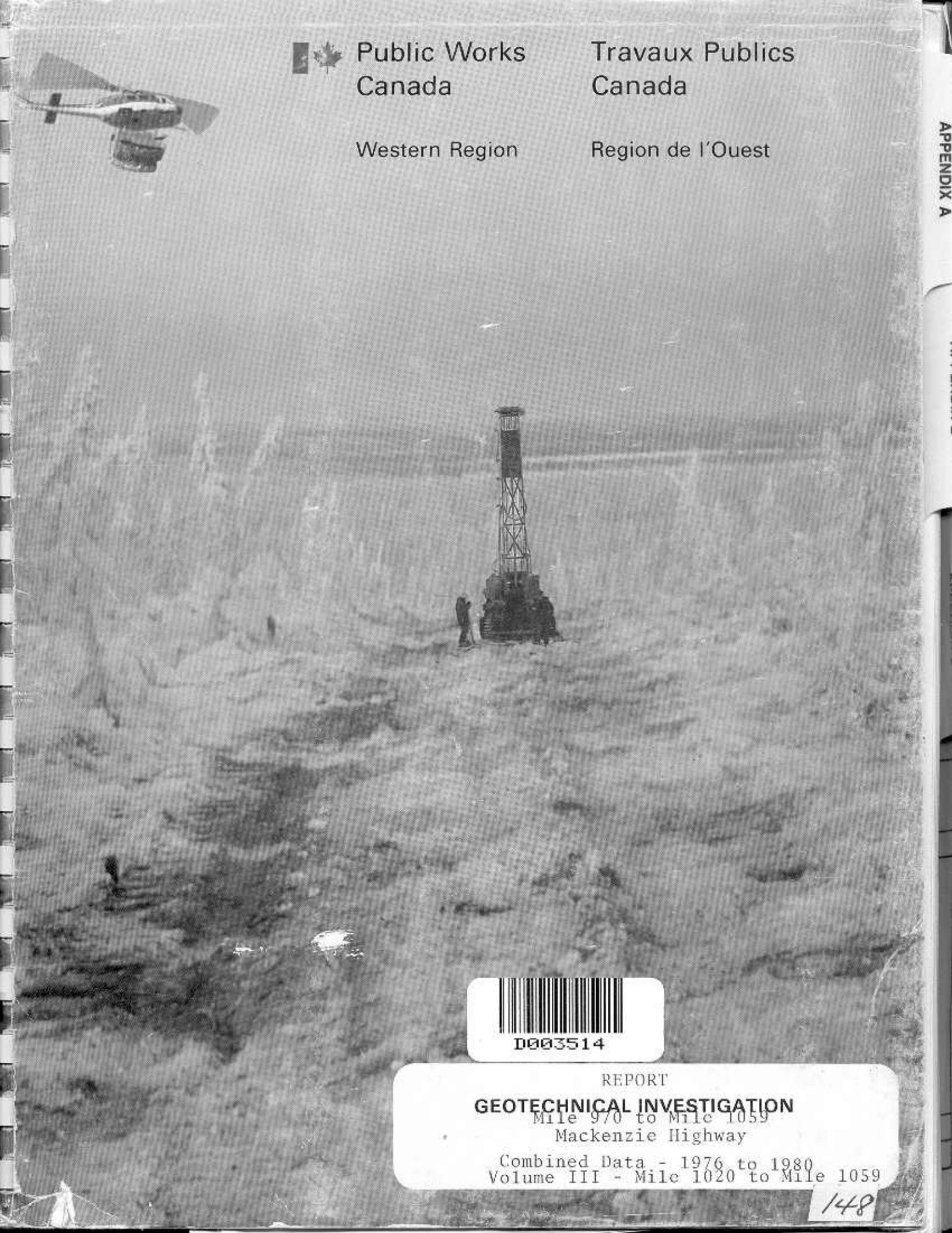
Public Works Canada | Travaux Publics Canada

Western Region | Region de l'Ouest



D003514

REPORT

GEOTECHNICAL INVESTIGATION

Mile 970 to Mile 1059
Mackenzie Highway

Combined Data - 1976 to 1980
Volume III - Mile 1020 to Mile 1059

148

APPENDIX A

Appendix A

5 Maps

(1) 1:36000 Eskimo Lakes
Feb 1977

(2) 1:3600 Eskimo Lakes
Feb 1977

(3) 77, 80 Drill Tests

(4) 22936-60

(5) A22936-148

Appendix B

ICE & WATER CHECK

INUVIK - TUK.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 6/4/71	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
		T-1

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
2						ICE		ICE
4								
6								
8						WATER		
10								
12								
14								
16						16'		
18						BOTTOM OF WATER - 16'		
20								
22								
24								

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

PLASTIC LIMIT ⟵⟶ LIQUID LIMIT

20 40 60 80 100 100+

DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
2							
4							
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							

NOTE

INUVIK - TUK.

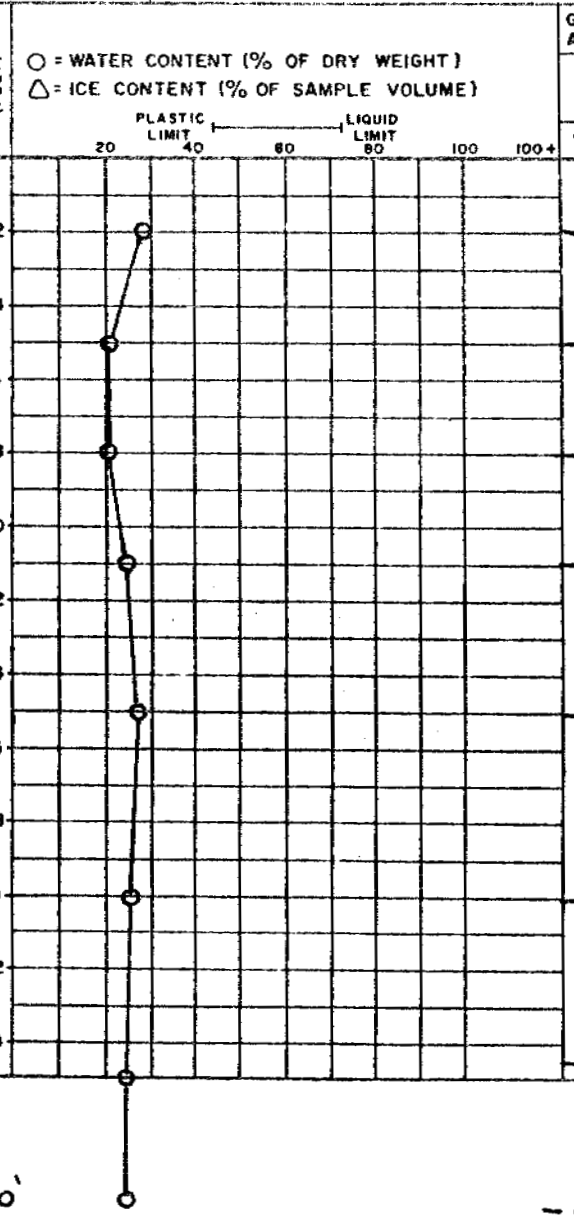
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 4/4/77	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE: MILE | B,C,S | NUMBER TT2

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
					Pt	PEAT 4"									
2					CL	CLAY - SILTY SANDY GRAVELLY 3'			43	38	19		WET		
4						SAND - SILTY									
6					SM				42	53	5		SAT.		
8									10	90	0		WET		
10															
12								V_S	18	82	0		SAT.		
14								1							
16								$V_C - V_Y$	10	90	0		FREE WATER		
18															
20									11	89	0		SAT.		
22					SP	FINE									
24									4	96	0		SAT		



-4-96-0 SAT.

BOTTOM OF HOLE - 30'

INUVIK - TUK.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 6/4/71	AIRPHOTO NO:	CHAINAGE:	OFFSET:
CKD	TECH PRONYCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV:

TEST HOLE: MILE | B,C,S | NUMBER T-3

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT 1.5'									
2						CLAY-SILTY SANDY PEBBLES 4'									
4								Vs							
6						SAND - FINE		1							
8					SP			Vc - Vr							
10															
12															
14															
16															
18						19'									
20						ICE		ICE							
22						22'									
24					SP	SAND - FINE		Vc - Vr							

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

PLASTIC LIMIT ⟷ LIQUID LIMIT
20 40 60 80 100 100+

	CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)
2	59	40	1		SAT	
4	9	91	0		WET	
6						
8	11	89	0		FRESH WATER	
10	8	92	0		WET	
12						
14	8	92	0		WET	
16						
18						
20						
22						
24	4	96	0		SAT	

30'

Bottom of Hole - 30'

-8 92 - 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
CKD	TECH PRONYCH	RIG: Air	SURFACE DRAINAGE:	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER: T4

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT — 1.5'		
2						SILT - SANDY CLAYEY PEBBLES		
4								
6					ML			
8								
10						ICE		ICE
12								
14						— 15'		
16						BOTTOM OF HOLE - 15'		
18								
20								
22								
24								

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

PLASTIC LIMIT ⟷ LIQUID LIMIT
20 40 60 80 100 100+

NO SAMPLES

DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
2							
4							
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							

R073

INUVIK - TUK

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

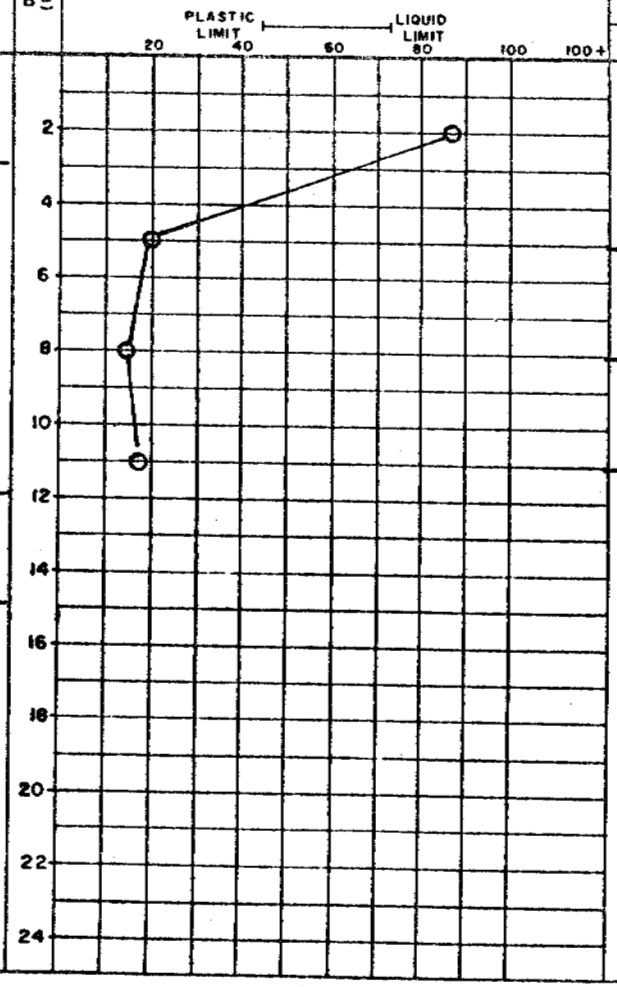
DWN	FIELD ENG	DATE DRILLED 6/4/77	AIRPHOTO NO:	CHAINAGE:	OFFSET:
CKD	TECH PRONYCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
		T-5

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT 1.5'		Vs
					Pt	PEAT - PEBBLES 3'		
					GC	SAND-GRAVEL-CLAY MIXTURE		Vs
					SM	SAND - SILTY		I
								Ic-Vi
						ICE 15'		ICE
						BOTTOM OF HOLE . 15'		

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



DEPTH (FEET)	CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
					MOIST		H.I.B.
5	33	40	27		FREE WATER		
8	23	76	1		WET		
11	24	76	0		WET		

R073

INUVIK - TUK

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 6/4/77	AIRPHOTO NO:	CHAINAGE:
CKD	TECH PRONYCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:

OFFSET:
ELEV

TEST HOLE: MILE | B,C,S | NUMBER T-6

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT — 5'		
2, 4, 6, 8, 10						ICE		ICE
12, 14					SP	SAND - FINE — 15'		Vs
16, 18, 20, 22, 24						BOTTOM OF HOLE - 15'		

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

PLASTIC LIMIT ⟷ LIQUID LIMIT
20 40 60 80 100 100+

NO SAMPLES

DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 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:
CKD	TECH PRONYCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
		T-7

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT 2'		
2						SILT - SANDY		
4								
6								Vs
8						9'		
10						SAND - SILTY		
12								
14						ICE 15'		ICE
16						BOTTOM OF HOLE - 15'		
18								
20								
22								
24								

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

PLASTIC LIMIT ⊢——⊣ LIQUID LIMIT

20 40 60 80 100 100+

NO SAMPLES

DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
2							
4							
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							

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INUVIK - TUK.

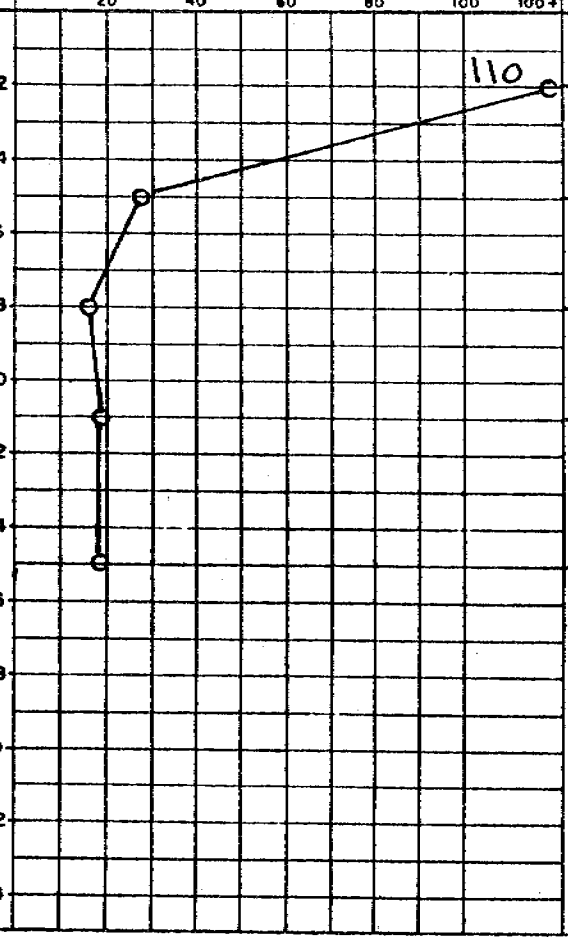
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 6/4/71	AIRPHOTO NO:	CHAINAGE:	OFFSET:
CKD	TECH PRONYCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE: MILE | B,C,S | NUMBER T-8

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
2					Pt	PEAT		Vs
						3'		
4						CLAY - SILTY SANDY GRAVELLY LOW PLASTIC		
6					CL			
						8'		
8					Sc	SAND - SILTY CLAYEY		Vc - Vr
10								
12					SM	SILTY PEBBLES		
14								
16								
18								
20						ICE		ICE
22								
24								



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
37	49	14		FREE WATER		
50	34	16		SAT.		
38	61	1		WET		
27	69	4		WET		
19	81	0		SAT.		

30'

BOTTOM OF HOLE - 30'

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:
CKD	TECH PRONYCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
		T-9

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
2						PEAT & ICE		ICE Pt
4					GM	GRAVEL SANDY SILTY 5'		Vs
6					SM	SAND - SILTY		
8								
10						ICE		ICE
12								
14						15'		
16						BOTTOM OF HOLE - 15'		
18								
20								
22								
24								

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

PLASTIC LIMIT ⊢——⊣ LIQUID LIMIT

20 40 60 80 100 100+

NO SAMPLES

DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
2							
4							
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							

R073

INUVIK - TUK.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 6/4/71	AIRPHOTO NO:	CHAINAGE:	OFFSET:
CKD	TECH PRONYCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV:

TEST HOLE

MILE	B,C,S	NUMBER
		T-10

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT									
2						2'									
4						CLAY - SILTY SANDY PEBBLES									
6									69	24	7		WET		
8					CL	LOW PLASTIC		$V_c - V_s$	57	38	5		WET		
10															
12									69	30	1		WET		
14															
16									63	31	6		WET		
18															
20									56	41	3		MOIST		
22						23'									
24					SM	SAND - SILTY			13	87	0		WET		

SP FINE

30'

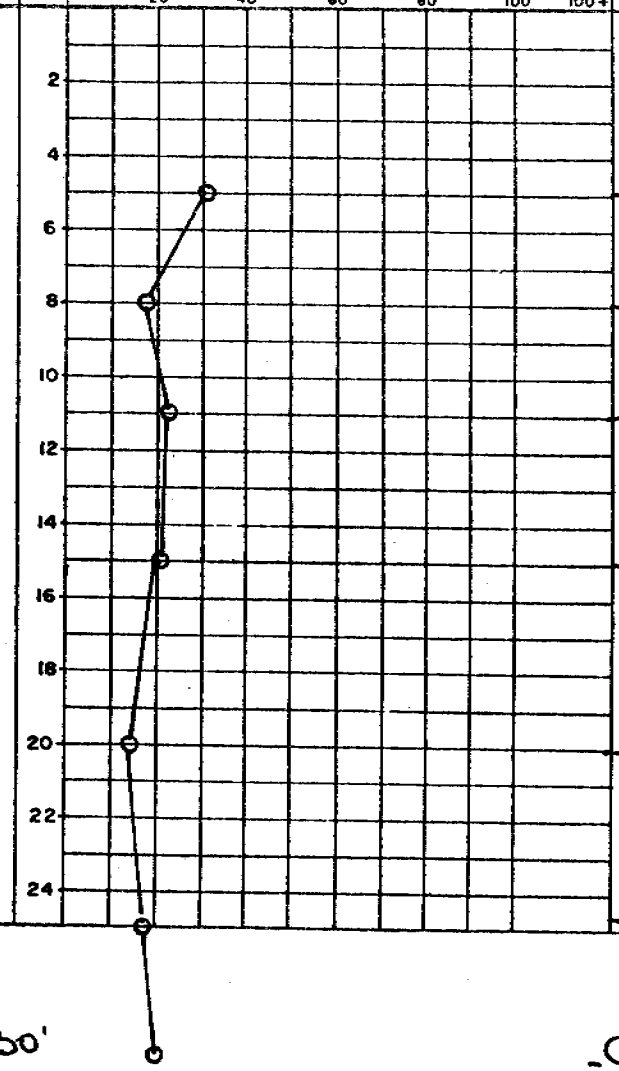
BOTTOM OF HOLE - 30'

-9-91-0 SAT.

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

PLASTIC LIMIT — LIQUID LIMIT

20 40 60 80 100 100+



INUVIK - TUK.

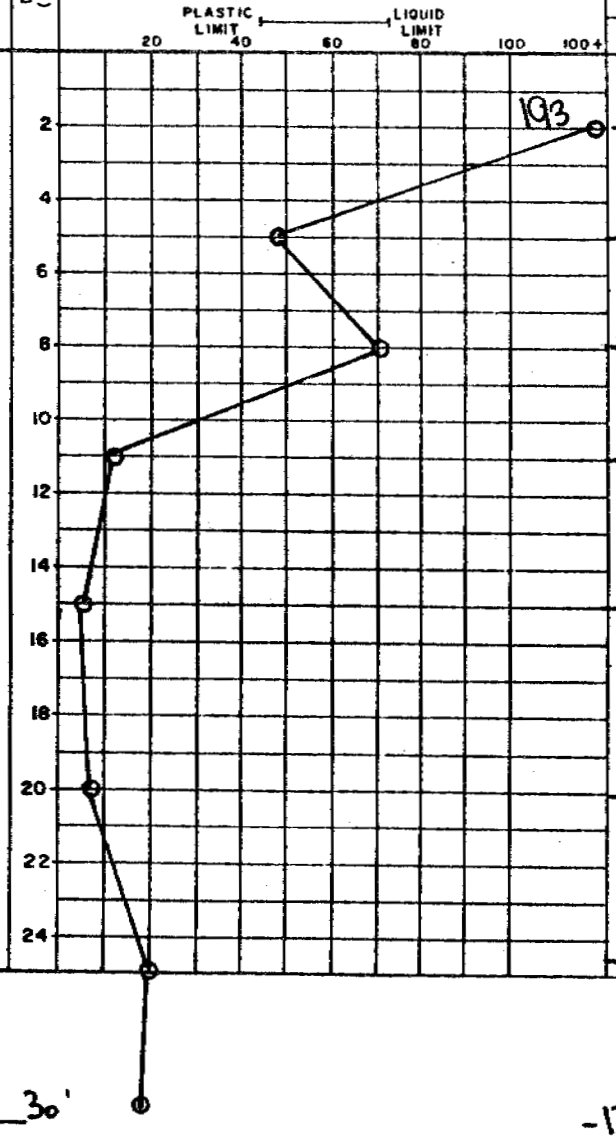
DRILL HOLE REPORT

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: T-11

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT .5'									
2						CLAY - SILTY			93	7	0		FREE WATER		
4					Gl	SANDY PEBBLES			72	24	4		FREE WATER		
6															
8						SILTY			98	2	0		FREE WATER		
10						10'									
12					Gc	GRAVEL - SAND MIXTURE CLAYEY			11	50	39		SAT.		
14															
16					SM	SAND - GRAVELLY SILTY			11	41	48		WET		Rock BIT USED 15'
18															
20						21'			20	54	26		WET		
22						CLAY - SILTY SANDY									
24					Cl	PEBBLES			64	34	2		WET		

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



SM | SAND - SILTY 29'
30'

BOTTOM OF HOLE - 30'

SAT.

-13-86-1

INUVIK - TUK.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 6/4/71	AIRPHOTO NO	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
		T-12

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
2					Pt	PEAT 3'		
4						CLAY - SILTY SANDY GRAVELLY 6'		Vs
6								
8					Sm	SAND - SILTY 9'		
10						ICE		ICE
12								
14						15		
16						BOTTOM OF HOLE - 15'		
18								
20								
22								
24								

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

PLASTIC LIMIT — LIQUID LIMIT
20 40 60 80 100 100+

NO SAMPLES

DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
2							
4							
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							

R073

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

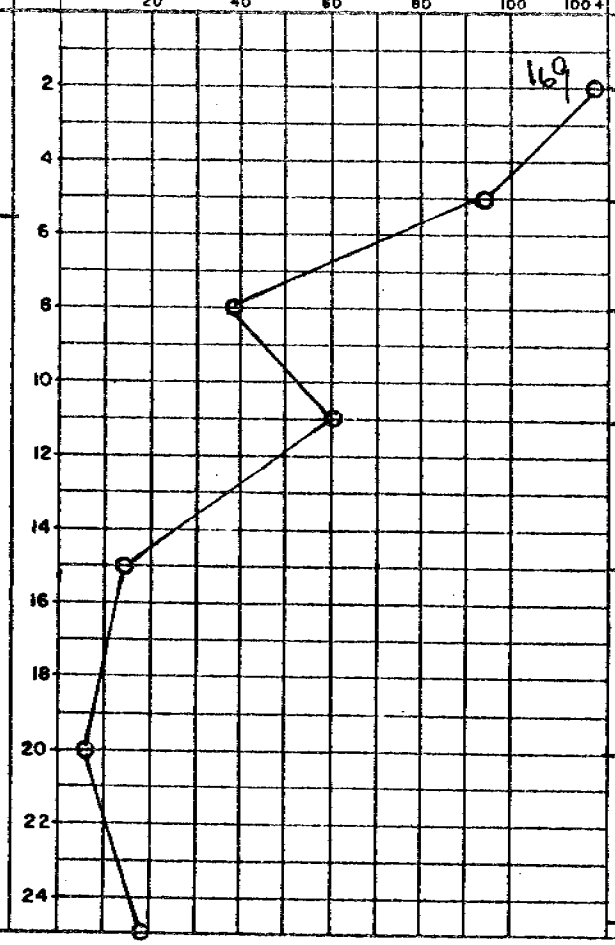
INUVIK - TUK.

DWN | FIELD ENG | DATE DRILLED 6/4/77 | AIRPHOTO NO: | CHAINAGE: | OFFSET:
CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE: | VEGETATION: | ELEV

TEST HOLE: MILE | B,C,S | NUMBER T-13

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
2					Pt	PEAT - SAND SILT & ICE		ICE, Pt, SM
4								
6						GRAVEL 5.5'		
						CLAY - SILTY 6' SANDY		
8					CL			
10					CI	LOW - MED. PLASTIC		
12						12'		
						SAND - GRAVELLY SILTY CLAYEY		
14					SC			
16								
18								
20								
22								
24						24'		
					CI	CLAY - SILTY SANDY PEBBLES		

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



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
91	9	0		SAT.		
88	12	0		WET		
86	14	0		SAT.		
69	17	14		FREE WATER		
17	53	30		SAT.		Rock Bit USED 15'-30'
17	57	26		MOIST		
73	22	5		MOIST		

R073

OVER

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED	AIRPHOTO NO	CHAINAGE	OFFSET
CKD	TECH	RIG	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
		T-13

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
2					Sc	SAND-SILTY CLAYEY		Vc-Vr, Vs	24	72	4		SAT.		
4															
6						ICE		ICE							
8															
10															
12						SAND-SILTY									
14					Sc										
						45'									
16						BOTTOM OF HOLE-45'									
18															
20															
22															
24															

DEPTH (FEET): 30, 32, 34, 36, 38, 40, 42, 44, 46, 18, 20, 22, 24

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

PLASTIC LIMIT — LIQUID LIMIT
20 40 60 80 100 100+

R073

INUVIK - TUK.

DRILL HOLE REPORT

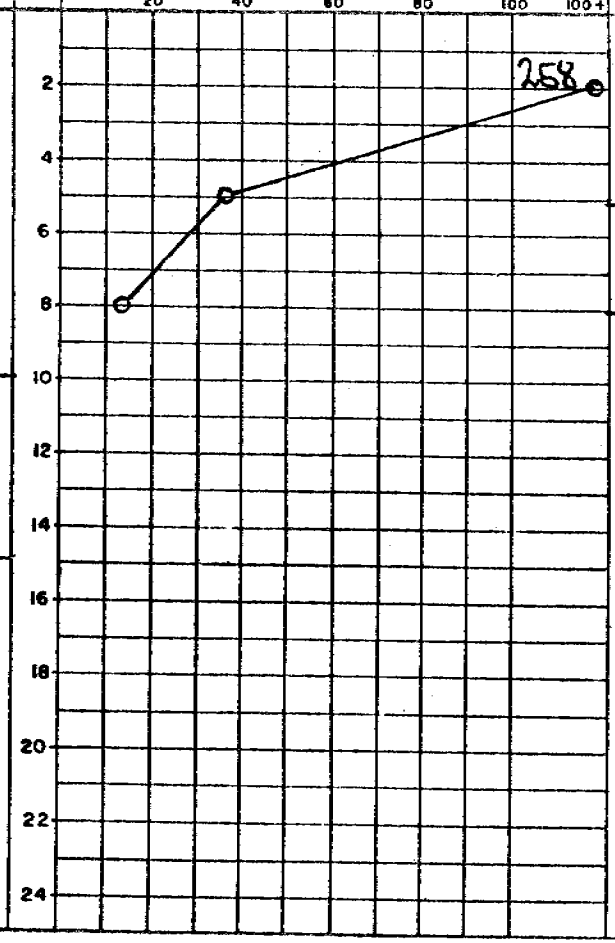
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG.	DATE DRILLED 6/4/77	AIRPHOTO NO.	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
		T-14

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
2					Pt	PEAT							WET		
4						4'									
6						SAND-GRAVEL MIX SILTY		Vs	27	34	39		FREE WATER		
8					SM-GM				25	39	36		WET		
10						10'									
12						ICE		ICE							
14															
16						15'									
18						BOTTOM OF HOLE.	15								
20															
22															
24															



R073

INUVIK - TUK.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

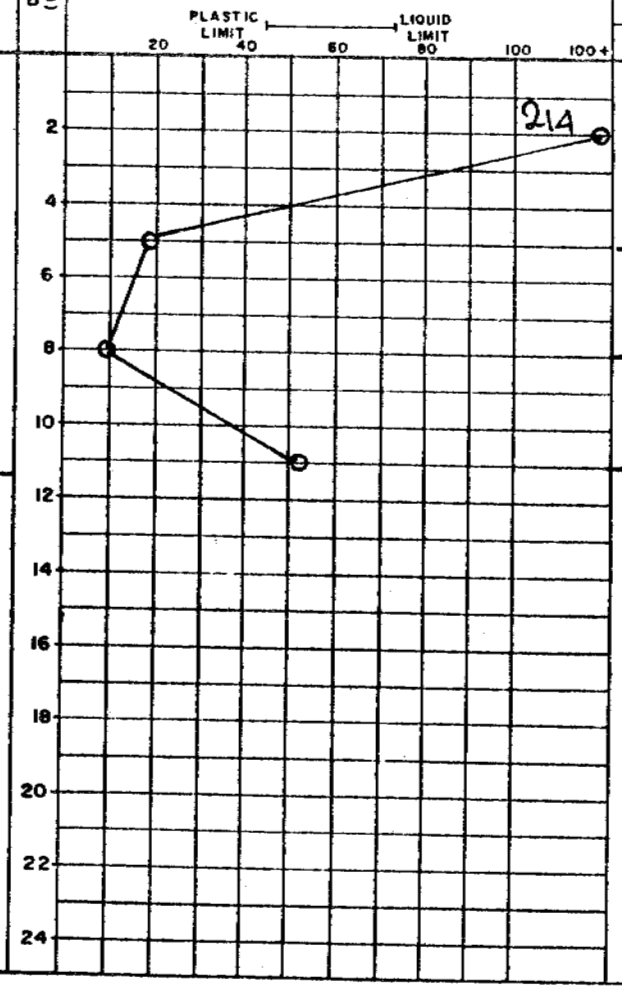
DWN	FIELD ENG	DATE DRILLED 6/4/77	AIRPHOTO NO:	CHAINAGE:	OFFSET:
CKD	TECH PRONYCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV:

TEST HOLE

MILE	B,C,S	NUMBER
		T-15

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
2					PT.	PEAT		
						3'		
4					GM	GRAVEL-SANDY SILTY		V S
6					SM	SAND-GRAVELLY SILTY		
8								
10						10'		
					CL	CLAY-SANDY GRAVELLY		
12								
14								
16								
18						ICE		ICE
20								
22								
24								

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



DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
2					WET		
4	14	32	54		SAT.		
8	17	60	23		WET		
10	46	32	22		FREE WATER		

ICE ICE

30'

BOTTOM OF HOLE - 30'

INUVIK - TUK.

DRILL HOLE REPORT

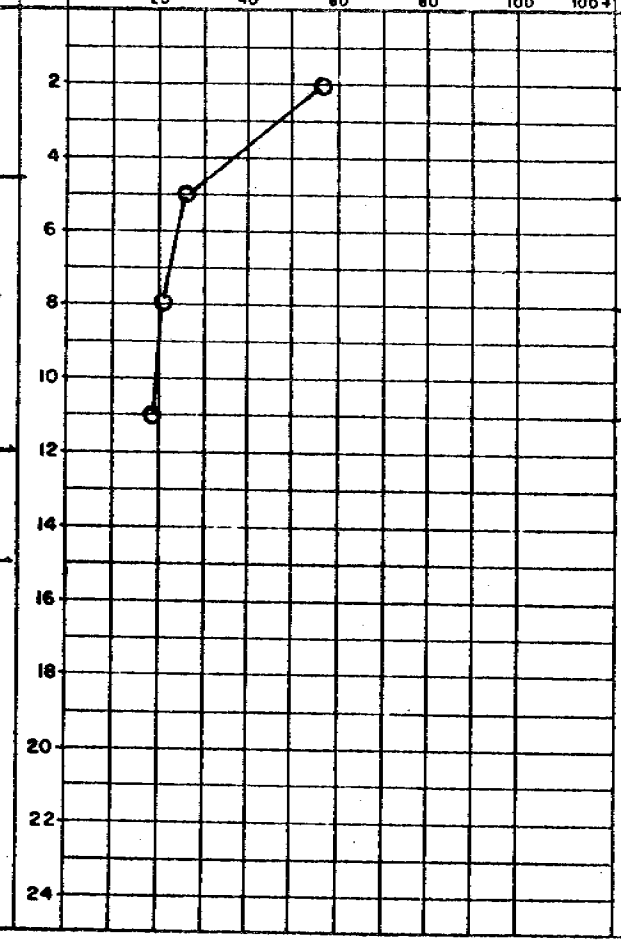
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 7/4/77	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
		TT-16

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
2					Pt	PEAT 2'		ICE & CL
4						ICE & SOIL 4.5'		
6					CL	CLAY - SILTY SANDY GRAVELLY PEBBLES LOW PLASTIC		$V_c - V_r$
8								
10								
12						ICE		ICE
14						15'		
16						BOTTOM OF HOLE - 15'		
18								
20								
22								
24								



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
83	16	1		FREE WATER		
69	15	21		WET		
77	18	5		WET		
73	21	6		WET		

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DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 1/4/77	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE:	VEGETATION	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
		1-77

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
2					Pt	PEAT		
						2.5'		
4						CLAY - SILTY SANDY PEBBLE		Vs
6								
8								
10						ICE		ICE
12								
14								
						15'		
16						BOTTOM OF HOLE - 15'		
18								
20								
22								
24								

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

PLASTIC LIMIT — LIQUID LIMIT

20 40 60 80 100 100+

NO SAMPLES

DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
2							
4							
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							

R073

INUVIK - TUK.

DRILL HOLE REPORT

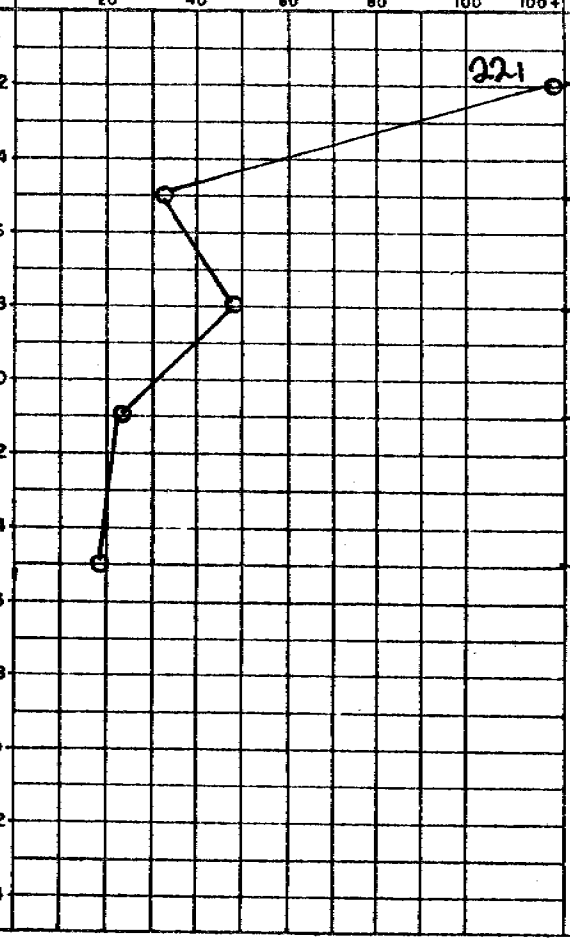
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 7/4/77	AIRPHOTO NO:	CHAINAGE:	OFFSET:
CKD	TECH PROVYCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
		T-18

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	REMARKS
					Pt	PEAT 8"			
2						CLAY - SILTY SANDY PEBBLES			
4									
6						LOW PLASTIC			
8					CL			Vs	
10									
12									
14						GRAVELLY 15'			
16						BOTTOM OF HOLE - 15'			
18									
20									
22									
24									



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
96	4	0				FREE WATER
83	16	1		WET		
81	18	1				FREE WATER
83	16	1		WET		
70	17	13		MOIST		

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DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 7/4/77	AIRPHOTO NO:	CHAINAGE:	OFFSET:
CKD	TECH PRONYCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
		T-19

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
2						PEAT - ICE & SOIL		PEAT - ICE - SOIL
4								
6						5½ CLAY - SILTY SANDY PEBBLES		
8								
10								VS
12								
14						15'		
16						BOTTOM OF HOLE - 15'		
18								
20								
22								
24								

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

PLASTIC LIMIT ⟷ LIQUID LIMIT

20 40 60 80 100 100+

NO SAMPLES

DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
2							
4							
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							

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DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 8/4/77	AIRPHOTO NO:	CHAINAGE:	OFFSET
CKD	TECH PRONYCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE: MILE | B,C,S | NUMBER T-40

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT 4"									
2						SAND - SILTY			25	75		0	WET		
4						PEBBLES			30	62		8	SAT.		
6															
8									22	64		14	SAT		
10					SM			VL-VR	28	63		9	SAT.		
12															
14									19	73		8	SAT		
16															
18															
20									32	63		5	WET		
22															
24									24	71		5	SAT		

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

PLASTIC LIMIT — LIQUID LIMIT
20 40 60 80 100 100+

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 8/4/71	AIRPHOTO NO:	CHAINAGE:	OFFSET:
CKD	TECH PRONYCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE: MILE | B,C,S | NUMBER T-41

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
2					Pt	PEAT		
						2.5'		
4						CLAY - SILTY SANDY FEW PEBBLES		Vs
6								
8								
10								Vc-Vr
12								
14								
						15'		
16						BOTTOM OF HOLE-15'		
18								
20								
22								
24								

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

PLASTIC LIMIT — LIQUID LIMIT: 20, 40, 60, 80, 100, 100+

NO SAMPLES

DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
2							
4							
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							

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DRILL HOLE REPORT

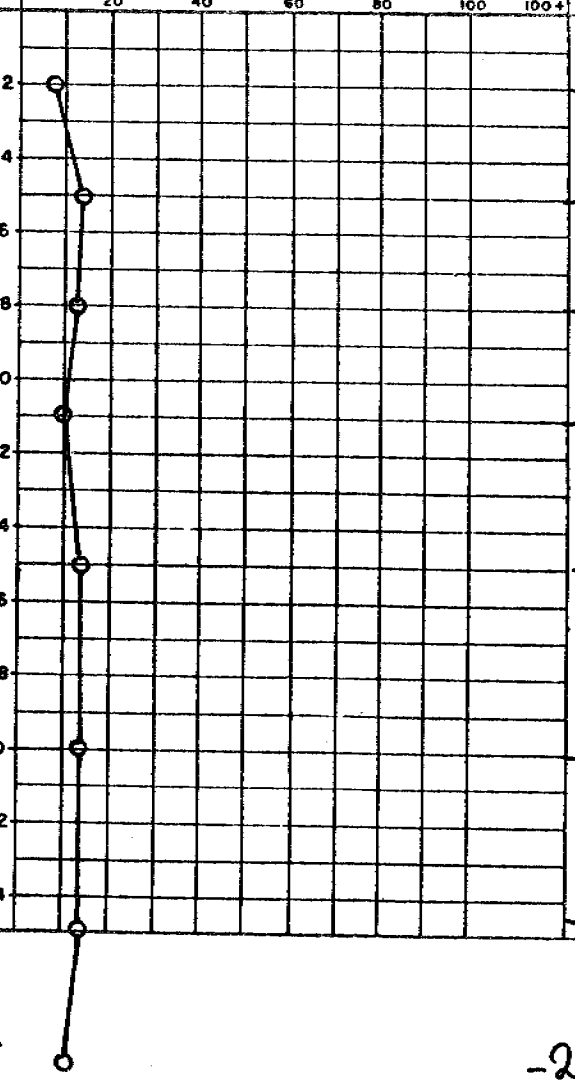
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED	AIRPHOTO NO:	CHAINAGE:	OFFSET:
CKD	TECH PRONYCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
		T-42

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
2						SAND			19	70		10	MOIST		
4															
6						- SILTY			20	61		19	WET		
8									20	61		19	SAT.		
10						GRAVELLY									
12					SM				18	68		14	WET		H.I.B.
14								$V_C - V_r$							
16									20	67		13	SAT		
18															
20									26	63		11	WET		
22															
24									24	66		10	WET		



-20-56-24 WET

BOTTOM OF HOLE - 30'

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DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 8/4/77	AIRPHOTO NO:	CHAINAGE:	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
		T-43

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
2					Pt.	PEAT		
						3'		
4						DIRTY ICE		ICE
6								
8						ICE & SAND		ICE & SM
10						ICE		ICE
12								
14								
16								
18								
20								
22								
24								

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

PLASTIC LIMIT — LIQUID LIMIT

20 40 60 80 100 100+

NO SAMPLES

GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS

SAND-SILTY GRAVELLY 30'

BOTTOM OF HOLE - 30'

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DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 9/4/77	AIRPHOTO NO	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE		
MILE	B,C,S	NUMBER
		T-44

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT .5									
2						SILT - GRAVELLY CLAYEY SANDY PEBBLES			62	13	25		Moist		
4															
6															
8					ML			Vs	51	46	3		Free Water		
10						GRAVELLY									
12									54	34	22		Free Water		
14						14'									
16						CLAY - SANDY SILTY PEBBLES			45	48	7		Sat.		
18					CL										
20						GRAVELLY		Vc - Vr	42	40	18		Wet		
22						22'									
24					SM	SAND - SILTY PEBBLES			24	69	7		Wet		

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

PLASTIC LIMIT — LIQUID LIMIT

20 40 60 80 100 100+

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 8/4/71	AIRPHOTO NO:	CHAINAGE:	OFFSET:
CKD	TECH PRONYCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE: MILE | B,C,S | NUMBER T-45

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT 4"		
2						GRAVEL-SANDY		
4						3.5' SAND-SILTY		Vs
6						PEBBLES 7'		
8								
10						ICE		ICE
12								
14						15'		
16						BOTTOM OF HOLE-15'		
18								
20								
22								
24								

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

PLASTIC LIMIT — LIQUID LIMIT: 20 40 60 80 100 100+

NO SAMPLES

DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
2							
4							
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							

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DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

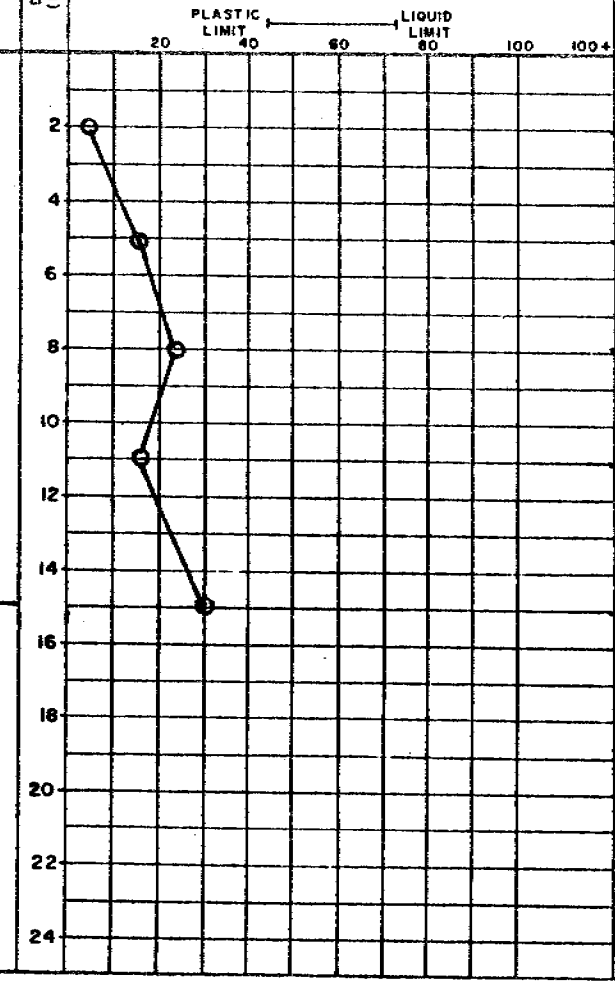
DWN	FIELD ENG	DATE DRILLED 9/4/77	AIRPHOTO NO:	CHAINAGE:	OFFSET
CKD	TECH PRONYCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
		TT-46

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT .5'		
2					SM	SAND - GRAVELLY SILTY - PEBBLES		
4								
6						6'		
8					CL	CLAY - SANDY SILTY PEBBLES		Vc - Vr
10								
12						LOW - MED. PLASTIC		
14					CI			
						15'		
16						BOTTOM OF HOLE - 15'		
18								
20								
22								
24								

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



DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
2	7	70	23		DAMP		
4	34	62	4		SAT.		
6							
8	61	36	3		WET		
10							
12	41	55	4		WET		
14							
16	78	19	3		WET		
18							
20							
22							
24							

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DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 24 MAY	AIRPHOTO NO:	CHAINAGE:	OFFSET
CKD	TECH PRONYCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE: MILE | B,C,S | NUMBER TF47

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT 1.5'									
2					SM	SAND - GRAVELLY SILTY			23	63	14		WET		
4					ML	SILT - SANDY			62	38	0		SAT.		
6															
8					SM	SAND - SILTY GRAVELLY		$V_c - V_r$	12	74	14		WET		
10															
12					SM	SAND - SILTY PEBBLES			17	82	1		WET		
14															
16									10	89	1		WET		
18															
20					SM	GRAVELLY			15	67	18		SAT		
22															
24						ICE		ICE							

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

PLASTIC LIMIT — LIQUID LIMIT
20 40 60 80 100 100+

30'

BOTTOM OF HOLE - 30'

INUVIK - TUK.

DRILL HOLE REPORT

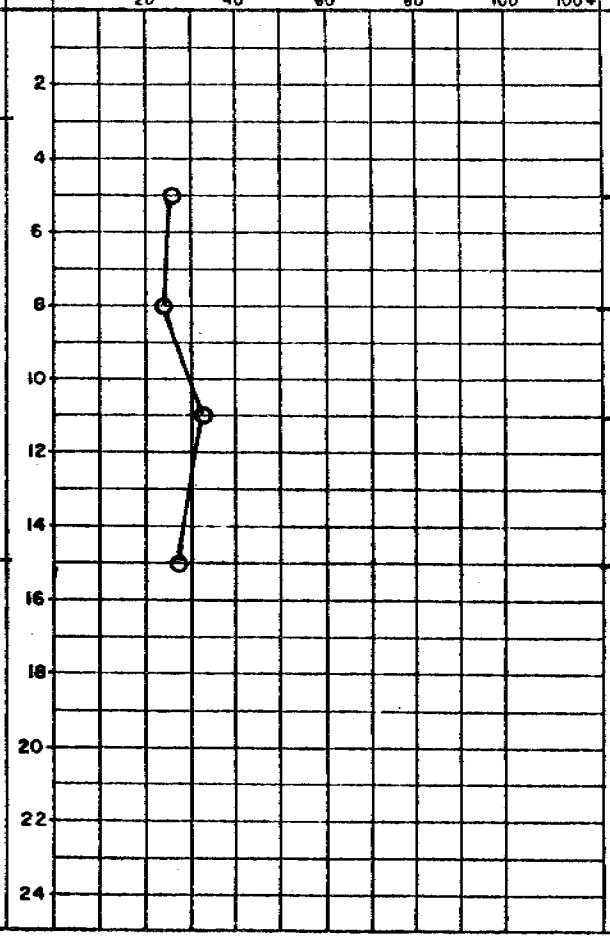
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 9 HIT	AIRPHOTO NO:	CHAINAGE:	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV.

TEST HOLE

MILE	B,C,S	NUMBER
		T-48

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
2						PEAT & ICE		ICE + Pt
4						CLAY - SILTY SANDY PEBBLES		
6								
8						LOW PLASTIC		V_c - V_r
10					CL			+
12								V_s
14								
16						15' BOTTOM OF HOLE - 15'		
18								
20								
22								
24								



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
82	14	4		WET		
79	17	4		WET		
79	16	5		SAT		
84	16	0		WET		

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

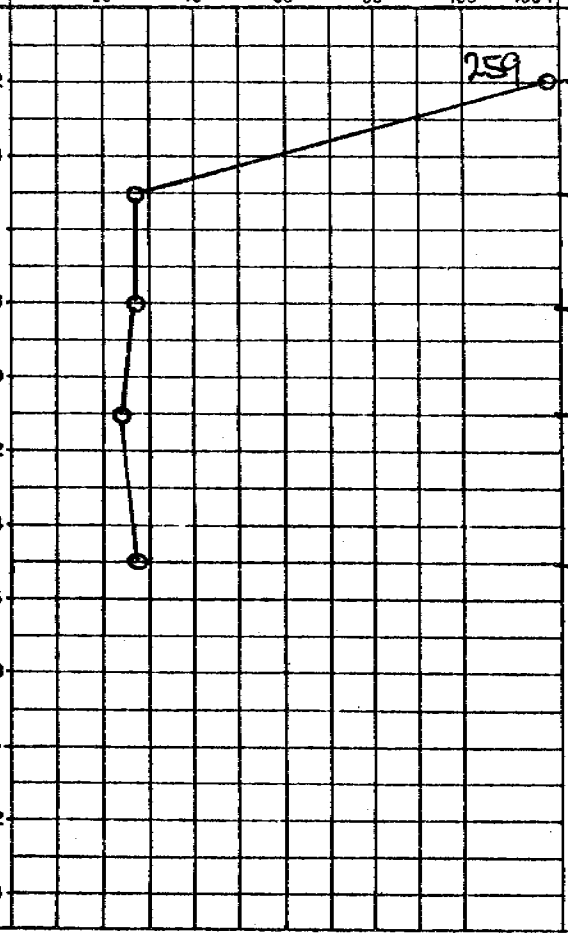
DWN	FIELD ENG	DATE DRILLED	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH	RIG	SURFACE DRAINAGE:	VEGETATION	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
		T-49

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT 1.5'		Vs							
2					OL	ORGANIC SILT 2.5			79	21	0		PRE-WATER,		
4						CLAY - SILTY SANDY PEBBLES			85	11	4		WET		
6															
8					CL	LOW PLASTIC		Vc - Vr	75	19	6		WET		
10															
12									83	16	1		WET		
14						15'									
16						BOTTOM OF HOLE -15			77	17	6		SAT.		
18															
20															
22															
24															

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



R073

INUVIK - TUK

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 8/4/71	AIRPHOTO NO:	CHAINAGE:	OFFSET:
CKD	TECH PRONYCH	RIG: A112	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
		T-50

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT 1'		
2						CLAY - SILTY - SANDY - PEBBLES		
4								
6								
8								
10						10'		
12						ICE & SOIL		ICE & CL
14						15'		
16						BOTTOM OF HOLE - 15'		
18								
20								
22								
24								

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

PLASTIC LIMIT — LIQUID LIMIT

20 40 60 80 100 100+

NO SAMPLES

DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
2							
4							
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							

R072

INUVIK - TUK.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 9/4/71	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE		
MILE	B,C,S	NUMBER
		T-5

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
2						PEAT & ICE 3'		ICE & Pt
4						CLAY - SILTY FEW PEBBLES		Vs
6								
8								
10						10		
12						ICE		ICE
14						15'		
16						BOTTOM OF HOLE - 15'		
18								
20								
22								
24								

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

PLASTIC LIMIT — LIQUID LIMIT
20 40 60 80 100 100+

NO SAMPLES

DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
2							
4							
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							

R073

INUVIK - TUK

DRILL HOLE REPORT

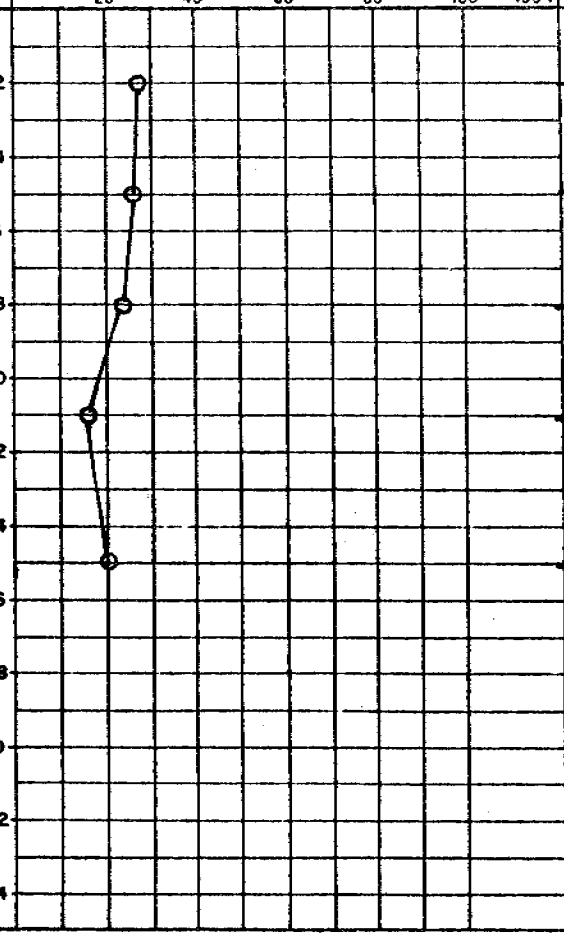
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 9/4/74	AIRPHOTO NO:	CHAINAGE:	OFFSET:
CKD	TECH PRAMCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV:

TEST HOLE: MILE | B,C,S | NUMBER T-52

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT 15'		
2						ICE & SOIL		ICE & CL
4						CLAY-SILTY SANDY PEBBLES		
6								
8								$V_c - V_r$
10					CL	LOW PLASTIC		
12								
14						15'		
16						BOTTOM OF HOLE - 15'		
18								
20								
22								
24								

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



DEPTH (FEET)	CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
2	77	16	7		SAT.		
4	79	18	3		WET		
8	75	20	5		WET		
10	70	16	14		WET		
14	75	17	8		Moist		

R073

INUVIK - TUK

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 9/4/71	AIRPHOTO NO:	CHAINAGE:	OFFSET
CKD	TECH PRONYOH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
		T-53

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
2						PEAT & ICE 3'		ICE & PT
4						ICE & SOIL 6'		ICE & CL
6								
8						ICE		ICE
10								
12								
14						15'		
16						BOTTOM OF HOLE - 15'		
18								
20								
22								
24								

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

PLASTIC LIMIT ⟷ LIQUID LIMIT

20 40 60 80 100 100+

NO SAMPLES

DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
2							
4							
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							

R073

INUVIK - TUK

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 9/4/77	AIRPHOTO NO:	CHAINAGE:	OFFSET:
CKD	TECH FRANCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
		T-54

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
2					Pt	PEAT 2'		
						ICE & SAND		ICE & SM
4								
6					SM	SAND - SILTY PEBBLES		
8								
10						ICE		ICE
12								
14						15'		
16						BOTTOM OF HOLE 15'		
18								
20								
22								
24								

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

PLASTIC LIMIT ⟷ LIQUID LIMIT

20 40 60 80 100 100+

NO SAMPLES

DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
2							
4							
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							

R073

Appendix C

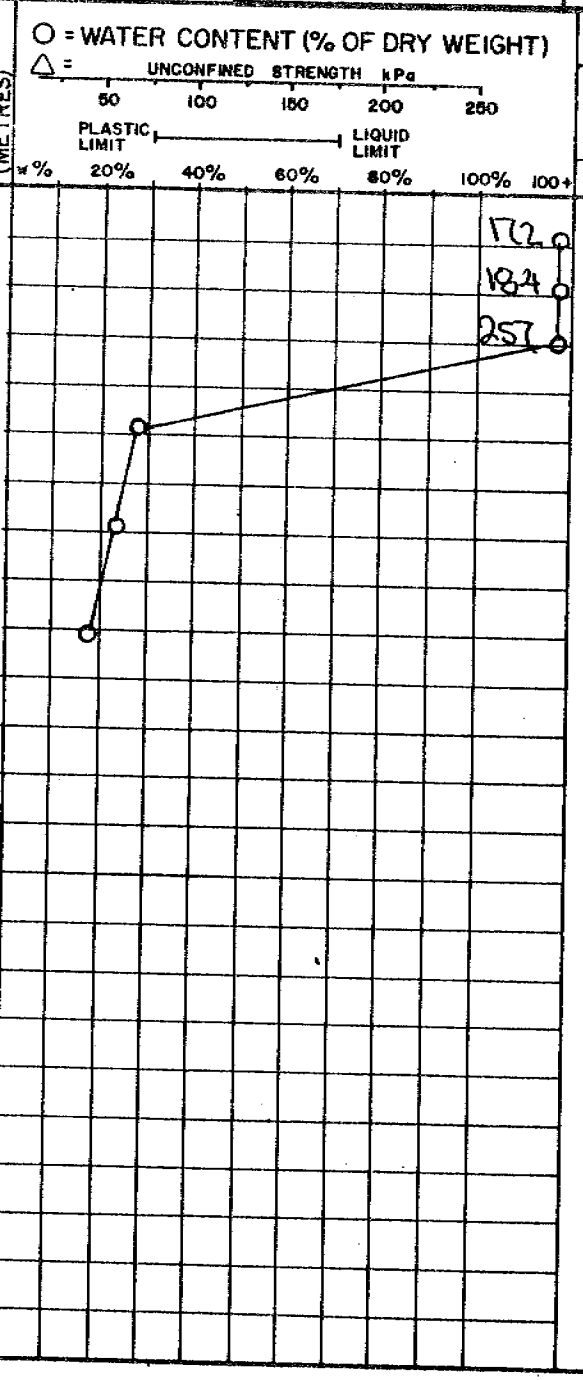
PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych | RIG Air | DATE 80/03/23 | km | B.P. No. | HOLE No. 1020-1

CHAINAGE: 2709+00 | OFFSET:

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	RELATIVE MOISTURE CONTENT	REMARKS
	Pt.	Peat .6m			Saturated	
2–6		Ice, Some Soil 1.8m		Ice, CL	✓ ✓	
8–14	CL, Cl	Clay-Silty, Low-Mod. Plastic		Vc-Vx	Sat.	
		Pebbles 4.6m		Vx	Moist-Wet	
16–38		Bottom of Hole - 4.6m			Damp.	



GRAIN-SIZE ANALYSIS: CLAY % | SILT % | SAND % | GRAVEL %

PUBLIC WORKS CANADA — DRILL HOLE REPORT

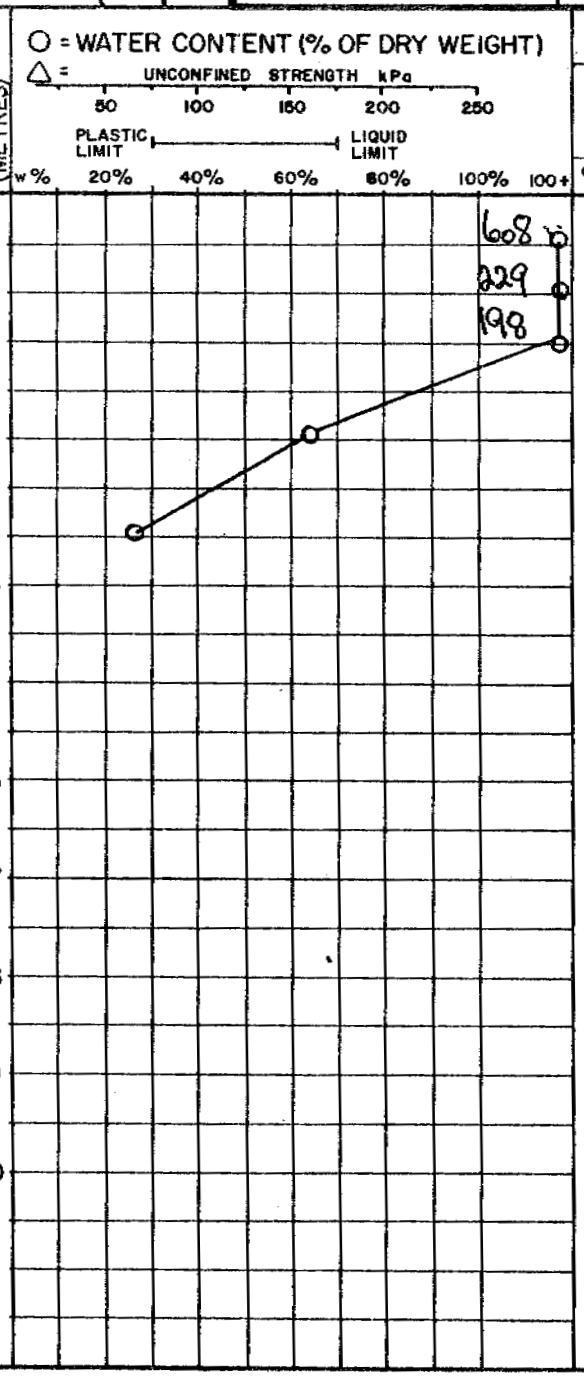
Inuvik - Tuk

TECH. D. Pronych	RIG Air	DATE 80/03/23	km	B.P. No.	HOLE No. 1020-2

CHAINAGE	OFFSET
2728+00	

REMARKS

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
2–6	Pt	PEAT & ICE		Ice & Pt.	1–1.8					SAT. / WET / Free Water
6		1.8m								
6–13	CL	CLAY - SILTY LOW PLASTIC		Vs / Vc-Vr	1.8–4					SAT. / WET
13		4.0m								
14–38		BOTTOM OF HOLE - 4.0 m								

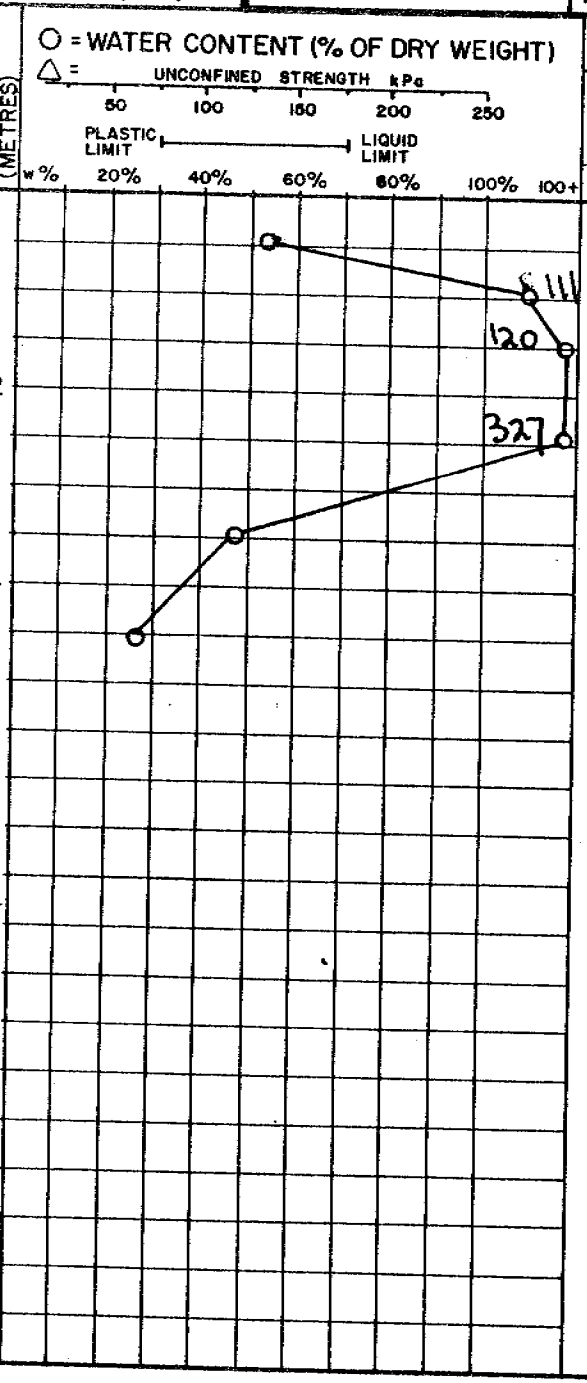


PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | Inuvik - Tuk.

TECH. D. Pronych | RIG Air | DATE 80/03/23 | km | B.P. No. | HOLE No. 1021-1

CHAINAGE	OFFSET
2746+00	

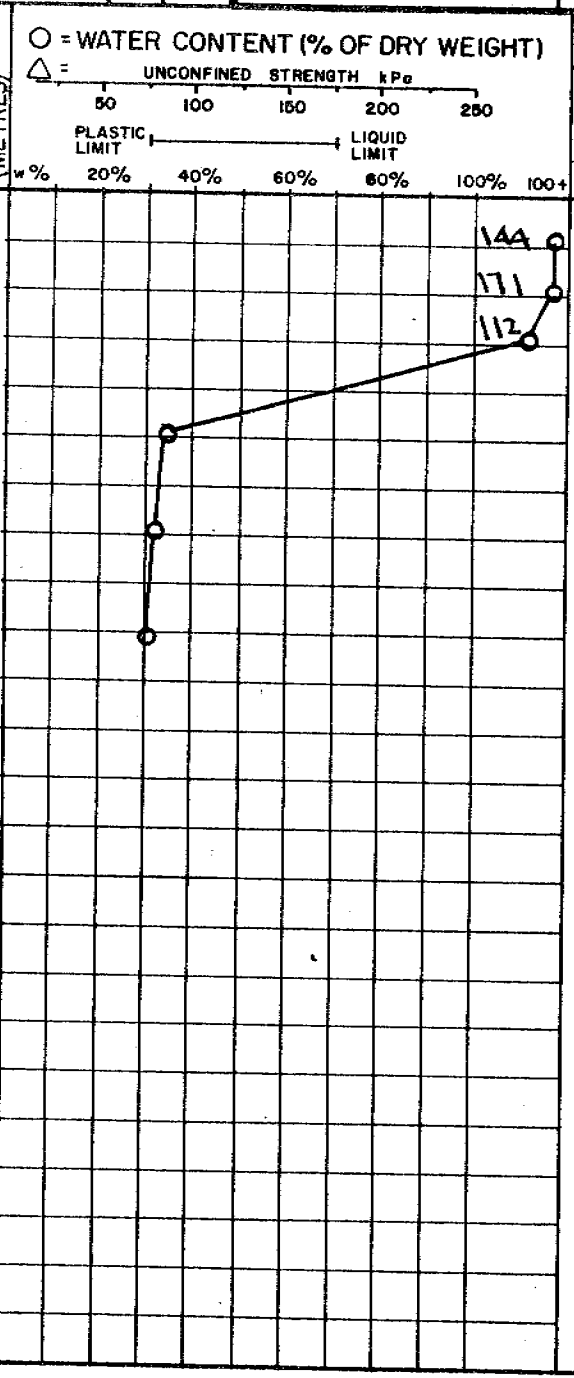
DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
2	Pt	PEAT		Pt +						Moist	
4		ICE		ICE +	1					Free Water	
6					2					✓	
8		CLAY		CL							
10	CL	CLAY - SILTY		Vs	3					✓	
12	I	LOW - MED. PLASTIC			4					SAT.	
14	CI	4.6m		Vc - Vr							
16		Bottom of Hole. 4.6m			5					Moist	
18					6						
20					7						
22					8						
24					9						
26					10						
28					11						
30											
32											
34											
36											
38											



PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | Inuvik - Tuk.

TECH. D. Paonych | RIG Air | DATE 80/03/23 | km | B. P. No. | HOLE No. 1021-2

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
2, 4	Pt	Peat & Ice		Ice + Pt	1					Moist	
6		1.8m								Rainwater	
8, 10, 12, 14	CL, CI	Clay - Silty, Low - Med. Plastic		Vs, Vc - Vr	2, 3, 4					Sat, Wet	
		4.6m									
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		Bottom of Hole - 4.6m			5, 6, 7, 8, 9, 10, 11					Moist	



GRAIN-SIZE ANALYSIS

CHAINAGE: 2769 + 00

OFFSET:

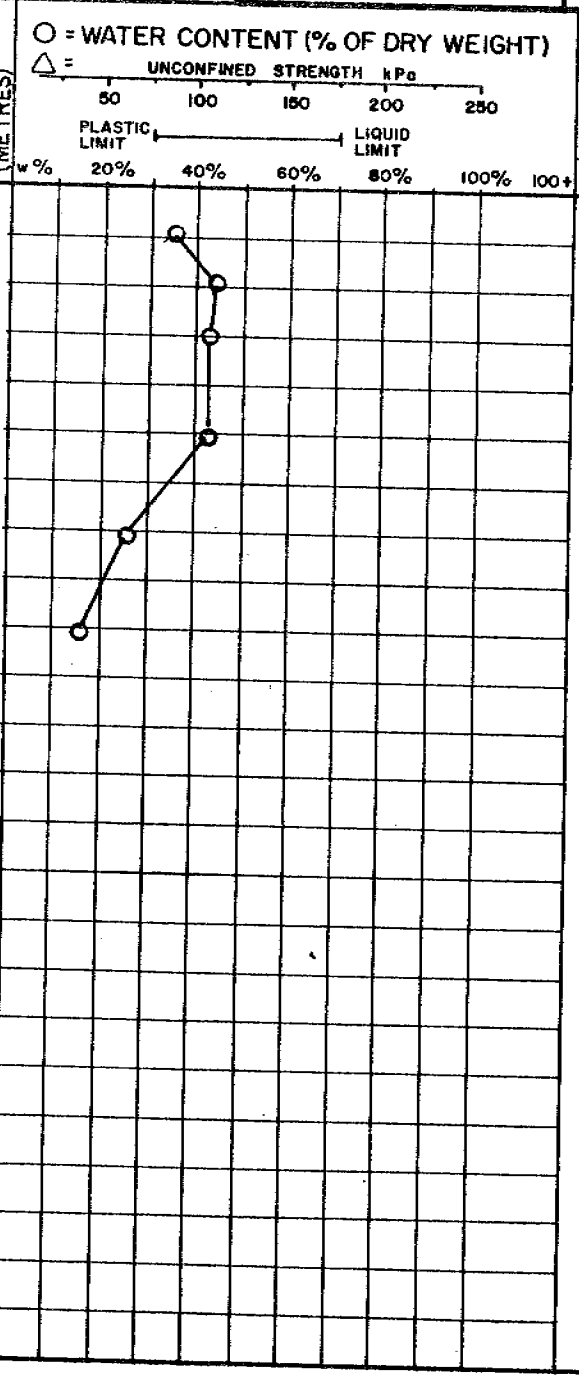
PUBLIC WORKS CANADA — DRILL HOLE REPORT

INUVIK - TUK.

TECH. D. PRONYCH	RIG AIR	DATE 80/03/23	km	B. P. No.	HOLE No. 1021-3

CHAINAGE	OFFSET
2780 + 00	

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
	PEAT	1m									
2		CLAY - SILTY									
4		LOW PLASTIC		V_S	1					MOIST-WET	
6	CL									SAT.	
8					2					SAT.	
10					3					WET	
12				V_X						MOIST	
14		4.6m			4						
16		BOTTOM OF HOLE - 4.6m								MOIST	
18					5						
20					6						
22											
24					7						
26											
28					8						
30											
32					9						
34											
36					10						
38					11						



PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | Inuvik - Tuk

TECH. D. COOK | RIG Air | DATE 80/03/30 | km | B.P. No. | HOLE No. 1021-4

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	CHAINAGE	OFFSET	REMARKS
	Pt	PEAT .3m											
2, 4, 6, 8, 10, 12, 14	CL, CI	CLAY - SILTY PEBBLES LOW-MED. PLASTIC		Vs	1, 2, 3, 4					DAMP POREWATER			
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		4.6m BOTTOM OF HOLE . 4.6m			5, 6, 7, 8, 9, 10, 11								

O = WATER CONTENT (% OF DRY WEIGHT)
△ = UNCONFINED STRENGTH kPa
50 100 150 200 250
PLASTIC LIMIT — LIQUID LIMIT
w % 20% 40% 60% 80% 100% 100+

PUBLIC WORKS CANADA — DRILL HOLE REPORT

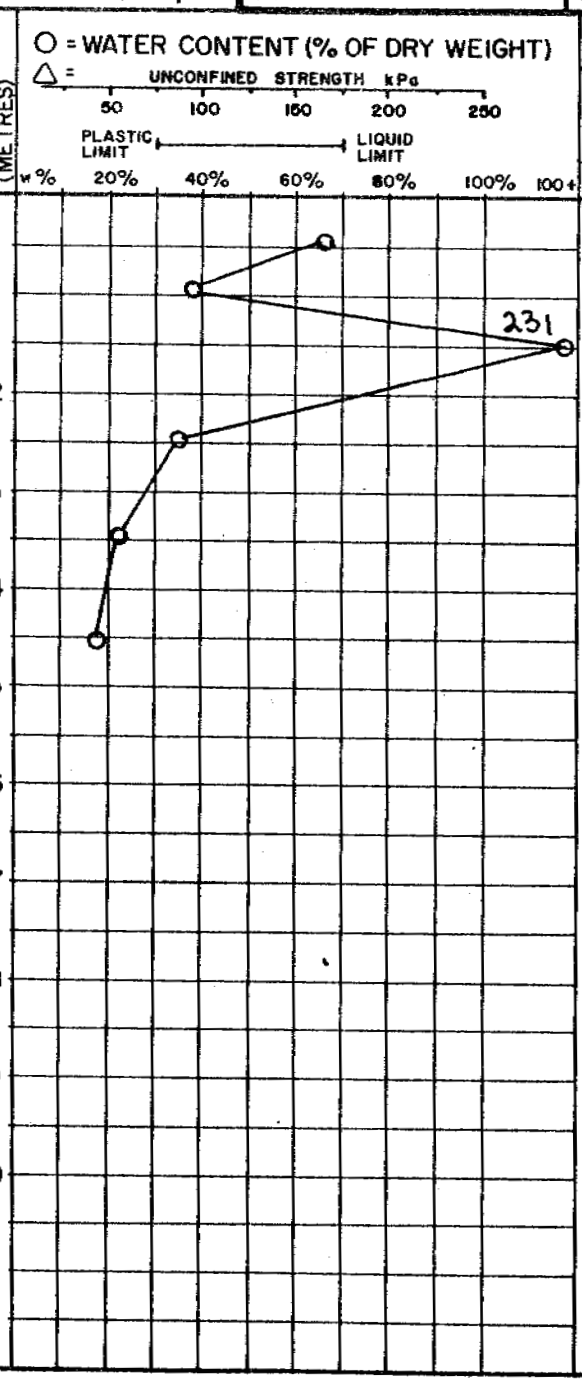
Inuvik - Tuk.

TECH. D. Pronych	RIG Air	DATE 80/03/23	km	B. P. No.	HOLE No. 1022-1

CHAINAGE	OFFSET
2822+00	

REMARKS

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
2–6	Pt	Peat - Clay & Ice		Ice + Pt + CL	0–1.8					Sat. / Wet / Free Water
6–14	CL	Clay - Silty - Pebbles Low Plastic		Vs / Vc - Vr	1.8–4.6					Sat / Moist - Wet
14–38		Bottom of Hole - 4.6m			4.6–11					Moist

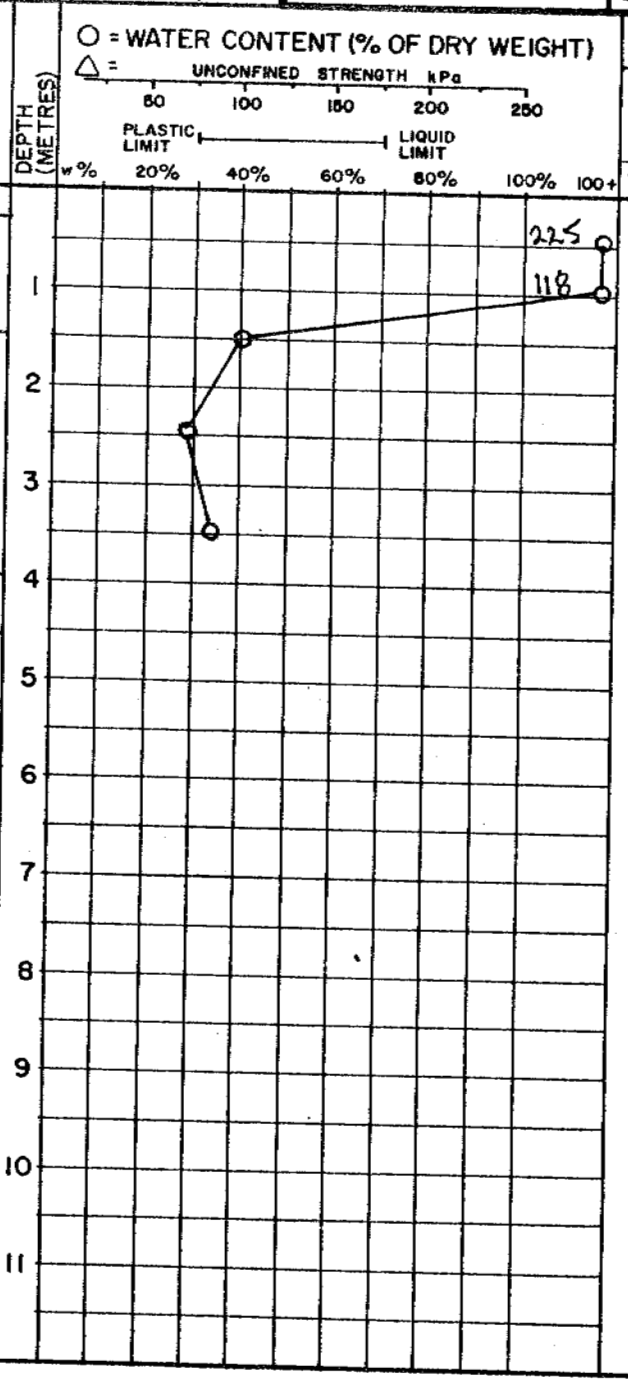


PUBLIC WORKS CANADA — DRILL HOLE REPORT

INUVIK - TUK.

