

**CLIENT** YUKON ENERGY CORPORATION  
**PROJECT** STUDY OF ICE PROCESSES IN THE MAYO RIVER, YUKON  
**SITE** Village of Mayo Dike  
**LOCATION** East side of dike road  
**DRILLING METHOD** SSA/HSA

**JOB NO.** 10-1404-08  
**GROUND ELEV.** 491.881 m  
**TOP OF PVC ELEV.** 493.12 m  
**WATER ELEV.** 490.12 m  
**DATE DRILLED** 4/14/2011  
**UTM (m)** N 7,052,871  
 E 455,751

ELEVATION (m)	DEPTH (m) (ft)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	PIEZ. LOG	DEPTH (m)	SAMPLE TYPE NUMBER	RECOVERY %	SPT (N) blows/0.15 m ▲ DYNAMIC CONE (N) blows/ft △	Cu POCKET PEN (kPa) ★ Cu TORVANE (kPa) ◆					
									20	40	60	80		
491	1		<b>SAND AND GRAVEL (SW-GW)</b> - Brown to tan, frozen, damp to moist when thawed, well-graded, fine- to coarse-grained, with fine- to medium-grained gravel, trace silt. Grain Size: Gravel (42%), Sand (45.8%), Silt & Clay (12.2 %) at 0.8 m.		0.3	S1								
490	2		- Grey, increase in silt content, trace clay below 2.29 m.				S2							
489.0	3		<b>GRAVELLY SAND (SW) TO SAND AND GRAVEL (SW-GW)</b> - Wet, clean (trace to no fines), well-graded, coarse-grained sand to medium-grained gravel, high gravel content containing well-rounded clasts, trace silt. Grain Size: Gravel (57%), Sand (36.8%), Silt & Clay (6.2 %) at 3.7 m.			S3								
488	4						S4							
487.5	5		<b>CLAYEY SILT (CL)</b> - Grey, laminated (mm scale), wet, soft to firm, low plasticity. Grain Size: Gravel (1.1%), Sand (4.9%), Silt (70.8%), and Clay (23.2 %) at 5.2 m.			S5								
486	6		<b>SILTY CLAY (CI)</b> - Grey, laminated (mm scale), moist to wet, firm, intermediate plasticity.											
485.8	6		<b>SILTY SAND (SP)</b> - Grey, wet, poorly graded, fine-grained sand and silt. - Poor to no auger recovery below 7.2 m.		6.7									
484.7	7													
484	8				7.3									
483	9		<b>END OF HOLE AT 9.1 m.</b>		9.1									
482.7	9		Notes: 1. 50 mm diameter well with 0.9 m stickup installed to 9.1 m. 2. Thermocouples installed at 9.1 m, 7.6 m, 6.1 m, 4.6 m, 3.05 m, and 1.5 m. 3. Water at 1.5 m after drilling. 4. Water level shown on log measured on 21-April-2011.											
482	10													
481	11													
480	12													
479	13													
478	14													

GEO TECHNICAL SOIL LOG P:\PROJECTS\2010\10-1404-08\DESIGN\GEOLOG\MAYO DYKE LOGS.GPJ

SAMPLE TYPE  Auger Grab

CONTRACTOR Donjek Drilling

INSPECTOR

APPROVED

DATE

RECEIVED

MAY 28 2014