

**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.** 491.566 m  
**TOP OF PVC ELEV.** 492.92 m  
**WATER ELEV.** 489.74 m  
**DATE DRILLED** 4/15/2011  
**UTM (m)** N 7,052,753  
 E 455,761

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
									PL	MC	LL
									% 20 40 60 80		
491	1		<b>SAND AND GRAVEL (SW-GW)</b> - Brown, dry to damp, frost encountered throughout layer, well-graded, fine- to coarse-grained sand, well-graded gravel, clasts up to 50 mm, some silt. Grain Size: Gravel (53%), Sand (32.6%), Silt & Clay (14.4 %) at 0.8 m.		0.3	S1					
490	5		- Mainly medium- to coarse-grained sand, trace fine-grained sand, and gravel, slight reduction in gravel size below 1.8 m. Grain Size: Gravel (40%), Sand (46.6%), Silt & Clay (13.4 %) at 2.3 m.			S2					
488.5	2										
488	3		<b>GRAVELLY SAND (SW) TO SAND AND GRAVEL (SW-GW)</b> - Brown, wet to saturated, clean (trace to no fines), high gravel content (rounded to subrounded), with sand (medium- to coarse-grained). - Auger recoveries approximately 50% from 3.05 m to 4.57 m.			S3					
486	4										
487	5										
486.1	6		<b>SILTY CLAY (CI)</b> - Grey, moist, varved, intermediate plasticity, trace fine-grained sand.			S4					
486	6										
485	7		- Increase in fine-grained sand content below 7 m.		6.6						
484.1	8		<b>SILTY SAND (SP)</b> - Grey, wet, fine-grained, with silt. - Auger recoveries approximately 20% below 7.6 m.		7.1	S5					
484	8										
483	9										
482.4	9		<b>END OF HOLE AT 9.1 m.</b>		9.0						
482	10		Notes: 1. 50 mm diameter well with 1.6 m stickup installed to 9 m. 2. Thermocouples installed at 9 m, 7.5 m, 6 m, 4.5 m, 2.9 m, and 1.4 m. 3. Sand and gravel squeezed and sloughed during drilling. 4. Water level shown on log measured on 21-April-2011.								
481	11										
480	12										
470	13										
478	13										

SAMPLE TYPE  Auger Grab

CONTRACTOR Donjek Drilling

INSPECTOR

APPROVED

DATE

RECEIVED

MAY 28 2014

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