TECH. D. COOK | RIG AIR | DATE 80/03/30 | km | B.P. No. | HOLE No. 1022-1A

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	Pt	PEAT .3m		
2, 4		ICE & SOIL 1.5m		ICE & CL
6, 8, 10, 12	CL, CI	CLAY - SILTY - PEBBLES LOW-MED PLASTIC 4.0m		Vs
14		ICE 4.6m		ICE
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		BOTTOM OF HOLE - 4.6m		



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
				Free H_2O	
				Free H_2O	
				SAT.	
				MOIST	
				MOIST-SAT	

CHAINAGE | OFFSET

PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | Inuvik - Tuk.

TECH. D. Pronych | RIG Air | DATE 80/03/23 | km | B.P. No. | HOLE No. 1023-1

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
2–12	Pt	Peat & Ice Some Clay		Ice + Pt + CL
14		4.0m		
16		Bottom of Hole. 4.0m		

O = WATER CONTENT (% OF DRY WEIGHT)
△ = UNCONFINED STRENGTH kPa (50, 100, 150, 200, 250)
PLASTIC LIMIT — LIQUID LIMIT
w% 20% 40% 60% 80% 100% 100+

DEPTH (METRES): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11

294, 129, 202, 182

GRAIN-SIZE ANALYSIS				RELATIVE MOISTURE CONTENT
CLAY %	SILT %	SAND %	GRAVEL %	
				Sat.
				Free Water
				✓
				✓

CHAINAGE	OFFSET
2853+00	

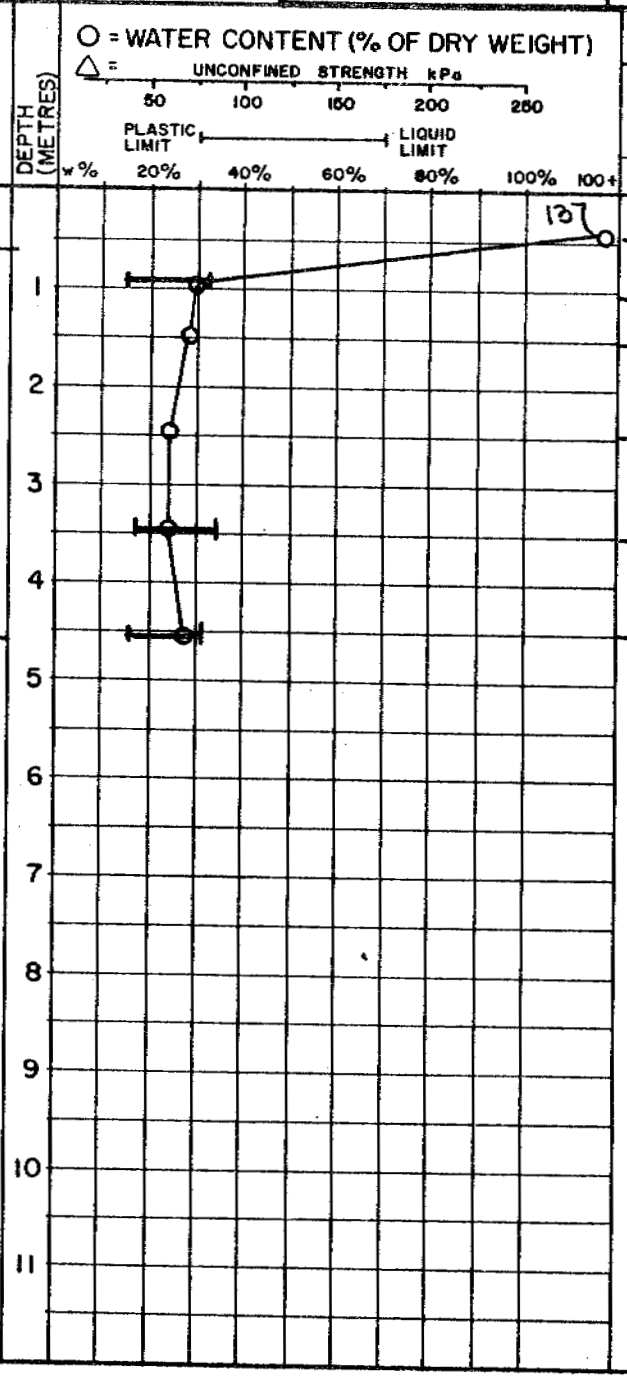
REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych | RIG Air | DATE 80/03/23 | km | B.P. No. | HOLE No. 1023-2

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
2	Pt	Peat .6m		Vs
4, 6, 8, 10, 12, 14	Cl	Clay - Silty Sandy Pebbles Med. Plastic		Vc - Vr
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		4.6m Bottom of Hole - 4.6m		



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
85	15	0		Peat/Water	
66	31	3		Wet	
63	36	1		Wet	
70	26	4		Wet	
63	33	4		Wet	
58	35	7		Sat.	

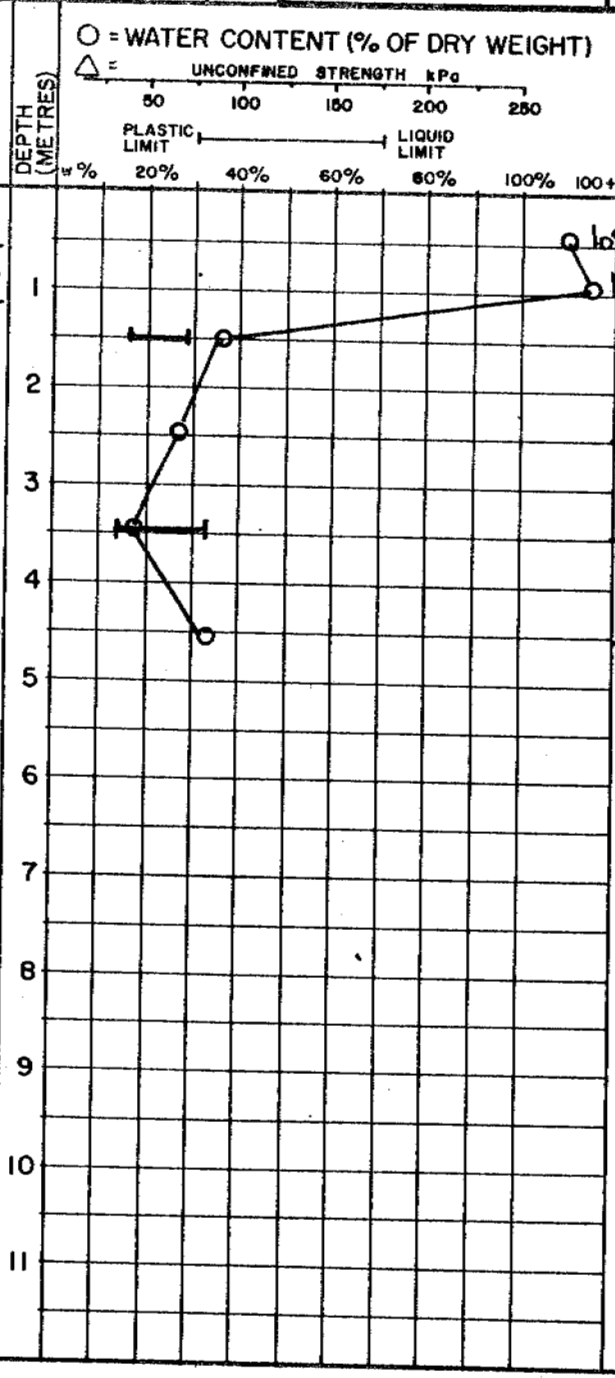
CHAINAGE | OFFSET

PUBLIC WORKS CANADA — DRILL HOLE REPORT

INUVIK - TUK

TECH. D. PRONYCH | RIG AIR | DATE 80/03/23 | km | B.P. No. | HOLE No. 1023-3

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
2	Pt.	PEAT .6m		Vs
4		ICE & CLAY		ICE + CL
6	CL	CLAY - SILTY LOW PLASTIC		
8				
10		SANDY - PEBBLES MED PLASTIC		Vs
12	CI			
14		SILTY SANDY 4.6m		
16		BOTTOM OF HOLE - 4.6m		
18				
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
108-	96-	4	0	PERMAFROST
99-	98-	2	0	✓
98-	2	0		✓
92-	8	0		SAT.
65-	32	3		MOIST
66-	30	0		SAT

CHAINAGE	OFFSET
2879+00	

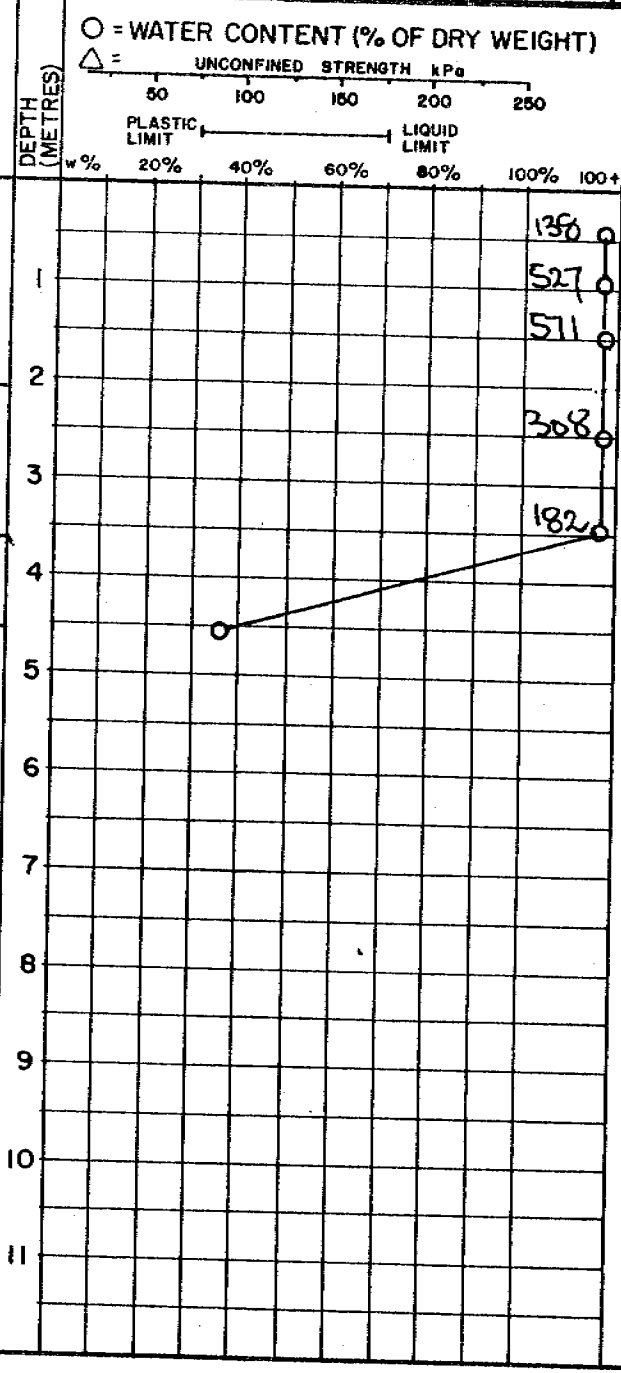
REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

TECH. D. PRONYCH	RIG AIR	DATE 80/03/23	km	B.P. No.
INUVIK - TUK				HOLE No. 1024-1

CHAINAGE	OFFSET
2917+00	

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
2–6		PEAT & ICE		ICE → Pt
6		2.1m		
8–12		ICE & SOIL		ICE & CL
12		3.7m		
14–16	CL	CLAY-SILTY MED. PLASTIC		Vc-Vr
16		4.6m		
18–38		BOTTOM OF HOLE - 4.6m		



GRAIN-SIZE ANALYSIS				RELATIVE MOISTURE CONTENT	REMARKS
CLAY %	SILT %	SAND %	GRAVEL %		
				MOIST	
				SAT.	
				FREE WATER	
				✓	
				✓	
				WET	

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych | RIG Air | DATE 80/03/23 | km | B. P. No. | HOLE No. 1024-2

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	RELATIVE MOISTURE CONTENT
2–6	Pt - CL	Peat + Clay		Vs	Wet; Wet; Frag/Wet
8–14	CL - CI	Clay - Silty Sandy Pebbles Low - Mod. Plastic		Vc - Vr	Wet; Moist - Wet; Wet
14		4.6m			
16		Bottom of Hole - 4.6m			

○ = WATER CONTENT (% OF DRY WEIGHT)

△ = UNCONFINED STRENGTH kPa (50, 100, 150, 200, 250)

PLASTIC LIMIT — LIQUID LIMIT

w % 20% 40% 60% 80% 100% 100+

DEPTH (METRES): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11

GRAIN-SIZE ANALYSIS: CLAY % | SILT % | SAND % | GRAVEL %

CHAINAGE: 2950+00 | OFFSET

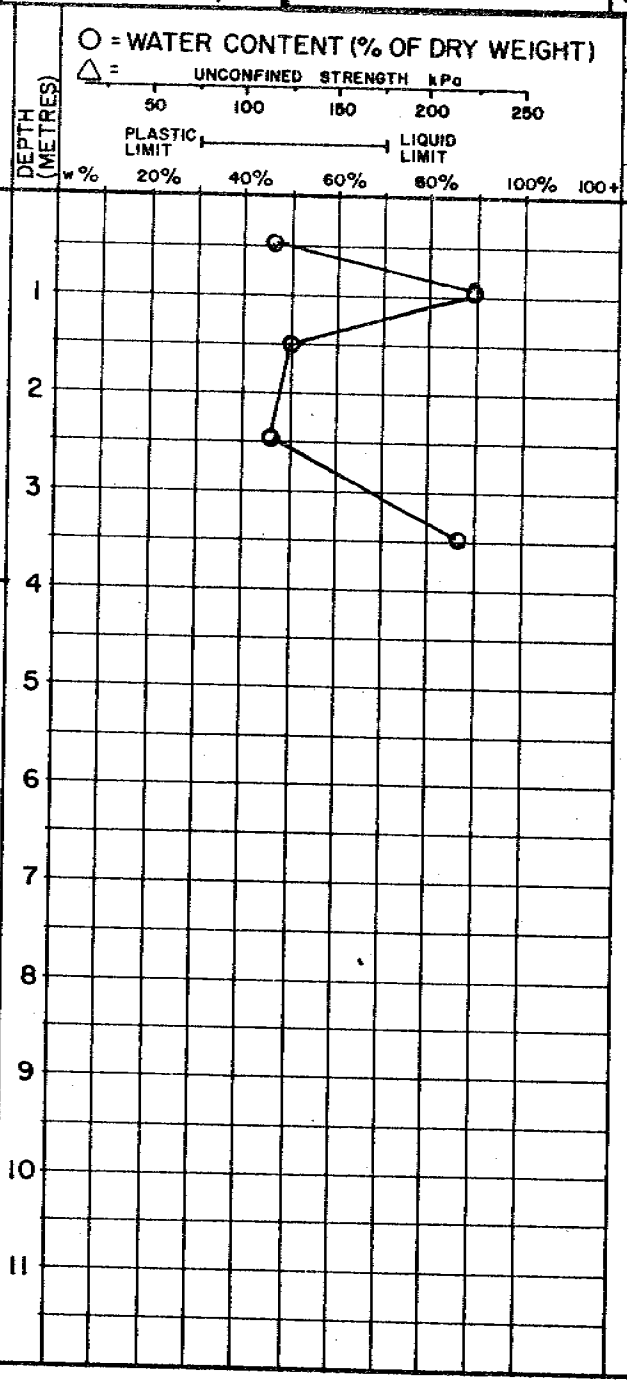
REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Cook | RIG Air | DATE 80/03/30 | km | B.P. No. | HOLE No. 1024-3

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	Pt	PEAT .3m		
2	Cl	CLAY - SILTY LOW PLASTIC ORGANICS		Vs
4				
6	CL -	LOW - MED. PLASTIC		
8	Cl			
10				
12		4.0m		
14				
16		BOTTOM OF HOLE - 4.0m		
18		BOULDER		
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				



GRAIN-SIZE ANALYSIS				RELATIVE MOISTURE CONTENT
CLAY %	SILT %	SAND %	GRAVEL %	
				SAT.
				Free H_2O
				✓
				✓
				✓

CHAINAGE	OFFSET

REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

INUVIK - TUK.

TECH. D. COOK	RIG AIR	DATE 80/03/30	km	B.P. No.	HOLE No. 1024-4

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	RELATIVE MOISTURE CONTENT
	Pt	PEAT — .5m				
2–6		CLAY - SILTY & ICE		ICE & CL	1–2	MOIST; FREE H_2O; SAT.
8–12	CL - CI	CLAY - SILTY SANDY PEBBLES LOW - MED PLASTIC		VX	2–4	DAMP; MOIST
14	SM	SAND - SILTY — 4.3m — 4.6m		VC - VX	4	SAT.
16–38		BOTTOM OF HOLE. 4.6m			5–11	

O = WATER CONTENT (% OF DRY WEIGHT)

△ = UNCONFINED STRENGTH kPa (50, 100, 150, 200, 250)

PLASTIC LIMIT — LIQUID LIMIT

w % 20% 40% 60% 80% 100% 100+

GRAIN-SIZE ANALYSIS	CLAY %	SILT %	SAND %	GRAVEL %

CHAINAGE	OFFSET

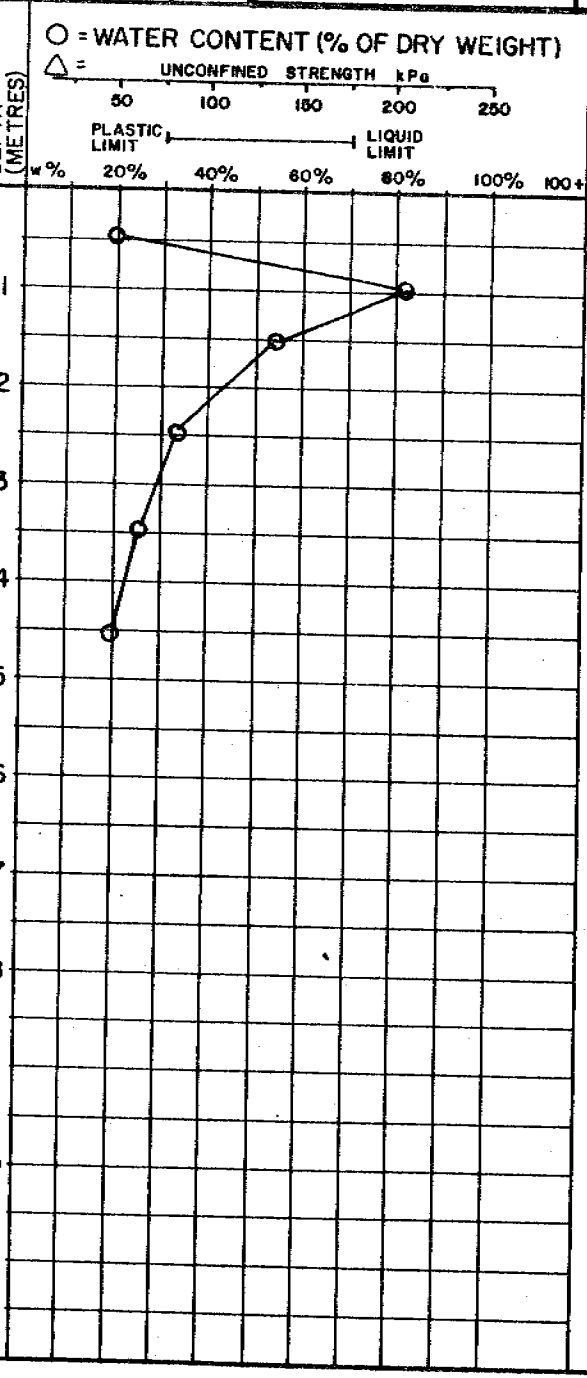
REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Cook | RIG Air | DATE 80\03\30 | km | B.P. No. | HOLE No. 1024-5

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
	Pt	Peat .3m									
2–4	Cl	Clay - Silty, Low - Med. Plastic		Vs	1					Damp-Moist	
4–6										Free H_2O	
6–8					2					Sat.	
8–10					3					Wet-Sat.	
10–12	Cl	Pebbles		V_c - V_r	4					Wet	
12–14											
14–16		4.6m			5					Moist	
16–18		Bottom of Hole - 4.6m			6						
18–20					7						
20–22					8						
22–24					9						
24–26					10						
26–28					11						
28–30											
30–32											
32–34											
34–36											
36–38											



CHAINAGE | OFFSET

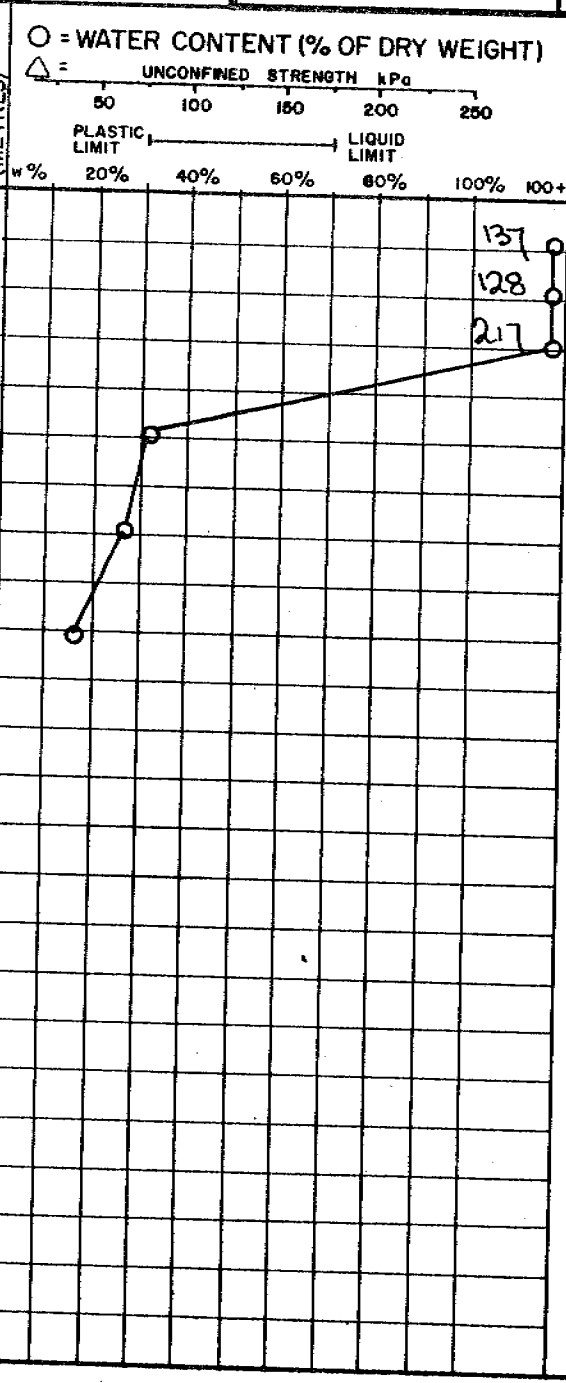
PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych | RIG Air | DATE 80/03/23 | km | B.P. No. | HOLE No. 1025-1

CHAINAGE	OFFSET
2965+00	

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
2–8	Pt	PEAT & ICE		ICE + Pt	0–2.4					PERMAFROST ✓ ✓	
8–14.6	CL	CLAY - SILTY - PEBBLES - LOW PLASTIC		Vs; Vc - Vr	2.4–4.6					SAT. WET MOIST	
14.6		Bottom of Hole - 4.6m									

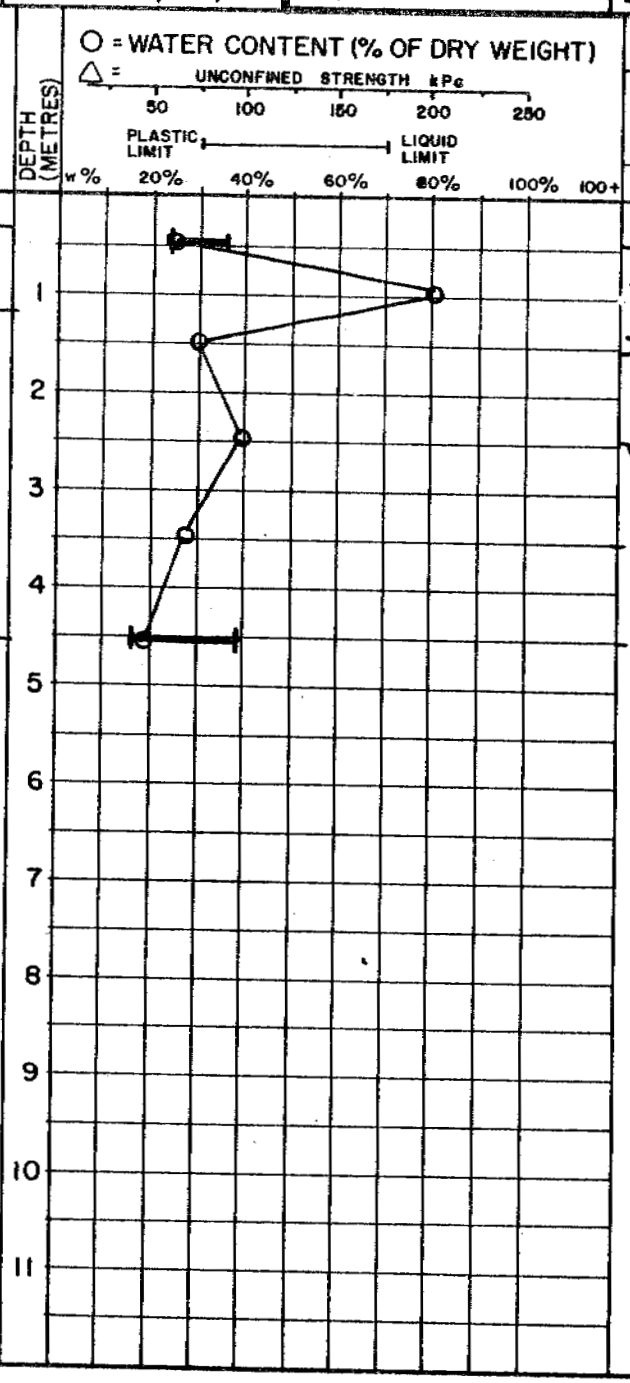


PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych | RIG Air | DATE 80/03/23 | km | B.P. No. | HOLE No. 1025-2

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	Pt	Peat .3 m		Vc-Vr
2	Cl	Ice & Soil		Icr & CL
4		Clay - Silty Sandy Pebbles Med. Plastic		
6				
8				Vc-Vr
10	Cl			
12				
14		4.6 m		
16		Bottom of Hole - 4.6 m		
18				
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
96	-	4	0	Damp Free Water	
79	-	20	1	Moist	
89	-	10	1	Wet	
85	-	11	4	Moist-Wet	
64	-	28	8	Moist	

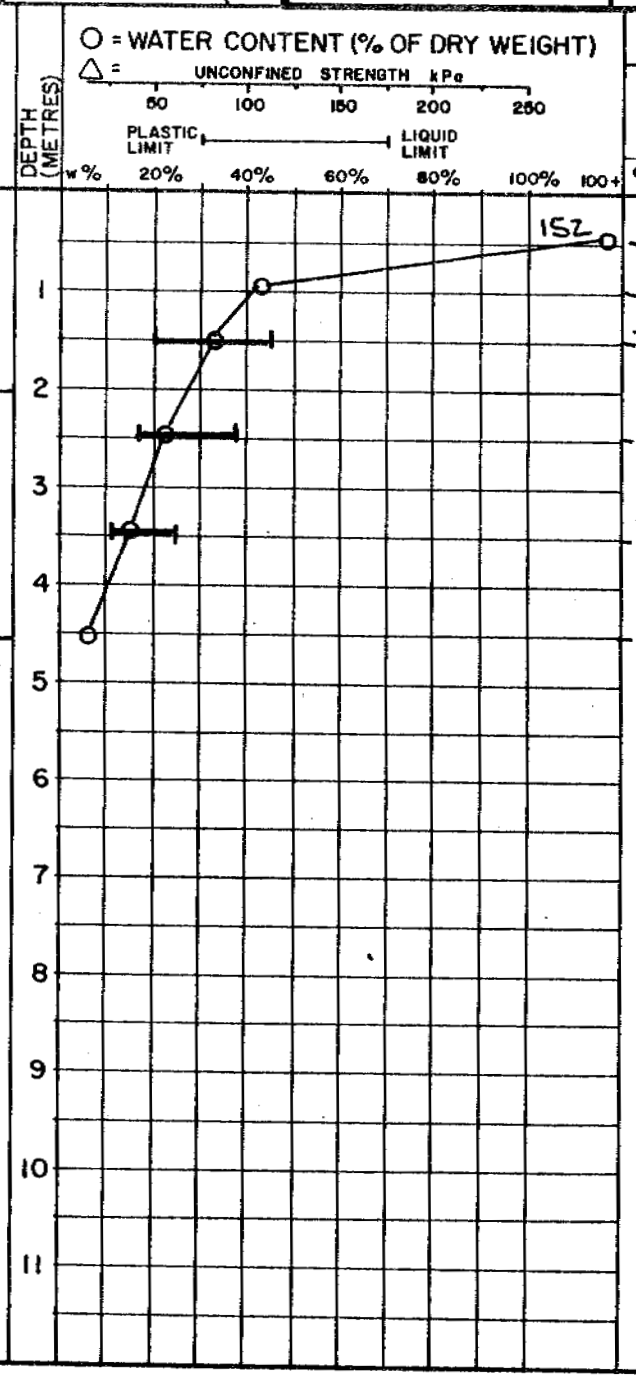
CHAINAGE: 2984+00 | OFFSET:

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych | RIG Air | DATE 80/03/24 | km | B.P. No. | HOLE No. 1025-3

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	Pt	PEAT .3m		
2–6	CL	CLAY - SILTY - SANDY - PEBBLES - MED. PLASTIC		Vs
8–12	CL	LOW PLASTIC 3.7m		Vc - Vr
12–14	GM	GRAVEL - SANDY SILTY 4.6m		
16–38		BOTTOM OF HOLE - 4.6m		



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
80	18	2		PERCHED WATER	
90	10	0		SAT	
73	23	4		SAT.	
66	27	7		MOIST-WET	
39	48	13		WET	
14	32	54		WET	

CHAINAGE | OFFSET

PUBLIC WORKS CANADA — DRILL HOLE REPORT

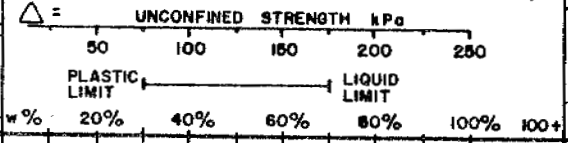
Inuvik - Tuk.

TECH. D. Pronych	RIG Air	DATE 80/03/24	km	B.P. No.	HOLE No. 1026-1

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
	Pt	PEAT .2m									
2		CLAY - SILTY ORGANICS		Vc-Vr							
4	CL	SANDY			1	66	29	5		MOIST	
		PEBBLES				43	45	12		WET	
6		LOW PLASTIC		VS		60	31	9		FREE WATER	
		2.1m			2						
8		SAND - SILTY									
	SM	PEBBLES				12	86	2		✓	
10		3.4 m			3						
12		BOTTOM OF HOLE - 3.4m									
14					4						
16											
18					5						
20											
22					6						
24											
26					7						
28											
30					8						
32											
34					9						
36											
38					10						
					11						

O = WATER CONTENT (% OF DRY WEIGHT)

△ = UNCONFINED STRENGTH kPa



GRAIN-SIZE ANALYSIS

CHAINAGE	OFFSET

PUBLIC WORKS CANADA — DRILL HOLE REPORT

INUUVIK - TUK.

TECH. D. PRONYCH	RIG AIR	DATE 80/03/24	km	B.P. No.	HOLE No. 1026-2

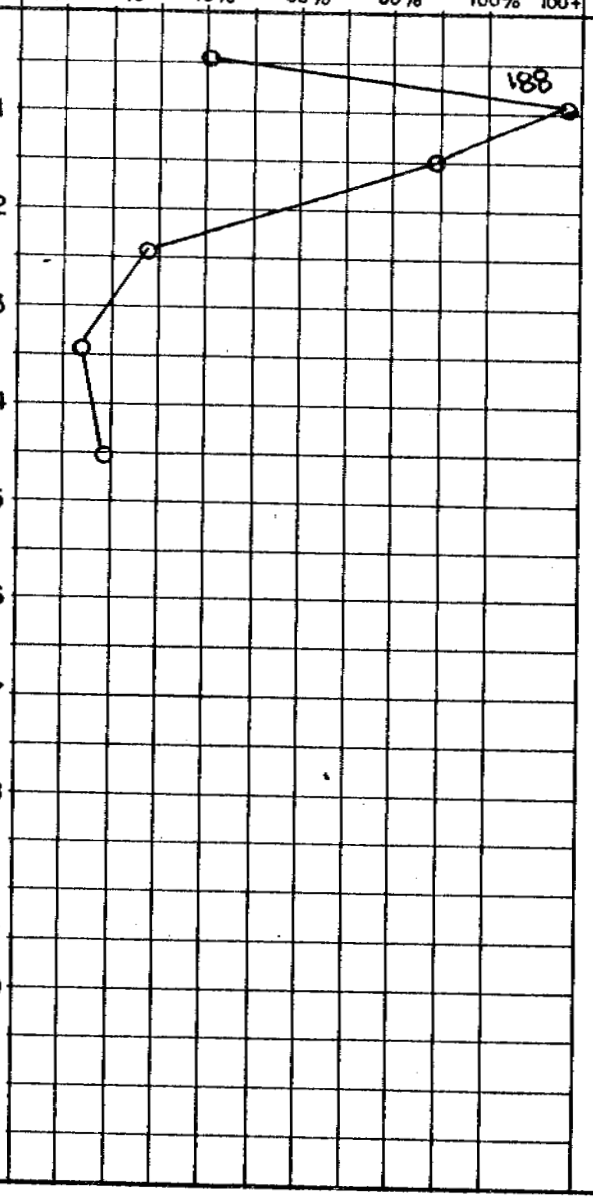
DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
0–2	CL	CLAY - SILTY .5 m		Vc-W							
2–6		PEAT & ICE 1.5 m		ICE + PEAT						WET, FREE H_2O	
6–8	CL	CLAY - SILTY								✓	
8–10		PEBBLES 2.7 m								SAT.	
10–14	SP	SAND - PEBBLES		Vx						WET	
14–16		4.6 m								WET	
16–38		BOTTOM OF HOLE 4.6 m									

O = WATER CONTENT (% OF DRY WEIGHT)

△ = UNCONFINED STRENGTH kPa (50, 100, 150, 200, 250)

PLASTIC LIMIT — LIQUID LIMIT

w % 20% 40% 60% 80% 100% 100+



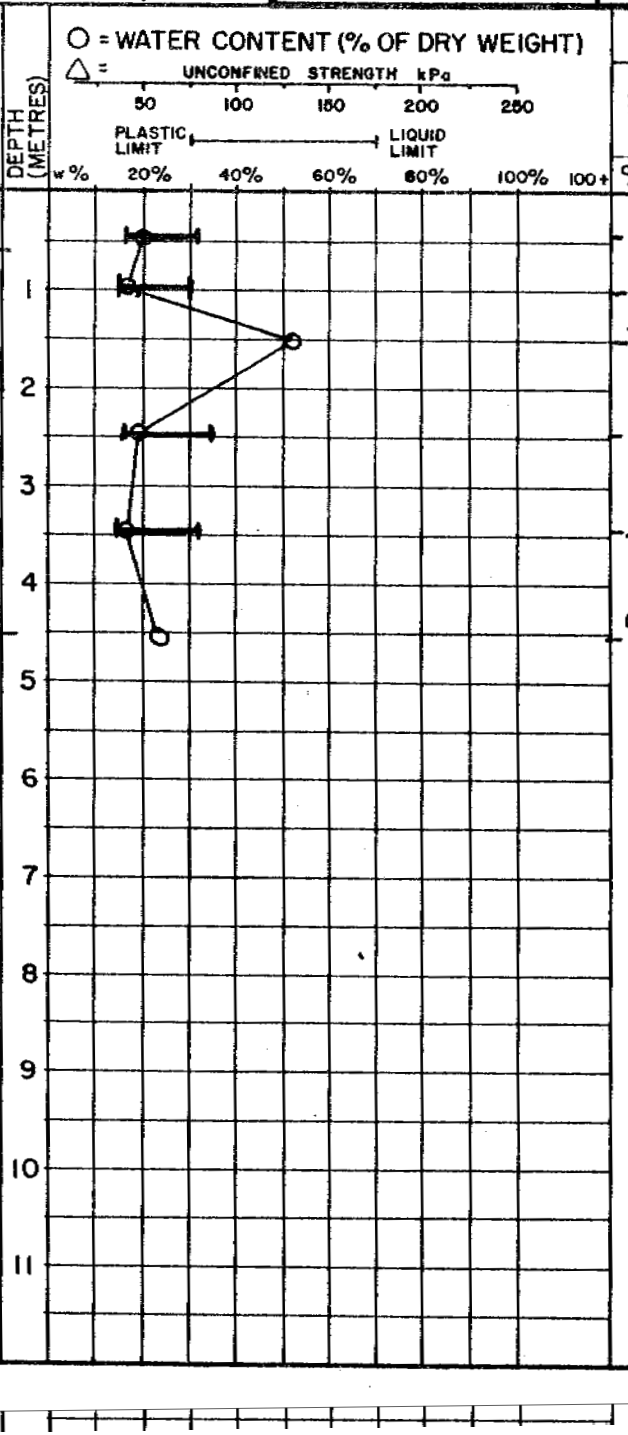
CHAINAGE	OFFSET

PUBLIC WORKS CANADA — DRILL HOLE REPORT

INUVIK - TUK.

TECH. D. PRONYCH	RIG Air	DATE 80/08/24	km	B.P. No.	HOLE No. 1026-3

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	Pt	PEAT .1m		
2		CLAY - SILTY SANDY PEBBLES TO GRAVELLY MED. PLASTIC		Vx
4				
6	Cl	GRAVEL LENSE .75m - .9m		Vs
8				
10				Vx
12				
14		4.6m		
16		BOTTOM OF HOLE. 4.6m		
18				
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
65	30	5		MOIST	
42	34	24		WET	
71	23	6		FREE H_2O	
57	31	12		WET	
48	32	20		WET	
58	33	9		WET	

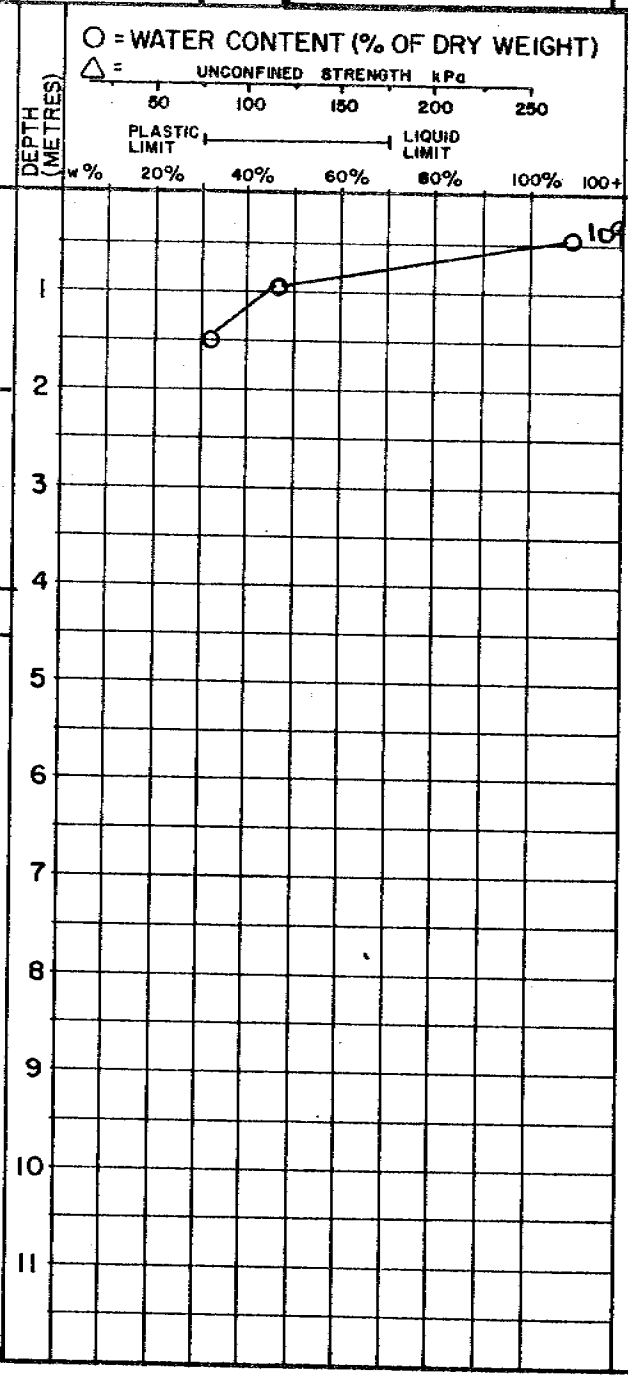
CHAINAGE | OFFSET

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk

TECH. D. Pranych | RIG Air | DATE 80/03/24 | km | B. P. No. | HOLE No. 1027-1

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	Pt	PEAT .5m		
2	CL - CI	CLAY - SILTY PEBBLES LOW - MED. PLASTIC		Vs
4				
6		2.1m		
8		ICE		ICE
10				
12		4.1m		
14		CLAY - SILTY SANDY 4.6m		
16				
18		BOTTOM OF HOLE - 4.6m		
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
				WET
				Free H_2O
				SAT.

CHAINAGE	OFFSET

REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk

TECH. D. Pronych | RIG Air | DATE 80/03/24 | km | B.P. No. | HOLE No. 1027-2

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	RELATIVE MOISTURE CONTENT
	Pt	Peat				
2	Pt - CL	Peat & Clay Silty .5m		Vs		Wet
4		1.2m			1	Free H_2O
6		Clay - Silty Pebbles			2	✓
8	CL	Low - Med. Plastic				Wet
10	CI	Sandy		Vc - Vr	3	
12					4	Wet
14		4.6m				
16		Bottom of Hole - 4.6m			5	Wet
18						
20					6	
22						
24					7	
26						
28					8	
30					9	
32						
34					10	
36						
38					11	

O = WATER CONTENT (% OF DRY WEIGHT)

△ = UNCONFINED STRENGTH kPa (50, 100, 150, 200, 250)

PLASTIC LIMIT — LIQUID LIMIT

w% 20% 40% 60% 80% 100% 100+

124

GRAIN-SIZE ANALYSIS	CLAY %	SILT %	SAND %	GRAVEL %

CHAINAGE	OFFSET
3066+50	100' Rt

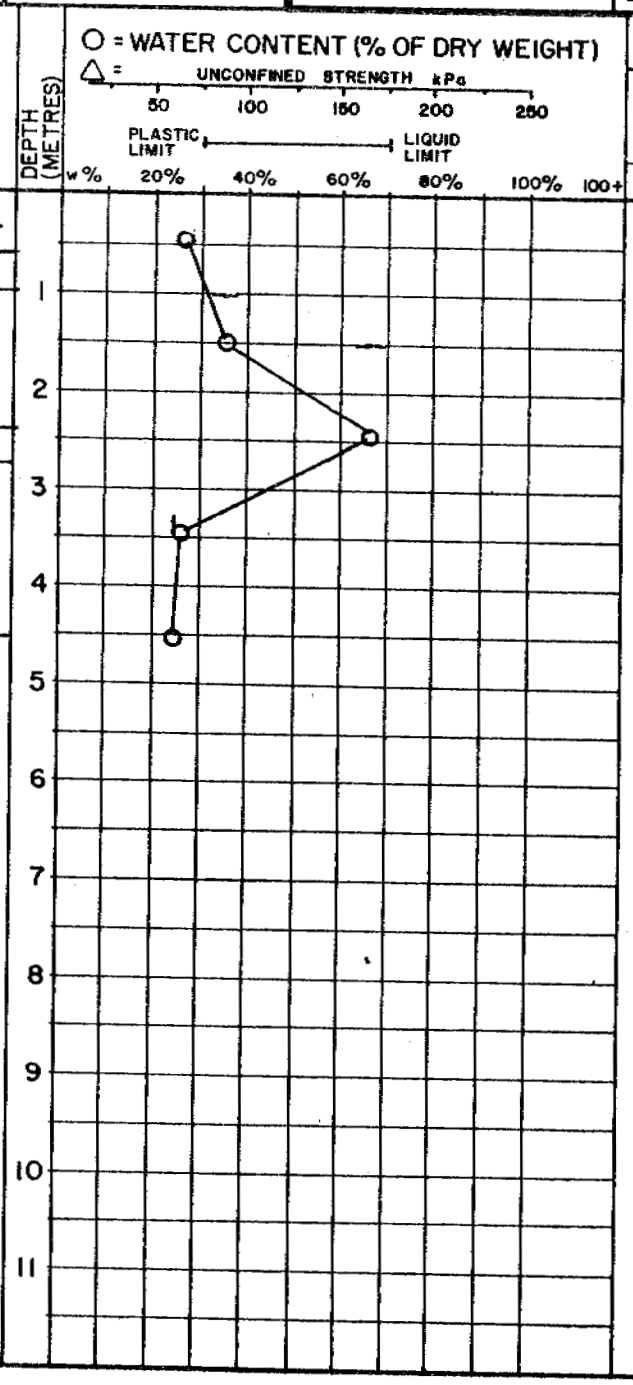
REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Proniych | RIG Air | DATE 80/03/24 | km | B.P. No. | HOLE No. 1027-3

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	RELATIVE MOISTURE CONTENT
	PT	PEAT			
2	OL	CLAY - SILTY & ORGANICS 1m		Vc - Vr	
		ICE		ICE	WET
4					
6	CL	CLAY - SILTY LOW PLASTIC		VS	FREE H_2O
8		PEAT & CLAY MIX 2.4m			
		2.7m		VS	SAT.
10	CL	CLAY - SILTY SOME ORGANICS			
12		FEW PEBBLES		Vc - Vr	WET
14		SANDY 4.6m			
16					WET
18		BOTTOM OF HOLE - 4.6m			
20					
22					
24					
26					
28					
30					
32					
34					
36					
38					



GRAIN-SIZE ANALYSIS	CLAY %	SILT %	SAND %	GRAVEL %

CHAINAGE	OFFSET

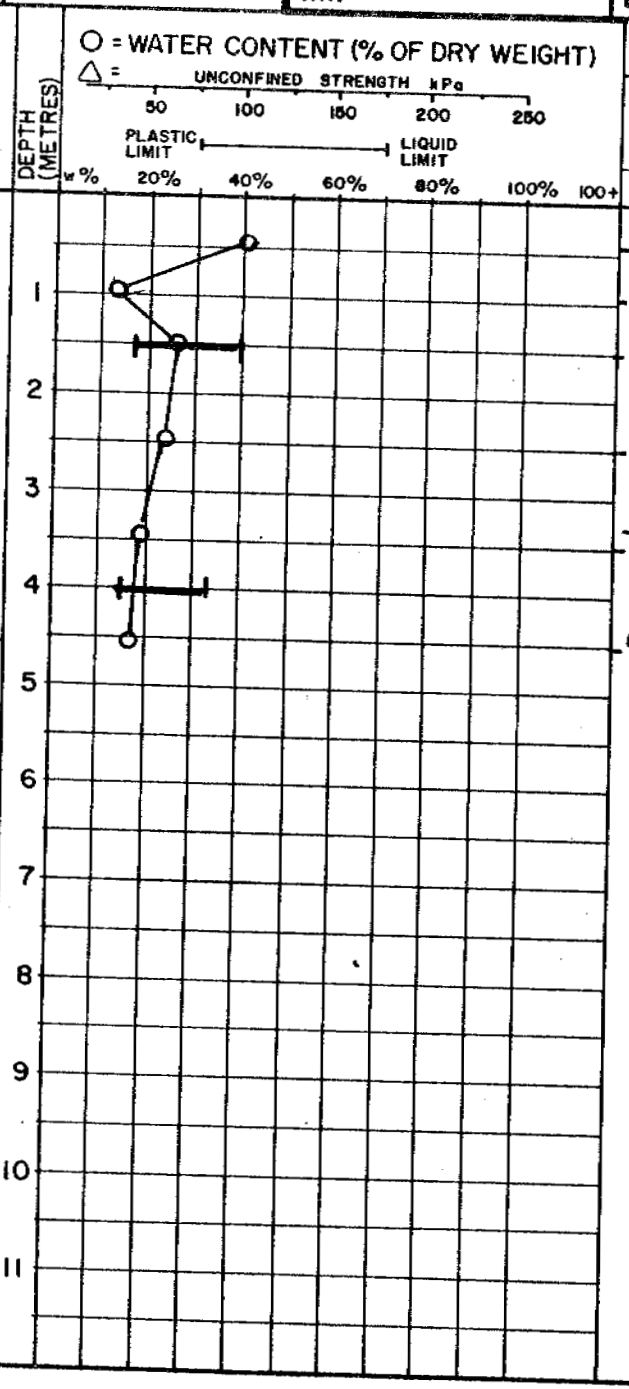
REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych	RIG	DATE	km	B. P. No.	HOLE No. 1028-1

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	P_1	PEAT .5m		
2, 4, 6, 8, 10, 12, 14	C_1	CLAY - SILTY SANDY GRAVELLY MED. PLASTIC PEBBLES		V_c - V_r ; V_x
		4.6m		
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		BOTTOM OF HOLE - 4.6 m		



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
43	51	6		WET	
27	50	23		WET	
53	29	18		WET	
68	27	5		WET	
70	28	2		MOIST	
59	39	2		MOIST	

CHAINAGE | OFFSET

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych	RIG Air	DATE	km	B.P. No.	HOLE No. 1028-2

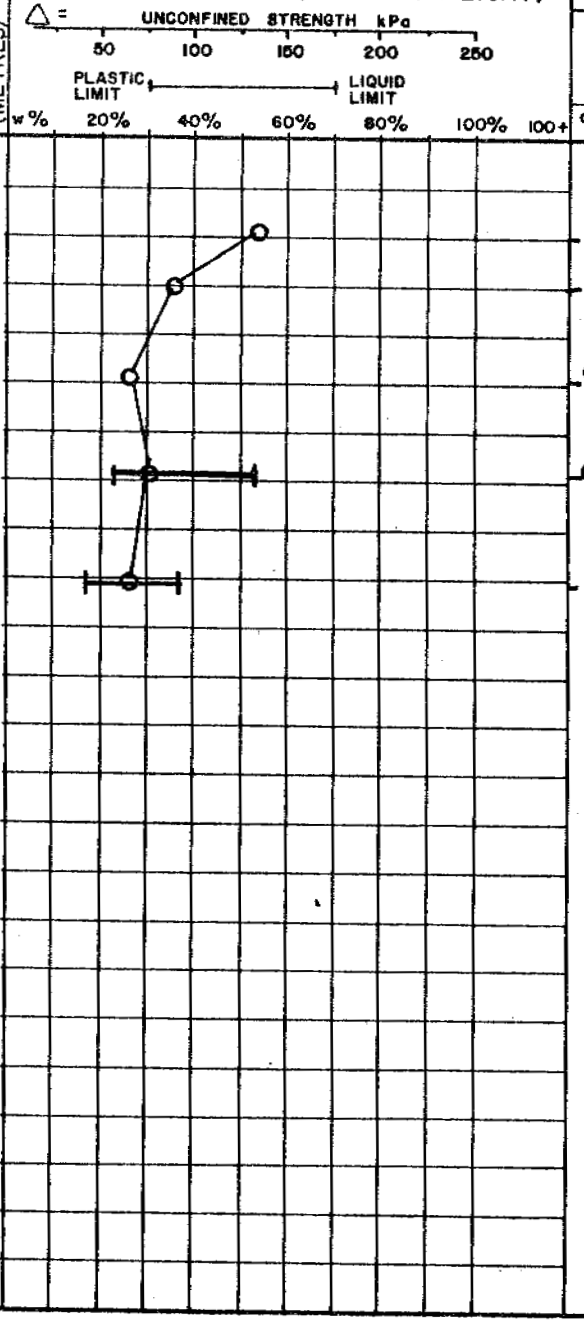
CHAINAGE	OFFSET
3117+74	

REMARKS

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
2	Pt	Peat & Ice		Ice & Pt
		.9m		
4–6	Ci	Clay - Silty Mod & High Plastic		
8–10	Ci – CH			$V_c - V_r$
12–14		Sandy		
		4.6 m		
16		Bottom of Hole - 4.6m		
18–38				

○ = WATER CONTENT (% OF DRY WEIGHT)

△ = UNCONFINED STRENGTH kPa



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
94	6	0		Wet
97	3	0		Wet
99	1	0		Wet
99	1	0		Moist - Wet
85	15	0		Moist - Wet

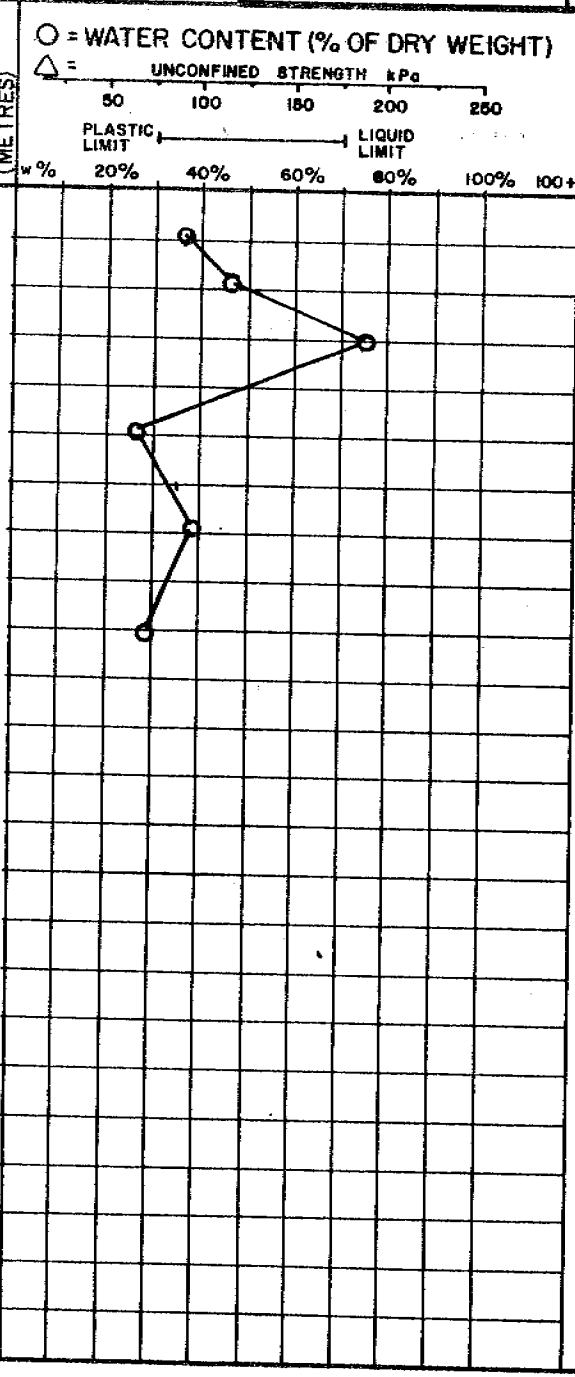
PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych | RIG Air | DATE 80/03/24 | km | B.P. No. — | HOLE No. 1028-3

CHAINAGE: 3147+50 | OFFSET:

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
	Pt	Peat .1m									
2	CL	Clay Silty Some Organics .9m		Vs						Wet	
4		Ice & Organics 1.8m		Ice - OL	1					Sat.	
6										Pore H_2O	
8		Clay - Silty Low Plastic			2					Sat.	
10	CL			Vs	3						
12										Sat.	
14		4.6m			4						
16		Bottom of Hole - 4.6m								Sat.	
18					5						
20					6						
22											
24					7						
26											
28					8						
30					9						
32											
34					10						
36											
38					11						



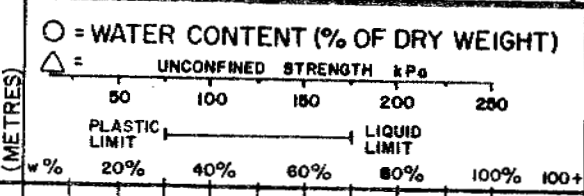
PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych | RIG Air | DATE 80/03/24 | km | B.P. No. | HOLE No. 1028-4

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
2	CL	CLAY - SILTY . 5m									
4		ICE & PEAT		ICE & P_t	1					WET	
6										PERC. H_2O	
8		CLAY - SILTY LOW - MED PLASTIC			2					SAT.	
10	CL I			V_s	3					WET	
12	CI									SAT.	
14		4.6m			4						
16		BOTTOM OF HOLE - 4.6m			5					PERC. H_2O	
18											
20					6						
22											
24					7						
26											
28					8						
30											
32					9						
34											
36					10						
38					11						

CHAINAGE: 3154+00 | OFFSET:



PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | Inuvik - Tuk.

TECH. D. Pronych | RIG Air | DATE 80/03/24 | km | B. P. No. | HOLE No. 1029-1

CHAINAGE	OFFSET
3189+00	

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
2	Pt	Peat .6m									
4		Ice & Peat		Ice + Pt	1					Wet	
6		Ice & Soil 2.1m		Ice + CL	2					Frozen H_2O ✓	
8		Ice 2.7m		Ice							
10		Clay - Silty Low Plastic			3						
12	CL			Vs	4					✓	
14		4.6m									
16					5					✓	
18		Bottom of Hole - 4.6m									
20					6						
22											
24					7						
26											
28					8						
30											
32					9						
34											
36					10						
38					11						

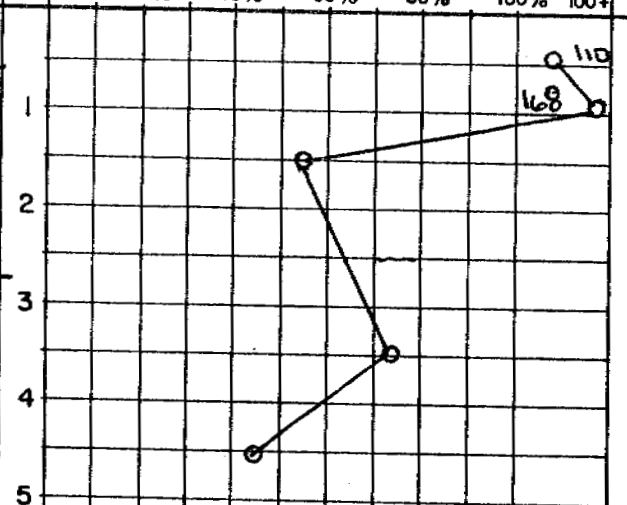
O = WATER CONTENT (% OF DRY WEIGHT)

Δ = UNCONFINED STRENGTH kPa

50 100 150 200 250

PLASTIC LIMIT — LIQUID LIMIT

w % 20% 40% 60% 80% 100% 100+



PUBLIC WORKS CANADA — DRILL HOLE REPORT

INUVIK - TUK.

TECH.	RIG	DATE	km	B.P. No.	HOLE No.
D. PRONYCH	AIR				1029-2

CHAINAGE	OFFSET
3188+00	50' LT

REMARKS

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
		PEAT .3m		
2, 4, 6		ICE & SOIL		ICE + CL
8, 10, 12, 14		ICE FEW SILT LENSES 4.6m		ICE + ML
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		BOTTOM OF HOLE - 4.6m		

DEPTH (METRES): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11

○ = WATER CONTENT (% OF DRY WEIGHT)

△ = UNCONFINED STRENGTH kPa: 50, 100, 150, 200, 250

PLASTIC LIMIT — LIQUID LIMIT

w% 20% 40% 60% 80% 100% 100+

NO SAMPLES TAKEN

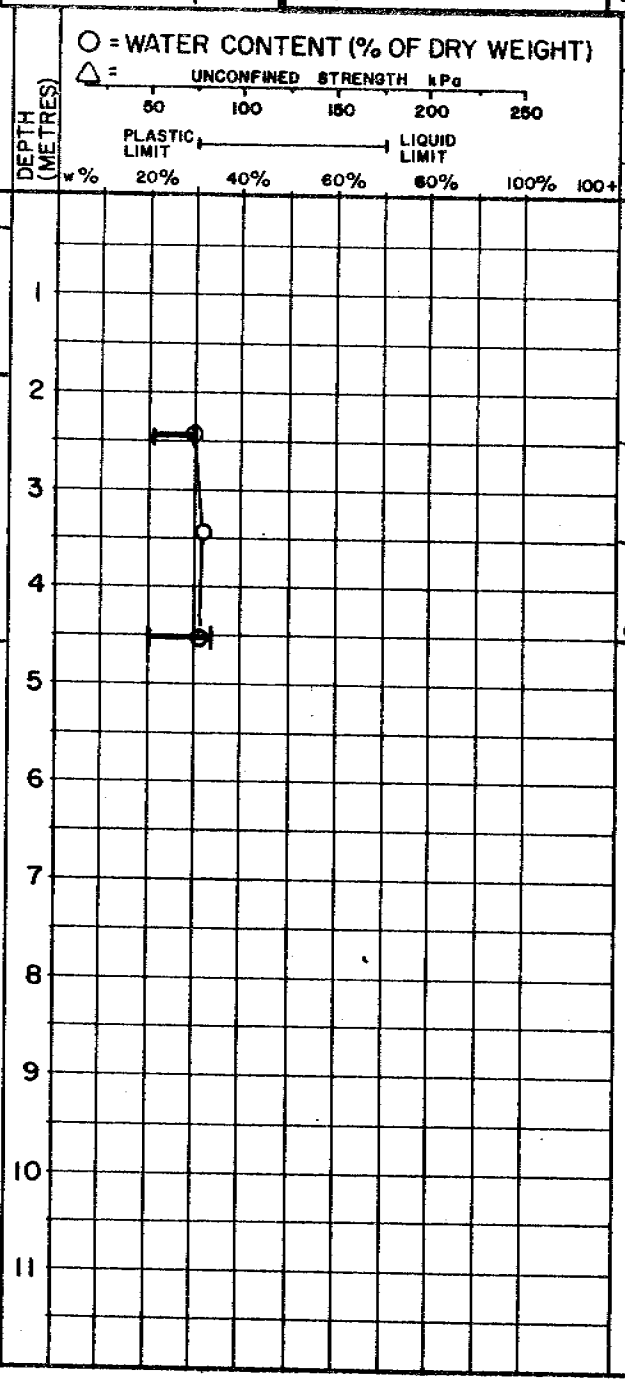
GRAIN-SIZE ANALYSIS				RELATIVE MOISTURE CONTENT
CLAY %	SILT %	SAND %	GRAVEL %	

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych | RIG Air | DATE 80/03/24 | km | B.P. No. | HOLE No. 1030-1

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	Pt	Peat .3m		
2, 4, 6		Ice + Some Soil		Ice + CL
8, 10	ML	Silt - Clayey		
		Clay - Silty Med. Plastic		$V_c - V_r$
12, 14	CI	4.6m		
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		Bottom of Hole - 4.6m		



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
99	1	0		Wet-Sat
98	2	0		Wet
98	2	0		Wet

CHAINAGE	OFFSET
3222+00	

REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pranych | RIG Air | DATE 80/03/24 | km | B. P. No. | HOLE No. 1030-2

CHAINAGE: 3235+50 | OFFSET:

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	RELATIVE MOISTURE CONTENT	REMARKS
2, 4, 6		PEAT & ICE		ICE & Pt.	1	FREE H_2O	
8, 10, 12, 14	Ci	CLAY - SILTY MED. PLASTIC		Vs	2, 3, 4	SAT. SAT. SAT.	
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		4.6m Bottom of Hole - 4.6m			5, 6, 7, 8, 9, 10, 11		

O = WATER CONTENT (% OF DRY WEIGHT)

△ = UNCONFINED STRENGTH kPa (50, 100, 150, 200, 250)

PLASTIC LIMIT — LIQUID LIMIT

w % 20% 40% 60% 80% 100% 100+

278

GRAIN-SIZE ANALYSIS	CLAY %	SILT %	SAND %	GRAVEL %

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych	RIG Air	DATE 80/03/24	km	B. P. No.	HOLE No. 1030-3

CHAINAGE	OFFSET
3241 + 00	

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
	Pt	PEAT .3 m									
2, 4, 6, 8		PEAT & ICE		ICE & Pt.	1, 2					Free H_2O	
10, 12, 14	Cl	CLAY - SILTY MED. PLASTIC		Vs	3, 4					SAT.	
		4.6m									
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		BOTTOM OF HOLE - 4.6m			5, 6, 7, 8, 9, 10, 11						

O = WATER CONTENT (% OF DRY WEIGHT)

△ = UNCONFINED STRENGTH kPa: 50, 100, 150, 200, 250

PLASTIC LIMIT — LIQUID LIMIT

w % 20% 40% 60% 80% 100% 100+

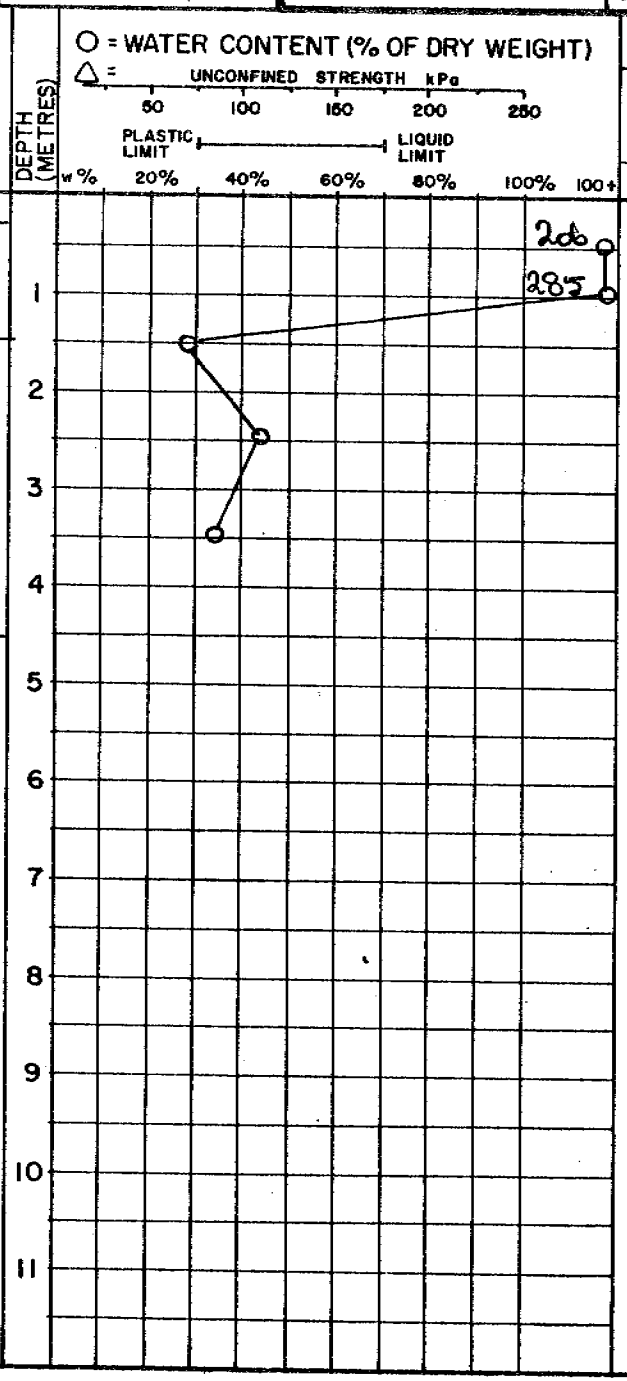
272

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Paonych | RIG Air | DATE 80/03/24 | km | B.P. No. | HOLE No. 1031-1

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	Pt	PEAT .3m		
2, 4		PEAT & Icr		Icr & Pt
6, 8, 10, 12, 14	ML, CL	SILT-CLAYEY TO CLAY SILTY		Vs
		SOME ORGANICS 4.6m		
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		BOTTOM OF HOLE. 4.6m		



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
				Free H_2O ✓ Mast. wet
				Free H_2O
				SAT.

CHAINAGE	OFFSET
3280+78	

REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

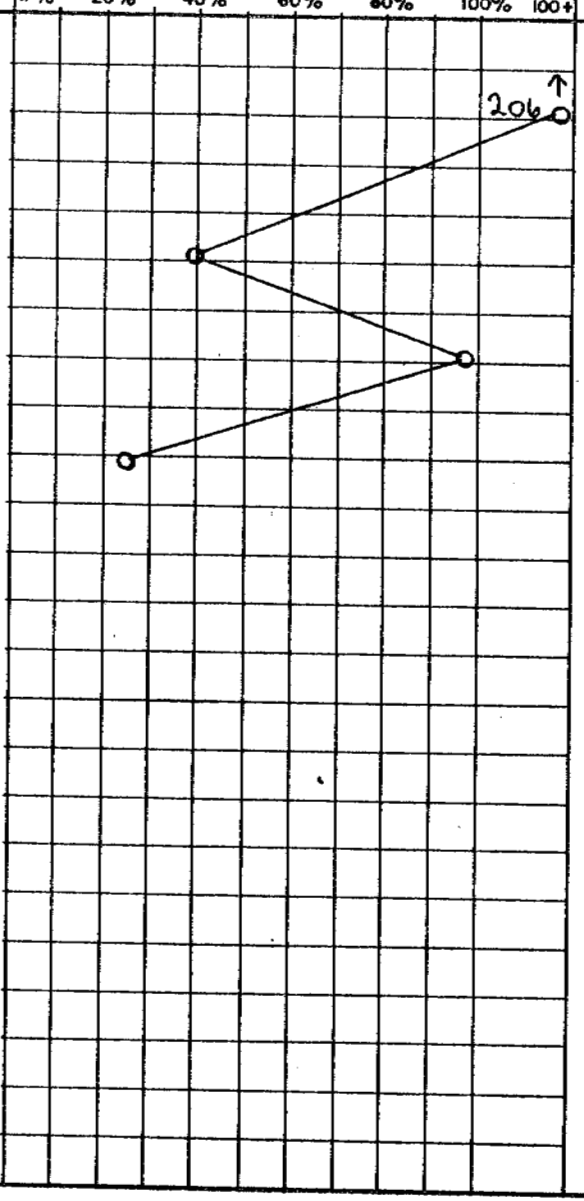
INUVIK - TUK.

TECH. D. PRONYCH | RIG AIR | DATE 80/03/24 | km | B.P. No. | HOLE No. 1031-2

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	Pt	PEAT .5m		Vs
2, 4, 6, 8		ICE & SOME SOIL		ICE & CL
10	CL	CLAY - SILTY LOW PLASTIC		Vs
14	ML	SILT. 4.6m		
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		BOTTOM OF HOLE 4.6m		

DEPTH (METRES): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11

O = WATER CONTENT (% OF DRY WEIGHT)
Δ = UNCONFINED STRENGTH kPa (50, 100, 150, 200, 250)
PLASTIC LIMIT — LIQUID LIMIT
w% 20% 40% 60% 80% 100% 100+



GRAIN-SIZE ANALYSIS				RELATIVE MOISTURE CONTENT
CLAY %	SILT %	SAND %	GRAVEL %	
				WET
				FREE H_2O
				FREE H_2O
				MOIST

CHAINAGE	OFFSET
3297+00	

REMARKS

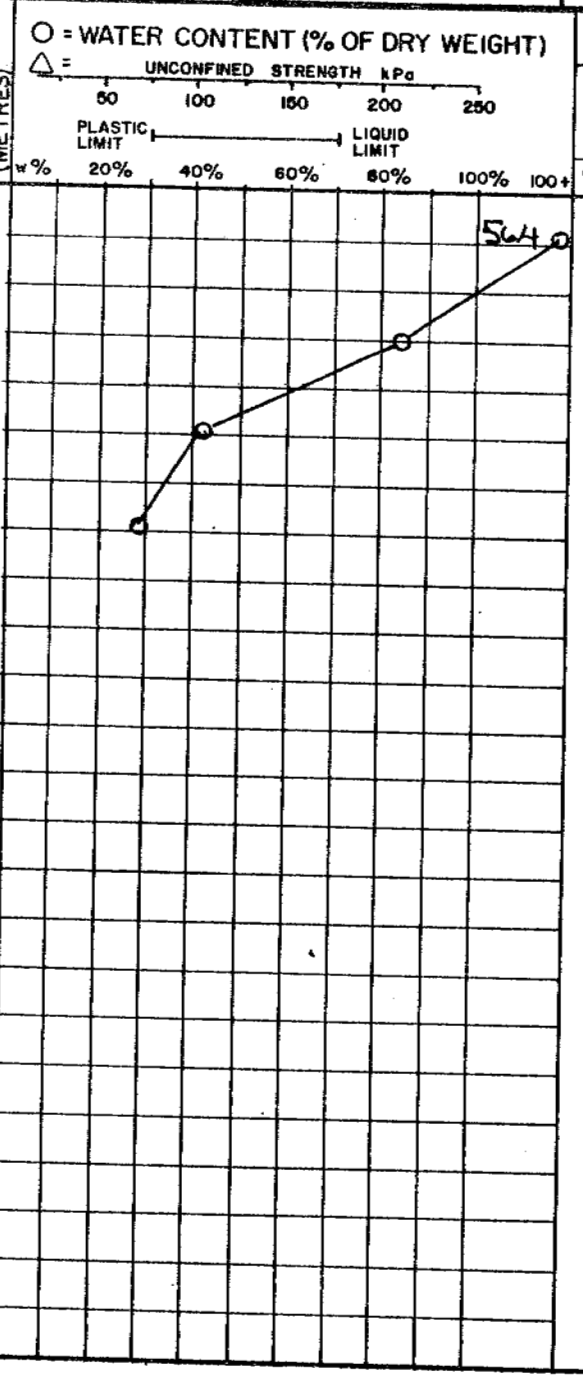
PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych | RIG Air | DATE 80/03/24 | km | B.P. No. | HOLE No. 1031-3

CHAINAGE: 3304+00 | OFFSET:

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
	Pt	Peat .3m									
2, 4		Peat & Ice		Ice + Pt.	1					Free H_2O	
6		Clay - Silty			2					Free H_2O	
8, 10	CL			Vs	3					Free H_2O	
12		Ice &		Ice & ML	4					Wet. Sat.	
14	ML	Silt - Clayey 4.6m									
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		Bottom of Hole - 4.6m			5, 6, 7, 8, 9, 10, 11						

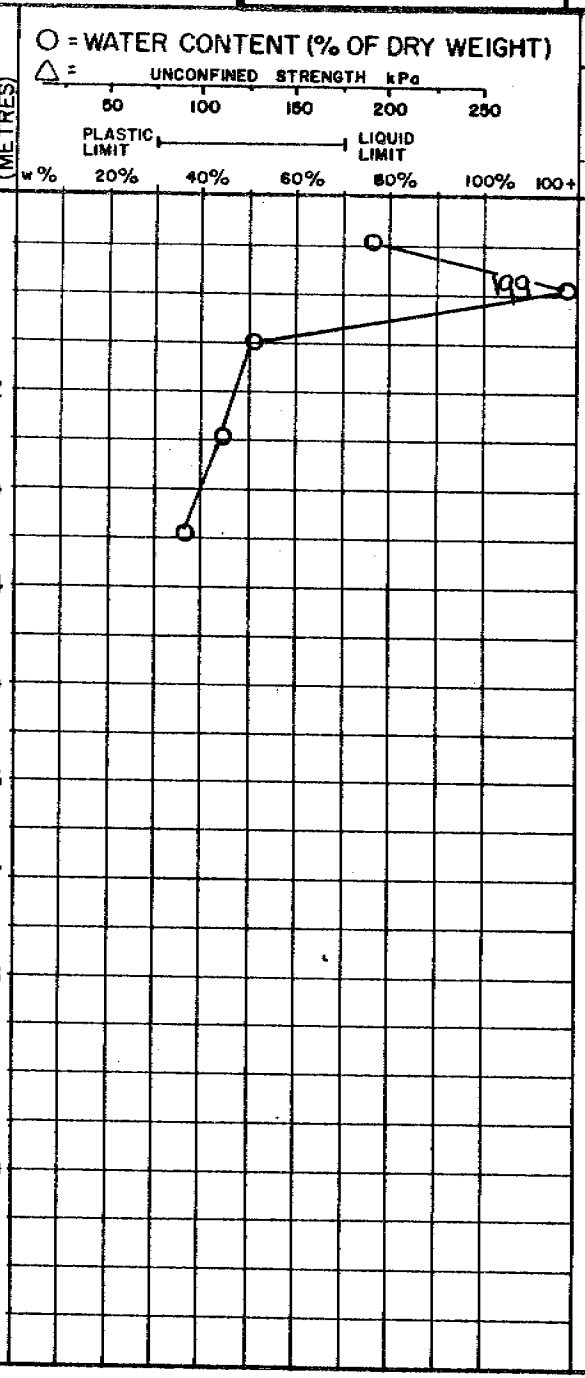


PUBLIC WORKS CANADA — DRILL HOLE REPORT

INUVIK - TUK.

TECH. D. PRONYCH	RIG AIR	DATE 80/03/24	km	B.P. No.	HOLE No. 1032-1

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	CHAINAGE 3343+00	OFFSET	REMARKS
	Pt	PEAT .3m											
2, 4, 6		ICE & SOIL ORGANICS		ICE + CL + OL						WET Poss H2O			
8, 10, 12, 14	Cl	CLAY - SILTY MED. PLASTIC 4.6m		VS						WET			
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		BOTTOM OF HOLE - 4.6m											



PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych	RIG Air	DATE 80/03/24	km	B.P. No.	HOLE No. 1032-2

CHAINAGE	OFFSET
3357+50	

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	RELATIVE MOISTURE CONTENT	REMARKS
	Pt	Peat				
		.3m				
2–6		Ice & Peat Clay		Ice + Pt + Cl	Free H_2O Free H_2O	
6–8		Clay - Silty Low - Med. Plastic				
8–14	CL CL			Vs	Sat. Sat.	
		4.6m				
14–16		Bottom of Hole - 4.6m			Sat.	

