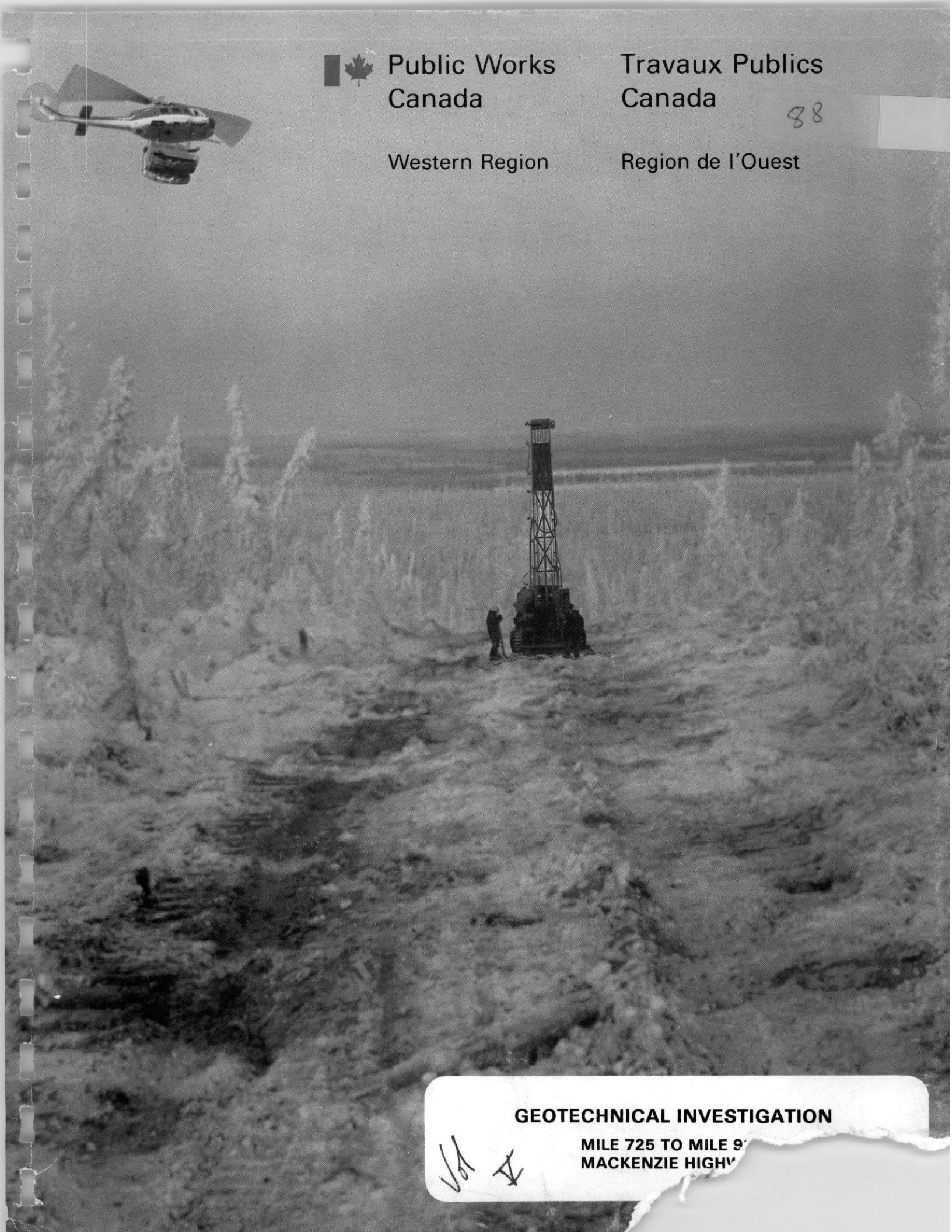
Public Works Canada

Travaux Publics Canada

88

Western Region

Region de l'Ouest



GEOTECHNICAL INVESTIGATION

MILE 725 TO MILE 9

MACKENZIE HIGH

16

DEPARTMENT OF PUBLIC WORKS

WESTERN REGION

REPORT ON

GEOTECHNICAL INVESTIGATION

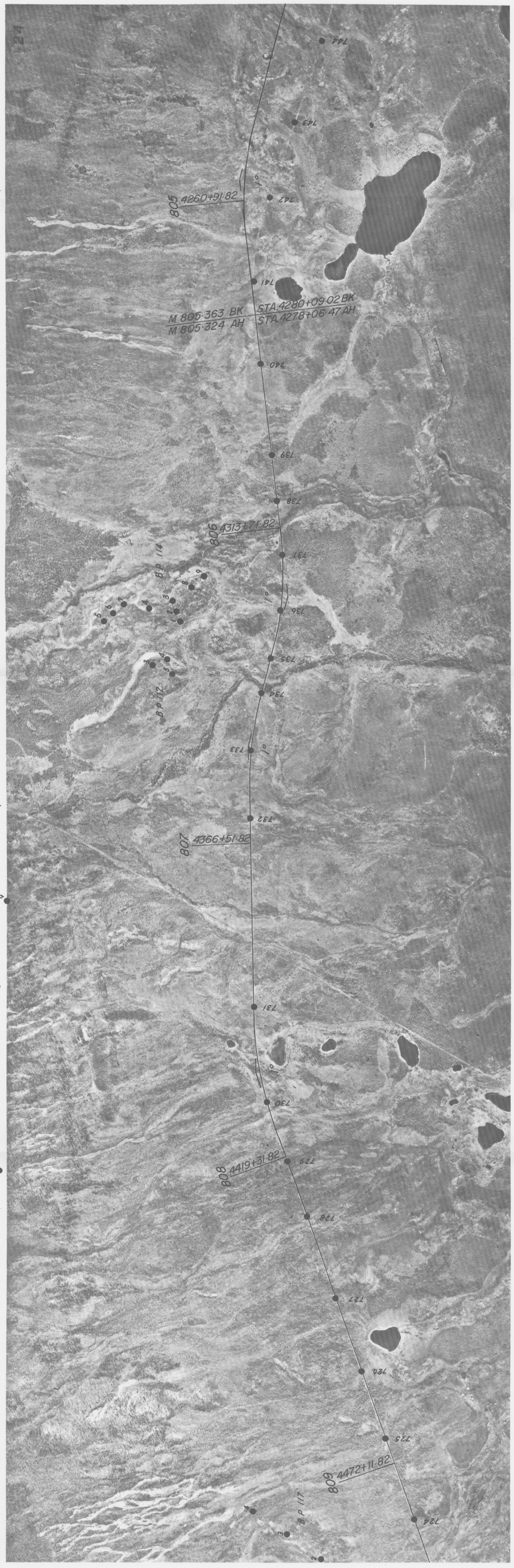
MILE 725 TO MILE 936

MACKENZIE HIGHWAY

VOLUME V

BOREHOLE LOGS AND AIRPHOTO MOSAICS

Mile 800 to Mile 835
Airphoto Mosaics #23 to #31
Centerline borehole logs #589 to #765
Borrow pits #91 to #124



805 4260+91·82
M 805·363 BK
M 805·324 AH
STA.4280+09·02 BK
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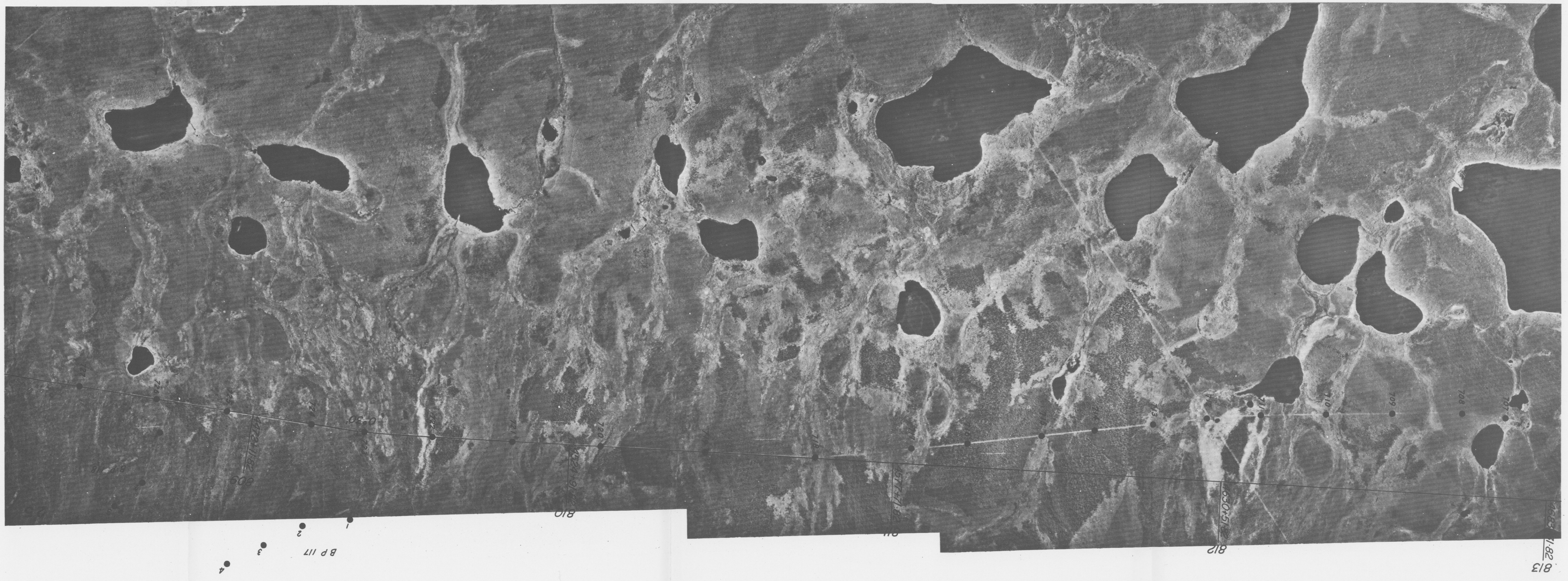
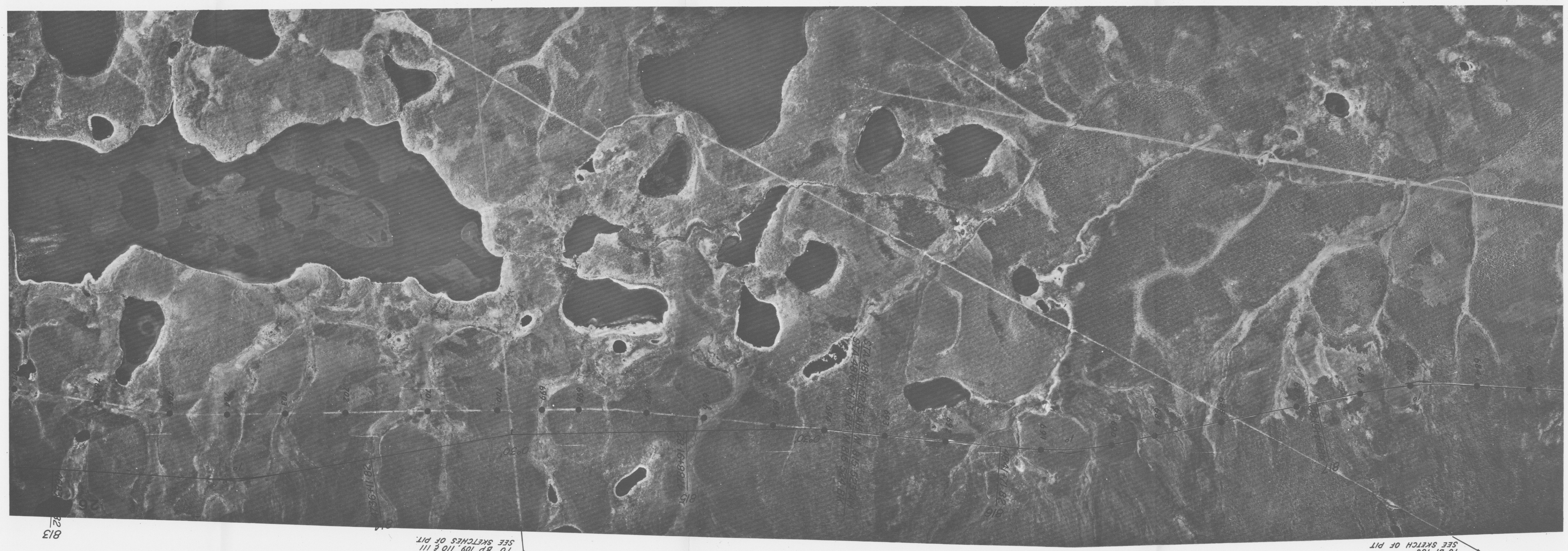
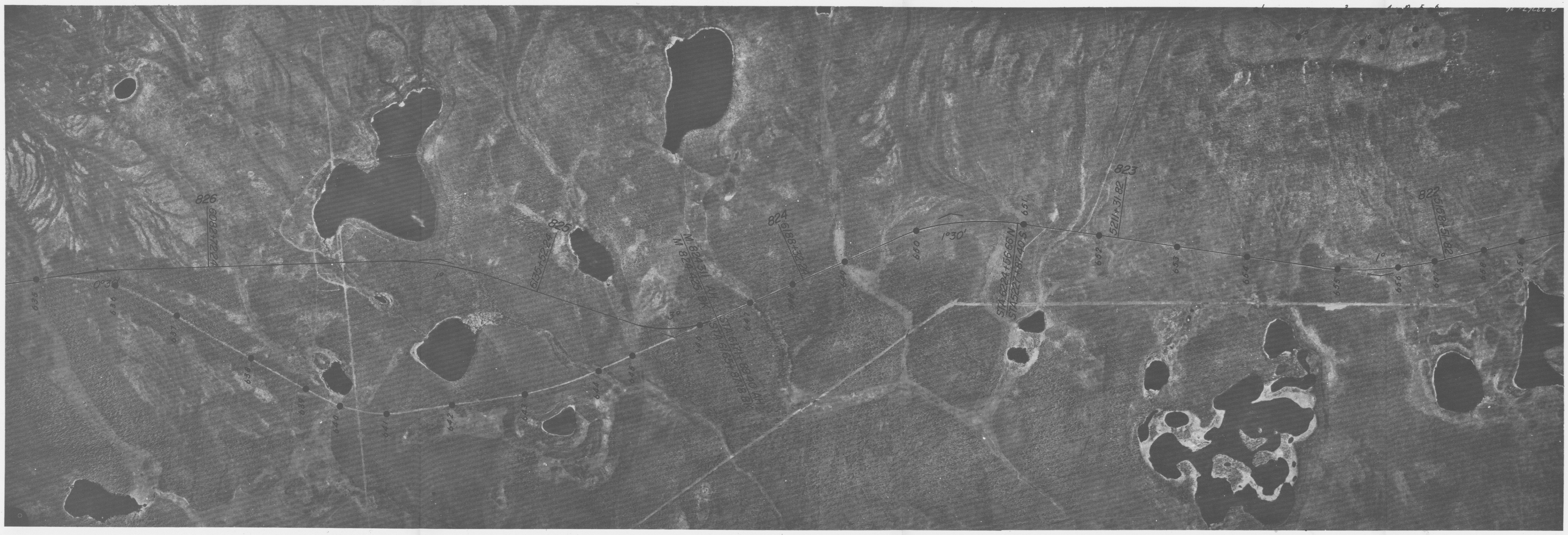
808 4419+31·82
809 4472+11·82



