remained open				18						
4.0					11						
					6						
					16						
					31						
					13						
					24						
					13						
					13						
					10						
		12									
					12						