O = WATER CONTENT (% OF DRY WEIGHT)

△ = UNCONFINED STRENGTH kPa (50, 100, 150, 200, 250)

PLASTIC LIMIT — LIQUID LIMIT

w % 20% 40% 60% 80% 100% 100+

DEPTH (METRES): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11

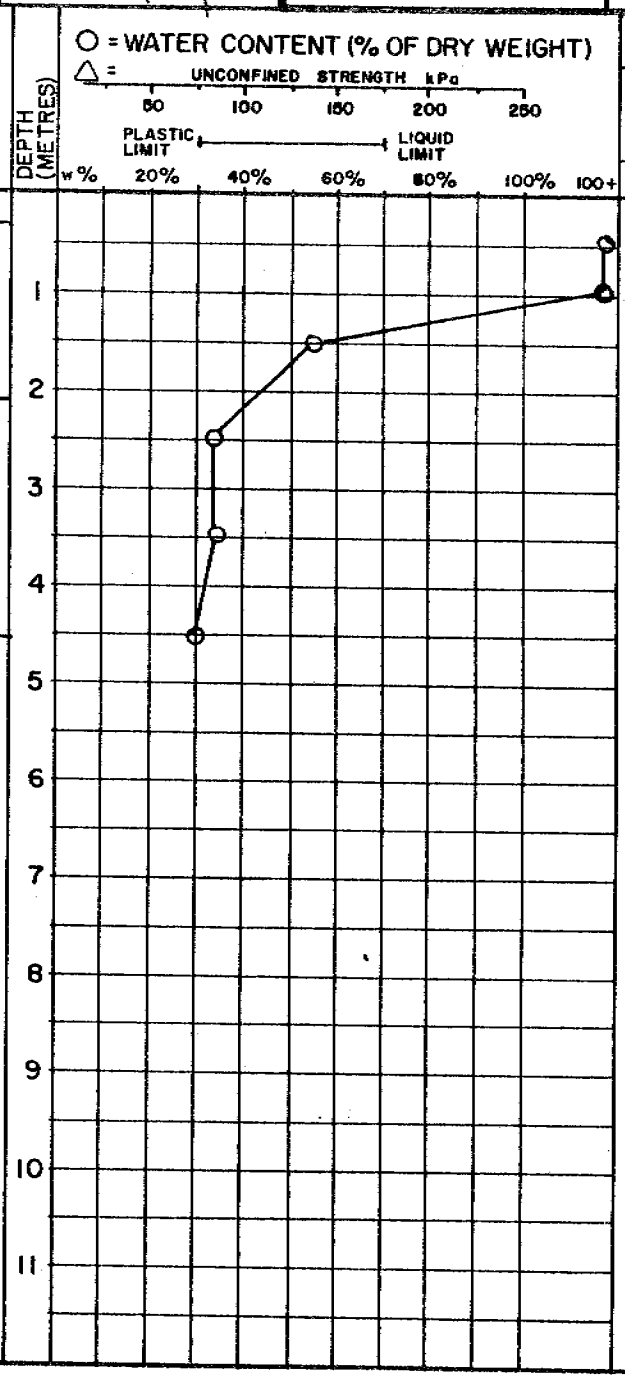
GRAIN-SIZE ANALYSIS: CLAY %, SILT %, SAND %, GRAVEL %

PUBLIC WORKS CANADA — DRILL HOLE REPORT

INUVIK - TUK.

TECH. D. PRONYCH	RIG AIR	DATE 80/03/24	km	B.P. No.	HOLE No. 1032-3

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	RELATIVE MOISTURE CONTENT
	P_t	PEAT .3m			
2, 4, 6		ICE & PEAT SOME CLAY		ICE & P_t + C_r	Pore H_2O Pore H_2O Pore H_2O
8, 10, 12, 14	C_1	CLAY - SILTY MED. PLASTIC 4.6m		$V_c - V_r$	WET WET MOIST
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		BOTTOM OF HOLE - 4.6 m			



GRAIN-SIZE ANALYSIS	CLAY %	SILT %	SAND %	GRAVEL %

CHAINAGE	OFFSET
3369+50	

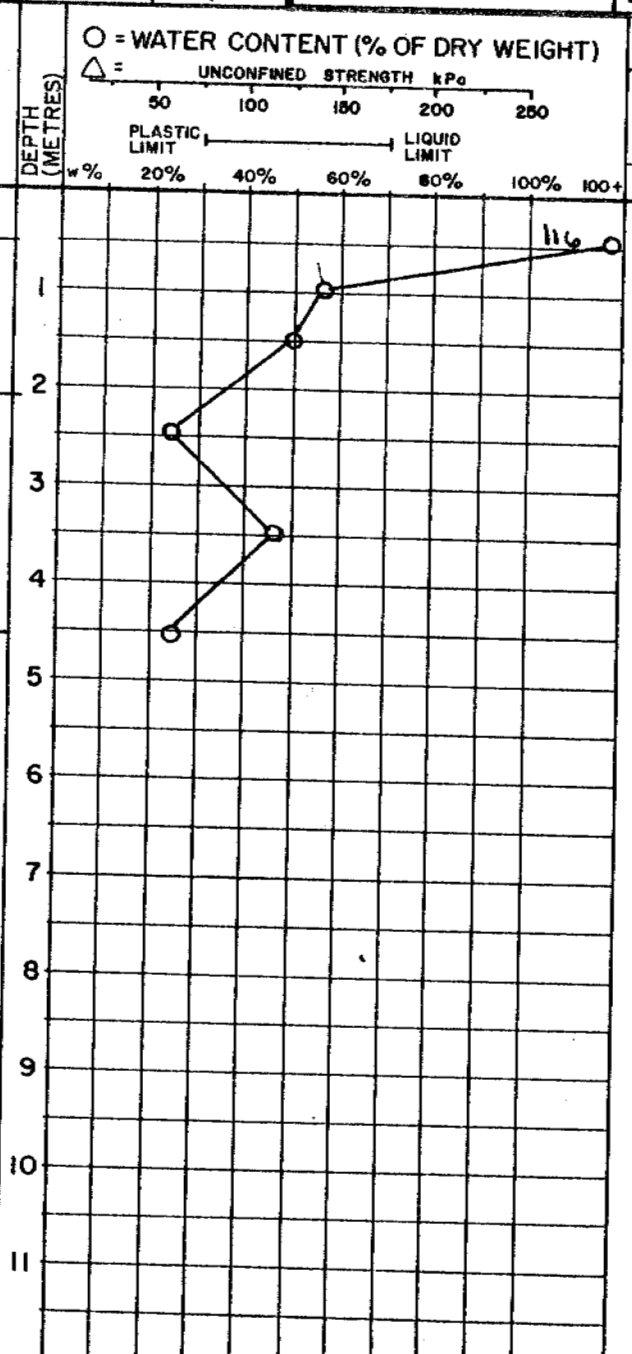
REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

INUVIK – TUK

TECH. D. PRONYCH | RIG AIR | DATE 80/03/24 | km | B.P. No. | HOLE No. 1033-1

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	Pt	PEAT .5m		
2–6		ICE & SOIL 2.1		ICE & CL
8–12	CL-CI	CLAY - SILTY LOW - MED. PLASTIC 3.7m		V_s
14	SC	SAND - CLAYEY SILTY 4.6m		
16–38		BOTTOM OF HOLE 4.6 m		



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
				SAT.
				FREE H_2O
				FREE H_2O
				MOIST-WET
				SAT.
				SAT.

CHAINAGE	OFFSET

REMARKS

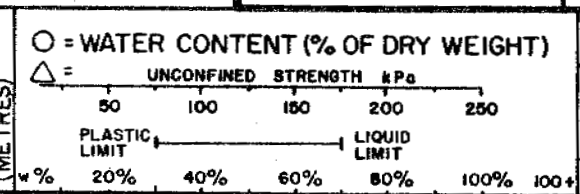
PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych	RIG Air	DATE 80/03/24	km	B.P. No.	HOLE No. 1033-2

CHAINAGE	OFFSET
3408+50	

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
2		SAND - PEBBLES FINE				3	96		1	MOIST	
4	SP				1	2	81		17	MOIST	
6						6	91		3	WET	
8		GRAVELLY		Vx	2	4	67		29	WET	
10					3						
12						5	68		27	WET	
14	SM	SILTY GRAVELLY 4.6m			4	30	54		16	WET	
16											
18		BOTTOM OF HOLE - 4.6m			5						
20											
22					6						
24											
26					7						
28											
30					8						
32											
34					9						
36					10						
38					11						



PUBLIC WORKS CANADA — DRILL HOLE REPORT

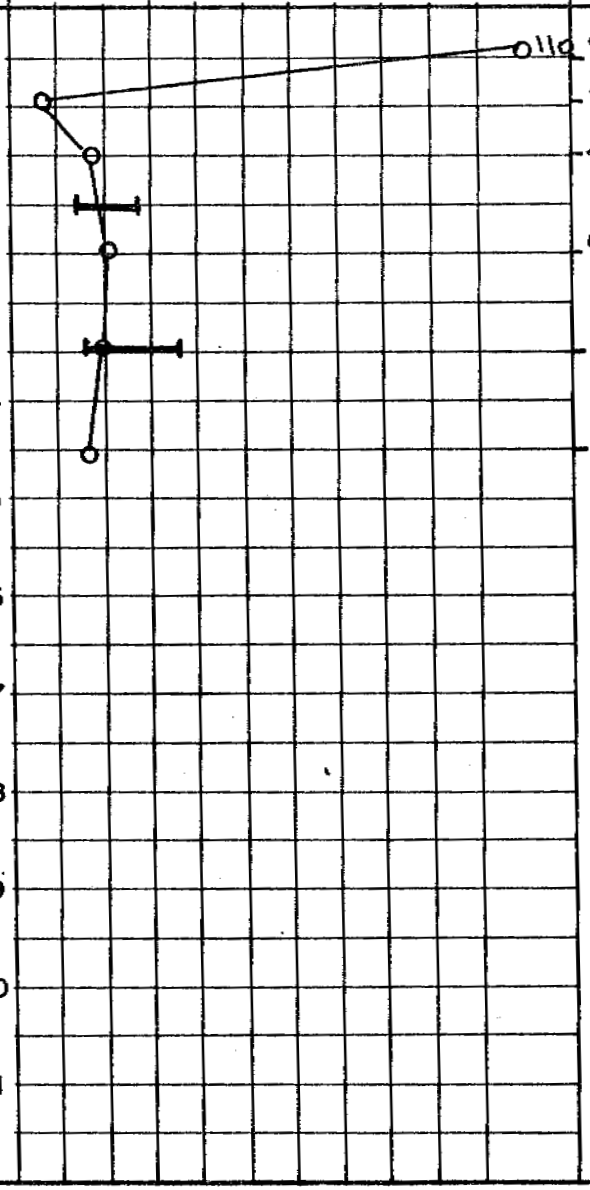
Inuvik - Tuk.

TECH. D. Pronych	RIG Air	DATE 80/03/24	km	B.P. No.	HOLE No. 1033-3

CHAINAGE	OFFSET
34 16+00	

REMARKS

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
2	Pt.	Peat .6m		Vs		80	15	5		MOIST
4	Sm	SAND - Silty Pebbles 1.5m			1	22	76	2		MOIST
6						45	33	22		SAT.
8	CL	CLAY - Silty Sandy Gravelly Low Plastic		V_c - V_r	2	58	27	15		WET
10					3					
12	CI	Pebbles Med. Plastic		V_x		66	30	4		WET
14		4.6m			4	55	40	5		WET
16		Bottom of Hole - 4.6m			5					
18										
20					6					
22										
24					7					
26										
28					8					
30										
32					9					
34										
36					10					
38					11					



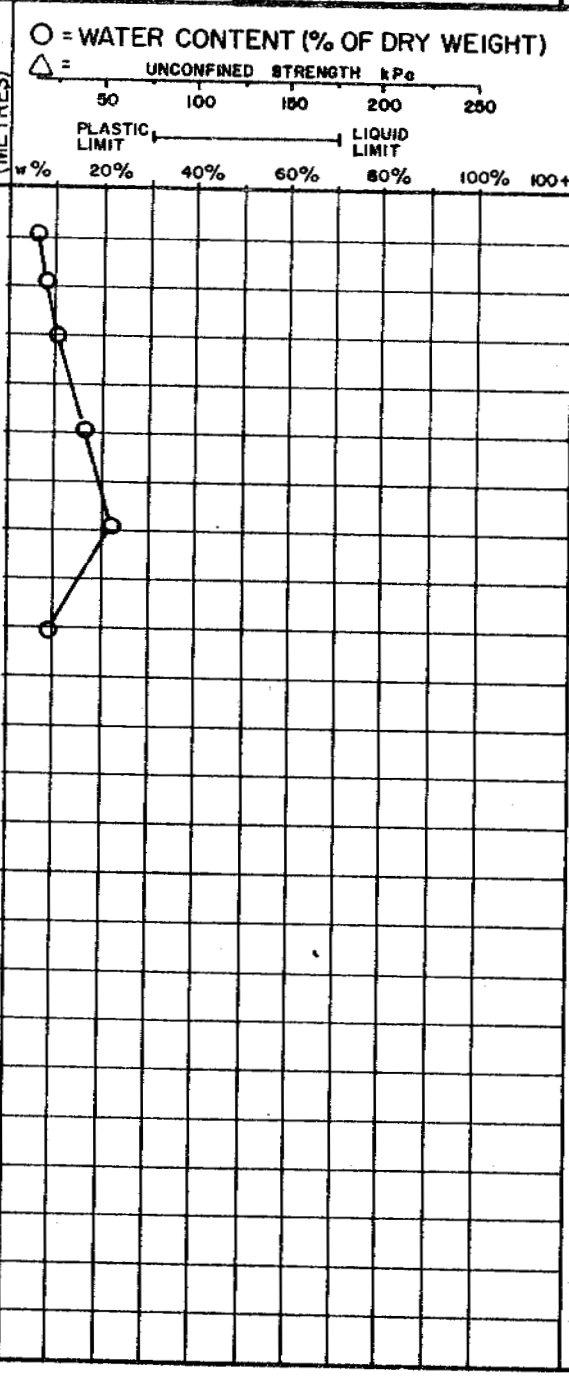
PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych | RIG Air | DATE 80/03/25 | km | B.P. No. | HOLE No. 1034-1

CHAINAGE: 3433+00 | OFFSET:

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
2	SM	SAND - Silty - Gravelly		Vx		3	76	21		Moist-wet	
4					1	15	77	8		Moist-wet	
6						19	55	26		Wet	
8	SP	SAND - Fine			2						
10				Vc - Vr		5	95	0		Wet	
12					3						
14	SW	SAND - Fine - Coarse Gravelly 4.6m				6	93	1		Wet	
16					4	2	62	36		Sat.	
18		Bottom of Hole - 4.6m			5						
20											
22					6						
24											
26					7						
28											
30					8						
32											
34					9						
36											
38					10						
					11						



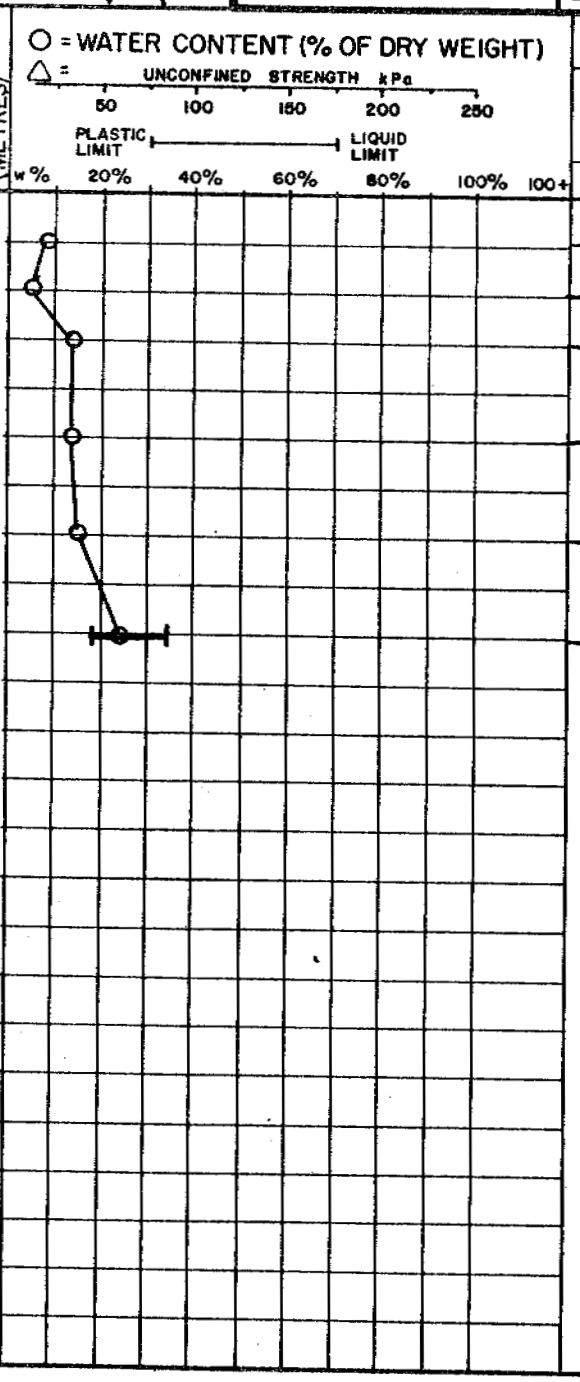
PUBLIC WORKS CANADA — DRILL HOLE REPORT

INUVIK - TUK.

TECH. D. PRONYCH | RIG Air | DATE 80/03/25 | km | B.P. No. | HOLE No. 103A-2

CHAINAGE: 34 & 6+00 | OFFSET:

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
	Pt	PEAT .1m									
2	SC	SAND - SILTY GRAVELLY									
4	SM			Vc - Vr	1	19	58	23		DAMP	
						16	75	9		DAMP	
6	SM				2	30	48	22		FREE H_2O	
8											
10					3	10	53	37		FREE H_2O	
		3.4m									
12	CL	CLAY - SAND - GRAVEL MIX		Vx	4	36	37	27		MOIST - WET	
14	CI	CLAY - SILTY SANDY 4.6m				85	14	1		MOIST - WET	
16		BOTTOM OF HOLE - 4.6m			5						
18											
20					6						
22											
24					7						
26											
28					8						
30											
32					9						
34					10						
36											
38					11						

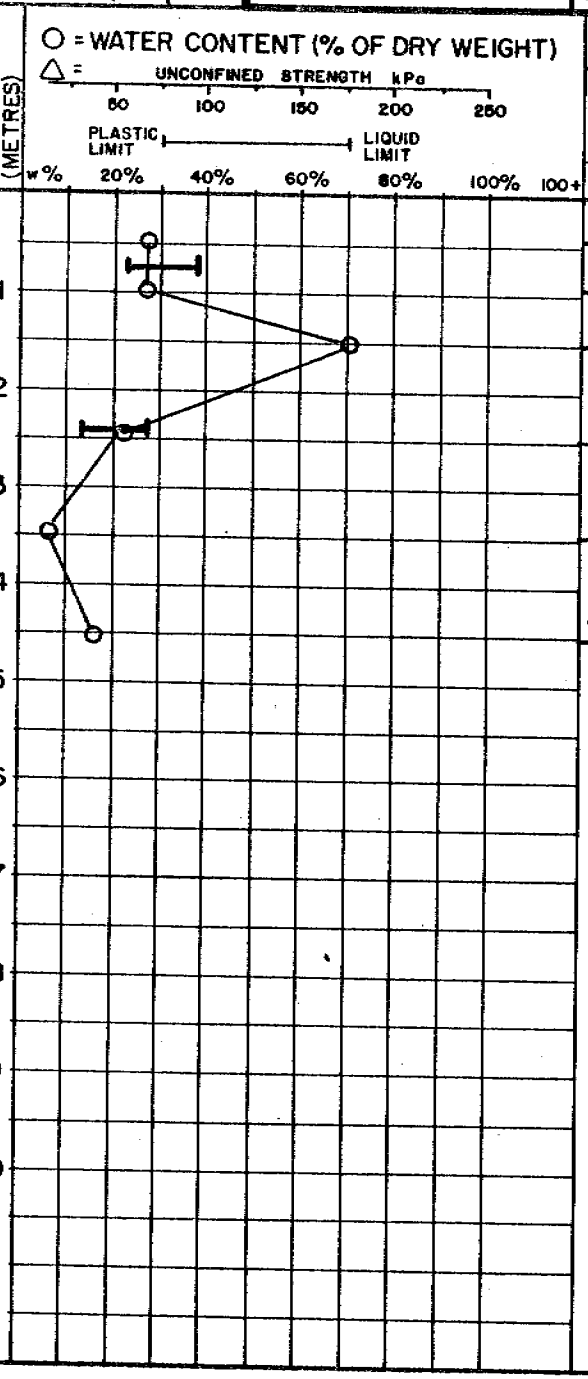


PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. PRONYCH | RIG Air | DATE 80/03/25 | km | B.P. No. | HOLE No. 1035-1

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
2	CL	CLAY - SILTY ORGANICS - SANDY		Vc - Vr		79	21	0		WET	
4		PEBBLES MED - LOW PLASTIC		Vs	1	68	26	6		MOIST	
6						59	33	8		Free H_2O	
8					2						
10		3.1 m				56	41	3		WET	
12	SM	SAND - GRAVELLY SILTY			3	11	51	38		WET	
14	SM	PEBBLES			4	36	58	6		WET	
		4.6 m									
16		BOTTOM OF HOLE - 4.6 m			5						
18											
20					6						
22											
24					7						
26											
28					8						
30					9						
32											
34					10						
36					11						
38											



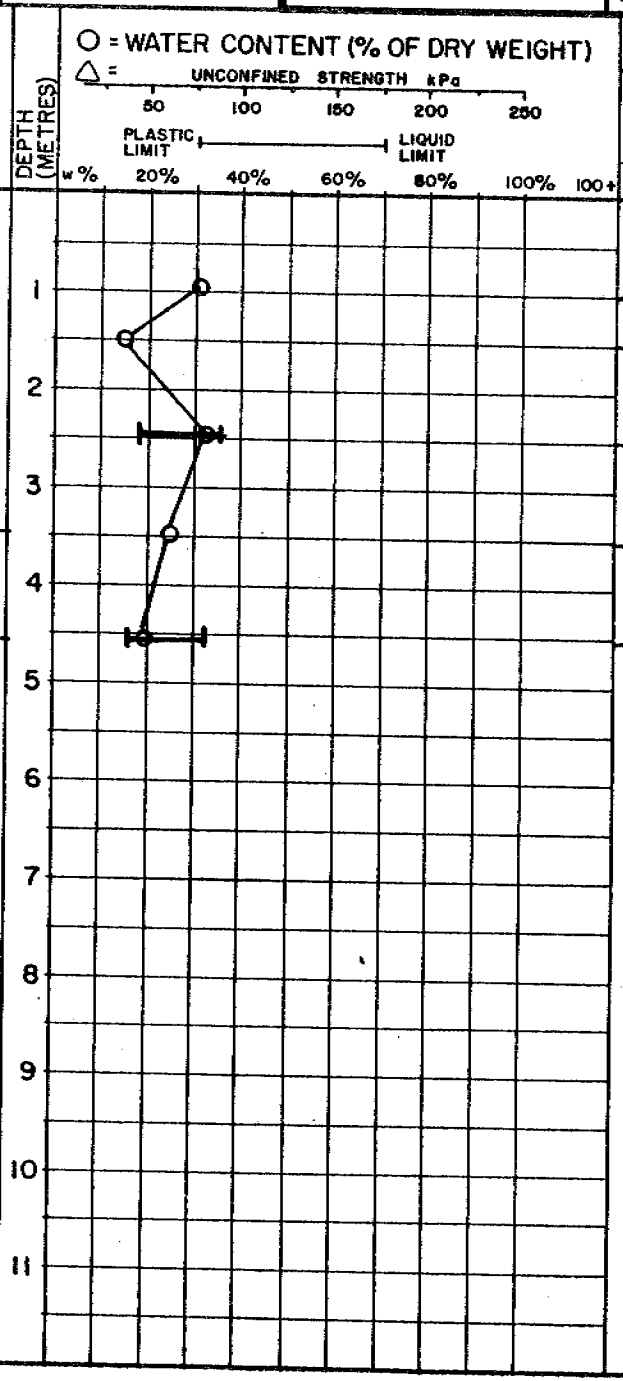
CHAINAGE: 3484+00 | OFFSET:

PUBLIC WORKS CANADA — DRILL HOLE REPORT

INUVIK - TUK

TECH. D. PRONYCH | RIG AIR | DATE 80/03/25 | km | B.P. No. | HOLE No. 1035-2

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
2	Pt	PEAT .6m		
4	CL	CLAY - SILTY SANDY 1.2m		
6	Sm	SAND - SILTY GRAVELLY 2.1m		Vs
8, 10, 12, 14	Cl	CLAY - SILTY SANDY PEBBLES MED. PLASTIC 4.6m		Vc - Vr
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		BOTTOM OF HOLE - 4.6m		



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
36	62	2		Free H_2O
18	66	16		SAT.
76	23	1		MOIST - WET
65	30	5		WET
67	30	3		MOIST - WET

CHAINAGE	OFFSET
3191+50	

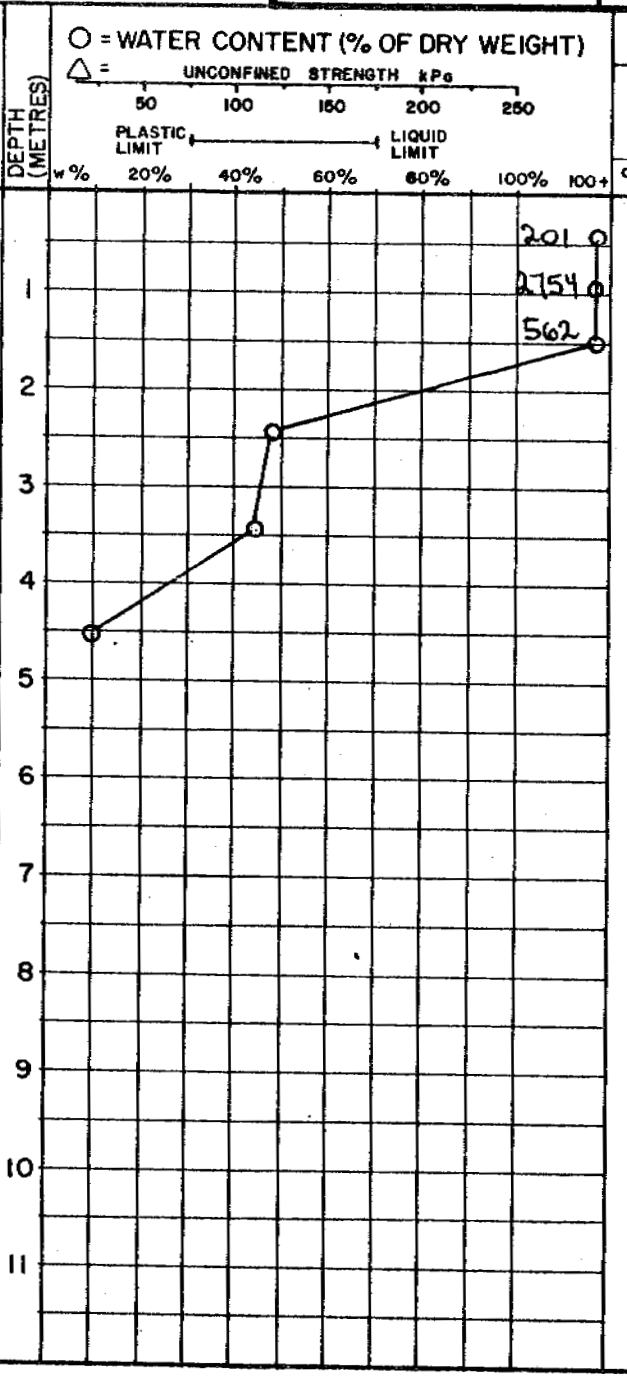
REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych	RIG Air	DATE 80/03/25	km	B.P. No.	HOLE No. 1035-3

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	RELATIVE MOISTURE CONTENT
2, 4		Peat & Ice (1.5m)		Ice & Pt.	Moist free H_2O
6		Ice & Sand (2.1m)		Ice + Sm	✓
8, 10	CL	Clay - Silty Pebbles Low Plastic (3.7m)		✓s	✓
12, 14	SP	Sand - Gravelly (4.6m)			✓
16		Bottom of Hole 4.6m			Sat.



GRAIN-SIZE ANALYSIS			
CLAY %	SILT %	SAND %	GRAVEL %

CHAINAGE	OFFSET

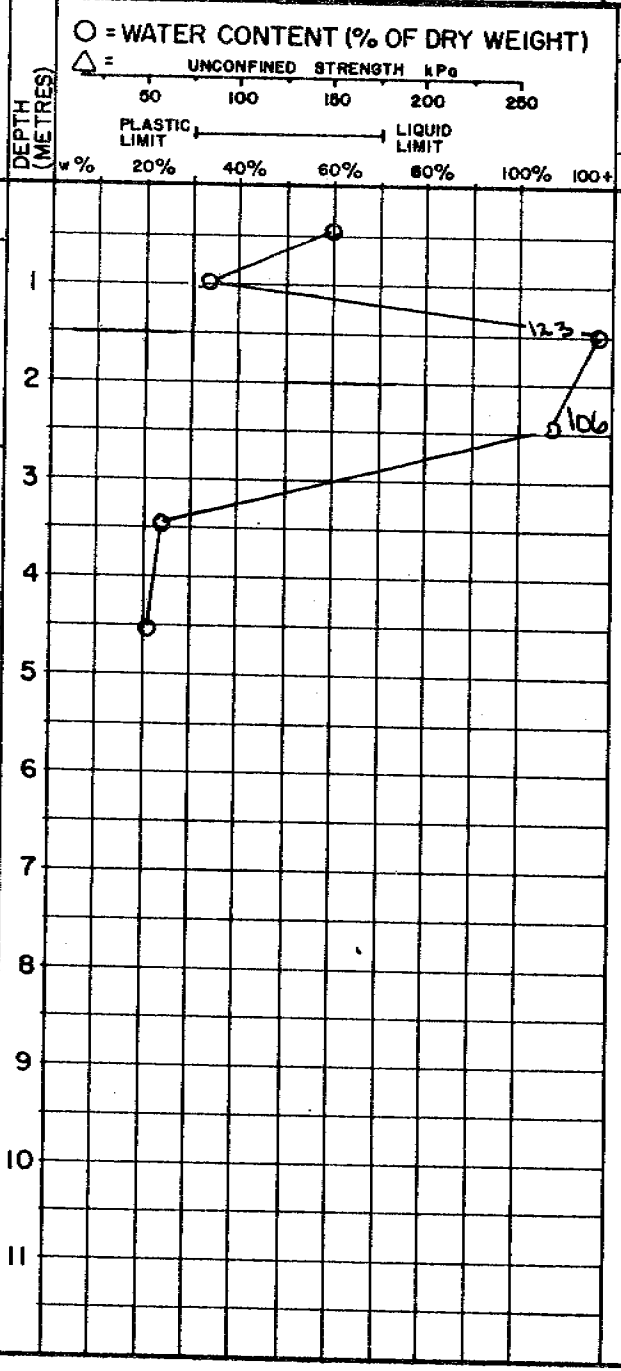
REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk

TECH. D. Pronych | RIG Air | DATE 80/03/25 | km | B.P. No. | HOLE No. 1036-1

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
2	Pt	Peat .6m		Vs
4		Ice & Organics Soil		Ice &
6				
8		2.7m		CL
10	ML	Silt - Sandy		
12				Vc - Vr
14	SM	Sand - Silty 4.6m		
16		Bottom of Hole - 4.6m		
18				
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				



GRAIN-SIZE ANALYSIS				RELATIVE MOISTURE CONTENT
CLAY %	SILT %	SAND %	GRAVEL %	
				WET
				WET
				Free H_2O
				Free H_2O
				Sat.
				WET

CHAINAGE	OFFSET
3536+00	

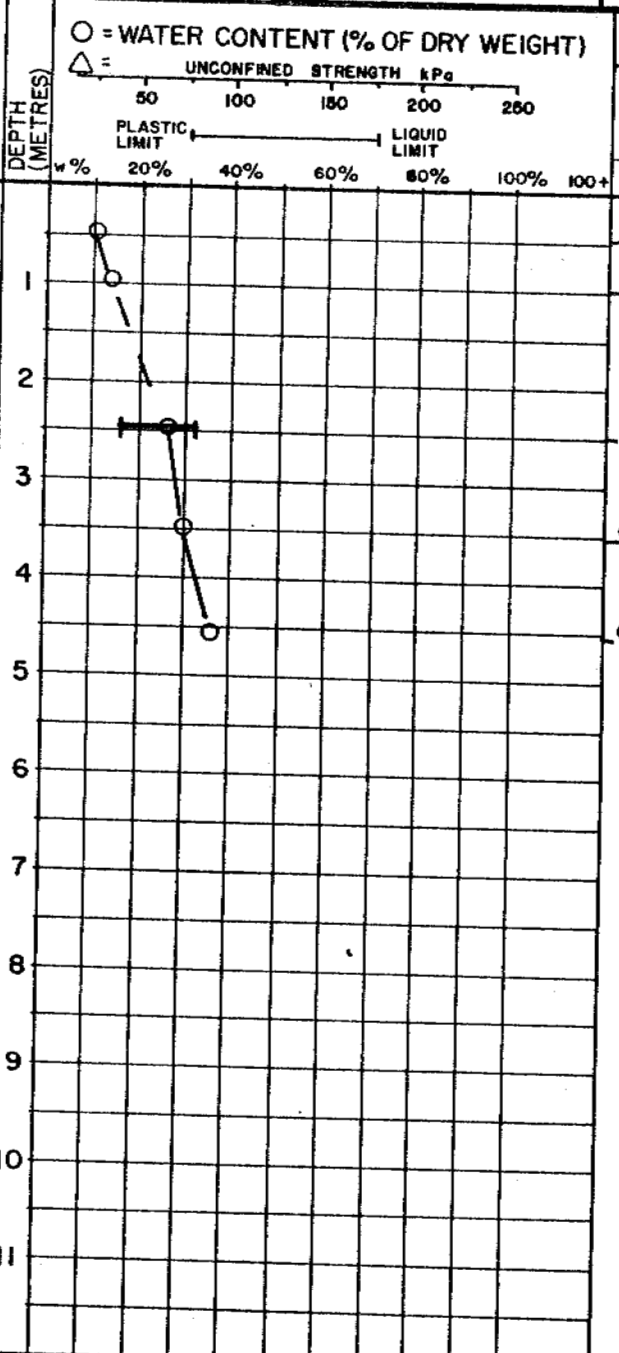
REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Paonych | RIG Air | DATE 80/03/25 | km | B.P. No. | HOLE No. 1036-2

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	Pt	Peat .3m		
2	SW	Sand. Pebbles		Vx
4		1.2m		
6		Ice + Some Soil		
8		2.1m		
10		Clay - Silty Med. Plastic		Vc - Vr
12	CI			I
14				Vs
16		4.6m		
18		Bottom of Hole - 4.6m		
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
2	89	7		Moist - Wet
9	82	9		Wet
93	7	0		Moist - Wet
97	3	0		Wet
96	4	0		Wet

CHAINAGE	OFFSET
3577 + 00	

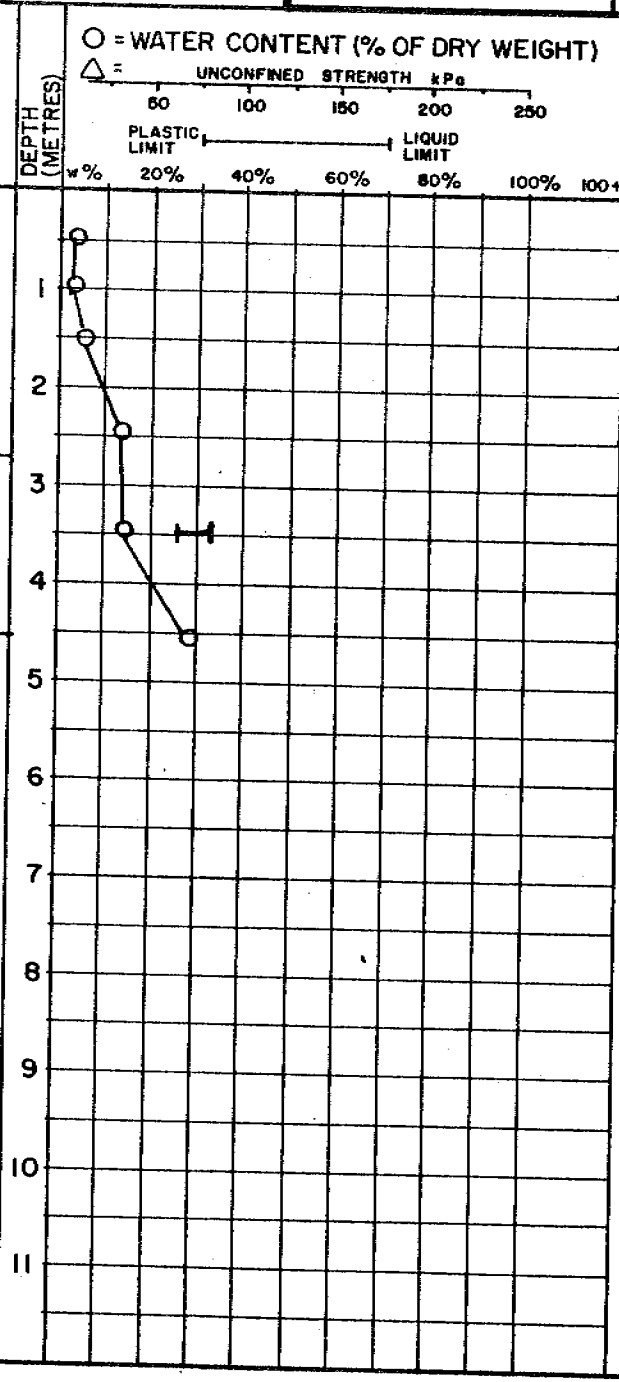
REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych | RIG Air | DATE 80/03/25 | km | B.P. No. | HOLE No. 1037-1

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	Pt	Peat .05m		
2, 4, 6, 8	SW	SAND- PEBBLES GRAVELLY		Vx
		2.7m		
10, 12, 14	CL	CLAY- SILTY SANDY PEBBLES ORGANICS LOW PLASTIC		Vc-Vr
		4.6m		
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		BOTTOM OF HOLE- 4.6m		



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
2	-	89	9	DAMP MOIST
1	-	71	28	✓
8	-	59	33	WET
10	-	74	16	SAT.
8	-	16	3	MOIST
88	-	8	4	WET

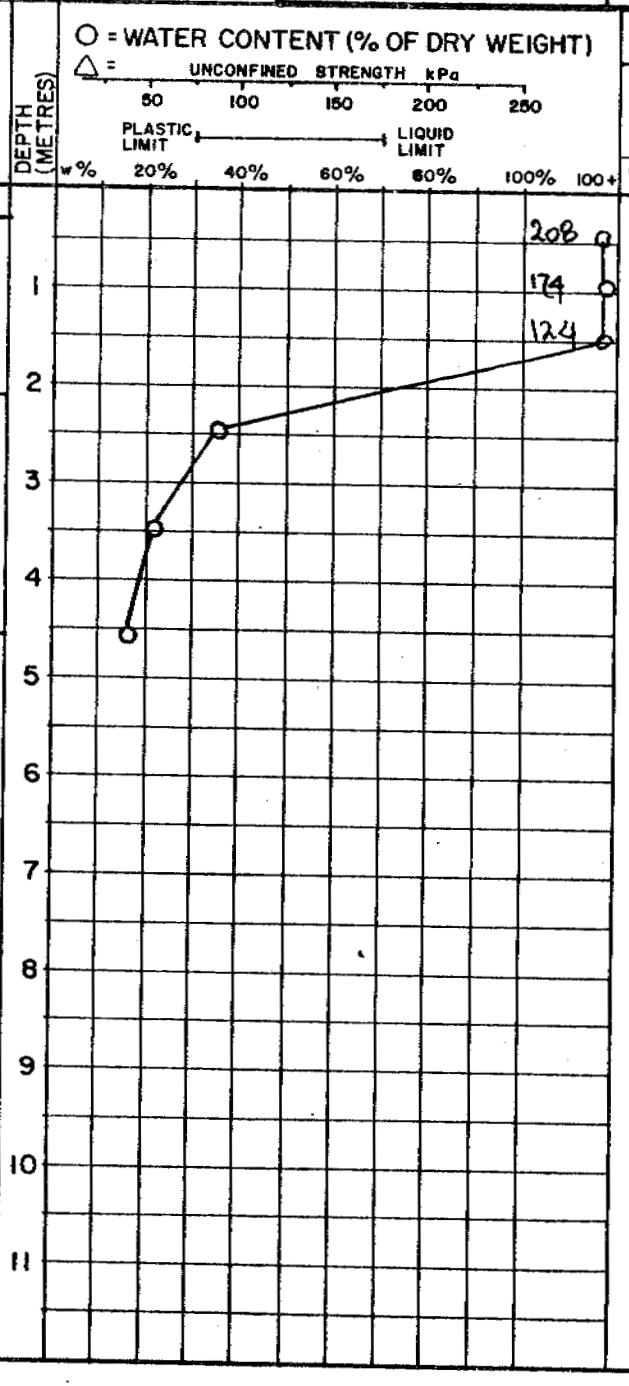
CHAINAGE	OFFSET
3603+50	

REMARKS

PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | Inuvik - Tuk.

TECH. D. Pronych | RIG Air | DATE 80/03/25 | km | B. P. No. | HOLE No. 1038-1

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	PT	PEAT .3m		
2, 4, 6		ICE & ORGANICS ICE + SOME SOIL 2.1m		ICE + OL + CL
8, 10, 12, 14	CL	CLAY - SILTY SANDY - PEBBLES LOW PLASTIC 4.6m		VS
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		BOTTOM OF HOLE - 4.6m		



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
				WET
				Free H_2O
				✓
				SAT
				WET
				WET

CHAINAGE	OFFSET
3641+00	

REMARKS

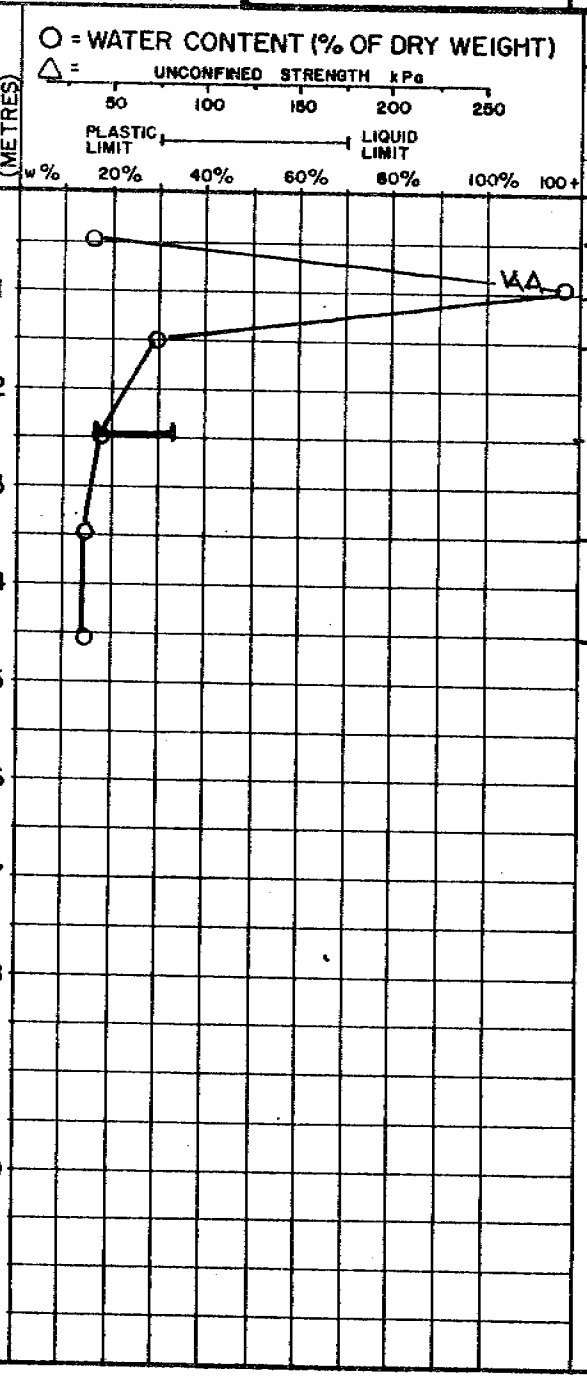
PUBLIC WORKS CANADA — DRILL HOLE REPORT

INUVIK - TUK.

TECH. D. PRONYCH | RIG AIR | DATE 80/03/25 | km | B. P. No. | HOLE No. 1038-2

CHAINAGE: 3655+00 | OFFSET:

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
	Pt	PEAT .6 m									
2		ICE + SOIL 1.2 m		ICE + CL							
4		CLAY - SILTY - SANDY - PEBBLES MED. PLASTIC		Vs	1	85	15	0		WET	
6						76	23	1		FREE H2O	
8					2	68	27	5		SAT.	
10	Cl					68	27	5		WET	
12				Vx	3	72	26	2		DAMP-MOIST	
14		SAND - GRAVELLY CLAYEY 4.6 m			4	31	36	33		MOIST	
16		BOTTOM OF HOLE. 4.6 m			5						
18					6						
20					7						
22					8						
24					9						
26					10						
28					11						
30											
32											
34											
36											
38											



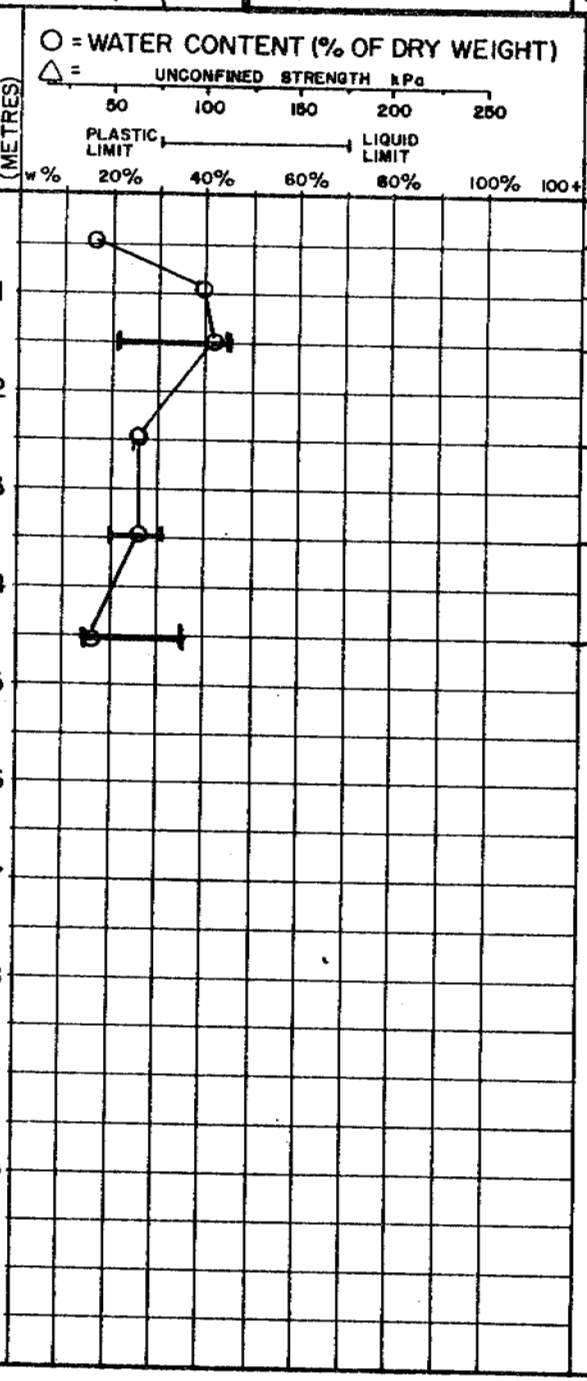
PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych	RIG Air	DATE 80/03/25	km	B.P. No.	HOLE No. 1038-3

CHAINAGE	OFFSET
3677+50	

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
	Pt	PEAT .1m									
2		CLAY - SILTY GRAVELLY		Vx		36	57	17		MOIST	
4		- SANDY		ICE + CL	1	75	24	1		SAT - Pore H2O	
6		- PEBBLES				77	22	1		SAT.	
8	CI	MED. PLASTIC			2	83	15	2		WET	
10				Vc - Vr							
12					3	93	7	0		MOIST	
14		4.6m			4						
16						72	26	2		MOIST	
18		BOTTOM OF HOLE - 4.6m			5						
20					6						
22											
24					7						
26											
28					8						
30											
32					9						
34											
36					10						
38					11						



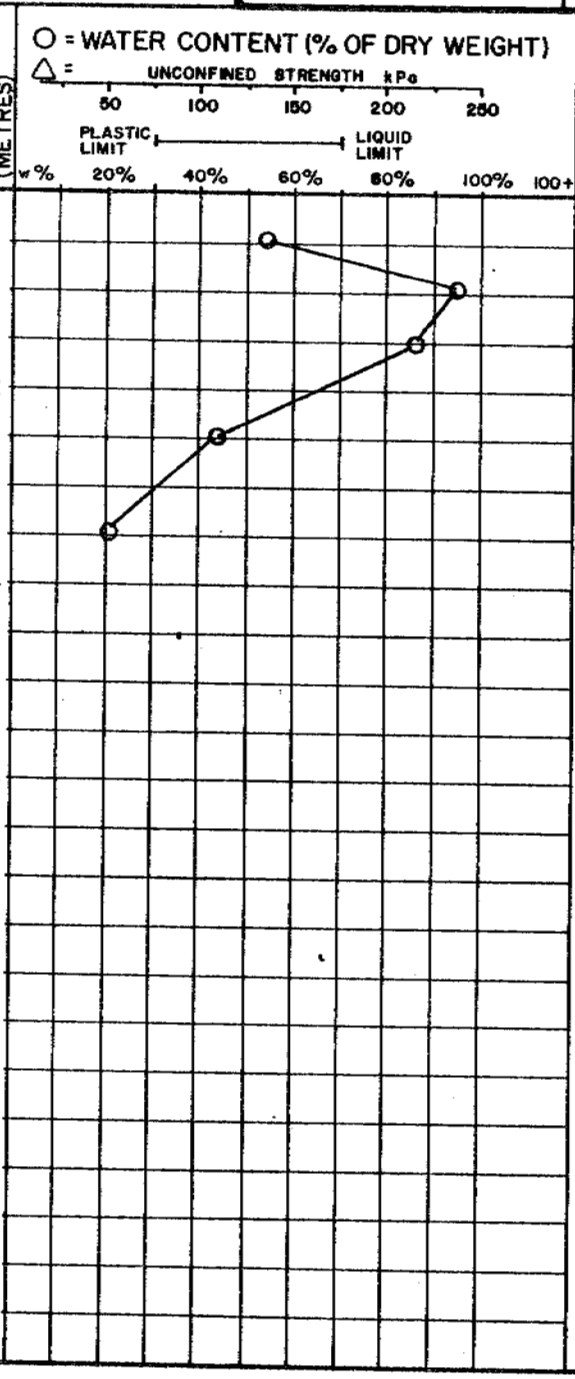
PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych	RIG Air	DATE 80/03/25	km	B.P. No.	HOLE No. 1039-1

CHAINAGE	OFFSET
3697+00	

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
2	Pt.	PEAT		Vs						Wet	
4		1.2 m			1					Wet	
6		ICE & SOIL		Ice & CL						Free H_2O	
8	CL-CI	CLAY - SILTY SANDY PEBBLES LOW-MED. PLASTIC		Vs	2					V	
10					3						
12		3.7m		Vc-Vr						Moist	
14		BOTTOM OF HOLE - 3.7m			4						
16					5						
18					6						
20					7						
22					8						
24					9						
26					10						
28					11						
30											
32											
34											
36											
38											



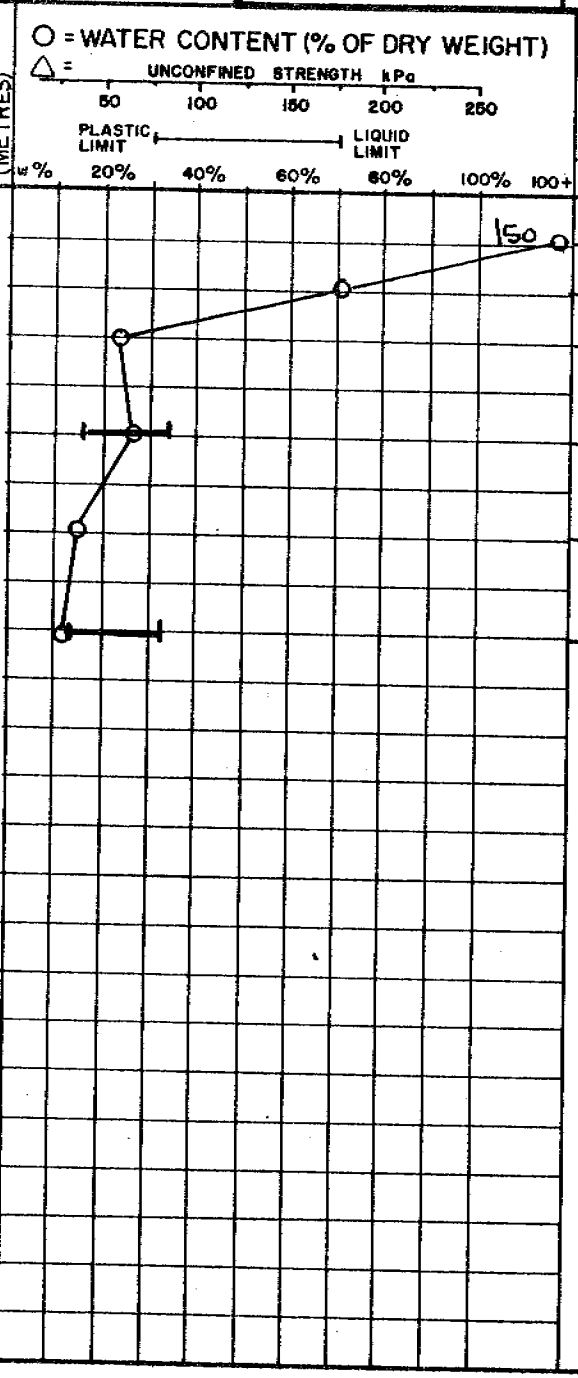
PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych | RIG Air | DATE 80/03/25 | km | B.P. No. | HOLE No. 1039-2

CHAINAGE: 3720+00 | OFFSET:

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
2	Pt	Peat .6m		Vs							
4		Ice + Org. + Soil		Ice + OL CL	1	67	31	2		Wet	
6		Clay - Silty Sandy Pebbles Med. Plastic				53	42	5		Saturated	
8					2	58	35	7		Wet-Sat	
10	CI			Vc-Vr		60	31	9		Sat.	
12					3	56	36	8		Moist	
14		4.6m			4	62	31	7		Humid	
16		Bottom of Hole - 4.6m									
18					5						
20					6						
22					7						
24					8						
26					9						
28					10						
30					11						
32											
34											
36											
38											

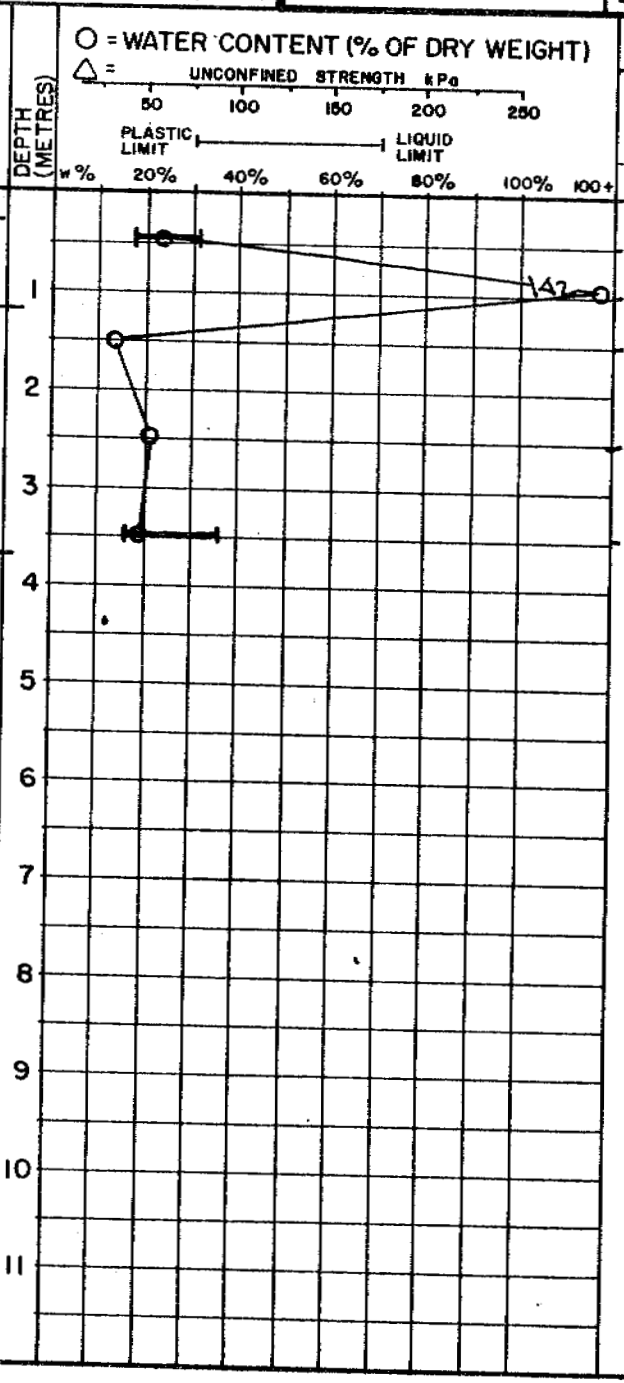


PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych | RIG Air | DATE 80/03/ | km | B.P. No. | HOLE No. 1040-1

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	Pt	Peat .3m		
2–4		Ice & organics & clay		Ice + Cl Pt
6		Clay - silty		
8–12	Cl	Sandy med. plastic gravelly 3.7m		Vc-Vf
14		Bottom of Hole 3.7m		



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
82	18	0		Moist	
83	15	2		Free H_2O	
98	2	0		H.I.B.	
88	12	0		Wet	
59	30	11		Moist-Wet	

CHAINAGE: 3754 +00 | OFFSET:

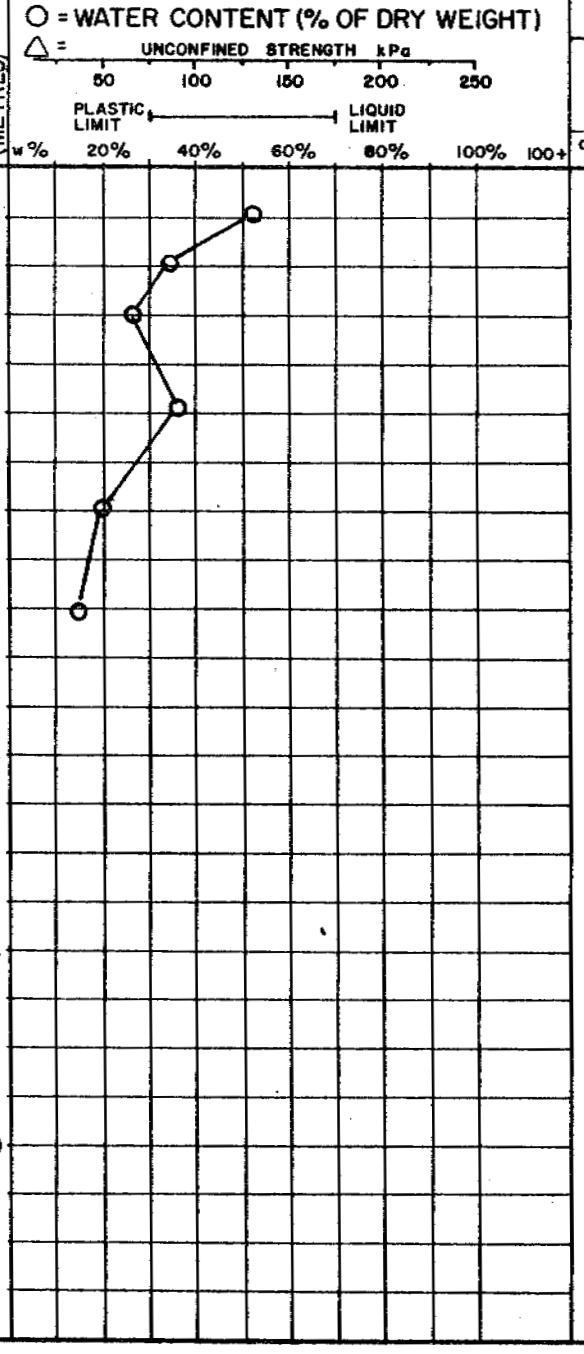
PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych	RIG Air	DATE 80/03/25	km	B.P. No.	HOLE No. 1041-1

CHAINAGE	OFFSET
3804+00	

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	RELATIVE MOISTURE CONTENT	REMARKS
	Pt	PEAT .6m			Moist	H.I.B.
2		CLAY - SILTY SANDY PEBBLES		Vs	Pure H2O	
4		LOW - MED. PLASTIC			SAT.	
6	CL					
8					SAT.	
10	CI					
12				Vc-Vf	WET	
14		4.6m				
16		BOTTOM OF HOLE - 4.6m			MOIST.	
18						
20						
22						
24						
26						
28						
30						
32						
34						
36						
38						

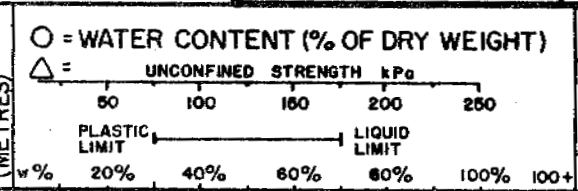


GRAIN-SIZE ANALYSIS			
CLAY %	SILT %	SAND %	GRAVEL %

PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | Inuvik - Tuk.

TECH. D. Pronych | RIG Air | DATE 80/03/25 | km | B.P. No. | HOLE No. 1040-2

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	CHAINAGE	OFFSET	REMARKS
2	Pt.	Peat		Vs		89	11		0	Wet	3767+00		
		1m			1	90	10		0	Sat.			
4		Clay - Silty Sandy Pebbles Med. Plastic		Vc-Vr		57	39		4	Sat.			
6					2								
8	Ci					67	26		7	Wet			
10					3								
12						65	28		7	H.I.B.			
14	CL	Low Plastic			4								
		4.6m				48	36		16	H.I.B.			
16		Bottom of Hole - 4.6m			5								
18													
20					6								
22													
24					7								
26													
28					8								
30													
32					9								
34													
36					10								
38					11								



PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych	RIG Air	DATE 80/03/25	km	B. P. No.	HOLE No. 1041-2

CHAINAGE	OFFSET
38260+00	

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
2, 4		Peat & Ice		Ice & Pt	1					Wet	
6, 8	Pt. CL	Peat & Clay Silty			2					Free H_2O Sat.	
		2.4 m									
10, 12, 14	Cl	Clay - Silty Med. Plastic		Vs	3					Wet-Sat Sat.	
		4.6 m									
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		Bottom of Hole - 4.6 m			4, 5, 6, 7, 8, 9, 10, 11						

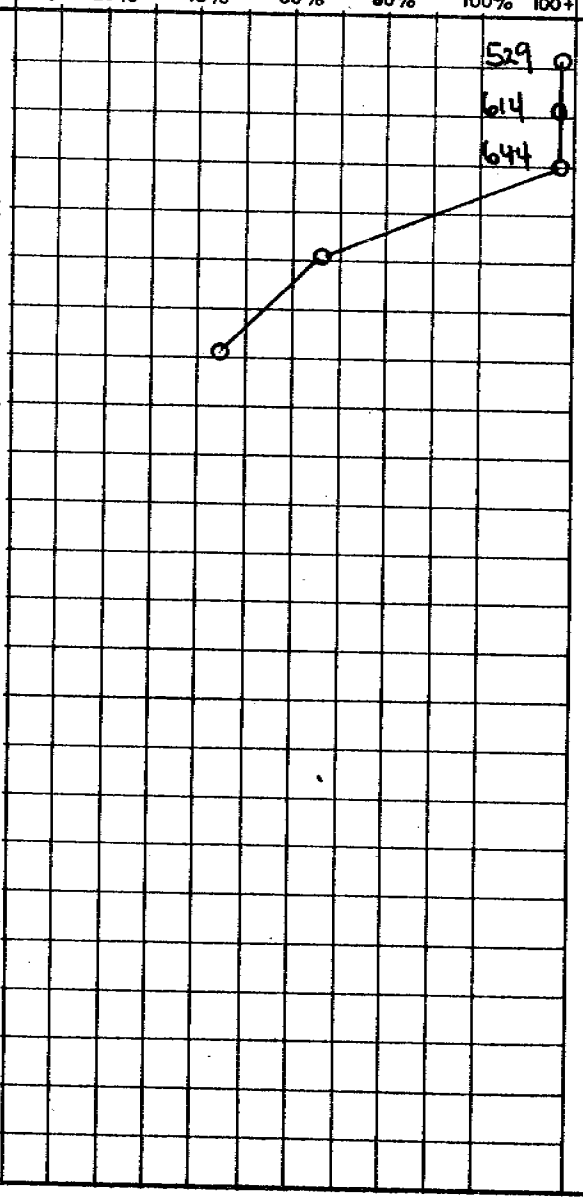
O = WATER CONTENT (% OF DRY WEIGHT)

Δ = UNCONFINED STRENGTH kPa

50 100 150 200 250

PLASTIC LIMIT — LIQUID LIMIT

w% 20% 40% 60% 80% 100% 100+



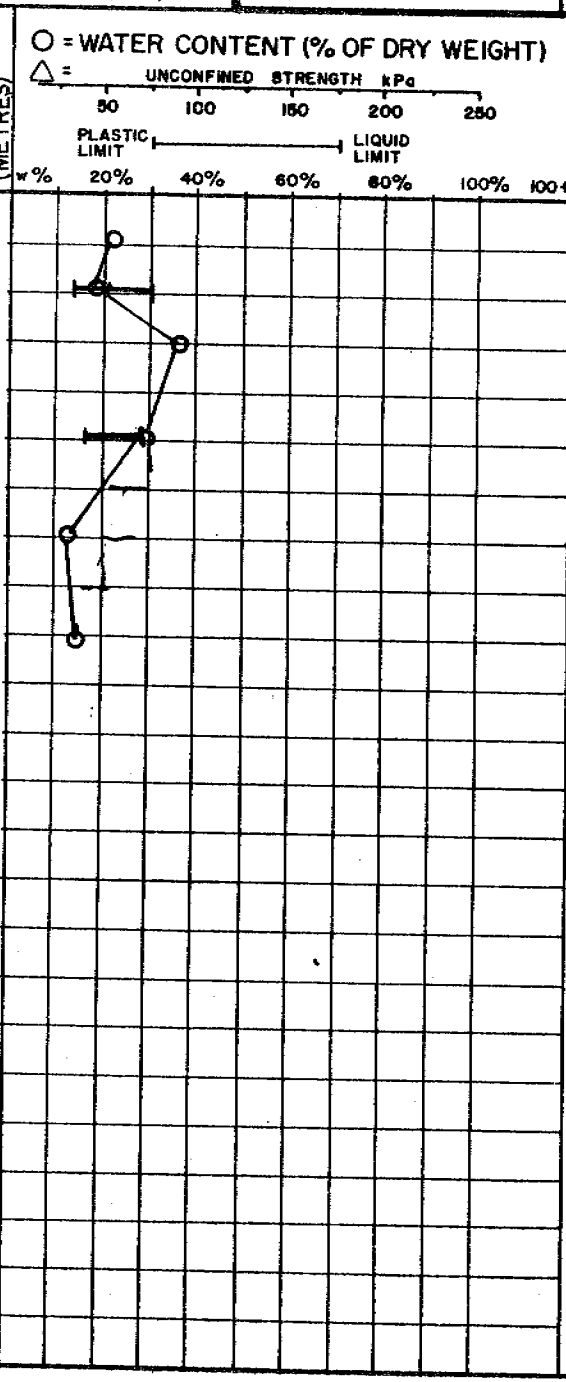
PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych | RIG Air | DATE 80/03/25 | km | B. P. No. | HOLE No. 1041-3

CHAINAGE: 3846+50 | OFFSET:

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
	Pt	Peat .1m									
2	SM	Sand - Silty Pebbles		Vc-Vr							
4	CL	Silty-Sandy Clay 1.1 m			1	24	70	6		Moist	
		Ice & Soil		Ice & CL		59	37	4		Moist	
6						76	24	0		Pore H2O	
8		2.1 m			2						
	CL	Clay - Silty Sandy Low Plastic				82	18	0		Sat.	
10					3						
12		2.7 m		Vc-Vr		26	59	15		Wet	
	Sc	Sand-Clayey Gravelly			4						
14		4.6m									
16						13	68	19		Wet	
		Bottom of Hole - 4.6m			5						
18											
20					6						
22											
24					7						
26											
28					8						
30											
32					9						
34					10						
36											
38					11						



PUBLIC WORKS CANADA — DRILL HOLE REPORT

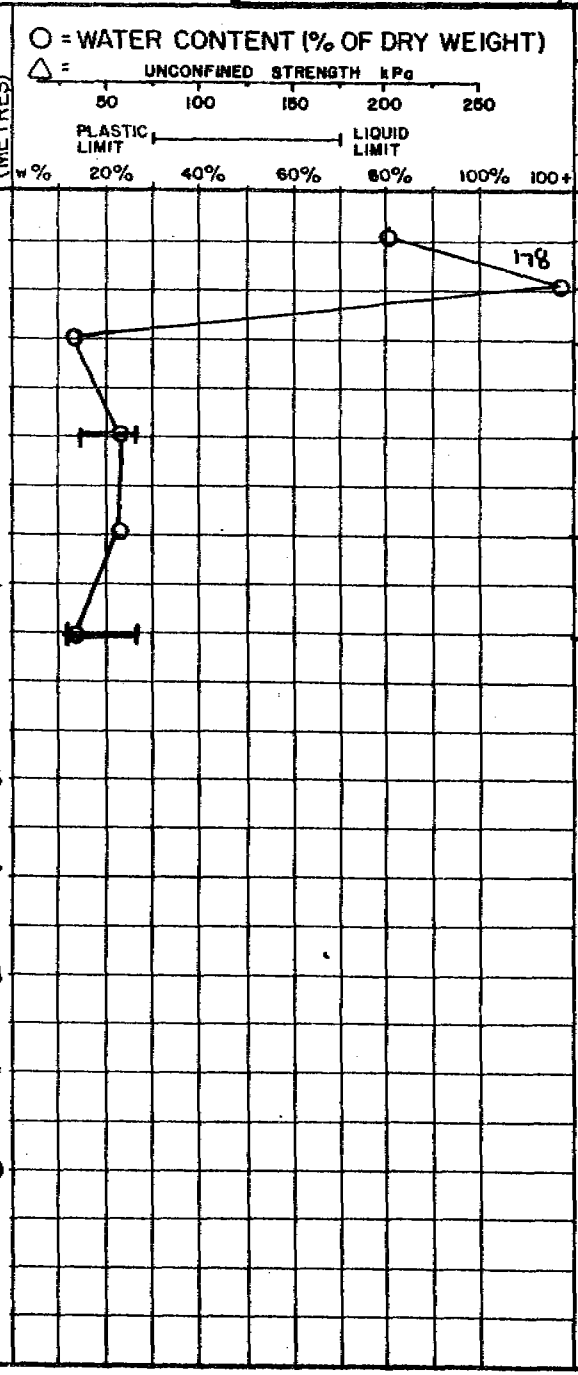
Inuvik - Tuk

TECH. D. Pronych	RIG Air	DATE 80/03/25	km	B.P. No.	HOLE No. 1042-1

CHAINAGE	OFFSET
3855+00	

REMARKS

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
2, 4		Peat & Ice 1.2m		Ice & Pt	1	89	11		0	Moist
						91	9		0	Sat
6	SM	Sand - Gravelly Silty 2.1m			2	16	54		30	Sat.
8, 10, 12, 14	CL	Clay - Silty Sandy Pebbles Low Plastic Gravelly 4.6m	Vc-Vr		3, 4	53	40		7	Sat.
						67	28		5	Wet
						37	34		29	Moist
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		Bottom of Hole - 4.6m			5, 6, 7, 8, 9, 10, 11					

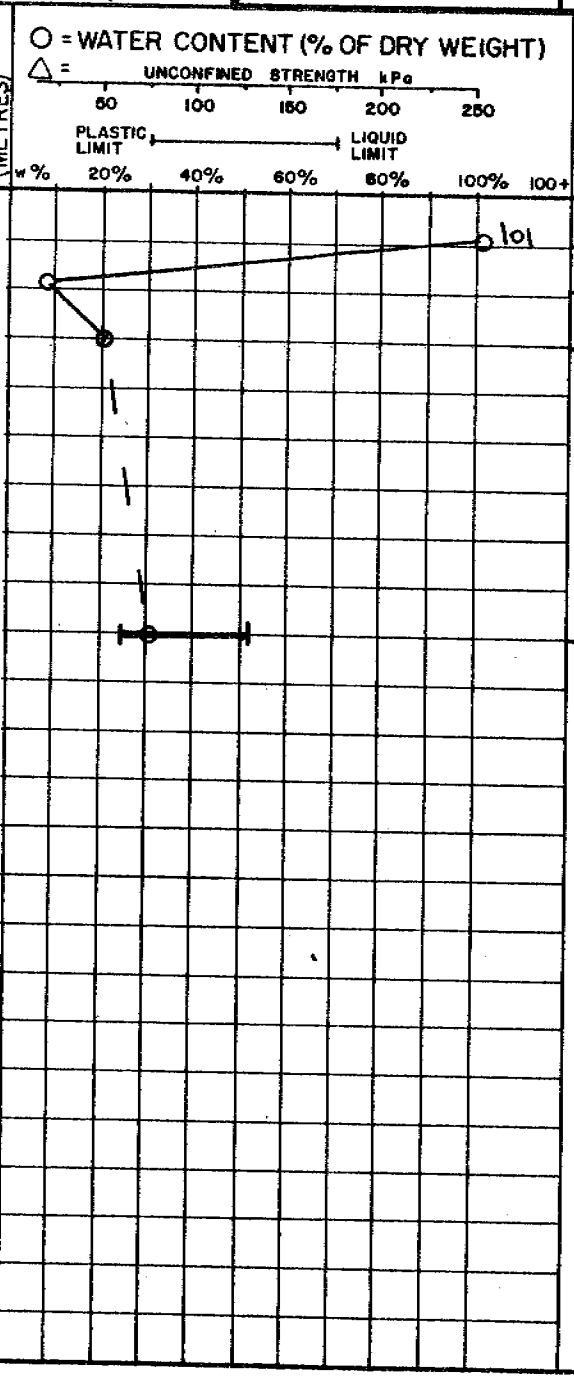


PUBLIC WORKS CANADA — DRILL HOLE REPORT

INUVIK - TUK.

