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Canada

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Canada

Western Region

Région de l'Ouest



SUPPLEMENTAL REPORT
GEOTECHNICAL INVESTIGATION
MILE 970 (INUVIK) TO MILE 1059 (TUK)
MACKENZIE HIGHWAY

PUBLIC WORKS CANADA
WESTERN REGION

SUPPLEMENTAL REPORT
GEOTECHNICAL INVESTIGATION
MILE 970 (INUVIK) TO MILE 1059 (TUKTOYAKTUK)
MACKENZIE HIGHWAY

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Geotechnical Engineer
1977-09-15

INDEX

- I INTRODUCTION
 - A General
 - B Data Presentation
- II SUMMARY OF RESULTS
 - A Inuvik Area
 - B Mile 970 To Mile 995
 - C Mile 1045 TO MILE 1059 (Tuktoyaktuk)

- APPENDIX A - Borehole Logs - Inuvik Area
- APPENDIX B - Borehole Logs - Mile 970-995
- APPENDIX C - Borehole Logs - Mile 1045 - 1059

I INTRODUCTION

A General

This report presents the results of a field boring programme carried out in March and April, 1977 along portions of the Mackenzie Highway between Inuvik and Tuktoyaktuk, N.W.T. The 1977 programme was a complement to a more extensive investigation carried out in 1976, and this report should be considered a supplement to the previous report dated 1976-10-15 and entitled "Geotechnical Investigation - Mile 970 (Inuvik) to Mile 1059 (Tuktoyaktuk) - Mackenzie Highway".

Two sections of the proposed route were investigated in 1977 - from Mile 970 (Inuvik) to Mile 995, and Mile 1043 to Mile 1059 (Tuktoyaktuk). The 25 mile section immediately north of Inuvik required additional field work as the 1976 investigation failed to identify adequate borrow sources along the selected route. The 1977 programme expanded the search area to Mile 995 on both sides of the selected route, with specific attention given to features along a tentative alternate location to the west.

Near Tuktoyaktuk, features were drilled along two tentative alignments in a 15-mile section not covered during the 1976 programme.

Borings were carried out by means of a Failing 1250 rotary drilling mounted on a Nodwell - 110, with a

3 man crew and a Nodwell-75 support vehicle. Daily crew transport from Inuvik was by helicopter.

B Data Presentation

All borehole logs and locations are included in the three Appendices.

Appendix A contains borehole logs and a 1"=1,000' mosaic of the area at Mile 972 - 973 near Inuvik where shale borrow was previously identified. Boreholes were drilled here to further delineate the borrow area and to identify soil types along a short revision from Mile 970 to Mile 973.

Appendix B contains borehole data and 1"=3,000' mosaics of the area between Inuvik and Mile 995. Borehole locations for both the 1976 and 1977 programmes are shown, however, only the 1977 borehole logs are included.

Appendix C contains borehole data and a 1"=3,000' mosaic for the Tuktoyaktyk area.

II SUMMARY OF RESULTS

A Inuvik Area - Appendix A

The majority of test holes here serve to define the shale borrow area previously identified in 1976 (Sector 1 - Area 2). Test holes drilled in 1976 were not located accurately and the holes shown on the 1"=1,000' mosaic in Appendix A properly situate the borrow area.

Six holes (#2K, 2L, 2M, 2N, 2O and 2P) were drilled along a proposed revision. All holes reveal ice rich subsoil and right-of-way cuts in this material would not be practical.

B Mile 970 to Mile 995 - Appendix B

With reference to the 1"=3,000' mosaics in Appendix B, the field crew proceeded north to Mile 995 approximately along Alternate 1, then easterly between Jimmy Lake and Noell Lake, and returned to Inuvik around the east side of Noell Lake. Comments herein will be limited only to those features that contain some useable material.

Test Holes #1 to #8

These holes investigated a series of kame deposits near Alternate 1. All features contain some useable sands or gravelly sands, however, volumes are very small and there are large random ice blocks within the features. These features could provide minor borrow material for construction along Alternate 1, however, because of the limited volumes and extensive ice, development is not considered practical.

Test Holes #13 to #19

The feature drilled here is a large kame that is located on Alternate 1. There are useable sands and gravelly sands intermixed with ice layers and blocks. This feature is large enough for development as a borrow source for construction along Alternate 1, although

extensive stripping and wasting, and drying in place would be required. There is insufficient material here to consider using this source for construction along the original routing.

Test Holes #25 to #27

These holes are located along the edge of a large glacial meltwater channel, and are in poorly indurated sandstone that is similar to the material encountered previously (1976) on the original route in Areas 13, 15, and 16.

Test Holes #35 and #36

This is a small kame or crevasse filling near the edge of Jimmy Lake, and roughly 1 mile east of the route, which contains some sands and gravels. Not practical for development due to limited volume.

Test Holes #39 to #44

These holes are located on a series of kame-like features at the north end of Noell Lake. Some sands and gravels were encountered but there is extensive ice and development for borrow would not be practical.

Test Holes #45 to #49

The area drilled is a small flood plain on the creek between Noell Lake and Jimmy Lake, that is at a much lower elevation than the surrounding terrain. There are significant volumes of gravelly, silty, sand here and although the deposits contain ice and are wet on

thawing, there is little or no massive ice. This material could be used for embankment construction with drying in place, however, it is presently too distant from the route for development.

Test Holes #50 to #56

Deposits here are similar to those described above, although the features drilled are at a higher elevation and contain some massive ice. These materials could be used for embankment construction with drying in place, however, are presently too distant from the route for consideration.

Test Holes #65 to #67

These holes were drilled on a kame-like feature on the east side of Noell Lake. Deposits are gravelly, silty, sand with some massive ice. Materials could be used for embankment construction with drying in place, however, the area is too distant from the present route, and volumes are too small to consider re-routing around Noell Lake.

Test Holes #75 to #77

The features drilled here are two small kames or crevasse fillings at the south end of Noell Lake. There is a limited quantity of useable sand-gravel here but it is roughly 2 miles from the present routing.

SUMMARY

This field programme did not locate any significant

quantities of good borrow, although some areas of gravel-silt-sand that could be used for construction with drying in place were identified. There is no basis from a materials standpoint to consider a revision in alignment from the present routing, either to Alternate 1, or easterly around Noell Lake. It is considered that the most practical approach to construction through this section would be to utilize the best available materials along the present routing with stage construction and drying-in-place as required. If this approach is taken, it is considered that borrow sources could be developed at Mile 978 (Area 6 from the 1976 programme), and at Mile 997 (Area 13 - 1976), and possibly some wet (icy) but useable till deposits could be located near Mile 985 and Mile 990. Additional drilling would be required along the route to locate the best till deposits to Mile 990.

C Mile 1045 to Mile 1059 (Tuktoyaktuk) - Appendix C

With reference to the 1"=3,000' airphoto mosaic in Appendix C, the field crew proceeded south from Tuktoyaktuk along the proposed alternate to Mile 1045, then returned roughly along the 1975 surveyed route.

Only one area suitable for borrow was identified - a narrow elongate ridge of gravelly sand (possibly an esker) near Mile 1045. Test holes #T25 to #T38 were drilled in this feature and a volume of material in the order of 300,000 cu. yds. has been estimated.

All materials were wet on thawing and there is some ice layers, however, stripping will be minimal and with selective wasting of ice rich material and some drying in place, this area will be a good viable source of borrow.

INUVIK - Tuk.										DRILL HOLE REPORT				DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED 28/3/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE											
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE		B,C,S		NUMBER							
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)						GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS	
										PLASTIC LIMIT LIQUID LIMIT 20 40 60 80 100 100+						CLAY	SILT	SAND	GRAVEL				
										%	%	%	%										
						H ₄ PEAT 8"			2														
						CLAY - SILTY		V _L - V _r	4														
						. SANDY			6														
						- REBBLES			8														
									10														
								V _S	12														
									14														
							15'		16														
						BOTTOM OF HOLE - 15'			18														
									20														
									22														
									24														

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[illegible]

INUVIK - Tuk.				DRILL HOLE REPORT				DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY										
DWN		FIELD ENG.		DATE DRILLED 28/3/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE						
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER						
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS		
										CLAY	SILT	SAND	GRAVEL					
										O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)								
										PLASTIC LIMIT 20 40 60 80 100 100+ LIQUID LIMIT 80 100 100+								
						PEAT 8"												
2						CLAY - SILTY SANDY PEBBLES MED. PLASTIC		Vc-Vr	2						62-23	10	DAMP	
4					4											80-15	5	WET
6					6											77-19	4	WET
8					8											80-17	3	MOIST
10					10											75-23	2	WET
12									12									
14									14									
16						15'			16									
18						BOTTOM OF HOLE - 15'			18									
20									20									
22									22									
24									24									

INUVIK - Tuk										DRILL HOLE REPORT					DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY				
DWN		FIELD ENG		DATE DRILLED 28/3/77		AIR PHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE							
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B.C.S NUMBER							
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS	
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %				
						PEAT .5													
2						CLAY. SILTY			2										
4					CH	HIGH PLASTIC			4										
6								V _x	6										
8									8										
10						SHALE - SOFT SILTY			10										
12									12										
14									14										
16						BOTTOM OF HOLE - 15'			16										
18									18										
20									20										
22									22										
24									24										

INUVIK - Tuk.

DRILL HOLE REPORT

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DWN		FIELD ENG.		DATE DRILLED 28/3/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE				
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B.C.S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME) PLASTIC LIMIT 20 40 60 80 100 100+ LIQUID LIMIT 80 100 100+																
2						CLAY - SILTY - BROWN SANDY		V _c - V _r	2	89	10	1	WET			
4						GREY - SILTY			4	69	26	5	WET			
6									6							
8									8	96	4	0	WET			
10									10							
12									12	99	1	0	WET			
14						SHALE - SOFT		V _x	14	15	66	9	Moist + 40 DRY SIEVED			
16									16							
18									18							
20									20	6	43	51	Humid	"	"	
22									22							
24									24	21	65	14	Moist	"	"	

30'
BOTTOM OF HOLE - 30'

-9-47-44 Humid " "

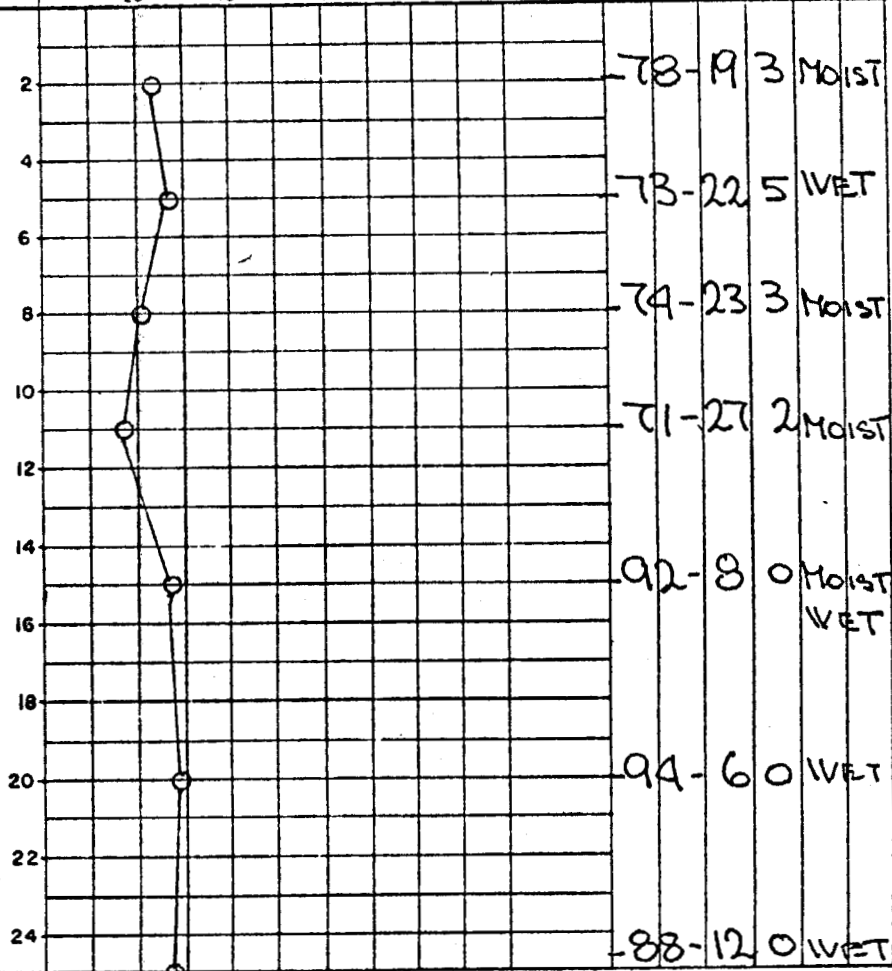
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MACKENZIE HIGHWAY

1974

INUVIK - Tuk.				DRILL HOLE REPORT				DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY								
DWN		FIELD ENG.		DATE DRILLED 28/3/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE				
CKD		TECH RONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B.C.S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
						PEAT 8"										
2						CLAY - SILTY										
4						SANDY										
6						PEBBLES										
8																
10					CL	SILTY		V _c - V _r								
12					CI	LOW - MED. PLASTIC										
14																
16																
18																
20																
22																
24																

○ = WATER CONTENT (% OF DRY WEIGHT)
 △ = ICE CONTENT (% OF SAMPLE VOLUME)

PLASTIC LIMIT 20 40 60 80 100 100+
 LIQUID LIMIT



78-19 3 Moist
 78-22 5 WET
 74-23 3 Moist
 71-27 2 Moist
 92-8 0 Moist
 94-6 0 WET
 88-12 0 WET

Bottom of Hole - 30'

94-6-0 Moist

INUVIK - Tuk.										DRILL HOLE REPORT										DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG.		DATE DRILLED 28/3/77		AIRPHOTO NO.		CHAINAGE		OFFSET		TEST HOLE																	
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV																			
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)										GRAIN SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS			
										PLASTIC LIMIT 20 40 60 80 100 100+ LIQUID LIMIT										CLAY	SILT	SAND	GRAVEL						
										%	%	%	%																
2						PEAT 1'			2																				
4						CLAY - SILTY FEW PEBBLES		V _c -V _r	4																				
6									6																				
8									8																				
10						ICE		ICE	10																				
12									12																				
14									14																				
16									16																				
18									18																				
20									20																				
22									22																				
24									24																				

INUVIK - Tuk.										DRILL HOLE REPORT				DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY					
DWN		FIELD ENG		DATE DRILLED 4/5/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE							
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE		B,C,S		NUMBER			
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS			
										CLAY %	SILT %	SAND %	GRAVEL %						
						P4 PEAT 1'		Vc-Vr											
2						CLAY - SANDY			2								78-21 1 No ST		
4						SILTY			4								74-26 0 IVET		
6						FEW PEBBLES			6										
8						MED & LOW PLASTIC			8								79-17 4 IVET		
10								Vs	10								89-11 0 SAT.		
12									12										
14									14								98-2 0 IVET		
16						15'			16										
18						BOTTOM OF HOLE - 15'			18										
20									20										
22									22										
24									24										

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY				
DWN		FIELD ENG		DATE DRILLED 28/3/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE				
CKD		TECH. PROXYL		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY	SILT	SAND	GRAVEL			
										O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)						
										PLASTIC LIMIT 20 40 60 80 100 100+ LIQUID LIMIT 80 100 100+						
2						PEAT			2							
4					CL	BROWN - CLAY - SILTY SANDY		Vc - Vr	4							
6						PEBBLES		I	6							
8						GRAVELLY at 11'		Vs	8							
10					CL				10							
12					CI	PEBBLES			12							
14								Vx	14							
16									16							
18									18							
20						GREY - SHALE - Soft			20							
22									22							
24									24							

30'
BOTTOM OF HOLE - 30'

-5-43-52 Humid

+40 DRY
SIEVED

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY				
DWN		FIELD ENG		DATE DRILLED		AIRPHOTO NO:		CHAINAGE 300' South of CURVE		OFFSET NORTH END		TEST HOLE				
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
						PEAT										
2						BROWN - CLAY - SILTY SANDY			2	81	17	2	MOIST			
4						CL FINE PEBBLES LOW PLASTIC			4	86	14	0	WET			
6									6							
8									8	77	20	3	WET			
10						ICE & CL - Sc		ICE	10	195	55	43	2	FREE WATER		
12									12							
14						CL CLAY - SILTY SANDY PEBBLES		Vs	14	106	54	33	13	FREE WATER		
16									16							
18						ICE		ICE	18							
20						BROWN - CLAY - SILTY SANDY			20	77	22	1	SAT.			
22						CI MED. PLASTIC			22							
24									24	81	19	0	SAT			

BOTTOM OF HOLE. 30'

ICE FROM 28' - 30'

Inuvik - Tuk				DRILL HOLE REPORT				DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY								
DWN		FIELD ENG		DATE DRILLED 28/3/77		AIRPHOTO NO:		CHAINAGE 500 South of 2k		OFFSET		TEST HOLE				
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B.C.S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
						Peat 8"										
2						BROWN - CLAY SILTY PEBBLES			2					83-16	1	MOIST
4									4					74-21	5	SAT.
6						COBBLE OR BOULDER @ 4'1" - 5'			6							
8						LOW PLASTIC		V _c -V _r	8					81-16	3	WET
10									10					79-15	6	WET
12									12							
14									14					78-19	3	MOIST
16						15'			16							
18						BOTTOM OF HOLE - 15'			18							
20									20							
22									22							
24									24							