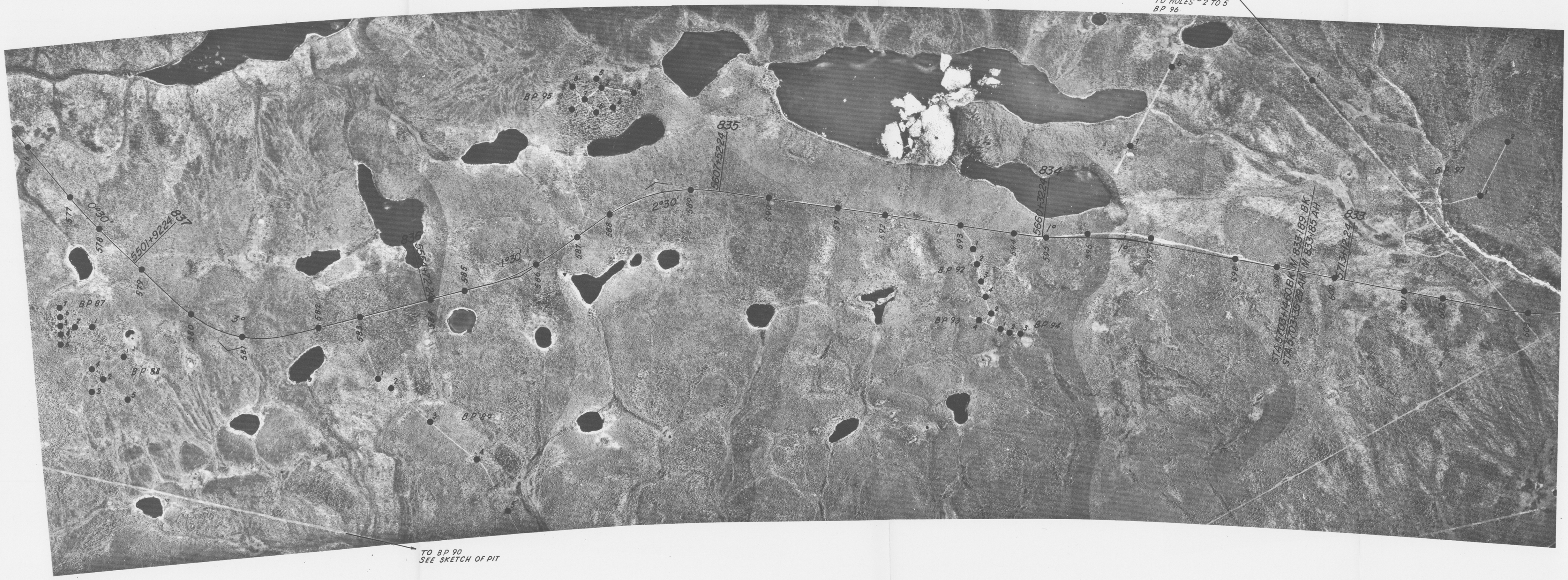


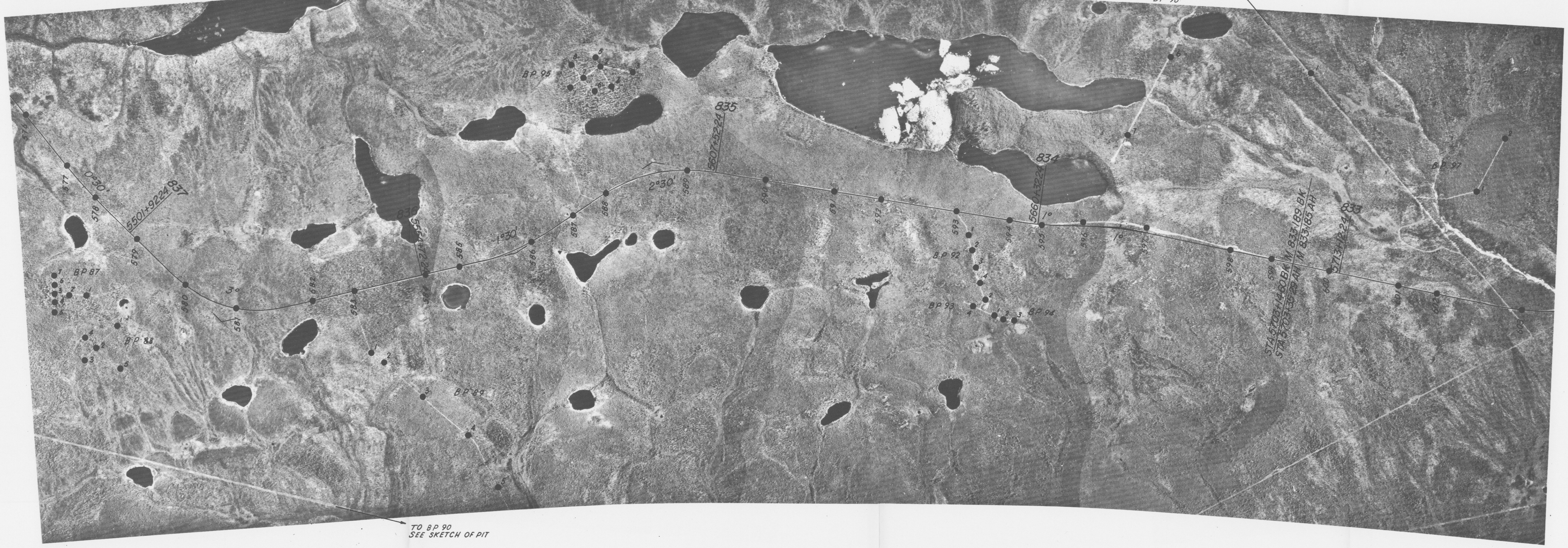
MACKENZIE RIVER
TO BP 106
SEE SKETCH OF PIT

BP 105 SEE SKETCH OF PIT

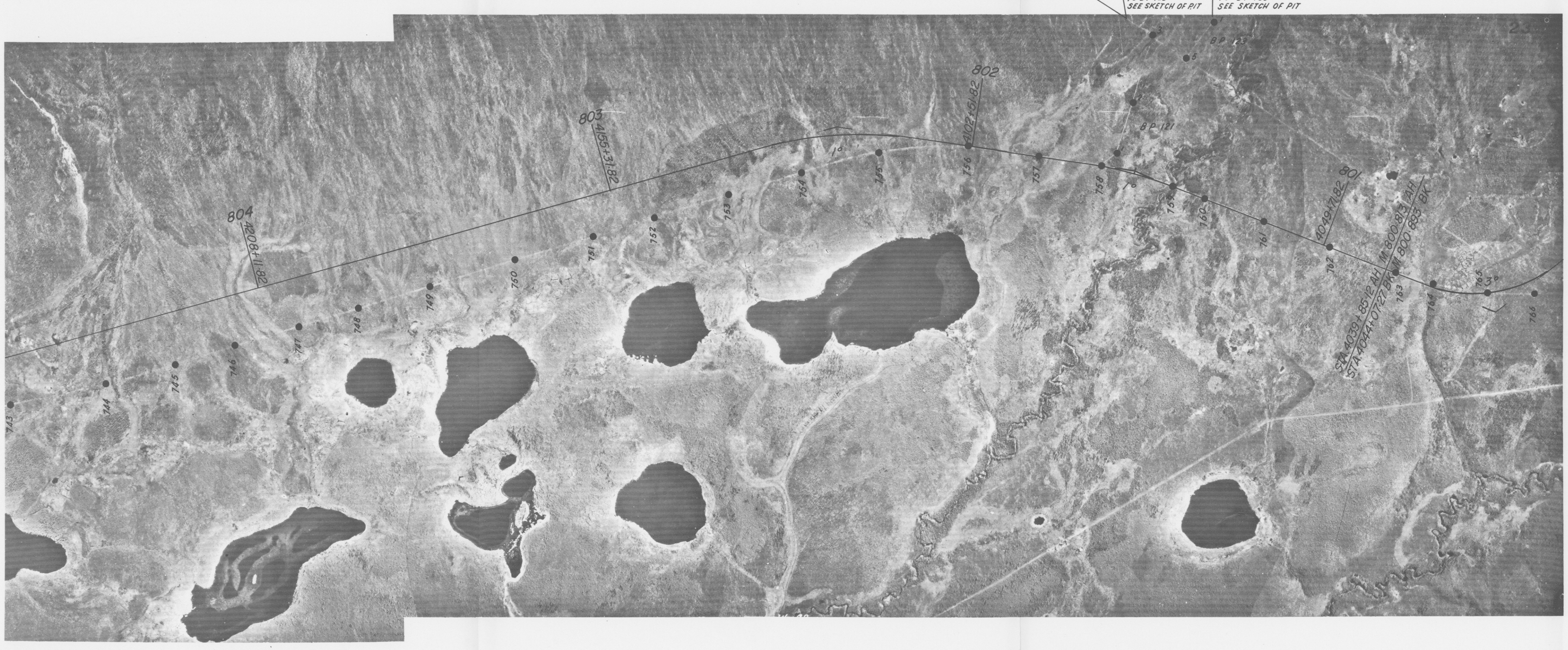


TO BP 96
SEE SKETCH OF PIT
TO BP 101
SEE SKETCH OF PIT


TO HOLES #2 TO 5
BP 96
BP 95
835
834
833
837
5501+92.24
5607+52.24
5660+32.24
5713+12.24
0°30'
1°30'
2°30'
BP 87
BP 88
BP 89
BP 92
BP 93
BP 94
BP 97
TO BP 90
SEE SKETCH OF PIT



BP 95
835
5607+5224
834
5660+3224
833
5713+12224
837
5501+9224
0°30'
2°30'
1°30'
BP 87
BP 88
BP 89
BP 92
BP 93
BP 94
BP 97
TO BP 90
SEE SKETCH OF PIT


SEE SKETCH OF PIT
SEE SKETCH OF PIT
804
4208+11.82
803
4155+31.82
802
4102+51.82
801
4049+71.82
STA.4039+85.12 AH
STA.4044+07.27 BK
M 800.813 AH
M 800.893 BK
BP 121
743
744
745
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DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