TECH. D. PRONYCH | RIG AIR | DATE 80/03/25 | km | B.P. No. | HOLE No. 1042-2

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
	Pt	PEAT		Vs							
2		.6 m									
	GW	GRAVEL - SAND MIXTURE		Vc - Vr	1	54	43	3		FREE WATER	
4		CLAY - SILTY SANDY				4	51	45		SAT.	
6					2	43	56	1		SAT.	
8		ICE		ICE							
10					3						
12											
14		CLAY - SILTY 4.6 m			4	99	1	0		MOIST	
16					5						
18		BOTTOM OF HOLE - 4.6 m									
20					6						
22											
24					7						
26											
28					8						
30					9						
32											
34					10						
36											
38					11						



CHAINAGE	OFFSET
3859 + 54	

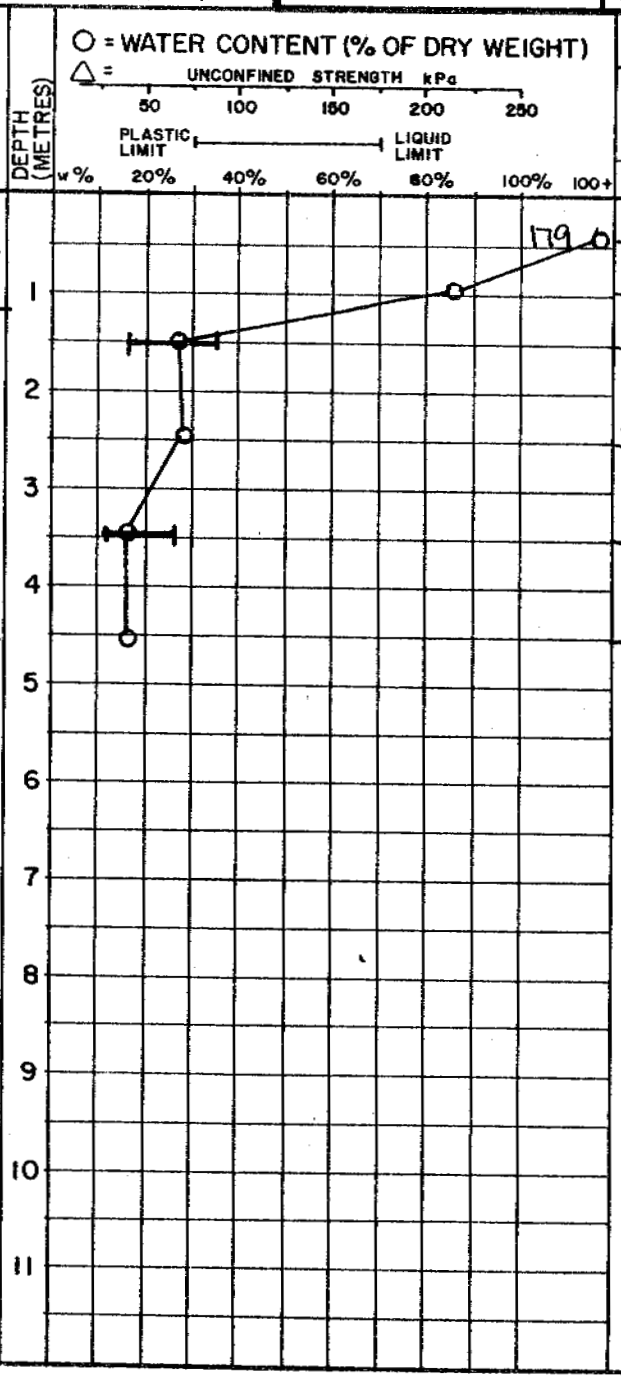
PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych	RIG Air	DATE 80/03/25	km	B.P. No.	HOLE No. 1042-3

CHAINAGE	OFFSET
3874 + 00	

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
2	Pt	PEAT .6m		
4		SOIL & ICE 1.2m		Ice & CL
6–14	CI, CL	CLAY - SILTY - SANDY PEBBLES MED - LOW PLASTIC		Vc - Vr
14		4.6m		
16–38		BOTTOM OF HOLE - 4.6m		



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
90	10	0		SAT.	
69	26	5		Pore Water	
70	27	3		Wet	
73	24	3		Wet	
53	41	6		Moist-Wet	
49	41	10		Moist	

PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | Inuvik - Tuk.

TECH. D. Pronych | RIG Air | DATE 80/03/25 | km | B.P. No. | HOLE No. 1042-4

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	Pt	Peat .5m		
2, 4, 6, 8, 10, 12, 14		Ice		Ice
		4.6m		
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		Bottom of Hole - 2.6m		

DEPTH (METRES): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11

○ = WATER CONTENT (% OF DRY WEIGHT)

△ = UNCONFINED STRENGTH kPa: 50, 100, 150, 200, 250

PLASTIC LIMIT — LIQUID LIMIT

w % 20% 40% 60% 80% 100% 100+

No Samples Taken

GRAIN-SIZE ANALYSIS				RELATIVE MOISTURE CONTENT
CLAY %	SILT %	SAND %	GRAVEL %	

CHAINAGE	OFFSET
3889+00	

REMARKS

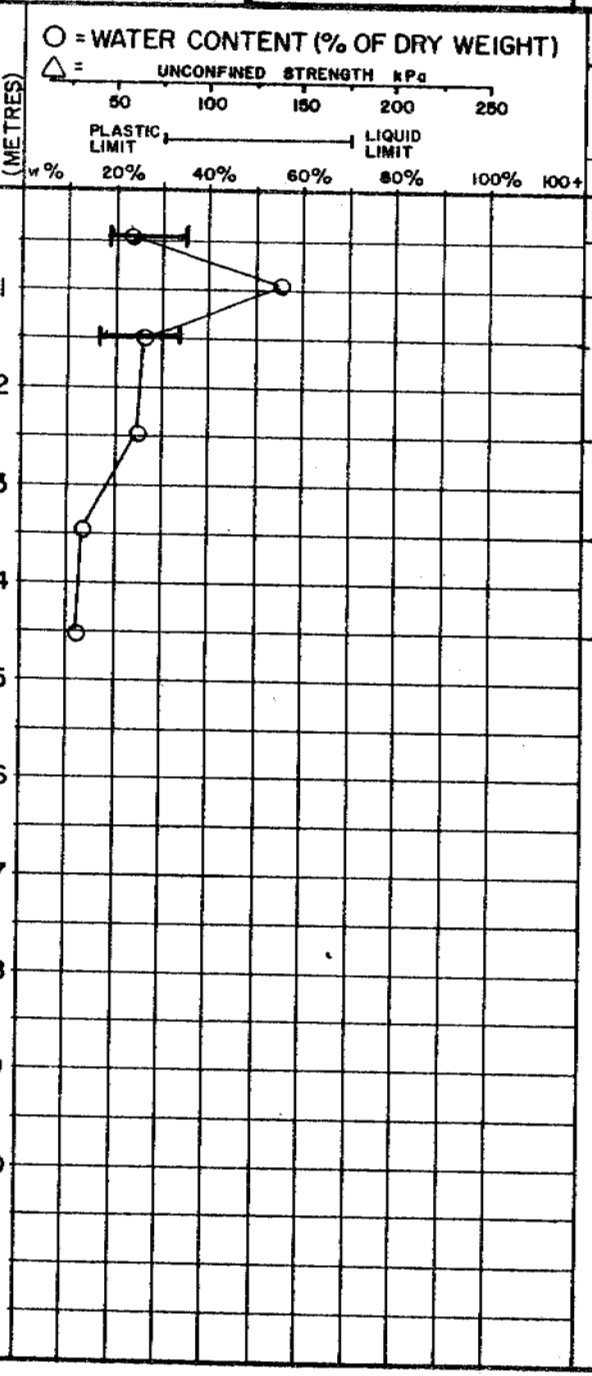
PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk

TECH. D. Pronych | RIG A12 | DATE 80/03/25 | km | B.P. No. | HOLE No. 1043-1

CHAINAGE	OFFSET
3908+77	80' R 14

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
	Pt	PEAT .3m									
2	CI	CLAY - SILTY SANDY		Vc-Vr		68	28	4		MOIST	
4		PEBBLES ICE & SOIL		ICE & CL	1	76	22	2		PEAT H2O	
6	CI	CLAY - SILTY SANDY PEBBLES MED. PLASTIC			2	65	27	8		SAT.	
8				Vc-Vr		72	22	6		WET	
10		SAND - CLAYEY SILTY 3.1m			3						
12	Sc	PEBBLES				36	56	8		WET	
14		4.6m			4						
16						25	61	14		WET	
18		Bottom of Hole - 4.6m			5						
20					6						
22											
24					7						
26											
28					8						
30					9						
32											
34					10						
36											
38					11						

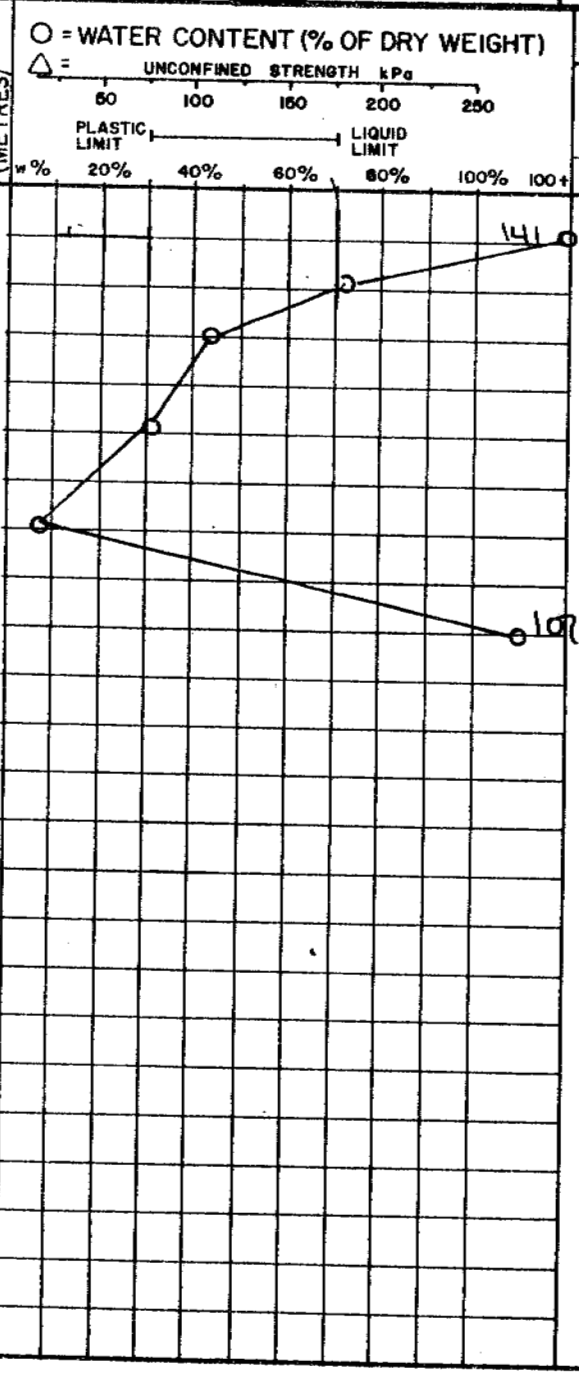


PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Pronych | RIG Air | DATE 80/03/25 | km | B.P. No. | HOLE No. 1043-2

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
2–4		Peat & Ice		Ice & Pt
6–14	CL	Clay - Silty Gravelly		Vs
14–16		Sand & Ice — 4.6m		Ice & SP
16–38		Bottom of Hole - 4.6m		



GRAIN-SIZE ANALYSIS				RELATIVE MOISTURE CONTENT
CLAY %	SILT %	SAND %	GRAVEL %	
				Free Water
				Wet
				Sat.
				Free Water
				Hi.B.
				Free Water

CHAINAGE	OFFSET

REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik-Tuk

TECH. D. PRONYCH	RIG AIR	DATE 80/03/25	km	B.P. No.	HOLE No. 1043-3

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	Pt	PEAT .3m		
2, 4, 6, 8, 10, 12, 14		ICE GRAVEL LENSE 0.05 THICK @ 2.4 m SOME SOIL & ORGANICS AFTER 2.4 m 4.6m		ICE
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		BOTTOM OF HOLE 4.6m		

DEPTH (METRES)	O = WATER CONTENT (% OF DRY WEIGHT) / Δ = UNCONFINED STRENGTH kPa (50, 100, 150, 200, 250) / PLASTIC LIMIT — LIQUID LIMIT (w% 20% 40% 60% 80% 100% 100+)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	CHAINAGE	OFFSET	REMARKS
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11	NO SAMPLES TAKEN								

PUBLIC WORKS CANADA — DRILL HOLE REPORT

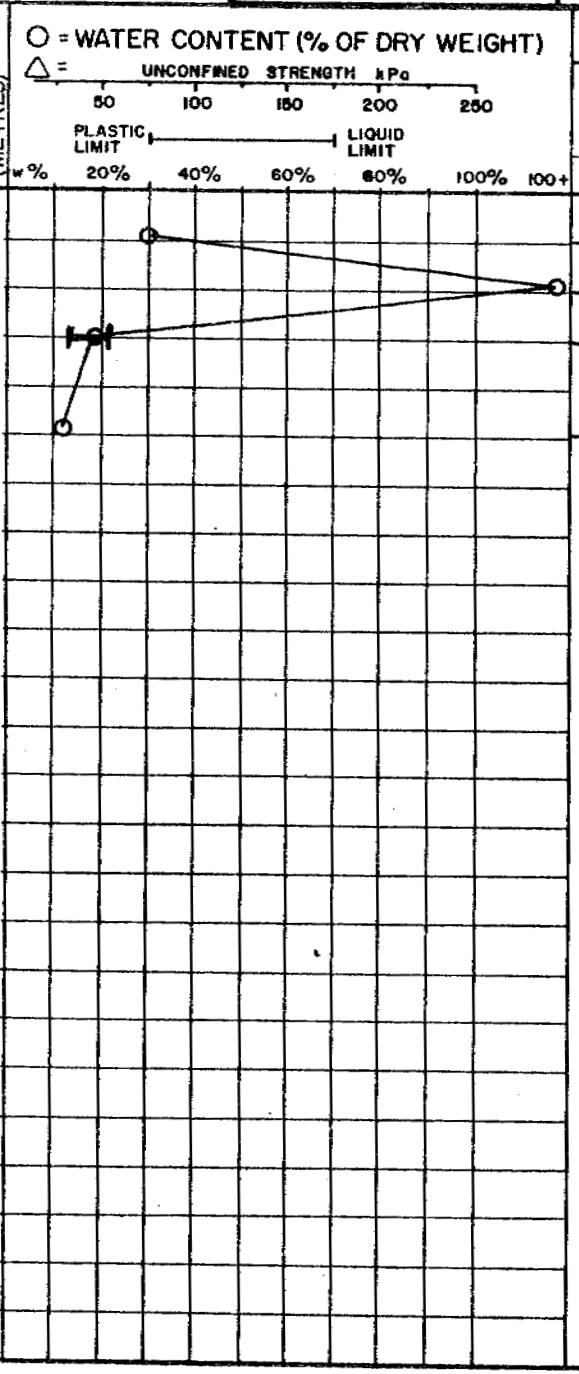
Inuvik - Tuk.

TECH. D. Pronych	RIG Air	DATE 80/03/26	km	B.P. No.	HOLE No. 1043+4

CHAINAGE	OFFSET
3943+00	

REMARKS

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
2	CL	CLAY - Silty Sandy .6m				71	29	0		Sat.
		ICE & ORGANICS 1.m		Ice + P.	1	55	44	1		Free H_2O
4	ML	CLAYEY SILT								
6	CL	Silty Clay Sandy Pebbles		Vc - Vr	2	38	54	8		Sat.
8	SM	SAND - Silty				17	75	8		Wet
10					3					
12		ICE		Ice						
14		Dirty 4.6m			4					
16										
18		Bottom of Hole - 4.6 m			5					
20										
22					6					
24										
26					7					
28										
30					8					
32										
34					9					
36					10					
38					11					



PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | Inuvik - Tuk

TECH. D. Pronych / B. Cook | RIG Air | DATE 80/03/26 | km | B.P. No. | HOLE No. 1043-5

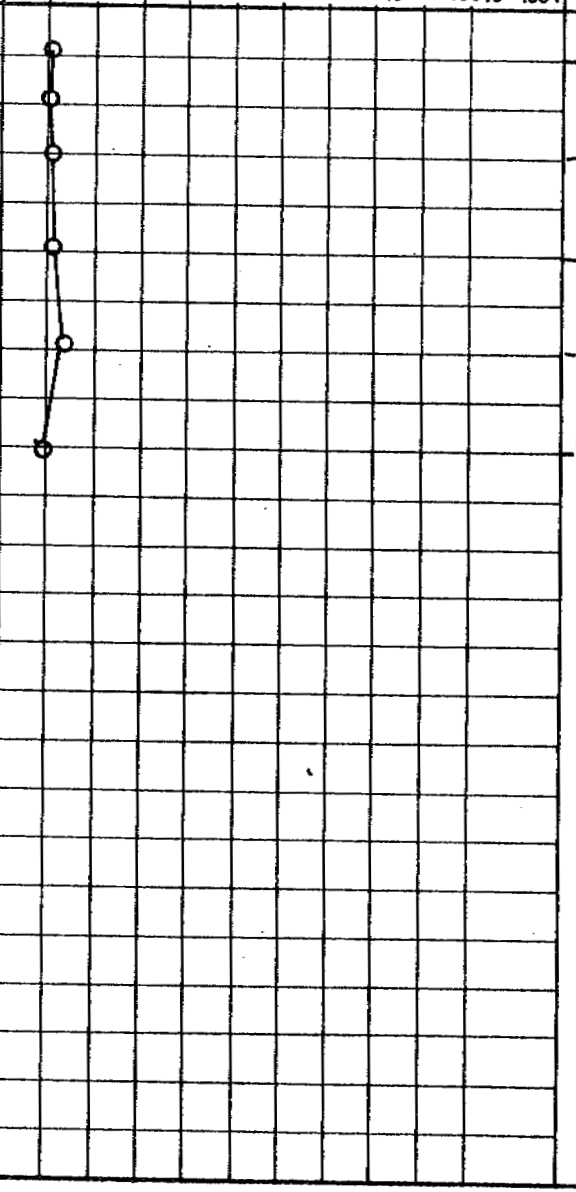
DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
2	Sm	SAND - SILTY GRAVELLY				14	-	73	13	Moist	
4					1					Moist	
6	Sc	CLAYEY				17	-	62	21	Moist	
8				Vx	2						
10						29	-	51	20	Wet	
12					3	22	-	48	30	Wet	
14		4.6m			4						
16						21	-	62	17	Wet	
18		BOTTOM OF HOLE - 4.6m			5						
20					6						
22											
24					7						
26											
28					8						
30					9						
32											
34					10						
36											
38					11						

○ = WATER CONTENT (% OF DRY WEIGHT)

△ = UNCONFINED STRENGTH kPa (50, 100, 150, 200, 250)

PLASTIC LIMIT — LIQUID LIMIT

w % 20% 40% 60% 80% 100% 100+



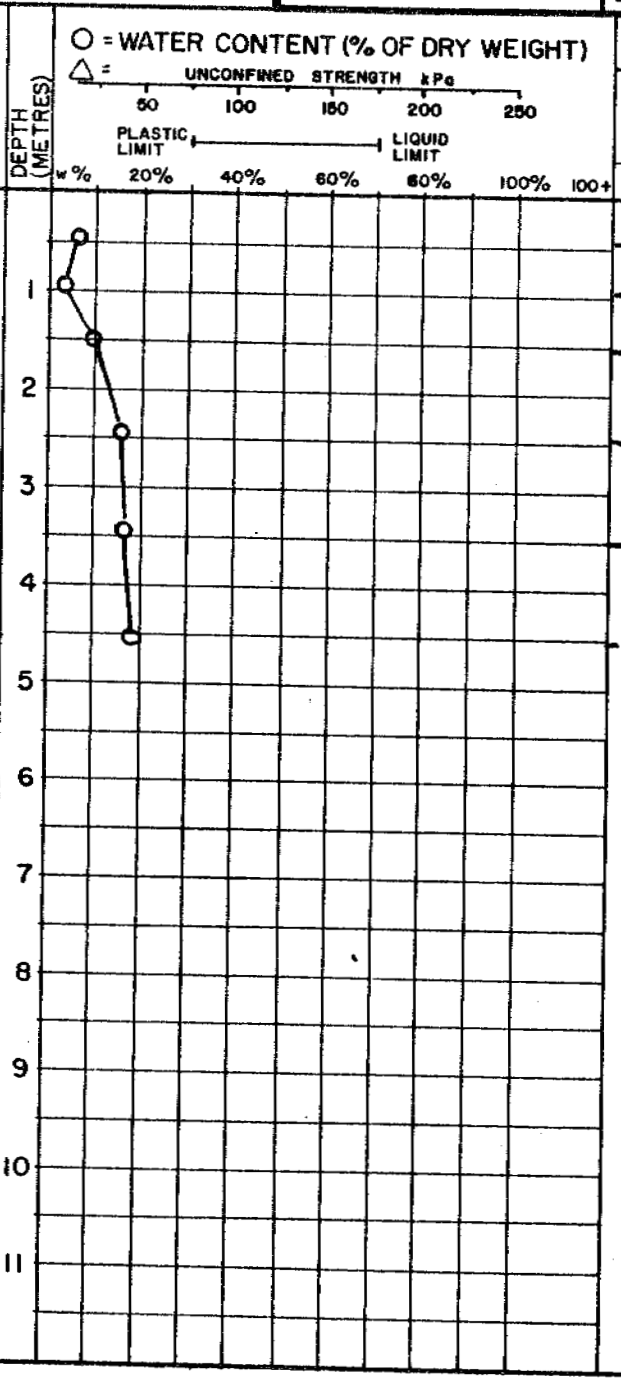
CHAINAGE | OFFSET

PUBLIC WORKS CANADA — DRILL HOLE REPORT

INUVIK - TUK.

TECH. D. COOK | RIG AIR | DATE 80/03/26 | km | B. P. No. | HOLE No. 1043-6

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
2	SM	SAND - SILTY GRAVELLY		
4				
6		· PEBBLES		
8				Vx
10				
12				
14	SP	4.6m		
16		BOTTOM OF HOLE - 4.6m		
18				
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
15	61	24		HUMID
2	76	12		HUMID
16	53	31		WET
10	83	7		WET
22	70	8		WET
8	91	1		WET

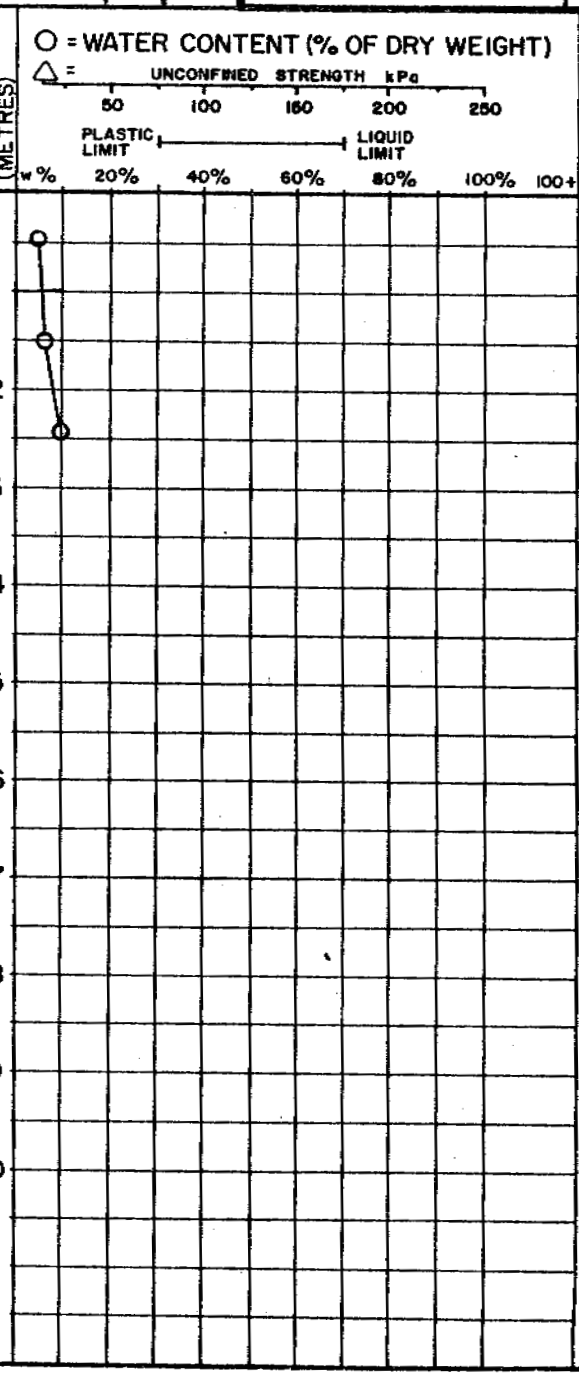
CHAINAGE	OFFSET

REMARKS

PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | Inuvik - Tuk.

TECH. D. Cook | RIG Air | DATE 80/03/26 | km | B.P. No. | HOLE No. 10453-7

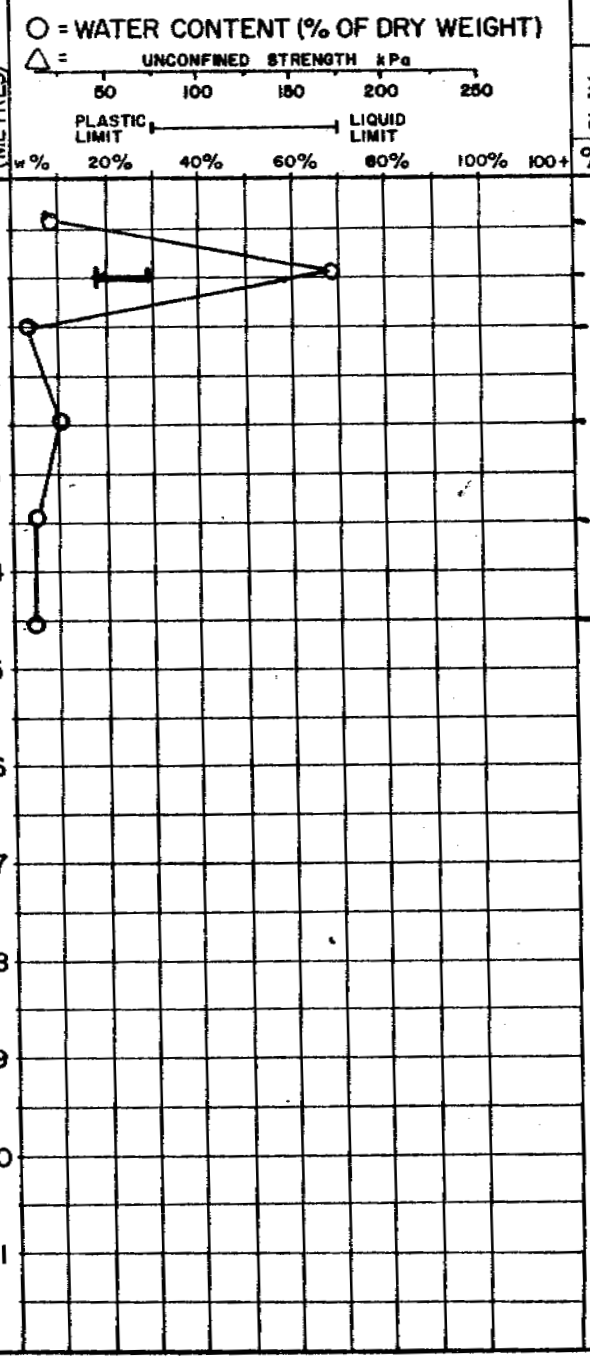
DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	CHAINAGE	OFFSET	REMARKS
2	SM-GM	SAND - GRAVEL MIXTURE		Vx	1	15	44	41		DAMP			
4	GP												
6	GP				2	2	62	36		WET			
8		2.4m		Vc - Vr		2	55	43		SAT			
10		BOTTOM OF HOLE. 2.4m			3								
12													
14					4								
16													
18					5								
20													
22					6								
24													
26					7								
28													
30					8								
32													
34					9								
36					10								
38					11								



PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | Inuvik - Tuk.

TECH. D. Cook | RIG Air | DATE 80/03/26 | km | B.P. No. | HOLE No. 1043-8

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
2	SP	SAND - GRAVELLY		Vx		8	52	40		DAMP	
		.9m									
4	CL	CLAY - SILTY SANDY GRAVELLY LOW PLASTIC		Vs	1	53	32	15		FREE H2O	
		1.8m									
6						30	57	13		H.I.B.	(DRY)
8		GRAVEL - SANDY			2	7	46	47		SAT.	
10	GW			Vc - Vr	3	3	42	55		WET	
12											
14		4.6m			4	3	52	45		WET	
16		BOTTOM OF HOLE - 4.6m			5						
18											
20					6						
22											
24					7						
26											
28					8						
30											
32					9						
34											
36					10						
38					11						



CHAINAGE | OFFSET

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Cook | RIG Air | DATE 80/03/26 | km | B.P. No. | HOLE No. 1043-9

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
2–4	GW	Gravel - Sandy		Vx
		1.5m		
6	CL	Clay Silty 1.8m		Vc - Vr
8–14		Ice - Some Soil		Ice - CL
		4.6m		
16–38		Bottom of Hole - 4.6m		

○ = WATER CONTENT (% OF DRY WEIGHT)

△ = UNCONFINED STRENGTH kPa (50, 100, 150, 200, 250)

PLASTIC LIMIT — LIQUID LIMIT

w % 20% 40% 60% 80% 100% 100+

DEPTH (METRES): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11

GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
16	27	57		Moist
3	50	47		Wet
2	30	68		Wet

CHAINAGE	OFFSET

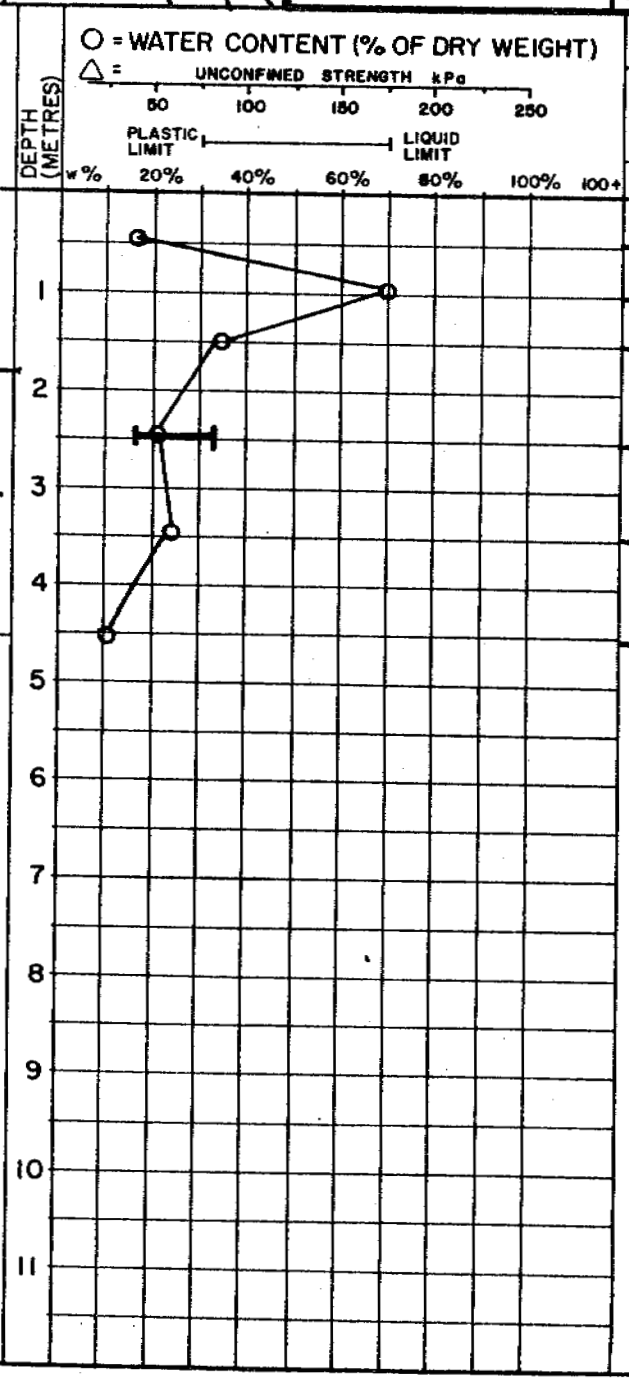
REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

INUVIK - TUK.

TECH. D. COOK | RIG AIR | DATE 80/03/27 | km | B. P. No. | HOLE No. 1044-1

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
2	PT & CL	PEAT & CLAY		
		0.9m		Vs
4		CLAY - SILTY PEBBLES		
6	CI	MED. PLASTIC		
8				
10				Vc-Vr
12	CL	LOW PLASTIC		
		4.0m		
14	SP	SAND - GROVELLY		
		4.6m		
16		BOTTOM OF HOLE - 4.6m		
18				
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
59	39	2		DAMP
65	33	2		MOIST
75	22	3		SAT.
68	24	8		WET
86	14	0		WET
8	60	32		WET

CHAINAGE	OFFSET
3970+30	

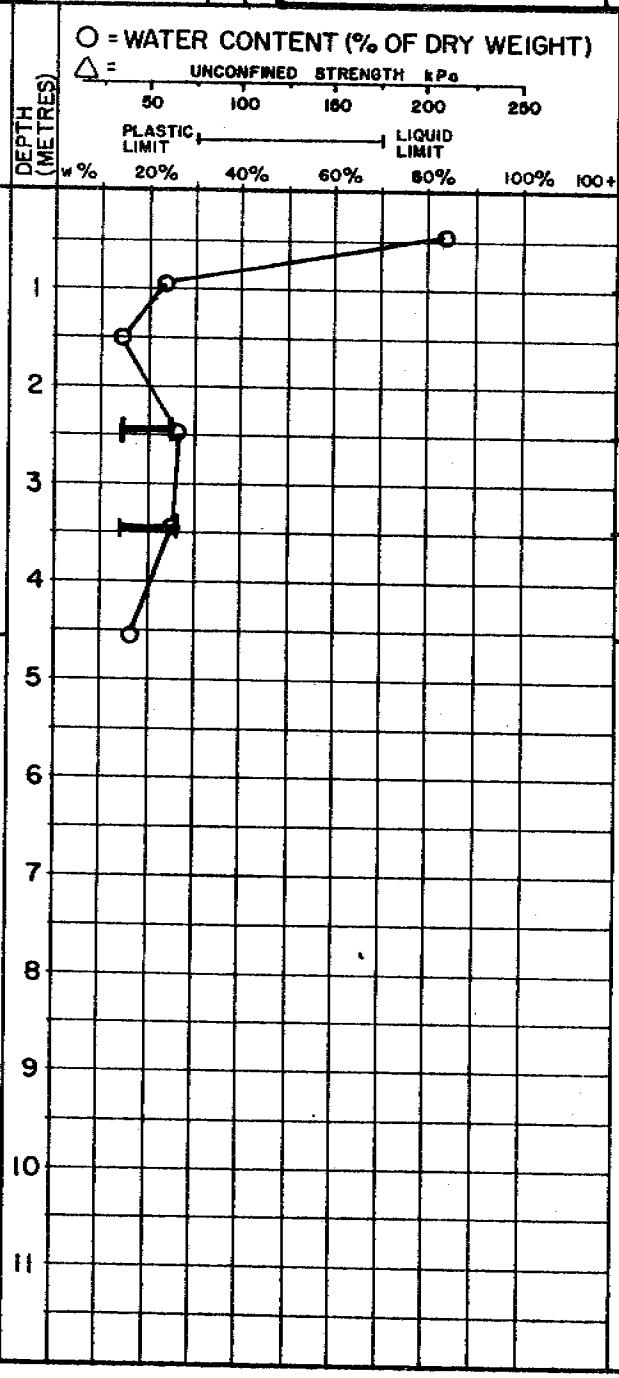
REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Cook | RIG Air | DATE 80/03/27 | km | B.P. No. | HOLE No. 104A-2

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	Pt	Peat .5m		
2–4	ML	Silt - Sandy - Gravelly 1.5m		Vs
6–8	CL	Clay - Silty - Sandy Pebbles Low Plastic		Vc - Vr
10–12				
14		Gravelly 4.6m		
16–38		Bottom of Hole - 4.6m		



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
67	31	2		Free H_2O
48	37	15		V
49	38	13		Wet
62	34	4		Sat.
70	24	6		Wet-Sat.
40	37	23		Moist

CHAINAGE: 3975 + 40 | OFFSET:

REMARKS:

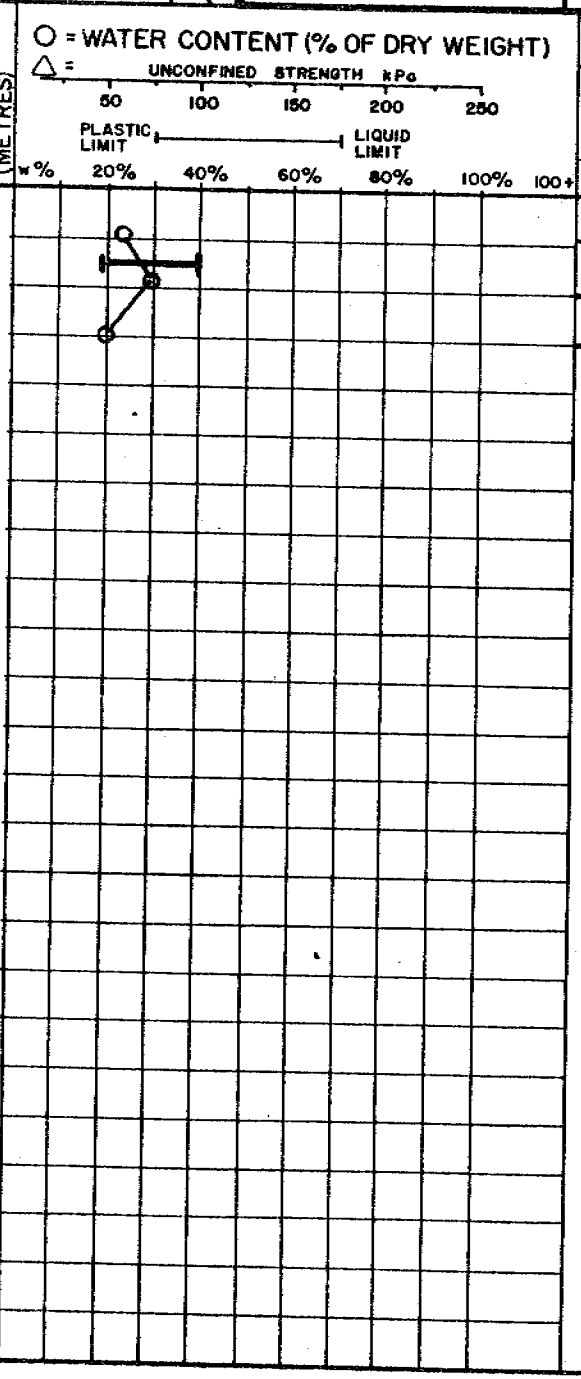
PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. COOK | RIG Air | DATE 80/03/27 | km | B.P. No. | HOLE No. 1044-3

CHAINAGE	OFFSET
4004+50	

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
	Pt	Peat .5m									
2	Cl	Clay - Silty Sandy Pebbles		Vc - Vr	1	63	35	2		Moist	
4						79	18	3		Wet	
6	Sm	Sand - Silty 1.8m				13	87	0		Wet	
8					2						
10		Ice Some Soil		Ice + ML	3						
12											
14		4.6m			4						
16		Bottom of Hole. 4.6m			5						
18											
20					6						
22											
24					7						
26											
28					8						
30					9						
32											
34					10						
36											
38					11						



PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Cook | RIG Air | DATE 80/03/27 | km | B.P. No. | HOLE No. 1045-1

CHAINAGE: 14+75 ? | OFFSET:

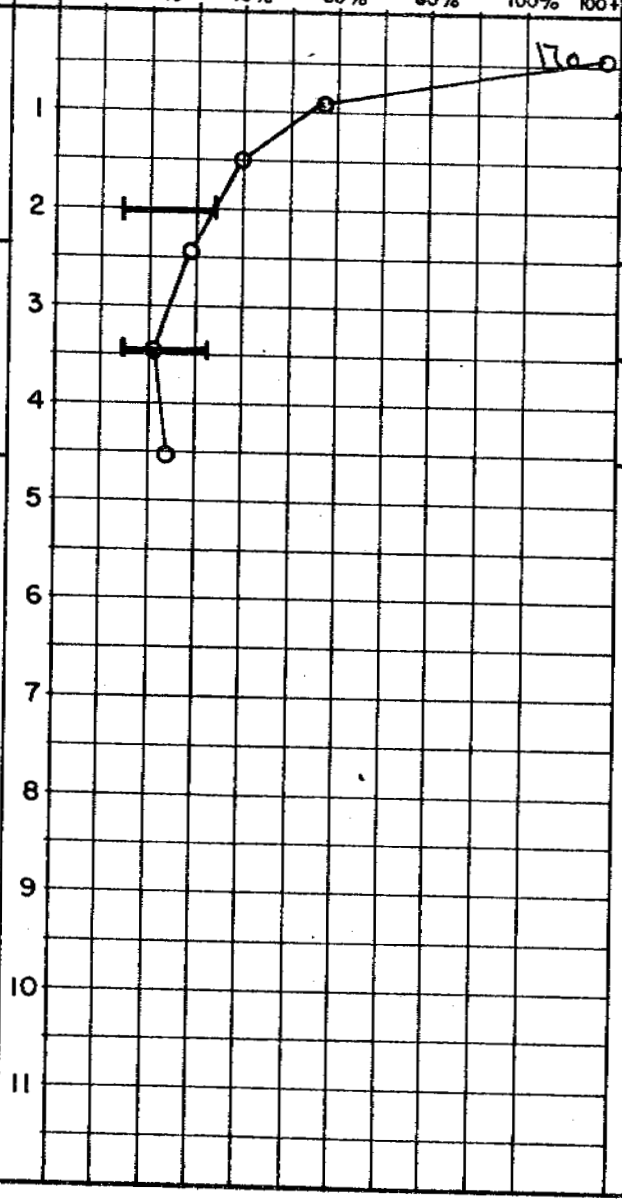
DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
2	Pt	PEAT .5m		
4–8		ICE & CLAY 2.4m		ICE & CL
10–14	Cl	CLAY - SILTY SANDY PEBBLE MED. PLASTIC 4.6m		Vs, $V_c - V_r$
16–38		BOTTOM OF HOLE - 4.6 m		

O = WATER CONTENT (% OF DRY WEIGHT)

Δ = UNCONFINED STRENGTH kPa (50, 100, 150, 200, 250)

PLASTIC LIMIT — LIQUID LIMIT

w % 20% 40% 60% 80% 100% 100+



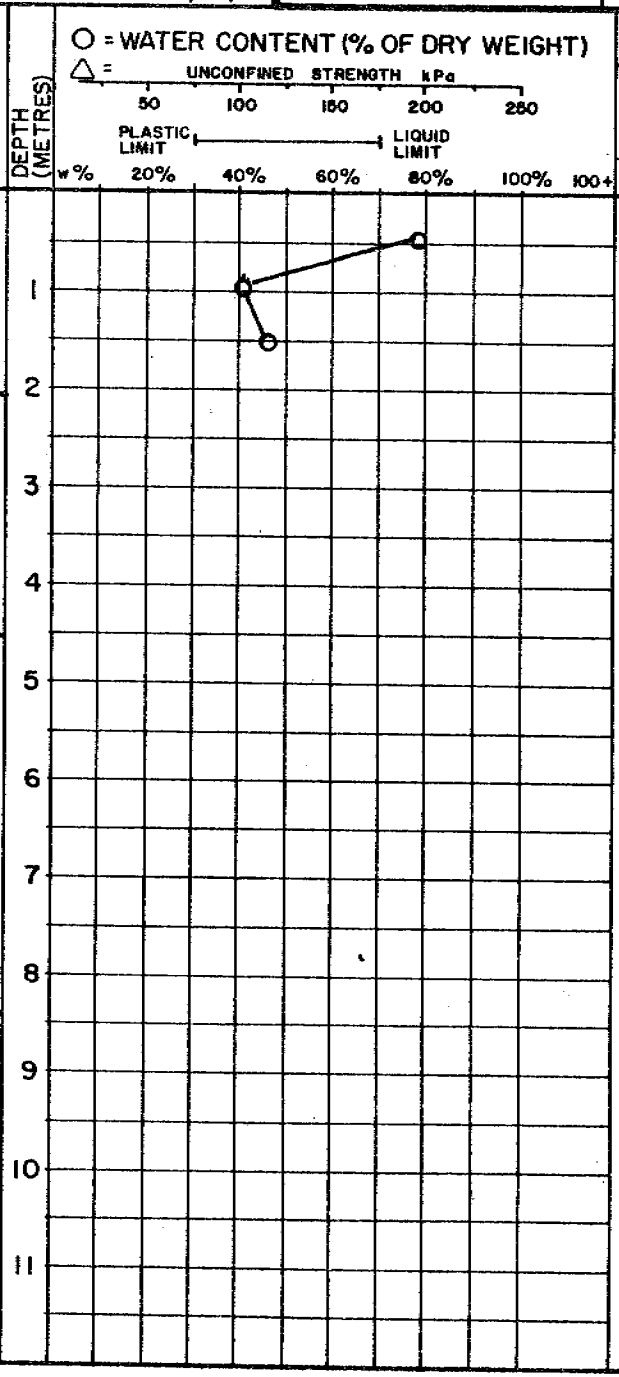
GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
80	20	0		Free H_2O	
73	26	1		✓	
71	29	0		SAT-Some H_2O (Free)	
68	29	3		SAT.	
65	32	3		WET	
76	23	1		MOIST-WET	

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik-Tuk

TECH. D. Cook	RIG Air	DATE 80/03/27	km	B.P. No.	HOLE No. 1045-2

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
2	Pt	Peat .5m		
4	CL	Clay. Silty Low - Med. Plastic		Vs
6	CL	2.1m		
8		Ice & Some Soil		Ice + CL
10				
12				
14		4.6m		
16		Bottom of Hole. 4.6m		
18				
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				



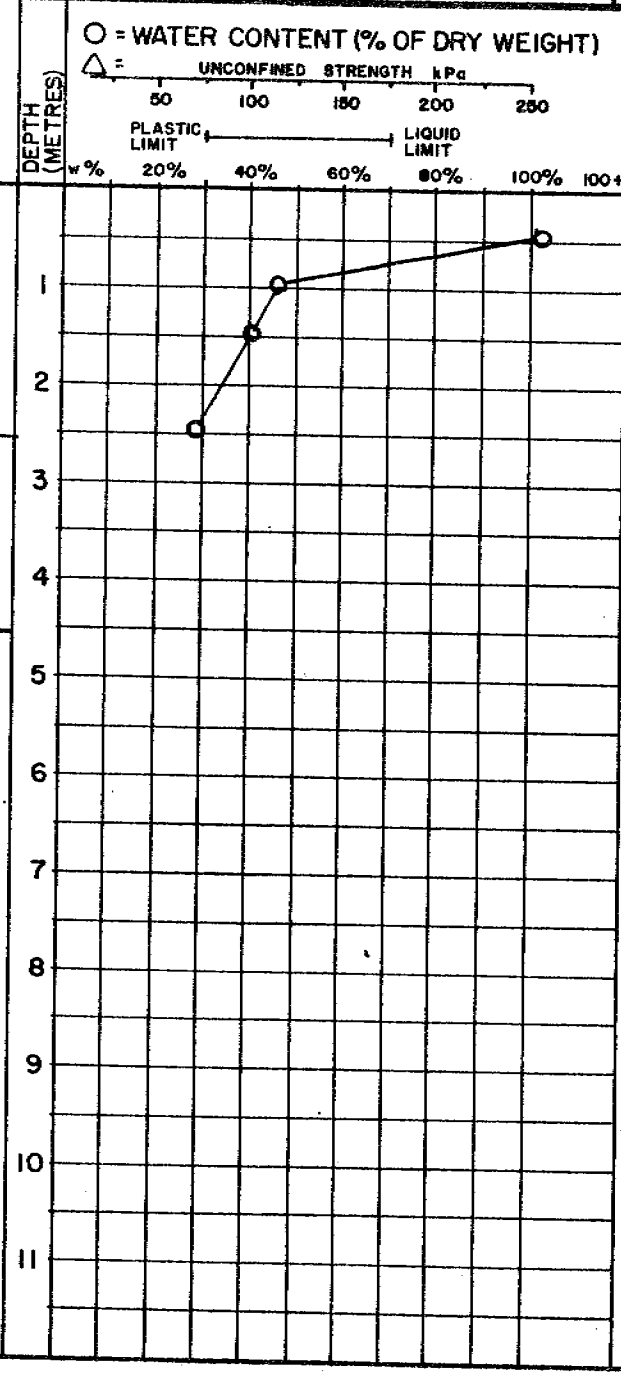
GRAIN-SIZE ANALYSIS				RELATIVE MOISTURE CONTENT	CHAINAGE	OFFSET
CLAY %	SILT %	SAND %	GRAVEL %		4027+50	
				Wet Sat. Free H_2O	REMARKS	

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Cook | RIG Air | DATE 80/03/27 | km | B.P. No. | HOLE No. 1045-3

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	A	Peat .5m		
2, 4, 6, 8	CL	Clay - Silty - Pebbles Low Plastic 2.6m		Vs
10, 12, 14		Ice 4.6m		Ice
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		Bottom of Hole - 4.6m		



GRAIN-SIZE ANALYSIS				RELATIVE MOISTURE CONTENT
CLAY %	SILT %	SAND %	GRAVEL %	
				Free H_2O
				✓
				✓
				✓

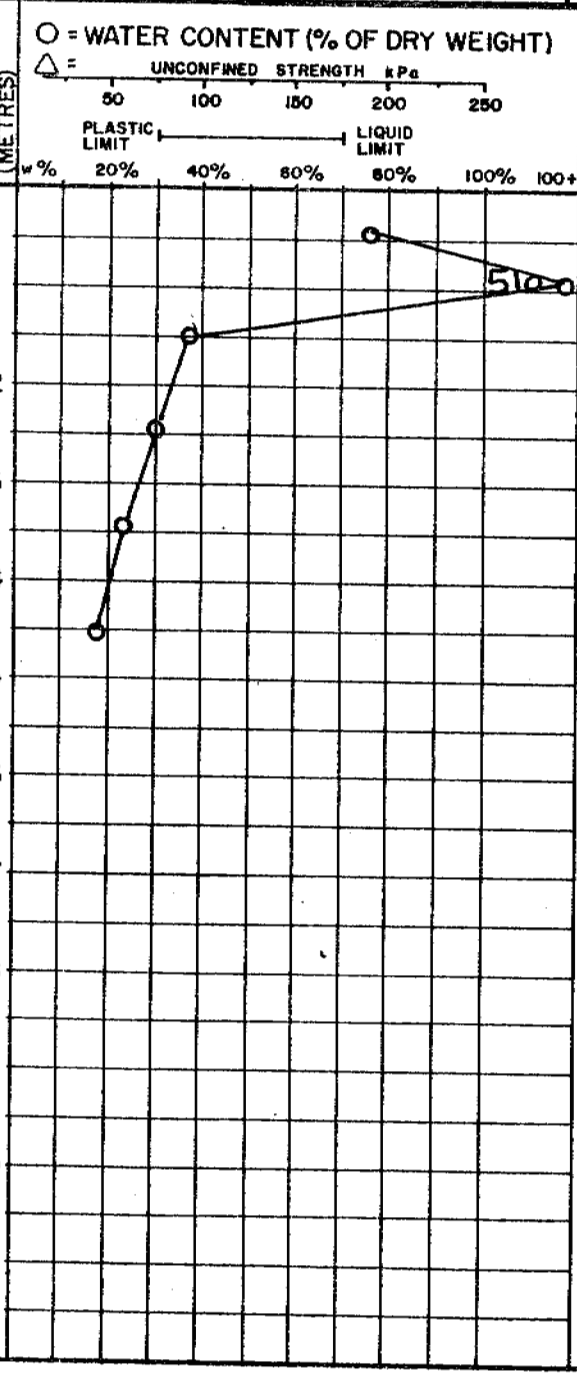
CHAINAGE	OFFSET
4033+50	

REMARKS

PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | Inuvik - Tuk.

TECH. D. Cook | RIG Air | DATE 80/03/27 | km | B.P. No. | HOLE No. 1045-4

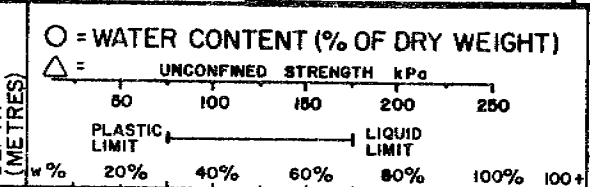
DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	CHAINAGE 4052+00	OFFSET	REMARKS
2		Peat & Ice		Ice & Pt						Sat.			
4		Clay - Silty			1					Free H_2O			
6		- Sandy								V			
8		- Pebbles		Vs	2								
10	CL	Low Plastic								Sat.			
12					3								
14		4.6m		Vc-Vr	4					Wet			
16					5					Moist			
18		Bottom of Hole - 4.6m											
20					6								
22													
24					7								
26													
28					8								
30					9								
32													
34					10								
36													
38					11								



PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | Inuvik - Tuk.

TECH. D. Cook | RIG Air | DATE 80/03/27 | km | B.P. No. | HOLE No. 1045-5

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
	Pt.	Peat .5m									
2	CL	Clay - Silty		V_s						Free H_2O	
4	I	Sandy			1					✓	
6	CI	Pebbles 2.1m								Wet	
8		Ice		Ice	2						
10		Trace of Soil		+	3						
12				CL							
14		4.6m			4						
16		Bottom of Hole - 4.6m			5						
18											
20					6						
22											
24					7						
26											
28					8						
30					9						
32											
34					10						
36											
38					11						



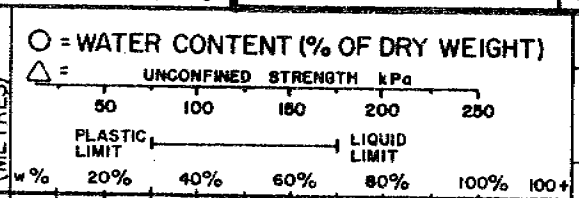
CHAINAGE: A058+00

OFFSET:

PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | Inuvik - Tuk.

TECH. D. Cook | RIG Air | DATE 80/08/27 | km | B.P. No. | HOLE No. 1046-1

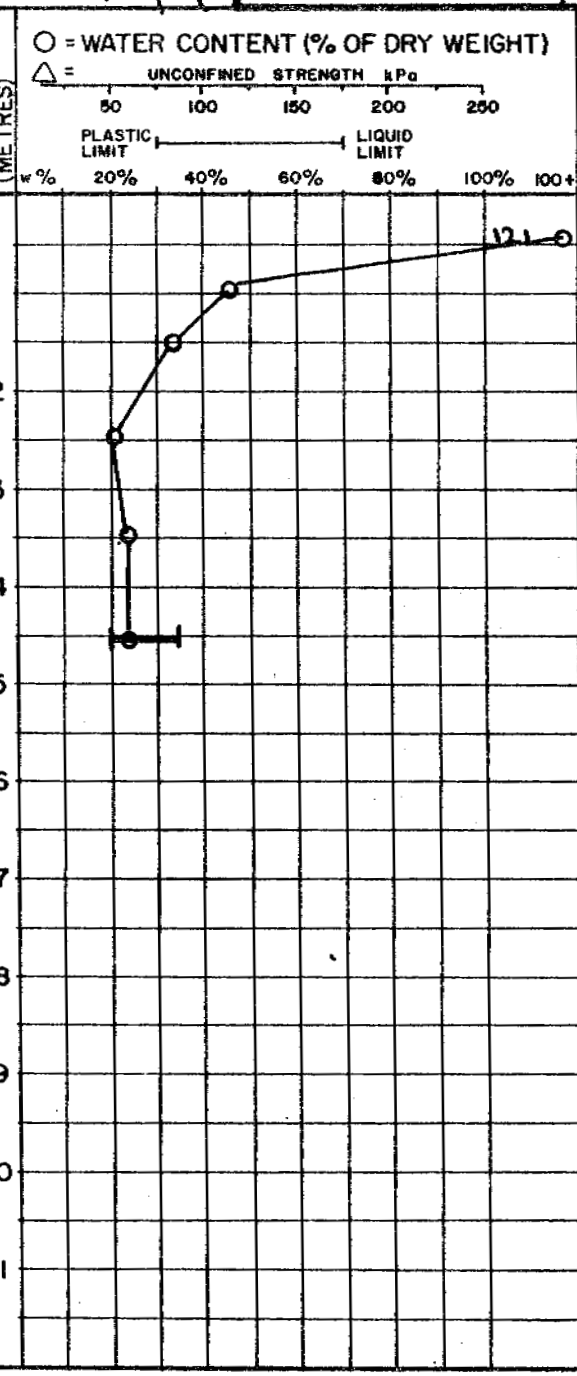
DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	RELATIVE MOISTURE CONTENT	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	CHAINAGE	OFFSET	REMARKS
2	Pt	Peat & Clay		Vs	Moist					4+74+00		
1m												
4		Clay Silty Pebbles			Free H_2O							
6	CL				✓							
8				Vs	✓							
10												
12	CI				Wet							
14												
4.6m												
16		Bottom of Hole - 4.6m			Moist							
18												
20												
22												
24												
26												
28												
30												
32												
34												
36												
38												



PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | Inuvik - Tuk.

TECH. D. Cook | RIG Air | DATE 80/03/27 | km | B.P. No. | HOLE No. 1046 - 2

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
	Pt.	Peat .5m		Vs						Free H_2O ✓	
2, 4, 6	Cl	Clay - Silty Med. Plastic			1, 2					Wet; Moist-Wet	
8, 10				Vc - Vr	3						
12, 14	Cl	Clay - Silty Sandy Pebbles Med. Plastic 3.4m – 4.6m			4	-72-	21	7		Moist-Wet; Moist-Wet	
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		Bottom of Hole - 4.6m			5, 6, 7, 8, 9, 10, 11						



CHAINAGE: 4101+50 | OFFSET:

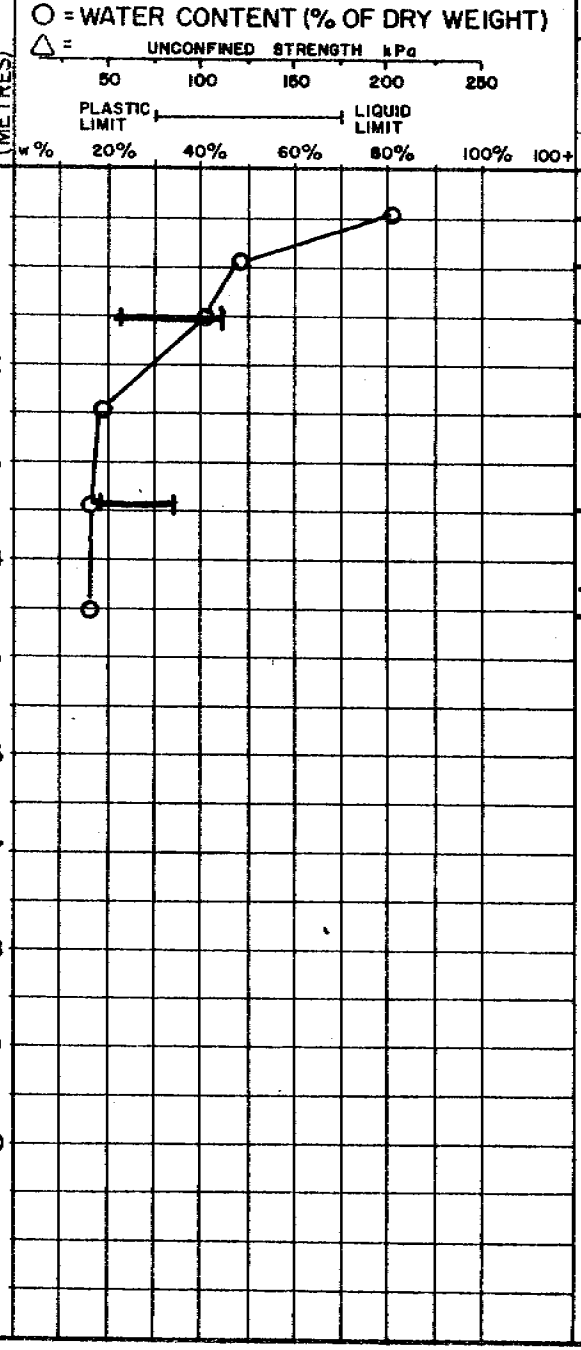
PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk

TECH. D. Cook	RIG Air	DATE 80/03/27	km	B.P. No.	HOLE No. 1046-3

CHAINAGE	OFFSET
? 1114+50	

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
	Pt	Peat .3m									
2, 4	Cl	Clay - Silty Med. Plastic 1.8m		Vs	1	87	13	0		Free H_2O	
						99	1	0		Sat.	
						87	7	6		Sat	
8, 10, 12, 14	Cl	Clay - Silty Sandy Pebbles Till Med. Plastic 4.6m		Vc - Vr, Vx	2, 3, 4	78	18	4		Wet - Moist	
						75	19	6		✓	
						74	20	6		✓	
16, 18		Bottom of Hole - 4.6m									

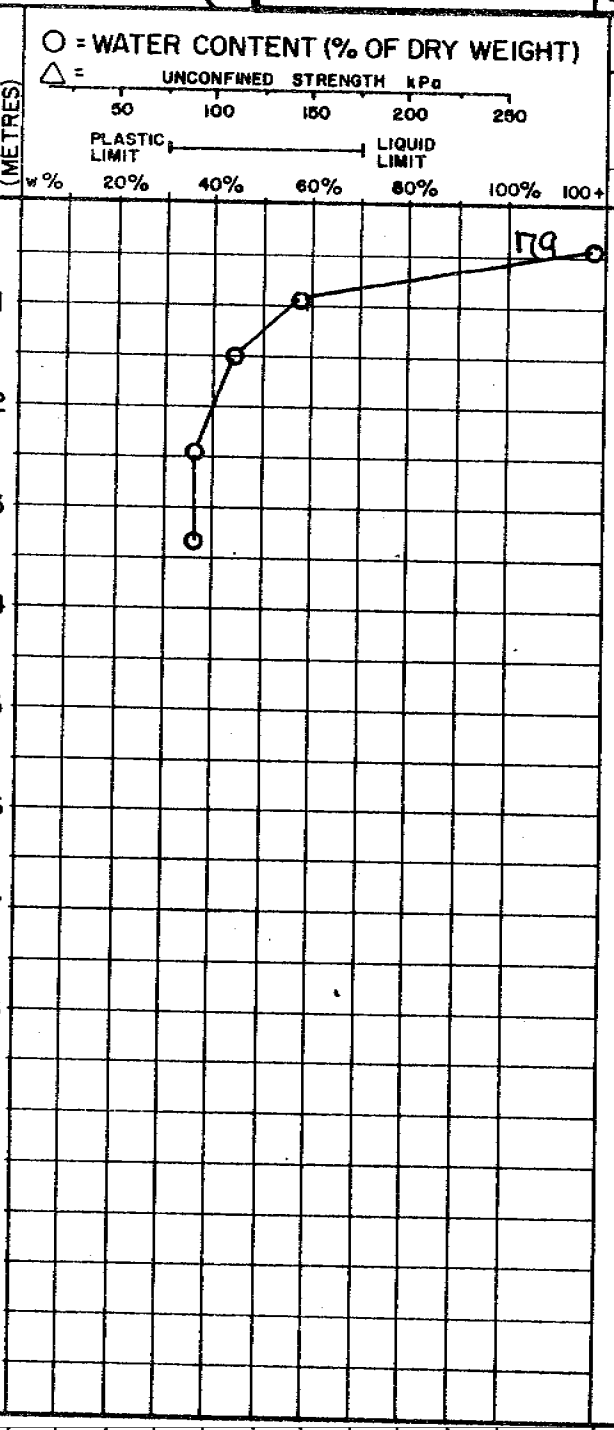


PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. COOK | RIG Air | DATE 80/03/27 | km | B.P. No. | HOLE No. 1047-1

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	CHAINAGE	OFFSET
	Pt	Peat & Clay									4137+00	
2		.5m										
4		Clay - Silty		Vs	1					Free H_2O		
6		Med. Plastic								Soft		
8	Cl			Vc - Vr	2					Wet		
10										Moist - Wet		
12		3.4m			3					✓		
14		Bottom of Hole - 3.4m			4							
16					5							
18												
20					6							
22												
24					7							
26												
28					8							
30												
32					9							
34												
36					10							
38					11							



REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT — INUVIK - TUK.

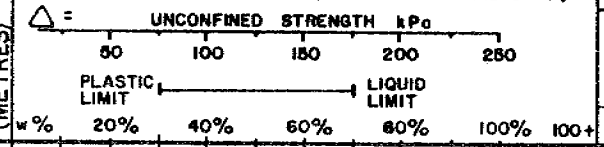
TECH. D. COOK	RIG AIR	DATE 80/03/27	km	B. P. No.	HOLE No. 1047-2

CHAINAGE	OFFSET
4146+50	

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	RELATIVE MOISTURE CONTENT	REMARKS
	Pt	PEAT .3m			Free Water	
2		CLAY SILTY ORGANICS		V_s	✓	
4		CLAY SILTY			✓	
6	CL	LOW - MED. PLASTIC				
8					Moist	
10	CI	PRIV PEBBLES		$V_c - V_r$		
12					Moist	
14		4.6m				
16		BOTTOM OF HOLE - 4.6m				
18						
20						
22						
24						
26						
28						
30						
32						
34						
36						
38						

○ = WATER CONTENT (% OF DRY WEIGHT)

△ = UNCONFINED STRENGTH kPa



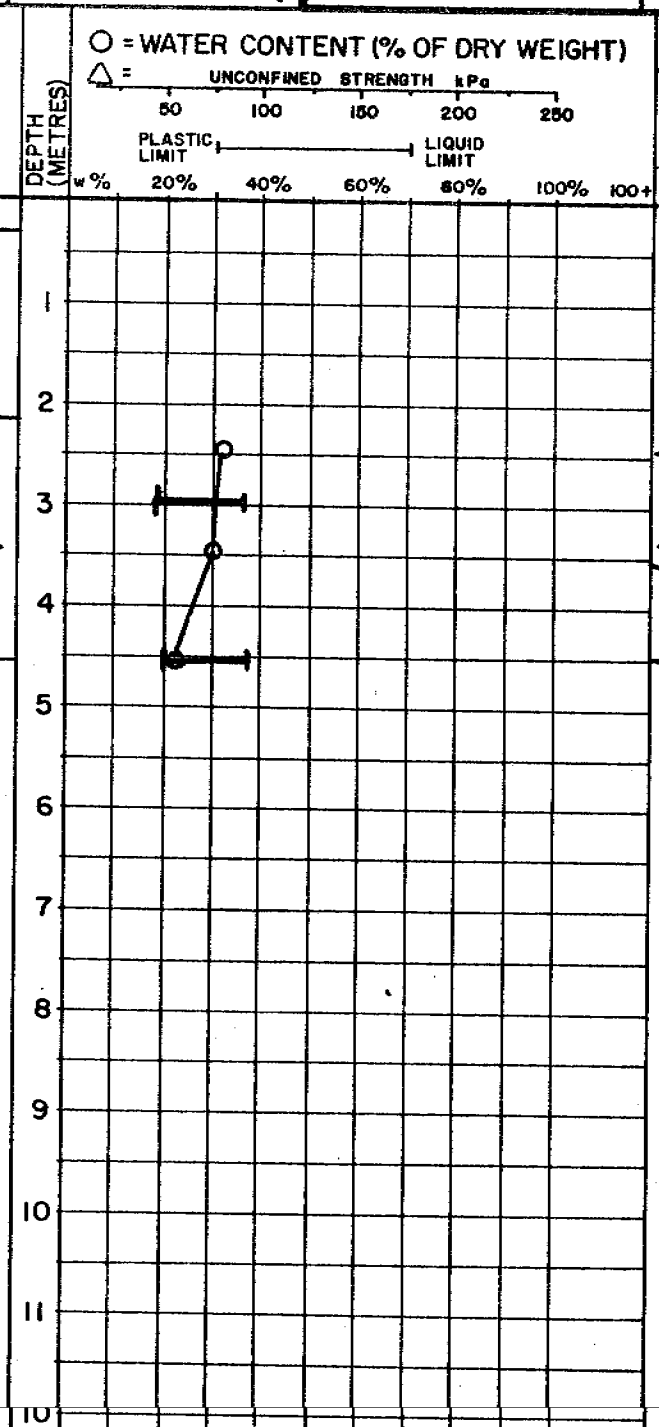
DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. COOK	RIG Air	DATE 80/03/27	km	B. P. No.	HOLE No. 1048-1

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	Pt	PEAT .3m		
2, 4, 6		ICE		ICE
8, 10, 12, 14	CL, CI	CLAY - SILTY SANDY LOW - MED - PLASTIC PEBBLES		Vc - Vr
		GRAVELLY 4.6m		
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		BOTTOM OF HOLE 4.6m		



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
75	24	1		WET
73	25	2		WET
60	26	14		MOIST

CHAINAGE	OFFSET
4168 + 10	

REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Cook	RIG Air	DATE 80/03/27	km	B.P. No.	HOLE No. 1048-3

CHAINAGE	OFFSET
4218+60	

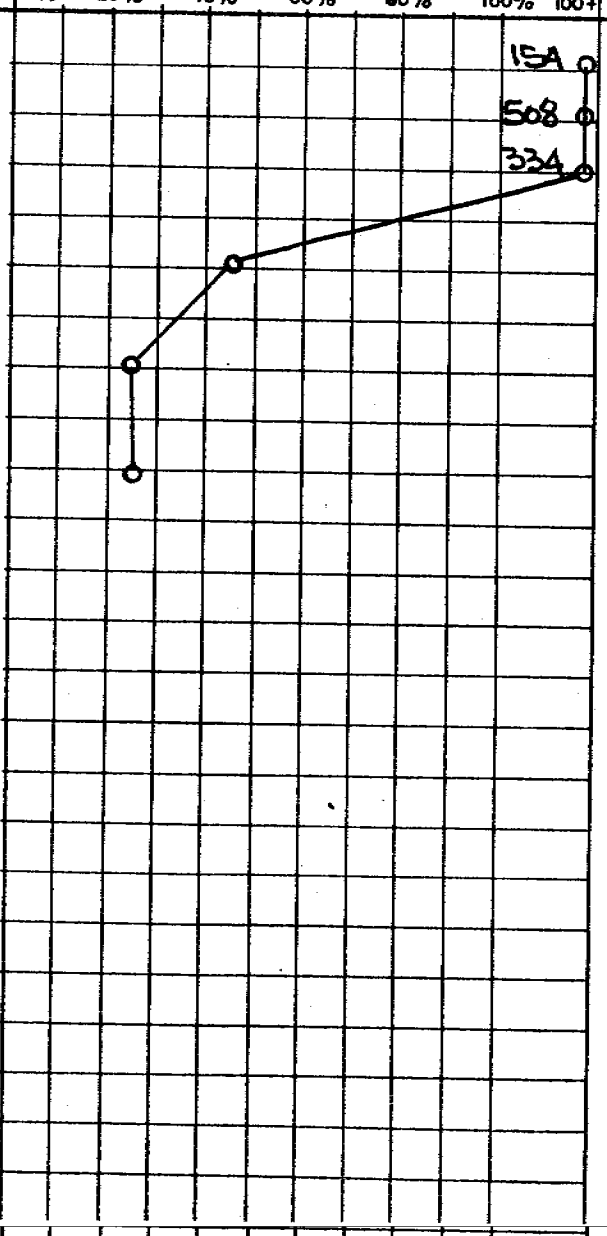
DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
	Pt	Peat .5m									
2–6		Ice & Soil		Ice + CL	1					Sat	
8		2.4m									
8–16	Cl	Clay-Silty, Med. Plastic		Vs + Vc-Vr	2–4					Wet; Moist-Wet; Moist-Wet	
		4.6m									
		Bottom of Hole - 4.6m									

O = WATER CONTENT (% OF DRY WEIGHT)

△ = UNCONFINED STRENGTH kPa (50, 100, 150, 200, 250)

PLASTIC LIMIT — LIQUID LIMIT

w % 20% 40% 60% 80% 100% 100+



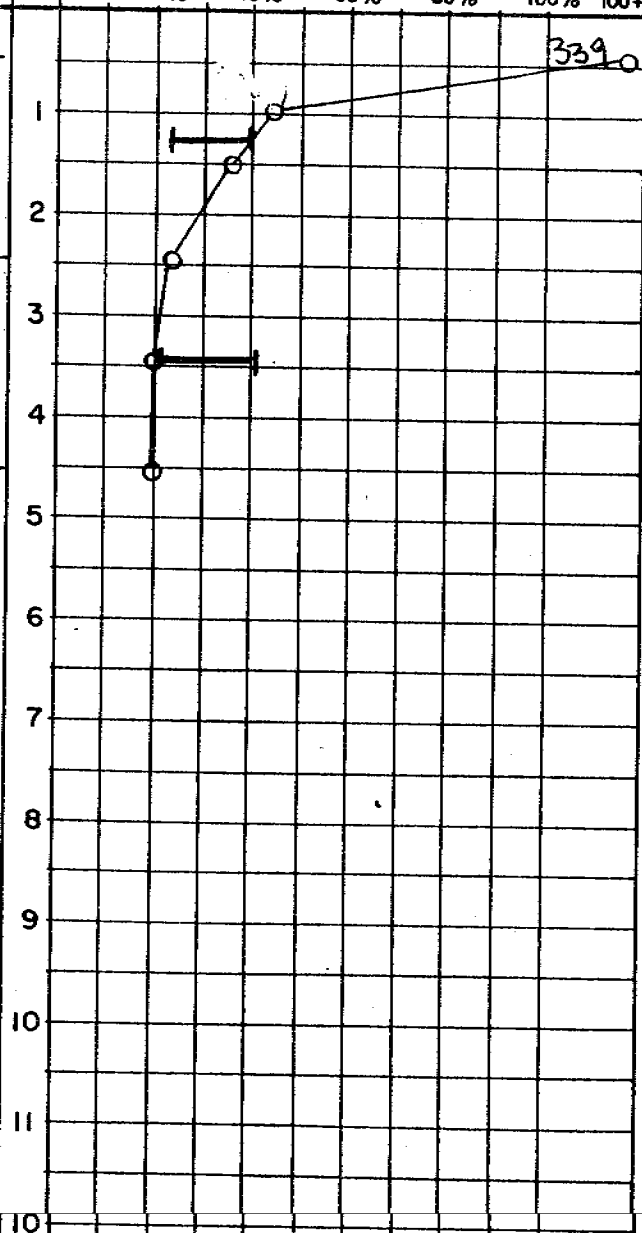
PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Cook	RIG Air	DATE 80/03/27	km	B.P. No.	HOLE No. 1049-1

CHAINAGE	OFFSET
4251+30	

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
2		PEAT & ICE .5m		IG = Pt
4		CLAY - SILTY SANDY PEBBLES MED. PLASTIC		Vs
6				
8	CI			
10				
12				$V_c - V_r$
14		4.6m		
16		BOTTOM OF HOLE 4.6m		
18				
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
51	36	7		WATER	
82	17	1		SAT.	
80	17	3		SAT.	
77	20	3		MOIST-WET	
80	14	6		✓	
84	14	2		✓	

PUBLIC WORKS CANADA — DRILL HOLE REPORT

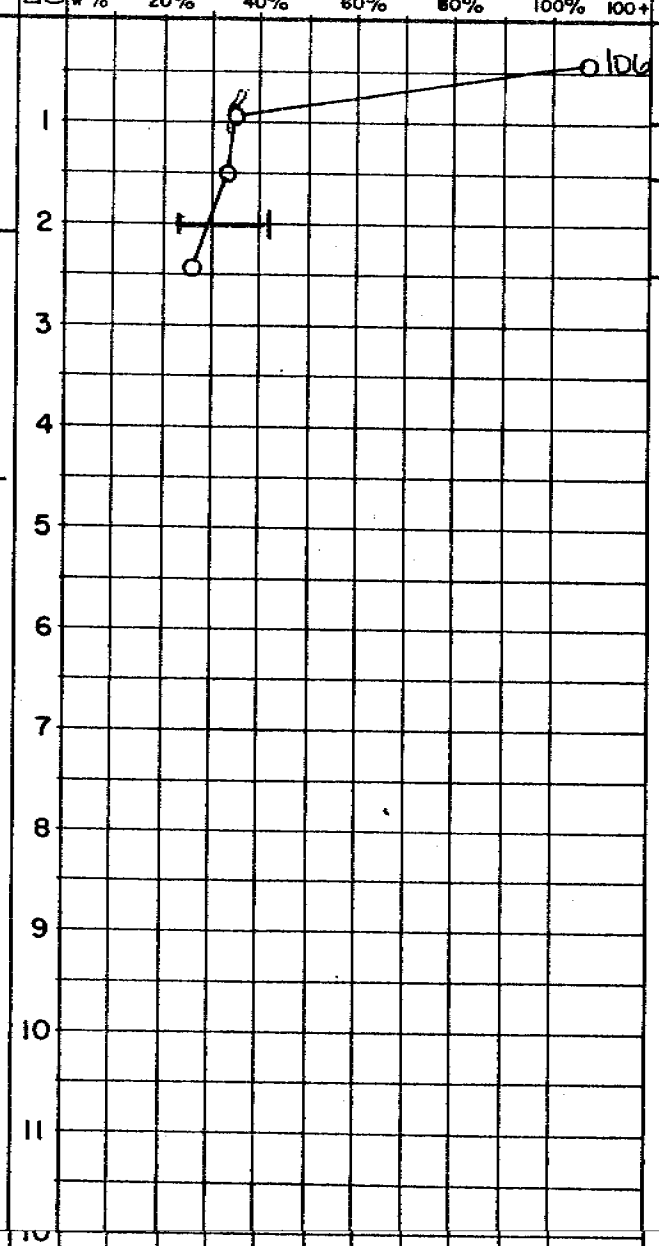
Inuvik - Tuk.