INUVIK - TUK.										DRILL HOLE REPORT		89+25		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY			
DWN		FIELD ENG		DATE DRILLED 28/3/77		AIR PHOTO NO:		CHAINAGE 600 South of 2L		OFFSET		TEST HOLE					
CKD		TECH PROBYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER					
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS	
										CLAY %	SILT %	SAND %	GRAVEL %				
										○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)							
										PLASTIC LIMIT ——— LIQUID LIMIT 20 40 60 80 100 100+							
2					CL	BROWN - 8" CLAY - SILTY/ SANDY			2		50	44	6	Moist			
4						PEBBLES - GRAVELLY			4		59	30	11	Moist			
6						LOW PLASTIC			6								
8						COBBLES OR BOULDERS			8		43	38	19	IVET			
10						TO 15'		V _c -V _r	10								
12									12		59	33	8	Moist			
14					CI	MED. PLASTIC			14		36	42	22	DAMP			
16									16								
18									18								
20						SILTY			20		43	6	1	Moist			
22									22								
24									24		95	50					
											30	60	5	Moist			

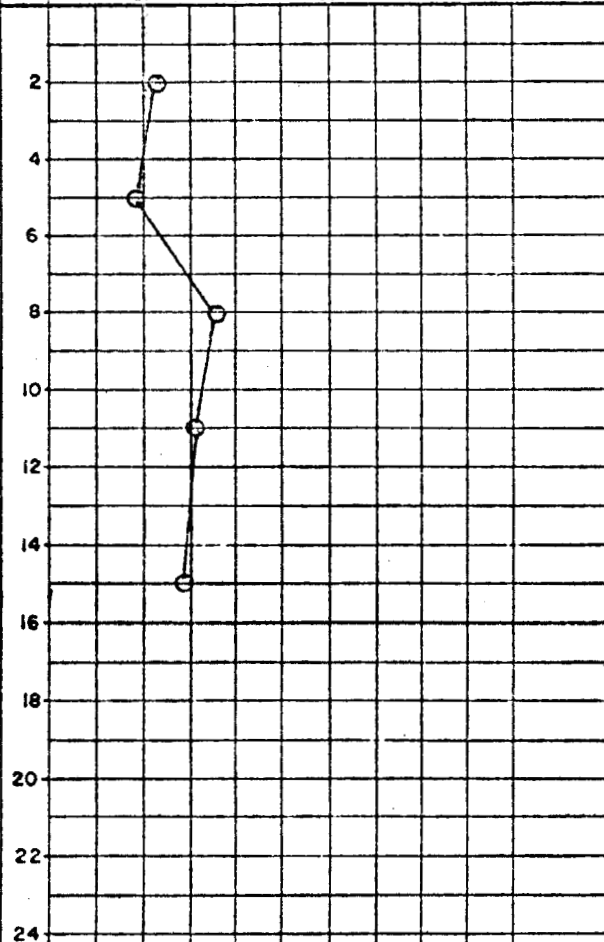
30'
BOTTOM OF HOLE - 30'

94-6-0 Moist

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY				
OWN		FIELD ENG		DATE DRILLED 28/3/77		AERIAL PHOTO NO:		CHAINAGE 84+50		OFFSET		TEST HOLE				
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B.C.S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
						PT PEAT 8"										
2						BROWN - CLAY / SILTY SANDY PEBBLES		V _c - V _r								
4						LOIV PLASTIC										
6						6'										
8						BROWN - CLAY - SILTY		V _s								
10						MED. PLASTIC										
12																
14																
16						15'										
18						BOTTOM OF HOLE - 15'										
20																
22																
24																

○ = WATER CONTENT (% OF DRY WEIGHT)
 △ = ICE CONTENT (% OF SAMPLE VOLUME)

PLASTIC LIMIT 20 40 60 80 100 100+



66-30 4 IVET
 56-34 10 IVET
 80-8 12 SAT.
 98-20 0 IVET
 98-20 0 MOIST

INUVIK-TUK.										DRILL HOLE REPORT										DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED 28/3/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE																	
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE		B,C,S		NUMBER													
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS											
												CLAY %	SILT %	SAND %	GRAVEL %														
						PEAT 8"		Vc-Vr	2																				
						BROWN-CLAY - SILTY SANDY																							
						MED. PLASTIC		Ms	4																				
					CI			Vs	6																				
								1	8																				
								Vc-Vr	10																				
									12																				
									14																				
									16																				
									18																				
									20																				
									22																				
									24																				

INUVIK - TULK.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY			
DWN		FIELD ENG.		DATE DRILLED 28/3/77		AIRPHOTO NO:		CHAINAGE 44+00		OFFSET		TEST HOLE			
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B.C.S NUMBER			
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS		WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS	
										CLAY %	SILT %				SAND %
						PEAT 8"				○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)					
2						BROWN -			2						
4						- CLAY		1/3	4						
6						- SILTY			6						
8					CI	MED. PLASTIC		V _c -V _r	8						
10									10						
12									12						
14									14						
16						15'			16						
18						BOTTOM OF HOLE - 15'			18						
20									20						
22									22						
24									24						

INUVIK - TUK.				DRILL HOLE REPORT				DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY								
OWN		FIELD ENG		DATE DRILLED 28/3/77		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE				
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
						PEAT .5										
2					CI	BROWN - CLAY			2							64-333 Moist
4						- SILTY SANDY			4							
6						- PEBBLES			6							65-305 Moist
8					SP	GRAVELLY SAND		VC-Vr	8							18-5824 SAT.
10									10							
12					CI	CLAY SILTY SANDY			12							71-1514 Moist
14									14							
16						15'			16							90-100 Moist
18									18							
20									20							
22									22							
24									24							



NOELL LAKE

SCALE 1"=3000'

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY						
DWN		FIELD ENG		DATE DRILLED 29/3/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE						
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER						
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %			
2						PEAT 8"		V _L -V _r	2	63	35	2	IVET					
4						CLAY - SILTY SANDY PEBBLES		V _L -V _r	4	83	17	0	IVET					
6						LOW PLASTIC		V _s	6									
8					CL			V _s	8	71	27	2	FREE WATER					
10								V _L -V _r	10	54	36	10	IVET					
12									12									
14						ICE		ICE	14									
16									16									
18						BROWN -		V _s	18									
20						-CLAY			20									
22					CL	SILTY SANDY			22									
24						LOW PLASTIC			24									

V_L-V_r

30'

BOTTOM OF HOLE - 30'

-76-24-0 FREE WATER

INUVIK - Tuk.										DRILL HOLE REPORT					DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED 29/3/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE												
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE		B,C,S		NUMBER								
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS						
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %									
						PEAT																		
2					Sc	BROWN - SAND SILTY GRAVELLY CLAYEY			2									21-5821 Moist						
4					CL	CLAY - SAND MIX		Vc-Vr	4									51-47 2 DAMP						
6					Sc	SAND-CLAYEY GRAVELLY SILTY			6															
8									8									13-5235 SAT.						
10									10															
12						ICE		ICE	12															
14						SAND & ICE LENSES			14															
16						BOTTOM OF HOLE - 15'			16															
18									18															
20									20															
22									22															
24									24															

Inuvik - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED 29/3/77		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE									
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE		B.C.S		NUMBER					
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS			
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %						
						PEAT BROWN - SANDY 4"			2									77-21 2 Moist			
						CI CLAY - SILTY PEBBLES 3'		V _c -V _r	4									18-71 11 WET			
						SAND - SILTY GRAVELLY			6												
					Sm				8									8-55 37 SAT.			
								V _s	10									14-74 12 FREE WATER			
									12												
									14												
									16												
									18												
						ICE		ICE	20												
									22												
									24												

ICE

ICE

30'
BOTTOM OF HOLE - 30'

INUVIK - Tuk.										DRILL HOLE REPORT				DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY					
DWN		FIELD ENG.		DATE DRILLED		AIRPHOTO NO.		CHAINAGE		OFFSET		TEST HOLE							
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV.		MILE		B,C,S		NUMBER			
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS	
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %				
										20	40	60	80	100	100+				
						PT PEAT 4"													
2						BROWN -			2									IVET	
4						- CLAY			4										
6						- SILTY			6	○								79-20 1 IVET	
8						- SANDY			8		○							93-6 1 IVET	
10						- PEBBLES		Nc-Vr	10										
12						LOW-MED. PLASTIC			12										
14									14										
16						15'			16	○								80-19 1 IVET	
18						BOTTOM OF HOLE - 15'			18										
20									20										
22									22										
24									24										

INUVIK - Tuk.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

OWN		FIELD ENG.		DATE DRILLED		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE				
CKD		TECH PRONYCH		RIG: AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B.C.S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME) PLASTIC LIMIT 20 40 60 80 100 100+ LIQUID LIMIT																
2						PE - 2" SAND - CLAYEY			2							3A-61 5 DAMP
4						Sc - GRAVELLY SILTY		V _x	4							12-6523 DAMP
6								V _c V _r	6							
8						8' ~~BOTTOM OF HOLE 8'~~			8							19-5526 SAT.
10						9' ICE		ICE	10							
12									12							
14									14							
16						15' BOTTOM OF HOLE 15'			16							
18									18							
20									20							
22									22							
24									24							

Inuvik - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY					
DWN		FIELD ENG		DATE DRILLED		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE					
CKD		TECH PRONYCH		RIG: AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER					
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
											CLAY %	SILT %	SAND %	GRAVEL %			
2						CLAY - SANDY		VC-Vr	2	○	31	58	11	Moist			
4						SAND - SILTY CLAYEY		I	4	○	12	61	27	Moist			
6					Sc	GRAVELLY		Vs	6	○	29	57	14	SAT.			
8									8	○	29	57	14	SAT.			
10						PEBBLES			10	○	37	59	4	Free WATER			
12						CLAY - SILTY SANDY			12	○	78	22	0	SAT.			
14									14	○	78	22	0	SAT.			
16						LOW PLASTIC			16	○	67	31	2	SAT.			
18					CL				18	○	67	31	2	SAT.			
20									20	○	67	31	2	SAT.			
22									22	○	68	32	0	WET			
24									24	○	68	32	0	WET			

BOTTOM OF HOLE - 30'
DIRTY ICE - 27'-30'

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY				
DWN		FIELD ENG		DATE DRILLED 29/3/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE				
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV:		MILE B.C.S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
						PEAT 4"										
2						BROWN -			2	84	16	0		IVET		
4						CLAY			4							
						- SILTY										
						- SANDY			6	72	21	7		IVET		
						CI			8	83	17	0		IVET		
						FELY PEBBLES										
						MED. & LOW			10							
						CL		VL - VR	12	82	17	1		IVET		
						PLASTIC			14							
									16	89	11	0		IVET		
									18							
									20	88	11	1		IVET		
									22							
									24	84	15	1		Moist		

Bottom of Hole - 30'

-79-16-5 Moist

Inuvik - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY				
DWN		FIELD ENG		DATE DRILLED 28/3/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		ELEV		TEST HOLE		
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:								
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
						PEAT										
2						GRAVEL-CLAY-SAND MIXTURE		V _c -V _r	2					30-45	25	MOIST
4									4					27-48	25	WET
6					Gc				6							
8									8					21-38	41	SAT
10								V _s	10					68-9	23	FREE WATER
12									12							
14						ICE		ICE	14					38-41	21	FREE WATER
16					Sc	SAND-GROVELLY CLAYEY SILTY		V _s	16							
18									18							
20									20							
22						ICE		ICE	22							
24									24							

ICE

ICE

30'

BOTTOM OF HOLE - 30'

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED 29/2/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		ELEV		TEST HOLE							
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:													
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS			
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %						
2						PEAT BROWN - CLAY - SILTY - SANDY C1 FEW PEBBLES MED. PLASTIC		VS	2	82	17	1					SAT.				
4									4	85	15	0					SAT.				
6									6												
8									8	79	19	2					SAT.				
10									10												
12									12	81	17	2					FREE WATER				
14									14												
16						ICE & SOME SOIL		ICE	16												
18									18												
20									20												
22									22												
24									24												

BOTTOM OF HOLE - 29'

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY				
DWN		FIELD ENG		DATE DRILLED 30/3/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE				
CKD		TECH. RONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV:		MILE B,C,S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
						GRAVEL-SAND CLAY MIXTURE				○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME) PLASTIC LIMIT 40 LIQUID LIMIT 60						
2									2							31-3534 Moist
4									4							26-3836 Moist
6									6							
8									8							26-4826 Moist
10									10							25-3342 WET
12									12							
14									14							27-5122 WET
16									16							
18									18							
20									20							
22									22							
24									24							

Gc

VL - Vr

15'

BOTTOM OF HOLE - 15'

HOLE SLOUGHING

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY				
DWN		FIELD ENG		DATE DRILLED 30/3/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE				
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY	SILT	SAND	GRAVEL			
										O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)						
										PLASTIC LIMIT 40 LIQUID LIMIT 80						
2						Pt PEAT - BLACK		V _s	2							DAMP
4						BROWN -			4							
6						- CLAY			6							80-19 1 SAT.
8						- SANDY			8							78-20 2 WET
10						- SILTY			10							82-18 0 Moist
12						MED. PLASTIC		V _c - V _r	12							
14						PEBBLES			14							73-20 7 Moist
16									16							
18									18							
20									20							76-20 4 Moist
22									22							
24									24							88-10 2 DAMP

BOTTOM OF HOLE - 25'

Inuvik - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY						
OWN		FIELD ENG.		DATE DRILLED 30/3/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE						
CKD		TECH. RYONCH		RIG: AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER						
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %			
						PT PEAT .5		VC-Vr	2			83	16	1		Moist		
						BROWN -		VC-Vr	4			86	13	1		WET		
						- CLAY		VC-Vr	6									
						- SILTY		VS	8			80	19	1		WET		
						- SANDY			10			82	15	3		Moist		
						PEBBLES			12									
						LOW-MED PLASTIC			14			86	13	1		Moist		
									16									
									18									
									20			77	15	8		SAT.		
									22									
									24			64	25	11		WET		

Bottom of Hole - 30'

-52-42-6 WET

Inuvik-Tuk				DRILL HOLE REPORT				DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY								
DWN		FIELD ENG.		DATE DRILLED 30/3/77		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE				
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B.C.S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
						PEAT 8"										
2						BROWN -		Vs								
4						- CLAY		I								
6					CL	SILTY SAND		Vc - Vr								
8						GRAVELLY TO 13'										
10						LOW PLASTIC										
12						BROWN - SANDY										
14					Sc	CLAYEY SILT		Vs								
16																
18																
20						ICE		ICE								
22																
24					CL	CLAY SILTY SANDY										
						WITH SOME SAND PEBBLES										
						GRAVEL - SAND MIX										
						CLAYEY										
						BOTTOM OF HOLE - 30'										

300

-12-4444 WET

Inuvik - Tuk										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY												
DWN		FIELD ENG		DATE DRILLED 30/6/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE												
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER												
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)						GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS		
										PLASTIC LIMIT 20 40 60 80 100 100+ LIQUID LIMIT 80 100 100+						CLAY %	SILT %	SAND %	GRAVEL %					
2						PEAT			2															
4									4															
6								VS	6															
8									8															
10									10															
12									12															
14						CLAY - SILTY - PEBBLES SAND 13'		VL-Vr	14															
16									16															
18									18															
20									20															
22									22															
24									24															

DRILL HOLE REPORT.

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

INUVIK - Tuk.