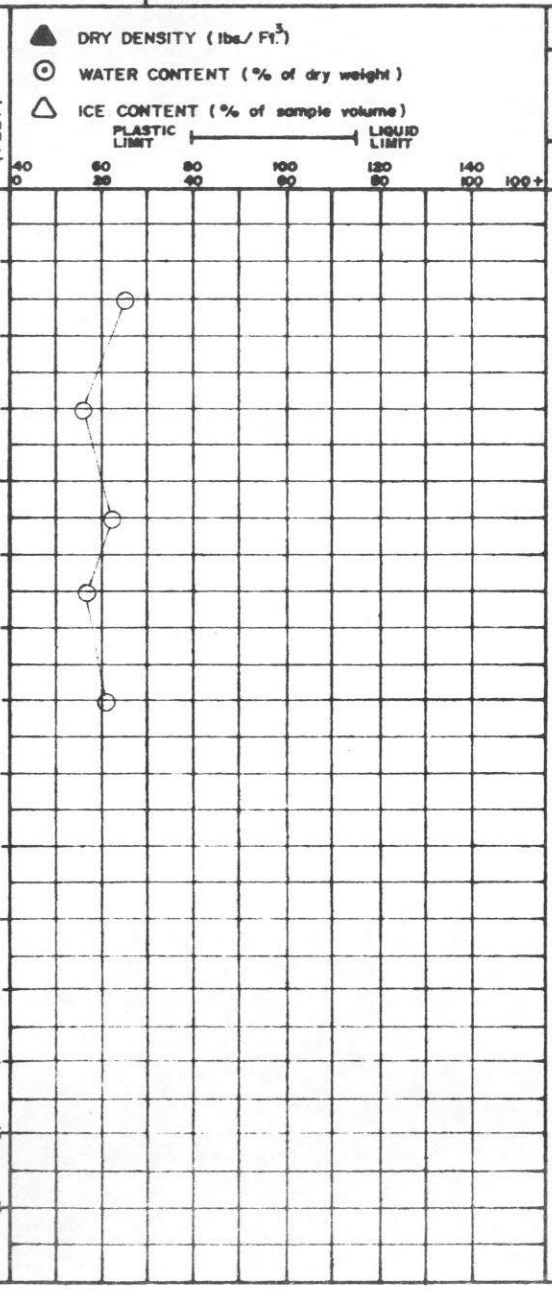
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 3/2/74	AIRPHOTO NO. A 23329-206	CHAINAGE. 5602+00	OFFSET. ℄	TEST HOLE 589
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 835

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'								
						CLAY -Silty Sandy Pebbles Med plastic		Moderate					Wet	
4														
6								Ice					Moist	Hole in Bag
8														
10							F						Moist	
					CI								Moist	
12								Vc - Vr						
14													Wet	
16														
18														
20														
22														
24														
26														
28														
						30'								

DRY DENSITY (lbs./Ft.^{3})
WATER CONTENT (% of dry weight)
ICE CONTENT (% of sample volume)



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

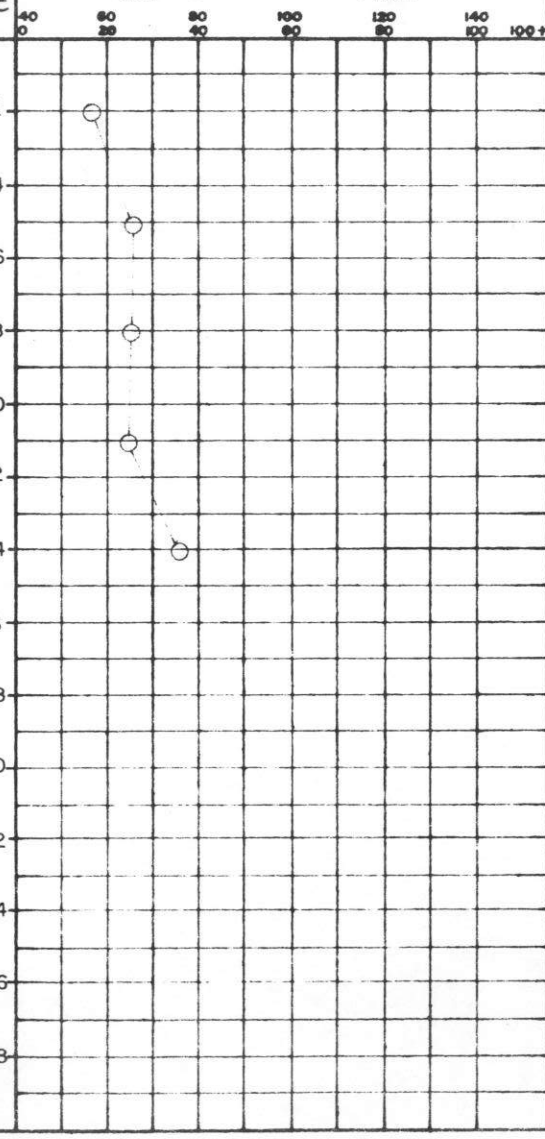
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 3/2/74	AIRPHOTO NO. A 23329-206	CHAINAGE. 5615+00	OFFSET. ℄	TEST HOLE 590
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE MAX. 4"	ELEV.	MILE 834

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		Moderate							
2						2'			2					Wet	
						CLAY -Silty Sandy Pebbles		Ice Vc - Vr							
4									4						
					CL			High						Sat.	
6									6						
8								Ice	8					Free Water	
						Silty Pebbles									
10					CI		F	Vs	10					Sat.	
12									12						
14									14					Free Water	
16									16						
18									18						
20									20						
22									22						
24									24						
26									26						
28									28						
						30'									

▲ DRY DENSITY (lbs./Ft.^{3})
⊙ WATER CONTENT (% of dry weight)
△ ICE CONTENT (% of sample volume)
PLASTIC LIMIT ├──┤ LIQUID LIMIT



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 3/2/74	AIRPHOTO NO. A 23329-206	CHAINAGE 5626+00	OFFSET ¢	TEST HOLE 591
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 834

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'		High					Free Water	
						CLAY -Silty Sandy Pebbles to 4' Low-med plastic								
4													Free Water	
6								Ice						
8					CL								Free Water	
10							F	Vs					Free Water	
12														
14					CI			Moderate					Wet	
16								To						
18								Low						
20								Ice						
22								Vc - Vr						
24														
26								Vx						
28														
						30'								

▲ DRY DENSITY (lbs./Ft.^{3})
⊙ WATER CONTENT (% of dry weight)
△ ICE CONTENT (% of sample volume)

PLASTIC LIMIT ⟷ LIQUID LIMIT

GRAIN-SIZE ANALYSIS

BOTTOM OF HOLE - 30'

DS-14-5-74 b

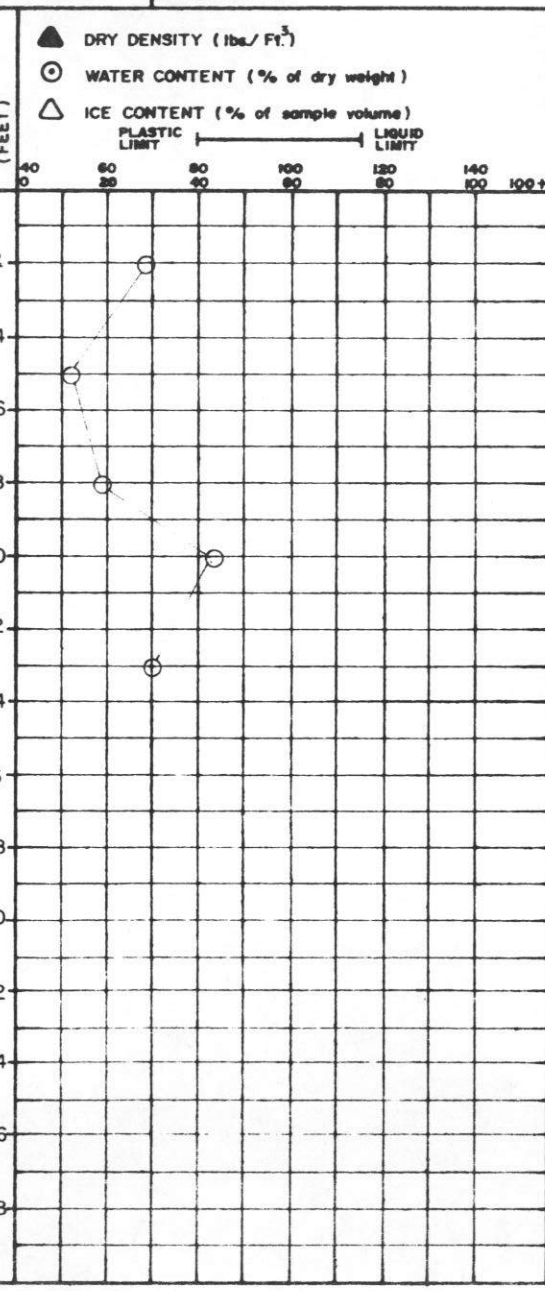
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 3/2/74	AIRPHOTO NO. A 23329-206	CHAINAGE. 5634+00	OFFSET. ℄	TEST HOLE 592
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 834

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	RELATIVE THAWED MOISTURE CONTENT	REMARKS
0–2'					Pt	PEAT		Moderate		
2'–5'					CI	CLAY -Silty Sandy Pebbles		Ice	Sat.	
5'–15'					SW	SAND -Medium-coarse	F	Vc - Vr	Wet	
									Sat.	
					SM	Silty fine		High Ice Vs	Free Water	
									Free Water	
15'–30'					CI	CLAY -Silty Sandy Med plastic		Low Ice Vx		



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

BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 3/2/74	AIRPHOTO NO. A 23329-206	CHAINAGE. 5647+00	OFFSET. ℄	TEST HOLE 593
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 834

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	DRY DENSITY (lbs./Ft.³) / WATER CONTENT (% of dry weight) / ICE CONTENT (% of sample volume) — PLASTIC LIMIT — LIQUID LIMIT (40/0, 60/20, 80/40, 100/60, 120/80, 140/100, 100+)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT										
2						2'		High	2	137.9					Free Water	
					OL ML	ORGANIC SILT										
4						4'		Ice	4						Free Water	
6						CLAY =Silty Sandy			6							
								Vs								
8					CL	Silty Low-med plastic	F		8						Sat.	
10									10						Sat.	
12					CI				12							
								Moderate							Wet	
14									14							
								Ice								
16									16							
18								Vc - Vr	18							
20						20'			20							
					ML	SILT -Clayey										
22									22							
24									24							
26									26							
28									28							
						ICE		ICE								
						29'										

BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 3/2/74	AIRPHOTO NO. A 23329-206	CHAINAGE. 5656+00	OFFSET. ℄	TEST HOLE 594
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 834

▲ DRY DENSITY (lbs./Ft.³)
⊙ 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	DEPTH (FEET)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT									
2						2'			2					Wet	
								High							
4						CLAY -Silty Sandy Low-med plastic Silty			4					Free Water	
6					CL			Ice	6						
							F								
8									8					Sat.	
10									10					Free Water	
12					CI			Vs	12						
														Wet	
14									14						
						15'									
16						SILT -Clayey		Low	16						
18								Ice	18						
20					ML				20						
								Vx							
22									22						
24									24						
26									26						
28									28						
						30'									

BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 4/2/74	AIRPHOTO NO. A 23329-208	CHAINAGE. 5661+00
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ℄

ELEV.

TEST HOLE 595

MILE 833

REMARKS

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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT		Moderate						
2						2'			2					Wet
						CLAY -Silty Sandy Pebbles Low-med plastic		To						
4									4					Free Water
								High						
6					CL				6					
								Ice						
8									8					Sat.
								Vc - Vr						
10							F		10					Wet
12					CI			Vs	12					
14									14					Wet
						15'								
16						SILT -Clayey		Low	16					
18								Ice	18					
20					ML				20					
22								Vx	22					
24									24					
26									26					
28									28					
						30'								

▲ DRY DENSITY (lbs./Ft.³)
⊙ WATER CONTENT (% of dry weight)
△ ICE CONTENT (% of sample volume)

PLASTIC LIMIT ⊢——⊣ LIQUID LIMIT

40 0 60 20 80 40 100 60 120 80 140 100 100+

BOTTOM OF HOLE - 30'

DS-14-5-74 b

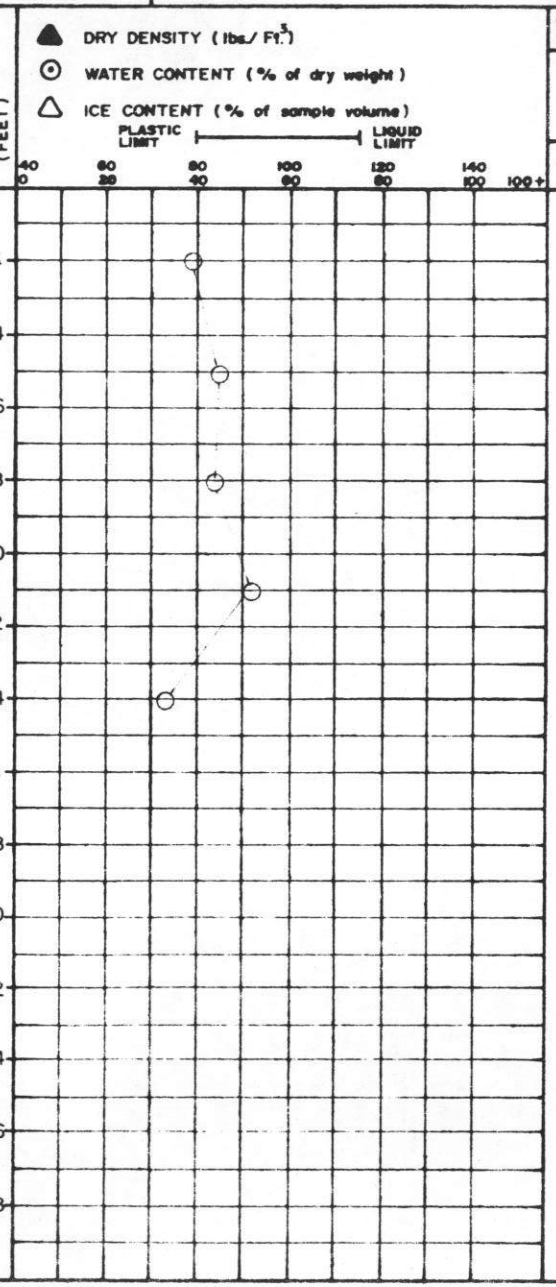
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO. A 23329-208	CHAINAGE. 5668+00	OFFSET. ℄	TEST HOLE 596
TECH. WILDEMAN	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 833