TECH. D. COOK	RIG AIR	DATE 80/03/27	km	B.P. No.	HOLE No. 1049.2

CHAINAGE	OFFSET
4263+00	

REMARKS

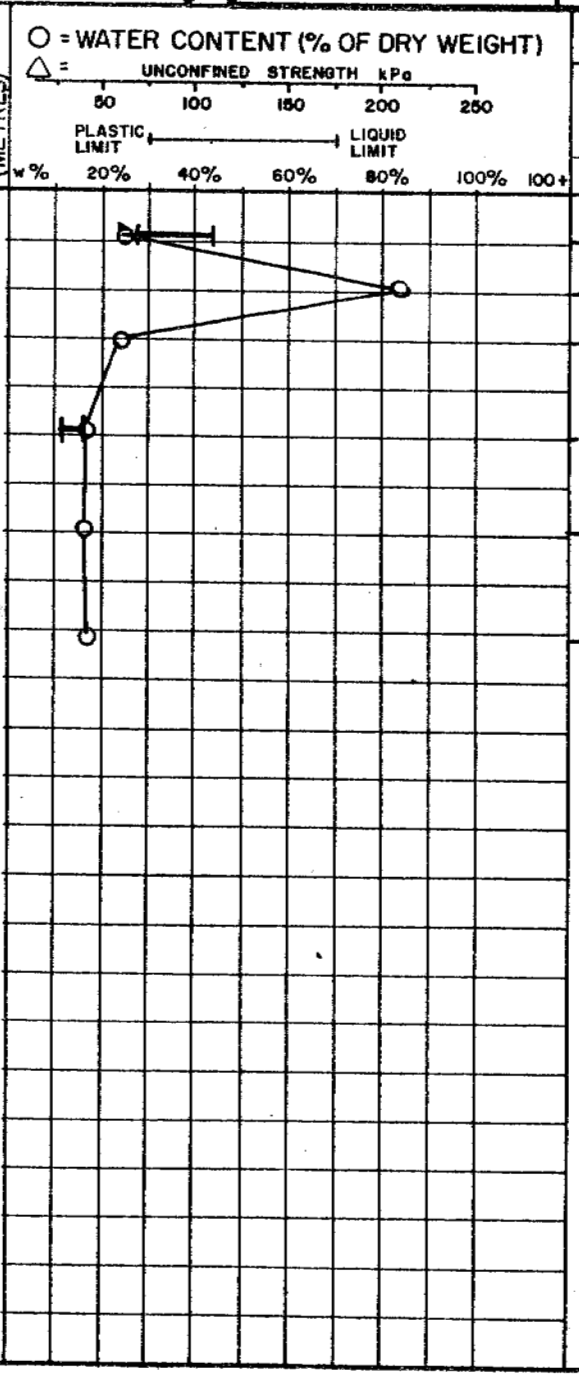
DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
	Pt	PEAT .3m								
2		CLAY - SILTY SANDY GRAVELLY MED. PLASTIC		Vs						FREE H_2O
4	CL				1	57	20	23		SAT.
6		SILTY PEBBLES				86	11	3		SAT.
8		2.1m			2	93	4	3		MOIST
10		ICE		ICE	3					
12		SOME SOIL		&						
14				CL	4					
		4.6m								
16		BOTTOM OF HOLE 4.6m			5					
18										
20					6					
22										
24					7					
26										
28					8					
30					9					
32										
34					10					
36										
38					11					



PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | INUVIK - TUK

TECH. D. COOK | RIG AIR | DATE 80/03/29 | km | B.P. No. | HOLE No. R-1

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
	Pt	PEAT .3m									
2		CLAY - SILTY SANDY PEBBLES MED. PLASTIC		Vs		72	22	6		MOIST	
4	Cl				1	42	42	16		PORE H_2O	
6		1.8m				66	33	1		SAT	
		SAND - SILTY PEBBLES			2	30	67	3		WET	
8											
10	Sm			Vc - Vr	3						
12						22	76	2		WET	
14		NO PEBBLES 4.6m			4						
16		BOTTOM OF HOLE. 4.6m				7	93	0		WET	
18					5						
20					6						
22											
24					7						
26											
28					8						
30					9						
32											
34					10						
36					11						
38											

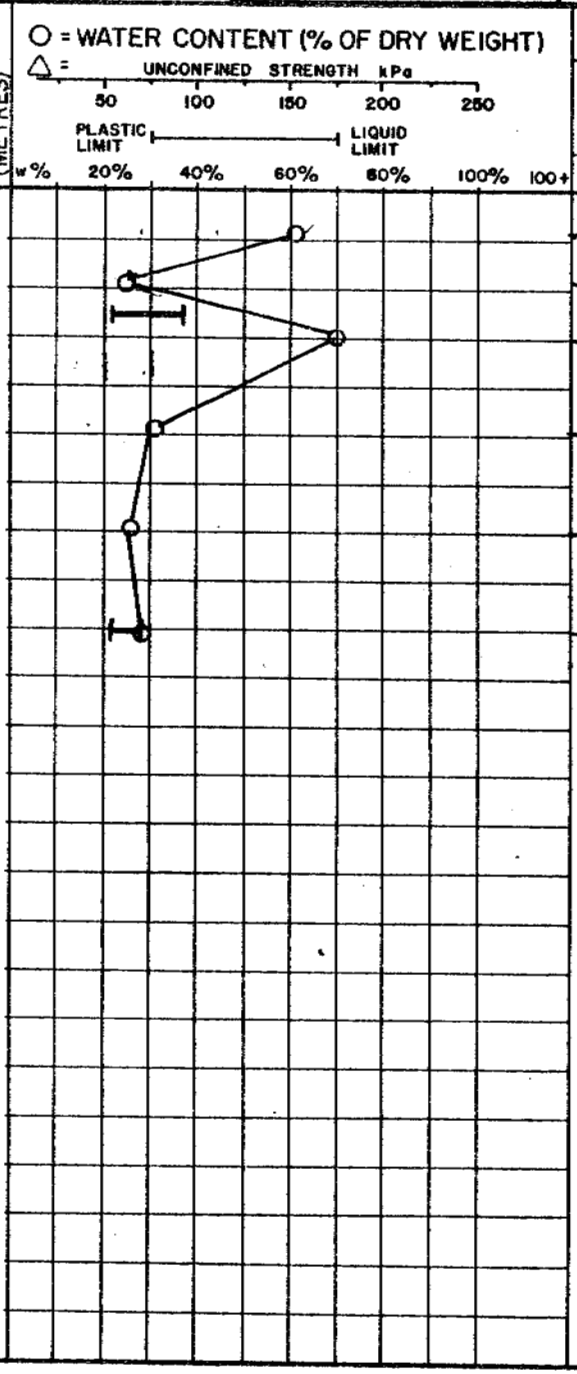


CHAINAGE | OFFSET

PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | Inuvik - Tuk

TECH. D. COOK | RIG Air | DATE 80/03/28 | km | B. P. No. | HOLE No. R-2

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
	A	PEAT .5m		Vs							
2		CLAY - SILTY SANDY				80	20	0		FREE WATER	
4				Vs	1	84	16	0		MOIST	
6	CI	SILTY MED PLASTIC				99	1	0		FREE WATER	
8		2.4m			2						
10		SILT - CLAYEY		Vc - Vr	3	88	12	0		WET	
12	ML CL	CLAY - SILTY				94	6	0		WET	
14		4.6m			4	95	5	0		WET	
16		BOTTOM OF HOLE 4.6m			5						
18											
20					6						
22											
24					7						
26											
28					8						
30					9						
32											
34					10						
36											
38					11						



CHAINAGE | OFFSET

PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | INUVIK - TUK

TECH. D. Cook | RIG Air | DATE 80/03/28 | km | B.P. No. | HOLE No. Q-3

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
	Pt	PEAT .3m									
2	CL	CLAY-SANDY SILTY PEBBLES		Vc-Vr		55	41	4		WET	
4				vs	1	42	51	7		POOR H2O	
6	ML	SILT-SANDY CLAYEY 1.8m				42	54	4		MOIST	
8	SM	SAND-SILTY			2	29	70	1		WET	
10	SP	SAND-FINE		Vc-Vr	3						
12						5	95	0		WET	
14		4.6m			4						
16		BOTTOM OF HOLE. 4.6m			5	4	77	19		WET	
18											
20					6						
22											
24					7						
26											
28					8						
30											
32					9						
34					10						
36											
38					11						

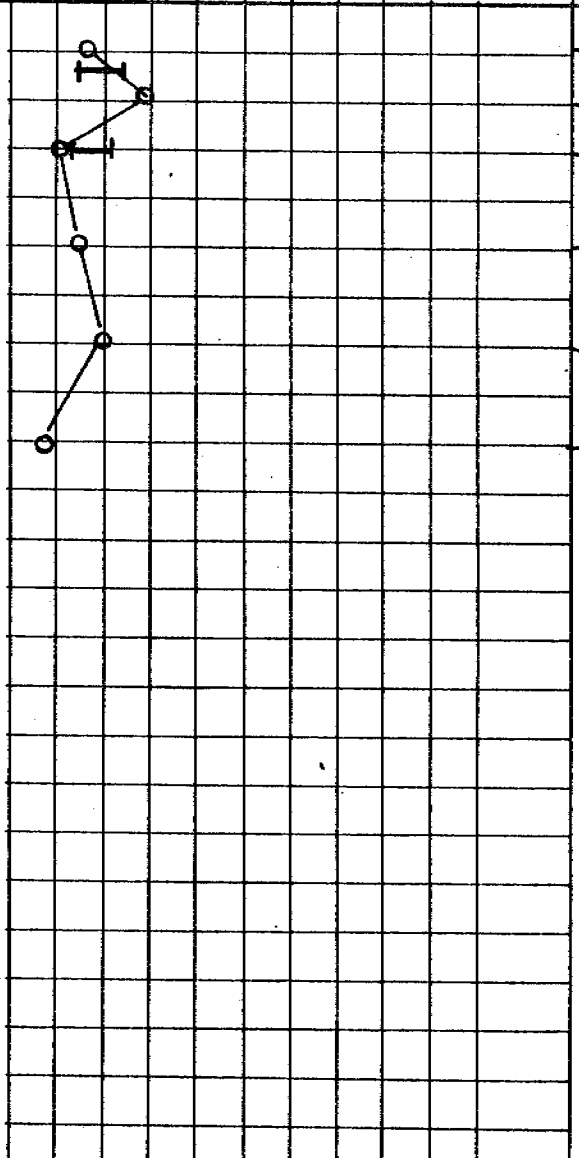
O = WATER CONTENT (% OF DRY WEIGHT)

△ = UNCONFINED STRENGTH kPa

50 100 150 200 250

PLASTIC LIMIT — LIQUID LIMIT

w% 20% 40% 60% 80% 100% 100+

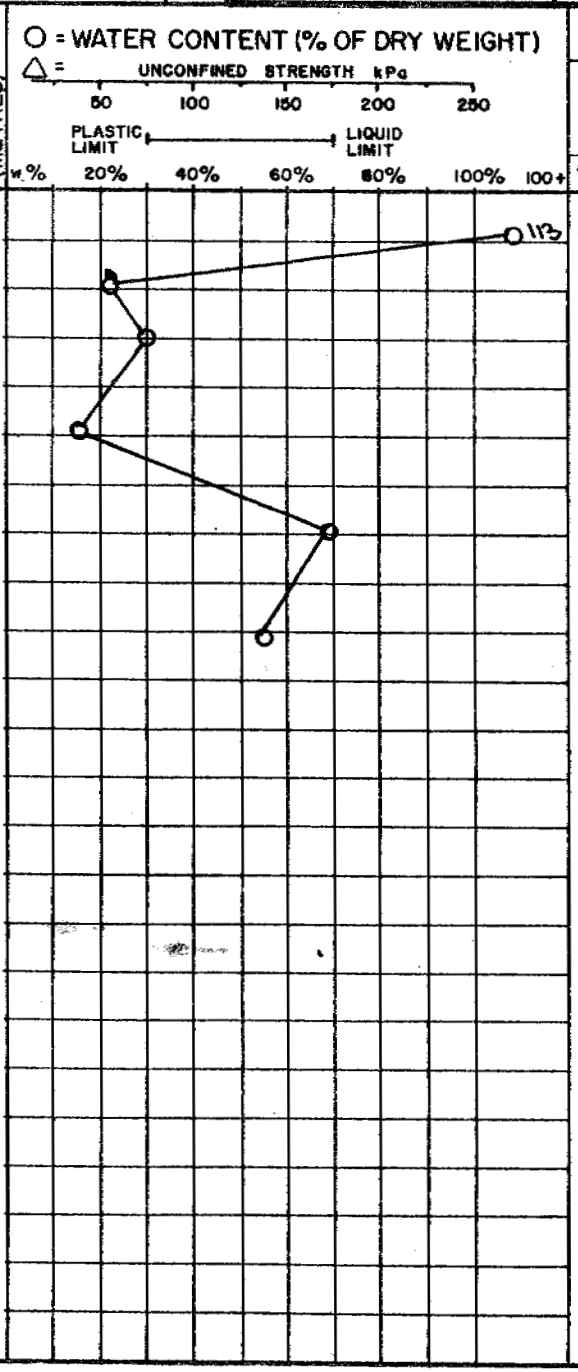


CHAINAGE | OFFSET

PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | INUVIK-TUK

TECH. D. COOK | RIG AIR | DATE 80/03/28 | km | B.P. No. | HOLE No. R4

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	RELATIVE MOISTURE CONTENT
	A.	PEAT .5m			FREE WATER
2		CLAY - SILTY SANDY			SAT.
4		PEBBLES			
6	CI	MED. PLASTIC			FREE WATER
8				Vs	
10	CL	LOW PLASTIC			H.I.B.
12					FREE WATER
14		4.6 m			
16		BOTTOM OF HOLE. 4.6m			
18					
20					
22					
24					
26					
28					
30					
32					
34					
36					
38					



GRAIN-SIZE ANALYSIS			
CLAY %	SILT %	SAND %	GRAVEL %

CHAINAGE	OFFSET

REMARKS

PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | INUVIK - TUK

TECH. D. COOK | RIG AIR | DATE 80/03/28 | km | B.P. No. | HOLE No. R.5

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	Pt	PEAT .5m		
2, 4, 6, 8, 10		ICE		ICE
12, 14		ICE & SOIL 4.6m		ICE & CL
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		BOTTOM OF HOLE 4.6m		

DEPTH (METRES): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11

O = WATER CONTENT (% OF DRY WEIGHT)

Δ = UNCONFINED STRENGTH kPa: 50, 100, 150, 200, 250

PLASTIC LIMIT — LIQUID LIMIT

w% 20% 40% 60% 80% 100% 100+

NO SAMPLES TAKEN

GRAIN-SIZE ANALYSIS				RELATIVE MOISTURE CONTENT
CLAY %	SILT %	SAND %	GRAVEL %	

CHAINAGE	OFFSET

REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

INUVIK - TUK

TECH. D. COOK | RIG AIR | DATE 80/03/28 | km | B.P. No. | HOLE No. R-6

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
	Pt	PEAT .3m									
2, 4	CL	CLAY - SILTY 1.5		Vs	1					Poor H2O	
										Wet-Sat.	
6, 8, 10, 12, 14		ICE DIRTY 4.6m		ICE & Some CL	2, 3, 4					Poor H2O	
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		BOTTOM OF HOLE - 4.6m			5, 6, 7, 8, 9, 10, 11						

O = WATER CONTENT (% OF DRY WEIGHT)

△ = UNCONFINED STRENGTH kPa: 50, 100, 150, 200, 250

PLASTIC LIMIT — LIQUID LIMIT

w % 20% 40% 60% 80% 100% 100+

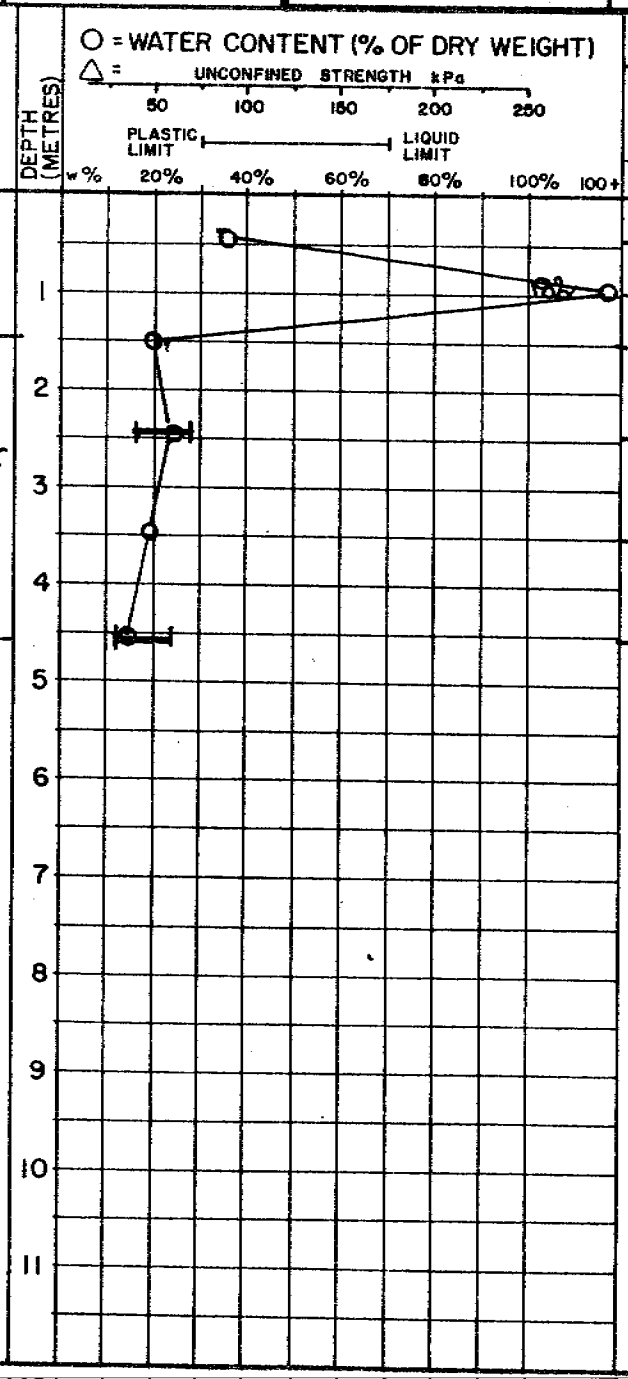
CHAINAGE | OFFSET

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. COOK | RIG Air | DATE 80/05/28 | km | B.P. No. | HOLE No. R7

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
2	Pt	Peat & Clay Sandy		Vs
4		1.0m		
6		Clay - Silty		
8		- Sandy		
10	CL	- Pebbles		Vc - Vr
12		Low Plastic		
14		4.6m		
16		Bottom of Hole - 4.6m		
18				
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
69	31	0		Moist	
81	19	0		Free H_2O	
54	42	4		Wet	
53	40	7		Wet	
51	42	7		Wet	
44	47	9		Wet	

CHAINAGE | OFFSET

PUBLIC WORKS CANADA — DRILL HOLE REPORT

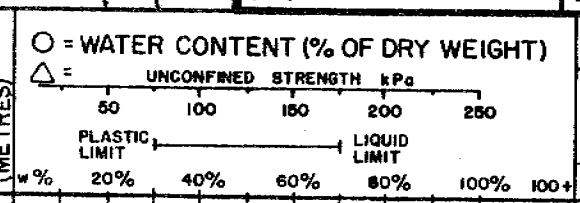
INUVIK - TUK (DUPLICATION)

TECH. D. Cook	RIG Air	DATE 80/03/28	km	B.P. No.	HOLE No. R-7(A)

CHAINAGE	OFFSET

REMARKS

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
2										
4					1					
6										
8					2					
10	CI	CLAY-SILTY SANDY GRAVELLY			3	28	56	16		WET
12	CL	PEBBLES				36	58	6		WET-SAT
14					4					
16										
18					5					
20										
22					6					
24										
26					7					
28										
30					8					
32										
34					9					
36										
38					10					
					11					



PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | INUVIK - TUK

TECH. D. COOK | RIG AIR | DATE 80/03/28 | km | B. P. No. | HOLE No. R-8

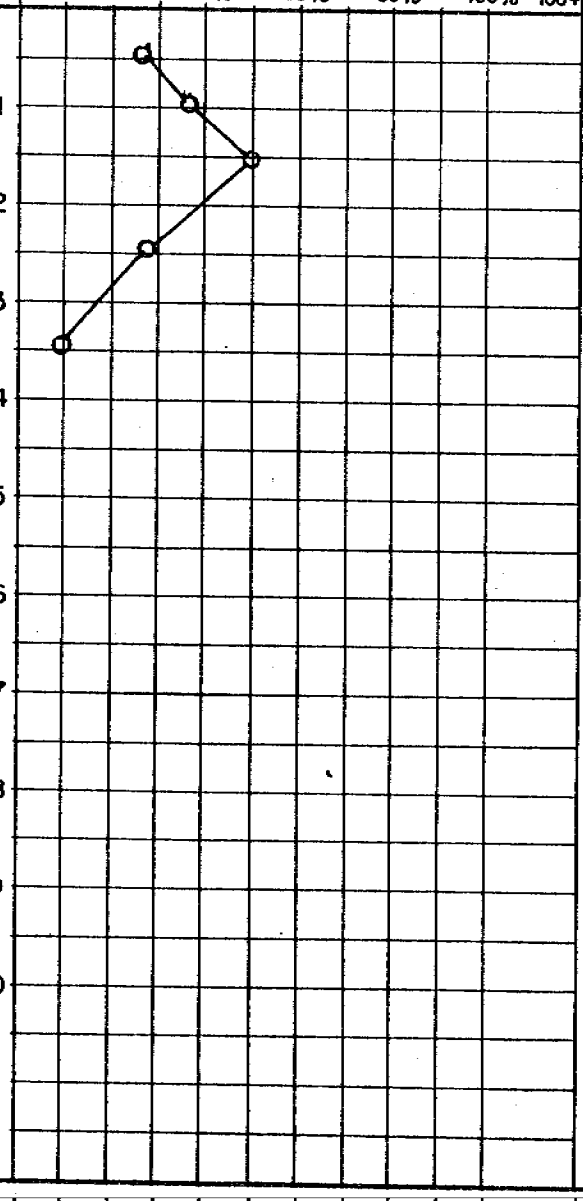
DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
	A	PEAT 0.3									
2	CI	CLAY - SILTY SANDY								WET	
4		PEBBLES		Vs	1					Pore H_2O	
6	CL										
8					2						
10	CL			V_c-V_r						WET	
12		GRAVEL - SAND MIX 4.0m			3					MOIST - WET	
14					4						
16		BOTTOM OF HOLE - 4.0m			5						
18		BOULDERS									
20					6						
22											
24					7						
26											
28					8						
30											
32					9						
34					10						
36											
38					11						

O = WATER CONTENT (% OF DRY WEIGHT)

△ = UNCONFINED STRENGTH kPa: 50, 100, 150, 200, 250

PLASTIC LIMIT — LIQUID LIMIT

w% 20% 40% 60% 80% 100% 100+



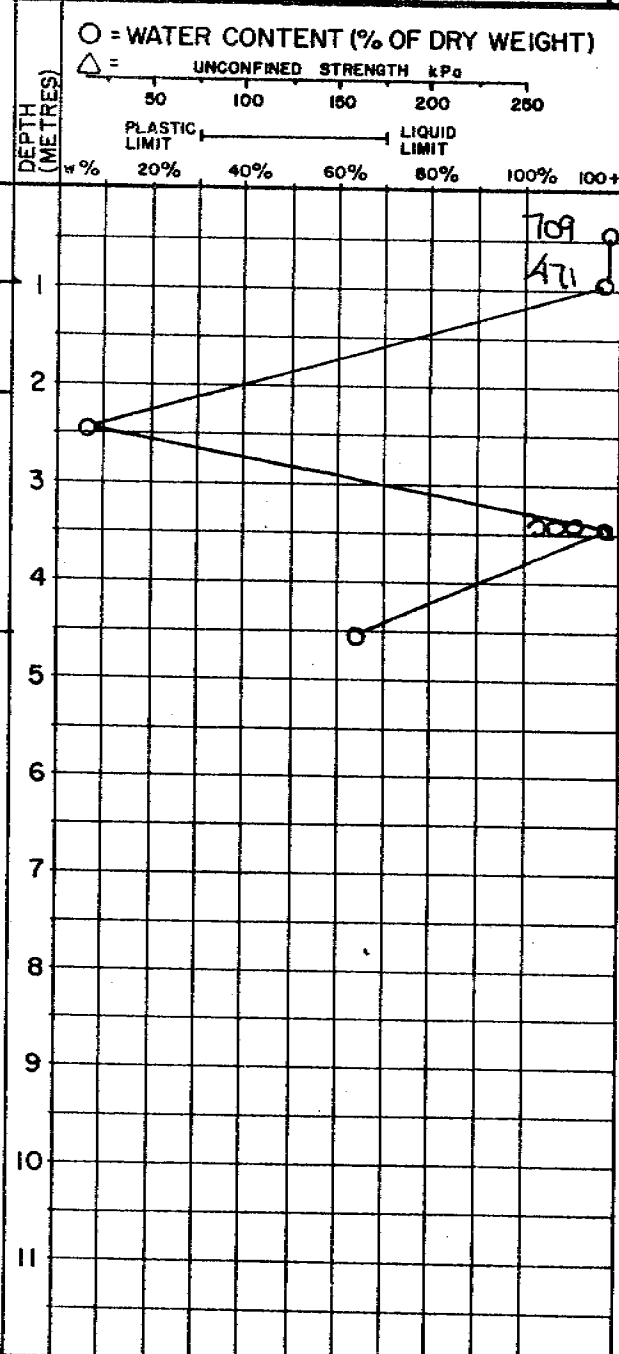
CHAINAGE | OFFSET

PUBLIC WORKS CANADA — DRILL HOLE REPORT

INUVIK - TUK.

TECH. D. COOK	RIG AIR	DATE 80/11/28	km	B. P. No.	HOLE No. R.9

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
2	Pt	PEAT & ICE 1.0m		Pt & ICE
4				
6		ICE 2.1m		ICE
8	GP	GRAVEL - SANDY		Vc-Vr
10		3.1m		VS
12	Pt	PEAT 4.0m		
14	ML PT	SILT - SANDY ORGANIC 4.6m		
16				
18		BOTTOM OF HOLE - 4.6m		
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				



GRAIN-SIZE ANALYSIS				RELATIVE MOISTURE CONTENT	CHAINAGE	OFFSET
CLAY %	SILT %	SAND %	GRAVEL %			
				SAT.	REMARKS	
				WET		
				WET		
				WET		
				MOIST		

PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | INUVIK-TUK

TECH. D. COOK | RIG AIR | DATE 80/03/28 | km | B.P. No. | HOLE No. R-10 & 10A

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
2		BOTH HOLE		
4		SANDY GRAVEL		
		DRY		
6				
8		HOLES CAVING IN		
10		31		
12		BOTTOM OF HOLES		
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				

DEPTH (METRES): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11

○ = WATER CONTENT (% OF DRY WEIGHT)

△ = UNCONFINED STRENGTH kPa: 50, 100, 150, 200, 250

PLASTIC LIMIT — LIQUID LIMIT

w% 20% 40% 60% 80% 100% 100+

GRAIN-SIZE ANALYSIS				RELATIVE MOISTURE CONTENT
CLAY %	SILT %	SAND %	GRAVEL %	

CHAINAGE	OFFSET

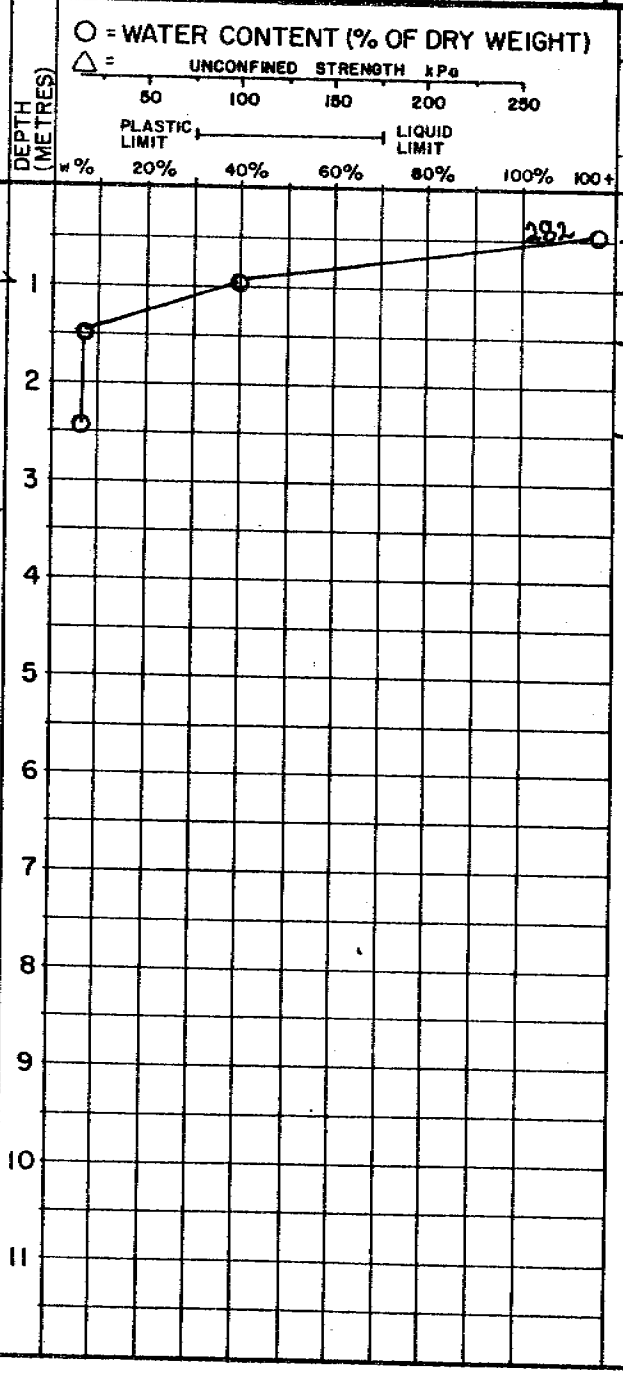
REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Cook | RIG Air | DATE 80/03/28 | km | B.P. No. | HOLE No. R-11

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
2	Pt	Pt & ICE 1.0m		ICE Pt
4	GP	GRAVEL - SANDY		
6				Vx
8		GRAVEL - SAND MIX 3.4m		
10				
12		BOTTOM OF HOLE - 3.4m		
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	CHAINAGE	OFFSET	REMARKS
88	12	0		MOIST			
5	80	15		FREE H2O			
3	62	35		MOIST			
4	50	46		WET			

PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | INUVIK - TUK.

TECH. D. COOK | RIG AIR | DATE 80/03/28 | km | B.P. No. | HOLE No. R-12

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	CHAINAGE	OFFSET	REMARKS
2		SAND - GRAVEL											
4	GP	MIX		Vx	1	3	59	38		MOIST			
6						2	62	36		MOIST			
8		2.4m			2	2	48	50		MOIST			
10		BOTTOM OF HOLE - 2.4m			3								
12													
14					4								
16													
18					5								
20													
22					6								
24													
26					7								
28													
30					8								
32													
34					9								
36													
38					10								
					11								

O = WATER CONTENT (% OF DRY WEIGHT)

Δ = UNCONFINED STRENGTH kPa: 50, 100, 150, 200, 250

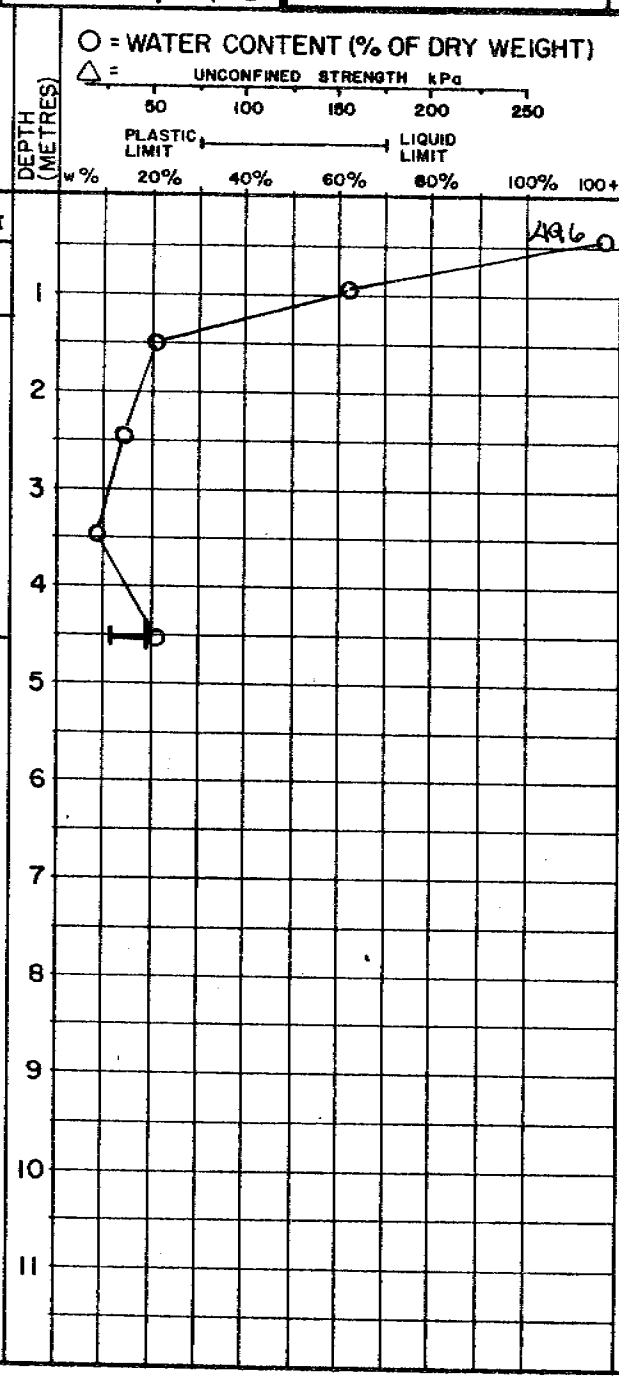
PLASTIC LIMIT — LIQUID LIMIT

w % 20% 40% 60% 80% 100% 100+

PUBLIC WORKS CANADA — DRILL HOLE REPORT — INUVIK-TUK.

TECH. D.COOK	RIG AIR	DATE 80/03/28	km	B. P. No.	HOLE No. R-13

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	Pt	PEAT & ICE .5m		ICE & Pt
2	SC	CLAYEY SAND PEBBLES		Vs
4		SAND-SILTY -GRAVELLY N.P.		Vc-Vx
6				
8	SM			
10				
12				
14	ML	SILTY-SANDY CLAYEY 4.6m		
16		BOTTOM OF HOLE - 4.6m		
18				
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
				WATER
28	64	8		FREE WATER
14	70	16		✓
14	73	13		SAT.
12	57	31		MOIST
40	56	4		SAT

CHAINAGE	OFFSET

REMARKS

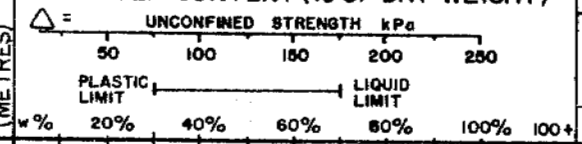
PUBLIC WORKS CANADA — DRILL HOLE REPORT

INUVIK-TUK.

TECH. D. COOK	RIG AIR	DATE 80/03/28	km	B. P. No.	HOLE No. R-K4

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	PT	PEAT .5m		
2, 4, 6	CL	CLAY - SILTY SANDY 2.1m		VS
8, 10, 12, 14		SOME SOIL & ICE 4.6m		ICE & CL
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		BOTTOM OF HOLE - 4.6m		

O = WATER CONTENT (% OF DRY WEIGHT)
Δ = UNCONFINED STRENGTH kPa



DEPTH (METRES): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11

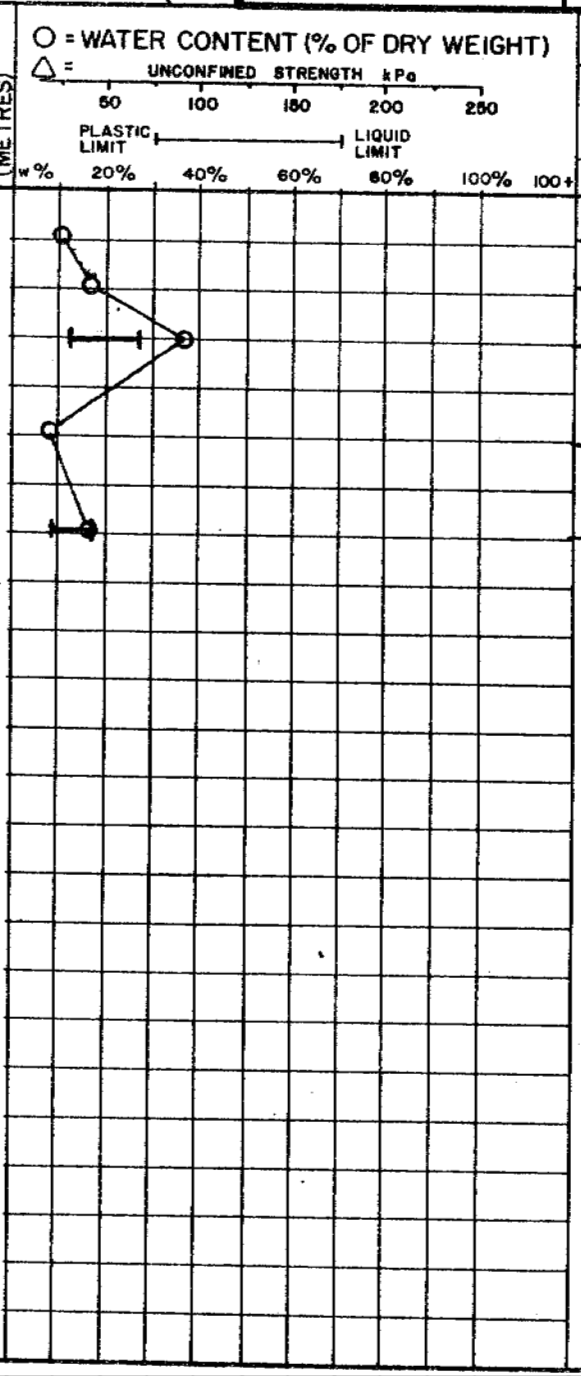
GRAIN-SIZE ANALYSIS				RELATIVE MOISTURE CONTENT	CHAINAGE	OFFSET
CLAY %	SILT %	SAND %	GRAVEL %			
				Free H_2O ✓	REMARKS	

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Cook | RIG Air | DATE 80/08/28 | km | B.P. No. | HOLE No. R-15

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	Pt	Peat .15m		
2	Sp	Sand - Gravelly		Vx
4	Sm	Silty Some Organics		
		1.5.		
6	Cl	Clay - Sandy		Vs
8		Silty		
		Gravelly		
10		Pebbles		Vc - Vr
12	Sc	Sand - Clayey Silty 3.7m		
14		Bottom of Hole - 3.7m		
16		Boulders		
18				
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
4	-	67	29	WET
21	-	53	26	MOIST
49	-	41	10	Free H2O
9	-	79	12	WET
31	-	67	2	WET

CHAINAGE	OFFSET

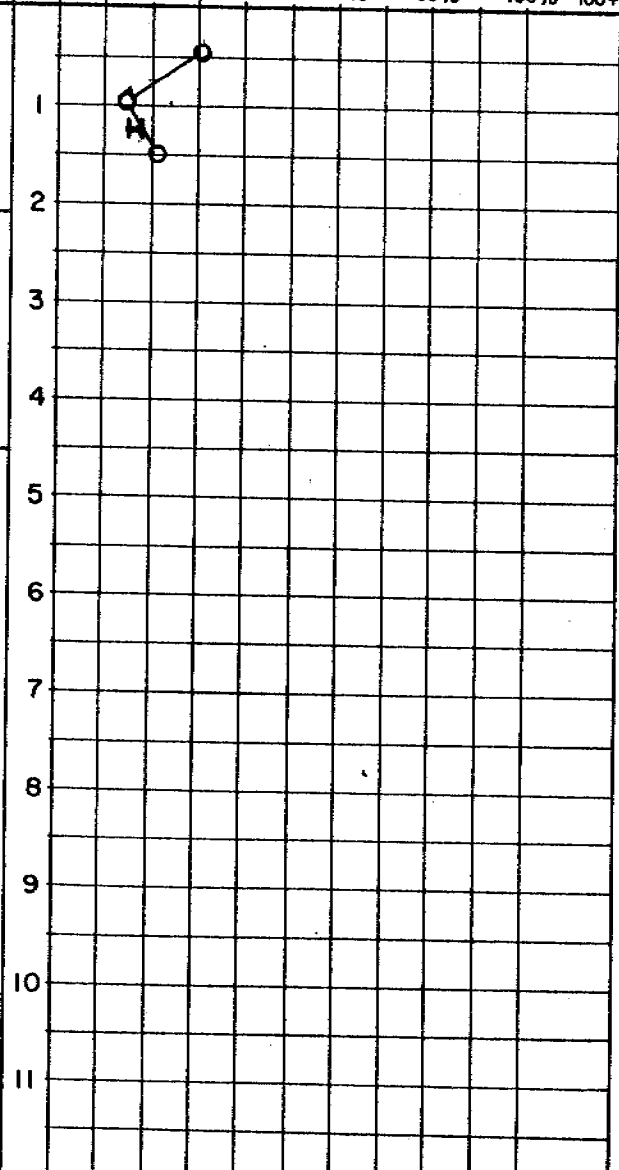
REMARKS

PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | Inuvik - Tuk

TECH. D. Cook | RIG Air | DATE 80/03/28 | km | B.P. No. | HOLE No. R-16

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	Pt	Peat		
2		.5m		
4	Sc	SAND - GRAVELLY SILTY CLAYEY		Vs
6	Sc	SAND - SILTY		
		2.1m		
8		ICE TRACE OF SOIL		ICE & Sc
10				
12				
14				
		4.6m		
16		Bottom of Hole - 4.6m		
18				
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				

O = WATER CONTENT (% OF DRY WEIGHT)
△ = UNCONFINED STRENGTH kPa (50, 100, 150, 200, 250)
PLASTIC LIMIT — LIQUID LIMIT
w% 20% 40% 60% 80% 100% 100+



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
49	45	6		Moist
20	49	31		Free H_2O
36	64	0		✓

CHAINAGE	OFFSET

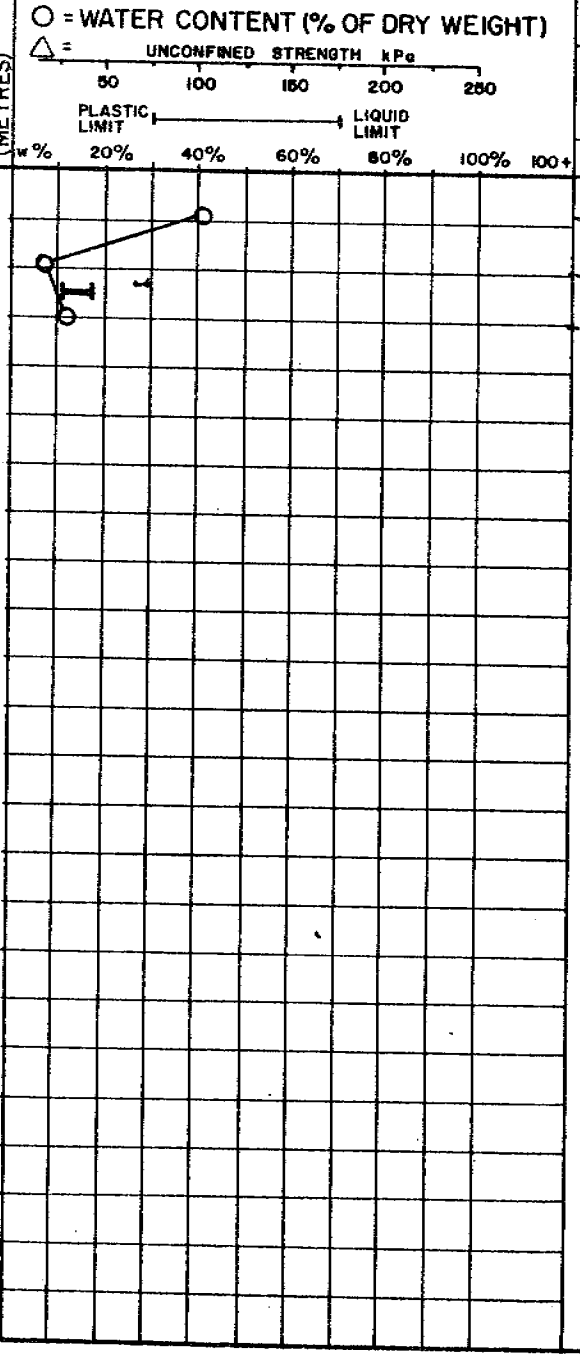
REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. COOK	RIG Air	DATE 80/03/28	km	B.P. No.	HOLE No. R-17

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	CHAINAGE	OFFSET	REMARKS
	Pt	Peat .15m											
2	Se	SAND - Clayey Gravelly		Vs		42	-	46	14	Wet			
4					1	21	-	55	26	Moist			
6	CL	To Clay - Sandy		Vc - Vr		19	-	58	23	Sat.			
8					2								
10		3.4m			3								
12													
14		Bottom of Hole - 3.4m			4								
16													
18					5								
20													
22					6								
24													
26					7								
28													
30					8								
32													
34					9								
36													
38					10								
					11								



PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. Cook | RIG Air | DATE 80/03/28 | km | B.P. No. | HOLE No. R-18

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	Pt	Peat .3m		
2, 4, 6	Sc	Sand-Clayey Gravelly Silty		Vc-Vr
		2.1m		
8, 10, 12, 14		Ice Trace of Soil		Ice & Sc
		4.6m		
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		Bottom of Hole 4.6m		

O = WATER CONTENT (% OF DRY WEIGHT)
Δ = UNCONFINED STRENGTH kPa (50, 100, 150, 200, 250)
PLASTIC LIMIT — LIQUID LIMIT
w% 20% 40% 60% 80% 100% 100+

DEPTH (METRES): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11

GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT
38	35	27		Moist
20	43	37		Sat.
18	53	29		Sat.

CHAINAGE | OFFSET

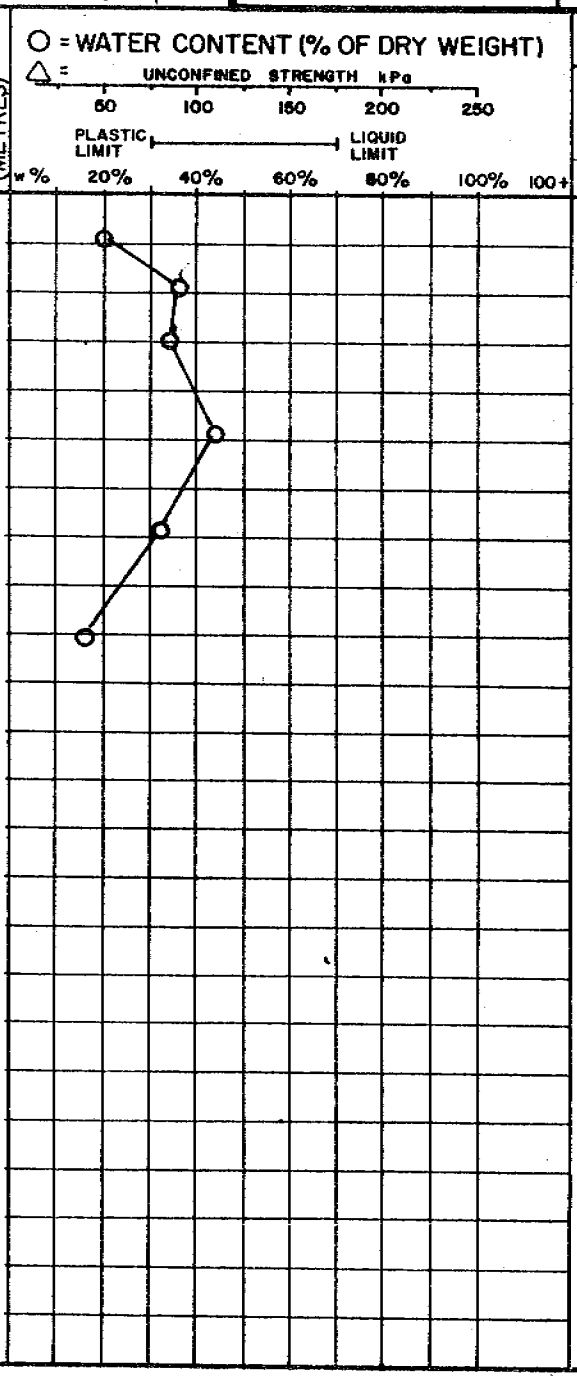
REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk.

TECH. D. COOK	RIG Air	DATE 80/03/28	km	B. P. No.	HOLE No. R-19

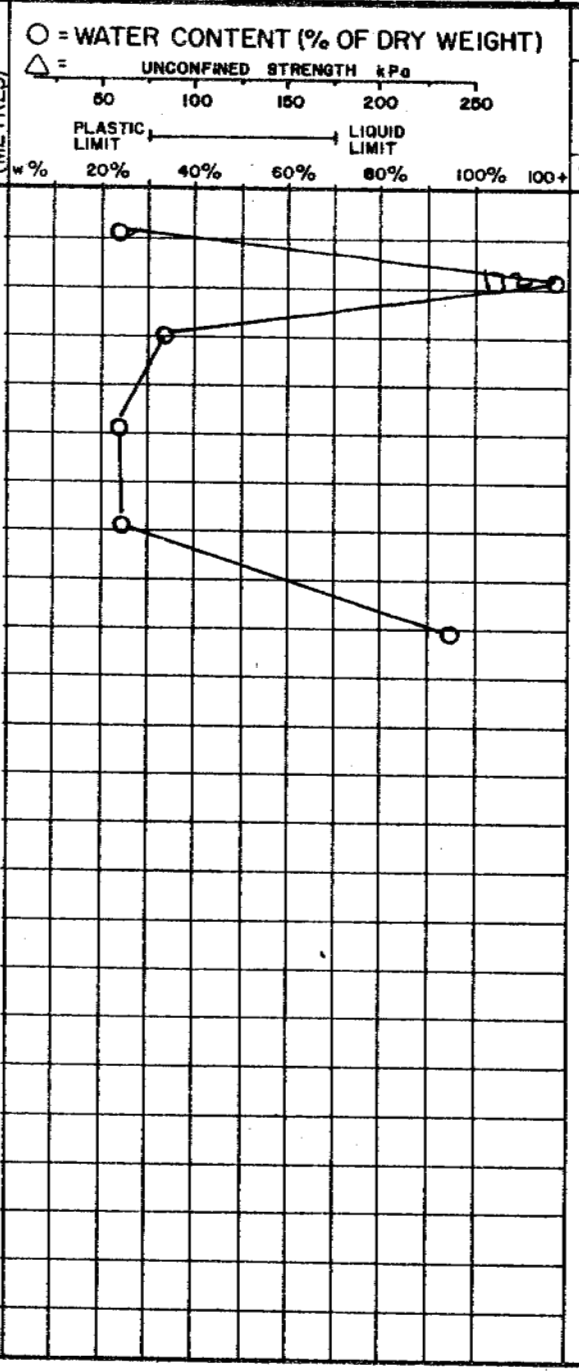
DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	CHAINAGE	OFFSET	REMARKS
	A	PEAT .5m											
2, 4, 6, 8, 10, 12	CL-CI	CLAY - SILTY SANDY PEBBLES		Vs	1, 2, 3					MOIST; FREE H_2O; ✓; ✓; SAT.			
14	CL	CLAY - SANDY GRAVELLY 4.6m		Vc-Vr	4					SAT.			
16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38		BOTTOM OF HOLE - 4.6m			5, 6, 7, 8, 9, 10, 11								



PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | INUVIK-TUK.

TECH. D. COOK | RIG AIR | DATE 80/08/28 | km | B.P. No. | HOLE No. R-20

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	RELATIVE MOISTURE CONTENT	REMARKS
	Pt	PEAT — .5m			MOIST	
2		CLAY - ORGANIC			Free H_2O	
4		CLAY - SILTY PEBBLES			✓	
6	CL - CI			VS		
8		SILTY SANDY PEBBLES			WET	
10						
12					WET	
14		GRAVELLY — 4.6m				
16					Free H_2O	
18		BOTTOM OF HOLE - 4.6m				
20						
22						
24						
26						
28						
30						
32						
34						
36						
38						



GRAIN-SIZE ANALYSIS	CLAY %	SILT %	SAND %	GRAVEL %

CHAINAGE	OFFSET

PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | Inuvik - Tuk.

TECH. D. Cook | RIG Air | DATE 80/03/28 | km | B.P. No. | HOLE No. R-21

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
	Pt	Peat .5m									
2		SAND - GRAVELLY									
4					1	17	70	13		Moist-Wet	
6	SP			Vx		3	71	16		Moist	
8					2	9	56	35		Wet	
10						7	65	28		Moist-Wet	
12		3.7m			3	8	48	44		Wet	
14		Bottom of Hole - 3.7m			4						
16					5						
18											
20					6						
22											
24					7						
26											
28					8						
30											
32					9						
34					10						
36											
38					11						

O = WATER CONTENT (% OF DRY WEIGHT)
△ = UNCONFINED STRENGTH kPa
50 100 150 200 250
PLASTIC LIMIT — LIQUID LIMIT
w% 20% 40% 60% 80% 100% 100+

CHAINAGE | OFFSET

PUBLIC WORKS CANADA — DRILL HOLE REPORT

Inuvik - Tuk

TECH. D. Cook	RIG Air	DATE 80/03/28	km	B.P. No.	HOLE No. R - 22

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	DEPTH (METRES)	RELATIVE MOISTURE CONTENT
	Pt	PEAT				
2		ORGANIC CLAY .6m				WET
4	CL	CLAY. SILTY PEBBLES			1	Free H_2O
6	-			Vs		WET
8	CI				2	
10		3.1m				SAT.
12	ML - SM	SILT - SAND MIX			3	WET
14	SP	SAND-GRAVELLY 4.6m		Vc-Vr	4	WET
16					5	
18		BOTTOM OF HOLE - 4.6m				
20		TILL FROM 4.3 m			6	
22						
24					7	
26						
28					8	
30						
32					9	
34						
36					10	
38					11	

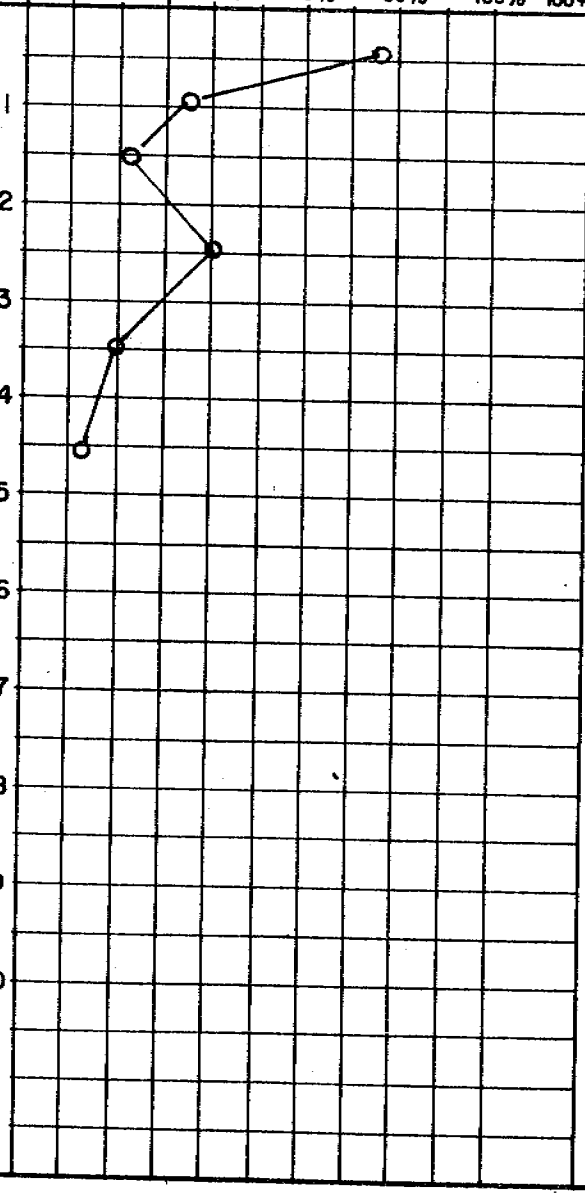
O = WATER CONTENT (% OF DRY WEIGHT)

△ = UNCONFINED STRENGTH kPa

50 100 150 200 250

PLASTIC LIMIT — LIQUID LIMIT

w % 20% 40% 60% 80% 100% 100+



GRAIN-SIZE ANALYSIS			
CLAY %	SILT %	SAND %	GRAVEL %

CHAINAGE	OFFSET

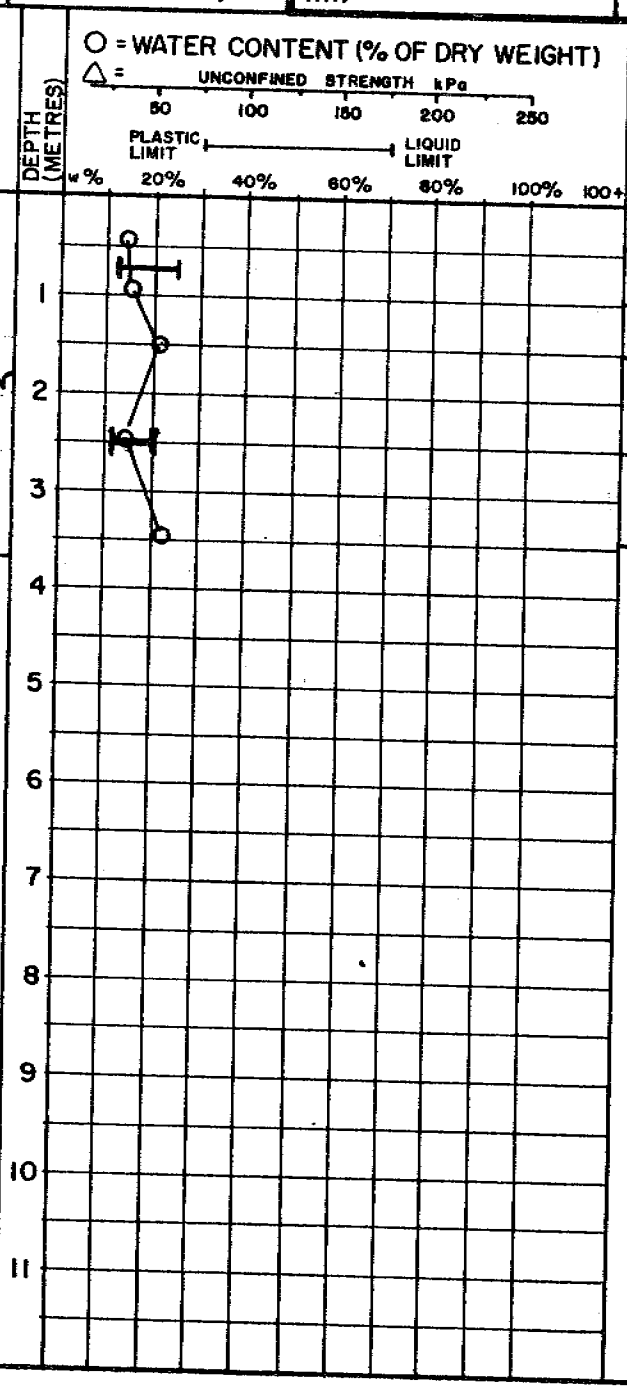
REMARKS

PUBLIC WORKS CANADA — DRILL HOLE REPORT

INUVIK - TUK

TECH. D. COOK | RIG Air | DATE 80/03/28 | km | B.P. No. | HOLE No. R-23

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION
	Pt	PEAT .3m		
2	CL	CLAY - SANDY SILTY GRAVELLY TILL		
4				
6		TO		$V_c - V_r$
8	Sc	SAND - CLAYEY GRAVELLY SILTY TILL		
10	CL			
12		3.7m		
14		BOTTOM OF HOLES 3.7m		
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				



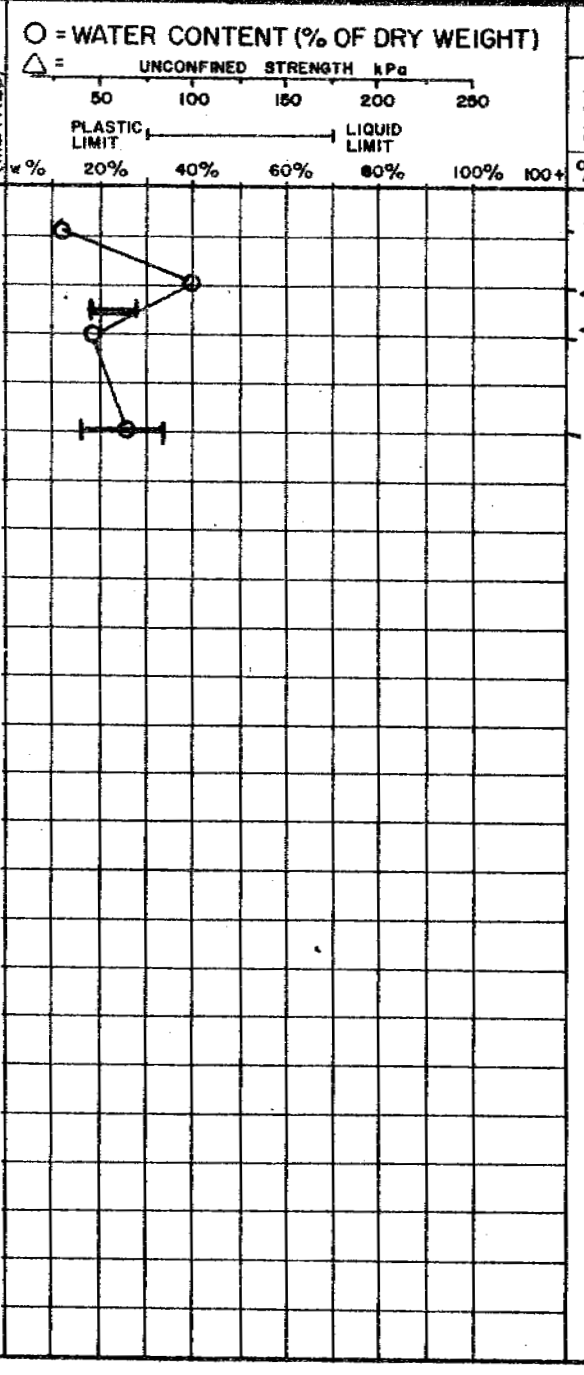
GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	REMARKS
33	52	15		MOIST	
40	51	9		MOIST-WET	
30	37	33		SAT.	
20	50	30		FREE H_2O	
34	46	20		SAT.	

CHAINAGE | OFFSET

PUBLIC WORKS CANADA | **DRILL HOLE REPORT** | INUVIK - TUK.

TECH. D. COOK | RIG AIR | DATE 80/03/28 | km | B.P. No. | HOLE No. R-24

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	PENETRATION RESISTANCE	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE MOISTURE CONTENT	CHAINAGE	OFFSET	REMARKS
	Pt	PEAT										
2		ORGANIC CLAY .6m		Vs	81	-	19	0	FREE H_2O			
4	CL	CLAY - SANDY SILTY LOW PLASTIC GRADUALLY		I	47	-	40	13	WET			
6				Vc - Vs	36	-	46	18	FREE H_2O			
8	CI	MED PLASTIC			58	-	34	8	WET			
10		3.1m										
12		Bottom of Hole - 3.1m										
14		BOULDERS										
16												
18												
20												
22												
24												
26												
28												
30												
32												
34												
36												
38												



Appendix D

SEARCH AREAS #24 and #24A

Landform and Location:	A large number of kames on an outwash plain located roughly 23 miles south of Tuktoyaktuk, and north and west of the Mackenzie Highway between Mile 1030 and 1032.
Material:	Sand and gravel, trace silt.
Volume:	Probably in excess of 500,000 cu. yds. but randomly located in small features.
Conclusion:	Recommend development of several small kames and granular ridges in Area #24A. Development will likely be viable because of the general lack of borrow along this portion of the route.

Topography

This source is a kame field located in a glacio-fluvial outwash plain about 23 miles south of Tuktoyaktuk. The kame field is very large, about three miles long and from 500 feet to one and one half miles in width. Features test drilled vary from roughly one half mile to one and one half miles from the alignment.

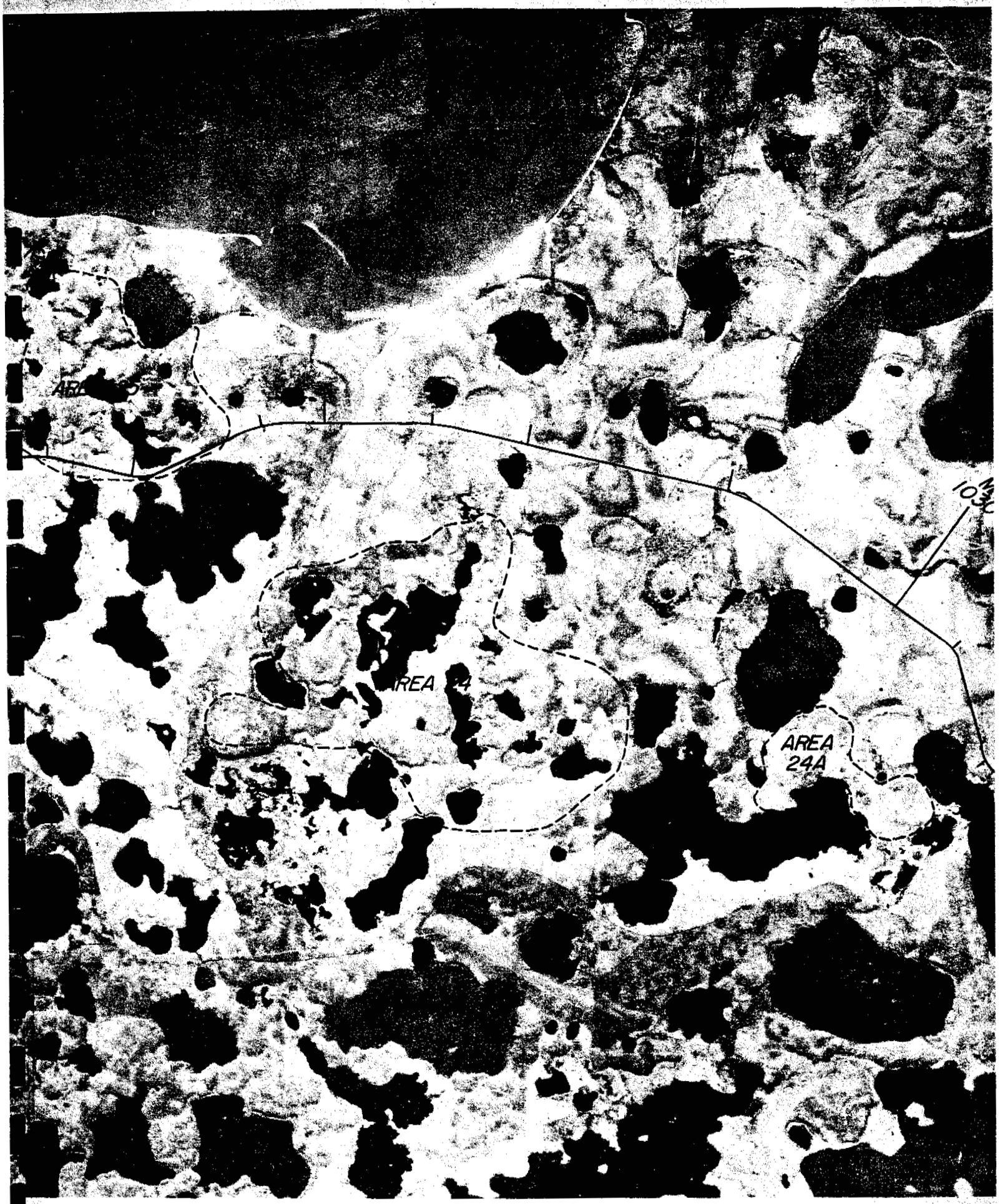
The terrain here is very rough and contains many ponds and hummocks. Kames may vary from 20 to 100 feet above the surrounding terrain and some are in excess of 1,000 feet at their base. Much of the terrain adjacent to the kames shows the polygonal pattern characteristic of massive ground ice, and ice was encountered in many of the test holes.

Materials and Quantities

There are numerous gravel exposures on the surface of kames however these gravel exposures invariably prove to be narrow, shallow and underlain by massive ground ice. Very few features contain sufficient volume of usable material for development as an embankment source. The larger granular features are located roughly one to one and one half miles from

the alignment in Area #24 and are considered to be too far from the highway for development.

There is usable granular borrow in Area #24A roughly one half mile from the alignment near Mile 1029.5. The volume of material here is estimated at probably 150,000 to 200,000 cu. yds. in several small kames and granular ridges. Some of the features will have little or no stripping and further drilling is recommended to define the limits of usable material. Development of these features is considered practical because of the relatively close proximity to the highway and the general lack of embankment borrow through the area. There will be some random massive clear ice layers within the gravels.



SCALE 1:36,0

24-4

24A-4
24A
24A-7

INUVIK - TUK

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 7-4-76 | AIRPHOTO NO. | CHAINAGE | OFFSET
CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA - 24 - 1

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
					Pt	PEAT 4"									
2–16					CL	CLAY - SILTY SANDY PEBBLES LOW PLASTIC		VS	61	35	4				DAMP
									93	7	0				FREE WATER
									62	37	1				SAT.
								Vc-VV	51	47	2				MOIST
						GRAVELLY 17			37	48	15				MOIST
18–24						ICE		ICE							

○ = WATER CONTENT (% OF DRY WEIGHT)
△ = ICE CONTENT (% OF SAMPLE VOLUME)
PLASTIC LIMIT — LIQUID LIMIT
20 40 60 80 100 100+

26'

SAND - SILTY - PEBBLES

BOTTOM OF HOLE - 30'

-38 61 - 1 FREE WATER

SAND - SILTY - PEBBLES

INUVIK - TUK.

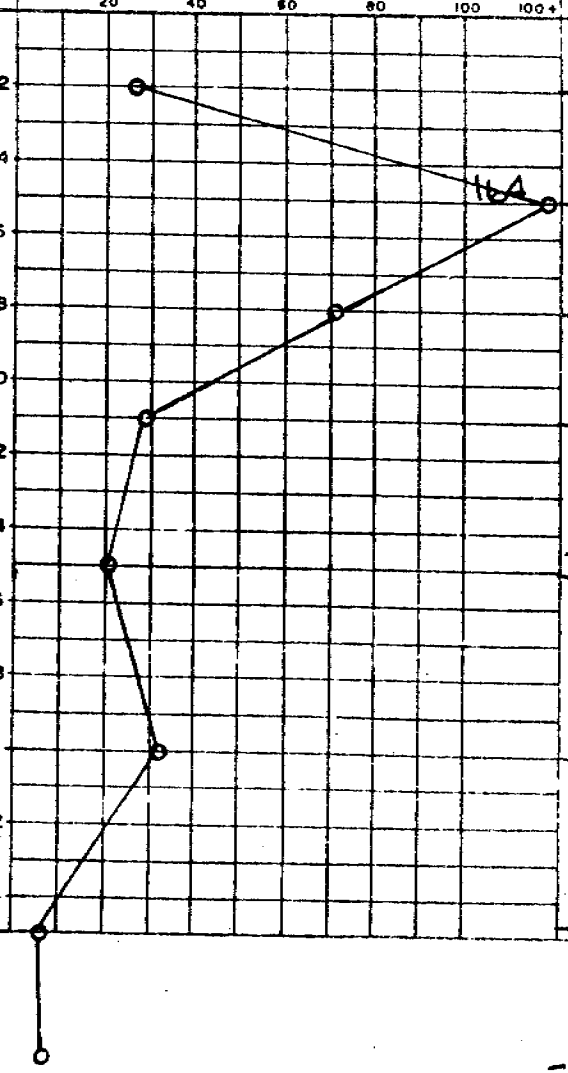
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 2/4/76	AIRPHOTO NO.	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE:	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA -24-2

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT 1'		
2						CLAY-SILTY 2'		
						ICE 3'		ICE
4					Pt	PEAT 5		
6						CLAY · SILTY SANDY		
8						LOW PLASTIC		VS
10					CL	GRAVELLY		
12								
14						PEBBLES		
16								
18								
20								
22								
24						24'		
						GRAVEL - SANDY		



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
86	14	0		DAMP		
98	2	0		SAT.		
63	37	0		PERMAFROST		
63	24	13		SAT		
72	20	8		WET		
68	30	2		MOIST		
75	41	52		SAT.		

GW

-8-39-53 SAT.

BOTTOM OF HOLE - 30'

Tuk - Tuk.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

FIELD ENG
TECH PRONYCH
DATE DRILLED 2/4/76
RIG AIR
AIRPHOTO NO:
CHAINAGE
SURFACE DRAINAGE
VEGETATION
OFFSET
ELEV

TEST HOLE
MILE | B,C,S | NUMBER
AREA-24-3

Unified Soil Symbol	Soil Description	Limits of Frozen Ground	Ice Description	Depth (Feet)	Grain-Size Analysis Clay %	Silt %	Sand %	Gravel %	Wet Density (pcf)	Dry Density (pcf)	Remarks
PT	PEAT 2"										
CL	CLAY - SILTY SANDY PEBBLES 4'			2	80	19	1		DAMP		
	ICE 6'		ICE	4							
CL	CLAY - SILTY PEBBLES LOW PLASTIC 14'		VC-VY	6, 8, 10, 12	91	8	1		SAT.		
GM	GRAVEL - SANDY SILTY 15.5'			14	55	34	11		MOIST		
SM	SAND - SILTY PEBBLES ROCK BIT USED AFTER 16'		VS	16, 18, 20	13	42	45		SAT.		
	GRAVELLY 23'			22	25	71	4		SAT.		
GW	GRAVEL - SANDY 25			24	11	68	21		SAT.		
SM	SAND - SILTY GRAVELLY										

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

PLASTIC LIMIT — LIQUID LIMIT
20 40 60 80 100 100+

BOTTOM OF HOLE - 30'

-7-73-20-SAT.

INUVIK - TUK.

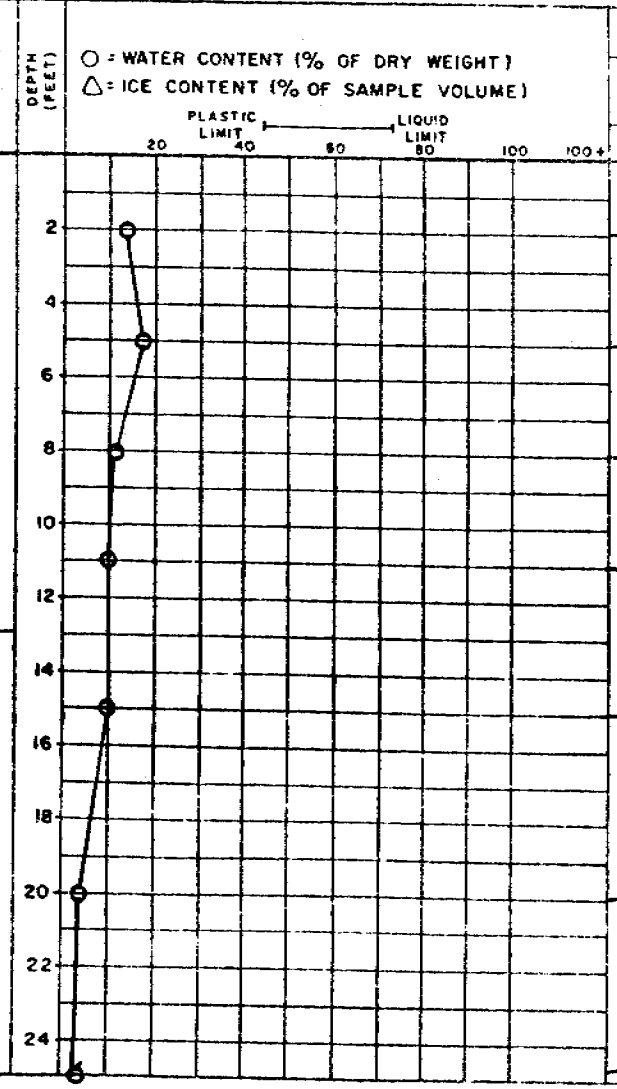
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 24/76 | AIRPHOTO NO: | CHAINAGE | OFFSET
CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA-24-4

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT — 2"		
2					CL	CLAY - SILTY SANDY PEBBLES — 4'		
4					SP	SAND - PEBBLES — 6'		
6					GM	GRAVEL - SANDY SILTY — 11'		Vs
8								
10								
12						SAND - GRAVELLY		
14								
16					SP	SAND - PEBBLES FINE - MEDIUM		Vx
18								
20								
22								
24								



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
56	41	3				DAMP
9	89	2				SAT.
10	24	66				FREE WATER
5	56	39				FREE WATER
4	95	1				MOIST
1	95	4				DAMP
4	89	7				DAMP

BOTTOM OF HOLE - 30'

-3-92-5 DAMP

INUVIK - TUK.

