

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. 491.400 m
TOP OF PVC ELEV. 492.49 m
WATER ELEV. 489.16 m
DATE DRILLED 4/16/2011
UTM (m) N 7,052,636
 E 455,690

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
									PL	MC	LL	
									%			
								20 40 60	20	40	60	80
491			SAND AND GRAVEL (SW-GW) - Brown, frozen, damp when thawed, some sand, gravel and sand are well-graded, trace silt, trace clay. Grain Size: Gravel (42%), Sand (33.3%), Silt & Clay (24.7 %) at 0.3 m.		0.3	S1						
490.5	1					S2						
490	5		SILT (ML) - Grey, frozen, moist when thawed, low plasticity, oxidized seams present, trace to some clay, trace to some fine-grained sand.									
489.3	2											
489			GRAVELLY SAND (SW) TO SAND AND GRAVEL (SW-GW) - Brown, frozen, clean (trace to no fines), high gravel content (rounded to subrounded), with sand (medium- to coarse-grained). - Hard and boney drilling from 2.1 m to 2.7 m (possible former riverbed). - Auger refusal encountered at 2.4 m. Moved 0.6 m and redrilled hole. Grain Size: Gravel (40%), Sand (47%), Silt & Clay (13 %) at 2.4 m. - Wet to saturated below 3.05 m. - Saturated to free water, little recovery on auger below 3.66 m. - Reduction in silt and clay content with depth. Grain Size: Gravel (61%), Sand (29.8%), Silt & Clay (9.2%) at 3.7 m. Grain Size: Gravel (66%), Sand (27.2%), Silt & Clay (6.8 %) at 4.9 m.			S3						
488	3					S4						
487	4					S6						
486	5											
485.5	6											
485			SILTY CLAY (CI) - Grey, moist, high silt content, intermediate plasticity, stiff. - Trace gravel below 7.6 m.			S7						
484	7											
483	8											
482	9											
481.6	10		SAND (SP) - Grey, wet, poorly graded, fine-grained, trace to some silt. - Auger recoveries approximately 30% below 9.75 m.		9.3							
481	11				9.9							
480	12											
479.2	13				11.9							
479	40		END OF HOLE AT 12.19 m.									
478	45		Notes: 1. 50 mm diameter well with 1.07 m stickup installed to 11.86 m. 2. Thermocouples installed at 11.86 m, 8.8 m, 7.3 m, 5.8 m, 4.24 m, and 2.7 m. 3. Water level shown on log measured on 21-April-2011.									

SAMPLE TYPE Auger Grab

CONTRACTOR
Donjek Drilling

INSPECTOR

APPROVED

DATE
12/8/11

RECEIVED

MAY 28 2014

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