DATE DRILLED 30/3/77

AIRPHOTO NO:

SURFACE DRAINAGE:

CHAINAGE:

VEGETATION:

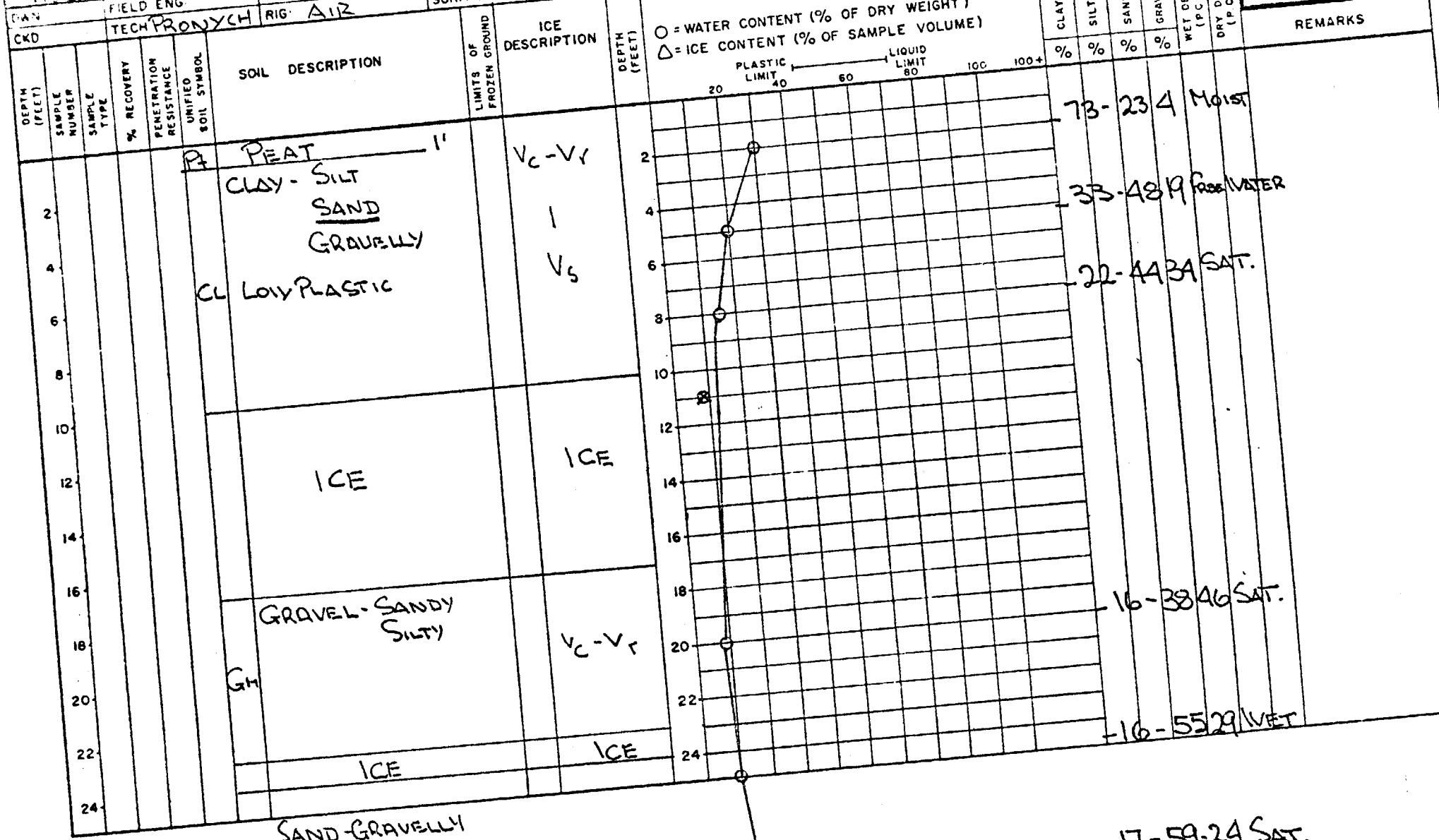
OFFSET:

ELEV:

TEST HOLE

MILE B.C.S NUMBER
15

REMARKS



SM SAND-GRAVELLY SILTY
BOTTOM OF HOLE - 30'

30'

INUVIK - Tuk-				DRILL HOLE REPORT				DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY								
DOWN		FIELD ENG		DATE DRILLED 20/3/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE				
CKD		TECH PRONYCH		RIG: AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
						PT PEAT 8"										
2						CLAY - SILTY SAND			2							
4						SC SAND - CLAY SILTY		V _c -V _r	4							
6									6							
8						SM SAND - SILTY PEBBLES			8							
10									10							
12						ICE OCCASSIONAL SAND LENSE		ICE	12							
14									14							
16									16							
18									18							
20						SM SAND - SILTY PEBBLES		V _c -V _r	20							
22									22							
24									24							

30'
BOTTOM OF HOLE - 30'

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY						
OWN		FIELD ENG.		DATE DRILLED 3/77		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE						
CND		TECHRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER						
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										PLASTIC LIMIT 20 40 60 80 100 100+	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %			
2						Peat 1'			2			29	52	19			DAMP	
4						SAND-CLAY ORG. Mix		V _x	4			25	39	36			WET	
6								V _{L-V_r}	6									
8									8			22	45	33			SAT.	
10						Gc GRAVEL - SANDY			10									
12						SILTY			12			16	34	50			DAMP	
14						CLAYEY			14									
16								V _x	16			20	53	27			DAMP	
18									18									
20									20			13	21	66			DAMP	
22									22									
24									24			26	43	31			DAMP	

POOR CIRCULATION

30'
BOTTOM OF HOLE - 30'

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
OWN		FIELD ENG.		DATE DRILLED 30/3/77		AIR PHOTO NO:		CHAINAGE:		OFFSET:		ELEV		TEST HOLE							
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:													
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS			
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %						
2						Peat 1"			2												
4						GROVEL-CLAY-SAND MIXTURE		V _c -V _r	4												
6									6												
8									8												
10									10												
12									12												
14						ICE		ICE	14												
16									16												
18						SMALL CLAY LENSE @ 17'			18												
20									20												
22									22												
24									24												

ICE

ICE

30'

BOTTOM OF HOLE - 30'

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
OWN		FIELD ENG.		DATE DRILLED 30/3/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE									
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER									
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS			
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %						
2						PEAT 8"			2	65	31	4									
4						CLAY - SANDY SILTY PEBBLES		VC - Vr	4	71	23	6									
6						LOW PLASTIC			6												
8									8	69	27	4									
10						ICE		ICE	10	15	38	47									
12						GRAVEL - SANDY		VC - Vr I	12												
14								Vs	14	9	44	47									
16						CLAY - SILTY			16												
18						MED. PLASTIC			18												
20									20	92	4	4									
22						BOTTOM OF HOLE .20'			22												
24									24												

NOTES

30'
BOTTOM OF HOLE - 30'

Inuvik - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY																
OWN		FIELD ENG.		DATE DRILLED 30/3/77		AIR PHOTO NO:		CHAINAGE:				OFFSET		ELEV.		TEST HOLE												
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:				VEGETATION:				ELEV.		MILE B.C.S. NUMBER												
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)										GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS		
										PLASTIC LIMIT 20 40 60 80 100 100+ LIQUID LIMIT										CLAY	SILT	SAND	GRAVEL					
																				%	%	%	%					
2						ORGANIC & ICE		ICE & Pt	2																			
4									4																			
6									6																			
8									8	No SAMPLE																		
10						SANDY GRAVEL	9'		10																			
12						SILTY CLAY & ICE		ICE + CL	12																			
14									14																			
16						BOTTOM OF HOLE - 15'			16																			
18									18																			
20									20																			
22									22																			
24									24																			

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG.		DATE DRILLED 21/3/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		ELEV		TEST HOLE							
CKD		TECH PRONYCH		RIG: AIR		SURFACE DRAINAGE:		VEGETATION:													
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS			
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %						
2						Peat			2												
4						CLAY - SILTY SANDY PEBBLES			4												
6						LOW - MED. PLASTIC			6												
8									8												
10									10												
12						SAND - SILTY CLAYEY GRAVELLY			12												
14									14												
16									16												
18									18												
20									20												
22									22												
24									24												

30'

BOTTOM OF HOLE - 30'

SAT

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE									
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV											
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS			
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %						
										20	40	60	80	100	100+						
2						PT PEAT			2												
4						GRAVEL - SILTY SANDY		V _c - V _r	4												
6						CLAY - SILTY SANDY GRAVELLY			6												
8									8												
10						ICE		ICE	10												
12						CLAY - SILTY		V _s	12												
14									14												
16						BOTTOM OF HOLE - 15'			16												
18									18												
20									20												
22									22												
24									24												

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY						
DWN		FIELD ENG		DATE DRILLED 5/3/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		ELEV		TEST HOLE				
CKD		TECH PRONYCH		RIG: AIR		SURFACE DRAINAGE:		VEGETATION:										
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %			
2						A PEAT			2									
4						CLAY - SILTY SANDY PEBBLES			4									
6									6									
8									8									
10						C MED-HIGH PLASTIC			10									
12						CH		V _c -V _r	12									
14									14									
16									16									
18						ALTERNATING LAYERS OF CLAY & ICE		ICE & CI	18									
20									20									
22									22									
24						AS ABOVE			24									

BOTTOM OF HOLE - 26'

INUVIK - Tuk.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

OWN		FIELD ENG		DATE DRILLED 3/3/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE				
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
										○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME) PLASTIC LIMIT 20 40 60 80 100 100+ LIQUID LIMIT 40 60 80 100 100+						
2						PT 8 ICE			2							
4					SM	SAND - SILTY GRAVELLY		VS	4							
6									6							
8					ML	SILT - CLAYEY SANDY 9'		I	8							
10						SAND - SILTY		Vc-Vr	10							
12									12							
14					SM				14							
16									16							
18									18							
20									20							
22									22							
24									24							

30'
BOTTOM OF HOLE - 30'

-26-74-0 Moist

17-67 16 FREE WATER

66-34 0 SAT.

22-77 1 Moist

21-79 0 Moist

30-70 0 Moist

-27-73 0 Moist

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG.		DATE DRILLED 31/3/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE									
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER									
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS			
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %						
2						PI PEAT 1.5'			2												
4						CLAY - SILTY SANDY FEW PEBBLES			4												
6						LOW - MEDIUM PLASTIC		VS	6												
8					CL				8												
10					CI				10												
12									12												
14									14												
16						SAND - SILT 1.5'		VC-Vr	16												
18					ML	MIXTURE			18												
20					SM				20												
22									22												
24									24												

SM SAND - SILTY

BOTTOM OF HOLE - 30'

-13-87-0 WET

1 of 2

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY				
DWN		FIELD ENG.		DATE DRILLED 3/3/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE				
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B.C.S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
						SAND - SILTY										
2									2	11	83	6	DAMP			
4									4	48	52	0	Free WATER			
6									6							
8									8	21	79	0	Moist			
10									10							
12									12	15	85	0	WET			
14									14	14	86	0	WET			
16									16							
18									18							
20									20	31	69	0	SAT			
22									22							
24									24	19	81	0	WET			

OVER

2 OF 2

DRILL HOLE REPORT										DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG.		DATE DRILLED		AIRPHOTO NO.		CHAINAGE		OFFSET		TEST HOLE							
CKD		TECH		RIG		SURFACE DRAINAGE		VEGETATION		ELEV		MILE B,C,S NUMBER							
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS			
										CLAY %	SILT %	SAND %	GRAVEL %						
										○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)									
										PLASTIC LIMIT	LIQUID LIMIT								
										40	80								
										100	100+								
2						SAND			30			28	72	0	SAT.				
4						- SILTY			32										
6								V _c -V _r	34			25	75	0	WET				
8									36										
10									38										
12									40			24	76	0	WET				
14									42										
16									44			22	78	0	MOIST				
18									46										
20									48										
22									50										
24									52										
						Bottom of Hole - 75'													

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

1991

INUVIK - Tuk.										DRILL HOLE REPORT										DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
OWN		FIELD ENG		DATE DRILLED 24/3/77		AIR PHOTO NO:		CHAINAGE		OFFSET		TEST HOLE																	
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER																	
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)						GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS							
										PLASTIC LIMIT 20 40 60 80 100 100+ LIQUID LIMIT						CLAY	SILT	SAND	GRAVEL										
										%	%	%	%																
2						Pt PEAT 1'			2																				
4						CLAY - SILTY		Vs	4																				
6									6																				
8							9'		8																				
10						ICE		ICE &	10																				
12						SOME SOIL 13'		CL	12																				
14						CLAY - SILTY			14																				
16						REIN PEBBLES			16																				
18								Vs	18																				
20									20																				
22									22																				
24									24																				

4073

30'
Bottom of Hole 30'

INUVIK - Tuk										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG.		DATE DRILLED: 14/11		AIRPHOTO NO:		CHAINAGE:		OFFSET:		ELEV		TEST HOLE							
CKD		TECH: PRONYCH		RIG: AIR		SURFACE DRAINAGE:		VEGETATION:													
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS		WET DENSITY (PCF)	DRY DENSITY (PCF)	MILE	B,C,S	NUMBER					
										CLAY %	SILT %						SAND %	GRAVEL %			
2					PT	PEAT 2'			2			53-389				FREE WATER					
4						CLAY - SILTY SANDY GRAVELLY			4			40-3426				FREE WATER					
6					CL	PEBBLES LOW PLASTIC		VS	6												
8									8			85-141				SAT.					
10									10												
12									12			68-284				SAT. H.I.B.					
14					SM	SAND - SILTY GRAVELLY 13'			14			17-6221				SAT.					
16									16												
18									18												
20								VS	20			7-7518				SAT.					
22									22												
24					SM	SAND - SILTY			24			13-861				FREE WATER					

30'

BOTTOM OF HOLE - 30'

-53-47-0 SAT.

Inuvik - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY											
DWN		FIELD ENG.		DATE DRILLED 11/4/77		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE											
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE		B.C.S		NUMBER							
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)						GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS	
										PLASTIC LIMIT ——— LIQUID LIMIT 20 40 60 80 100 100+						CLAY	SILT	SAND	GRAVEL				
																%	%	%	%				
2						PEAT			2														
4						CLAY - SILTY SANDY PEBBLES		V _s	4														
6									6														
8									8														
10									10														
12						ICE		ICE	12														
14									14														
16									16														
18						LENSES OF ICE & CLAY		ICE & CL	18														
20									20														
22								V _C - V _r	22														
24						CLAY - SILTY		V _s	24														

28'
Bottom of Hole - 28'

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

Bottom of Hole - 30'

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY													
DWN		FIELD ENG.		DATE DRILLED 14/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		ELEV		TEST HOLE											
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:																	
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)						GRAIN SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS			
										PLASTIC LIMIT		LIQUID LIMIT		CLAY	SILT	SAND	GRAVEL	%	%				%	%	
										20	40	60	80	100	100+	%	%	%	%						
2						ICE & PEAT		ICE & P ₊	2																
4						CLAY - SILTY SANDY PEBBLES 6" GRAVEL LENSES @ 6' & 13' 15'		V _S	4																
6					6																				
8					8																				
10					10																				
12					12																				
14					14																				
16					16																				
18					18																				
20					20																				
22					22																				
24					24																				
						BOTTOM OF HOLE - 15'																			

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY				
DWN		FIELD ENG.		DATE DRILLED 14/11		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE				
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
						A PENT 1'				O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)						
						CLAY - SILTY SANDY PEBBLES				PLASTIC LIMIT 40 LIQUID LIMIT 80 20 40 60 80 100 100+						
2									2							
4									4							
6						6" GRAVELLY LAYERS		Uc-Vr	6							
8						@ 8' + 11' + 14'			8							
10									10							
12									12							
14						WET OR SAT. ON THAWING. 15'			14							
16									16							
18						BOTTOM OF HOLE. 15'			18							
20									20							
22									22							
24									24							

Inuvik - Tuk										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY			
DWN		FIELD ENG		DATE DRILLED 14/77		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE			
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER			
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS		WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS	
										CLAY %	SILT %				
						PEAT									
2					SM	SAND - SILTY GRAVELLY		Vc-Vr	2			26-4925		DAMP	
4									4			16-4836		SAT.	
6							7'		6						
8						ICE & SAND	9'	ICE & SM	8						
10					GH	GRAVEL - SANDY SILTY			10			21-3148		SAT.	
12									12						
14									14			79-2102		FREE WATER	
16					CL	CLAY - SILTY SANDY	15'		16						
18					SM	SAND - SILTY GRAVELLY	17'		18						
20								Vs	20			11-7811		SAT.	
22									22						
24									24			8-8012			
												8-512		SAT.	

SM PERCLES

30'

BOTTOM OF HOLE - 30'

-13-84-3 FREE WATER

INUVIK - Tuk										DRILL HOLE REPORT										DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED 14/77		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE																	
CKD		TECH PRONYCH		RIG: AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV:																			
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)					GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS								
										PLASTIC LIMIT 20 40 60 80 100 100+ LIQUID LIMIT					CLAY	SILT	SAND	GRAVEL											
										%	%	%	%																
2						ICE & PEAT		ICE +	2																				
4						SAND - SILTY PEBBLES 6'	4'	Pl	4																				
6						GRAVEL - SANDY SILTY 9'			6																				
8									8																				
10						SILT - SANDY CLOVEN		Vs	10																				
12									12																				
14									14																				
16									16																				
18									18																				
20									20																				
22									22																				
24									24																				

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY														
DWN		FIELD ENG.		DATE DRILLED 14/77		AIRPHOTO NO.		CHAINAGE		OFFSET		TEST HOLE														
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE		VEGETATION		ELEV		MILE B,C,S NUMBER														
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)						GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS				
										PLASTIC LIMIT ——— LIQUID LIMIT 20 40 60 80 100 100+						CLAY	SILT	SAND	GRAVEL							
															%	%	%	%								
2						ICE & PEAT		ICE & P	2																	
4									4																	
6									6																	
8						CLAY - SILTY FEW PEBBLES		Vs	8	NO SAMPLES																
10									10																	
12									12																	
14									14																	
16									16																	
18									18																	
20									20																	
22									22																	
24									24																	

Inuvik - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY				
OWN		FIELD ENG		DATE DRILLED 14/11		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE				
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B.C.S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
										O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)						
										PLASTIC LIMIT 20 40 60 80 100 100+ LIQUID LIMIT						
2						ICE & PEAT		ICE & P ₊	2							
4							4'		4							
6						CLAY - SILTY - SANDY - PEBBLES			6							
8					CL				8							
10						GRAVELLY FROM			10							
12						6'-9'			12							
14					CI			V _s	14							
16									16							
18									18							
20									20							
22									22							
24									24							

Bottom of Hole - 30' 30'

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

NOTE

Bottom of Hole - 30'

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY				
OWN		FIELD ENG		DATE DRILLED 14/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE				
CKD		TECH PRONCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B.C.S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
						PEAT 4"										
2					SM	SAND - SILTY GRAVELLY			2					25-56	19	DAMP
4									4					26-52	22	SAT.
6									6							
8								V _s	8					21-53	26	SAT.
10						GRAVEL - SAND MIXTURE			10					9-50	41	SAT
12									12							
14									14					8-47	45	SAT.
16					GM	SILTY			16							
18									18							
20									20					31-32	37	FRESH WATER
22									22							
24									24					98-20		SAT.