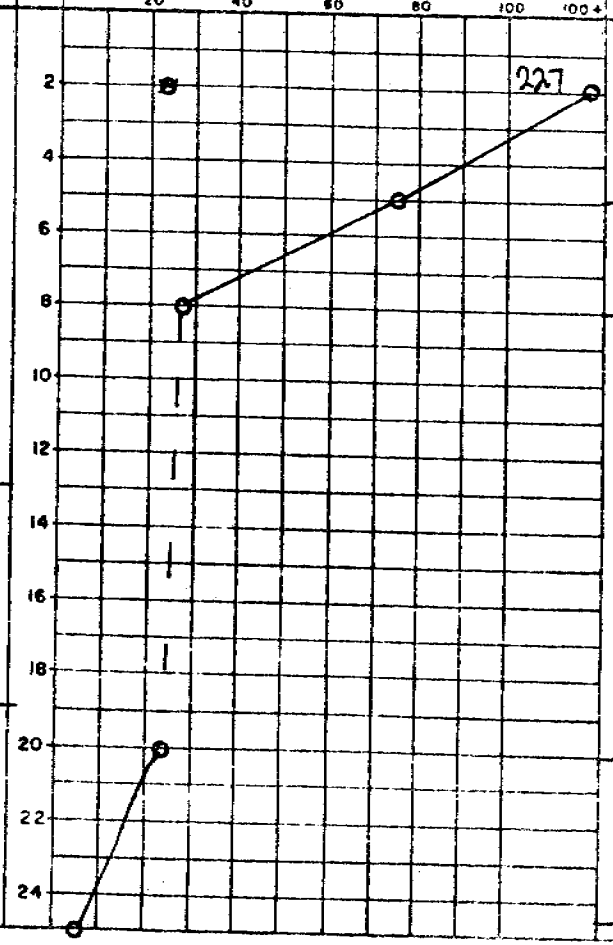
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN: | FIELD ENG: | DATE DRILLED 4/4/76 | AIRPHOTO NO: | CHAINAGE: | OFFSET:
CKD: | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE: | VEGETATION: | ELEV:

TEST HOLE: MILE | B,C,S | NUMBER: AREA-24-5

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
2					Pt	PEAT									
						2.5									
4					CL	CLAY - SILTY SANDY GRAVELLY		Vs							
6					CI				49	35	16		Free WATER		
8									55	28	17		SAT.		
10															
12															
						13'									
14						ICE & SOIL		ICE							
16															
18															
						19'									
20					SP	SAND - FINE			9	91	0		SAT.		
22								Vs							
						23'									
24					GW	GRAVEL - SANDY			7	18	75		SAT		



NEXT PAGE

DRILL HOLE REPORT

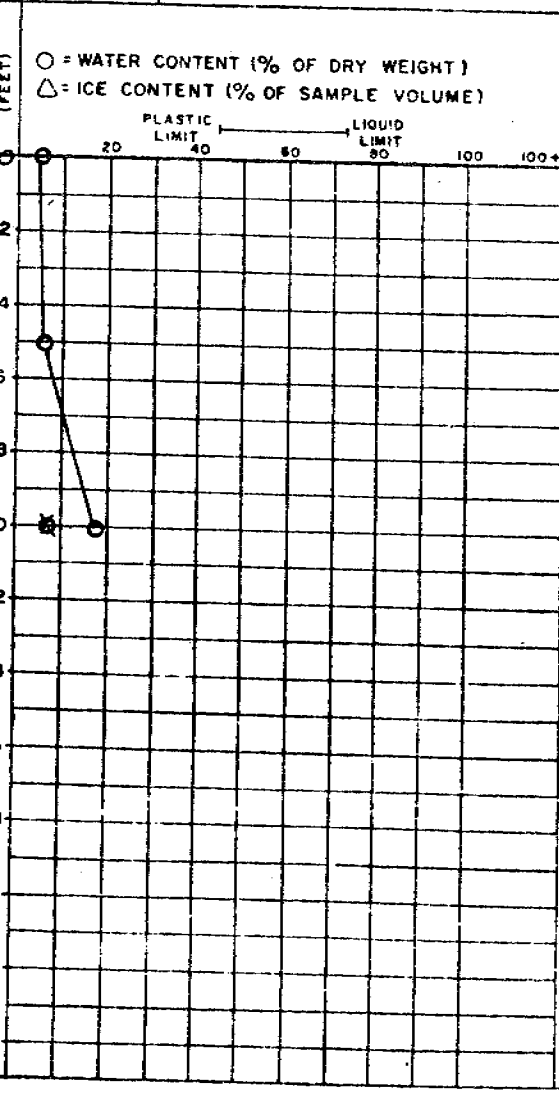
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH	RIG	SURFACE DRAINAGE:	VEGETATION	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
AREA-24-5		

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					GP - GW	GRAVEL - SANDY		Vs	-4-	15	84				SAT
						41'			-1-	23	76				SAT.
									-5-	29	66				FREE WATER
						ICE		ICE							
						45'									
						BOTTOM OF HOLE - 45'									



INUVIK - TUK.

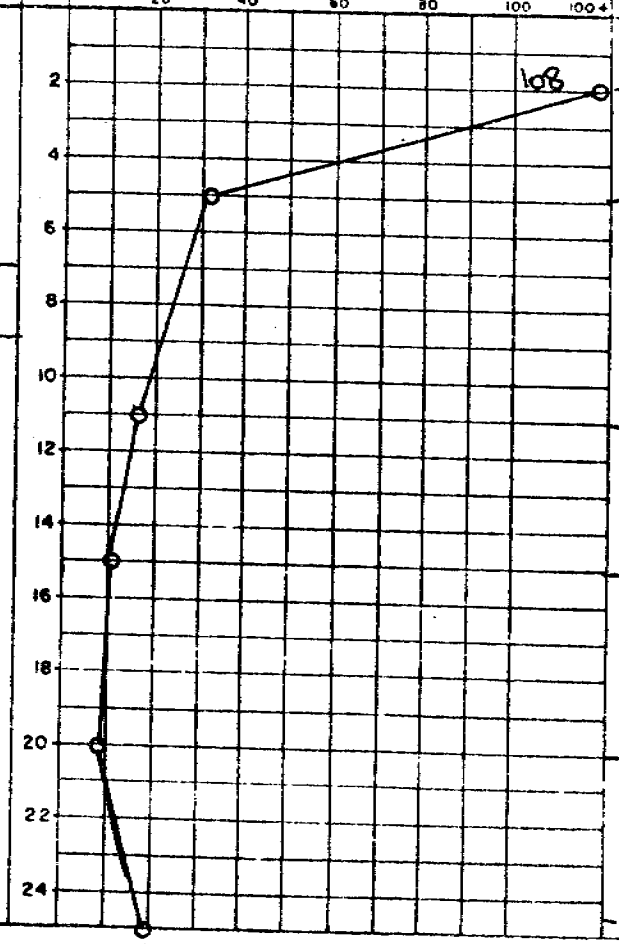
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 4/4/76 | AIRPHOTO NO: | CHAINAGE | OFFSET
CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE: | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA-24-6

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT .5'		
2					CL CI	CLAY - SILTY SANDY 3'		VS
4					ML	SILT - SANDY CLAYEY 7'		
8						ICE 9'		ICE
10						SAND - GRAVELLY SILTY		
16					SM			VS
18								
20								
22								
24						PEBBLES		



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
74	26	0		FREE WATER		
54	46	0		FREE WATER		
11	72	17		FREE WATER		
12	49	39		SAT.		
4	76	20		SAT.		
13	85	2		SAT.		

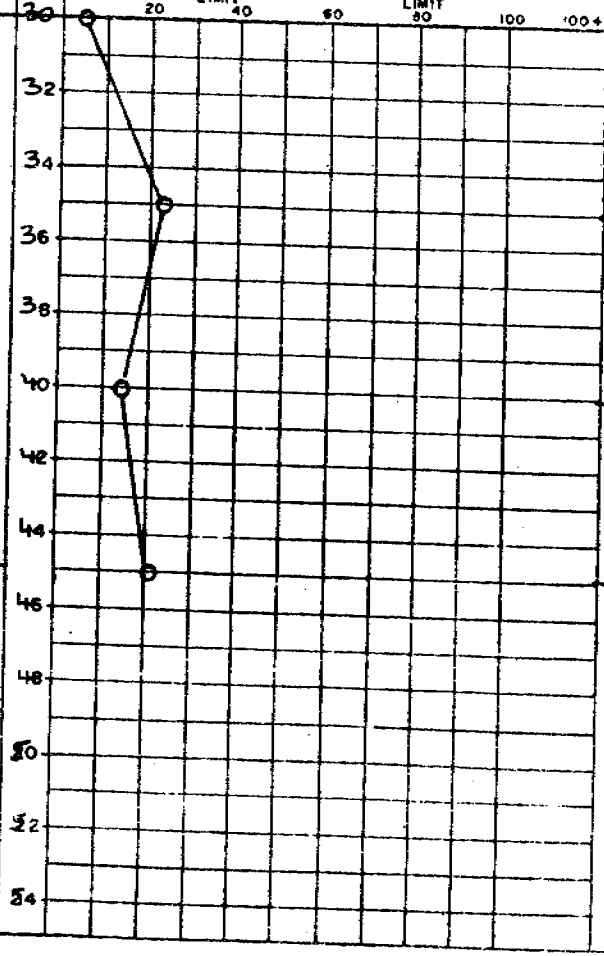
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH	RIG	SURFACE DRAINAGE:	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA - 24 - 6

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
						SAND GRAVEL MIX 32'			2	46	52		SAT.		
						SAND-SILTY PEBBLES			16	82	2		PERMAWATER		
					SM			Vs							
									8	92	0		SAT.		
						45									
						BOTTOM OF HOLE -45'			12	86	2		SAT.		



INUVIK - TUK

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

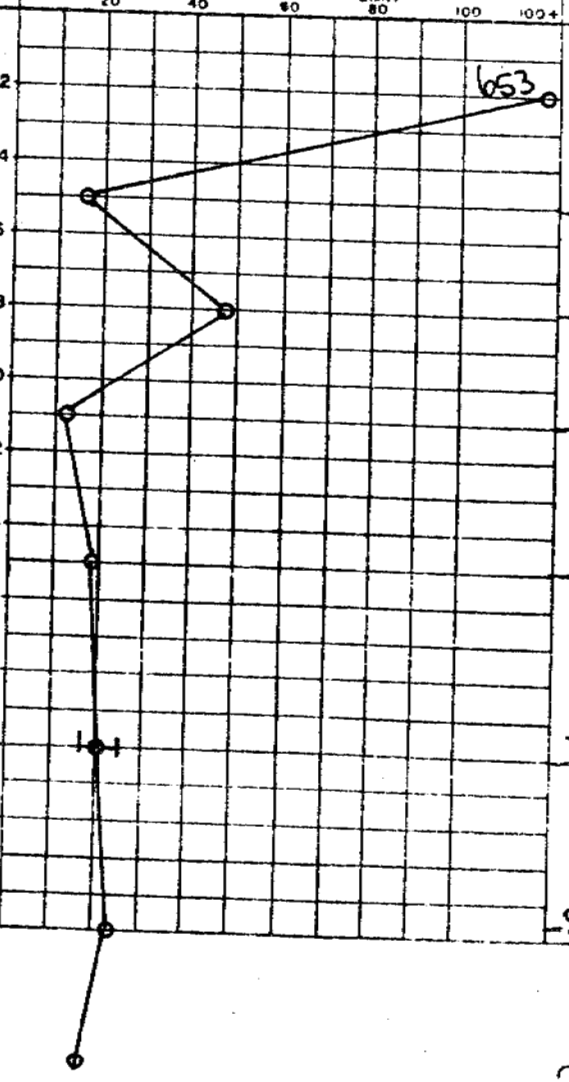
DWN | FIELD ENG | DATE DRILLED 7/4/76 | AIRPHOTO NO | CHAINAGE
CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | OFFSET | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA-24-7

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT 8"									
						SAND 1.5									
					Pt	PEAT 3'									
						SAND-GRAVELLY SILTY		Vs							
					SM	OCCASSINAL GRAVEL LENSE									
						18'									
					CL	CLAY-SILTY SANDY		Vc-Vr							
					ML	SILT-SANDY CLAYEY LOW PLASTIC									
						27'									
					SM	SAND-SILTY									

BOTTOM OF HOLE - 30'

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



ORGANIC					FREE WATER
24	49	27			SAT.
27	66	7			FREE WATER
19	55	26			SAT.
14	78	8			SAT.
70	30	0			WET
82	18	0			MOIST
28	72	0			SAT.

INUVIK - TUK.

DRILL HOLE REPORT

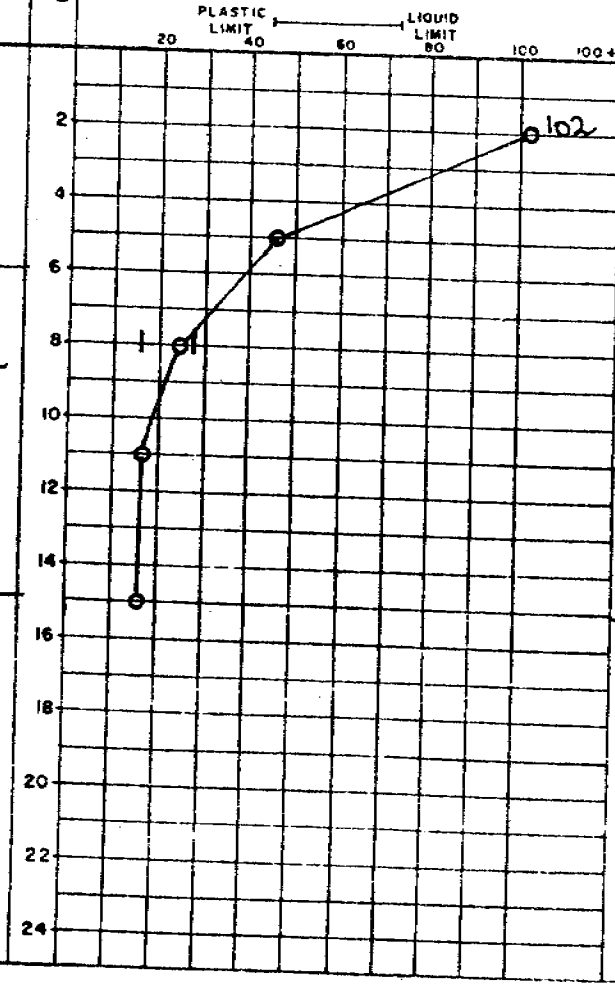
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 7/4/76 | AIRPHOTO NO: | CHAINAGE | OFFSET
CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE: | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA-2A-8

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT		
					Gc	GRAVEL-CLAY-SAND MIX (0–3')		Vs
					CL	CLAY-SILTY SANDY PEBBLES; LOW PLASTIC (3'–15')		Vc-Vs To Vx
						BOTTOM OF HOLE-15'		

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



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
31	30	39				FREE WATER
54	35	11				FREE WATER
73	24	3				WET
19	72	9				MOIST
61	31	8				MOIST

INUVIK - TUK

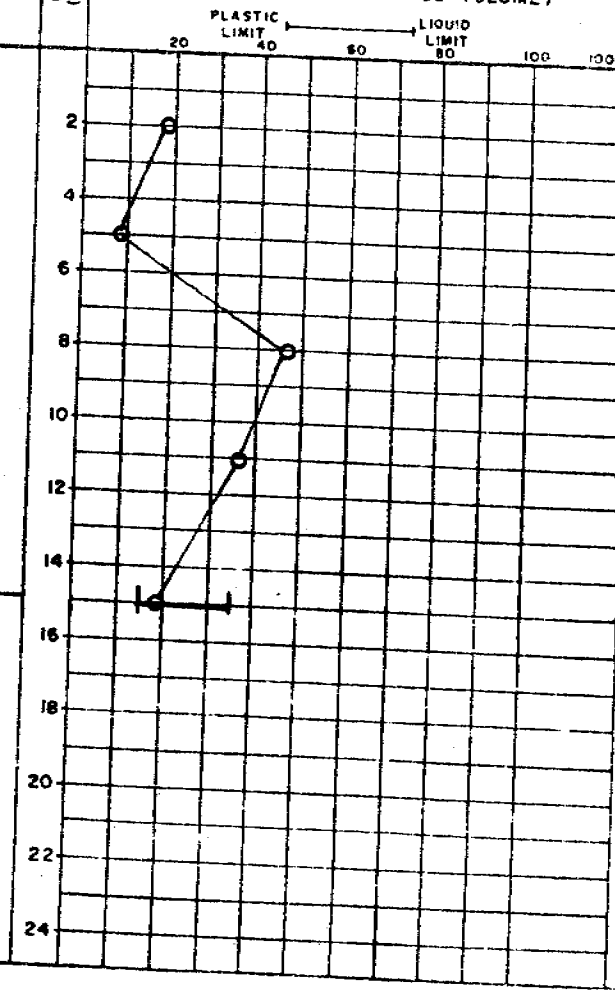
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 1/4/76 | AIRPHOTO NO. | CHAINAGE
CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | OFFSET | ELEV

TEST HOLE: MILE | B,C,S | NUMBER — AREA - 24-9

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
2					CL	CLAY - SILTY SANDY PEBBLES									
					CL			VS							
4						3'			43	34	23		SAT.		
					GM	GRAVEL - SANDY SILTY		TO							
6									14	38	48		WET		
						7'		VC-VF							
8						CLAY - SILTY SANDY			61	39	0		SAT.		
10															
						PEBBLES									
12					CI	MED. PLASTIC			65	28	7		WET		
14								VX							
						15'									
16						BOTTOM OF HOLE - 15'			62	34	4		MOIST		
18															
20															
22															
24															



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DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 7/4/74 | AIRPHOTO NO | CHAINAGE | OFFSET
CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA-24-10

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT 4"									
					Sp	SAND FINE-MEDIUM PEBBLES		Vx	1		83	16	MOIST		
									2		92	6	MOIST		
									4		94	2	MOIST		
									2		98	0	MOIST		
						12 BOTTOM OF HOLE - 12' CAVING									

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

PLASTIC LIMIT — LIQUID LIMIT
20 40 60 80 100 100+

INUVIK - TUK.

DRILL HOLE REPORT

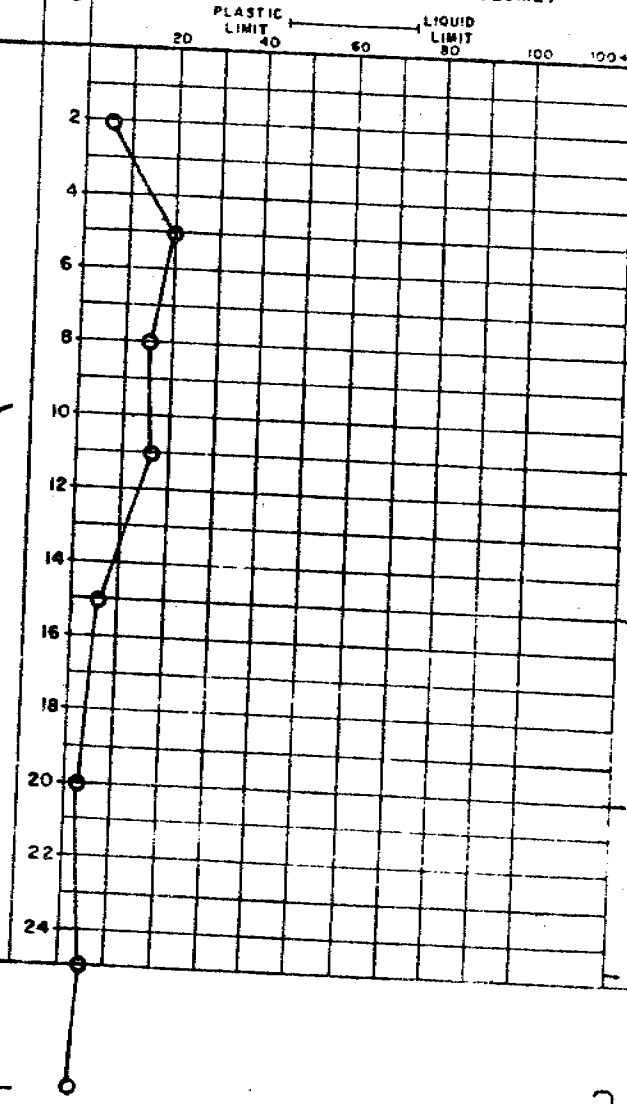
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 7/4/76 | AIRPHOTO NO: | CHAINAGE:
CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE: | VEGETATION: | OFFSET | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA 24-11

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT 2"		
					SM	SAND - SILTY PEBBLES		Vc-Vr
					GW	GRAVEL - SANDY 11.5'		

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



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
12	73	15		Moist		
25	71	4		SAT.		
6	92	2		WET		
13	76	11		WET		
8	40	52		SAT.		
5	23	72		WET		
5	37	58		SAT.		

BOTTOM OF HOLE - 30'

-3-20-77 WET H.I.B.

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DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 1/4/76	AIRPHOTO NO:	CHAINAGE	
CKD	TECH PRANCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	OFFSET
					ELEV

TEST HOLE

MILE	B,C,S	NUMBER
AREA-24-12		

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
						0' PEAT		
2						CLAY - SILTY SANDY PEBBLES — 5'		Vs
6								
8						ICE		ICE
10								
12								
14						15'		
16						BOTTOM OF HOLE - 15		
18								
20								
22								
24								

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

PLASTIC LIMIT — LIQUID LIMIT

20 40 60 80 100 100+

NO SAMPLES

DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
2							
4							
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							

INUVIK - TUK.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

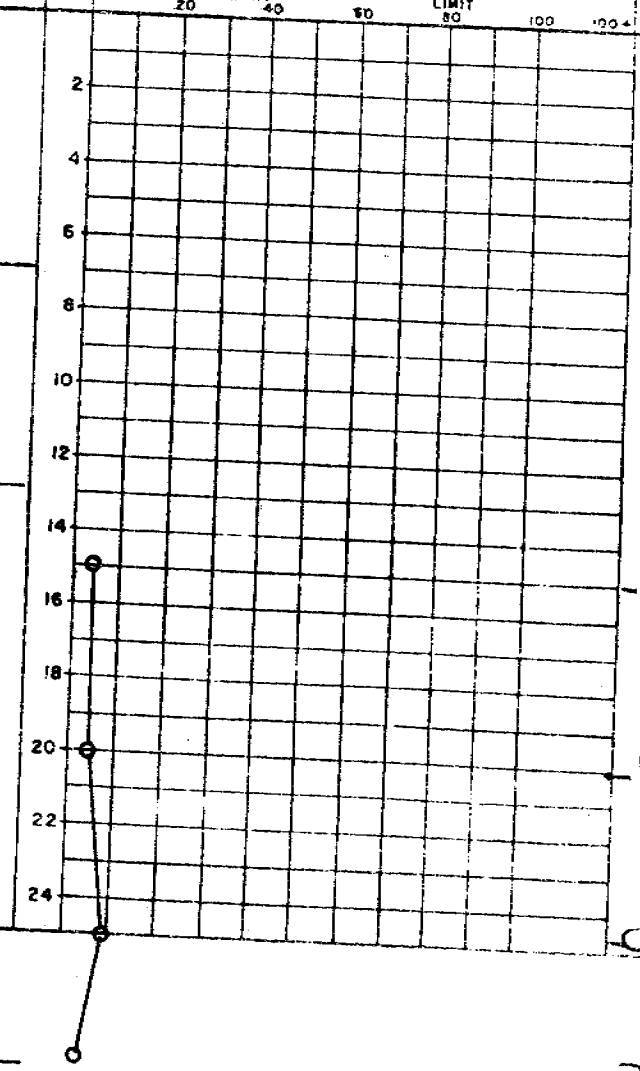
OWN FIELD ENG	DATE DRILLED 1 4 76
CKD BY PRONYCH	RIG AIR
AIRPHOTO NO:	CHAINAGE
SURFACE DRAINAGE:	VEGETATION
OFFSET	ELEV

TEST HOLE: MILE | B,C,S | NUMBER — ARRA-24-13

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT 1'									
						ICE & SOIL 7'		ICE & SOIL							
						ICE 13'		ICE							
					GW	GRAVEL-SANDY		Vc-Vr							
					SW	SAND-GRAVELLY									

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

PLASTIC LIMIT — LIQUID LIMIT



- 4-32 64 WET
- 1-24 75 SAT
- 9-74 17 WET
- 3-17-80 WET

GW GRAVEL-SANDY

BOTTOM OF HOLE - 30'

INUVIK - TUK

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 7/4/76 | AIRPHOTO NO | CHAINAGE | OFFSET

CKD | TECH P. Ronych | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA-24-14

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 ← → LIQUID LIMIT; 20, 40, 60, 80, 100, 100+)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
						Re Rest 4"											
2						SAND - SILTY			2								
4									4								
6								$V_c - V_r$	6	NO SAMPLES							
8					SM				8								
10									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

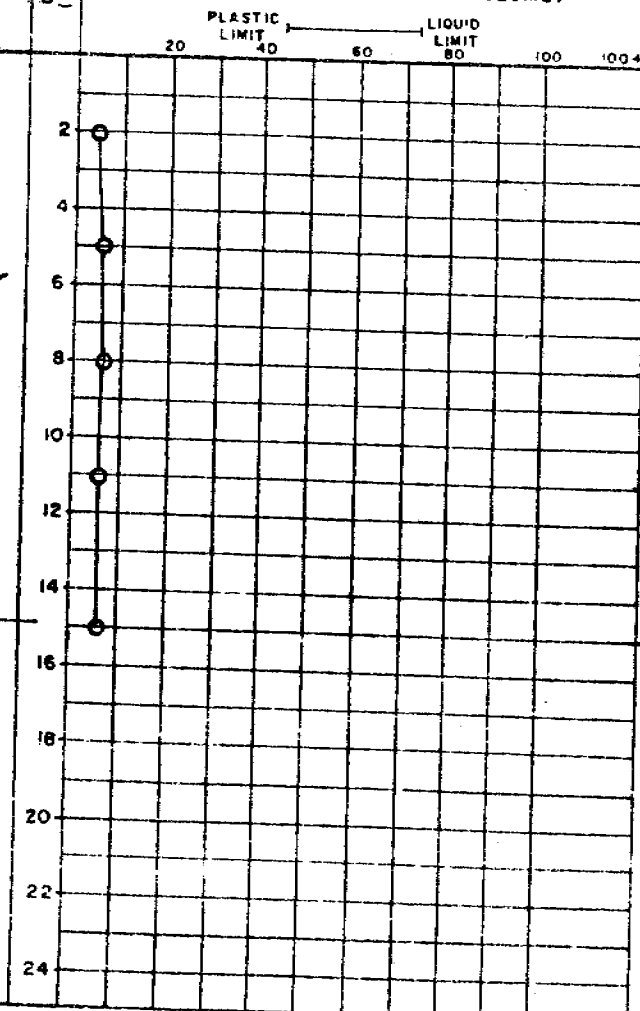
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 7-6-76 | AIRPHOTO NO: | CHAINAGE | OFFSET
CKD | TECH Ronych | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA-24A1

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
						0 PEAT									
2					GP	GRAVEL-SAND MIX 24									
6					SW	SAND GRAVELLY		$V_c - V_r$							
8					GP	GRAVEL-SAND MIX									
12					SM	SAND-SILTY PEBBLES 15'									
						BOTTOM OF HOLE - 15'									

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



CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)
3	56	41		WET
1	66	33		WET
4	62	34		WET
6	41	53		SAT.
22	72	6		SAT.

INUVIK - TUK.

DRILL HOLE REPORT

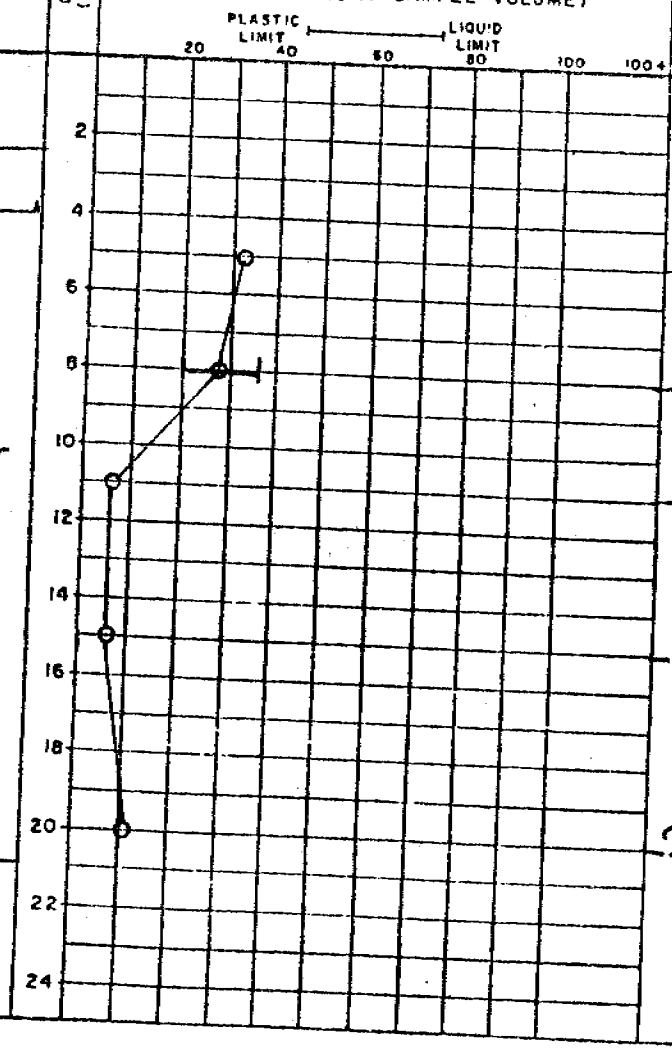
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

FIELD ENG	DATE DRILLED 11-16	AIRPHOTO NO:	CHAINAGE
TECH PROMYCH	RIG AIR	SURFACE DRAINAGE:	OFFSET
		VEGETATION:	ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA-2AA-2

DEPTH (FEET)	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
	Pt	PEAT 8"								
		CLAY - SILTY SANDY 1/2'								
		ICE 4'	ICE							
	Cl	CLAY - SILTY SANDY MED. PLASTIC 10'		68	32	0				SAT.
				70	26	4				SAT.
	Gly	GRAVEL - SANDY 18'	$U_c - V_r$	30	25	72				SAT.
				2	19	79				SAT.
	Sc	SAND - GRAVELLY CLAYEY 21'								
				27	51	22				WET
		BOTTOM OF HOLE - 21'								

O = WATER CONTENT (% OF DRY WEIGHT)
Δ = ICE CONTENT (% OF SAMPLE VOLUME)



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DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DATE DRILLED 7/4/76 | AIRPHOTO NO: | CHAINAGE | OFFSET

TEST PRONYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA-24A-3

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 ⟷ LIQUID LIMIT)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					GW	GRAVEL - SANDY			2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24		3	40	57		WET		
					GW	SAND-GRAVELLY 7'		V_C - VV			2	45	53		MOIST		
					GW	GRAVEL- SANDY 9'					3	69	28		WET		
					GW	15'					4	33	63		SAT.		
						BOTTOM OF HOLE - 15'					1	16	83		SAT.		

INUVIK - TUK

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

FIELD ENG | DATE DRILLED 7/4/76 | AIRPHOTO NO: | CHAINAGE | OFFSET
TECH PRONYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA - 24A-4

SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
				Pt	PEAT 1'										
					ICE & ORGANICS		ICE & OH	2, 4							
					ICE & SAND		ICE & SM	6, 8, 10							
				GM	GRAVEL - SANDY SILTY 15'			12, 14							
					BOTTOM OF HOLE - 15'			16, 18, 20, 22, 24							

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

PLASTIC LIMIT ⟷ LIQUID LIMIT
20 40 60 80 100 100+

NO SAMPLES

INUVIK - TUK.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

FIELD ENG | DATE DRILLED 4/76 | AIRPHOTO NO: | CHAINAGE: | OFFSET

TECH PROVICH | RIG AIR | SURFACE DRAINAGE: | VEGETATION: | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA-24A-5

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) (PLASTIC LIMIT — LIQUID LIMIT; 20, 40, 60, 80, 100, 100+)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
				Pt	PEAT .5'											
				CL - CI	CLAY - SILTY SANDY PEBBLES		Vs	2, 4, 6	NO SAMPLES							
							Vc - Vx	8, 10, 12								
					14'			14								
					GRAVEL - SANDY 15'											
					BOTTOM OF HOLE - 15'			16, 18, 20, 22, 24								

Inuvik - Tuk

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

FIELD ENG	DATE DRILLED 7/4/76	AIRPHOTO NO:	CHAINAGE
TECH Pronych	RIG Air	SURFACE DRAINAGE	VEGETATION
		OFFSET	ELEV

TEST HOLE: MILE | B,C,S | NUMBER: ABTD-24A-7

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT 2'									
2					CL	CLAY - SILTY SANDY GRAVELLY PEBBLES 7'		Vs	41	36	23		WET		
4															
6									80	19	1		FREE WATER		
8					SM	SAND - GRAVELLY SILTY 15'		Vc - Vf	21	61	18		SAT.		
10									11	61	28		WET		
12															
14						BOTTOM OF HOLE - 15'			8	56	36		WET		
16															
18															
20															
22															
24															

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

PLASTIC LIMIT — LIQUID LIMIT
20 40 60 80 100 100+

INUVIK - TUK

DRILL HOLE REPORT

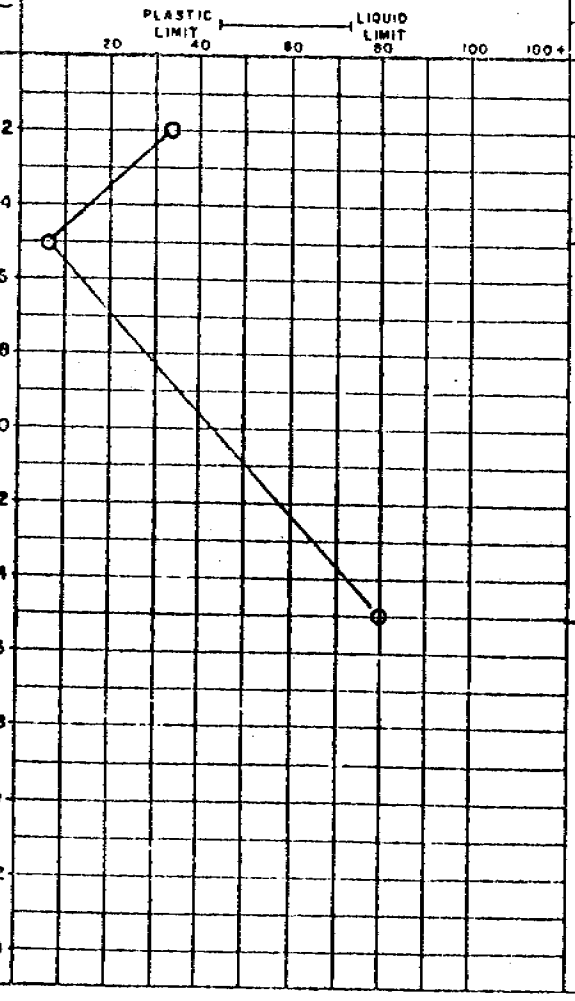
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

FIELD ENG | DATE DRILLED 7/4/76 | AIRPHOTO NO: | CHAINAGE | OFFSET
TECH PRONYCH | RIG AIR | SURFACE DRAINAGE: | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA - 24A-6

SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
				Pt	PEAT 4"										
				CL	CLAY - SILTY SANDY 3'		Vs	2	68	30	2		SAT.		
				SW	SAND - GRAVELLY 6'			4	7	55	38		SAT.		
					ICE		ICE	6, 8, 10, 12							
					13										
				SM	SAND - SILTY 15'		Vs	14	24	76	0		FREE WATER		
					BOTTOM OF HOLE 15'			16, 18, 20, 22, 24							

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



SEARCH AREA #25

Landform and Location:	A concentration of kames on an outwash plain located roughly 20 miles south of Tuktoyaktuk and adjacent to the Mackenzie Highway at Mile 1034.
Material:	Sands and gravels trace silt.
Stripping:	Variable from 0 to 6-7 feet.
Volume:	Probably 1,000,000 cu. yds. in several features.
Conclusion:	A good source of embankment borrow immediately adjacent to the highway. Materials will be wet on thawing but will drain in place. Some massive ground ice can be expected. Several features will have to developed. Further drilling required.

Topography

This source is a concentration of kames located on a glacio-fluvial outwash plain about 20 miles south of Tuktoyaktuk. The kame field is large, roughly one mile square and is adjacent to the highway between Mile 1033.5 and 1034.5.

The terrain is very irregular and contains many ponds and hummocks. Individual kames may vary up to 100 feet above the surrounding terrain, and most are steep-sided, elongate features which may vary up to 400 feet in width and in excess of 1,000 feet in length. Much of the terrain adjacent to the kames shows the pologonal pattern characteristic of massive ground ice and ice was encountered in may test holes.

Materials and Quantities

These kames deposits are very erratic. There are numerous gravel exposures on the surface and faces of the kames, however, the granular exposures in many instances tend to be discontinuous, narrow, and shallow, and underlain by massive ground ice. There is, however, significant volumes of usable material here, partially in the form of large gravel ridges and gravel exposures on the kames, and partially in the form of gravel beds on the

many instances tend to be discontinuous, narrow, and shallow, and underlain

flats adjacent to the kames (i.e., holes #12, #15 and #16). The sands and gravels contain some ice but moisture contents on thawing are generally less than 10 - 15% - these materials will drain readily. Sufficient drilling has been carried out only to verify that there are significant quantities of granular materials here and, because of the extreme variability, drilling patterns will be required to define the preferred areas. It is considered unlikely that any large borrow pit can be developed without encountering some massive ground ice within the sands and gravels. Volumes here are estimated in excess of 1,000,000 cu. yds. with development of several pit areas required. Excavation can best be accomplished by stripping thawed materials periodically throughout the summer to eliminate ice in the final product.

RLA 25
103
34+27+30
25-8
25-9
25-7
25-14
25-16
25-15
25-54
25-16

INUVIK - TUK.

DRILL HOLE REPORT

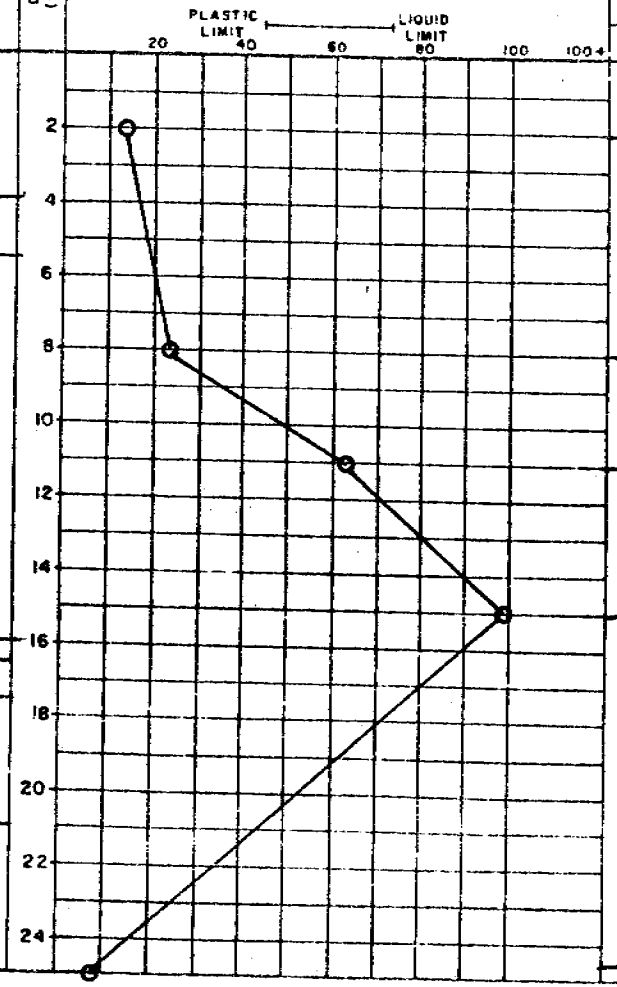
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 3/4/76 | AIRPHOTO NO: | CHAINAGE | OFFSET
CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA - 25 - 1

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT									
					OL	CLAY - SILTY SANDY PEBBLES 2'		VX	46	52	2				MOIST
4					CI	4'									
						ICE & SOIL 5½'		ICE							
6						SAND-CLAYEY GRAVELLY									
8									32	48	20				FREE WATER
10					SC	PEBBLES		VS							
12									28	66	6				FREE WATER
14						GRAVELLY 15'									
					SM	SAND - SILTY GRAVELLY			24	62	14				FREE WATER
						ICE		ICE							
					GW	ROCK BIT USED AFTER 15									
18															
20						ICE		ICE							
22						GRAVEL - SANDY									
24					GW			VS	1	39	60				SAT.

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



NEXT PAGE

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

WN	FIELD ENG	DATE DRILLED	AIRPHOTO NO	CHAINAGE	OFFSET
KD	TECH	RIG	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
AREA - 25 - 1		

(FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
					GW	GRAVEL-SANDY			30	1		42	57	SAT.		
									32							
									34							
									36	8		43	49	SAT.		
								Vs	38							
						SILTY			40	16		44	40	FREE WATER		
					GM				42							
						45'			44							
						BOTTOM OF HOLE - 45'			46	7		45	48	SAT.		
									48							
									50							
									52							
									54							

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

PLASTIC LIMIT — LIQUID LIMIT
20 40 60 80 100 100+

INUVIK - TUK

DRILL HOLE REPORT

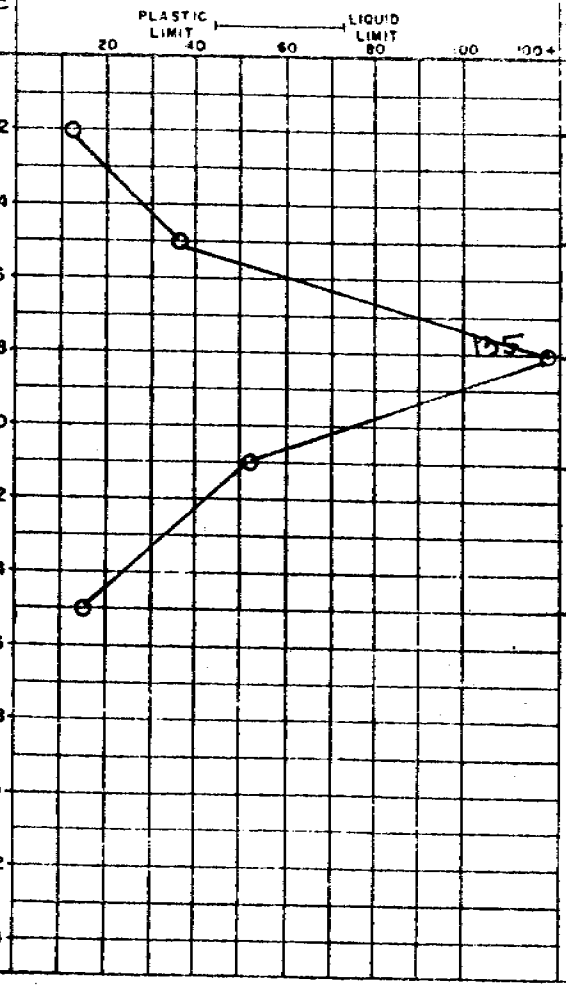
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRAWN	FIELD ENG	DATE DRILLED 3/4/76	AIRPHOTO NO.	CHAINAGE	OFFSET
CHKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER — AREA - 25-2

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
					Pt	PEAT 2"									
2					CL	CLAY - SANDY SILTY GRAVELLY			43	42		15			MOIST
4															
6					Sc	SAND - CLAYEY GRAVELLY SILTY			31	56		13			FREEWATER
8									22	61		17			FREEWATER
10						10'									
12					GM	SAND-GRAVEL MIX SILTY			12	48		40			FREEWATER
14					SM										
16									18	55		27			FREEWATER
18															
20						ICE		ICE							
22															
24															

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



26'

DRILL HOLE REPORT

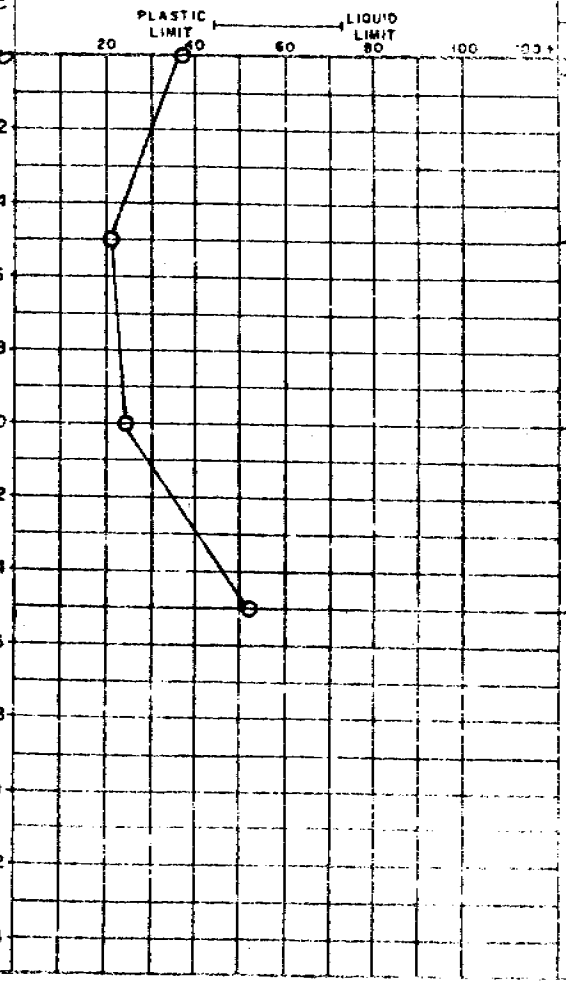
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH	RIG	SURFACE DRAINAGE:	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER: ARTA-25-2

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
						SAND - FINE			5		95	0			FREE WATER
					SP			Vs	8		92	0			SAT.
									11		89	0			FREE WATER
						45' BOTTOM OF HOLE-45'			8		92	0			FREE WATER

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



INUVIK - TUK

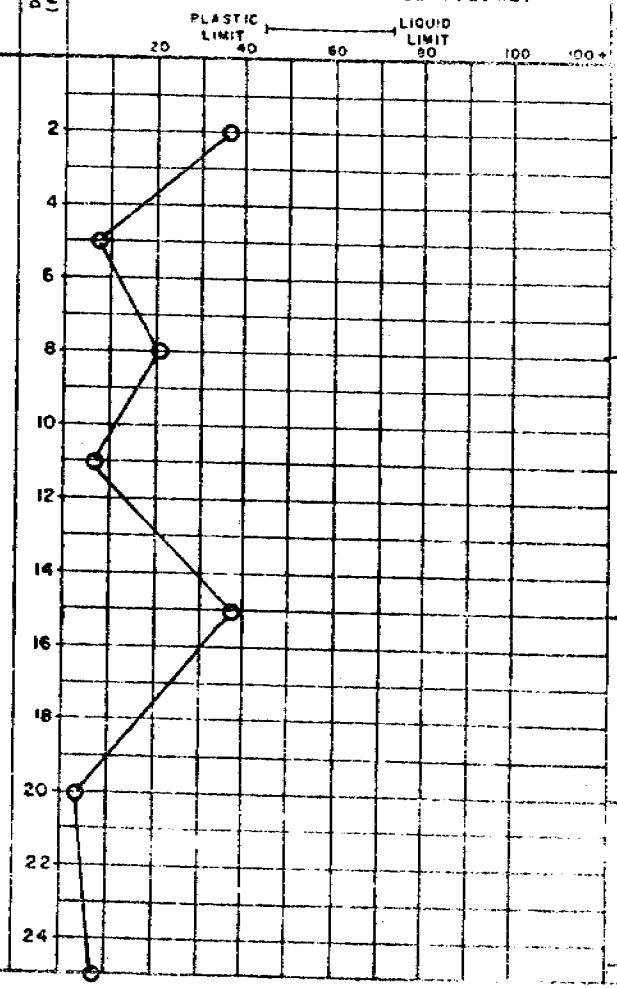
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRAWN	FIELD ENG	DATE DRILLED 3/4/76	AIRPHOTO NO.	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER — AREA - 25 - 3

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					CL	CLAY - SILTY SANDY PEBBLES MED. PLASTIC			78	21	1				DAMP
4'					GW	GRAVEL - SANDY			8	32	60				SAT
6'					SM	SAND - SILTY GRAVELLY			23	59	18				FREE WATER
10					GW	GRAVEL - SANDY		Vs	10	22	68				SAT.
									8	21	71				FREE WATER
									1	05	14				SAT.
									2	23	75				SAT.



27'

ICE ICE

ICE TO 45'

BOTTOM OF HOLE - 45'

INUVIK - TUK.

DRILL HOLE REPORT

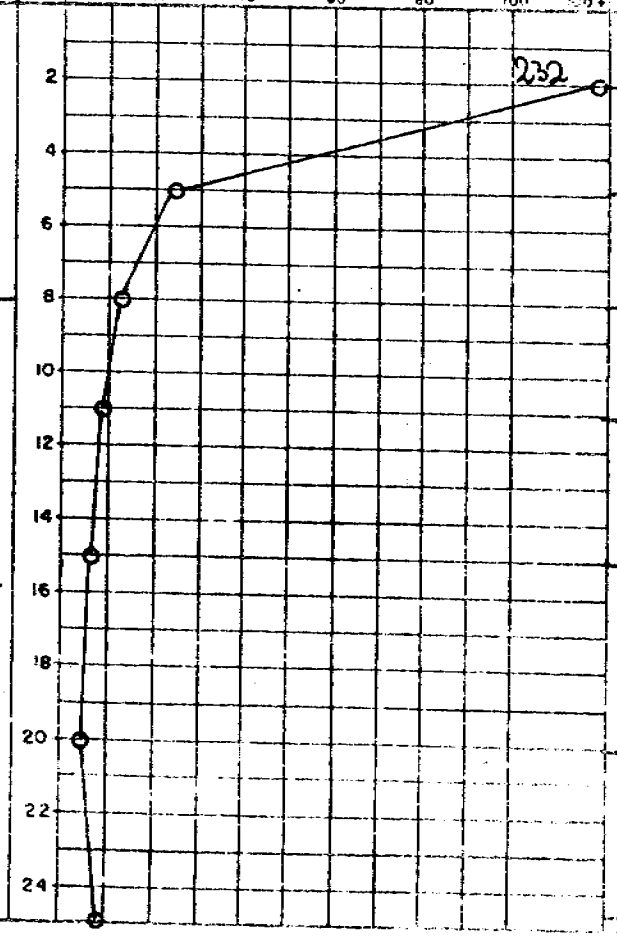
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 3/4/86	AIRPHOTO NO.
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE

CHAINAGE | OFFSET | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER — AREA - 25-4

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT — 2"		
					CL	CLAY - SILTY SANDY GRAVELLY LOW PLASTIC		Vs
						8'		
					GW	GRAVEL - SANDY		Vc - Vr



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
58	27	15		FREEWATER		
56	22	22		SAT.		
29	30	41		SAT.		
9	35	56		SAT.		
10	46	44		SAT		
3	24	73		SAT.		
3	17	80		SAT		

Hole CAVING

Bottom of Hole - 30

2-13-85

Hole CAVING

INUVIK - TUK.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 5/4/76	AIRPHOTO NO	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA - 25 - 5

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 — LIQUID LIMIT; 20 40 60 80 100 100+)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
					GW	GRAVEL - SANDY Loose		NOT FROZEN									
4						Hole CAVING			2								
6						6'			4	NO SAMPLES							
8						BOTTOM OF HOLE - 6'			6								
10									8								
12									10								
14									12								
16									14								
18									16								
20									18								
22									20								
24									22								
									24								

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

INUVIK - TUK.

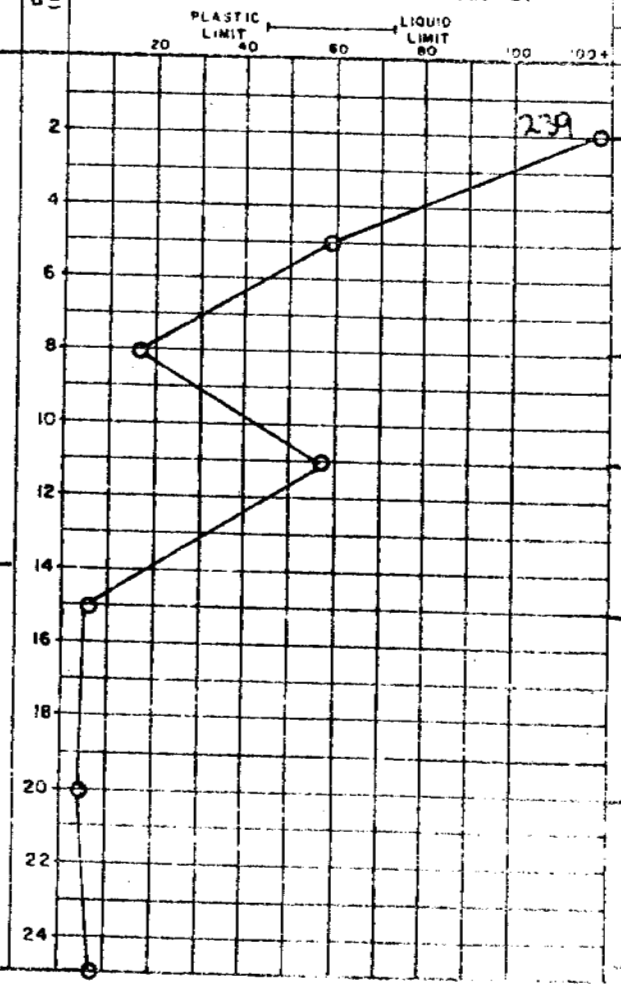
DWN | FIELD ENG | DATE DRILLED 3-4-76 | AIRPHOTO NO | CHAINAGE | OFFSET
CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE 8,C,S NUMBER ADDA-25-6

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT		
					CL	CLAY - SILTY SANDY LOW-MED. PLASTIC (2")		
					SC	SAND - SILTY CLAYEY PEBBLES - GRAVELLY (6')		Vs
					GW	GRAVEL - SANDY (14')		VL-Vr

SAND - SILTY (26.5')

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



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
78	22	0				FREE WATER
56	37	7				FREE WATER
40	56	4				SAT.
38	42	18				FREE WATER
7	27	66				SAT.
3	30	67				SAT.
4	31	65				SAT.

26.5

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

CKD	FIELD ENG	DATE DRILLED	AIRPHOTO NO	CHAINAGE	OFFSET
	TECH	RIG	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER: Area -25-6

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 CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
					GM	SAND - SILTY		Vs	30	-	19 -	81	0			FREE WATER
									32							
									34							
						NO RETURNS AFTER 33'			36							
									38							
									40							
						42			42							
						BOTTOM OF HOLE - 42'			44							
									46							
									48							
									50							
									52							
									54							

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

PLASTIC LIMIT ○ — LIQUID LIMIT
20 40 60 80 100 100+

INUVIK - TUK

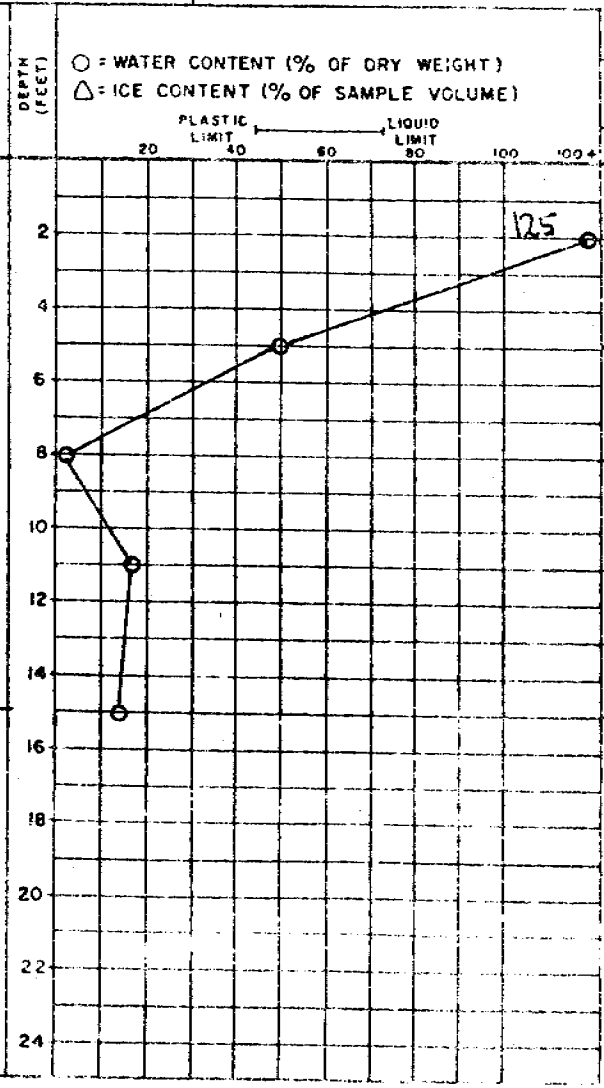
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 3/4/76 | AIRPHOTO NO | CHAINAGE | OFFSET
CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA - 25 - 7

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT — 1'		
						CLAY - SILTY		VS
					CL	SANDY LOW PLASTIC — 6'		
					SW	SAND - GRAVELLY		
					SM	SILTY GRAVELLY — 15'		VS
						BOTTOM OF HOLE - 15'		
						CAVING		



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
91	9	0				FREE WATER
78	22	0				FREE WATER
6	69	25				SAT. ?
5	92	3				SAT.
15	59	26				SAT.

INUVIK - TUK.

DRILL HOLE REPORT

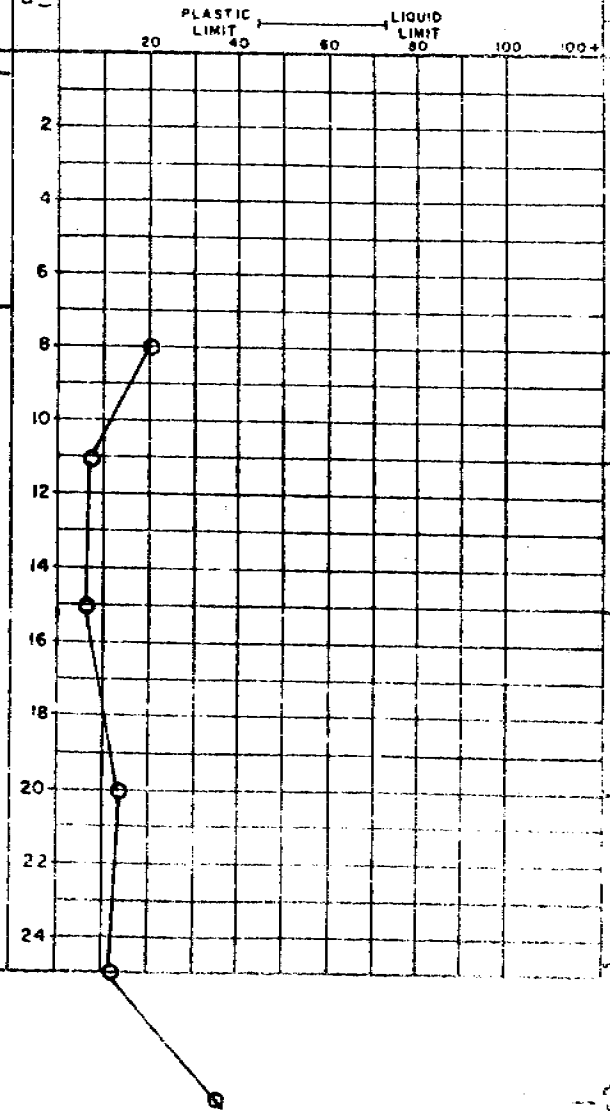
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DOWN	FIELD ENG	DATE DRILLED 3/4/72	AIRPHOTO NO.	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER — AREA-25-8

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT — 2"									
4, 6						ICE & SOIL — 7'		ICE & CL-CI							
8					GM	SAND-SILTY — 9'									
10, 12, 14					GM	GRAVEL-SANDY SILTY		Vs							
18					GW	SAND-GRAVELLY — 18'									
20, 22, 24					GM	SILTY-GRAVELLY									

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



	CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
10	9	0					SAT.
16	38	46					SAT.
2	23	75					SAT.
3	16	30					FREE WATER
14	56	30					SAT.
22	61	11					FREE WATER

BOTTOM OF HOLE - 30'

INUVIK - TUK.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 5/4/76 | AIRPHOTO NO: | CHAINAGE | OFFSET
CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE: | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER — AREA - 25-9

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
					Pt	PEAT — 1'									
						CLAY - SILTY SANDY		Vs							
4						ICE		ICE							
6						CLAY - SILTY SANDY		Vs							
8															
10															
12															
14															
						ICE		ICE							
18															
20															
22															
24						GRAVEL - SANDY		Vs							

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

PLASTIC LIMIT — LIQUID LIMIT
20 40 60 80 100 100+

NO SAMPLES

Bottom of Hole - 27'
No Returns

INUVIK - TUK.

DRILL HOLE REPORT

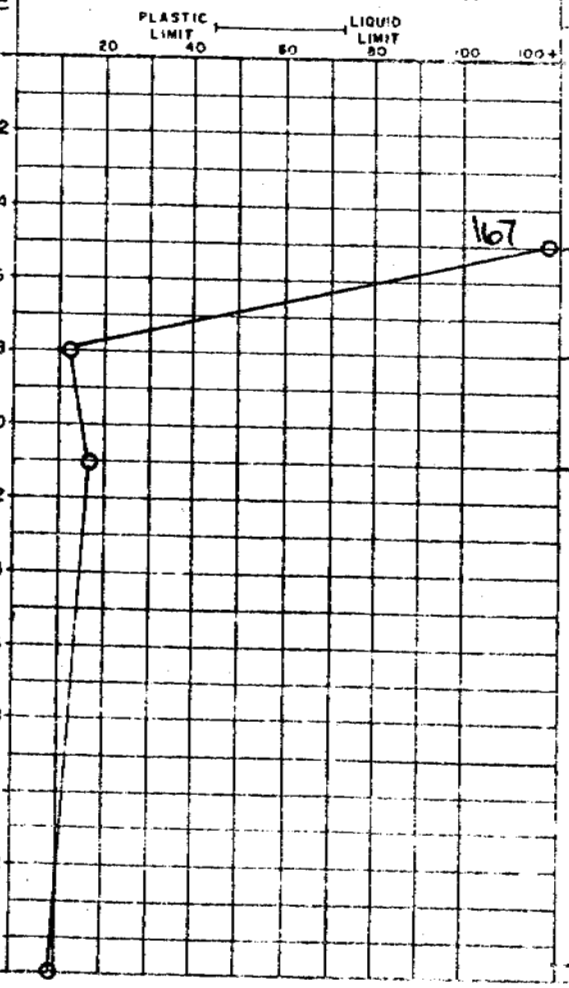
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 3/4/76 | AIRPHOTO NO: | CHAINAGE | OFFSET
CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA - 25 - 10

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt.	PEAT		
					CL	CLAY - SILTY SANDY (2.5')		Vs
					CI	(7')		
					GW SW	SAND-GRAVEL MIX (12')		
						ICE (15.5)		ICE
					GW	GRAVEL-SANDY (19')		
					GP	SAND - PEBBLES		Vc-Vr

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



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
85	15	0				FREE WATER
14	45	41		WET		
7	50	43		FREE WATER		
4	91	5		WET		

CAVING

BOTTOM OF HOLE - 27'

Inuvik - Tuk

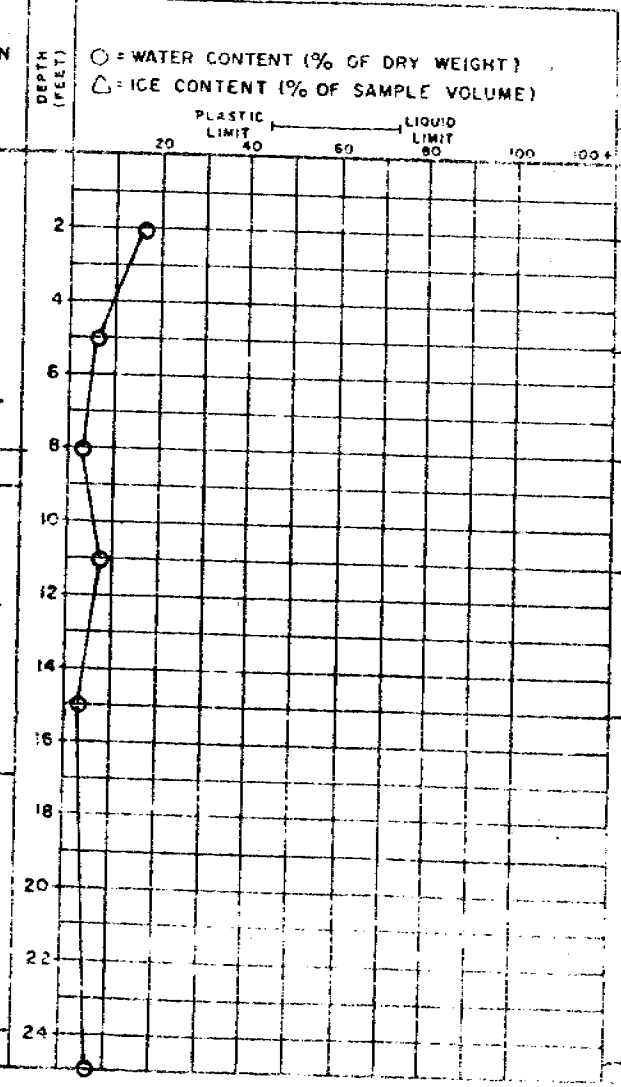
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 3/4/76 | AIRPHOTO NO. | CHAINAGE | OFFSET
CKD | TECH Pronych | RIG Air | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER — AREA - 25 - 11

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					PT	PEAT 2"		
					CL	CLAY - Sandy Silty Pebbles 3'		
					CL			
4						GRAVEL - SANDY		Vs
6					GW			
8						8'		Vc - Vr
						ICE 9'		ICE
10						GRAVEL - SANDY		
12					GW			Vc - Vr
14								
18								
20						ICE		ICE
22								
24								
						SAND - GRAVEL Mix.		
					GP			



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
54	40	6				DAMP
4	39	59				SAT.
5	32	63				SAT.
3	31	66				SAT
2	34	64				SAT
1	57	42				SAT.

Bottom of Hole. 30'

INUVIK - TUK.

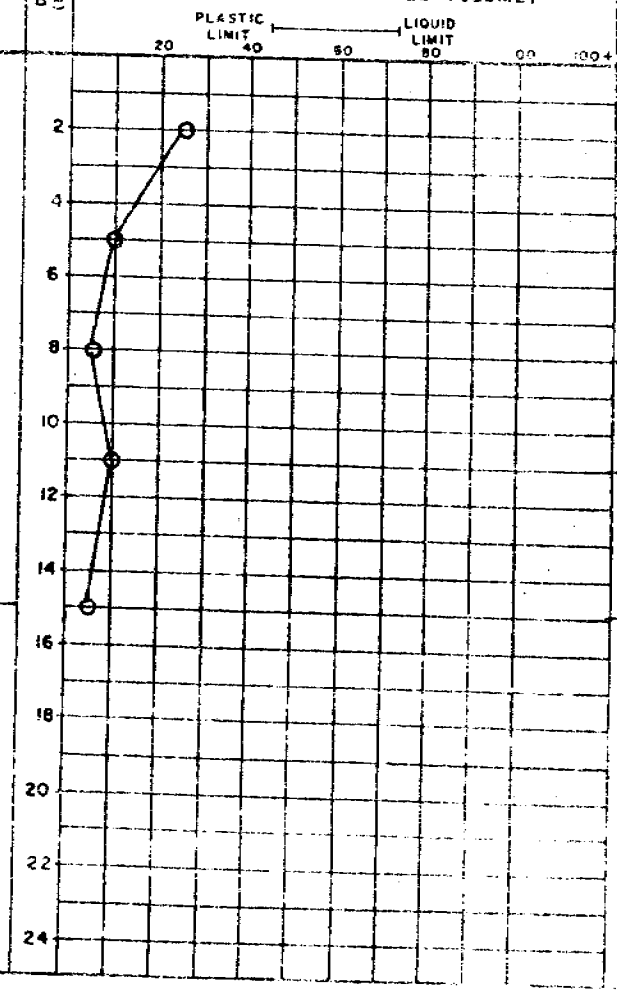
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN: FIELD ENG | DATE DRILLED: 3/4/66 | AIRPHOTO NO: | CHAINAGE: | OFFSET:
CKD: TECH PROVOH | RIG: AIR | SURFACE DRAINAGE: | VEGETATION: | ELEV:

TEST HOLE: MILE: | B,C,S: | NUMBER: ARE-25-12

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT 4"		
					CL	CLAY - SILTY SANDY GRAVELLY 2.5		
					GM	GRAVEL - SANDY SILTY 15'		
					GW			
						BOTTOM OF HOLE - 15'		



GRAIN SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
55	31	14		WET		
17	42	41		SAT.		
10	34	56		WET		
15	43	42		SAT.		
6	43	51		WET		

INUVIK - TUK

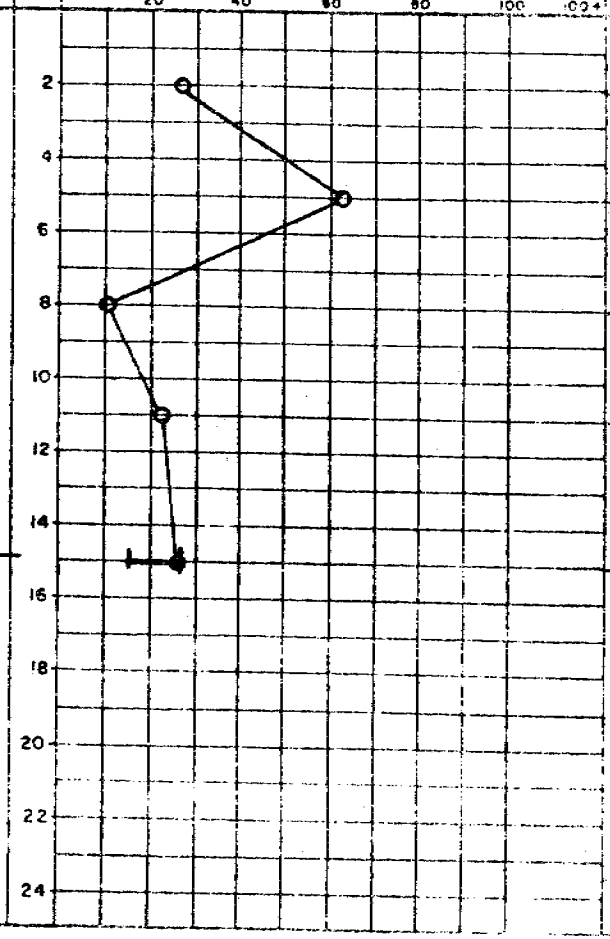
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN: FIELD ENG | DATE DRILLED 6/4/76 | AIRPHOTO NO: | CHAINAGE | OFFSET
CKD: TECH PRONYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA - 25 - 13

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT 4"									
					CL	CLAY - SILT / SANDY PEBBLES 3'			55	41	4		WET		
4						SAND - SILTY		Vs							
6					SM	GRAVELLY			37	63	0		FREE WATER		
8						9'			31	44	25		WET		
10						CLAY - SANDY SILTY PEBBLES									
12					CL	LOW PLASTIC			55	41	4		SAT.		
14						15'									
						BOTTOM OF HOLE - 15'			68	28	4		SAT.		
18															
20															
22															
24															



INUVIK - TUK.

DRILL HOLE REPORT

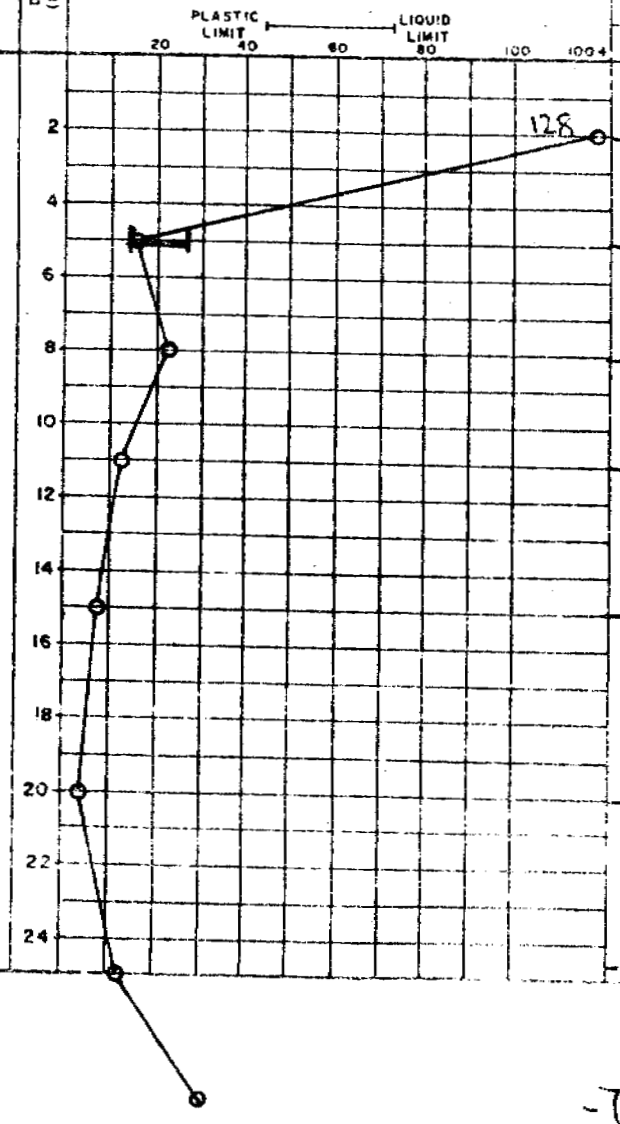
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 6/4/76 | AIRPHOTO NO | CHAINAGE | OFFSET
CKD | TECH Ronych | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | 8,C,S | NUMBER: AREA-25-4

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT		
						SAND & CLAY - PEBBLES 2.5'		
					CL	CLAY - SILTY SANDY GRAVELLY LOW PLASTIC		
						7'		
					GM	SAND - SILTY GRAVELLY 9'		
						GRAVEL - SANDY		
					GW			VS
						25'		
						SAND - GRAVELLY		
					SW			VS

BOTTOM OF HOLE - 30'



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
50	40	10		SAT.		
32	39	29		SAT.		
26	63	11		SAT.		
5	47	48		SAT.		
7	33	60		SAT.		
2	9	89		SAT.		
3	80	17		WET		

-7-16-77 Preliminary

INUVIK - TUK.

DRILL HOLE REPORT

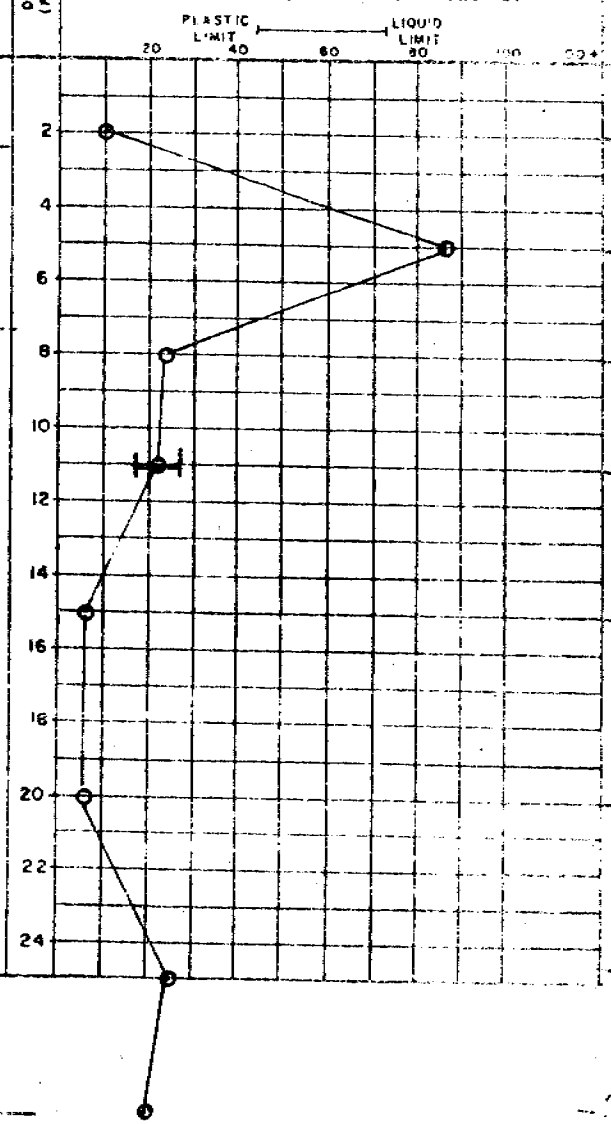
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 6/4/76 | AIRPHOTO NO | CHAINAGE | OFFSET
CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA - 25-15

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					GP	GRAVEL - SAND MIX (1" – 2.5')		
4, 6						ICE & ORGANIC		ICE & OH
8, 10, 12					CL	CLAY - SILTY SANDY LOW PLASTIC		VC - VS
14, 16, 20					GW	GRAVEL - SANDY (14' – 22')		TO VS
22, 24					SM	SAND - GRAVELLY SILTY (22' – 24')		

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



GRAIN SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
9	44	47		WET		
83	17	0		FROZEN		
78	18	4		WET		
90	10	0		WET		
9	48	43		WET		
2	20	78		SAT.		
8	76	16		SAT.		

BOTTOM OF HOLE - 3.1

-25-74-1 SAT.