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2					CL	CLAY -Gravelly Sandy Silty Low plastic		High Ice					Free Water To 15'	
4														
6														
8					CL	CLAY -Silty 8'	F							
10					ML	SILT -Clayey Low plastic		Vs						
12														
14														
16								Moderate Ice						
18														
20								Vc - Vr						
22														
24														
26														
28						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

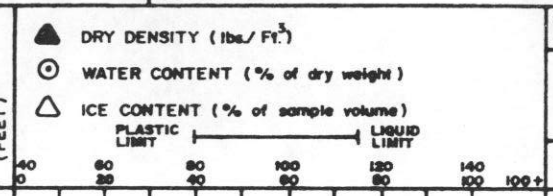
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO. A 23329-208	CHAINAGE. 5679+00	OFFSET. ℄	TEST HOLE 597
TECH. WILDEMAN	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 833

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2						CLAY -Silty Sandy		High Ice					Free Water	
4					CL	Low-high plastic							Free Water	
6														
8						Silty		Vs					Free Water	
10					CI		F							
12													Sat.	
14					CH									
								Moderate					Wet	
16														
18								Ice						
20								Vc - Vr						
22														
24														
26														
28														
						29'								
						BOTTOM OF HOLE - 29'								



DS-14-5-74 b

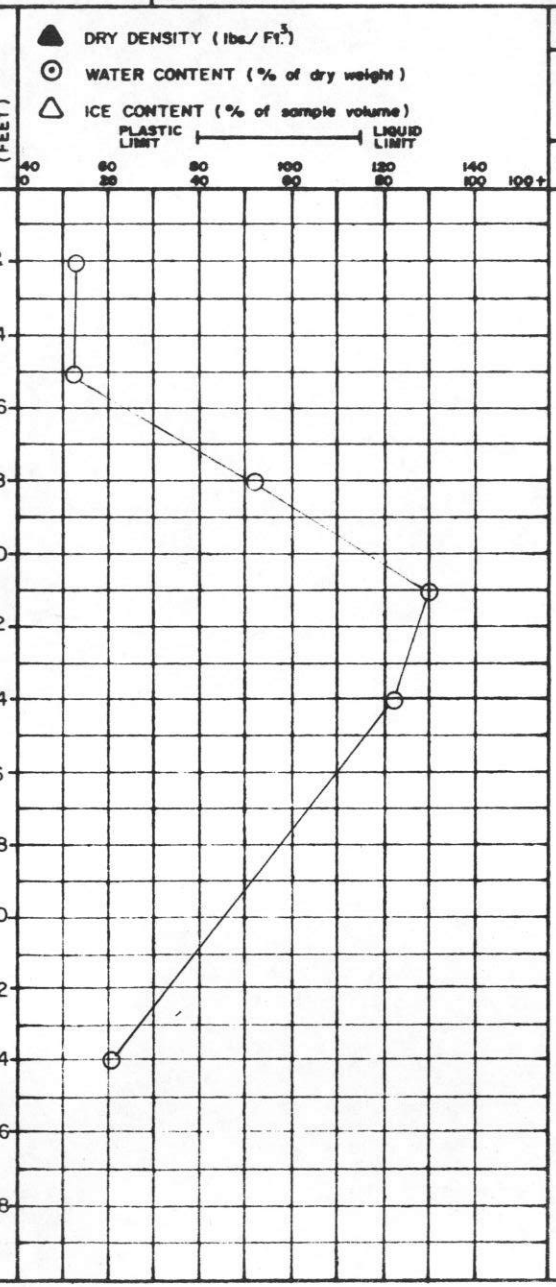
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO. A 23329-208	CHAINAGE. 5693+25	OFFSET. ℄	TEST HOLE 598
TECH. WILDEMAN	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 833

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2					CL	CLAY -Silty Sandy Low plastic	F	Vs					Free Water To 15'	
4														
6														
8						Few pebbles								
10								High Ice						
12														
14														
16								Moderate Ice						
18														
20														
22								Vc - Vr						
24														
26														
28						29'								



BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO. A 23329-208	CHAINAGE. 5700+00	OFFSET. ℄	TEST HOLE 599
TECH. WILDEMAN	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 833

DRY DENSITY (lbs./Ft.³) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2						CLAY							Sat.	
						-Sandy		High						
4						Silty								
						Pebbles							Free Water	
6						Med plastic		Ice						
8													Free Water	
10					CI			Vs						
													Free Water	
12							F							
14													Sat.	
16														
18														
20														
22														
24														
26														
28						29'								

BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO. A 23329-208	CHAINAGE. 5708+00	OFFSET. ℄	TEST HOLE 600
TECH. WILDEMAN	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 833

DRY DENSITY (lbs./Ft.³) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'		High						
2						CLAY -Sandy Silty Pebbles Med plastic		Ice					Free Water	
4								Vs						
6								Low					Moist	
8					CI			Ice					Moist	
10							F	To						
12								Vx					Moist	
14								Moderate					Wet	
16								Ice						
18								Vc - Vr						
20														
22														
24														
26														
28														
						—29'								

BOTTOM OF HOLE - 29'

DS-14-5-74 b

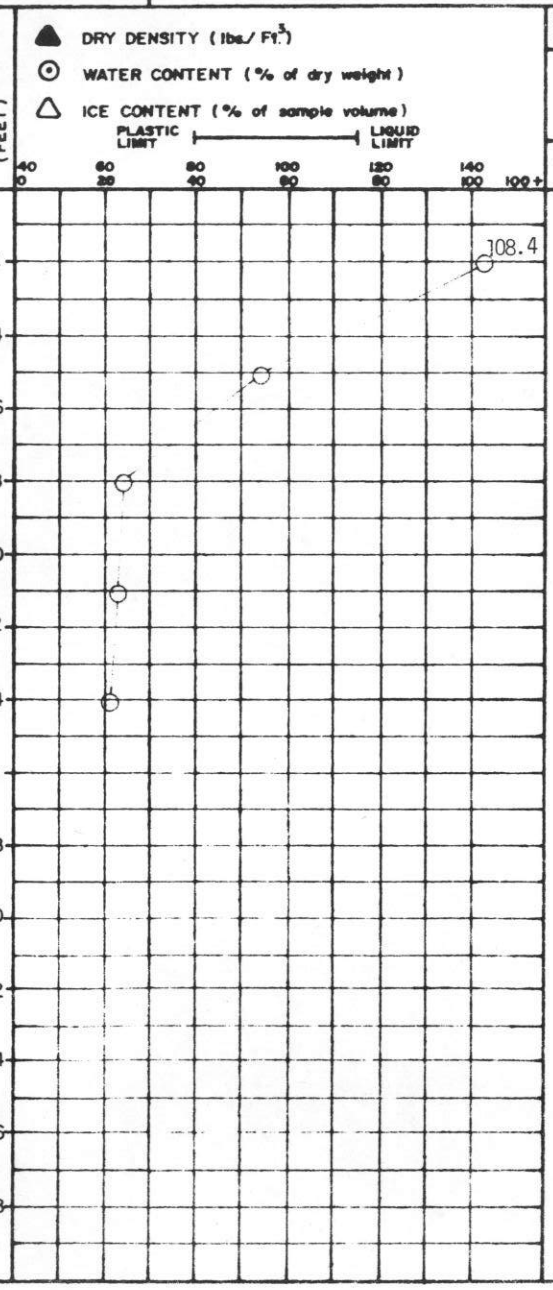
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO. A 23329-208	CHAINAGE. 5722+00	OFFSET. ℄	TEST HOLE 601
TECH. WILDEMAN	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 832

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'		High						
2					OL ML	ORGANIC SILT 4'		Ice					Free Water	
4						CLAY -Silty Sandy Pebbles Till Med plastic		Vs					Free Water	
8								Moderate					Moist	
12					CI		F	Ice					Moist	
14								&					Moist	
16								Low						
18								Ice						
20								Vc - Vr						
22														
24								Vx						
26														
28						29'								



BOTTOM OF HOLE - 29'

DS-14-5-74 b

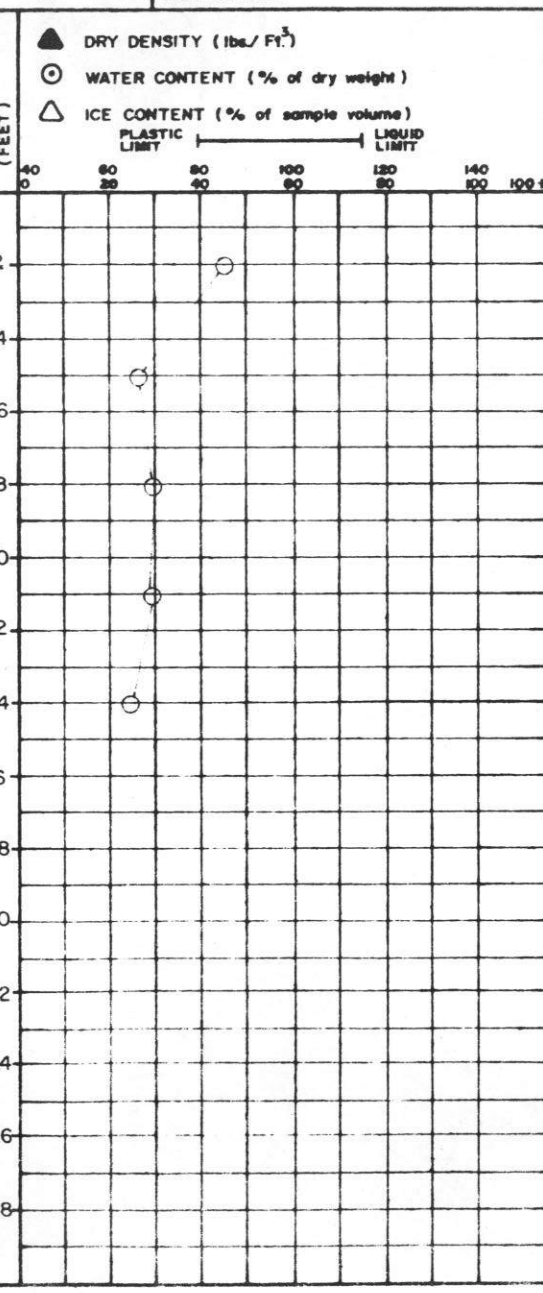
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO. A 23329-208	CHAINAGE. 5728+00	OFFSET. ℄	TEST HOLE 602
TECH. WILDEMAN	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 832

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		High					Free Water	
2						CLAY -Silty Sandy Pebbles Low-med plastic		To						
4					CL			Moderate					Sat.	
6								Ice						
8								Vc - Vr					Sat.	
10							F	Vs					Sat.	
12								Moderate						
14								Ice					Wet	
16					CI									
18								Vc - Vr						
20														
22														
24														
26														
28						29'								



BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

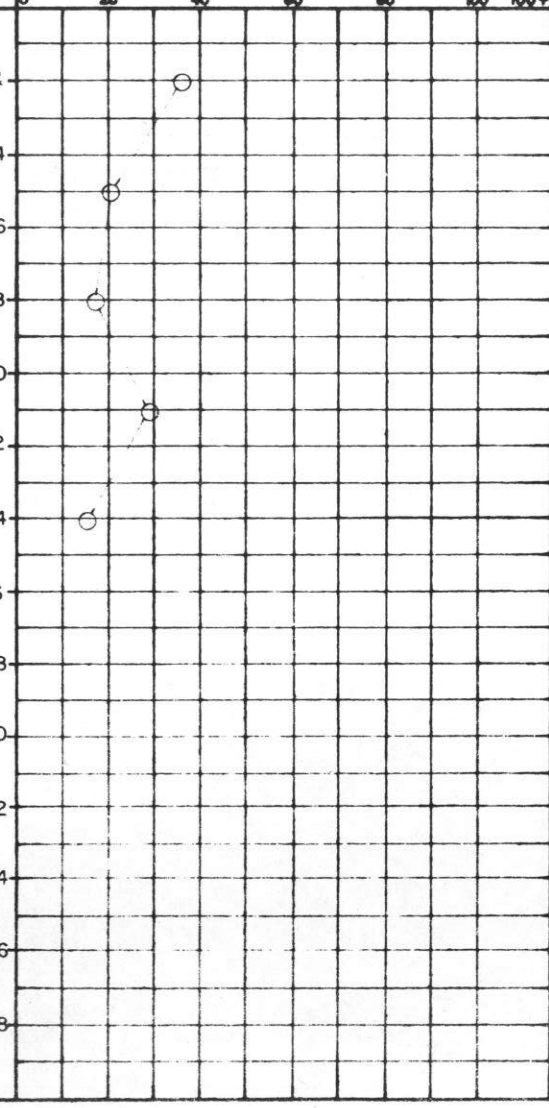
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO. A 23329-210	CHAINAGE. 5742+00	OFFSET. ℄	TEST HOLE 603
TECH. WILDEMAN	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 832