CLAY - SILTY
CI MED. PLASTIC

V_s

30'
BOTTOM OF HOLE - 30'

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED		AIRPHOTO NO:		CHAINAGE		OFFSET		ELEV		TEST HOLE							
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:													
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS			
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %						
						Peat 6"															
2						SAND - SILTY GRAVELLY		V _c -V _r	2												
4					SM				4												
6									6												
8					CL	CLAY - SILTY 7'			8												
10					SM	SAND - SILTY 10'		V _s	10												
12									12												
14					CI	CLAY - SILTY SANDY PEBBLES 15'			14												
16						BOTTOM OF HOLE - 15'			16												
18									18												
20									20												
22									22												
24									24												

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

6972

Inuvik - Tuk.										DRILL HOLE REPORT										DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG.		DATE DRILLED		AIRPHOTO NO.		CHAINAGE		OFFSET		TEST HOLE																	
CKD		TECH		RIG		SURFACE DRAINAGE		VEGETATION		ELEV		MILE		B,C,S		NUMBER													
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)										GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS			
										PLASTIC LIMIT ——— LIQUID LIMIT 20 40 60 80 100 100+										CLAY	SILT	SAND	GRAVEL						
																				%	%	%	%						
2						P ₇ PEAT 2'			2																				
4						CLAY - SILTY SANDY PEBBLES		V _s	4																				
6						6" GRAVEL LENSES @ 5'			6																				
8						ICE		ICE	8	NO SAMPLE																			
10								10																					
12								12																					
14								14																					
16						GRAVEL - SANDY 15'		V _s	16																				
18						BOTTOM OF HOLE - 15'			18																				
20								20																					
22								22																					
24								24																					

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

2072

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY			
DWN		FIELD ENG		DATE DRILLED 14/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE			
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER			
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS		WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS	
										CLAY %	SILT %				SAND %
						PEAT 4"									
2						SAND - SILTY			2			32-662		FRESH WATER	
4					SM	GRAVEL - SANDY			4			23-3641		SAT.	
6					GM	SILTY			6						
8									8						
10					SM	SAND - SILTY			10						
12						PEBBLES			12						
14									14						
16									16			40-591		SAT.	
18									18						
20						GRAVELLY			20			13-5235		SAT.	
22									22						
24					SM				24			40-4317		SAT.	

Bottom of Hole - 30'

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

[illegible]

Inuvik - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY			
OWN		FIELD ENG.		DATE DRILLED 14/77		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE			
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER			
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS		WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS	
										CLAY %	SILT %				SAND %
						CLAY-SILT - SAND PEBBLES									
2					CL	LOW PLASTIC			2					35-54 11 REWATER	
4									4					59-39 2 REWATER	
6									6						
8					SC	SAND-SILTY CLAYEY PEBBLES			8					40-59 1 SAT.	
10									10					78-15 7 MOIST	
12						CLAY-SILT - SAND GRAVELLY			12						
14					CL				14					31-44 25 MOIST	
16									16						
18									18						
20									20					40-39 21 MOIST	
22									22						
24						GRAVEL-SAND-SILT MIXTURE			24					22-40 38 SAT.	

GM

30' 0

BOTTOM OF HOLE - 30'

-12-41-47-IVET

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY						
OWN		FIELD ENG.		DATE DRILLED 14/77		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE						
CKD		TECH PRONVCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV:		MILE B.C.S. NUMBER						
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %			
2					Pt	PEAT			2	36.4								SAT
4						Black PEAT			4	150.5								SAT
6					Pt				6									
8									8	74.3								FREE WATER
10						SAND - SILTY GRAVELLY			10									FREE WATER
12					SH				12									
14									14									
16						CLAY - SILTY			16									20-54.26 SAT.
18									18									
20					CI	SANDY PEBBLES			20									89.9 2 Moist
22									22									
24									24									78.19 3 WET

GRAVEL - SAND - SILT
GM MIXTURE 27'
Bottom of Hdr - 30'

-16-43-41 SAT.

1 OF 2

INUVIK - Tuk.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN		FIELD ENG	DATE DRILLED	AIR PHOTO NO:	CHAINAGE:	OFFSET	TEST HOLE													
CKD		TECH	RIG	SURFACE DRAINAGE:		VEGETATION:	ELEV		MILE	B,C,S	NUMBER									
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME) PLASTIC LIMIT 40 LIQUID LIMIT 60 20 40 60 80 100 100+ GRAIN-SIZE ANALYSIS <table border="1"> <tr> <td>CLAY</td> <td>SILT</td> <td>SAND</td> <td>GRAVEL</td> </tr> <tr> <td>%</td> <td>%</td> <td>%</td> <td>%</td> </tr> </table> WET DENSITY (PCF) DRY DENSITY (PCF)			CLAY	SILT	SAND	GRAVEL	%	%	%	%
CLAY	SILT	SAND	GRAVEL																	
%	%	%	%																	
REMARKS																				
2						PEAT		VS	2	SAT.										
4						CLAY - SILTY SANDY			4	2A-62 14 SAT.										
6						SAND - SILTY GRAVELLY			6											
8						Rock BIT USED D-15'			8	36-49 15 WET										
10									10	27-59 14 DAMP										
12								Vc-Vr	12											
14									14	8-73 19 WET										
16									16											
18									18											
20									20	17-49 34 SAT										
22									22											
24									24	16-58 26 SAT										

OVER

2 of 2

DRILL HOLE REPORT										DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DOWN		FIELD ENG.		DATE DRILLED		AIRPHOTO NO.		CHAINAGE		OFFSET		TEST HOLE							
CKD		TECH		RIG		SURFACE DRAINAGE		VEGETATION		ELEV		MILE B.C.S. NUMBER							
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS			
										CLAY %	SILT %	SAND %	GRAVEL %						
						SAND - GROVELLY SILTY CLAYEY			30	13	56	31	SAT						
2					Sc				32										
4									34										
6									36	15	70	15	WET						
8								Vc-Vr	38										
10									40	45	46	9	WET						
12									42										
14									44										
16									46	13	65	22	WET						
18						BOTTOM OF HOLE - 45'			18										
20									20										
22									22										
24									24										

Inuvik - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED 24/77		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE									
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION		ELEV		MILE B,C,S NUMBER									
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS			
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %						
						CLAY - SILTY SANDY - GRAVELLY		V _c -V _r	2	56	23	21					DAMP				
						SAND - GRAVEL MIXTURE		V _s	4	15	60	25					SAT.				
					GP				8	11	37	52					SAT				
									10	9	65	26					SAT.				
						Rock Bit USED AFTER 15'			15	135	23	28	49				FREE WATER				
						SAND - SILTY GRAVELLY		V _s	20	34	60	6					SAT.				
					SM				24	18	50	32					SAT				

30'
BOTTOM OF HOLE - 30'

-24-65-14
FREE WATER

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
OWN		FIELD ENG.		DATE DRILLED 24/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		ELEV.		TEST HOLE							
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:						MILE B.C.S NUMBER							
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)				GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS	
										CLAY %	SILT %	SAND %	GRAVEL %								
2					PT	PEAT			2	102	47	49	4			FREE WATER					
4					CL	CLAY - SILTY SANDY PEBBLES 3'			4		32	55	13			FREE WATER					
6					SM	SAND - SILTY GRAVELLY		VS	6												
8									8		29	61	10			SAT.					
10									10												
12									12	120	65	34	1			FREE WATER					
14						ICE & CLAY		ICE & CL	14												
16									16	511	75	22	3			FREE WATER					
18									18												
20						SAND - GRAVELLY SILTY		VS	20		13	43	39			SAT.					
22					GM				22												
24									24		15	74	11			SAT.					

OVER

2 of 2

DRILL HOLE REPORT										DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY						
DWN		FIELD ENG		DATE DRILLED		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE				
CKD		TECH		RIG		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B.C.S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
										O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)						
										PLASTIC LIMIT	LIQUID LIMIT					
										40	60	80	100	100+		
									30						26-104	SAT.
2						SAND - SILTY CLAYEY PEBBLES			32							
4									34						30-628	SAT
6									36							
8									38							
10									40						42-562	SAT.
12									42							
14						GRAVELLY 45'			44						11-5930	SAT.
16									46							
18						BOTTOM OF HOLE - 45'			18							
20						Rock BIT USED			20							
22									22							
24									24							

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY					
DWN		FIELD ENG.		DATE DRILLED 2/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE					
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV:		MILE B.C.S NUMBER					
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS	
										CLAY	SILT	SAND	GRAVEL				
										○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)							
										PLASTIC LIMIT ——— LIQUID LIMIT 20 40 60 80 100 100+							
2						P+ PEAT			2							156	FREE WATER
4						SC SAND - CLAYEY SILTY PEBBLES			4							29-68	3 FREE WATER
6									6								
8									8							23-73	4 SAT.
10						SM SILTY GRAVELLY PEBBLES		VS	10							21-53	26 WET
12									12								
14									14							275	55-38 7 FREE WATER
16									16								
18									18								
20									20							18-76	6 FREE WATER
22									22								
24						GRAVELLY			24							-13-	5532 SAT.

OVER

DRILL HOLE REPORT										DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY						
DWN		FIELD ENG		DATE DRILLED		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE				
CKD		TECH		RIG		SURFACE DRAINAGE		VEGETATION		ELEV		MILE B,C,S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
										○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)						
										PLASTIC LIMIT 40 LIQUID LIMIT 80 100 100+						
						SAND-SILTY SM . PEBBLES		Vs	30					17-79	4	SAT
2									32							
4								1	34					10-84	6	SAT
6								Vc - Vr	36							
8									38							
10									40					9-77	14	WET
12									42							
14						GRAVELLY			44							
16							45'		46					8-51	41	SAT
18						BOTTOM OF HOLE-45'			18							
20						Rock Bit USED			20							
22									22							
24									24							

Inuvik - Tuk				DRILL HOLE REPORT				DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY							
DWN	FIELD ENG	DATE DRILLED	AIRPHOTO NO:	CHAINAGE:	OFFSET	TEST HOLE									
CKD	TECH	RIG	SURFACE DRAINAGE:	VEGETATION:	ELEV	MILE	B,C,S								
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)	PLASTIC LIMIT 20 40 60 80 100 100+	LIQUID LIMIT 80 100 100+	GRAIN-SIZE ANALYSIS CLAY % SILT % SAND % GRAVEL %	WET DENSITY (P.C.F.) DRY DENSITY (P.C.F.)	REMARKS 54
2					P+	PEAT			2						
4					SM	SAND - GRAVELLY SILTY		Vs	4						
6									6						
8									8						
10									10						
12					CL	Rock BIT USED CLAY - SILTY SANDY PEBBLES			12						
14									14						
16						ICE		ICE	16						
18									18						
20					SM	SAND - GRAVELLY SILTY		Vs	20						
22									22						
24									24						

PEBBLES

BOTTOM OF HOLE - 30'

-22-69.9 SAT.

INUVIK - Tuk										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
OWN		FIELD ENG		DATE DRILLED		AIRPHOTO NO.		CHAINAGE		OFFSET		TEST HOLE									
CKD		TECH		RIG		SURFACE DRAINAGE		VEGETATION		ELEV		MILE B.C.S. NUMBER									
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS					
										CLAY %	SILT %	SAND %	GRAVEL %								
						PEAT .5'															
2						CLAY - SILTY SANDY			2							81 - 190 Mast					
4						MED. PLASTIC 4'			4							21 - 60 19 SAT.					
6						SAND - SILTY GRAVELLY			6												
8									8							12 - 60 28 FREE WATER					
10									10												
12									12							14 - 69 17 FREE WATER					
14									14							14 - 50 36 FREE WATER					
16									16												
18						CLAY - SILTY SANDY PEBBLES 17'			18												
20									20							5120 - 70 - 93 7 FREE WATER					
22									22												
24						Rock Bit USED			24							61 - 33 6 IVET					
						SAND - SILTY GRAVELLY										1770 - 19 - 66 - 15 FREE WATER					

Bottom of Hole - 30'

1 OF 2

INUVIK - Tuk										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY			
DWN		FIELD ENG		DATE DRILLED 24/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE			
CKD		TECH PRONYH		RIG: AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER			
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS		WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS	
										CLAY %	SILT %				
2						SAND-GRAVELLY SILTY			2			15-54	31	SAT.	
4						Rock BIT USED TO 15'			4			38-37	25	WET.	
6						PEBBLES			6						
8							9'		8			51-42	7	FREE WATER	
10						ICE		ICE	10						
12							13'		12						
14						CLAY - SILTY SANDY			14			88-12	0	FREE WATER	
16									16						
18						SAND-GRAVELLY SILTY			18						
20									20			12-49	39	SAT.	
22									22						
24									24			9-80	11	SAT.	

OVER

2 of 2

DRILL HOLE REPORT										DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE							
CKD		TECH		RIG		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER							
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS	
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %				
						SAND-SILTY			30	20	40	17	33	0	16	PREWATER			
2									32										
4					SM	RBBLBS			34			12	84	4	16	PREWATER			
6									36										
8									38			9	88	3					
10									40			~~9~~	~~88~~	~~3~~		PREWATER			
12									42										
14									44			3	90	7	16	PREWATER			
16						BOTTOM OF HOLE. 45'			46										
18									18										
20									20										
22									22										
24									24										

INUVIK - Tyk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY						
DWN		FIELD ENG		DATE DRILLED 2/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE						
CKD		TECH PRONYCH		RIG: AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV:		MILE B.C.S NUMBER						
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS		
										CLAY %	SILT %	SAND %	GRAVEL %					
2						R Peat		Vs	2									
4										4								
6										6								
8										8								
10						CLAY - SILTY SANDY PEBBLES		Vs	10									
12										12								
14										14								
16										16								
18						Bottom of Hole 15'			18									
20									20									
22									22									
24									24									

○ = WATER CONTENT (% OF DRY WEIGHT)
 △ = ICE CONTENT (% OF SAMPLE VOLUME)

PLASTIC LIMIT 40 60 80 100 100+
 LIQUID LIMIT

NO SAMPLES

57

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED 4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE									
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER									
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS			
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %						
2					P4	PEAT			2												
4						CLAY - SILTY SANDY			4												
6					C1	PEBBLES			6												
8									8												
10						ICE & SOIL		ICE & SOIL CL	10												
12					CL	CLAY - SILTY SANDY			12												
14					C1	PEBBLES			14												
16						BOTTOM OF HOLE. 15'			16												
18									18												
20									20												
22									22												
24									24												

Inuvik - Tuk.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

OWN		FIELD ENG.		DATE DRILLED 24/77		AIR PHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE									
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV:		MILE B,C,S NUMBER									
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)				GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS	
										PLASTIC LIMIT 20 40 60 80 100 100+ LIQUID LIMIT				CLAY	SILT	SAND	GRAVEL				
										%	%	%	%								
2						Peat			2												
4						Silt -		Vc-Vr	4												
6						- CLAYEY		1.	6												
8									8												
10								Vs	10												
12									12												
14									14												
16									16												
18									18												
20									20												
22									22												
24									24												

Peat

Silt -
- CLAYEY

Vc-Vr

1.

Vs

NO SAMPLES

BOTTOM OF HOLE - 15'

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY															
DWN		FIELD ENG		DATE DRILLED 4/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE															
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV																	
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)						GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	MILE	B,C,S	NUMBER			
										PLASTIC LIMIT ——— LIQUID LIMIT 20 40 60 80 100 100+						CLAY	SILT	SAND	GRAVEL								
																%	%	%	%	REMARKS							
2						P ₄ PEAT 2'			2																		
4					ML	SILT - CLAYEY SANDY		V _S	4																		
6									6																		
8									8	NO SAMPLES																	
10						ICE		ICE	10																		
12					ML	SILT - CLAYEY SANDY			12																		
14						PEBBLES 15			14																		
16						BOTTOM OF HOLE - 15			16																		
18									18																		
20									20																		
22									22																		
24									24																		

INUVIK - Tuk										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY				
DWN		FIELD ENG		DATE DRILLED 3/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE				
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
						PEAT 8"										
2						CLAY-SILTY SANDY PEBBLES			2					75-17	8	Moist
4						CLAY-SILTY SANDY PEBBLES			4					82-17	1	Free Water
6						CLAY-SILTY SANDY PEBBLES			6					62-35	3	SAT.
8						CLAY-SILTY SANDY PEBBLES			8					26-41	33	WET
10						CLAY-SILTY SANDY PEBBLES			10					81-17	2	SAT
12						CLAY-SILTY SANDY PEBBLES			12					82-16	2	WET
14						CLAY-SILTY SANDY PEBBLES			14							
16						CLAY-SILTY SANDY PEBBLES			16							
18						CLAY-SILTY SANDY PEBBLES			18							
20						CLAY-SILTY SANDY PEBBLES			20							
22						CLAY-SILTY SANDY PEBBLES			22							
24						CLAY-SILTY SANDY PEBBLES			24							

-84-15-1- WET

Bottom of Hole - 30'

Inuvik - Tuk.				DRILL HOLE REPORT				DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY								
DWN		FIELD ENG.		DATE DRILLED 2/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE				
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
						CLAY - SILTY FEW PEBBLES ICE LENSES				O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)						
										PLASTIC LIMIT 40 LIQUID LIMIT 80						
2									2							
4									4							
6									6							
8									8							
10									10							
12									12							
14									14							
16									16							
18									18							
20									20							
22									22							
24									24							

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

OWN		FIELD ENG.		DATE DRILLED		AIR PHOTO NO.		CHAINAGE		OFFSET		TEST HOLE				
CKD		TECH		RIG		SURFACE DRAINAGE		VEGETATION		ELEV		MILE B.C.S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
										O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)						
										PLASTIC LIMIT LIQUID LIMIT 20 40 60 80 100 100+						
2						P ₊ PEAT 2'			2							
4						ICE		ICE	4							
6									6							
8									8							
10						CLAY-SILTY FEW PEBBLES			10							
12						CI		V _S	12							
14						ICE LENSES 15'			14							
16									16							
18						BOTTOM OF HOLE-15			18							
20									20							
22									22							
24									24							