1 of 2

DRILL HOLE REPORT

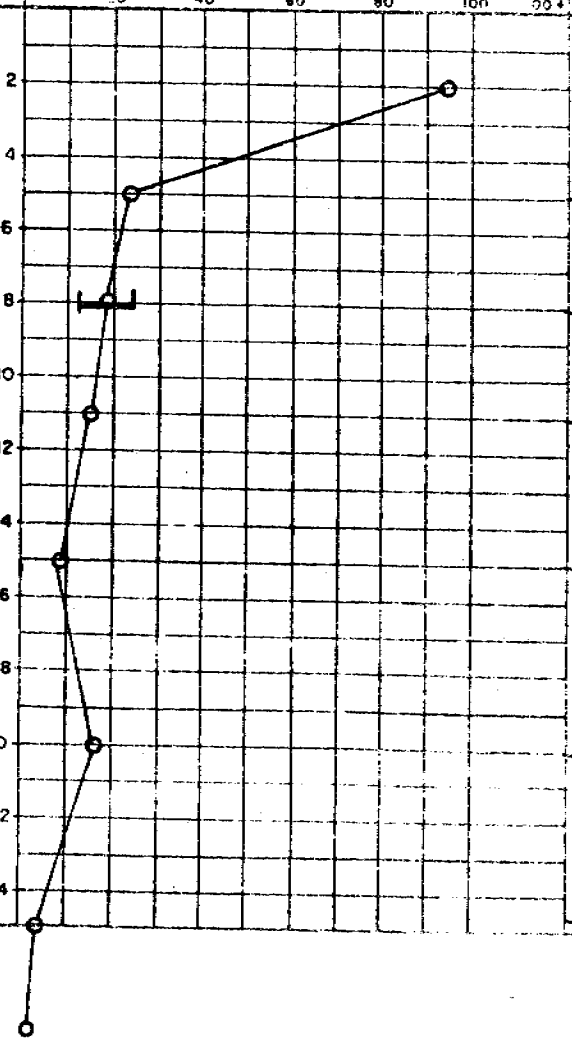
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

INUVIK - TUK.

DWN | FIELD ENG | DATE DRILLED 6/4/76 | AIRPHOTO NO: | CHAINAGE | OFFSET
CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | 3,C,S | NUMBER: A8-29-25-16

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT 4"		
					SM	SAND - SILTY ORGANIC 3'		VS
					CL	CLAY - SILTY GRAVELLY SANDY LOW PLASTIC PEBBLES 8.5'		
					SM	SAND - SILTY PEBBLES		
						GRAVELLY		VC - VY
					SP	FINE - MEDIUM		
						GRAVEL - SANDY 22'		
					GW			



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
35	59	6		SAT		
53	29	18		SAT		
34	60	6		SAT		
18	19	3		WET		
14	60	16		WET		
8	92	0		WET		
4	23	73		WET		

30

2-24-74 CAT

NEXT PAGE

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

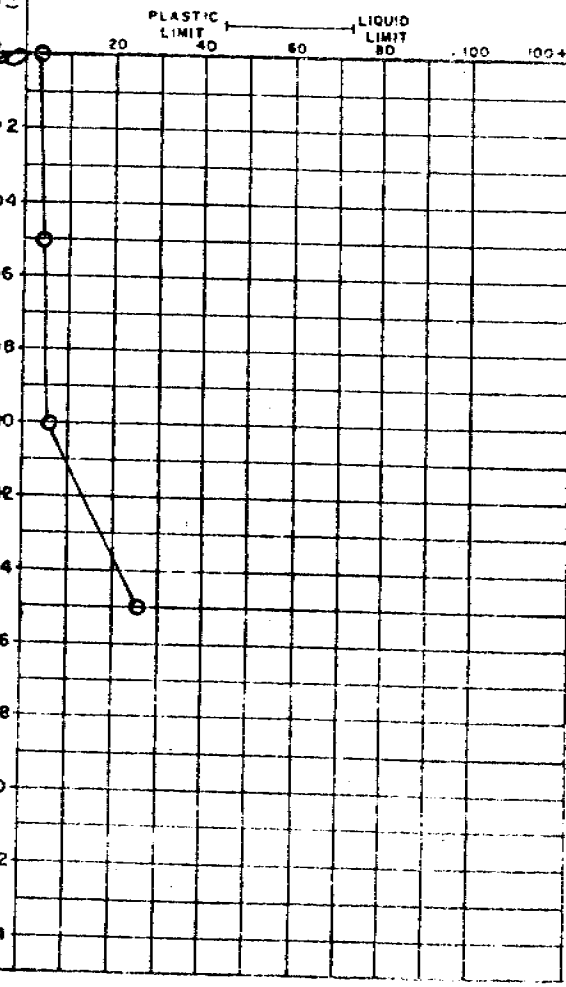
DWN	FIELD ENG	DATE DRILLED	AIRPHOTO NO.	CHAINAGE	OFFSET
CKD	TECH	RIG	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
AREA -25-16		

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
					GW	GRAVEL-SANDY			2	24	74		SAT.		
									4	26	70		SAT.		
					GM	SILTY									
						39			10	28	62		WET		
					ML	SILT-CLAYEY SANDY NON PLASTIC									
						45			55	41	4		SAT		
						BOTTOM OF HOLE - 45'									

O = WATER CONTENT (% OF DRY WEIGHT)
Δ = ICE CONTENT (% OF SAMPLE VOLUME)



INUVIK - TUK.

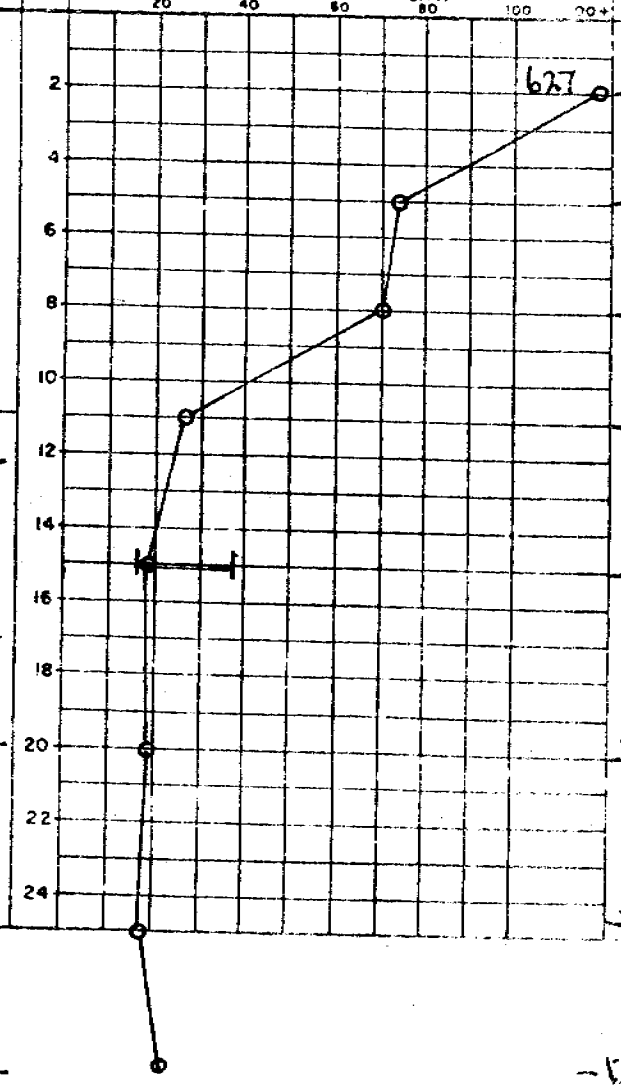
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 6/4/76 | AIRPHOTO NO. | CHAINAGE | OFFSET
CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B.C.S | NUMBER — AREA - 25-17

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT — 8"		
4					Pt	PEAT & ORGANIC CLAY		Vs
6					OH			
8						CLAY - SILTY SANDY GRAVELLY		
10								
12						MED. PLASTIC		Vc - Vr
14					Cl			
18						PEBBLES		
20								
22								Vx
24								



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
98	2	0				FREE WATER
92	8	0				SAT.
68	30	2				FREE WATER
61	17	22				WET
62	23	15				MOIST
78	24	3				DAMP
74	25	1				MOIST

SAND - SILTY — 26'
Sm

BOTTOM OF HOLE - 30'

-13-87-0 WRT

INUVIK - TUK.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 6/4/76	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE:	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER: 1035 - 1

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
					Pt	PEAT 1'		ICE + OH							
						ORGANIC & ICE									
6					CL	CLAY - SILTY SANDY 8'			42	58	0				FROZEN WATER
8						SAND - SILTY - GRAVELLY 11'		$V_c - V_r$	14	69	17				WET
12					CI	CLAY - SILTY SANDY PEBBLES MED. PLASTIC 15'			82	17	1				MOIST
						BOTTOM OF HOLE - 15'			69	28	3				MOIST

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

PLASTIC LIMIT — LIQUID LIMIT

20 40 60 80 100 100+

DEPTH (FEET): 2 4 6 8 10 12 14 16 18 20 22 24

INUVIK - TUK

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG	SURFACE DRAINAGE:	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | (NUMBER) 1035-2

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT 1'		
4, 6						ICE & ORGANIC 7'		ICE & OH
8, 10, 12, 14					SM	SAND - SILTY GRAVELLY 15'		VS
						BOTTOM OF HOLE. 15'		

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

PLASTIC LIMIT — LIQUID LIMIT; 20, 40, 60, 80, 100

NO SAMPLES

GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS

SEARCH AREAS #26, #26A, #26B, #27, #27A, #27B, #27C and #28

Landforms and Locations:	Glacio-fluvial outwash features located roughly 15 miles south of Tuktoyaktuk and at Mile 1041 of the Mackenzie Highway.
Material:	Sands and gravels - trace silt-wet on thawing.
Stripping:	Little or no stripping on most features.
Conclusion:	Good embankment borrow source. Limited stripping and haul, although features are small. Materials are wet on thawing but should drain in place. Pits probably cannot be reworked after one summer season.

Topography

This source is a series of small glacio-fluvial outwash features on the abandoned lake-bed of Eskimo Lakes roughly 15 miles south of Tuktoyaktuk and between Mile 1041 and 1042 of the Mackenzie Highway. The features have very little surface relief and are only slightly above the surrounding terrain. Terrain adjacent to the deposits is marked by numerous areas of polygonal ground indicative of massive ground ice, and some test holes near the edges of the outwash features encountered extensive ice. Several features near the highway were test drilled and there are numerous comparable features further east of those checked in the vicinity of Mile 1040, which may contain additional usable material.

Materials and Quantities

Only features #27, #27A and #27B contain sufficient quantities of usable material to warrant development. The material in these features is a sandy gravel or gravelly sand which is at moisture contents usually less than 15% on thawing. Little or no massive ground ice was encountered within the granular deposits, however, there is ground ice in the adjacent terrain. As the features have little surface relief, pit development will

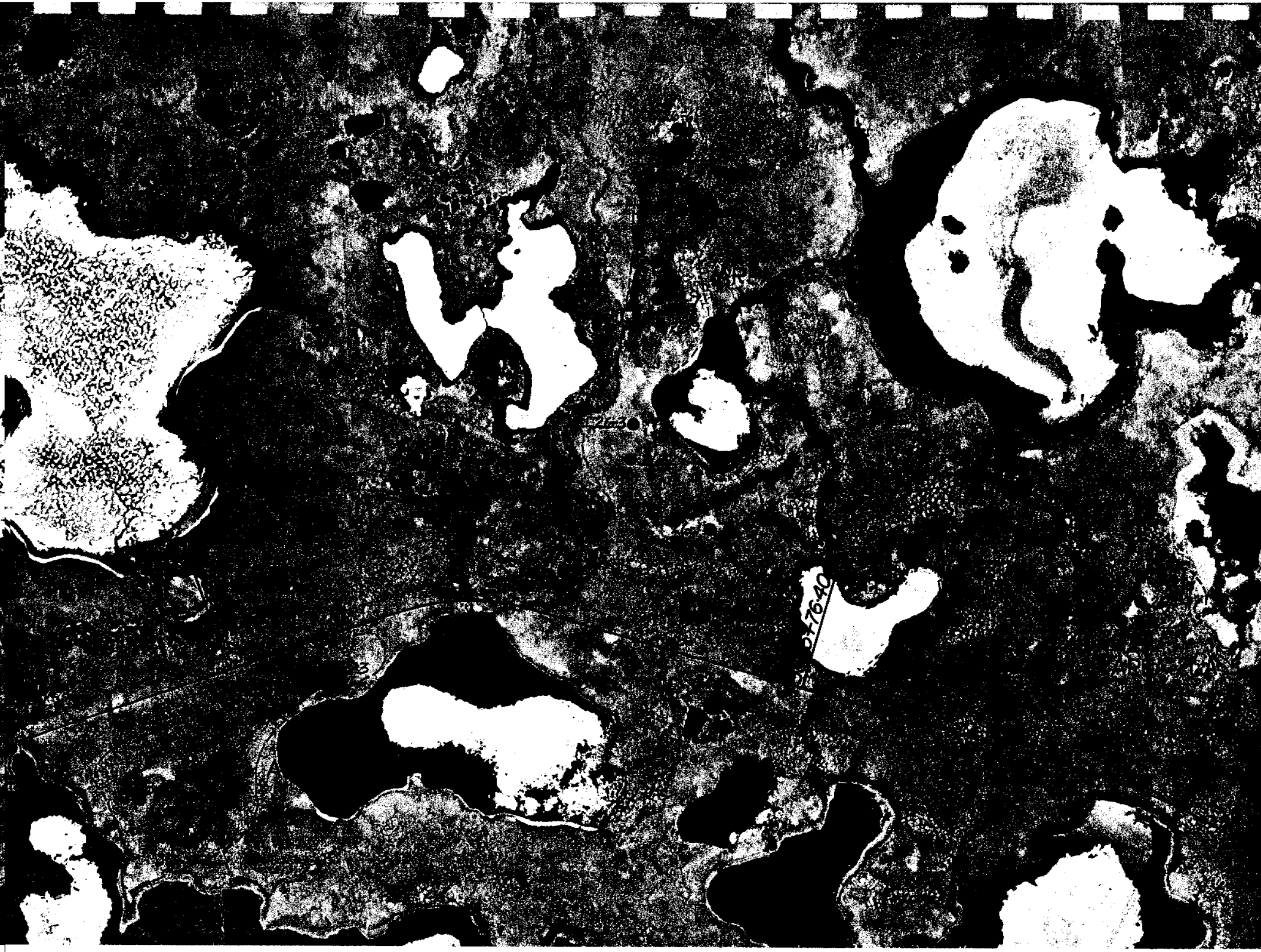
be below the general terrain and because of the ground ice nearby, significant sloughing and inflow into the pits could occur during the summer season. Area #27A is the major source with usable material in two features - holes #27A - 1, 2 and 6; and holes #27A - 7 and 8. The material is layered sandy gravel and gravelly sand with some silty sand at depth and, although wet on thawing, should drain in place. Volumes here are estimated at 250,000 cu. yds. with little or no stripping.

Area #27B is a small granular deposit on the highway alignment at Mile 1041. The material is very coarse granular on the surface and sloughed badly into drill holes limiting the drilling depth. Although unproven at depth this feature may contain in excess of 50,000 cu. yds. with no stripping.

Area #27 contains some usable material near holes 27-4, 27-6 and 27-7, but caving granular deposits limited drilling. There are similar features further to the east which also consist of granular material at the surface, and although small, have little or no stripping. Many of these features could yield in the order of 40,000 to 50,000 cu. yds. with little development costs.

Areas #26, #26A, #26B, #27C and #28 all contain some very minor granular deposits but quantities are too small and erratic to warrant development.

M
1040
AREA 27
AREA 27C
AREA 27B
M
1035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AREA
27-2
27-7
28-1
28-3
1042
1041
AREA 27C

INUVIK - TUK

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN: FIELD ENG | DATE DRILLED 6/4/76 | AIRPHOTO NO. | CHAINAGE | OFFSET

CKD: TECH PROPSCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA-26-1

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, LIQUID LIMIT 60–80, 100, 100+)	GRAIN SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
					PT	PEAT .5'											
2						CLAY - SILTY SANDY PEBBLES			2								
4					CL				4								
6					CL				6								
8						GRAVEL LENS (SANDY) 12'-13'		VC-VY	8	NO SAMPLES							
10									10								
12									12								
14						15'			14								
16						BOTTOM OF HOLE - 15			16								
18									18								
20									20								
22									22								
24									24								

INUVIK - TUK.

DRILL HOLE REPORT

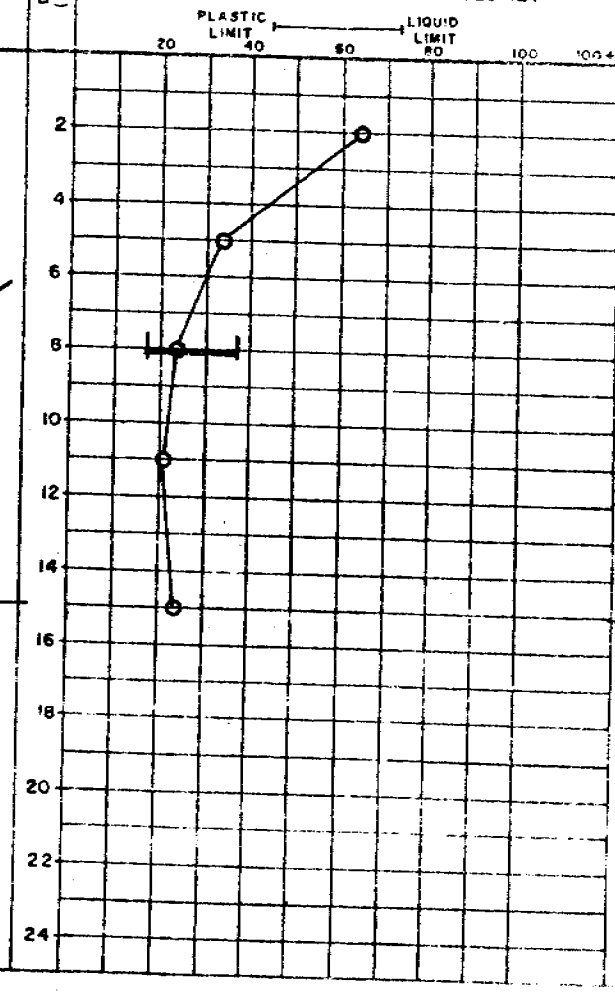
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 6/4/76	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE:	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER — AREA-26-2

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
					PT	PEAT 4"									
					CL	CLAY - SILTY SANDY PEBBLES MED. PLASTIC		Vs	71	27	2		POSS WATER		
								Vc-Vr	75	24	1		WET		
									73	22	5		WET		
									76	21	3		MOIST		
						BOTTOM OF HOLE - 15'			87	12	1		MOIST		

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



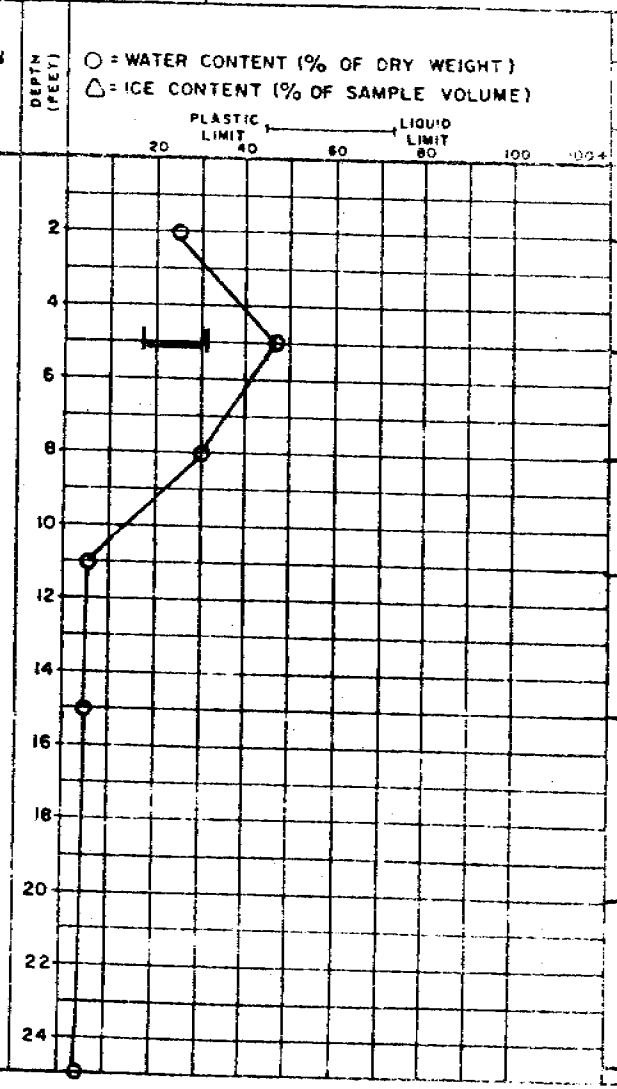
Inuvik - Tuk.

DRILL HOLE REPORT	DEPARTMENT OF PUBLIC WORKS, CANADA MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 4/76	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH Bronych	RIG AIR	SURFACE DRAINAGE:	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER — AREA - 26-3

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT 4"		
2						CLAY - SILTY SANDY GRAVELLY PEBBLES MOD. PLASTIC		
4								
6					Cl			Vs
8								To
						9'		
10						GRAVEL - SANDY		
12								Vc-Vr
14					GW			
16								
18								
20								
22								
24					GM	SILTY		



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
59	30	11		WET		
72	27	1		Groundwater		
90	10	0		SAT.		
2	29	69		SAT.		
3	26	71		SAT.		
4	35	61		SAT.		
14	43	43		SAT.		

Bottom of Hole - 25'

Nivik - Tuk

DRILL HOLE REPORT

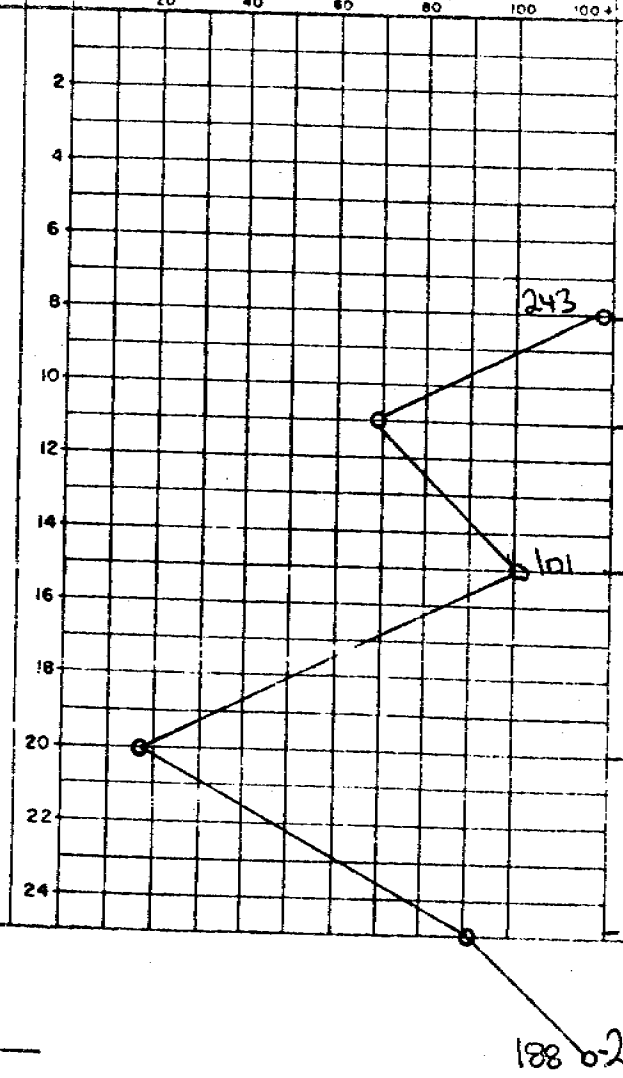
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 6-4-76	AIRPHOTO NO	CHAINAGE	OFFSET
CKD	TECH PROWYCH	RIG AIR	SURFACE DRAINAGE:	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER — AREA - 26 - 4

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT		
2						SAND-SILTY 4"		
4						GRAVELLY		
6								
8					SM			
10								Vs
12								
14								
16								
18								
20								
22								
24								

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



DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
2	30	59	11				FREE WATER
12	17	67	16				FREE WATER
16	11	52	37				FREE WATER
20	19	56	25				SAT.
24	10	76	14				FREE WATER
	23	64	13				FREE WATER

Bottom of Hole - 30'

INUVIK - TUK

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 6/4/76 | AIRPHOTO NO: | CHAINAGE | OFFSET

CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA-26-5

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT 4"		
2, 4, 6, 8						CLAY - SILTY SANDY PEBBLES		Vs
8, 10, 12, 14						ICE		ICE
16, 18, 20, 22						ICE & SAND		ICE & SM
24						SAND - SILTY		
					SM	PEBBLES		Vs

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

PLASTIC LIMIT → LIQUID LIMIT

20 40 60 80 100 100+

No SAMPLES

GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS

Bottom of Hole - 30'

INUVIK - TUK

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 4/76 | AIRPHOTO NO: | CHAINAGE | OFFSET
CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA-26-6

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	Peat 4"		
2						ICE & Soil		ICE
4, 6, 8, 10, 12, 14						ICE 15'		ICE
16, 18, 20, 22, 24						Bottom of Hole - 15'		

DEPTH (FEET): 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24

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

PLASTIC LIMIT — LIQUID LIMIT
20 40 60 80 100 00+

NO SAMPLES

GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS

INUVIK - TUK

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

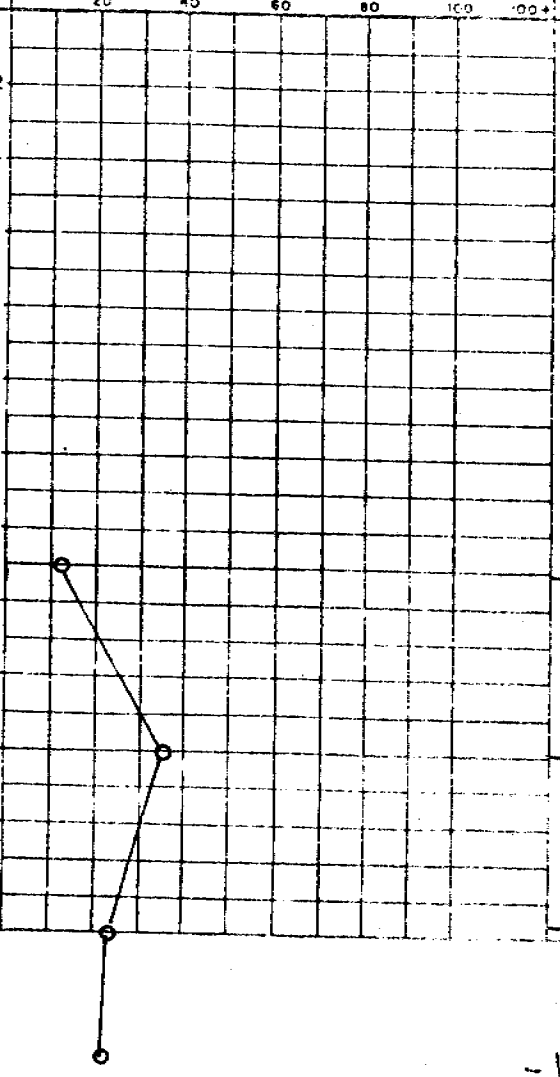
DWN | FIELD ENG | DATE DRILLED 4/76 | AIRPHOTO NO | CHAINAGE | OFFSET
CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER — AREA - 26 - 7

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
					Pt	PEAT 4"									
2–4					GM	SAND - SILTY PEBBLES 6'		Vs							
6–12						ICE		ICE							
12–16					GM	GRAVEL - SAND - SILT MIX 13' – 16'									
16–24					GM	SAND - SILTY		Vs							

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

PLASTIC LIMIT — LIQUID LIMIT



18 - 41 41 SAT.

21 - 79 0 FREE WATER

24 - 76 0 SAT.

- 10 - 90 - 0 SAT.

BOTTOM OF HOLE - 30'

INUVIK - TUK.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 6/4 70 | AIRPHOTO NO | CHAINAGE | OFFSET
CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: ARCA-26-9

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	Peat 4"		
					CL	CLAY - SILTY SANDY PEBBLES		VS
4					CL			
6								
8						ICE		ICE
10								
12					SM	SAND - SILTY PEBBLES		VS
14								
						15 BOTTOM OF HOLE - 15		
18								
20								
22								
24								

DEPTH (FEET) | ○ = WATER CONTENT (% OF DRY WEIGHT) | △ = ICE CONTENT (% OF SAMPLE VOLUME) | PLASTIC LIMIT — LIQUID LIMIT | 20 40 60 80 100 200+

NO SAMPLES

GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS

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DRILL HOLE REPORT

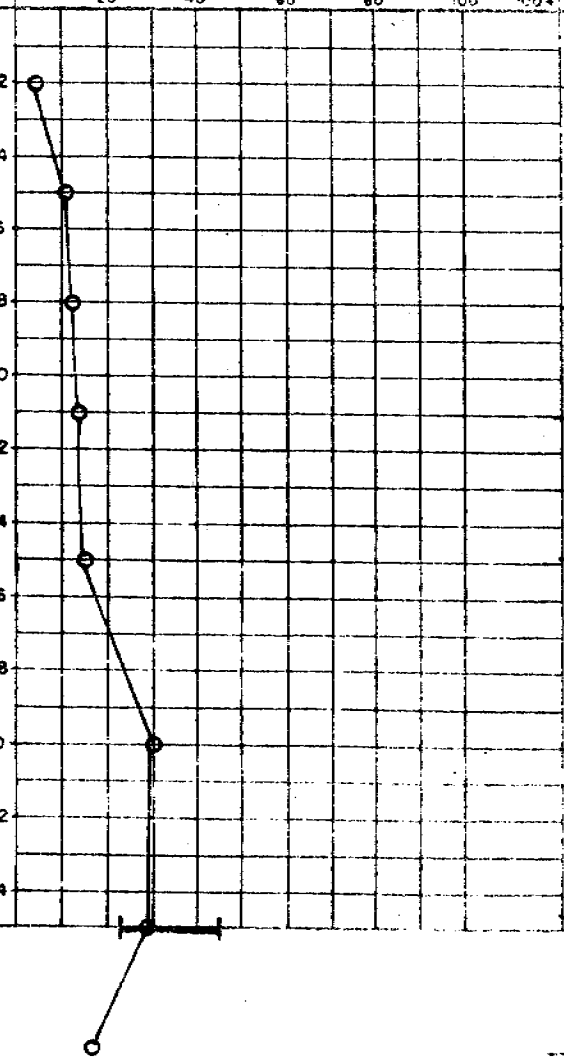
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 6/4/76 | AIRPHOTO NO. | CHAINAGE | OFFSET
CKD | TECH PRONYCHING SIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE

MILE	B,C,S	NUMBER
AREA - 26A1		

DEPTH (FEET)	SAMPLE NUMBER	SAMP. TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT — 2"		
						SAND - GRAVELLY		
4					SW			
6								
8								$V_c - V_r$
10					SM	SILTY		
12								
14								
18						— 17'		
20						CLAY - SILTY SANDY		
22					CI	MED. PLASTIC		
24								



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
6	59	35		WET		
8	78	14		WET		
8	82	10		SAT.		
13	58	29		SAT.		
20	54	26		SAT		
90	10	0		WET		
92	18	0		MOIST		

BOTTOM OF HOLE. 30'

76-22-2 MOIST

INUVIK - TUK

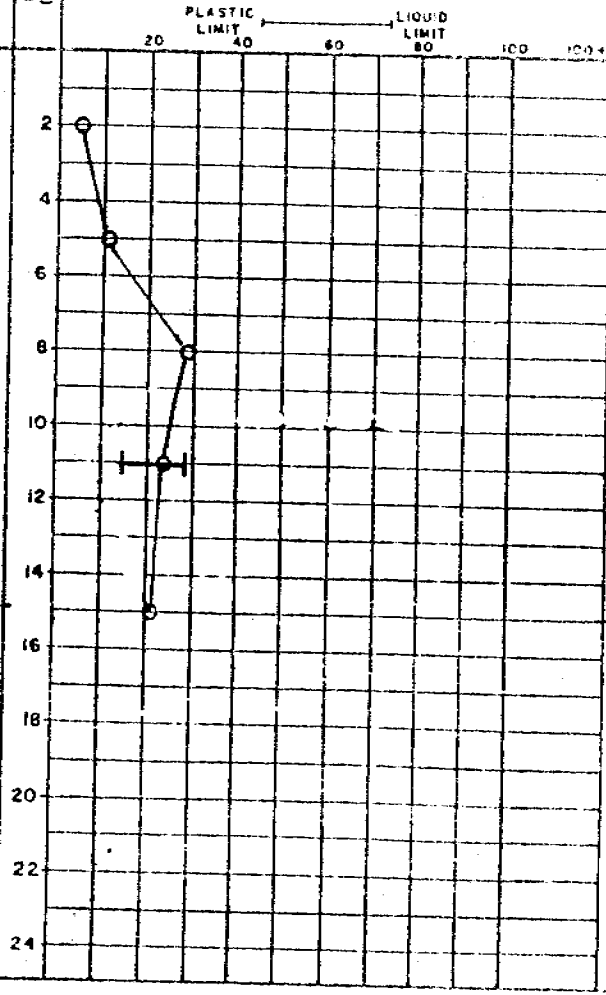
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DAN | FIELD ENG | DATE DRILLED 4/4/76 | AIRPHOTO NO. | CHAINAGE | OFFSET
CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B.C.S | NUMBER: AREA-26A-2

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					PT	PEAT 4"		
					GW	GRAVEL - SANDY		
					CL	CLAY - SILTY - GRAVELLY SANDY LOW PLASTIC PEBBLES 5' – 15'		$V_L - V_I$
						BOTTOM OF HOLE - 15'		



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
9	21	70		WET		
46	14	40		SAT.		
81	19	0		WET		
68	28	4		WET		
79	17	4		DRY		

Inuvik - Tuk

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

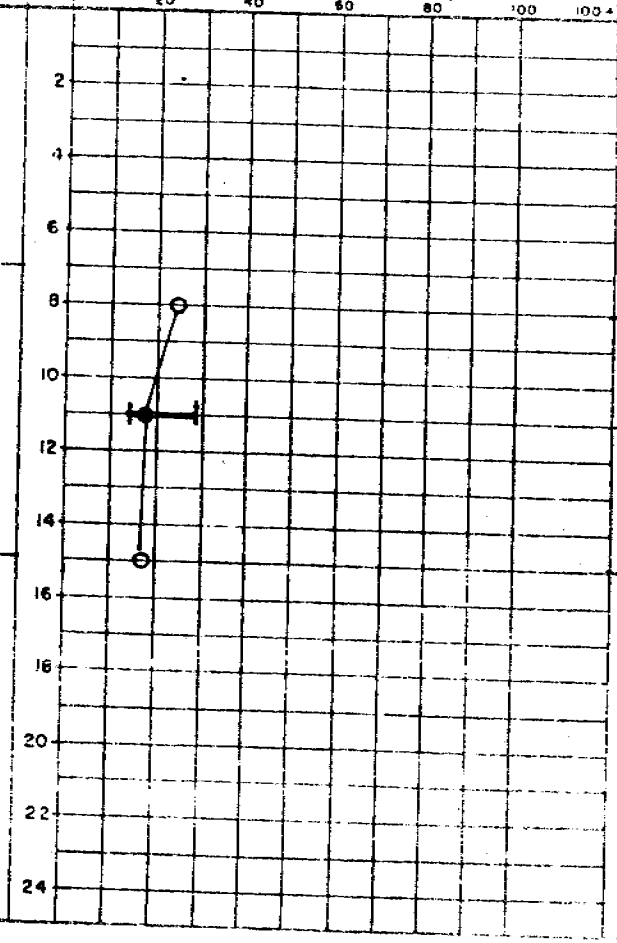
DWN | FIELD ENG | DATE DRILLED | AIRPHOTO NO. | CHAINAGE | OFFSET
CKD | TECH Bondych | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA - 26B-1

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN SIZE ANALYSIS % CLAY	% SILT	% SAND	% GRAVEL	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	Peat 4"									
4						CLAY - SILTY SANDY PEBBLES LOW PLASTIC		Vs							
6															
8					CL				51	48	1		WET		
10								Vc - Vr							
12									63	31	6		WET		
14						15'									
						BOTTOM OF HOLE - 15'			55	34	11		WET		
18															
20															
22															
24															

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

PLASTIC LIMIT ⟵⟶ LIQUID LIMIT



INUVIK - TUK

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

OWN | FIELD ENG | DATE DRILLED 5/4/76 | AIRPHOTO NO | CHAINAGE | OFFSET
CRO | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA - 26B-2

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT 1'		
						ICE & CLAY 4'		ICE & CI
						ICE & ORGANIC 5'		ICE & OH
						CLAY - SILTY 7'		Vs
						ICE & ORGANICS 8'		ICE & OH
						CLAY - SILTY FEW PEBBLES 15'		Vs
						BOTTOM OF HOLE - 15'		

O = WATER CONTENT (% OF DRY WEIGHT)
Δ = ICE CONTENT (% OF SAMPLE VOLUME)

PLASTIC LIMIT — LIQUID LIMIT

NO SAMPLE

GRAIN SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS

INUVIK - TUK

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRAWN	FIELD ENG	DATE DRILLED 5/4/76	AIRPHOTO NO	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA - 26B-2

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT 1'		
						ICE & CLAY 4'		ICE & CI
4						ICE & ORGANIC 5'		ICE & OH
6						CLAY - SILTY 7'		Vs
8						ICE & ORGANICS 8'		ICE & OH
10						CLAY - SILTY FEW PEBBLES		Vs
12								
14						15'		
						BOTTOM OF HOLE - 15'		
16								
18								
20								
22								
24								

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

PLASTIC LIMIT — LIQUID LIMIT
20 40 60 80 100 100+

NO SAMPLE

DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
2							
4							
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							

NUVIK - TUK

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 5/4/76 | AIRPHOTO NO | CHAINAGE | OFFSET
CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA - 268-3

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
					Pt	PEAT 4"									
						CLAY - SILTY SANDY PEBBLES		Vs							
4									70	24	6				FROM WATER
6						LOW PLASTIC									
8					CL				63	36	1				WET
10								Vc - Vr	56	37	7				WET
12															
14									40	49	11				WET
16															
18						SAND - GRAVELLY									
20					Sp				17	64	19				WET
22								Vc - Vr							
24									17	64	19				WET

○ = WATER CONTENT (% OF DRY WEIGHT)
△ = ICE CONTENT (% OF SAMPLE VOLUME)
PLASTIC LIMIT — LIQUID LIMIT
20 40 60 80 100 00+

26 1/2

SM SAND - SILTY

BOTTOM OF HOLE - 30'

-22-78-0 SAT.

INUVIK - TUK

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 9/6/76 | AIRPHOTO NO | CHAINAGE | OFFSET

CKD | TECH PROWYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

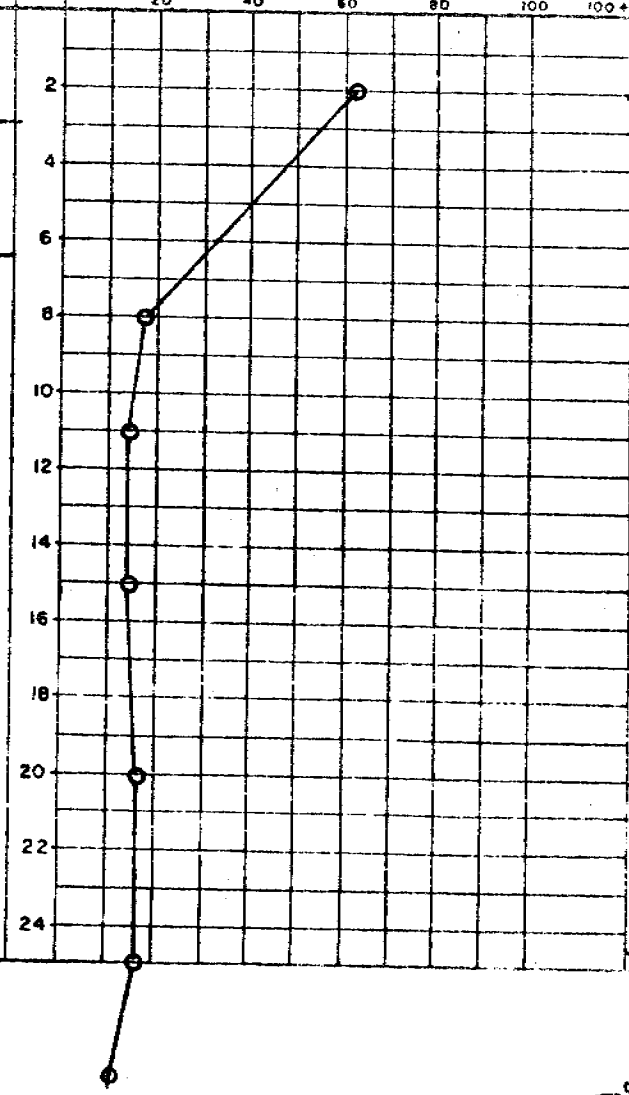
TEST HOLE: MILE | B,C,S | NUMBER: AREA-27-1

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT 2"									
2					CL CI	CLAY - SILTY SANDY		Vs	81	19	0		SAT.		
4 6						ICE & SOIL		ICE & CL							
8 10 12 14					CI	CLAY - SILTY SANDY PEBBLES MED. PLASTIC		Vx	52 / 49 / 56 / 57 / 48	44 / 47 / 38 / 38 / 45	4 / 4 / 6 / 5 / 7		WET / MOIST / MOIST / MOIST / MOIST		
16 18 20 22 24															

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

PLASTIC LIMIT ⟷ LIQUID LIMIT

20 40 60 80 100 100+



-56-35-9 DAMP

BOTTOM OF HOLE-30'

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DRILL HOLE REPORT

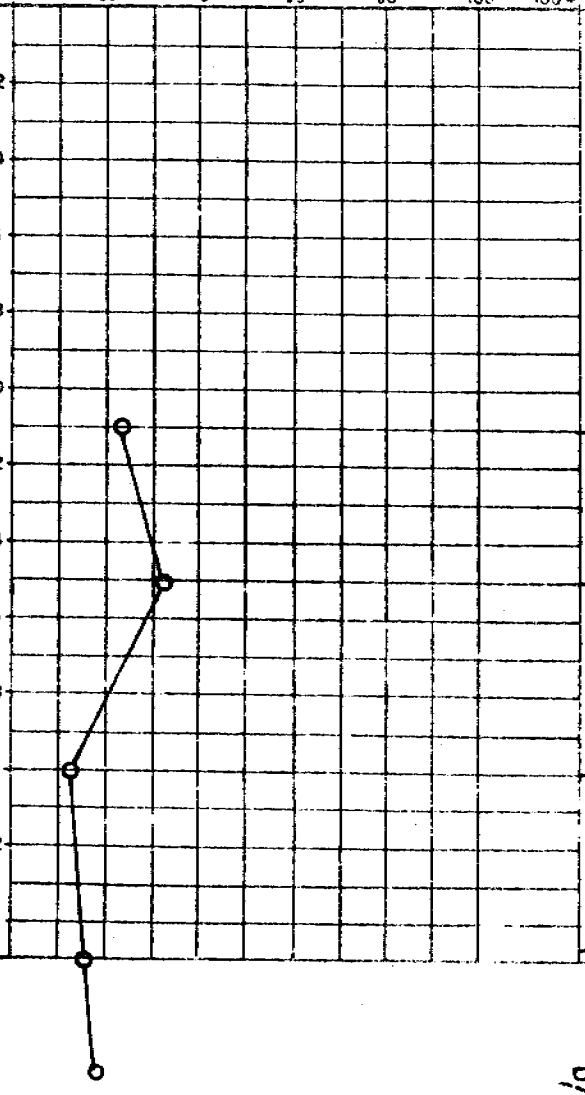
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 4/4/76 | AIRPHOTO NO. | CHAINAGE | OFFSET
CKD | TECH PRONYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA-27-2

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT 1'									
4, 6, 8						ICE		ICE							
10, 12, 14					CL	CLAY - SILTY PEBBLES SANDY LOW PLASTIC		Vs	41	50	9		SAT.		
									54	45	1		SAT.		
18, 20, 22, 24								VL-Vr	47	41	12		WET		
									41	50	9		WET		
									57	37	6		MOIST		

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



BOTTOM OF HOLE - 30'

NIVIK - TUK.

DRILL HOLE REPORT

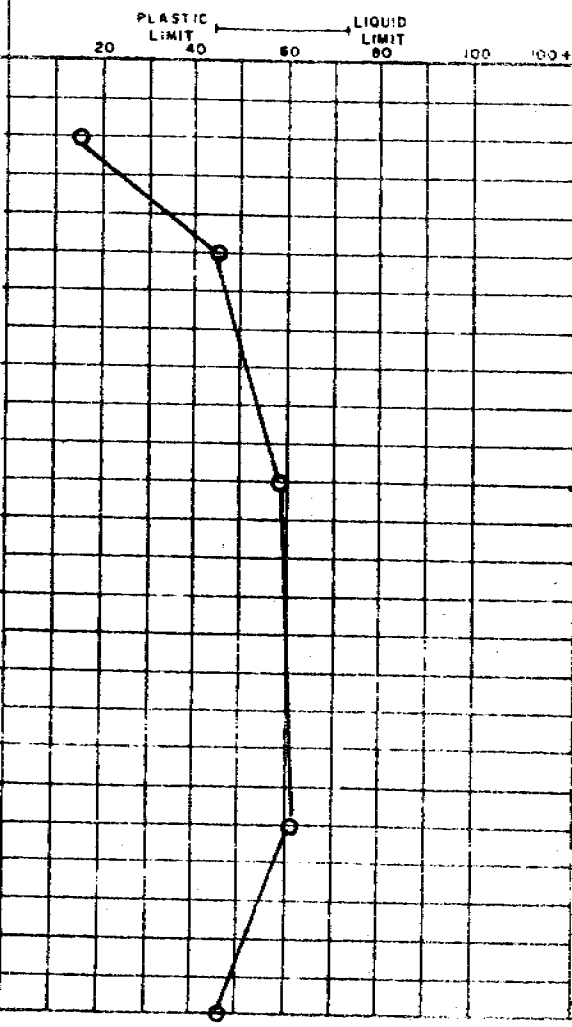
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 4/76	AIRPHOTO NO.	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER — AREA-27-3

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
					Pt	PEAT 2"									
2–4					SM	SAND - SILTY GRAVELLY PEBBLES		Vs	21	65	14		SAT.		
4–6									19	75	6		FREE WATER		
6–8						ICE		ICE							
8–10															
10–12					SM	SAND - SILTY GRAVELLY		Vs	13	70	17		FREE WATER		
12–14															
14–16						ICE		ICE							
16–18															
18–20						SAND - SILTY									
20–22					SM			Vs	28	72	0		FREE WATER		
22–24															
24									2	97	1		FREE WATER		

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



DRILL HOLE REPORT

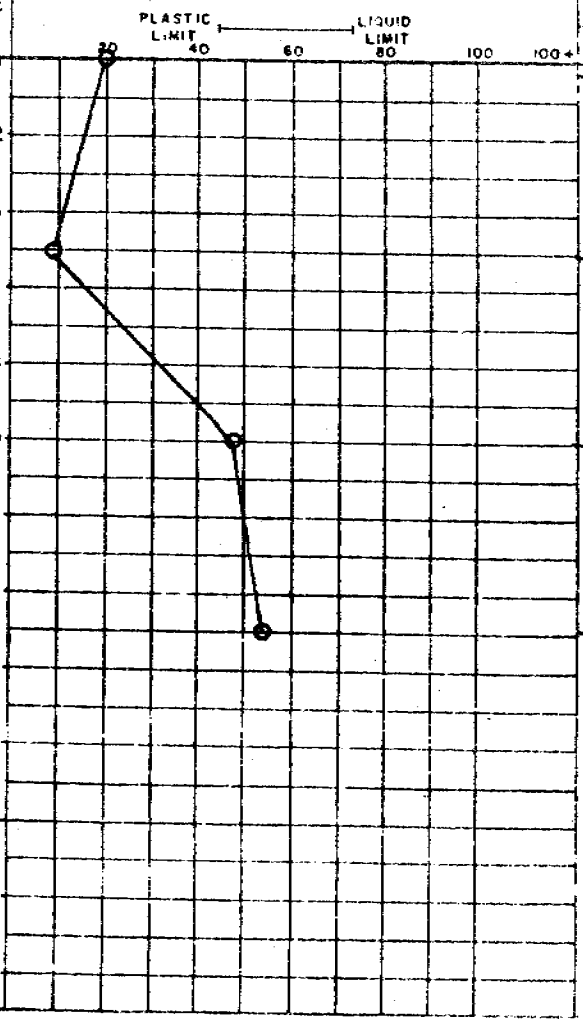
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED	AIRPHOTO NO.	CHAINAGE	OFFSET
CKD	TECH	RIG	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER — AREA - 27-3

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					SP	SAND - FINE			-	3	97	0	SAT.		
						GRAVELLY									
									-	3	59	38	SAT.		
						PEBBLES		V S							
					SM	SILTY									
									-	10	87	3	FREE WATER		
					SP	SAND - FINE									
						45'			-	7	93	0	FREE WATER		
						BOTTOM OF HOLE - 45'									

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



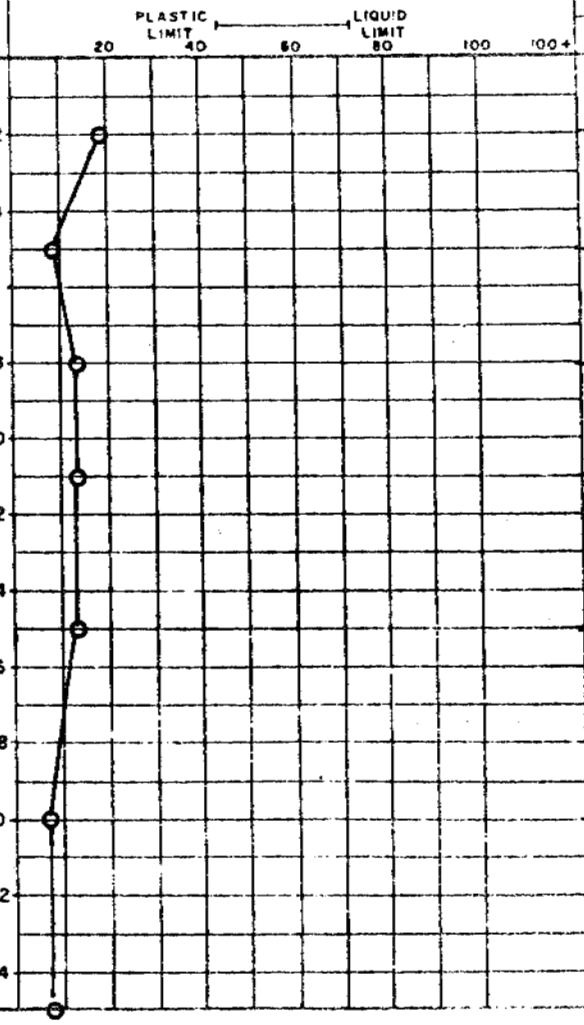
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 4/4/76	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH Prowych	RIG AMR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA-27-4

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 CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	Peat 2"										
					SM	SAND-GRAVELLY SILTY			2	12	57	31				FREE WATER
4								$V_c - V_r$	4	18	69	13				SAT.
6					GM	GRAVEL - SANDY SILTY			6							
8								T_o	8	20	30	50				SAT.
10					SM	SAND - SILTY GRAVELLY		V_s	10	29	54	17				SAT.
12									12							
14									14	27	43	30				SAT.
16									16							
18									18							
20									20	24	58	21				SAT.
22									22							
24					GW	GRAVEL - SANDY			24	9	40	51				SAT.



DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

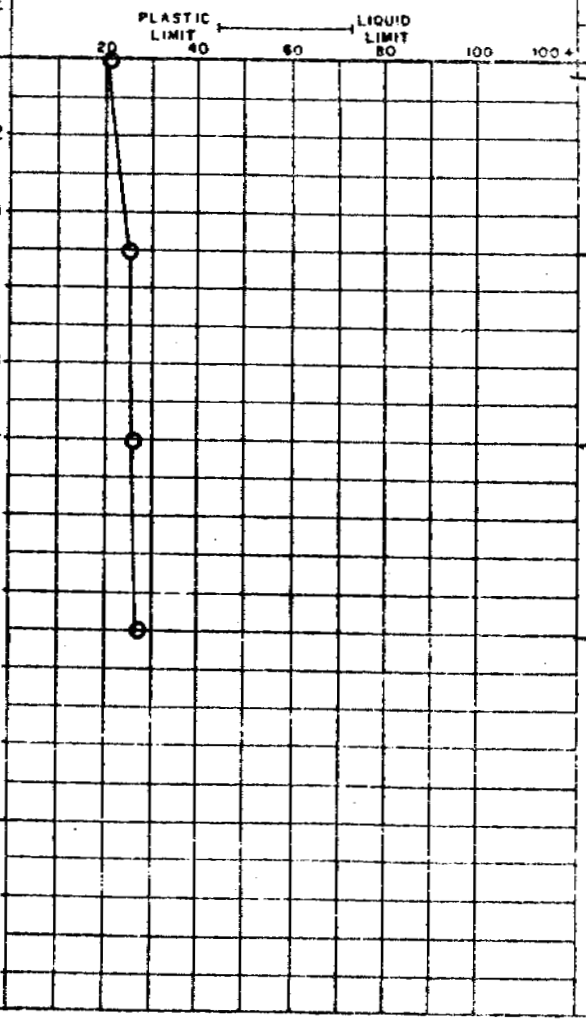
OWN	FIELD ENG	DATE DRILLED	AIRPHOTO NO.	CHAINAGE	OFFSET
CKD	TECH	RIG	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
AREA - 27 - 4		

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
						SILT - SANDY GRAVELLY		
					SM	SAND - SILTY		V_s
						45'		
						BOTTOM OF HOLE - 45'		

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



GRAIN SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
60	25	15		SAT.		
22	75	3		SAT.		
41	59	0		SAT.		
22	78	0		FREE WATER		

DRILL HOLE REPORT

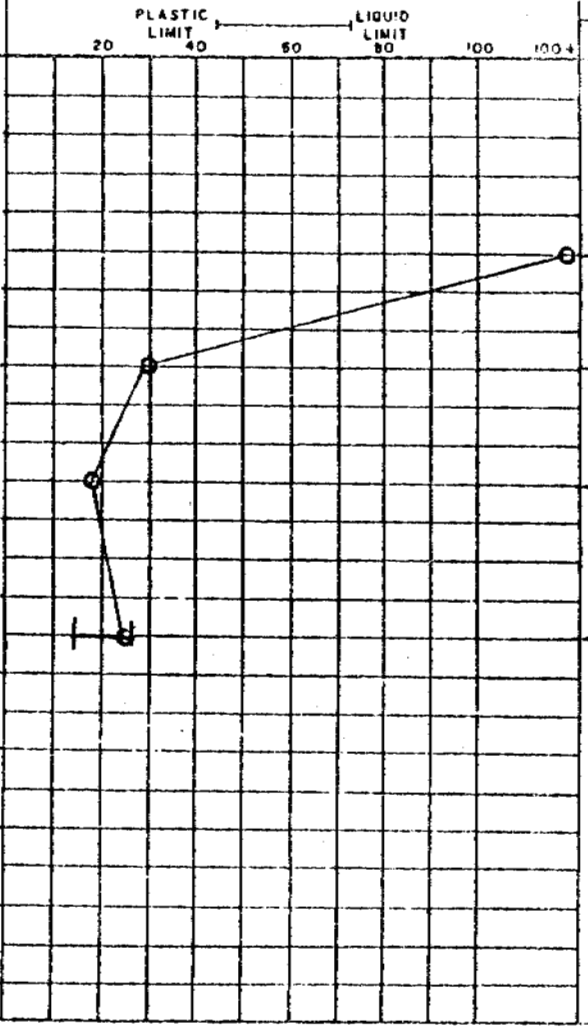
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

Inuvik - Tuk					
DWN	FIELD ENG	DATE DRILLED 4/4/76	AIRPHOTO NO	CHAINAGE	OFFSET
CKD	TECH Phonych	RIG Air	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER — AREA-27-5

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
					Pt	Peat 4"		Ice & Peat								
2						Ice & Peat 3'			2							
4					CL	Clay - Silty Sandy			4							
6									6	54	46	0				Groundwater
8						Clay - Silty			8	96	4	0				Damp
10									10							
12					CL	Sandy Pebbles Lay Rustic			12	50	38	12				Sat.
14						15'			14	79	18	3				Sat
						Bottom of Hole - 15'										
18									18							
20									20							
22									22							
24									24							

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



Inuvik - Tuk.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 4/4/76	AIRPHOTO NO:	CHAINAGE:	OFFSET
CKD	TECH PRONYCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
AREA-27		-6

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	Peat 1"		
2						GRAVEL - SANDY LOOSE		
4						NO CIRCULATION AFTER 5'		
5						6'		
						BOTTOM OF HOLE - 6'		
8								
10								
12								
14								
18								
20								
22								
24								

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

PLASTIC LIMIT ⟷ LIQUID LIMIT
20 40 60 80 100 100+

NO SAMPLES

DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
2							
4							
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							

INUVIK - TUK

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 4/4/76	AIRPHOTO NO	CHAINAGE	OFFSET
CKD	TECH FRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER — AREA 27-7

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, LIQUID LIMIT 60–80)	GRAIN SIZE ANALYSIS: CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT											
						GRAVEL - SANDY LOOSE			2	NO SAMPLES							
4						4'			4								
						BOTTOM OF HOLE - 4' NO CIRCULATION											
6									6								
8									8								
10									10								
12									12								
14									14								
									16								
18									18								
20									20								
22									22								
24									24								

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DRILL HOLE REPORT

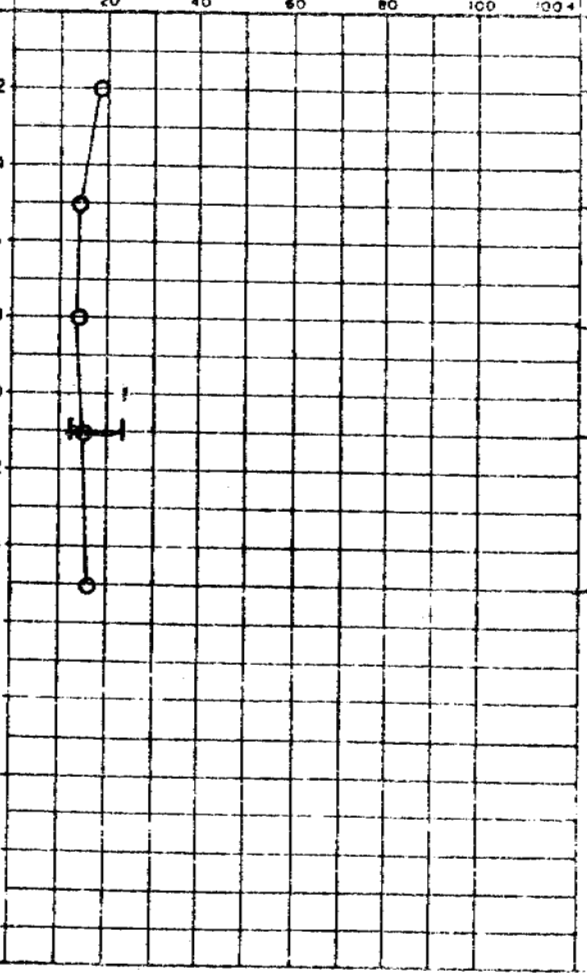
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 4/4/76	AIRPHOTO NO	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER — AREA - 27 - 8

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT — 2'		
2					SM	SAND-GRAVELLY SILTY		
4								
6								
8								Vc - Vr
						9'		
10					CL	CLAY - SANDY GRAVELLY LOW PLASTIC		
12								
14								
						15'		
16						BOTTOM OF HOLE - 15'		
18								
20								
22								
24								

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



DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
2	9	54	32		WET		
6	11	65	24		WET		
8	33	37	30		WET		
11	43	46	11		WET		
15	39	45	16		SAT.		

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DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
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DWN	FIELD ENG	DATE DRILLED 4/4/76	AIRPHOTO NO	CHAINAGE	OFFSET
CKD	TECH PROVYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER — AREA - 27-9

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT 4"		
2						CLAY - SILTY SANDY PEBBLES		
4								
6								Vs
8								
10								
12								Vc - Vx
14								
						BOTTOM OF HOLE - 15'		
18								
20								
22								
24								

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

PLASTIC LIMIT ⟷ LIQUID LIMIT
20 40 60 80 100 100+

NO SAMPLES

DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
2							
4							
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							

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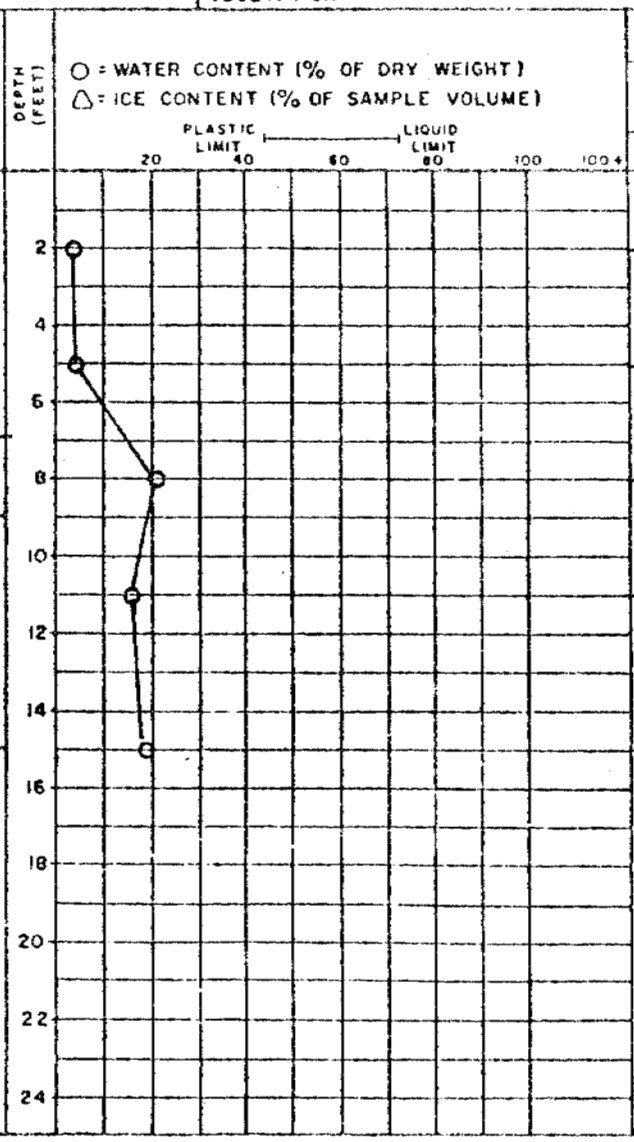
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DAM	FIELD ENG	DATE DRILLED 4/4/76	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER — AREA - 27A-1

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					PT	PEAT		
2					GW	SAND-GRAVELLY		VX
4								
6					GM	GRAVEL-SILTY-SANDY		
8								VS
10					SM	SAND-SILTY GRAVELLY		VS TO
12								
14						PEBBLES		VL-VF
						15'		
						BOTTOM OF HOLE - 15'		
18								
20								
22								
24								



GRAIN-SIZE ANALYSIS	CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
2		87	11		DAMP		
4		76	23		MOIST		
6		35	53		FREE WATER		
8		71	17		SAT.		
10		84	5		SAT		

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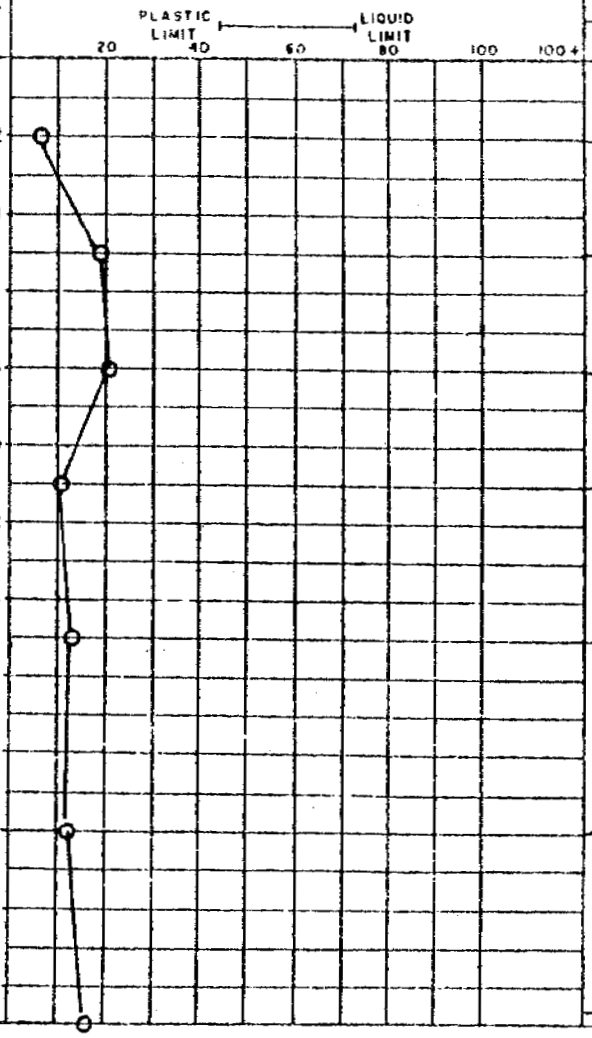
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 4/6/76	AIRPHOTO NO	CHAINAGE	OFFSET	TEST HOLE
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV	MILE / B,C,S / NUMBER: AREA - 27A-2

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT 1"		
						SAND-GRAVELLY		
4					Sp	SAND - FINE TO MEDIUM		
6								Vs
8								\
10						GRAVELLY		
12								Vc-Vr
						13'		
14					GW	GRAVEL - SANDY		
						17'		
18						SAND-GRAVELLY		
20					Sw			
22								
24						PEBBLES		

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



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
5	59	36		WET		
7	93	0		SAT.		
8	91	1		SAT.		
4	77	19		SAT.		
5	43	52		SAT.		
6	67	27		SAT.		
6	86	8		WET		

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DRILL HOLE REPORT

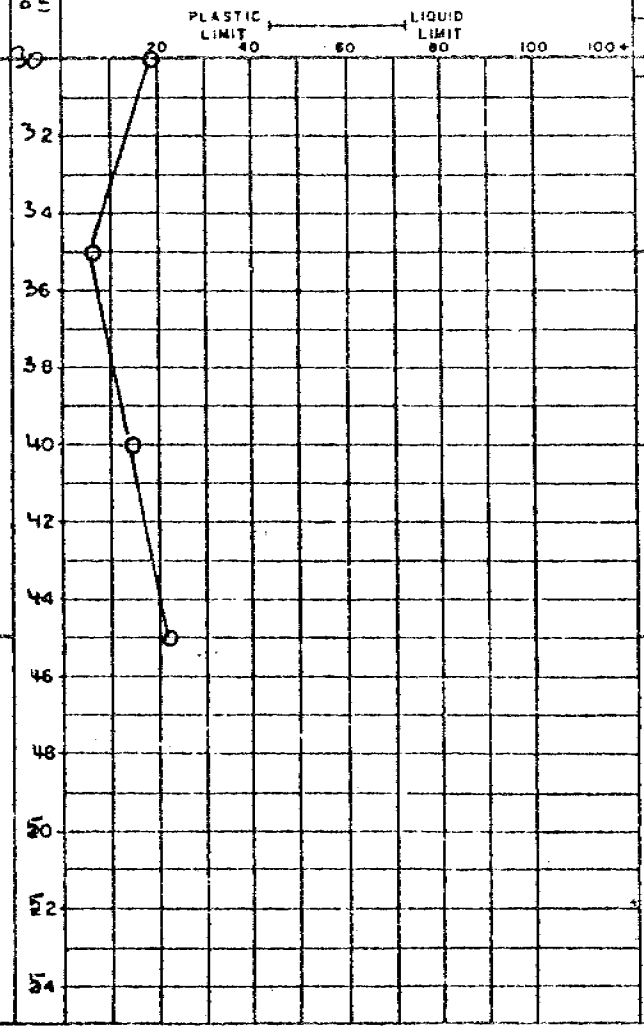
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED	AIRPHOTO NO	CHAINAGE	OFFSET
CKD	TECH	RIG	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA-27A-2

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					SP	SAND - PEBBLES FINE - MEDIUM			5	91	4		WET		
						34'									
					GW	GRAVEL - SANDY			2	37	61		SAT.		
					GM	GRAVEL SAND - SILTY MIX		$V_C - V_r$	24	38	38		SAT.		
						41'									
					SM	SAND - SILTY		V_s	40	60	0		SAT		
						45'									
						BOTTOM OF HOLE - 45'									

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



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DRILL HOLE REPORT

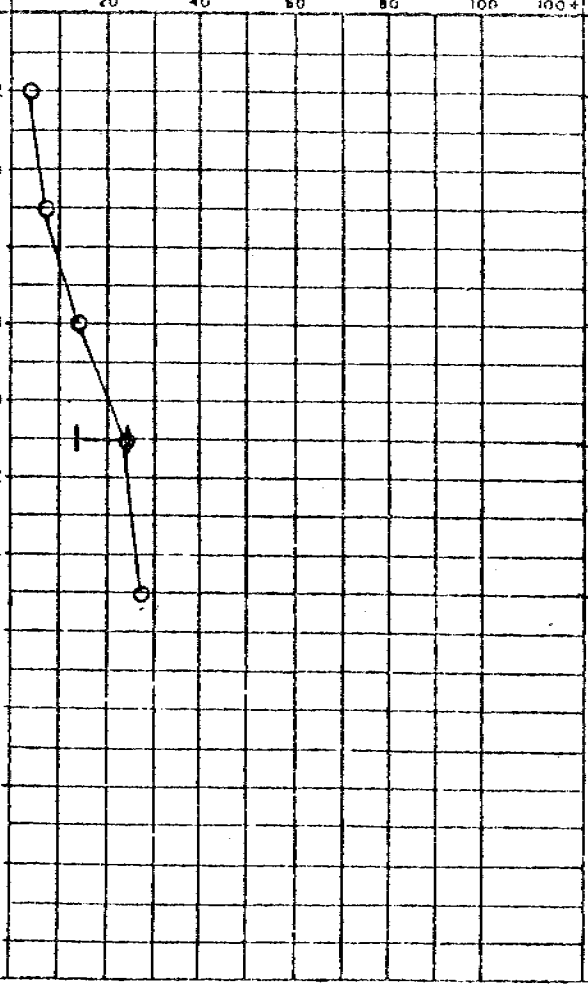
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 4/9/62	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
AREA - 27A-3		

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT — 5'		
2					GW	GRAVELLY SANDY		Vc-Vr
4								
6								
8						— 8'		
					SW	SAND-GRAVELLY		
10						— 11'		
12					ML	SILT - SANDY CLAYEY		Vs
14					CL	CLAY - SILTY SANDY		
						— 15'		
						BOTTOM OF HOLE - 15		
18								
20								
22								
24								



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
1	40	59		WET		
3	43	54		SAT.		
6	60	34		SAT.		
51	43	6		WET		
60	40	0		SAT.		

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DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 4/9/76	AIRPHOTO NO	CHAINAGE	OFFSET
CKD	TECH Pronych	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | U.C.S | NUMBER — AREA-27A-4

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT 1'		
2, 4, 6, 8, 10						ICE		ICE
12, 14						ICE & PEAT 15'		ICE & PEAT
18, 20, 22, 24						BOTTOM OF HOLE - 15'		

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

PLASTIC LIMIT ⟷ LIQUID LIMIT

DEPTH (FEET): 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24

NO SAMPLES

GRAIN-SIZE ANALYSIS				WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
CLAY %	SILT %	SAND %	GRAVEL %			

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DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 4/4/76	AIRPHOTO NO.	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER — AREA-27A-5

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT 4"		
					CL	CLAY - SILTY - SANDY - PEBBLES		$V_c - V_r$
					CL			
						15'		
						BOTTOM OF HOLE - 15'		

DEPTH (FEET): 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24

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

PLASTIC LIMIT — LIQUID LIMIT: 20, 40, 60, 80, 100, 100+

NO SAMPLES

GRAIN-SIZE ANALYSIS				WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
CLAY %	SILT %	SAND %	GRAVEL %			

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

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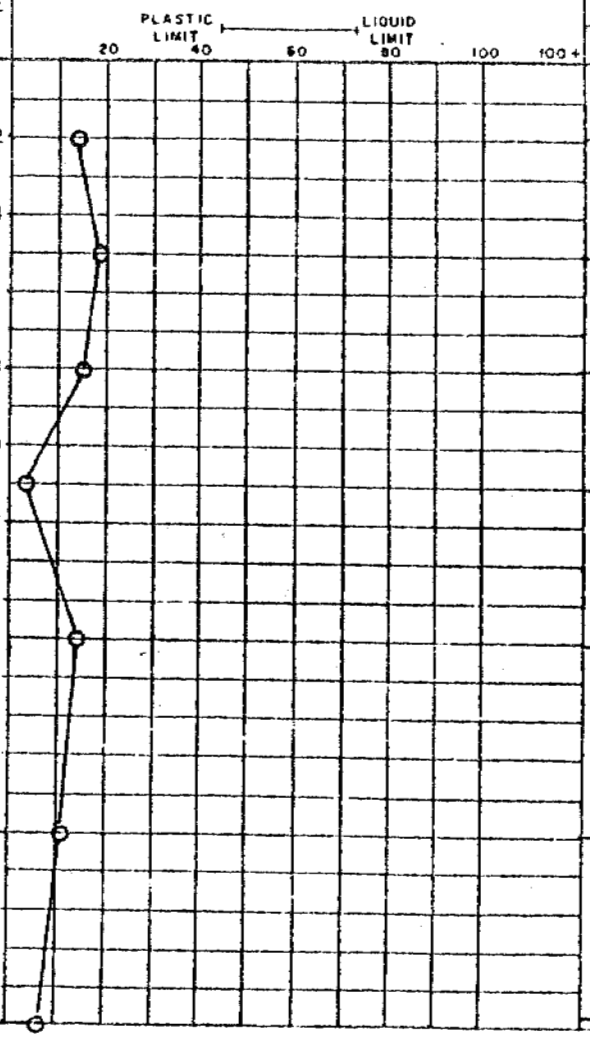
DWN	FIELD ENG	DATE DRILLED 5/4/76	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER — AREA - 27A-6

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT		
					SP	SAND - FINE (1")		Vc-Vr
4								
6								
8								
10						10'		
12					GW	GRAVEL - SANDY		
14						14'		
						SAND - FINE GRAVELLY		
						17'		
18					GP	GRAVEL - SANDY		
20								
22								
24					GM	SILTY		
						26'		



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
7	93	0		WET		
5	95	0		WET		
6	89	5		WET		
4	20	76		WET		
5	83	12		WET		
5	54	41		SAT.		
10	33	57		WET		

DRILL HOLE REPORT

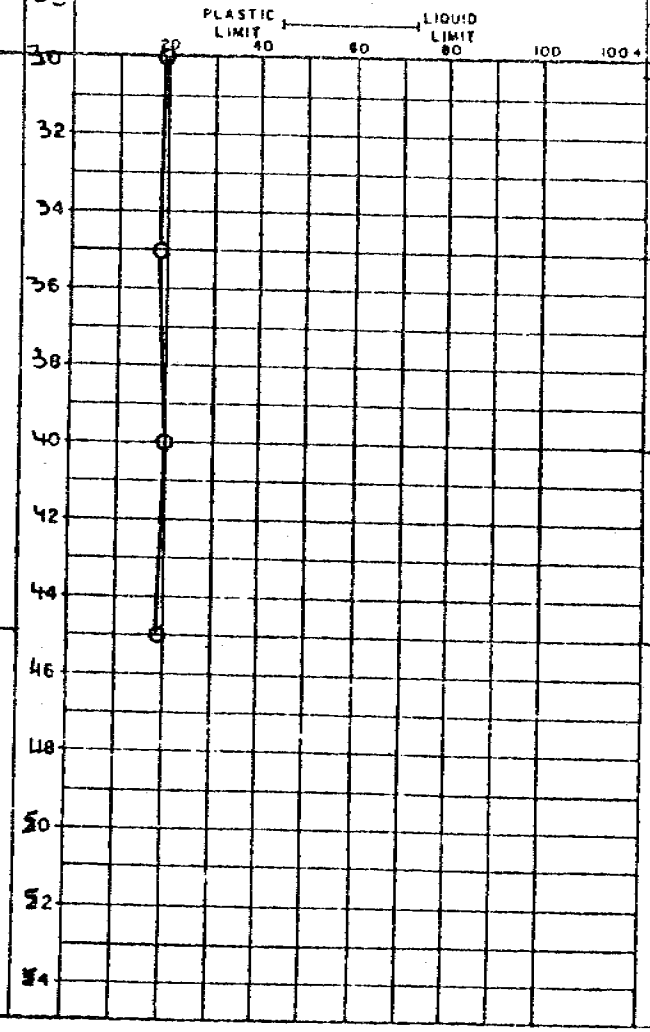
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DOWN	FIELD ENG	DATE DRILLED	AIRPHOTO NO.	CHAINAGE	OFFSET
CKD	TECH	RIG	SURFACE DRAINAGE:	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA-27A-6

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					SM	SAND - SILTY		$V_C - V_r$
						45' BOTTOM OF HOLE - 45'		

O = WATER CONTENT (% OF DRY WEIGHT)
Δ = ICE CONTENT (% OF SAMPLE VOLUME)



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
31	69	0		WET		
41	59	0		SAT.		
36	64	0		SAT		
34	66	0		SAT		

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DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

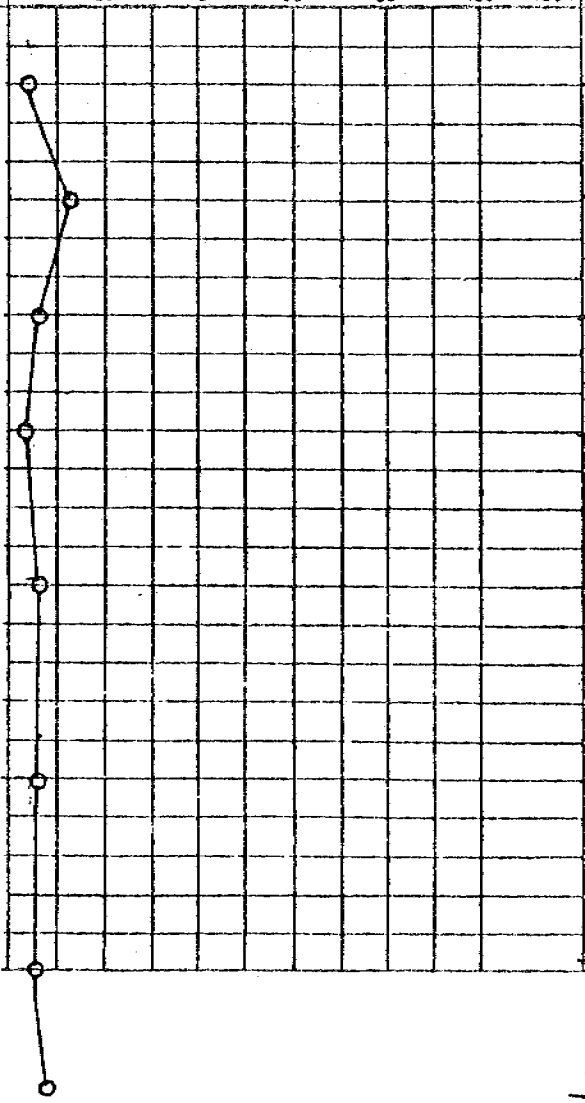
DWN | FIELD ENG | DATE DRILLED 5/4/76 | AIRPHOTO NO. | CHAINAGE | OFFSET
CKD | TECH PRONYCH | RIG AB | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B,C,S | NUMBER
AREA 27A-7

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
					Pt	PEAT 2"									
						GRAVEL - SANDY									
					GW				7	37	56		MOIST		
4															
						5'									
6					SW	SAND - GRAVELLY			7	86	7		WET		
						7'									
8						GRAVEL - SANDY			4	58	38		SAT.		
10								Vc-Vr							
					GW				2	26	72		SAT		
12								To							
14								Vs							
									8	62	30		SAT.		
18															
20									10	10	80		SAT.		
22															
24									1	21	78		SAT.		