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 1'		High						
2						CLAY -Sandy Silty Pebbles Low plastic		Ice					Free Water	
4								Vs						
6					CL			Low					Sat.	
8								Ice					Moist	
10							F	Vx					Free Water	
12								High						
14						— 14'		Ice					Free Water	
16					SW SM	SAND -Silty-coarse — 16'		Vs						
18						CLAY As Above		Low						
20								To						
22					CL			Moderate						
24								Ice						
26								Vx						
28								Vc - Vr						
						— 29'								

▲ DRY DENSITY (lbs/Ft.³)
⊙ WATER CONTENT (% of dry weight)
△ ICE CONTENT (% of sample volume)
PLASTIC LIMIT ├──┤ LIQUID LIMIT



BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO. A 23329-210	CHAINAGE. 5750+00	OFFSET. ℄	TEST HOLE 604
TECH. WILDEMAN	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 832

DRY DENSITY (lbs./Ft.³) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
2						ICE		ICE					Water	
4														
						5'								
					Pt	PEAT							Sat.	
						5½'								
6						CLAY-Sandy								
					CL	Silty		High						
					CI	Pebbles							Free Water	
8						8'								
					SM	SAND								
10						-Silty		Ice						
						Pebbles								
						11'							Sat.	
12						CLAY	F							
						-Sandy								
						Silty								
14						Pebbles		Vs					Sat.	
					CL	Low-med plastic								
16														
18					CI									
20														
22														
24														
26														
28														
						29'								

BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

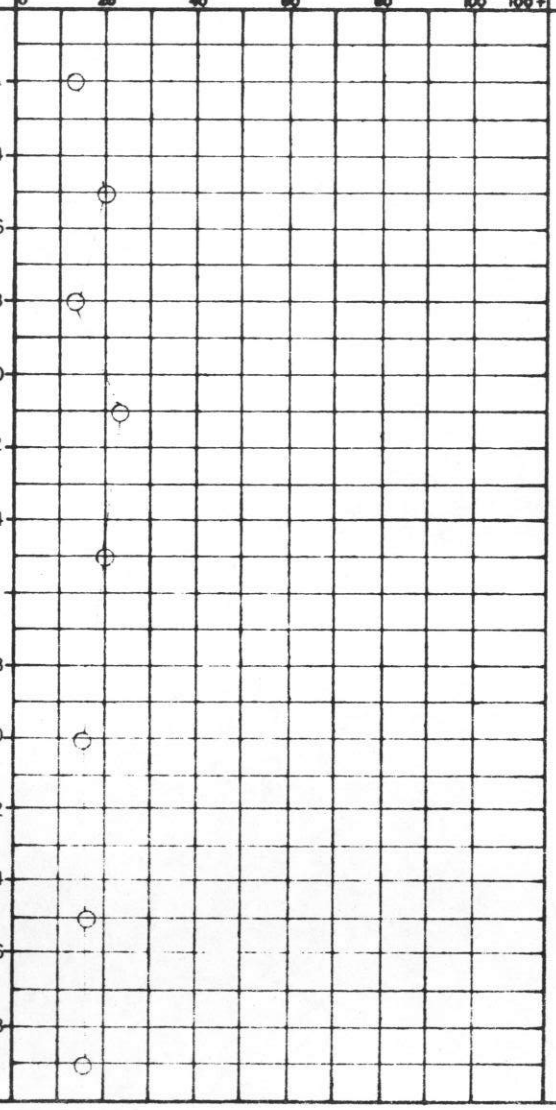
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 9/2/74	AIRPHOTO NO. A 23329-210	CHAINAGE. 5750+00	OFFSET. ℄ CREEK BANK-N	TEST HOLE 604-B
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 832

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	RELATIVE THAWED MOISTURE CONTENT	REMARKS
						ICE 20"		ICE		
2					SC	SAND -Gravelly Clayey 4'		Moderate	Damp	
4										
6						CLAY -Silty Sandy Pebbles Gravelly @ 8'		Ice	Wet	
8									Sat.	
10						Silty Pebbles	F		Wet	
12										
14					CI	Med plastic			Wet	
16								Vc - Vr		
18										
20									Wet	
22										
24										
26									Moist	
28						29'			Wet	

▲ DRY DENSITY (lbs./Ft.^{3})
⊙ WATER CONTENT (% of dry weight)
△ ICE CONTENT (% of sample volume)
PLASTIC LIMIT ├──┤ LIQUID LIMIT



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

BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

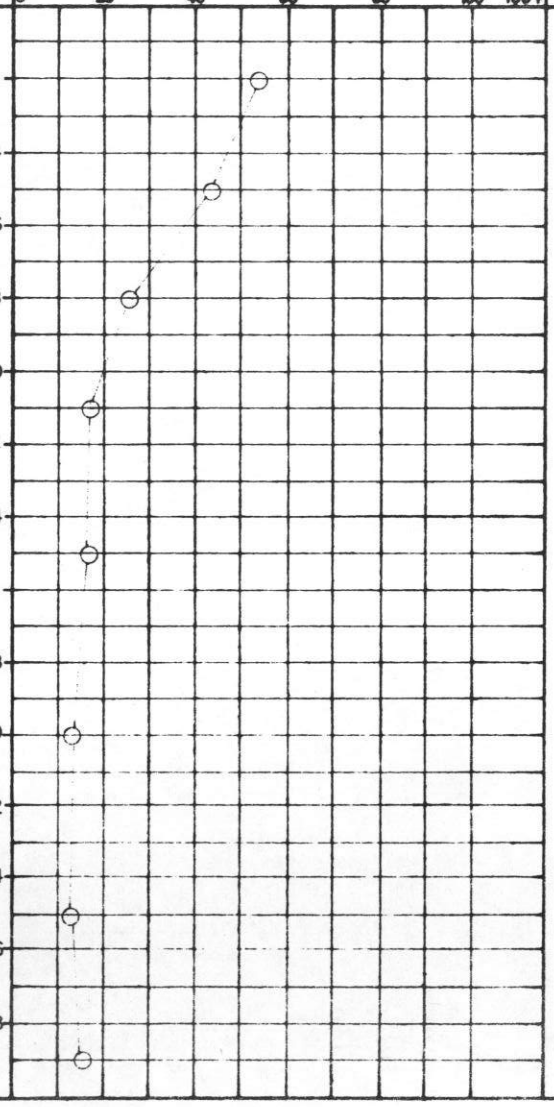
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 9/2/74	AIRPHOTO NO. A 23329-210	CHAINAGE. 5750+00	OFFSET. ℄ - CREEK BANK-S	TEST HOLE 604-C
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 832

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
						ICE 1'		ICE						
2						SAND -Silty							Free Water	
4								High						
					SM	Silty fine							Free Water	
6								Ice						
8						8'	F						Free Water	
10						CLAY -Silty Gravelly Sandy							Free Water	
								Vs						
12					CL	Low-med plastic								
14														
													Sat.	
16					CI									
18								Low						
20								Ice					Damp	
						Pebbles								
22								Vx						
24														
						Boulders or Cobbles @ 27'							Damp	
26														
28														
						29'							Moist	

DRY DENSITY (lbs./Ft.³)
WATER CONTENT (% of dry weight)
ICE CONTENT (% of sample volume)
PLASTIC LIMIT — LIQUID LIMIT



BOTTOM OF HOLE - 29'

DS-14-5-74 b

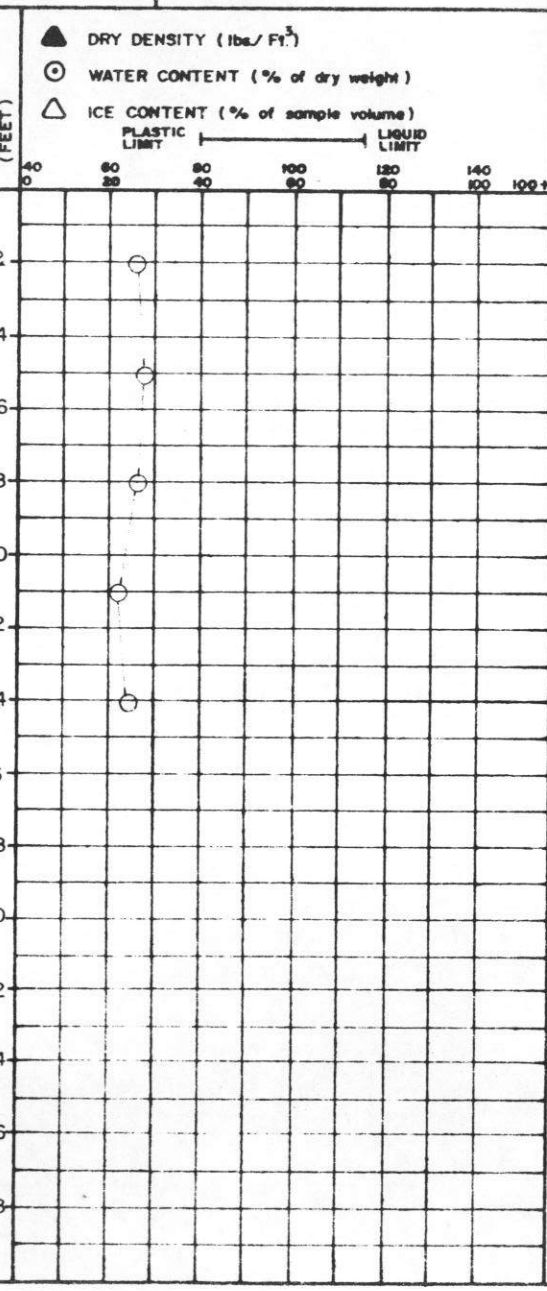
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO. A 23329-210	CHAINAGE. 5762+00	OFFSET. ℄	TEST HOLE 605
TECH. WILDEMAN	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 832

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 1'								
2					CL	CLAY -Silty Few pebbles Low plastic — 4'		Low Ice Vx					Moist	
4														
6					ML	SILT -Sandy Clayey — 8'		Vs Moderate					Free Water	
8													Wet	
10						CLAY -Silty Sandy Pebbles Low-med plastic	F	Ice						
12					CL								Moist	
14								Vc - Vr					Wet	
16					CI									
18														
20														
22														
24						— 25'								
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

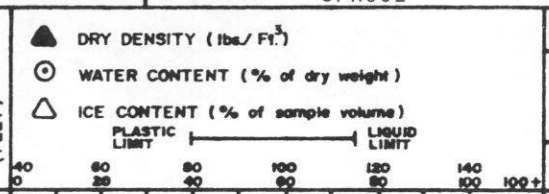
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO. A 23329-210	CHAINAGE. 5774+00	OFFSET. ℄	TEST HOLE 606
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION. SPRUCE	ELEV.	MILE 831

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT									
2									2					Moist	
4						4'			4						
						CLAY -Sandy Silty Organic mat. to 10'								Free Water	
6					OL				6						
								High							
8									8					Free Water	
					CL			Ice							
10									10					Free Water	
12							F	Vs	12						
14									14					Free Water	
						15'									
16					ML	SILT -Gravelly Sandy Clayey			16						
								Moderate							
18						18'			18						
								Ice							
20						CLAY -Silty Sandy Pebbles			20					Moist	
22					CI	Med plastic		Vc - Vr	22						
24									24						
26									26						
28									28						
						29'								Moist	