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY								
OWN		FIELD ENG		DATE DRILLED 3/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE								
CKD		TECH PRONYX		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B.C.S NUMBER								
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS		
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %					
2						Peat		Vs	2											
4						CLAY - SILTY	5'		4											
6						SANDY		Vs - Vr	6											
8						PEBBLES			8											
10						MED. PLASTIC			10											
12									12											
14									14											
16									16											
18									18											
20									20											
22									22											
24									24											

30'
-83-15-2 DAMP

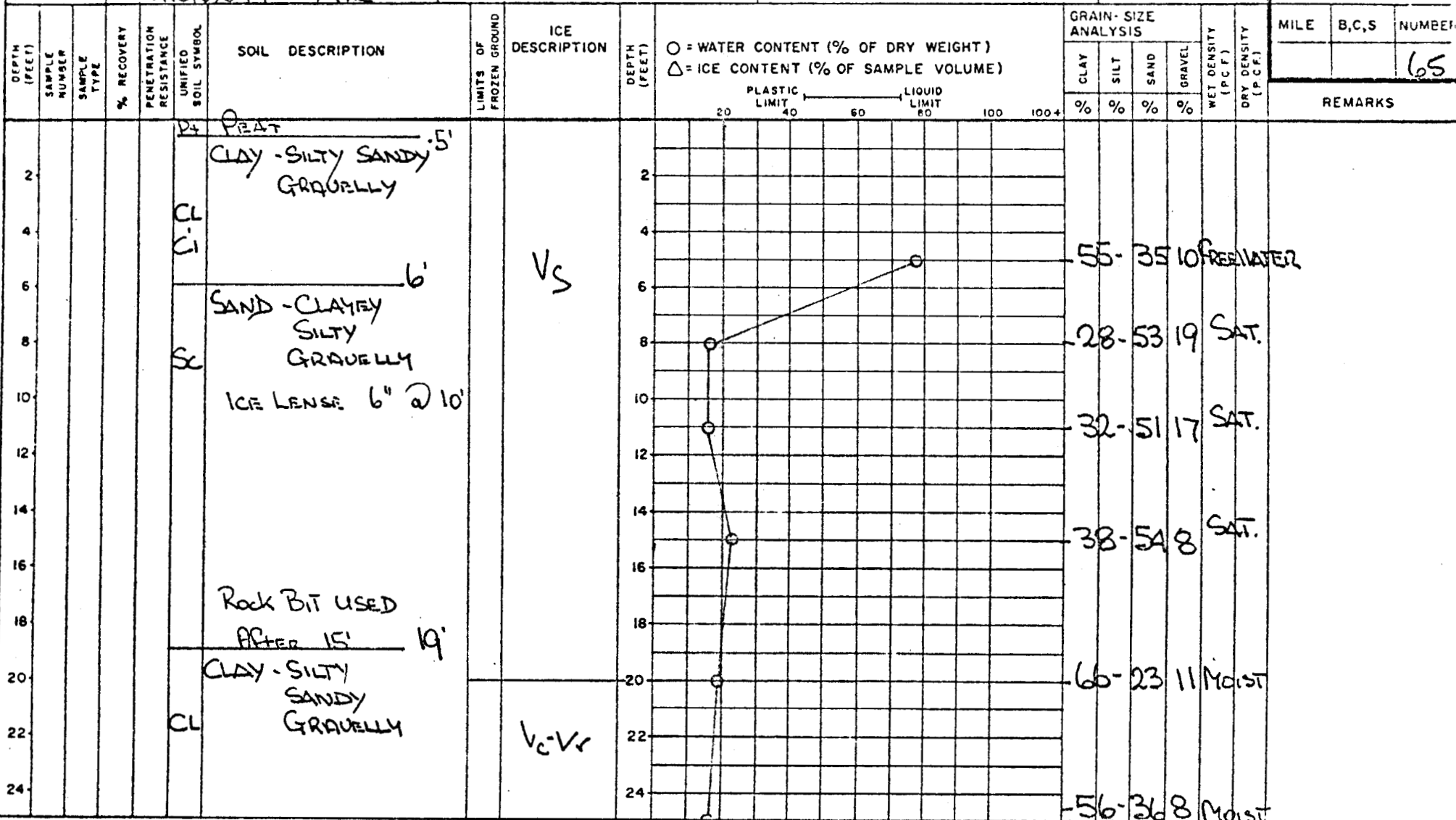
BOTTOM OF HOLE - 30'

INUVIK - Tuk.

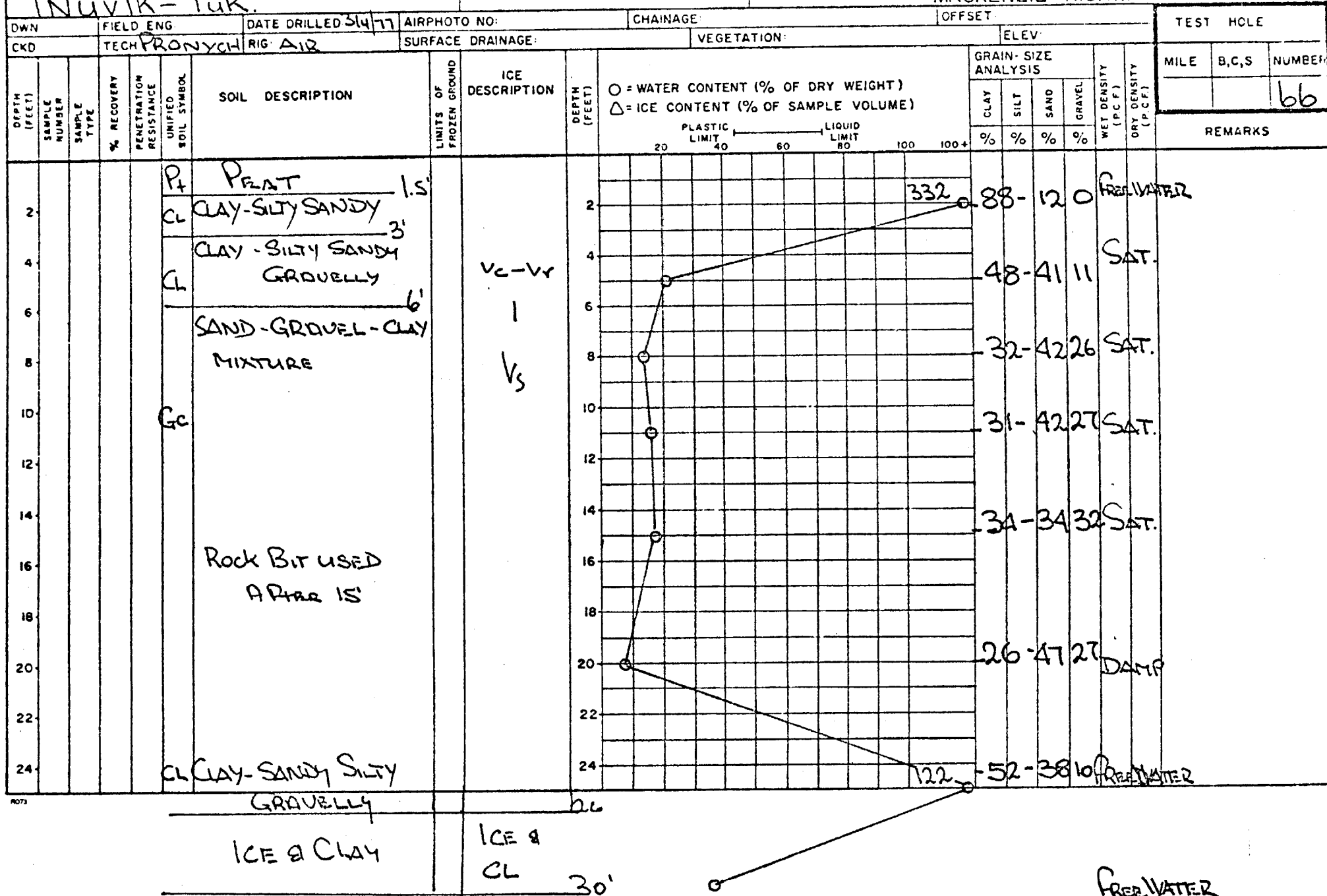
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

OWN	FIELD ENG.	DATE DRILLED 3/4/77	AIR PHOTO NO.	CHAINAGE	OFFSET	TEST HOLE
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV	MILE B,C,S NUMBER



DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY



Bottom of Hole - 30'

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
OWN		FIELD ENG		DATE DRILLED 3/4/77		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE									
CKD		TECH PRONYCH		RIG A12		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B.C.S NUMBER									
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS		WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS							
										CLAY %	SILT %				SAND %	GRAVEL %					
2						PER 2'			2												
4						CLAY - SILTY			4												
6						SANDY			6												
8						PEBBLES			8												
10						LOW PLASTIC		Vs	10												
12									12												
14						14'			14												
16						GRAVEL - SANDY			16												
18						SILTY			18												
20						CLAYEY			20												
22									22												
24						ICE		ICE	24												
						CLAY - SILTY															
						SANDY															
						GRAVELLY															
						ICE		ICE													

BOTTOM OF HOLE - 30'

INUVIK - Tuk										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY					
DWN		FIELD ENG.		DATE DRILLED 03/4/77		AIR PHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE					
CKD		TECH PRONYCH		RIG: AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER					
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS	
										CLAY %	SILT %	SAND %	GRAVEL %				
						PEAT & ICE				○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME) PLASTIC LIMIT 40 LIQUID LIMIT 80 20 40 60 80 100 100+							
2					PI				2								
4						ICE			4								
6						CLAY - SILTY SANDY		VS	6								
8					CL	LOW PLASTIC			8								
10									10								
12									12								
14						ICE		ICE	14								
16						BOTTOM OF HOLE - 15'			16								
18									18								
20									20								
22									22								
24									24								

INUVIK-TUK.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG.		DATE DRILLED 3/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		ELEV:		TEST HOLE							
CKD		TECH PRONYCH		RIG: AIR		SURFACE DRAINAGE:		VEGETATION:						MILE B.C.S NUMBER							
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS			
										PLASTIC LIMIT 40	LIQUID LIMIT 80	CLAY %	SILT %	SAND %	GRAVEL %						
2						ICE & PEAT			2												
4						CLAY - SILTY SANDY PEBBLES			4												
6									6												
8						LOW-MED. PLASTIC			8												
10					CL				10												
12									12												
14					CI				14												
16									16												
18									18												
20									20												
22									22												
24									24												

30'
Bottom of Hole - 30'

INUVIK - Tuk.										DRILL HOLE REPORT					DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY						
DWN		FIELD ENG		DATE DRILLED 3/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE									
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV:		MILE B.C.S NUMBER									
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)					GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										PLASTIC LIMIT ——— LIQUID LIMIT 20 40 60 80 100 100+					CLAY	SILT	SAND	GRAVEL			
										%	%	%	%								
2						P+ PEAT 2'			2												
4						ICE 4 1/2'		ICE	4												
6						ALTERNATING LAYERS OF ICE & CLAY		V _s	6												
8							8														
10							10														
12							12														
14							14														
16							16														
18							18														
20							20														
22							22														
24							24														
Bottom of Hole - 15'																					

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY						
OWN		FIELD ENG.		DATE DRILLED 3/4/71		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE						
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER						
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %			
					PT	PRAT 8'			2			81	19	0			WET	
					Q	CLAY - SILTY SANDY		1/5	4			90	10	0				
					CI	LOIV - MED. PLASTIC			6									
								1/6 - 1/7	8			90	10	0			Moist	
						11'			10			94	6	0			SAT.	
					HL	SILT -			12									
						15'			14			45	55	0			Moist	
					Sc	SAND - SILTY CLAYEY			16									
						20'			18									
					CI	CLAY - SILTY SANDY PEBBLES			20			83	15	2			DAMP	
									22									
									24			80	19	1			SAT.	
						MED. PLASTIC		1/5										

30'
BOTTOM OF HOLE - 30'

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN		FIELD ENG.	DATE DRILLED	AIRPHOTO NO:	CHAINAGE:	OFFSET	TEST HOLE													
CKD	TECH	RIG	SURFACE DRAINAGE:		VEGETATION:	ELEV	MILE	B,C,S	NUMBER											
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME) PLASTIC LIMIT 40 LIQUID LIMIT 80	GRAIN-SIZE ANALYSIS <table border="1"> <tr> <td>CLAY</td> <td>SILT</td> <td>SAND</td> <td>GRAVEL</td> </tr> <tr> <td>%</td> <td>%</td> <td>%</td> <td>%</td> </tr> </table> WET DENSITY (P.C.F.) DRY DENSITY (P.C.F.)	CLAY	SILT	SAND	GRAVEL	%	%	%	%	REMARKS
CLAY	SILT	SAND	GRAVEL																	
%	%	%	%																	
2						Peat			2	107	12-88	0	FREE WATER							
4						SAND-SILTY			4	125	83-17	0	FREE WATER							
6						CLAY-SANDY SILTY		VS	6		96-4	0	FREE WATER							
8									8		87-11	2	DAMP							
10						SILTY			10		92-8	0	DAMP							
12						FEW PEBBLES			12		87-13	0	DAMP							
14						CI MED. PLASTIC		VC-Vr	14		94-5	1	DAMP							
16									16											
18									18											
20									20											
22									22											
24									24											

-85-14-1-DAMP

BOTTOM OF HOLE - 30'

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN		FIELD ENG.	DATE DRILLED	AIRPHOTO NO:	CHAINAGE:	OFFSET	TEST HOLE										
CKD	TECH	RIG	SURFACE DRAINAGE:	VEGETATION:	ELEV												
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS	
										CLAY	SILT	SAND	GRAVEL				
										%	%	%	%				
										○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)							
										PLASTIC LIMIT 20 40 60 80 100 100+							
2						A Peat			2					90-100	Moist		
4						CLAY - SILTY			4					87-112	SAT.	H.I.B.	
6						SANDY			6					84-142	SAT.		
8						PEBBLES			8					84-142	SAT.		
10						LOW PLASTIC			10					84-142	SAT.		
12									12								
14									14					83-161	WET		
16									16								
18									18								
20									20					86-140	FREE WATER		
22									22								
24									24					84-151	SAT		

Bottom of Hole - 30'

Inuvik - Tuk.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

OWN		FIELD ENG	DATE DRILLED	AIRPHOTO NO:	CHAINAGE:	OFFSET	TEST HOLE										
CKD	TECH	PROYCH	RIG	SURFACE DRAINAGE:	VEGETATION:	ELEV	MILE	B,C,S	NUMBER								
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
											CLAY	SILT	SAND	GRAVEL			
										PLASTIC LIMIT	LIQUID LIMIT	%	%	%	%		
										20 40 60 80 100 100+							
2						A PEAT			2								
4						ICE	2.5'	ICE	4								
6							6.5		6								
8						CLAY-SILTY			8								
10								Vs	10								
12									12								
14									14								
16							15'		16								
18						BOTTOM OF HOLE - 15'			18								
20									20								
22									22								
24									24								

INUVIK - Tuk										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED 3/17		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE									
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER									
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS					
										CLAY	SILT	SAND	GRAVEL								
										O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)											
										PLASTIC LIMIT 40 LIQUID LIMIT 80											
2						R PEAT			2												
4						CLAY - SILTY SANDY PEBBLES			4												
6						LOW PLASTIC			6												
8						SAND - GRAVELLY SILTY		VC-Vr	8												
10									10												
12									12												
14									14												
16									16												
18									18												
20									20												
22									22												
24									24												

BOTTOM OF HOLE - 30'

INUVIK-TUK										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG.		DATE DRILLED 3/4/77		AIR PHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE									
CKD		TECH PRONCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B.C.S NUMBER									
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS					
										CLAY %	SILT %	SAND %	GRAVEL %								
2						Peat			2							Free Water					
4						CLAY-SILTY SANDY			4												
6						CL LOIV PLASTIC			6												
8									8												
10						SAND-SILTY CLAYEY GRAVELLY			10												
12									12												
14									14												
16									16												
18									18												
20									20												
22									22												
24									24												

30'
Bottom of Hole - 30'

INUVIK - Tuk.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DOWN		FIELD ENG		DATE DRILLED 3/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE				
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV:		MILE B,C,S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)																
PLASTIC LIMIT 20 40 60 80 100 100+ LIQUID LIMIT																
2						A PRAT			2	116	88-9	3	FREE WATER			
4						CLAY - SILTY SANDY PEBBLES			4		84-13	3	FREE WATER			
6						LOW PLASTIC			6							
8									8		69-24	7	FREE WATER			
10									10							
12									12		82-16	2	FREE WATER			
14									14							
16									16		83-14	3	SAT			
18									18							
20									20							
22									22							
24									24							

INUVIK - TUK.				DRILL HOLE REPORT				DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY								
DWN		FIELD ENG		DATE DRILLED 3/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE				
CKD		TECH FROST		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B.C.S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
						CLAY - SILTY SANDY PEBBLES LOW-MED. PLASTIC										
2									2							61-28 11 MOST
4									4							89-74 4 WATER
6									6							
8									8							91-90 0 WET
10									10							89-9-2 0 WET
12									12							
14									14							90-91 0 WET
16									16							
18									18							
20									20							90-100 0 MOST
22									22							
24									24							87-112 DAMP

1073

BOTTOM OF HOLE - 30'

-94-6-0 DAMP

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY										
DWN		FIELD ENG.		DATE DRILLED 3/4/77		AIRPHOTO NO.		CHAINAGE		OFFSET		TEST HOLE										
CKD		TECH PRONCH		RIG AIR		SURFACE DRAINAGE		VEGETATION		ELEV		MILE B.C.S NUMBER										
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS				
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %							
2					A	PEAT			2			60	27	13								
4					CI	CLAY-SILTY SANDY GRAVELLY		Vc-Vr	4			12	53	35								
6					SM	SAND-GRAVELLY SILTY PEBBLES			6			56	40	4								
8								ICE	8												H.I.B.	
10									10													
12									12													
14									14													
16									16													
18									18													
20					SP	SAND-GRAVELLY		Vs	20			8	56	30								FREE WATER
22									22													
24								ICE	24			89	8	3								SAT. H.I.B.
						CLAY																

CL SILTY PEBBLES
LOW PLASTIC 30'
BOTTOM OF HOLE - 30'

INUVIK-TUK										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY				
DWN		FIELD ENG		DATE DRILLED 3/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE				
CKD		TECH PRONCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B.C.S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
2						P. PEAT			2							
4						SAND - SILTY GRAVELLY		VS	4							
6						GRAVEL-SANDY		1	6							
8									8							
10						SAND - SILTY PEBBLES		VC-Vr	10							
12									12							
14									14							
16						SILT - SANDY			16							
18									18							
20									20							
22									22							
24									24							

30'

BOTTOM OF HOLE - 30'

02-8-0 1VBT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

Bottom of Hole - 30'

ICE & WATER CHECK

INUVIK - Tuk.				DRILL HOLE REPORT				DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY								
DWN		FIELD ENG.		DATE DRILLED 6/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE				
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV:		MILE B.C.S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
										CLAY	SILT	SAND	GRAVEL			
										○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)						
										PLASTIC LIMIT 20 40 60 80 100 100+ LIQUID LIMIT 80 100 100+						
2						ICE		ICE	2							
4									4							
6									6							
8									8							
10						WATER			10							
12									12							
14									14							
16									16							
18									18							
20									20							
22									22							
24									24							

INUVIK - Tyk.				DRILL HOLE REPORT				DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY								
DWN		FIELD ENG		DATE DRILLED 4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE				
CKD		TECH PRONYCH		RIG: AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY	SILT	SAND	GRAVEL			
										O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)						
										PLASTIC LIMIT LIQUID LIMIT 20 40 60 80 100 100+						
						CLAY - SILTY SANDY GRAVELLY 3'			2		43	38	19		WET	
						SAND - SILTY			4		42	53	5		SAT.	
									8		10	90	0		WET	
									12		18	82	0		SAT.	
									16		10	90	0		Free Water	
									20		11	89	0		SAT.	
									24		4	96	0		SAT	

30'

Bottom of Hole - 30'

-4-96-0 SAT.