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

PLASTIC LIMIT — LIQUID LIMIT
20 40 60 80 100 100+



3 19 78 SAT.

BOTTOM OF HOLE - 30'

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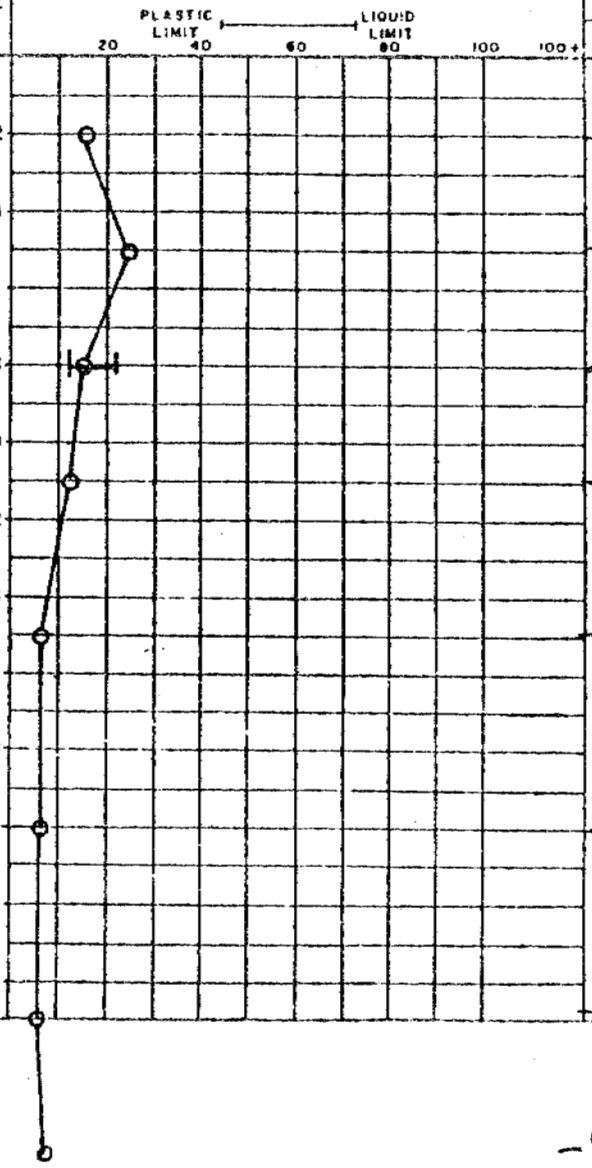
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 5/4/76	AIRPHOTO NO.	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER — AREA - 27A-8

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
					Pt	PEAT 2"									
						CLAY - SILTY SANDY PEBBLES			44	44	12		WET		H.I.B.
4															
6									55	39	6		WET		
					CL	SANDY GRAVELLY LOW PLASTIC									
8								Vc-Vr	34	47	19		WET		
10						11'									
									33	57	10		WET		
12					SC	SAND - CLAYEY GRAVELLY 13'									
14					GM	GRAVEL - SANDY SILTY			10	43	47		WET		
					GW	SANDY									
18															
20									3	29	68		SAT.		
22															
24									2	30	68		SAT.		



-9-5041 SAT.

BOTTOM OF HOLE - 30'

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DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 5/4/76	AIRPHOTO NO	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA 27B-1

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT 2"									
2					GV	GRAVEL - SANDY			4	34	62		WET		
4															
6									6	49	45		SAT.		
8									7	42	51		SAT.		
10															
12						BOTTOM OF HOLE - 12' CAVING			8	44	48		SAT.		
14															
16															
18															
20															
22															
24															

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

PLASTIC LIMIT ⟵ ⟶ LIQUID LIMIT
20 40 60 80 100 100+

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DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 5/4/76	AIRPHOTO NO	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER: AREA - 27B-2

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	Peat 1"		
2						GRAVEL - COBBLES BOULDERS		
4								
6						6'		
8						BOTTOM OF HOLE 6' REFUSAL		
10								
12								
14								
16								
18								
20								
22								
24								

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

PLASTIC LIMIT — LIQUID LIMIT: 20 40 60 80 100 100+

NO SAMPLES

DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
2							
4							
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							

ROT3

INUVIK - TUK.

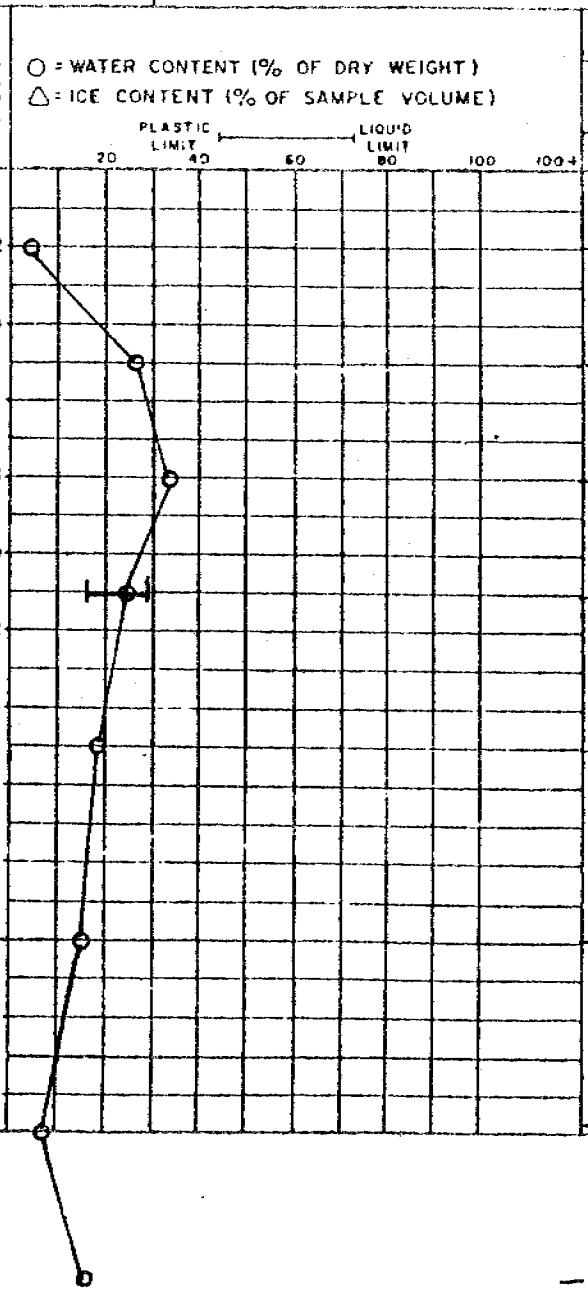
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 5/4/76 | AIRPHOTO NO. | CHAINAGE | OFFSET
CKD | TECH PRODYCH | RIG AIR | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | B.C.S | NUM — AREA-27C-

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT 1"									
2					SW	SAND-GRAVELLY 3'			3	61	36		WET		
4						CLAY-SILTY SANDY			59	46	0		SAT.		
6															
8					CL	PEBBLES			91	9	0		WET		
10						LOW PLASTIC		Vc-Vr	58	35	7		WET		
12						GRAVELLY									
14						14									
						SAND-CLAYEY GRAVELLY SILTY			33	46	21		SAT		
18					Sc										
20									34	62	4		WET		
22															
24									19	55	26		SAT.		



BOTTOM OF HOLE - 30'

-20-77-3 SAT.

INUVIK - TUK.

DRILL HOLE REPORT

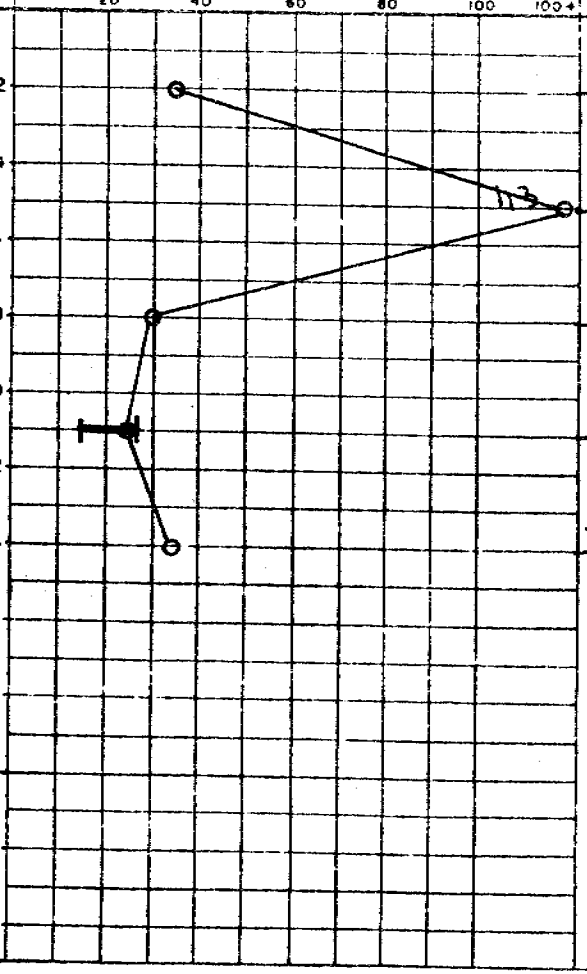
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 5/4/76	AIRPHOTO NO.	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG A12	SURFACE DRAINAGE	VEGETATION	ELEV.

TEST HOLE: MILE | B,C,S | NUMBER: AREA-216-2

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT — 3"									
2						CLAY - SANDY PEBBLES		Vs	51	41	8				FREE WATER
4															
6						SILTY			54	43	3				FREE WATER
8					CL	GRAVELLY			45	43	12				SAT.
10						LOW PLASTIC		Vc-Vr	49	32	19				WET
12															
14						PEBBLES. — 15'			76	18	6				WET
16						BOTTOM OF HOLE - 15'									
18															
20															
22															
24															

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



R071

INUVIK - TUK.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

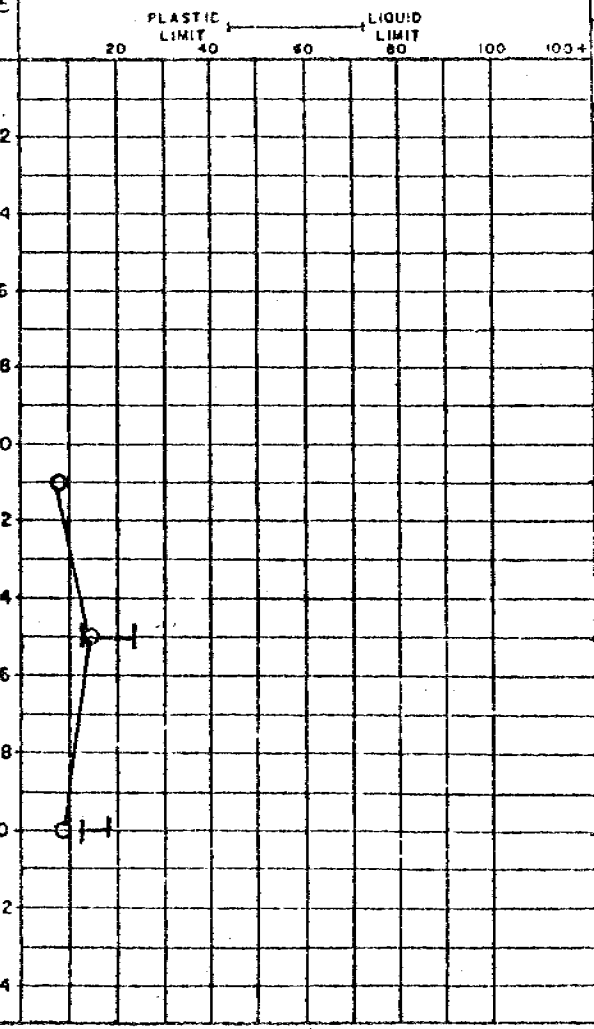
DWN	FIELD ENG	DATE DRILLED 5/4/76	AIRPHOTO NO.	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE

MILE	B,C,S	NUMBER
AREA - 2		IC-3

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT 1'		
						ICE & ORGANIC 7'		ICE & OH
					Cl	CLAY - SILTY SANDY 9'		
					GW	GRAVEL - SANDY 14'		
					CL	CLAY - SILTY SANDY GRAVELLY LOW PLASTIC 20'		VL-VV
					SC	SAND - CLAYEY SILTY GRAVELLY 26'		

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



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
4	22	74		SAT.		
46	43	11		WET		
24	54	22		WET		

BOTTOM OF HOLE - 26'

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

INUVIK - TUK.

FIELD ENG	DATE DRILLED 5/4/76	AIRPHOTO NO:	CHAINAGE
TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION

OFFSET
ELEV

TEST HOLE

MILE	B,C,S	NUMBER
AREA - 27C-3		

REMARKS

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)
					Pt	PEAT 1'								
2, 4, 6						ICE & ORGANIC 7'		ICE & OH						
8					Cl	CLAY - SILTY SANDY 9'								
10, 12					GW	GRAVEL - SANDY 14'			4	22	74		SAT.	
14, 16, 18					CL	CLAY - SILTY SANDY GRAVELLY LOW PLASTIC 20'		VL-VY	46	43	11		WET	
20, 22, 24					SC	SAND - CLAYEY SILTY GRAVELLY 26'			24	54	22		WET	

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

PLASTIC LIMIT — LIQUID LIMIT
20 40 60 80 100 100+

BOTTOM OF HOLE - 26'

INUVIK - TUK

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 8/4/76	AIRPHOTO NO	CHAINAGE	OFFSET
CKD	TECH PROKOPYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMB — AREA 28-1

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT 3"									
2						CLAY - SILTY SANDY GRAVELLY LOW PLASTIC		Vs	46	39	15		SAT.		
4															
6									50	42	8		WET		
8									48	44	8		WET		
10								Vc-Vr							
12									46	41	13		MOIST		
14															
16									53	38	9		WET		
18															
20									43	44	13		WET		
22															
24									62	31	7		MOIST		

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

PLASTIC LIMIT — LIQUID LIMIT

20 40 60 80 100 100+

27'

Sm SANDY GRAVELLY SILTY Vs

BOTTOM OF HOLE - 30'

-19-56-25 SAT.

SANDY GRAVELLY

INUVIK - TUK

DRILL HOLE REPORT

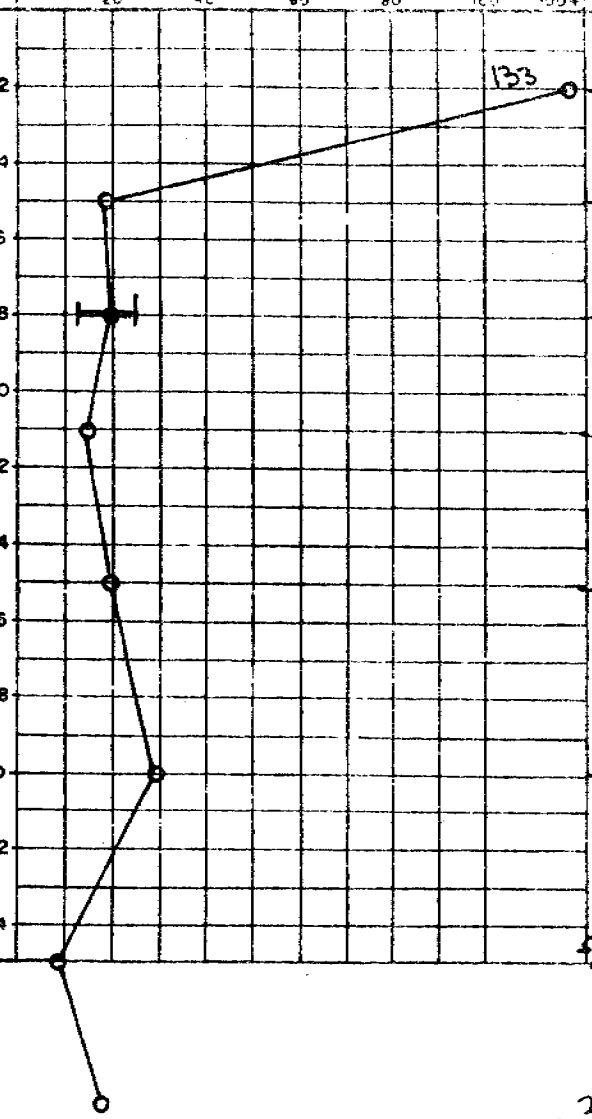
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 5/4/70	AIR PHOTO NO	CHAINAGE	OFFSET
CKD	TECH P. Bodnych	RIG Air	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER — AREA - 28-2

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
					Pt	PEAT 4"									
2						CLAY - SILTY SANDY		Vs							
4															
6						GRAVELLY									
8						PEBBLES									
10						LOW PLASTIC		Vc-Vv							
12					CL										
14															
16															
18															
20															
22															
24					GC	GRAVEL-SAND-CLAY MIX									

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



72	28	0	FREE WATER	
46	39	15	WET	
49	40	11	WET	
90	7	3	WET	
66	29	5	Moist	
59	33	8	WET	
27	36	37	WET	
30	60	10	WET	

SM SAND-SILTY GRAVELLY
BOTTOM OF HOLE - 30'

INUVIK-TUK.

DRILL HOLE REPORT

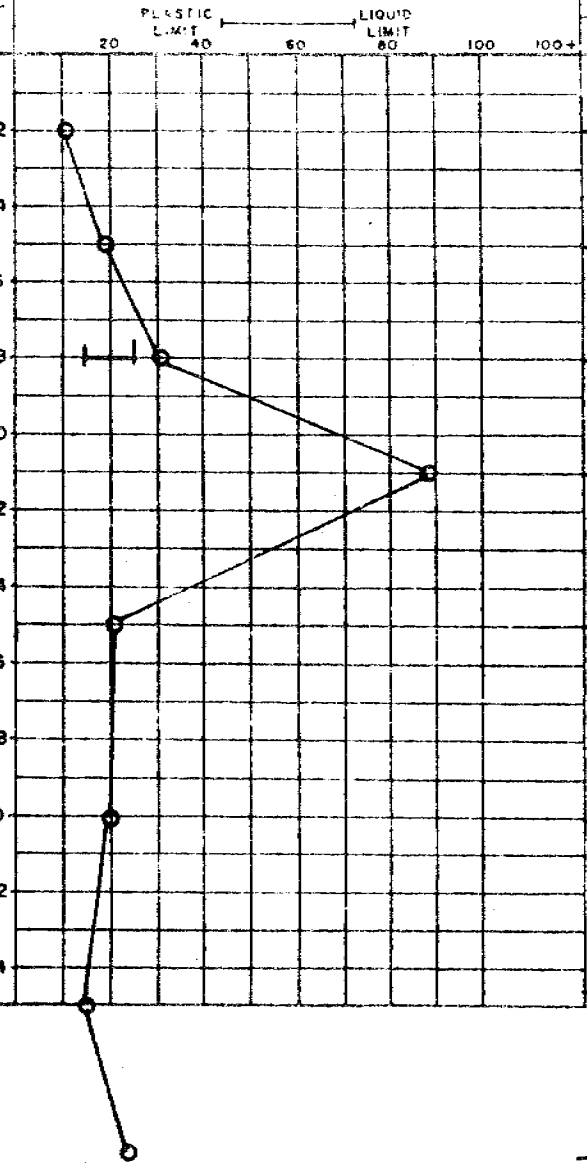
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN | FIELD ENG | DATE DRILLED 5/4/76 | AIRPHOTO NO | CHAINAGE | OFFSET
CKD | TECH PRONYCH | RIG AUK | SURFACE DRAINAGE | VEGETATION | ELEV

TEST HOLE: MILE | S.C.S | NUMBER — AREA-28-3

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT — 2"									
2					SM	SAND-SILTY GRAVELLY PEBBLES — 5'		Vc-Vr	27	48	25		WET		
4															
6						CLAY-SANDY SILTY PEBBLES			30	66	4		SAT.		
8						LOW PLASTIC			58	40	2		SAT.		
10					CL			Vs	76	21	3		FREE WATER		
12															
14						— 14'									
16					SP	SAND-PEBBLES FINE-MED.			7	86	7		SAT.		
18								Vc-Vr							
20					SM	SILTY-GRAVELLY			23	66	11		WET		
22															
24									21	63	16		WET		

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



— 27
CLAY-SILTY SANDY
CL PEBBLES

BOTTOM OF HOLE - 30'

-55-42-3 WET

CL PEBBLES

Inuvik - Tuk

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 5/4/76	AIRPHOTO NO	CHAINAGE	OFFSET	TEST HOLE
CKD	TECH PROKYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV	MILE / B,C,S / NUMBER: AREA-28-4

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT 4"									
2						CLAY - SILTY SANDY PEBBLES		Vs	69	30	1				FREE WATER
4									64	33	3				FREE WATER
6															
8						MED. PLASTIC			56	35	9				WET
10					Cl				64	32	4				WET
12															
14								Vc-Vr	71	35	4				WET
16															
18															
20						SAND - SILTY CLAYEY 20'			49	51	0				WET
22					Sc	SILTY									
24									21	78	1				WET

○ = WATER CONTENT (% OF DRY WEIGHT)
△ = ICE CONTENT (% OF SAMPLE VOLUME)
PLASTIC LIMIT — LIQUID LIMIT
20 40 60 80 100 100+

17%

CL CLAY - SILTY SANDY PEBBLES 28'

BOTTOM OF HOLE - 30'

61-36-3 WET

INUVIK - Tuk.

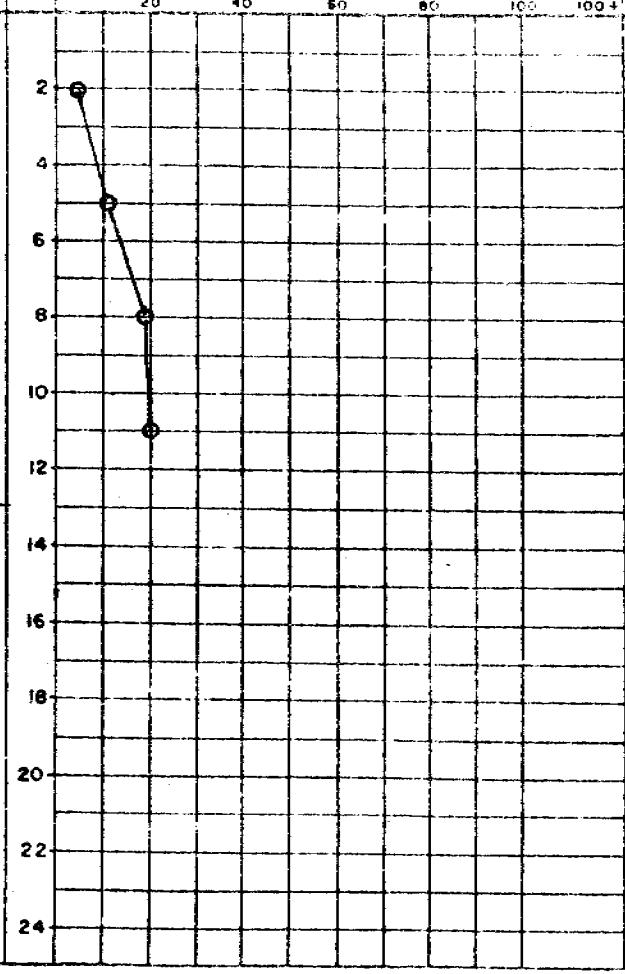
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 5/4/76	AIRPHOTO NO	CHAINAGE	OFFSET
CKD	TECH PROCOPICH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE: MILE | B,C,S | NUMBER: ARFA - 28-5

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT 1"		
2					GW	SAND-GRAVELLY		
4								
6					GP	FINE-MED.		
8								
10								
12						13'		
14								
16								
18						ICE		ICE
20								
22								
24								

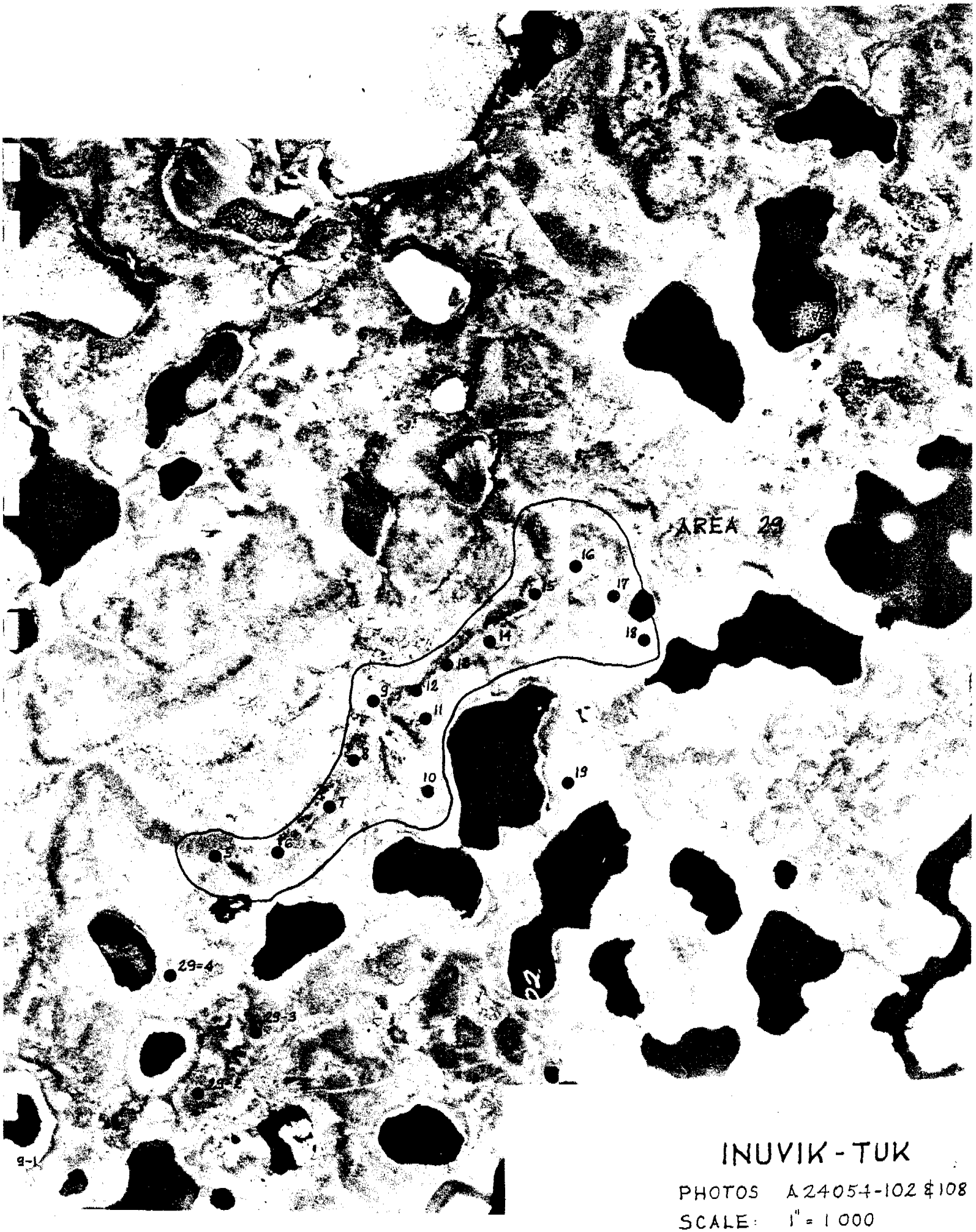


GRAIN SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
3	84	13		WET		
6	65	29		SAT.		
6	94	0		SAT.		
6	94	0		SAT.		

BOTTOM OF HOLE - 30'

SEARCH AREA #29

Landform and Location:	Glacio-fluvial outwash feature (small esker or crevasse filling) roughly 1 mile west of the alignment near Mile 1044.
Material:	Gravelly sand and sand gravel, some silt, wet or saturated on thawing.
Stripping:	Feature is a narrow elongate ridge - stripping on south side will increase as depth of excavation extends below adjacent terrain.
Conclusion:	A good viable source of borrow. Volume of material estimated at roughly 300,000 cu. yds. Extraction by stripping periodically throughout summer is recommended to eliminate ice in final product. Subsequent stockpiling, and winter haul to R.O.W. to avoid construction of haul road will be required.



INUVIK - TUK

PHOTOS A24054-102 & 108

SCALE: 1" = 1 000

DATE: JUNE 22 / 1975

INUVIK - TUK.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

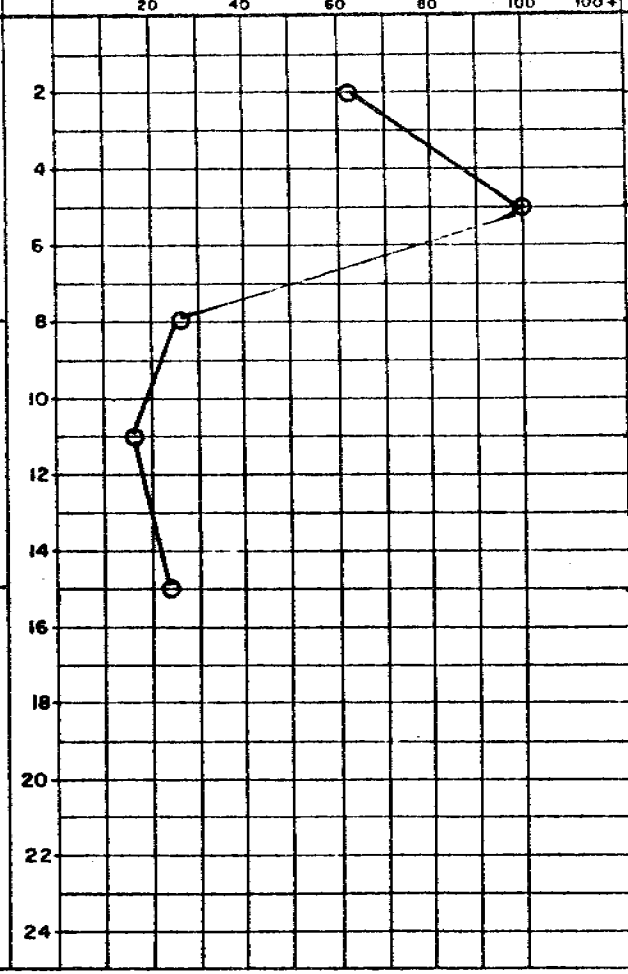
DWN	FIELD ENG	DATE DRILLED 7/4/77	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE 29-1

MILE	B,C,S	NUMBER
		[redacted]

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT 1.5'									
2					Sm	SAND - SILTY PEBBLES 5'		Vs	16	80	4				FREE WATER
4									68	30	2				FREE WATER
6						CLAY - SILTY SANDY PEBBLES									
8					CL				69	29	2				WET
10						LOW - MED. PLASTIC		Vc - Vr	53	45	2				MOIST
12					CI										
14						15'			74	24	2				DAMP
16						BOTTOM OF HOLE - 15'									
18															
20															
22															
24															

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



R073

INUVIK - TUK.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 7/4/77	AIRPHOTO NO	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE 29-2

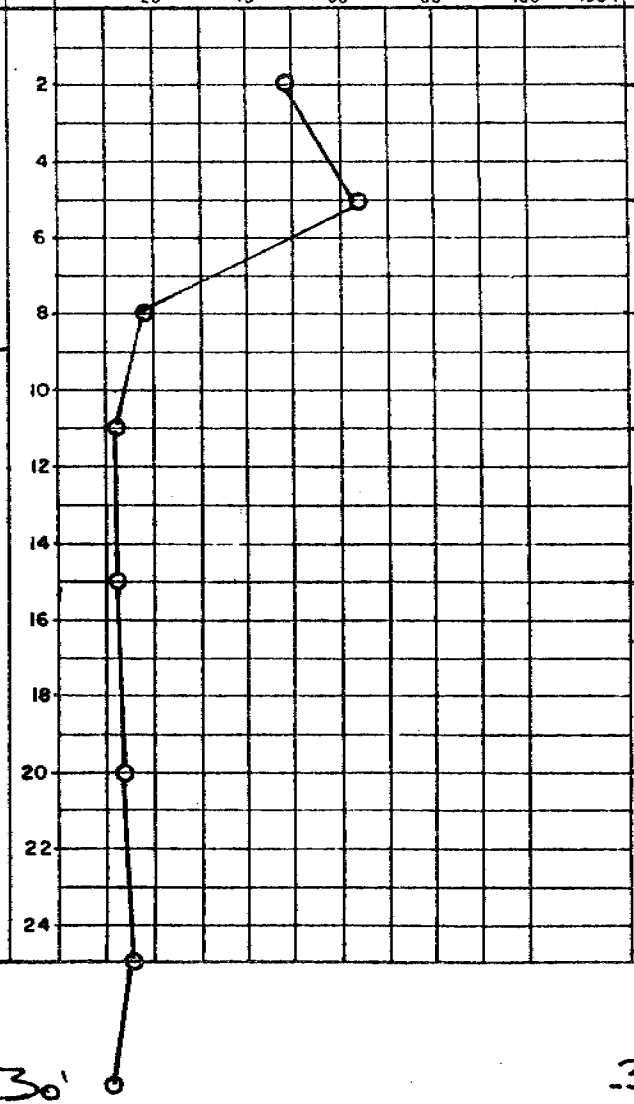
MILE	B,C,S	NUMBER
		[redacted]

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt.	PEAT 2'									
					CL	CLAY - SANDY SILTY PEBBLES		Vs	40	53	7			FREE WATER
					Ci				39	43	18			FREE WATER
						6'									
						SAND - SILTY GRAVELLY			35	54	11			SAT
					SM				32	49	19			MOIST
								Vc - Vr	33	46	21			DAMP
									34	56	10			DAMP
						30'			43	50	7			DAMP

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

PLASTIC LIMIT — LIQUID LIMIT

20 40 60 80 100 100+



37-52-11 DAMP

BOTTOM OF HOLE - 30'

INUVIK - TUK.

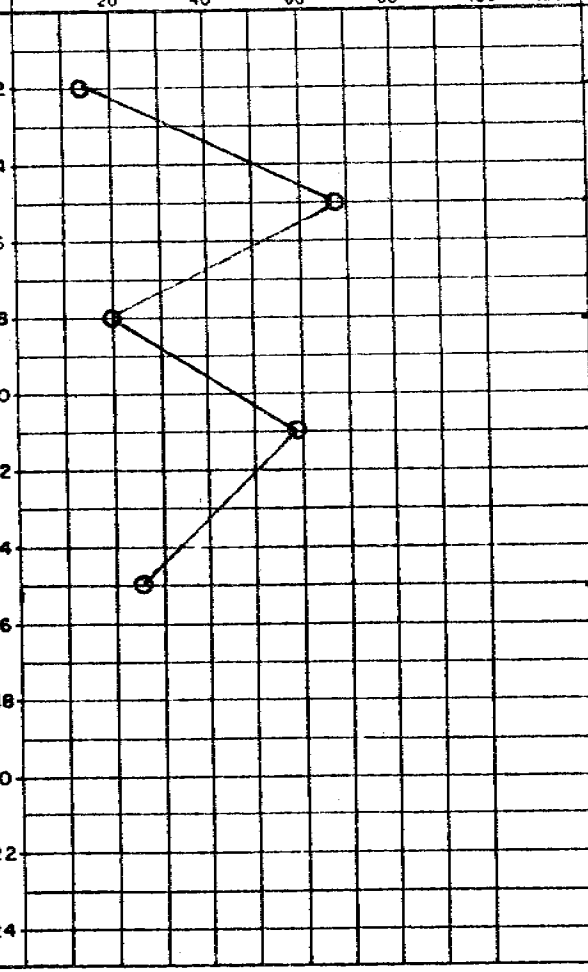
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG.	DATE DRILLED 7/4/77	AIRPHOTO NO.	CHAINAGE	OFFSET	TEST HOLE 29-3
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV	MILE / B,C,S / NUMBER [redacted]

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT 2'		
					Cl	CLAY - SILTY SANDY PEBBLES 13'		Vs
					Sc	CLAYEY SILTY SAND - PEBBLES 15'		
						BOTTOM OF HOLE - 15'		

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



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
38	52	10		DAMP		
48	43	9		FREE WATER		
51	41	8		WET		
96	4	0		SAT		
40	59	1		FREE WATER		

R073

INUVIK - TUK.

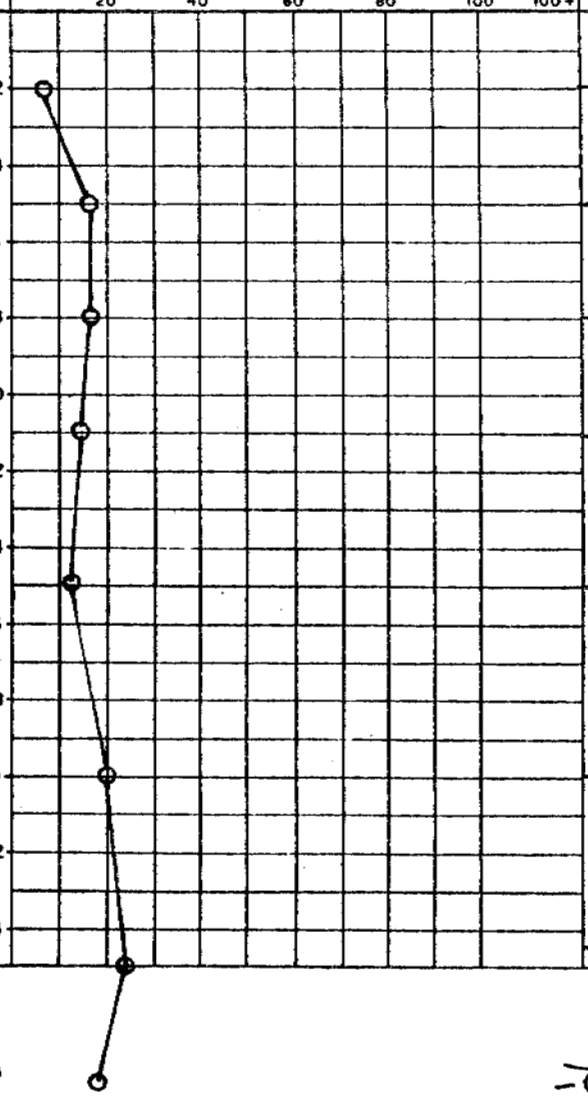
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 7/4/77	AIRPHOTO NO:	CHAINAGE	OFFSET	TEST HOLE 29-5
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV	MILE / B,C,S / NUMBER [redacted]

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT 2"		
2					SM	SAND - SILTY GRAVELLY		
4					Sc	CLAYEY		
6								
8						9'		
10					CL	CLAY - SILTY SANDY GRAVELLY LOW PLASTIC 13'		$V_c - V_r$
12								
14					SM	SAND - SILTY GRAVELLY 17'		
16								
18						CLAY - SILTY SANDY PEBBLES		
20								
22					CI	MED - PLASTIC		
24								

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



DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
2	20	45	35		MOIST		
4	29	60	11		SAT.		
8	31	50	19		SAT.		
10	49	30	21		WET		
14	12	75	13		WET		
20	79	20	1		MOIST		
24	68	19	13		MOIST		

30'

BOTTOM OF HOLE - 30'

-TC-21-2 DAMP

R073

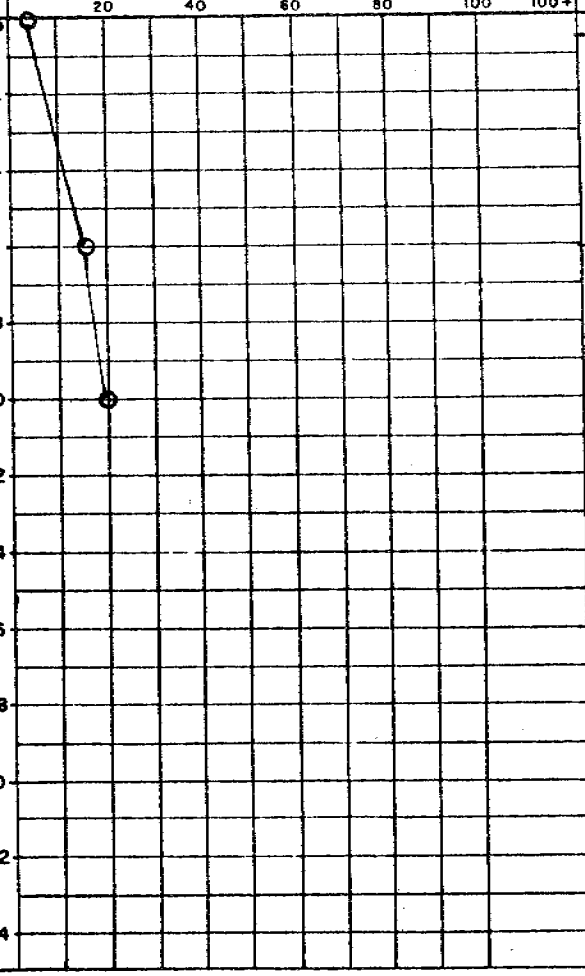
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED	AIRPHOTO NO:	CHAINAGE:	OFFSET	TEST HOLE 29-6
CKD	TECH	RIG:	SURFACE DRAINAGE:	VEGETATION	ELEV	MILE / B,C,S / NUMBER [redacted]

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
0–10					SP	SAND - FINE			4		96	0	DAMP		
10–41					SM	SILTY - PEBBLES			19		77	4	WET		
41									29		71	0	SAT.		
41–42						BOTTOM OF HOLE. 41									

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



R073

INUVIK - TUK.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

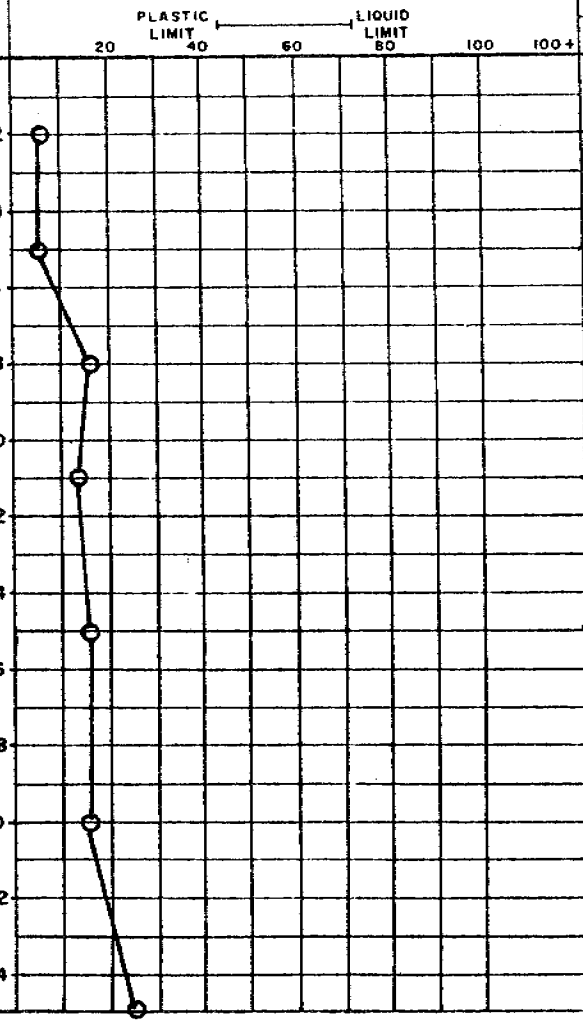
DWN	FIELD ENG	DATE DRILLED 7/4/71	AIRPHOTO NO	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE 29-7

MILE	B,C,S	NUMBER
		[redacted]

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT 10"									
2						SAND - SILTY PEBBLES			10	88	6		DAMP		
4					SM			Vc-Vr	10	81	9		MOIST		
6															
8									15	79	6		WET		
10						GRAVELLY			13	66	21		SAT.		
12															
14									19	64	17		SAT		
16								Vs							
18															
20									18	59	23		SAT		
22															
24					ML	SILT - SANDY - PEBBLES			56	39	5		SAT		

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



R073

OVER

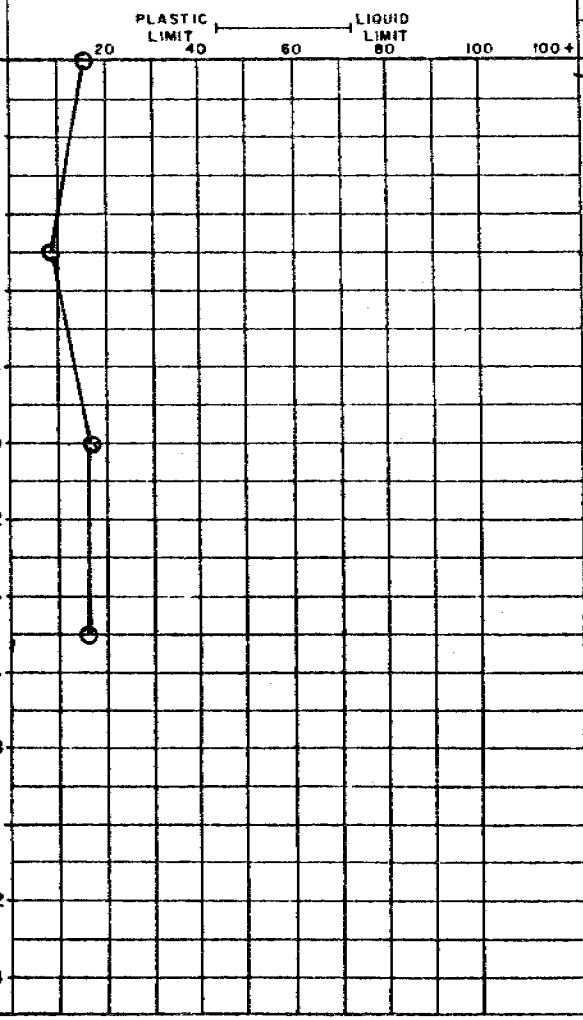
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED	AIRPHOTO NO	CHAINAGE	OFFSET	TEST HOLE 29-7
CKD	TECH	RIG	SURFACE DRAINAGE	VEGETATION	ELEV	MILE / B,C,S / NUMBER [redacted]

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
0–32'					CL	CLAY-SILTY-SANDY GRAVELLY		$V_C - V_r$	50	38	12		SAT.		
32–37'					SM	SAND-SILTY GRAVELLY			20	51	29		WET		
37–45'					ML, CL, CI	SILT-CLAYEY; CLAY-SILTY; PEBBLES SANDY			57	40	3		DAMP		
45'						BOTTOM OF HOLE-45'			TB	24	3		DAMP		

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



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DRILL HOLE REPORT

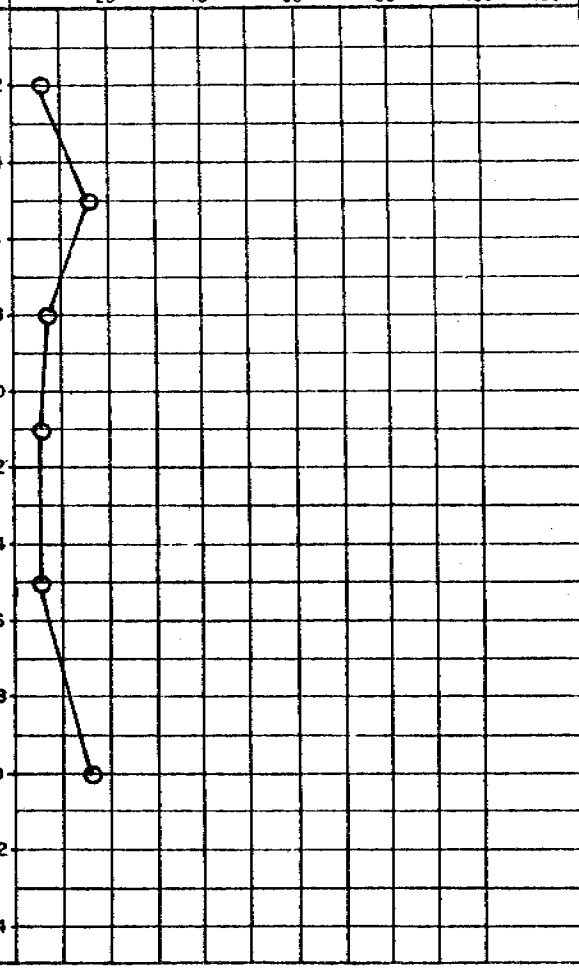
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG:	DATE DRILLED 1/4/77	AIRPHOTO NO:	CHAINAGE:	OFFSET
CKD	TECH PRONYCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE 29-8

MILE	B,C,S	NUMBER
		[redacted]

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT 10"		
2						SAND - PEBBLES SILTY		
4					SM			
6						6'		
8					SW	SAND-GRAVELLY TO SAND-GRAVEL MIXTURE		Vc-Vr
10								
12					GW			
14								
16								
18								
20						20'		
					CL	CLAY-SILTY SANDY P. 21'		
22						BOTTOM OF HOLE		
24								



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
22	65	13		DAMP		
17	75	8		SAT.		
5	63	32		SAT.		
5	64	31		SAT		
3	52	45		SAT		
15	77	8		SAT.		

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DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 7/4/77	AIRPHOTO NO:	CHAINAGE:	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE 29-9

MILE	B,C,S	NUMBER
		[redacted]

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT 4"									
						SAND-GRAVELLY									
2									2	68	30		DAMP		
4									14	53	33		SAT.		
6					Sil			Vc-Vr							
8									5	55	40		SAT.		
10									7	66	27		SAT.		
12						12'									
						BOTTOM OF HOLE - 12'									
14															
16															
18															
20															
22															
24															

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

PLASTIC LIMIT — LIQUID LIMIT
20 40 60 80 100 100+

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INUVIK - TUK

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

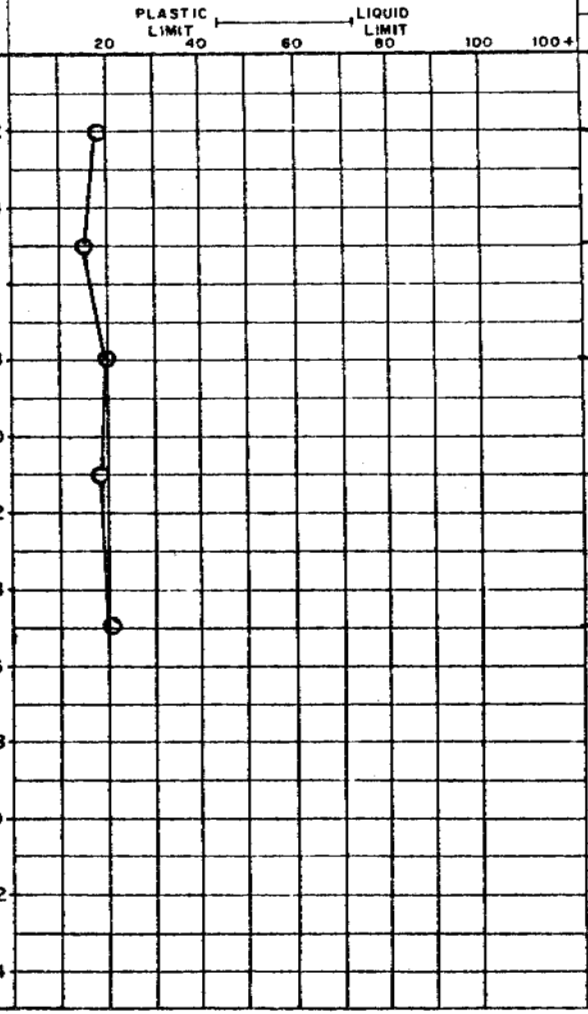
DWN	FIELD ENG	DATE DRILLED 7/4/77	AIRPHOTO NO	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE 29-10

MILE	B,C,S	NUMBER
		[redacted]

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

PLASTIC LIMIT ⊢——⊣ LIQUID LIMIT



DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT 10"									
2					SM	SAND - SILTY PEBBLES		Vc-Vr	27	69	4		SAT.		
4					ML	SILT - SANDY PEBBLES			53	44	3		WET		H.I.B.
6															
8					SM	SAND - SILTY PEBBLES		Vs	30	65	5		SAT.		
10					ML	SILT - SANDY CLAYEY GRAVELLY			44	42	14		SAT.		
12															
14					SM	SAND - SILTY - PEBBLES 15'			42	54	4		SAT		
16						BOTTOM OF HOLE - 15									
18															
20															
22															
24															

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DRILL HOLE REPORT

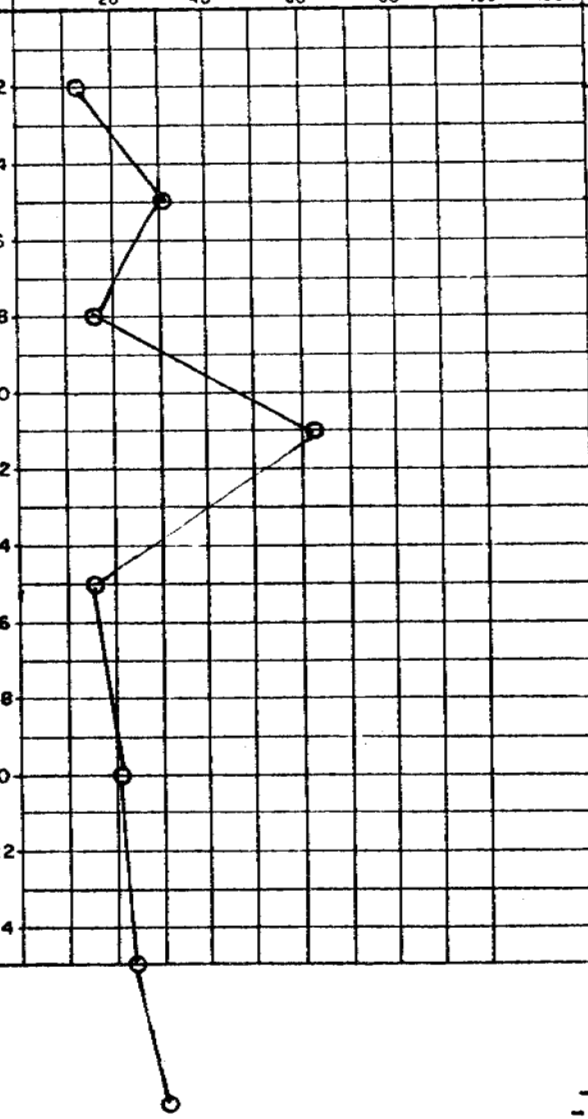
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 1/4/77	AIRPHOTO NO:	CHAINAGE:	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE 29-11

MILE	B,C,S	NUMBER
		[redacted]

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					Pt	PEAT — 8"		
2						SAND - SILTY PEBBLES		
4					SM			
6								
8						— 9'		
10					CL	CLAY - SILTY SANDY		Vs
12						— 12'		
14						SAND - SILTY PEBBLES		
16					SM			
18								
20						GRAVELLY		
22								
24								



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
29	67	4				WET
21	72	7				FREE WATER
28	71	1				WET
67	33	0				FREE WATER
20	77	3				WET
10	70	20				FREE WATER
37	45	18				SAT.

PEBBLES

BOTTOM OF HOLE - 30

-70-26-4 WET.

DRILL HOLE REPORT

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MACKENZIE HIGHWAY

INUVIK - TUK.

DWN	FIELD ENG	DATE DRILLED 8-11-71	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE:	VEGETATION	ELEV

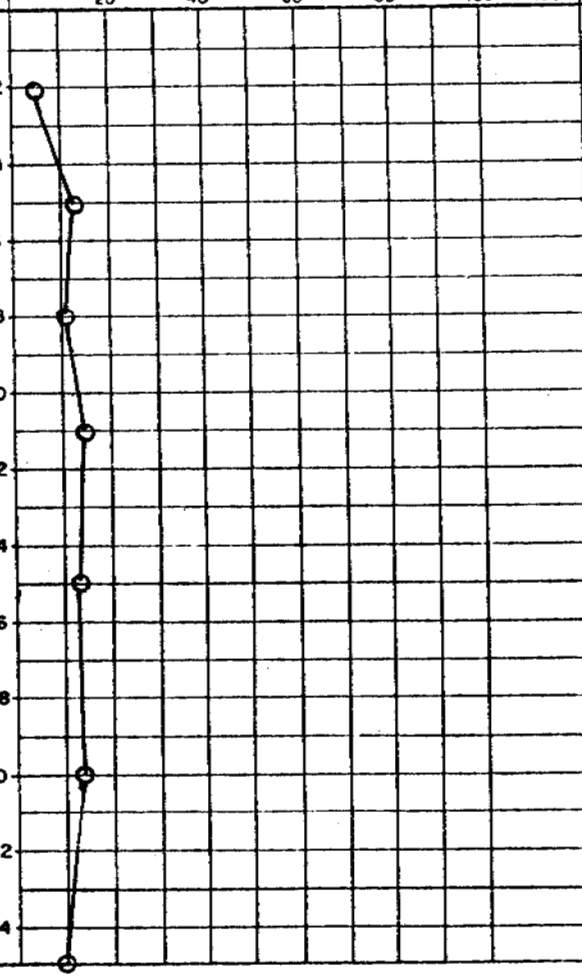
TEST HOLE 29-12

MILE	B,C,S	NUMBER
		[redacted]

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT 4"									
2						SAND-SILTY PEBBLES			14	82	4		DAMP		
4									31	64	5		WET		
6															
8									26	66	8		SAT		
10									24	72	4		SAT		
12					SM			Vc-Vr							
14									24	73	3		SAT.		
16															
18															
20						GRAVELLY			19	65	16		SAT.		
22															
24									17	51	32		SAT		

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

PLASTIC LIMIT — LIQUID LIMIT
20 40 60 80 100 100+



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OVER

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

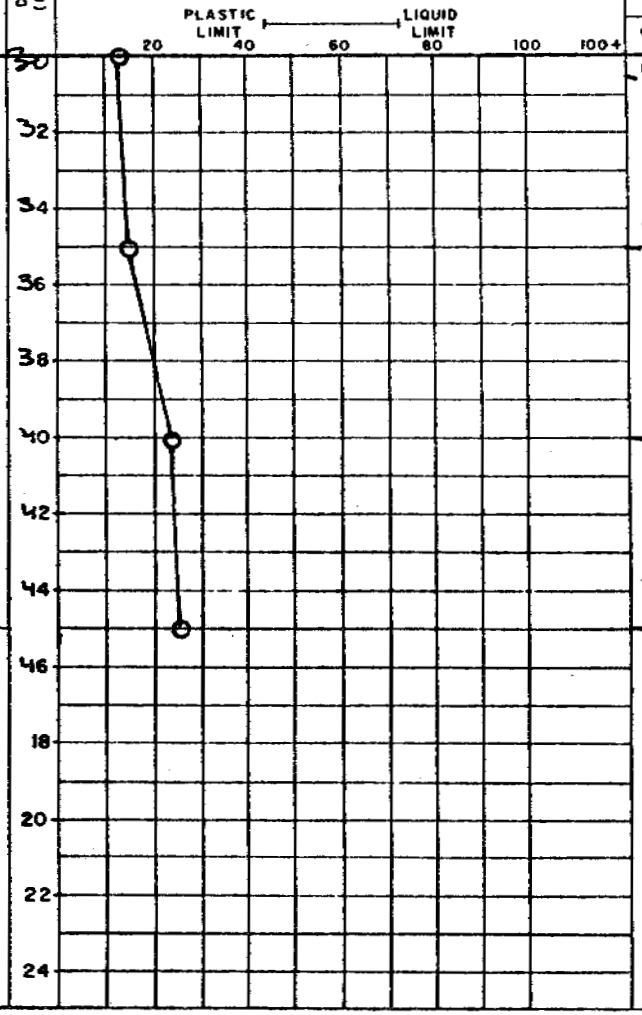
DWN	FIELD ENG	DATE DRILLED	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH	RIG	SURFACE DRAINAGE:	VEGETATION	ELEV

TEST HOLE 29-12

MILE	B,C,S	NUMBER
		[redacted]

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
0						SAND - SILTY PEBBLES			23	66	11		SAT.		
2															
4									35	63	2		SAT		
6					SM										
8						SILTY FINE		VS							
10					SP				11	89	0		FREE WATER		
12															
14									10	90	0		SAT. - FREE WATER		
16						BOTTOM OF HOLE - 45'									
18															
20															
22															
24															

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



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DRILL HOLE REPORT

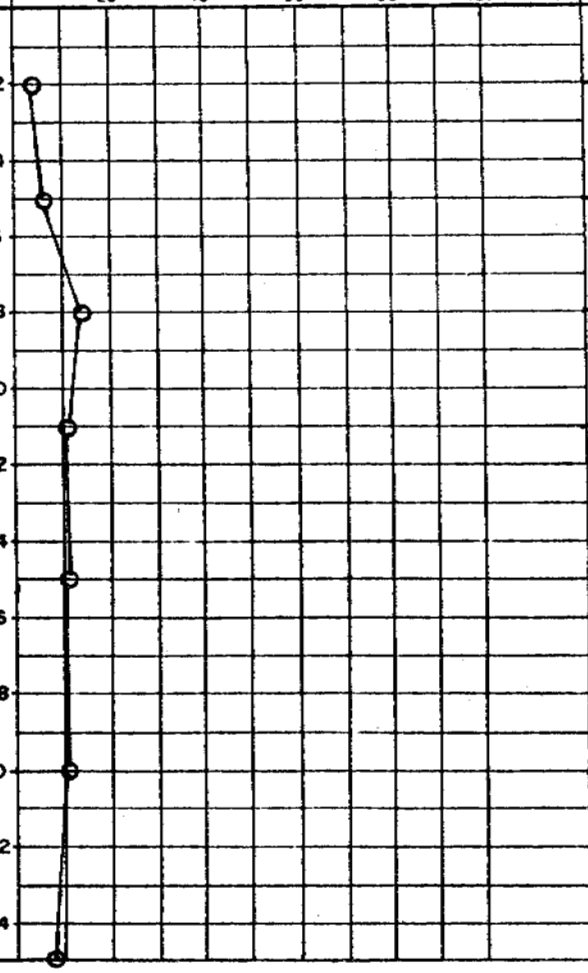
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 8/4/77	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV

TEST HOLE 29-13

MILE	B,C,S	NUMBER
		[redacted]

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
2						SAND - SILTY GRAVELLY		
4								
6						PEBBLES		
8								
10					SM			Vc - Vr
12								
14						GRAVELLY		
16								
18								
20								
22								
24								



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
14	62	24		DAMP		
20	60	20		MOIST		
26	70	4		SAT.		
25	70	5		WET		
23	65	12		WET		
26	48	26		WET		
24	61	15		WET		

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OVER

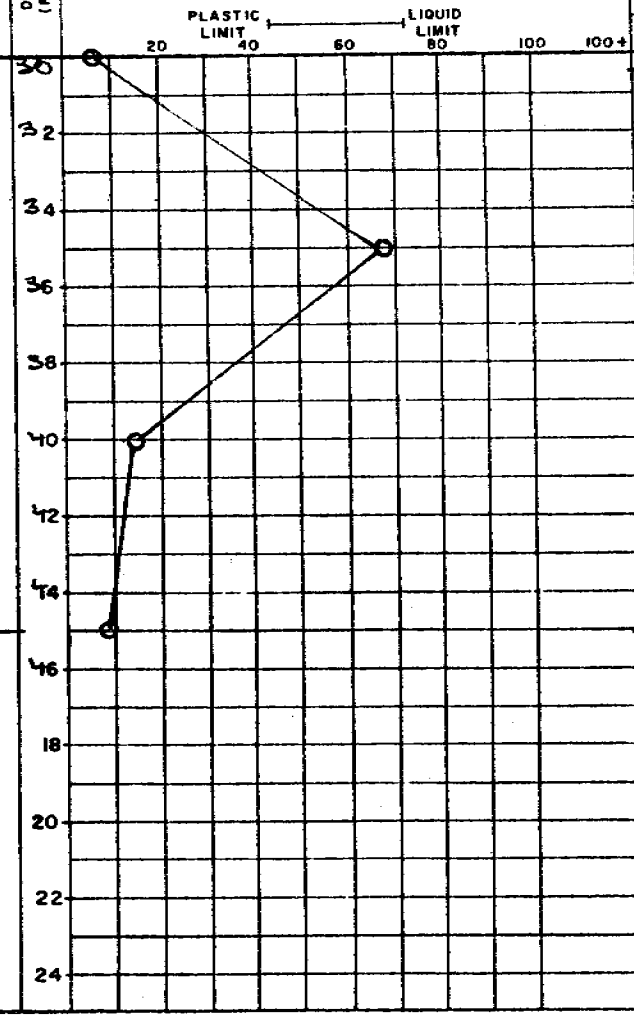
DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED	AIRPHOTO NO	CHAINAGE	OFFSET	TEST HOLE 29-13
CKD	TECH	RIG	SURFACE DRAINAGE	VEGETATION	ELEV	MILE / B,C,S / NUMBER [redacted]

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
					SM	SAND-SILTY GRAVELLY		
45'								
						BOTTOM OF HOLE - 45'		

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



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
19	59	22		MOIST		
21	67	12		FROZEN		
28	50	22		SAT.		
21	61	18		SAT.		

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DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 8/4/77	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE:	VEGETATION	ELEV

TEST HOLE 29-14

MILE	B,C,S	NUMBER
		[redacted]

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT 4"									
2						SAND - SILTY GRAVELLY			28	49	23				FREE WATER
4									22	61	17				FREE WATER
6															
8									20	61	19				SAT.
10					SM			VS	23	59	18				SAT.
12															
14									22	62	16				SAT.
16															
18															
20									23	70	7				SAT.
22															
24															

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

PLASTIC LIMIT — LIQUID LIMIT
20 40 60 80 100 100+

ICE & SAND — ICE + SM — 30'

BOTTOM OF HOLE - 30'

INUVIK-TUK.

DRILL HOLE REPORT

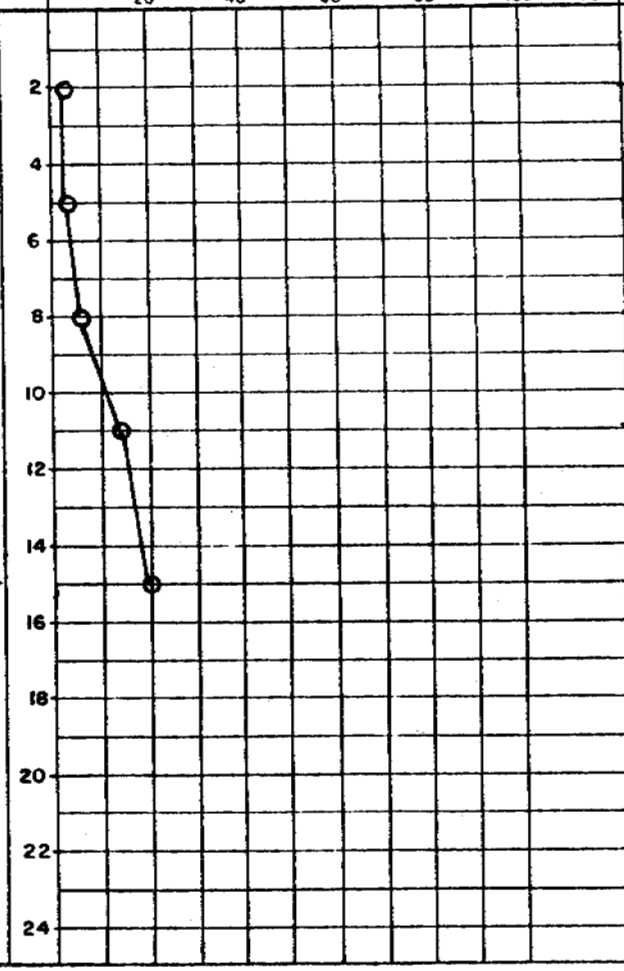
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 8/4/77.	AIRPHOTO NO	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE 29-15

MILE	B,C,S	NUMBER
		[redacted]

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION
2					SM	SAND - SILTY GRAVELLY		
4					SP			
6								
8					SP			$V_c - V_r$
10								
12								
14					SM	SILTY		
						15'		
16						BOTTOM OF HOLE - 15'		
18								
20								
22								
24								



GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
25	35	40		DAMP		
1	59	40		MOIST		
6	65	29		WET		
8	80	12		WET		
23	74	3		SAT.		

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INUVIK-TUK.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 8/4/77	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION	ELEV

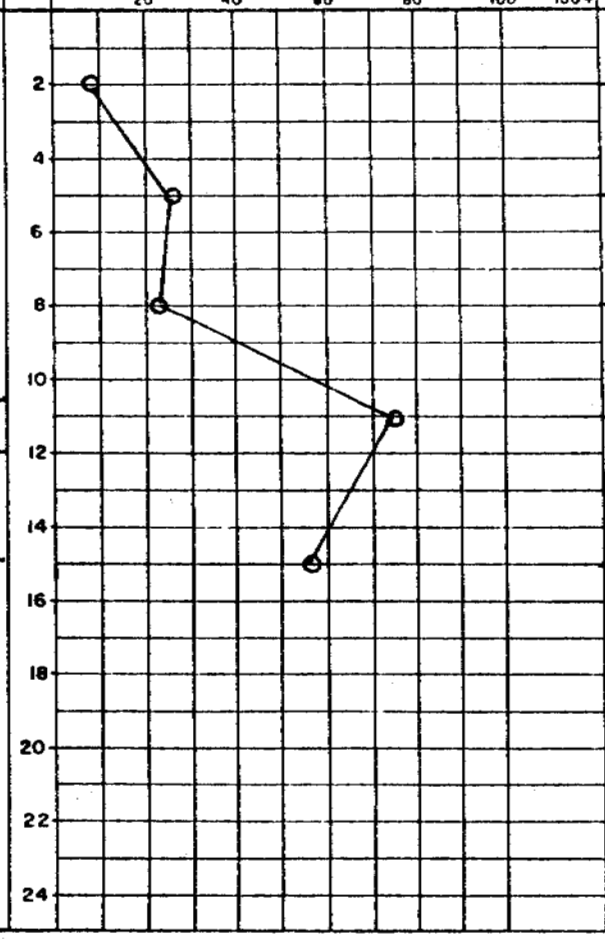
TEST HOLE 29-16

MILE	B,C,S	NUMBER
		[redacted]

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
					Pt	PEAT 4"									
2					Sm	SAND - SILTY PEBBLES		Vs	32	66	2				DAMP
4									33	65	2				FREEWATER
6															
8									35	61	4				FREEWATER
10															
12						ICE & SAND		Ice & Sm	27	62	1				FREEWATER
14					Sm	As Above		Vs	21	68	11				FREEWATER
16						ICE - DIRTY		ICE							
18															
20															
22															
24															

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

PLASTIC LIMIT — LIQUID LIMIT
20 40 60 80 100 100+



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:
CKD	TECH PRONYCH	RIG: AIR	SURFACE DRAINAGE:	VEGETATION:	ELEV:

TEST HOLE 29-17

MILE	B,C,S	NUMBER
		[redacted]

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT 4"									
2					CL	CLAY-SILTY SANDY PEBBLES		Vs	56	43	1				DAMP
4					CI	4'									
6					Sc	SAND-CLAYEY SILTY PEBBLES			26	66	8				PERCH WATER H.I.B.
8						GRAVELLY			19	57	24				SAT.
10					Sm	SILTY-PEBBLES		Vc-Vr	37	58	5				WET
12						GRAVELLY									
14									27	54	19				WET
16															
18															
20									26	70	4				WET
22															
24									21	61	18				WET

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

PLASTIC LIMIT — LIQUID LIMIT
20 40 60 80 100 100+

30'

Bottom of Hole - 30'

-26-56-18 SAT.

R073

INUVIK - TUK.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

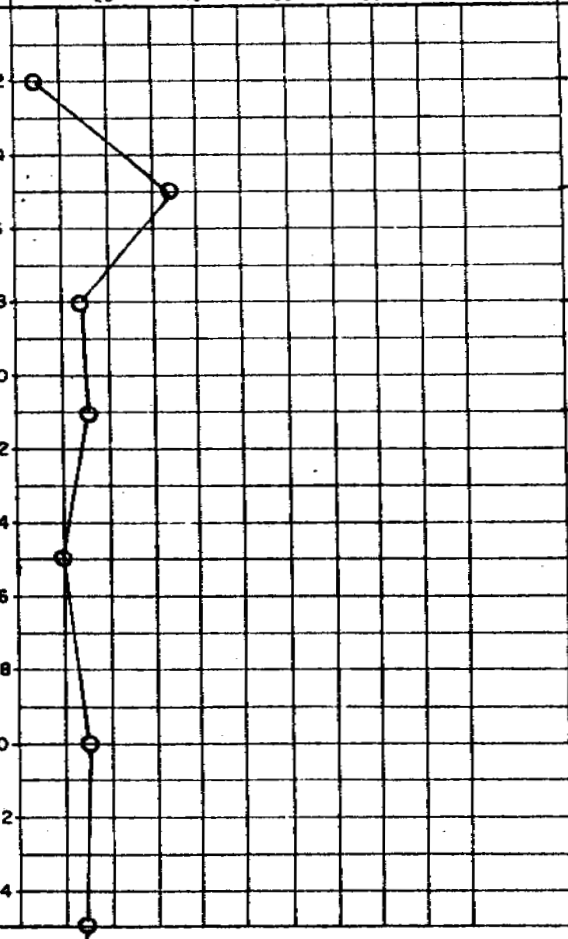
DWN	FIELD ENG	DATE DRILLED 8/4/77	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH PRONYCH	RIG AIR	SURFACE DRAINAGE:	VEGETATION	ELEV

TEST HOLE 29-18

MILE	B,C,S	NUMBER
		[redacted]

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (P.C.F.)	DRY DENSITY (P.C.F.)	REMARKS
					Pt	PEAT 8"									
2					SM	SAND - SILTY GRAVELLY			13	75	12		DAMP		H.I.B
4					ML	SILT - SANDY - CLAYEY			60	40	0		SAT.		
6															
8					SC	SAND - SILTY CLAYEY		Vc-Vr	24	43	33		WET		
10									33	55	12		SAT.		H.I.B.
12															
14									29	51	20		WET		
16						16'									
18						CLAY - SILTY SANDY PEBBLES									
20					CL	LOW PLASTIC			60	35	5		WET		
22						23'									
24					SM	SAND - SILTY GRAVELLY			29	59	12		WET		

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



SM SAND - SILTY 30' -23-55-0 WET

BOTTOM OF HOLE - 30'

R073

INUVIK - TUK.

DRILL HOLE REPORT

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DWN	FIELD ENG	DATE DRILLED 8/4/77	AIRPHOTO NO:	CHAINAGE	OFFSET
CKD	TECH FRONYCH	RIG AIR	SURFACE DRAINAGE	VEGETATION	ELEV

TEST HOLE 29-19

MILE	B,C,S	NUMBER
		[redacted]

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	WET DENSITY (PCF)	DRY DENSITY (PCF)	REMARKS
					PT	PEAT 4"									
2						SAND-SILTY PEBBLES			30	66	4				DAMP
4						GRAVELLY			19	66	15				WET
6									22	67	11				WET
8															
10									41	48	11				DAMP
12								$V_c - V_r$							
14					SM				26	63	11				WET
16															
18															
20									41	51	8				MOIST
22															
24									16	71	13				WET

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

PLASTIC LIMIT — LIQUID LIMIT

20 40 60 80 100 100+

PEBBLES 30' -42-56-2 WET

BOTTOM OF HOLE - 30'

R073