BOTTOM OF HOLE - 29

DS-14-5-74 b

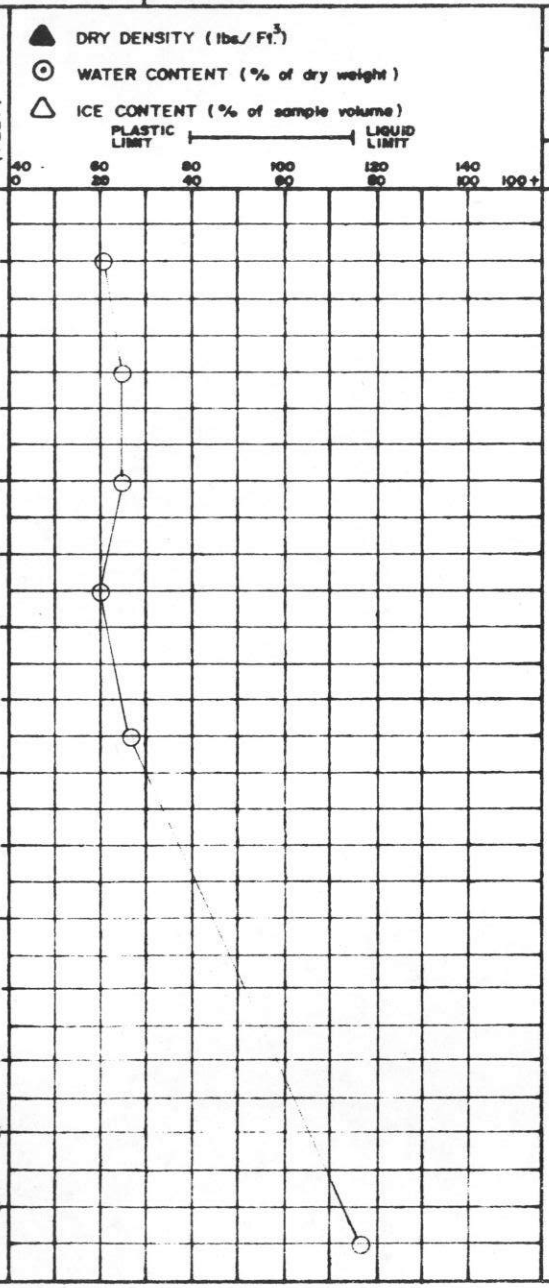
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO. A 23329-210	CHAINAGE. 5783+00	OFFSET. ℄ -	TEST HOLE 607
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. LEVEL	VEGETATION. SPRUCE	ELEV.	MILE 831

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1½'								Hole on seismic line
2						CLAY -Silty Sandy Med plastic		Moderate					Moist	
4								Ice						
6													Wet	
8						Pebbles from 8'	F						Moist	
10					CI								Damp	
12								Vc - Vr						
14													Wet	
16														
18														
20						21'								
22														
24						ICE		ICE						
26														
28						28'							Free Water	
						29'								



BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO. A 23329-210	CHAINAGE. 5796+00	OFFSET. ON SEISMIC LINE	TEST HOLE 608
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. POOR	VEGETATION. SPRUCE	ELEV.	MILE 831

DRY DENSITY (lbs./Ft.³) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		High Ice					Damp	
4'						CLAY -Silty Sandy Pebbles Low-med plastic Gravelly @ 11'		Vs					Sat.	
								Moderate To Low Ice					Moist	
					CL		F						Moist	
					CI								Moist	
								Vc - Vr						
								Vx						
29'													Damp	

BOTTOM OF HOLE - 29'

DS-14-5-74 b

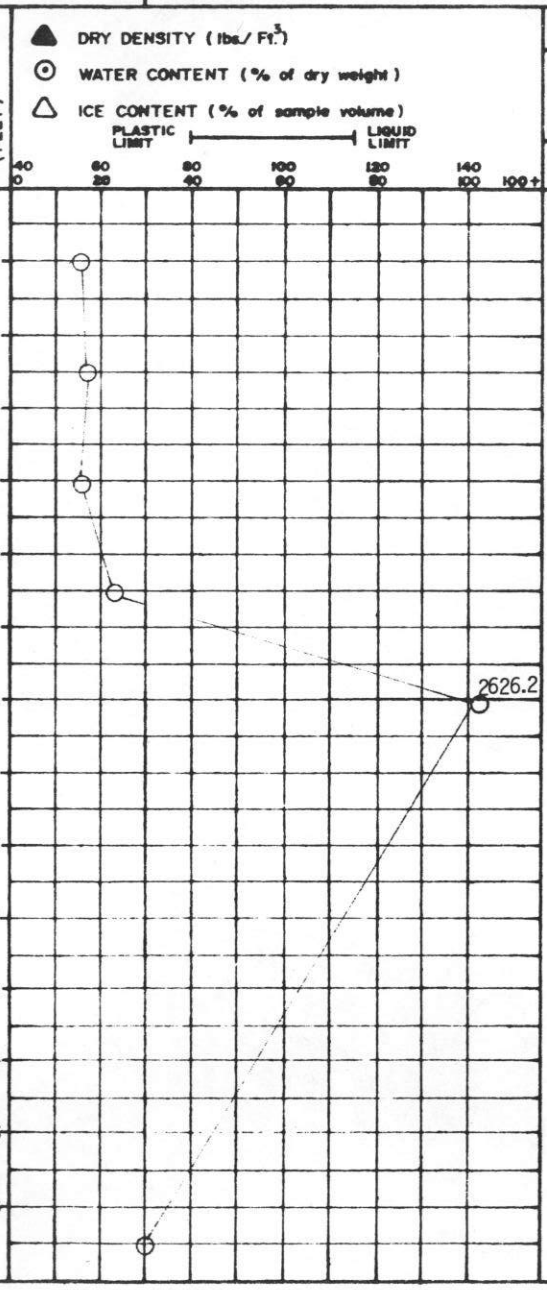
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO. A 23329-210	CHAINAGE 5802+00	OFFSET. ¢	TEST HOLE 609
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 831

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1½'		Low						
2						CLAY -Silty Sandy Pebbles Gravelly from 8'-13' Low-med plastic	F	Ice					Moist	
4														
6					CL			Vx					Wet	
8					CI								Sat.	
10								Moderate Ice						
12								Vc - Vr					Sat.	
14						ICE		ICE					Water	
16														
18														
20						CLAY -Silty Pebbles Med plastic		Moderate						
22					CI			Ice						
24														
26								Vc - Vr						
28														
						29'							Sat.	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

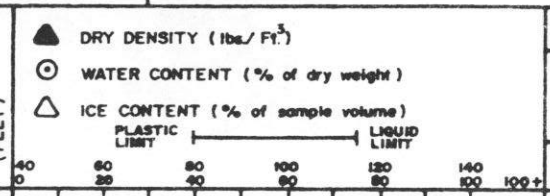
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 7/2/74	AIRPHOTO NO. A 23329-210	CHAINAGE. 5813+00	OFFSET. ON SEISMIC LINE	TEST HOLE 610
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 831

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'		Moderate					Moist	
4						ORG. MAT. to 4'		Ice						
						CLAY -Silty Sandy Pebbles Low-med plastic							Sat.	
6							F							
8					CL			Vc - Vr					Wet	
10								Low					Moist	
12													Moist	
								Ice						
14														
16														
18					CI			Vx						
20														
22														
24														
26														
28														
						29'								



BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

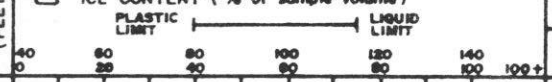
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 7/2/74	AIRPHOTO NO. A 23329-210	CHAINAGE 5820+00	OFFSET. ON SEISMIC LINE	TEST HOLE 611
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 830

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		Low						
2						2'		Ice					Moist	
						CLAY		Vx						
4						-Silty								
						Sandy								
6						Pebbles		Moderate					Wet	
						Low-med plastic								
8								&					Sat.	
							F							
10								High					Sat.	
12								Ice					Sat.	
					CI									
14								Vs						
16								Vc - Vr						
18														
20														
22														
24														
26														
28														
						29'								

▲ DRY DENSITY (lbs./Ft.^{3})
⊙ WATER CONTENT (% of dry weight)
△ ICE CONTENT (% of sample volume)



BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 7/2/74	AIRPHOTO NO. A 23329-210	CHAINAGE 5829+00	OFFSET ON SEISMIC LINE	TEST HOLE 612
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 830

▲ DRY DENSITY (lbs./Ft.³)
⊙ 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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		Moderate						
2						2'							Sat.	
						CLAY -Silty Sandy Few pebbles to 10' Med plastic		Ice						
4														
6								Vc - Vr					Wet	
8													Wet	
10					CI		F						Free Water	
								Vs						
12								Ice					Sat.	
14								High						
16								Moderate						
18								Ice						
20								Vc - Vr						
22														
24														
26														
28														
						29'								

BOTTOM OF HOLE - 29'

DS-14-5-74 b

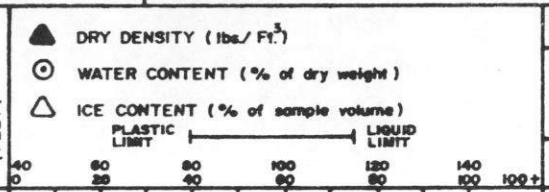
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 7/2/74	AIRPHOTO NO. A 23329-212	CHAINAGE 5836+00
OFFSET. ON SEISMIC LINE	TEST HOLE 613	MILE 830	
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.			

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		Low						
2						2'							Moist	
						CLAY -Silty Pebbles Low-med plastic		Ice						
4														
													Moist	
6					CL			Vx						
8													Wet	
10							F						Wet	
								Moderate						
12					CI								Wet	
								Ice						
14														
16														
								Vc - Vr						
18														
20														
22														
24														
26														
28														
						29'								



BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 7/2/74	AIRPHOTO NO. A 23329-212	CHAINAGE 5842+00	OFFSET. ℄	TEST HOLE 614
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 830

▲ DRY DENSITY (lbs./Ft.³)
⊙ 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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1.5'		High						
2						CLAY		Ice					Wet	
4						-Silty								
						Pebbles								
						Sandy 5'-10'								
6						Low-med plastic		Vs					Sat.	
8					CL			Moderate					Wet	
							F							
10								To					Wet	
12													Moist	
14					CI			Low						
16								Ice						
18								Vc - Vr						
20														
22								Vx						
24														
26														
28														
						—29'								

BOTTOM OF HOLE - 29'

DS-14-5-74 b

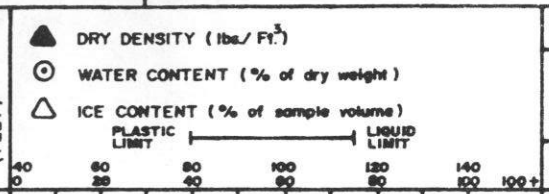
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 7/2/74	AIRPHOTO NO. A 23329-212	CHAINAGE. 5848+00	OFFSET. ℄	TEST HOLE 615
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 830

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 2'		High					Free Water	
2–4					CL	CLAY -Silty Sandy Pebbles from 8' Low-med plastic	F	Ice					Wet	
6–8					CL			Vs					Wet	
8–10													Free Water	
10–12						ICE Some Clay		ICE & CI					Free Water	
12–14														
14–16					CI	As above	F	Moderate Ice						
16–18														
18–20														
20–22								Vc - Vr						
22–24														
24–26														
26–28														
						29'								



BOTTOM OF HOLE - 29'

DS-14-5-74 b

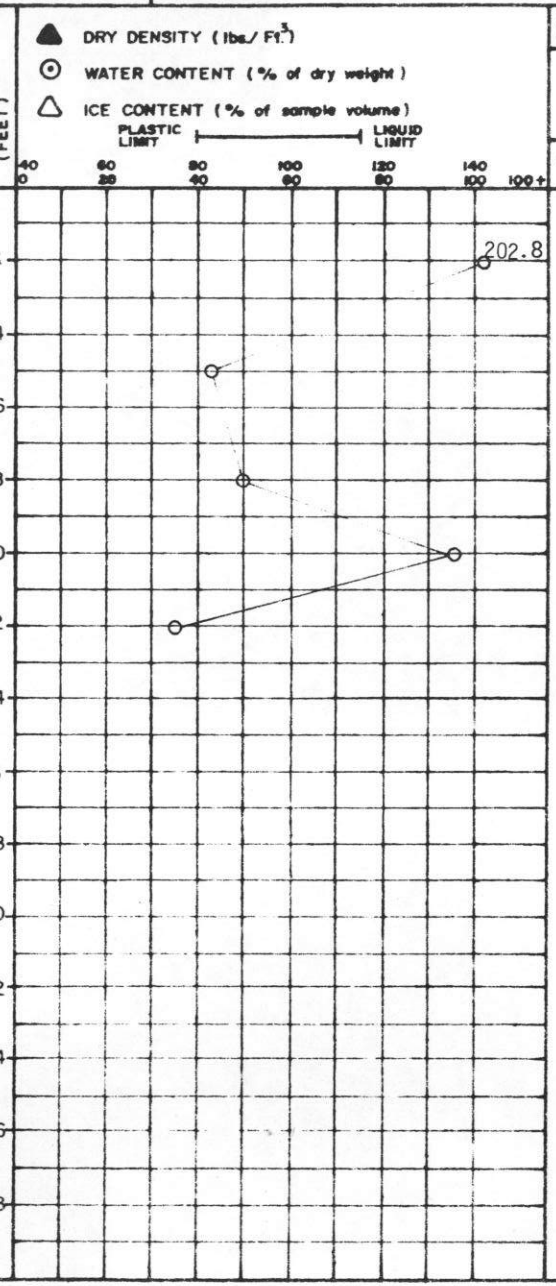
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 7/3/74	AIRPHOTO NO. A 23329-212	CHAINAGE. 5853+00	OFFSET. ℄	TEST HOLE 616
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 830