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED 6/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE									
CKD		TECH PRONYCH		RIG A/R		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER									
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS			
												CLAY %	SILT %	SAND %	GRAVEL %						
2						PRAT 1.5'			2												
4						CLAY-SILTY SANDY FIBBLES 4'		V _s	4												
6						SAND - FINE		I	6												
8					SP			V _c -V _r	8												
10									10												
12									12												
14									14												
16									16												
18									18												
20						ICE 19'		ICE	20												
22									22												
24					SP	SAND - FINE 22'		V _c -V _r	24												

30'
Bottom of Hole - 30'

-892-0 Moist

INUVIK - Tuk.										DRILL HOLE REPORT										DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED 6/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE																	
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV:		MILE B,C,S NUMBER																	
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS										WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS							
										O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)																			
										PLASTIC LIMIT 20 40 60 80 100 100+ LIQUID LIMIT 80 100 100+										CLAY %		SILT %		SAND %		GRAVEL %			
2						Peat 1.5'			2																				
4					ML	Silt-Sandy Clayey Pebbles			4																				
6									6																				
8									8	NO SAMPLES																			
10						ICE		ICE	10																				
12									12																				
14									14																				
16						15'			16																				
18						Bottom of Hole - 15'			18																				
20									20																				
22									22																				
24									24																				

INUVIK - Tuk										DRILL HOLE REPORT					DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG.		DATE DRILLED 6/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		ELEV:		TEST HOLE										
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:																
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS						
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %									
2						PEAT 1.5'		VS	2															
4						PEAT - PEBBLES 3'		VS	4															
6						SAND-GRAVEL-CLAY MIXTURE		VS	6															
8						SAND-SILTY		VS	8															
10								VS	10															
12								VS	12															
14						ICE 15'		ICE	14															
16									16															
18									18															
20									20															
22									22															
24									24															

INUVIK - Tuk										DRILL HOLE REPORT										DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED 6/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE																	
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE		B,C,S		NUMBER													
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)						GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS							
										PLASTIC LIMIT		LIQUID LIMIT		CLAY	SILT	SAND	GRAVEL												
										20	40	60	80	100	100+	%	%	%	%										
						SP PEAT																							
2						ICE		ICE	2																				
4									4																				
6									6																				
8									8																				
10									10																				
12						SAND - FINE		VS	12																				
14										14																			
16						BOTTOM OF HOLE - 15'			16																				
18									18																				
20									20																				
22									22																				
24									24																				

INUVIK - Tuk										DRILL HOLE REPORT										DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
OWN		FIELD ENG		DATE DRILLED 6/4/77		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE		MILE		B,C,S		NUMBER											
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV																			
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)						GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS							
										PLASTIC LIMIT		LIQUID LIMIT		CLAY	SILT	SAND	GRAVEL												
									20	40	60	80	100	100+	%	%	%	%											
2						A PEAT 2'			2																				
4						SILT-SANDY			4																				
6								Vs	6																				
8									8																				
10						SAND-SILTY 9'			10																				
12									12																				
14						ICE 15'		ICE	14																				
16						BOTTOM OF HOLE - 15'			16																				
18									18																				
20									20																				
22									22																				
24									24																				

INUNK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY						
OWN		FIELD ENG.		DATE DRILLED 6/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE						
CKD		TECH PRONCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER						
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %			
2					Pe	PEAT		Vs	2	110		37	49	14				FREE WATER
4					CL	CLAY - SILTY SANDY GRAVELLY LOW PLASTIC			4			50	34	16				SAT.
6									6									
8					Sc	SAND - SILTY CLAYEY		Vc - Vy	8			38	61	1				WET
10									10									
12					SM	SILTY PEBBLES			12			27	69	4				WET
14									14									
16									16			19	81	0				SAT.
18									18									
20						ICE		ICE	20									
22									22									
24									24									

NOTES

30'
Bottom of Hole - 30'

INUVIK - Tuk.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN		FIELD ENG.		DATE DRILLED 6/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		ELEV		TEST HOLE								
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:														
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)				GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS		
										PLASTIC LIMIT 20 40 60 80 100 100+ LIQUID LIMIT				CLAY	SILT	SAND	GRAVEL				%	%
2						PEAT & ICE		ICE P ₄	2													
4					GM	GRAVEL SANDY SILTY S'		V _S	4													
6					SM	SAND-SILTY			6													
8									8													
10									10													
12						ICE		ICE	12													
14									14													
16									16													
18									18													
20									20													
22									22													
24									24													

15'
BOTTOM OF HOLE - 15'

NO SAMPLES

T-9

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG.	DATE DRILLED 4/11	AIRPHOTO NO:	CHAINAGE:	OFFSET	TEST HOLE
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV	

TEST HOLE

MILE	B,C,S	NUMBER
1		
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100		

T-10

REMARKS

[illegible]

SP

FINE

20.

Bottom of Hole - 30'

$$-q \cdot q_1 = 0 \quad S_{\Delta T}.$$

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED 04/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE									
CKD		TECH PRONYCH		RIG: AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER									
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS					
										CLAY %	SILT %	SAND %	GRAVEL %								
						Pt PEAT CLAY - SILTY															
2									2												
4						SANDY PEBBLES			4												
6									6												
8						SILTY			8												
10									10												
12						Gc GRAVEL - SAND MIXTURE CLAYEY			12												
14									14												
16						SM SAND GRAVELLY SILTY			16												
18									18												
20									20												
22						CLAY - SILTY SANDY PEBBLES			22												
24									24												

SM / SAND - SILTY 29'

BOTTOM OF HOLE - 30'

30'

-13-86-1

SAT.

INUVIK - Tuk.				DRILL HOLE REPORT				DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY													
DWN		FIELD ENG		DATE DRILLED 6/4/77		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE									
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B.C.S NUMBER									
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)					GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										PLASTIC LIMIT 20 40 60 80 100 100+ LIQUID LIMIT 80 100 100+					CLAY	SILT	SAND	GRAVEL			
										%	%	%	%								
2						A PEAT			2												
4						CLAY-SILTY SANDY		Vs	4												
6						GRAVELLY 6'			6	NO SAMPLES											
8						SAND-SILTY 9'			8												
10									10												
12						ICE		ICE	12												
14									14												
16									16												
18						BOTTOM of HOLE 15'			18												
20									20												
22									22												
24									24												

1 of 2

Inuvik - Tuk.				DRILL HOLE REPORT				DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY								
DWN		FIELD ENG		DATE DRILLED 6/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE				
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
2						PEAT - SAND SILT & ICE		ICE	2	169	91	9	0	SAT.		
4								Pt	4							
6						GRAVEL 5.5'		SM	6		88	12	0	WET		
8						CLAY - SILTY SANDY			8		86	14	0	SAT.		
10						LOW - MED. PLASTIC			10							
12									12		69	17	14	FREE WATER		
14						SAND - GRAVELLY SILTY CLAYEY			14							
16									16		17	53	30	SAT.	Rock Bit USED 15'-30'	
18									18							
20									20		17	51	26	Moist		
22									22							
24						CLAY-SILTY SANDY PEBBLES			24		73	22	5	Moist		

OVER

2 of 2

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN		FIELD ENG.		DATE DRILLED		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE												
CKD		TECH		RIG		SURFACE DRAINAGE:		VEGETATION:		ELEV														
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)					GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS			
										PLASTIC LIMIT 40	60	80	100	100+	CLAY %	SILT %	SAND %	GRAVEL %						
									30											2A-724 SAT.				
2					Sc	SAND-SILTY CLAYEY		Vc-Vr 1 Vs	32															
4									34															
6									36															
8						ICE		ICE	38															
10									40															
12						SAND-SILTY			42															
14					Sc				44															
16						45'			46															
18						BOTTOM OF HOLE-45'			18															
20									20															
22									22															
24									24															

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DOWN		FIELD ENG		DATE DRILLED 4/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE									
CKD		TECH PRONCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER									
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS			
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %						
2						PEST			2												
4						SAND-GRAVEL MIX SILTY		VS	4												
6									6												
8					SM GM				8												
10							10'		10												
12						ICE		ICE	12												
14									14												
16							15'		16												
18						BOTTOM OF HOLE - 15			18												
20									20												
22									22												
24									24												

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

NSA

Bottom of Hole - 30'

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DOWN		FIELD ENG		DATE DRILLED 7/4/77		AIRPHOTO NO:		CHAINAGE		OFFSET		ELEV		TEST HOLE							
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:													
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (P.C.F.)	REMARKS			
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %						
2						Peat 2'		ICE & CL	2			83	16	1		Free Water					
4						ICE & SOIL 4.5'			4			64	15	21		WET					
6						CLAY-SILTY SANDY GRAVELLY PEBBLES LOW PLASTIC		V _c -V _r	6												
8							8						77	18	5		WET				
10							10						73	21	6		WET				
12						ICE 15'		ICE	12												
14							14														
16							16														
18						BOTTOM OF HOLE - 15'			18												
20							20														
22							22														
24							24														

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY													
DWN		FIELD ENG.		DATE DRILLED 11/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE													
CKD		TECH PRONYCH		RIG: AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER													
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)						GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS			
										PLASTIC LIMIT 20 40 60 80 100 100+						CLAY	SILT	SAND	GRAVEL						
																%	%	%	%						
2						P ₄ PEAT			2																
4						CLAY - SILTY		V _S	4																
6						SANDY PEBBLE			6	NO SAMPLES															
8									8																
10						ICE		ICE	10																
12									12																
14									14																
16									16																
18									18																
20									20																
22									22																
24									24																

Inuvik - Tuk.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN		FIELD ENG		DATE DRILLED 4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE									
CKD		TECH PRONCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER									
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS					
										CLAY	SILT	SAND	GRAVEL								
○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)																					
										20	40	60	80	100	100+	%	%	%	%		
2						CLAY - SILTY SANDY PEBBLES			2					221	96	4	0	FREE WATER			
4						LOW PLASTIC			4						83	16	1	WET			
6									6												
8									8						81	18	1	FREE WATER			
10									10												
12									12						83	16	1	WET			
14						GRAVELLY			14												
16						BOTTOM OF HOLE - 15'			16						70	17	13	Moist			
18									18												
20									20												
22									22												
24									24												

INUVIK - Tuk.										DRILL HOLE REPORT										DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED 7/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE																	
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE		B,C,S		NUMBER													
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)						GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS							
										PLASTIC LIMIT ——— LIQUID LIMIT 20 40 60 80 100 100+						CLAY	SILT	SAND	GRAVEL										
										%	%	%	%																
2						PEAT - ICE & SOIL		PEAT - ICE - SOIL	2																				
4									4																				
6						CLAY - SILTY SANDY PEBBLES	5 1/2'		6	NO SAMPLES																			
8								Vs	8																				
10									10																				
12									12																				
14									14																				
16						BOTTOM OF HOLE - 15'	15'		16																				
18									18																				
20									20																				
22									22																				
24									24																				

Inuvik - Tuk.										DRILL HOLE REPORT				DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY			
OWN		FIELD ENG		DATE DRILLED		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE					
CKD		TECH		RIG		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER					
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS	
										CLAY %	SILT %	SAND %	GRAVEL %				
						PEAT .5'				○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)							
						ORGANICS - ICE & SOIL				PLASTIC LIMIT 40 LIQUID LIMIT 80							
2									2	162	88	14	3			Free water	
4									4		75	23	2			SAT.	
6						CLAY - SILTY SANDY			6								
8						PEBBLES			8		77	19	4			WET	
10					CL	LOW - MED. PLASTIC			10		79	15	6			WET	
12									12								
14					CL				14		78	17	5			WET	
16									16								
18									18								
20									20		82	16	2			MOIST	
22									22								
24									24		81	17	2			DAMP	

Bottom of Hole - 30'

-82-16-2 WET

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY				
DWN		FIELD ENG		DATE DRILLED 7/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE				
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY	SILT	SAND	GRAVEL			
										O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)						
										PLASTIC LIMIT 20 40 60 80 100 100+ LIQUID LIMIT						
2					Peat	1.5'			2							16-30 4 FREE WATER
4					SAND - SILTY PEBBLES	5'		vs	4							68-30 2 FREE WATER
6					CLAY - SILTY SANDY PEBBLES				6							69-29 2 WET
8									8							
10					LOW-MED PLASTIC			vc-vr	10							53-45 2 MOIST
12									12							
14						15'			14							74-24 2 DAMP
16									16							
18									18							
20									20							
22									22							
24									24							
						BOTTOM OF HOLE - 15'										

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY				
DWN		FIELD ENG		DATE DRILLED 14/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE				
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B.C.S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY	SILT	SAND	GRAVEL			
										O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)						
										PLASTIC LIMIT 20 40 60 80 100 100+ LIQUID LIMIT						
2						A. PEAT 2'		V _s	2					40-53	7	FRESH WATER
4						CLAY-SANDY SILTY PERBBLES			4					39-43	18	FRESH WATER
6						SAND-SILTY GRAVELLY			6							
8									8					35-54	11	SAT
10					SM				10					32-49	19	MOIST
12									12							
14								V _c -V _r	14					33-46	21	DAMP
16									16							
18									18							
20									20					34-56	10	DAMP
22									22							
24									24					43-59	7	DAMP

30' 0

BOTTOM OF HOLE - 30'

37-52-11 DAMP

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY						
DWN		FIELD ENG		DATE DRILLED 14/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE						
CKD		TECH PRONKH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER						
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
												CLAY	SILT	SAND	GRAVEL			
										PLASTIC LIMIT 40 LIQUID LIMIT 60 20 40 60 80 100 100+		%	%	%	%			
2						R PEAT 2'			2	○		38	52	10	DAMP			
4						a CLAY-SILTY SANDY PEBBLES			4		○	48	43	9	FREE WATER			
6									6									
8								US	8	○		51	41	8	WET			
10									10									
12									12		○	96	40	0	SAT			
14						Sc CLAYEY SILTY SAND-PEBBLES 15'			14		○	40	59	1	FREE WATER			
16									16									
18						BOTTOM OF HOLE - 15'			18									
20									20									
22									22									
24									24									

INUVIK - Tuk										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE									
CKD		TECH PRONCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER									
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS			
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %						
						CLAY - SILTY SANDY PEBBLES LOW PLASTIC															
2									2												
4									4												
6									6												
8									8												
10									10												
12									12												
14									14												
16									16												
18									18												
20									20												
22									22												
24									24												

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY				
DWN		FIELD ENG		DATE DRILLED 7/4/77		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE				
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
										○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)						
										PLASTIC LIMIT 20 40 60 80 100 100+ LIQUID LIMIT						
2					SM	SAND - SILTY GRAVELLY			2							20-45 35 Moist
4					SC	CLAYEY			4							29-60 11 SAT.
6									6							
8									8							31-50 19 SAT.
10					CL	CLAY - SILTY SANDY GRAVELLY		V _c -V _r	10							49-30 21 WET
12									12							
14					SM	SAND - SILTY GRAVELLY			14							12-75 13 WET
16									16							
18									18							
20						CLAY - SILTY SANDY PEBBLES			20							79-20 1 Moist
22					CI	MED - PLASTIC			22							
24									24							-68-19 13 Moist

30' -77-21-2 DAMP

Bottom of Hole - 30'