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 1'								
2					OH OL	ORGANIC CLAY							Free Water	
4						— 4'		High						
					CI	CLAY -Silty Gravelly							Sat.	
6					CH	Pebbles & Sandy @ 8' Med-high plastic		Ice						
8													Wet	
10						— 10'		Vs					Sat.	
					OH OL	ORGANIC CLAY								
12						— 12'							Sat.	
						CLAY -Silty Sandy Pebbles Med plastic	F							
14														
16								Low						
					CI									
18								Ice						
20														
22								Vx						
24														
26														
28														
						— 29'								



BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

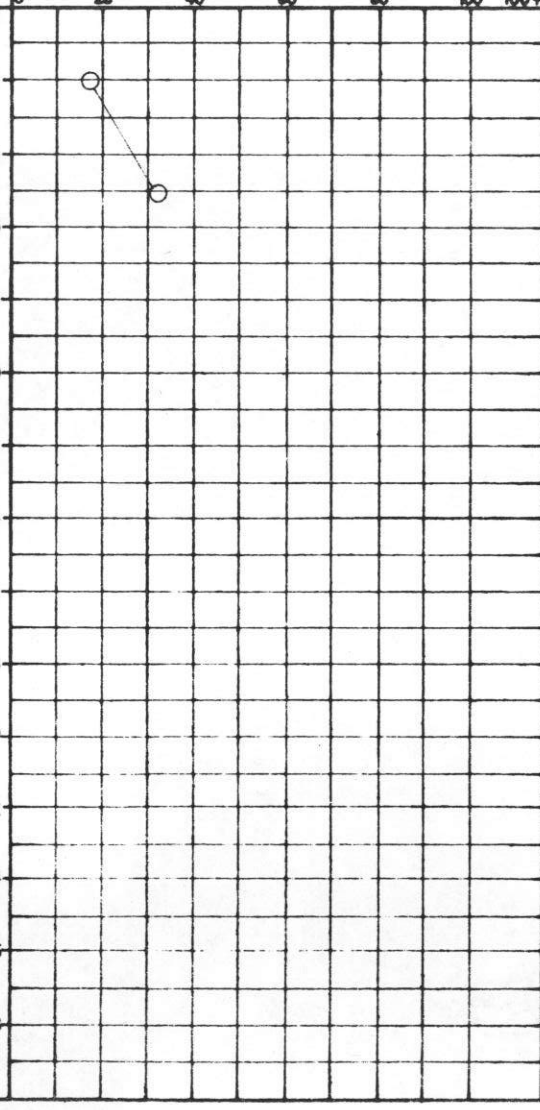
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 7/2/74	AIRPHOTO NO. A 23329-212	CHAINAGE. 5863+00	OFFSET. ℄	TEST HOLE 617
TECH.	RIG.	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 830

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'		Moderate & Low Ice Vc - Vr Vx						
2						CLAY -Silty Sandy Pebbles Low-med plastic							Moist	
4					CL		F							
6					CI								Wet	
8						8'								
10						ICE		ICE						
12														
14														
16						15'		Moderate Ice						
18														
20					CI	As above	F							
22								Vc - Vr						
24														
26														
28														
						29'								

▲ DRY DENSITY (lbs./Ft.^{3})
⊙ WATER CONTENT (% of dry weight)
△ ICE CONTENT (% of sample volume)
PLASTIC LIMIT ├──┤ LIQUID LIMIT



BOTTOM OF HOLE - 29'

DS-14-5-74 b

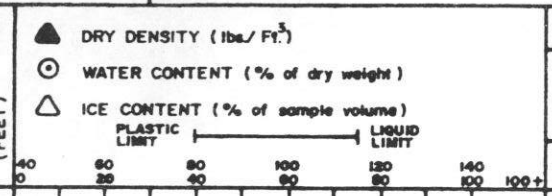
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 7/2/74	AIRPHOTO NO. A 23329-212	CHAINAGE. 5875+00	OFFSET. ℄	TEST HOLE 618
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 829

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		Moderate							
2						2'			2					Wet	
						CLAY -Silty Sandy Pebbles Low-med plastic		Ice							
4									4						
6					CL			Vc - Vr	6					Sat.	
8									8					Wet	
10						Gravelly from 10'-14' Boulders @ 12'			10					Wet	
12							F		12					Wet	
								Low Ice							
14					CI			Vx	14						
16								Moderate	16						
18								Ice	18						
20								Vc - Vr	20						
22									22						
24									24						
26									26						
28									28						
						29'									



BOTTOM OF HOLE - 29'

DS-14-5-74 b

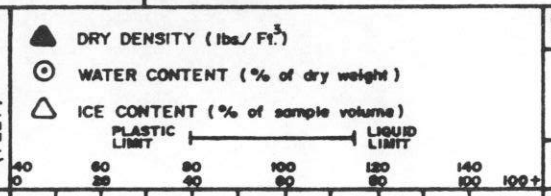
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 7/2/74	AIRPHOTO NO. A 23329-212	CHAINAGE. 5885+00	OFFSET. ℄	TEST HOLE 619
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 829

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		Moderate						
2						2'							Wet	
						CLAY -Silty Sandy Few pebbles Low-med plastic		Ice						
4													Wet	
6														
								Vc - Vr						
8													Wet	
10					CL		F						Wet	
12													Wet	
					CI									
14														
16														
18														
20														
22														
24														
26														
28														
						29'								



BOTTOM OF HOLE - 29'

DS-14-5-74 b

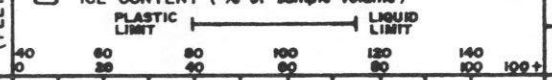
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 7/2/74	AIRPHOTO NO. A 23329-212	CHAINAGE. 5892+00	OFFSET. ℄	TEST HOLE 620
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 829

DRY DENSITY (lbs./Ft.^{3}) ▲
WATER CONTENT (% of dry weight) ⊙
ICE CONTENT (% of sample volume) △



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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'		Moderate					Wet	
						CLAY -Silty Sandy Pebbles Low-med plastic								
4					CL			To					Wet	
6														
8								Low					Wet	
					CI									
10							F						Wet	
								Ice						
12													Wet	
14								Vc - Vr						
16														
18														
20								Vx						
22														
24														
26														
28														
						29'								

BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A 23329-212	CHAINAGE. 5917+00	OFFSET. ℄	TEST HOLE 622
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 829

DRY DENSITY (lbs./ Ft.³) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2'		Moderate						
2								To					Sat.	
4						CLAY -Silty Sandy Pebbles Low-Med plastic		High						
6								Ice					Sat.	
8					CL									
10								Vc - Vr					Wet	
12					CI		F	Vs						
14													Sat.	
16								Low						
18								Ice						
20														
22								Vx						
24														
26														
28						30'								

BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

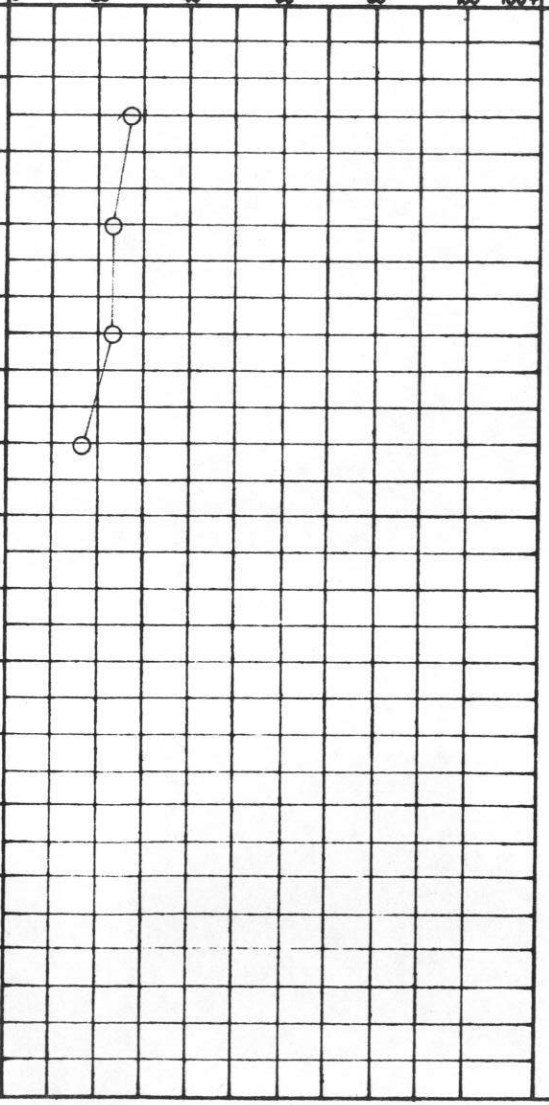
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A 23329-214	CHAINAGE. 5930+00	OFFSET. ¢	TEST HOLE 623
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 828

DRY DENSITY (lbs./Ft.^{3}) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'								
						CLAY -Silty Sandy Med plastic							Wet	
4														
6								Low					Moist	
8														
10					CI		F	Ice					Moist	
12													Moist	
14								Vx						
16														
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

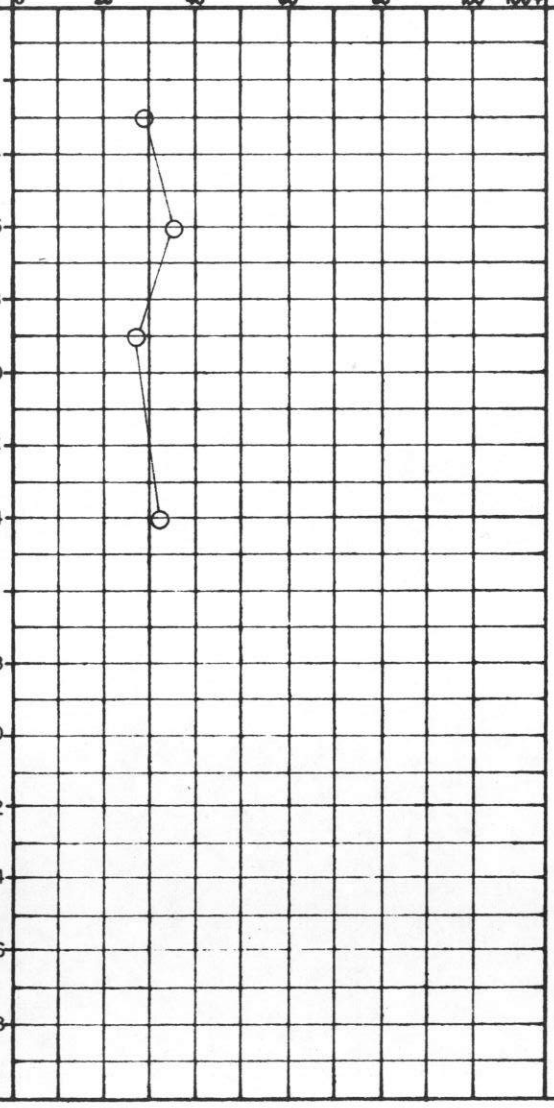
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A 23329-214	CHAINAGE. 5935+00	OFFSET. ℄	TEST HOLE 624
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 828

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'		Moderate						
						CLAY -Silty Sandy Med plastic							Sat.	
4								Ice						
6													Wet	
8					CI			Vc - Vr						
													Wet	
10							F							
12														
14													Sat.	
16														
18														
20								Low						
22								Ice						
24														
26								Vx						
28														
						30'								

DRY DENSITY (lbs./Ft.³)
WATER CONTENT (% of dry weight)
ICE CONTENT (% of sample volume)
PLASTIC LIMIT — LIQUID LIMIT



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

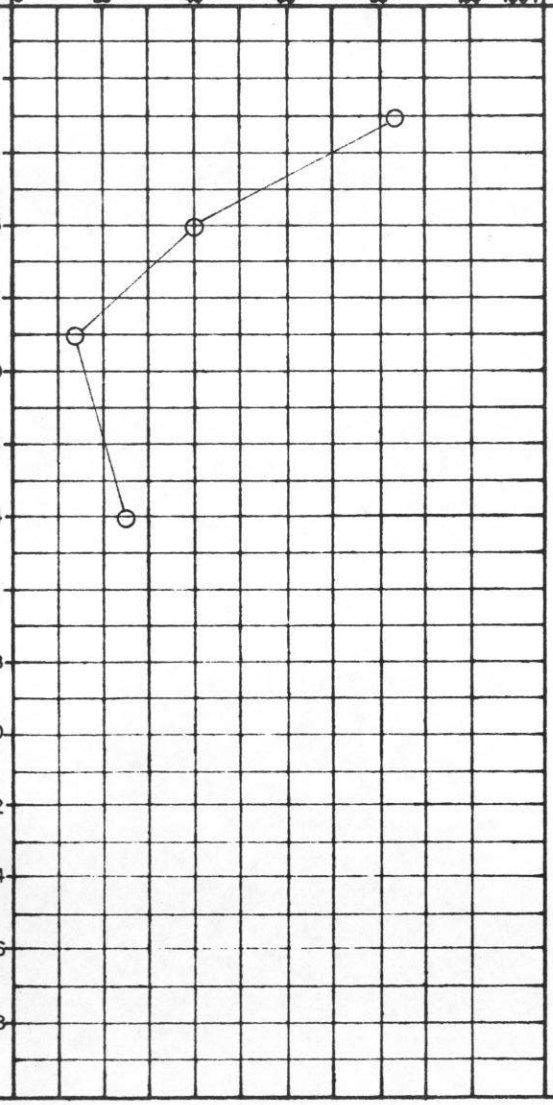
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A 23329-214	CHAINAGE. 5943+00	OFFSET. ℄	TEST HOLE 625
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 828