1 of 2

INUNK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
OWN		FIELD ENG		DATE DRILLED 14/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		ELEV		TEST HOLE							
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:													
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS			
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %						
2						Peat 1.5'			2			42	54	4		DAMP					
4					SC	SAND-SILTY CLAYEY PEBBLES			4			33	60	7		Free Water					
6						GRAVELLY		Vs	6												
8					SM				8			20	61	19		Free Water					
10									10												
12									12			17	63	20		SAT.					
14						ICE		ICE	14												
16						SAND-FINE			16			9	90	1		SAT.					
18									18												
20					SP	GRAVELLY		Vc-Vr	20			2	69	29		Moist					
22									22												
24									24			4	74	22		DAMP					

O.I.E.R

DRILL HOLE REPORT										DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE							
CKD		TECH		RIG		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE		B,C,S					
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS			
									○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)										
									PLASTIC LIMIT ——— LIQUID LIMIT 20 40 60 80 100 100+				CLAY	SILT	SAND	GRAVEL			
									%				%	%	%				
					Sp	SAND - FINE			30					4	96	0	DAMP		
2									32										
4									34										
						SILTY - PEBBLES			36					19	77	4	WET		
6									38										
8					Sm				40					29	71	0	SAT.		
10									42										
									44										
12						BOTTOM OF HOLE-41			46										
14									48										
16									50										
18									52										
20									54										
22									56										
24									58										

1 of 2

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY				
DWN CKD		FIELD ENG		DATE DRILLED		AIR PHOTO NO.		CHAINAGE		OFFSET		TEST HOLE				
		TECH		RIG		SURFACE DRAINAGE		VEGETATION		ELEV		MILE B,C,S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
						PEAT 10"										
2						SAND - SILTY PEBBLES		V _c -V _r								
4					SH											
6																
8																
10						GRAVELLY										
12																
14																
16								V _s								
18																
20																
22																
24						ML SILT - SANDY-PEBBLES										

OVER

1 of 2

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN		FIELD ENG	DATE DRILLED	AIRPHOTO NO:	CHAINAGE:	OFFSET	TEST HOLE											
CKD	TECH		RIG	SURFACE DRAINAGE:	VEGETATION:	ELEV	MILE	B,C,S										
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	WATER CONTENT (% OF DRY WEIGHT) ○	ICE CONTENT (% OF SAMPLE VOLUME) △	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
												CLAY	SILT	SAND	GRAVEL			
												%	%	%	%			
2					CL	CLAY-SILTY-SANDY GRAVELLY			30	20		50	38	12		SAT.		
4					SM	SAND-SILTY GRAVELLY		VC-Vr	32									
6									34			20	51	29		WET		
8					ML	SILT-CLAYEY			36									
10					CL	CLAY-SILTY			38									
12					CL	PEBBLES SANDY			40			57	40	3		DAMP		
14					CI				42									
16									44			73	24	3		DAMP		
18									46									
20									48									
22									50									
24									52									
									54									
									56									
									58									
									60									
									62									
									64									
									66									
									68									
									70									
									72									
									74									
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									96									
									98									
									100									
									102									
									104									
									106									
									108									
									110									
									112									
									114									
									116									
									118									
									120									
									122									
									124									

INUVIK - Tuk										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DOWN		FIELD ENG		DATE DRILLED 14/7		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE									
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER									
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS					
										CLAY %	SILT %	SAND %	GRAVEL %								
						PEAT															
2						SAND - PEBBLES SILTY			2					22-65	13	DAMP					
4					Sm				4					17-75	8	SAT.					
6						SAND-GRAVELLY To		Vc-Vr	6					5-63	32	SAT.					
8					Sw	SAND-GRAVEL MIXTURE			8					5-64	31	SAT					
10									10					5-64	31	SAT					
12					GW				12												
14									14					3-52	45	SAT					
16									16												
18									18												
20						CL CLAY-SILTY SANDY P.			20					15-77	8	SAT.					
22						BOTTOM OF HOLE			22												
24									24												

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED 7/4/77		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE									
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE		B.C.S		NUMBER					
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS			
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %						
						PEAT															
						SAND-GRAVELLY 4"															
2									2									2-6830 DAMP			
4									4									14-5333 SAT.			
6									6												
8									8									5-5540 SAT.			
10									10												
12									12									7-6627 SAT.			
14									14												
16									16												
18									18												
20									20												
22									22												
24									24												
						BOTTOM OF HOLE - 12'															

INUVIK - Tuk										DRILL HOLE REPORT										DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG.		DATE DRILLED 14 11		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE																	
CKD		TECH PRONCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER																	
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS											
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %														
						PEAT																							
2						SH SAND - SILTY PEBBLES		Vc-Vr	2			27	69	4		SAT.													
4						ML SILT - SANDY PEBBLES			4			53	44	3		IVET	H.I.B.												
6									6																				
8						SH SAND - SILTY PEBBLES			8			30	65	5		SAT.													
10						ML SILT - SANDY CLAYEY GRAVELLY		Vs	10																				
12									12																				
14						SH SAND - SILTY - PEBBLES			14																				
16									16			42	54	4		SAT													
18									18																				
20									20																				
22									22																				
24									24																				
						BOTTOM OF HOLE - 15																							

Inuvik - Tuk.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN FIELD ENG. DATE DRILLED: 14/77

AIRPHOTO NO:

CHAINAGE:

OFFSET:

CKD TECH PRONYCH

RIG: AIR

SURFACE DRAINAGE:

VEGETATION:

ELEV

TEST HOLE

MILE B.C.S NUMBER

T-31

REMARKS

DEPTH (FEET)
SAMPLE NUMBER
SAMPLE TYPE
% RECOVERY
PENETRATION RESISTANCE
UNIFIED SOIL SYMBOL

SOIL DESCRIPTION

LIMITS OF FROZEN GROUND

ICE DESCRIPTION

DEPTH (FEET)

○ = WATER CONTENT (% OF DRY WEIGHT)
△ = ICE CONTENT (% OF SAMPLE VOLUME)

PLASTIC LIMIT 40 LIQUID LIMIT 80

GRAIN SIZE ANALYSIS

CLAY SILT SAND GRAVEL
% % % %

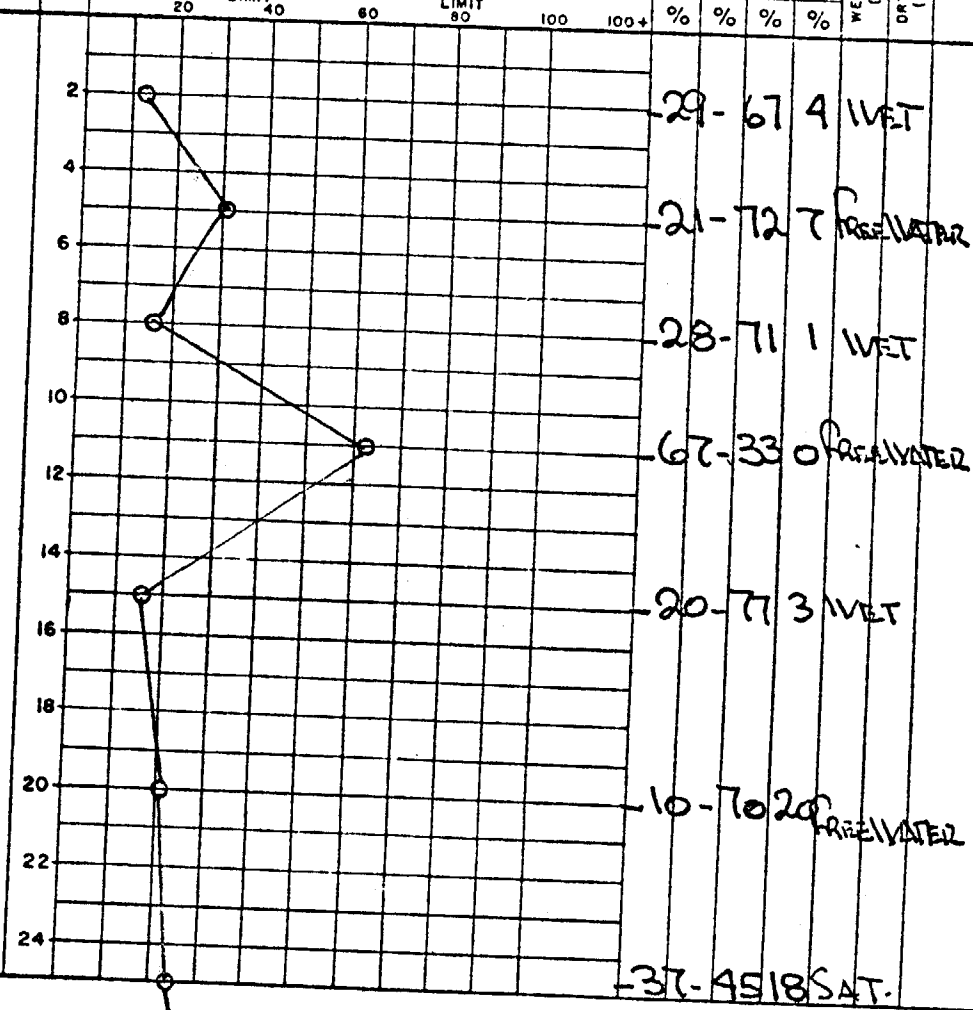
WET DENSITY (P.C.F.)
DRY DENSITY (P.C.F.)

PEAT 8"
SAND-SILTY PEBBLES

CLAY - SILTY SANDY 9'

SAND-SILTY PEBBLES 12'

GRAVELLY



PEBBLES
BOTTOM OF HOLE - 30

-70-26-4 IVET.

102

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY			
OWN		FIELD ENG.		DATE DRILLED 8/17		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE			
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER			
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS		WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS	
										CLAY %	SILT %				SAND %
2						SAND-SILTY PEBBLES			2			14-82	4	DAMP	
4									4			31-64	5	1/2	
6									6			26-66	8	SAT	
8									8			24-72	4	SAT	
10									10						
12									12						
14									14			24-73	3	SAT.	
16									16						
18									18						
20						GRAVELLY			20			19-65	16	SAT.	
22									22						
24									24			17-51	32	SAT	

OVER

DRILL HOLE REPORT										DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
OWN		FIELD ENG.		DATE DRILLED		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE							
CKD		TECH		RIG		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER							
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS			
										CLAY	SILT	SAND	GRAVEL						
										○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)									
										PLASTIC LIMIT LIQUID LIMIT 40 60 80 100 100+									
						SAND-SILTY PEBBLES			30					23-66	11	SAT.			
2									32										
4									34										
6					SM				36					35-63	2	SAT			
8						SILTY FINE		VS	38										
10					SP				40					11-89	0	Free WATER			
12									42										
14									44										
16									46					10-90	0	SAT. - FREE WATER			
18						BOTTOM OF HOLE - 45'			18										
20									20										
22									22										
24									24										

1 of 2

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY				
DWN		FIELD ENG		DATE DRILLED 8/4/77		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE				
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY	SILT	SAND	GRAVEL			
										○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME) PLASTIC LIMIT 20 40 60 80 100 100+ LIQUID LIMIT						
2						SAND-SILTY GRAVELLY			2							14-622ADAMP
4									4							20-602dMast
6						PEBBLES			6							
8									8							26-704 SAT.
10					SM			Vc-Vr	10							25-705 WET
12									12							
14						GRAVELLY			14							23-6512 WET
16									16							
18									18							
20									20							26-4826 WET
22									22							
24									24							24-6115 WET

OVER

2 of 2

DRILL HOLE REPORT										DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY						
DWN		FIELD ENG		DATE DRILLED		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE				
CKD		TECH		RIG		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B.C.S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
										O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)						
										PLASTIC LIMIT 40 60 80 100 100+ LIQUID LIMIT 60 80 100 100+						
2						SAND-SILTY GRAVELLY			30		19	59	22			Most
4									32							
6									34		21	67	12			Free water
8									36							
10									38							
12									40		28	50	22			Sat.
14									42							
16									44		21	61	18			Sat.
18									46							
20									48							
22									50							
24									52							

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY						
DWN		FIELD ENG.		DATE DRILLED		AIRPHOTO NO.		CHAINAGE		OFFSET		TEST HOLE						
CKD		TECH		RIG		SURFACE DRAINAGE		VEGETATION		ELEV		MILE B.C.S. NUMBER						
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	WATER & ICE CONTENT		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)		CLAY	SILT	SAND	GRAVEL			
									PLASTIC LIMIT 40 LIQUID LIMIT 80									
						PEAT												
2						SAND - SILTY GRAVELLY			2			28	49	23				FREE WATER
4									4			22	61	17				FREE WATER
6									6									
8									8			20	61	19				SAT.
10									10									
12									12			23	59	18				SAT.
14									14									
16									16			22	62	16				SAT.
18									18									
20									20			23	70	7				SAT.
22									22									
24									24									

ICE & SAND

ICE
+
SM

30'

BOTTOM OF HOLE - 30'

INUVIK-Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED 8/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE									
CKD		TECH PRONCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER									
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS					
										CLAY %	SILT %	SAND %	GRAVEL %								
2						SM SAND-SILTY GRAVELLY			2					25-35	40	DAMP					
4						SP			4					1-59	40	MOIST					
6									6												
8						SP		V _c -V _r	8					6-65	29	WET					
10									10												
12									12												
14						SM SILTY			14												
16						Bottom of Hole- 15'			16					23-74	3	SAT.					
18									18												
20									20												
22									22												
24									24												

INUVIK-TUK.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY				
DWN		FIELD ENG.		DATE DRILLED 8/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE				
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B.C.S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
2						SAND-SILTY PEBBLES		Vs	2	32	66	2	DAMP			
4					Sm				4	33	65	2	FRESH WATER			
6									6							
8									8	35	61	4	FRESH WATER			
10						ICE & SAND		Ice & Sm	10	27	62	1	FRESH WATER			
12									12							
14					Sm	As Above		Vs	14							
16									16	21	68	11	FRESH WATER			
18						ICE -		ICE	18							
20						DIRTY			20							
22									22							
24									24							

30'
BOTTOM OF HOLE-30'

INUVIK-Tuk										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG.		DATE DRILLED 8/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		ELEV		TEST HOLE							
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:													
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS					
										CLAY %	SILT %	SAND %	GRAVEL %								
						CLAY-SILTY SANDY PEBBLES		V _s	2					56-43	1 DAMP						
						SAND-CLAYRY SILTY PEBBLES			4					26-66	8 PRE WATER H.I.B.						
						GRAVELLY SILTY-PEBBLES			8					19-57	24 SAT.						
						GROVELLY		V _c -V _r	10					37-58	5 WET						
									12												
									14					27-54	19 WET						
									16												
									18												
									20					26-70	4 WET						
									22												
									24					21-61	18 WET						

Bottom of Hole-30

-26-56-18 SAT.

INUVIK-Tuk.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

OWN		FIELD ENG.		DATE DRILLED 8/17		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE				
CKD		TECH PRONCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B.C.S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY	SILT	SAND	GRAVEL			
2						SM SAND-SILTY GRAVELLY			2							
4						ML SILT-SANDY-CLAYEY			4							
6									6							
8						SC SAND-SILTY CLAYEY		VC-VL	8							
10									10							
12									12							
14									14							
16						CLAY-SILTY SANDY REBBLES			16							
18									18							
20						CL Low Plastic			20							
22									22							
24						SM SAND-SILTY GRAVELLY			24							

SM SAND-SILTY

Bottom of Hole 30'

30' 0

-23-55-0 WET

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY				
DWN		FIELD ENG		DATE DRILLED 8/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE				
CKD		TECH RONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
						PT PEAT 4"										
2						SAND-SILTY PEBBLES			2					30-66	4	DAMP
4						GRAVELLY			4					19-66	15	WET
6									6							
8									8					22-67	11	WET
10									10							
12									12					41-48	11	DAMP
14									14							
16									16					26-63	11	WET
18									18							
20									20					41-51	8	MOIST
22									22							
24									24							

PEBBLES
Bottom of Hae-30'

30'

-42-56-2 WET

INUVIK - Tuk.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

OWN		FIELD ENG		DATE DRILLED 8/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE				
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY	SILT	SAND	GRAVEL			
										%	%	%	%			

○ = WATER CONTENT (% OF DRY WEIGHT)
 △ = ICE CONTENT (% OF SAMPLE VOLUME)

PLASTIC LIMIT 20 40 60 80 100 100+
 LIQUID LIMIT

2						PEAT 4"			2		25	75	0	WET		
4						SAND - SILTY			4		30	62	8	SAT.		
6						PEBBLES			6							
8									8		22	64	14	SAT		
10					SM			VL-VR	10		28	63	9	SAT.		
12									12							
14									14		19	73	8	SAT		
16									16							
18									18							
20									20		32	63	5	WET		
22									22							
24									24		24	71	5	SAT		

30' ○

BOTTOM OF HOLE - 30'

-26-70-10 WET

Inuvik - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY												
DWN		FIELD ENG		DATE DRILLED 8/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE												
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV:		MILE B,C,S NUMBER												
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)						GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS		
										PLASTIC LIMIT 20 40 60 80 100 100+						CLAY	SILT	SAND	GRAVEL					
															%	%	%	%						
2						P ₄ PEAT			2															
4						CLAY - SILTY		V _S	4															
6						SANDY			6															
8						FEW PEBBLES			8															
10									10															
12								V _{C-V}	12															
14									14															
16									16															
18									18															
20									20															
22									22															
24									24															

Inuvik - Tuk.						DRILL HOLE REPORT				DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY					
DWN		FIELD ENG		DATE DRILLED		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE			
CKD		TECH <i>Romach</i>		RIG: <i>AIR</i>		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER			
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS		WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS	
										CLAY %	SILT %				SAND %
										○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)					
										PLASTIC LIMIT 20 40 60 80 100 100+ LIQUID LIMIT					
2						SAND - SILTY GRAVELLY			2					19-70 10 Mast	H.I.B.
4									4					20-61 19 WET	
6									6					20-61 19 SAT.	
8									8					20-61 19 SAT.	
10									10					18-68 14 WET	
12									12					20-67 13 SAT	
14									14					26-63 11 WET	
16									16					24-66 10 WET	
18									18						
20									20						
22								22							
24								24							

NOTES

Bottom of Hole - 30'

-20-56-24 WET

INUVIK - Tuk										DRILL HOLE REPORT										DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED 8/4/77		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE																	
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE		B,C,S		NUMBER													
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)						GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS							
										PLASTIC LIMIT		LIQUID LIMIT		CLAY	SILT	SAND	GRAVEL												
									20 40 60 80 100 100+						%	%	%	%											
2						1. PEAT			2																				
4						DIRTY ICE		ICE	4																				
6									6																				
8						ICE & SAND		ICE & SM	8																				
10									10	NO SAMPLES																			
12									12																				
14									14																				
16						ICE		ICE	16																				
18									18																				
20									20																				
22									22																				
24									24																				

SAND-SILTY

GRAVELLY

30'

BOTTOM OF HOLE - 30'

Inuvik - Tuk-										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY				
DWN		FIELD ENG		DATE DRILLED 14/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE				
CKD		TECH P. Rouch		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
										CLAY %	SILT %	SAND %	GRAVEL %			
						PEAT										
2						SILT-GRAVELLY CLAYEY SANDY PEBBLES			2					62-13	25	Moist
4									4							
6									6							
8					ML			Vs	8					51-45	3	Free Water
10						GRAVELLY			10							
12									12					51-34	22	Free Water
14									14							
16						CLAY-SANDY SILTY PEBBLES			16					45-48	7	Sat.
18					CL				18							
20						GRAVELLY		Vc-Vr	20					42-40	18	WET
22									22							
24					SM	SAND-SILTY PEBBLES			24					24-69	7	WET

GRAVELLY

30

BOTTOM OF HOLE - 30

-23-50-27 WET

INUVIK - Tuk.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN		FIELD ENG		DATE DRILLED 8/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE										
CKO		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER										
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)				GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS		
										PLASTIC LIMIT 20 40 60 80 100 100+				CLAY	SILT	SAND	GRAVEL					
												%	%	%	%							
2						GRAVEL-SANDY 4"			2													
4						SAND-SILTY 3.5'		U _S	4													
6						PEBBLES 7'			6													
8									8													
10						ICE		ICE	10													
12									12													
14									14													
16									16													
18									18													
20									20													
22									22													
24									24													

T-45

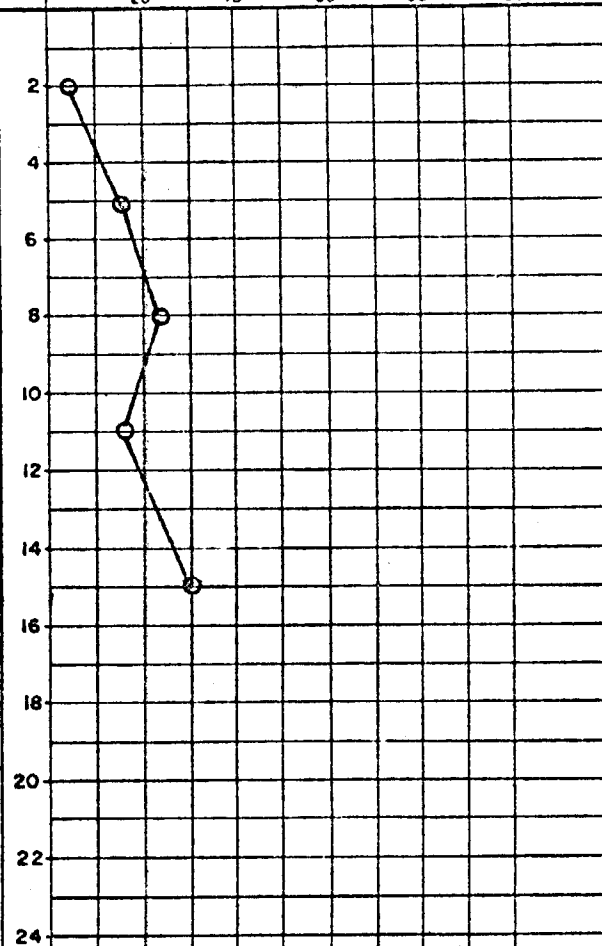
NO SAMPLES

BOTTOM OF HOLE - 15'

INUVIK - Tuk										DRILL HOLE REPORT				DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY			
DWN		FIELD ENG.		DATE DRILLED 9/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE					
CKD		TECH PRONYCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER					
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS	
										CLAY %	SILT %	SAND %	GRAVEL %				
						PEAT .5'											
2					SM	SAND-GRAVELLY			2							7-70 23 DAMP	
4						SILTY-PEBBLES			4							34-62 4 SAT.	
6						CLAY-SANDY		V _c -V _r	6							61-36 3 IVET	
8						SILTY PEBBLES			8								
10					C ₁	LOW-MED. PLASTIC			10							41-55 4 IVET	
12									12								
14					C ₁				14							78-19 3 IVET	
16						BOTTOM OF HAE- 15'			16								
18									18								
20									20								
22									22								
24									24								

○ = WATER CONTENT (% OF DRY WEIGHT)
 △ = ICE CONTENT (% OF SAMPLE VOLUME)

PLASTIC LIMIT 40 LIQUID LIMIT 60



INUVIK - Tuk.										DRILL HOLE REPORT				DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY					
DWN		FIELD ENG		DATE DRILLED 9/14/57		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE							
CKD		TECH PRONCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE		B,C,S		NUMBER			
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS			
										CLAY	SILT	SAND	GRAVEL						
										○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)									
										PLASTIC LIMIT 40 LIQUID LIMIT 80									
						PT PEAT													
2					SH	SAND-GRAVELLY SILTY			2					23-63	14	WET			
4					ML	SILT - SANDY			4					62-38	0	SAT.			
6					SH	SAND-SILTY GRAVELLY		U _c -V _r	6										
8					SH	SAND-SILTY GRAVELLY			8					12-74	14	WET			
10					SH	SAND-SILTY PEBBLES			10					17-82	1	WET			
12									12										
14									14					10-89	1	WET			
16									16										
18									18										
20					SH	GRAVELLY			20					15-67	18	SAT			
22									22										
24						ICE		ICE	24										

30'

BOTTOM OF HOLE - 30'

INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY				
OWN		FIELD ENG		DATE DRILLED		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE				
CKD		TECH		RIG		SURFACE DRAINAGE		VEGETATION		ELEV		MILE B.C.S NUMBER				
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS		WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS		
										CLAY	SILT				SAND	GRAVEL
										○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)						
										PLASTIC LIMIT 40 LIQUID LIMIT 80						
2						PEAT & ICE		ICE + P	2							
4						CLAY-SILTY SANDY PEBBLES LOW PLASTIC		V _c -V _r 1 V _s	4							
6					6											
8					8											
10					10											
12									12							
14									14							
16									16							
18									18							
20									20							
22									22							
24									24							

DRILL HOLE REPORT										DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED		AIRPHOTO NO:		CHAINAGE		OFFSET		TEST HOLE							
CKD		TECH		RIG		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER							
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS			
										CLAY	SILT	SAND	GRAVEL						
										○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)									
										20	40	60	80	100	100+				
2						Peat 1.5'		Vs	2										
						OL ORGANIC SILT 2.5'													
4						CLAY-SILTY			4										
						SANDY													
6						PEBBLES			6										
						Low PLASTIC		Vc - Vr											
8									8										
10									10										
12									12										
14									14										
16						15'			16										
						BOTTOM OF HOLE - 15'													
18									18										
20									20										
22									22										
24									24										

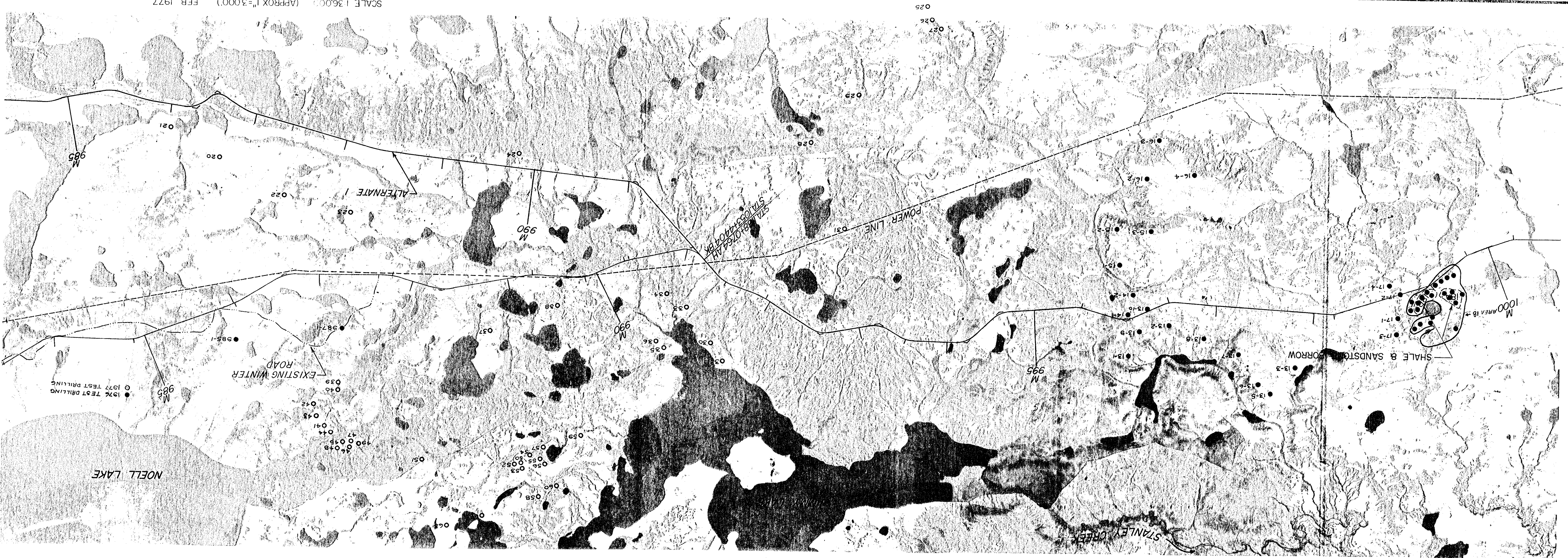
Inuvik - Tuk										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY														
DWN		FIELD ENG		DATE DRILLED 8/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE														
CKD		TECH French		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE		B,C,S		NUMBER										
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)						GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS				
										PLASTIC LIMIT 40 ——— LIQUID LIMIT 80 20 60 100 100+						CLAY	SILT	SAND	GRAVEL							
																%	%	%	%							
						REPEAT 1'																				
2						CLAY - SILTY			2																	
4						- SANDY			4																	
6						- PEBBLES			6																	
8									8																	
10							10'		10																	
12						ICE & SOIL		ICE &	12																	
14								CL	14																	
16							15'		16																	
18						BOTTOM OF HOLE - 15'			18																	
20									20																	
22									22																	
24									24																	

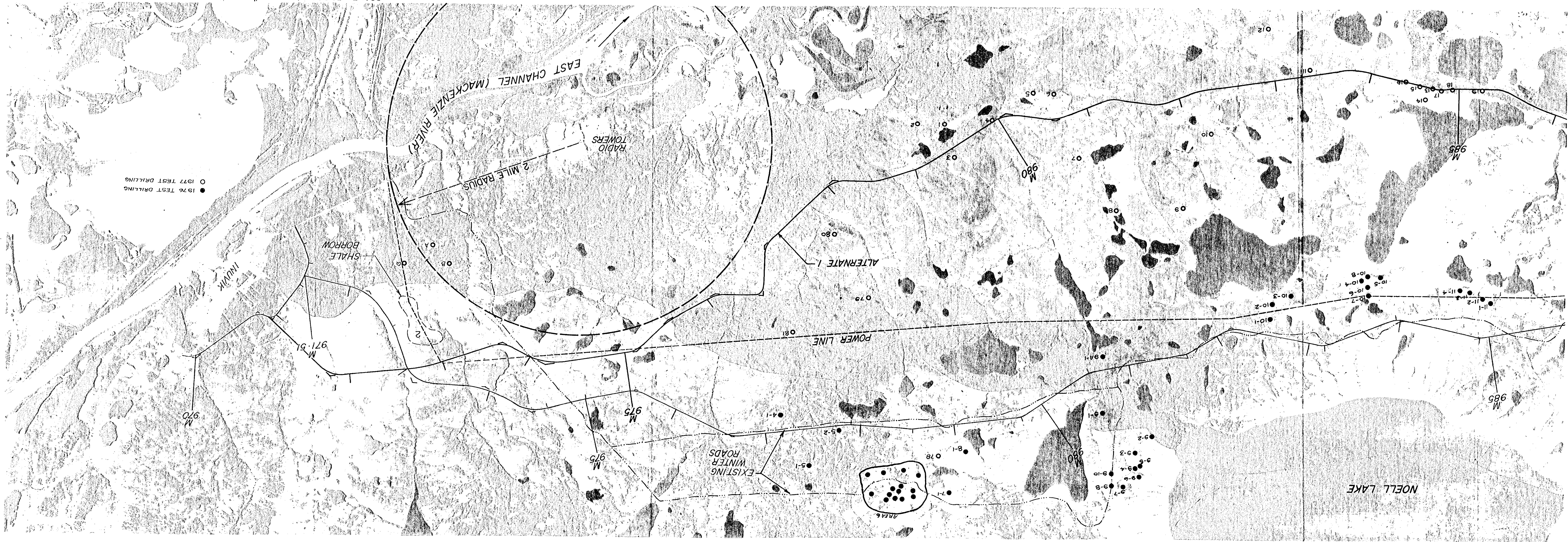
INUVIK - Tuk.										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY														
DWN		FIELD ENG		DATE DRILLED 9/11/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE														
CKD		TECH PRONYCH		RIG A12		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE		B,C,S		NUMBER										
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)						GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS				
										PLASTIC LIMIT		LIQUID LIMIT		CLAY	SILT	SAND	GRAVEL									
									20		40		60		80		100		100+		%	%	%	%		
2						PEAT & ICE	3'	ICE & Pt	2																	
4						CLAY - SILTY few pebbles		Vs	4																	
6									6																	
8									8																	
10							10		10																	
12						ICE		ICE	12																	
14									14																	
16							15'		16																	
18						BOTTOM OF HOLE - 15'			18																	
20									20																	
22									22																	
24									24																	

INUVIK-Tuk										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED 9/1/77		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE									
CKD		TECH BRANCH		RIG AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B.C.S NUMBER									
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	O = WATER CONTENT (% OF DRY WEIGHT) Δ = ICE CONTENT (% OF SAMPLE VOLUME)		GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS			
										PLASTIC LIMIT	LIQUID LIMIT	CLAY %	SILT %	SAND %	GRAVEL %						
2						PEAT 15'		ICE & CL	2			77-16	7			SAT.					
4						CLAY SILTY SANDY PEBBLES			4			79-18	3			WET					
6									6												
8								V _c -V _r	8			75-20	5			WET					
10						CL LOW PLASTIC			10			70-16	14			WET					
12									12												
14									14			75-17	8			MOIST					
16									16												
18									18												
20									20												
22									22												
24									24												

Inuvik - Tuk										DRILL HOLE REPORT										DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY									
DWN		FIELD ENG		DATE DRILLED		AIRPHOTO NO:		CHAINAGE:		OFFSET		TEST HOLE																	
CKD		TECH		RIG		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE		B,C,S		NUMBER													
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)						GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS							
										PLASTIC LIMIT LIQUID LIMIT 20 40 60 80 100 100+						CLAY	SILT	SAND	GRAVEL										
2						PEAT & ICE	3	ICE A ⁺	2																				
4						ICE & SOIL	6	ICE & CL	4																				
6									6																				
8									8																				
10						ICE		ICE	10																				
12									12																				
14									14																				
16									16																				
18									18																				
20									20																				
22									22																				
24									24																				

INUVIK - Tuk										DRILL HOLE REPORT		DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY											
DWN		FIELD ENG		DATE DRILLED 9/4/77		AIRPHOTO NO:		CHAINAGE:		OFFSET:		TEST HOLE											
CKD		TECH Franch		RIG: AIR		SURFACE DRAINAGE:		VEGETATION:		ELEV		MILE B,C,S NUMBER											
DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	○ = WATER CONTENT (% OF DRY WEIGHT) △ = ICE CONTENT (% OF SAMPLE VOLUME)					GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS		
										PLASTIC LIMIT 20 40 60 80 100 100+ LIQUID LIMIT					CLAY	SILT	SAND	GRAVEL					
										%	%	%	%										
2						P ₂ PEAT 2'		ICE & SM	2														
4						ICE & SAND			4														
6					SM	SAND - SILTY PEBBLES			6														
8									8														
10						ICE		ICE	10														
12									12														
14									14														
16						15'			16														
18						BOTTOM OF HOLE 15'			18														
20									20														
22									22														
24									24														





● 1976 TEST DRILLING
○ 1977 TEST DRILLING

SCALE 1:36,000 (APPX 1:20,000) FEB 1977

SCALE 1"=3000'