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
2					Pt	PEAT		High					Sat.	
4						4'								
6						CLAY -Silty Sandy Pebbles		Ice					Free Water	
8														
10					CL	Low-med plastic		Vs					Sat.	
12							F							
14					CI								Wet	
16								Low						
18														
20								Ice						
22								Vx						
24														
26														
28														
						30'								

DRY DENSITY (lbs./Ft.³)
WATER CONTENT (% of dry weight)
ICE CONTENT (% of sample volume)
PLASTIC LIMIT — LIQUID LIMIT



BOTTOM OF HOLE - 30'

DS-14-5-74 b

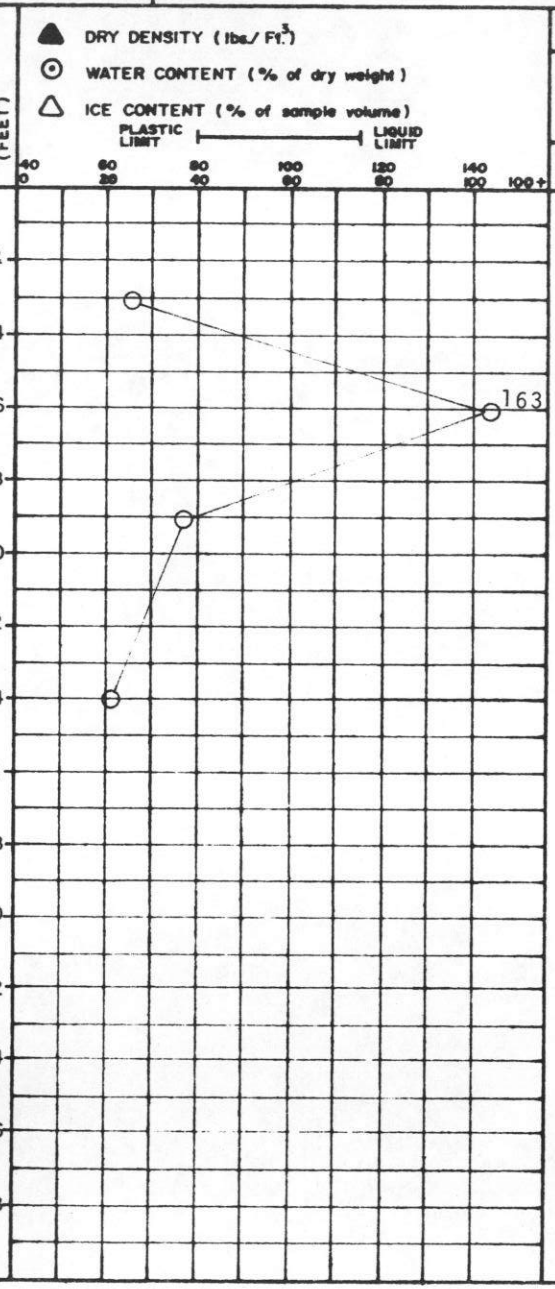
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A 23329-214	CHAINAGE. 5951+00	OFFSET. ℄	TEST HOLE 626
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 828

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2					CL	CLAY -Silty Sandy Pebbles Low plastic		High Ice					Free Water	
4						5'								
6					Pt	PEAT							Free Water	
8						8'		Vs						
10						CLAY -Organics to 10' -Silty Sandy Pebbles Med plastic	F						Sat.	
12								Low						
14					CI			Ice					Moist	
16														
18														
20								Vx						
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A 23329-214	CHAINAGE. 5963+00	OFFSET. ℄	TEST HOLE 627
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 828

▲ DRY DENSITY (lbs./Ft.³)
⊙ 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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'		Moderate						
						CLAY -Silty Sandy Med plastic							Wet	
4								Ice						
6													Wet	
8								Vc - Vr						
													Wet	
10					CI									
12							F						Wet	
14														
16								Low						
18														
								Ice						
20														
22														
								Vx						
24														
26														
28														
						30'								

BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A 23329-214	CHAINAGE. 5976+00	OFFSET. ℄	TEST HOLE 628
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 828

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		High							
2						2'			2						
						CLAY								Wet	
4						-Silty		Ice	4						
						Sandy									
						With organics									
6						to 10'			6					Wet	
						Low-med plastic									
								Vs							
8					CL				8						
					CI									Sat.	
10									10						
12							F		12						
14						Pebbles			14					Moist	
								Low							
16									16						
18								Ice	18						
20									20						
								Vx							
22									22						
24									24						
26									26						
28									28						
						30'									

▲ DRY DENSITY (lbs./Ft.^{3})
⊙ WATER CONTENT (% of dry weight)
△ ICE CONTENT (% of sample volume)

PLASTIC LIMIT ├──┤ LIQUID LIMIT

BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

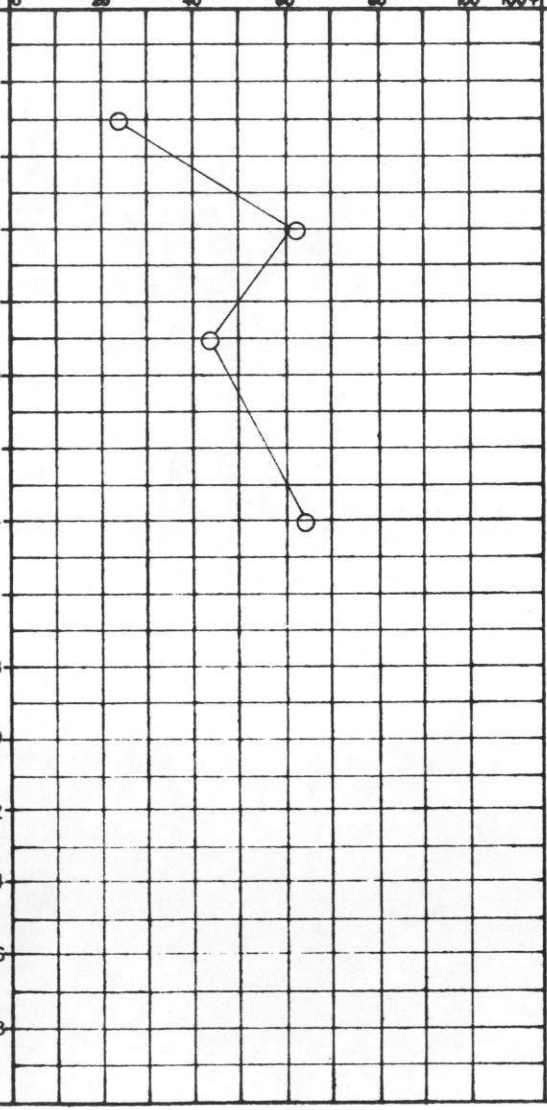
SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A 23329-214	CHAINAGE. 5988+00	OFFSET. ¢	TEST HOLE 629
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 827

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		Low							
2						2'		Ice	2						
						CLAY -Silty, sandy Pebbles Med-high plastic		Vx						Damp	
4									4						
6					CI			High	6					Free Water	
8								Ice	8						
10					CH				10					Sat.	
								Vs							
12									12						
14							F		14					Free Water	
16								Moderate	16						
18								To	18						
20								High	20						
22								Ice	22						
24								Vc - Vr	24						
26									26						
28								Vs	28						
						30'									

▲ DRY DENSITY (lbs/ Ft.^{3})
⊙ WATER CONTENT (% of dry weight)
△ ICE CONTENT (% of sample volume)

PLASTIC LIMIT ⊢——⊣ LIQUID LIMIT



BOTTOM OF HOLE - 30'

DS-14-5-74 b

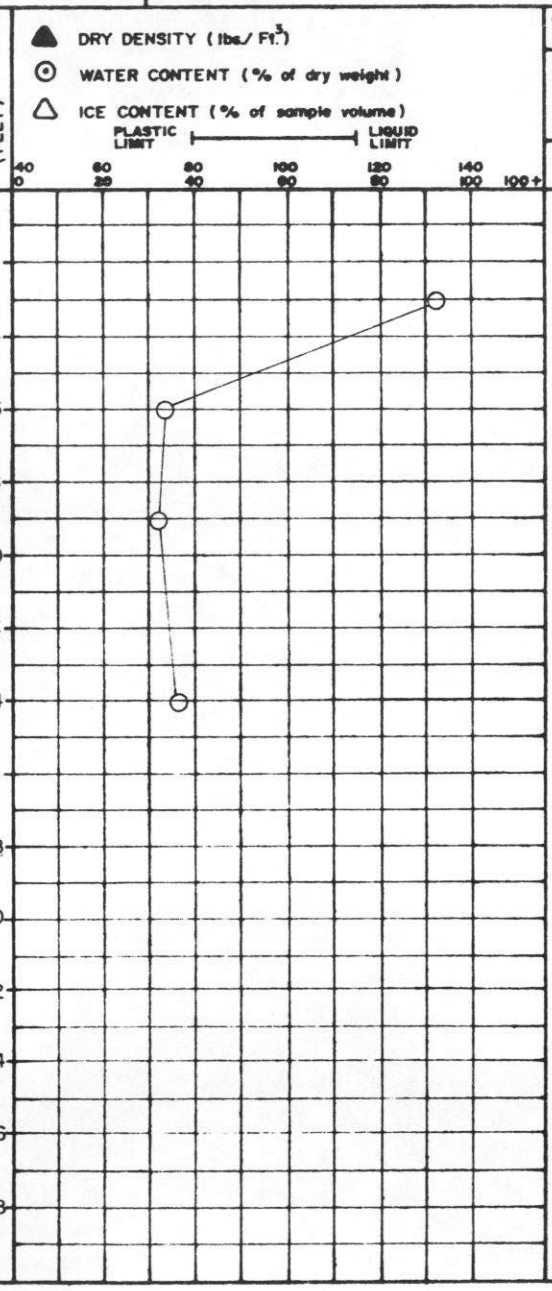
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 23329-214	CHAINAGE. 6001+50	OFFSET. ℄	TEST HOLE 630
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 827

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
2					Pt	PEAT		High					Sat.	
4						4'		Ice						
6						CLAY -Silty Sandy Pebbles							Free Water	
8					CL	Low-med plastic		Vs						
10					CI		F						Sat.	
12														
14													Sat.	
16								Moderate						
18								Ice						
20														
22								Vc - Vr						
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

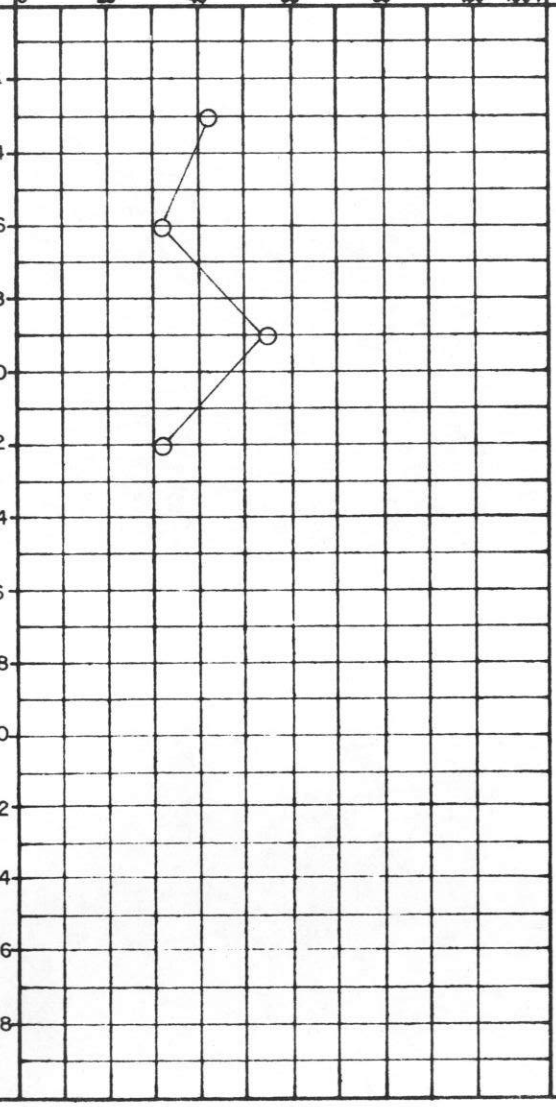
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 23329-216	CHAINAGE. 6013+00	OFFSET. ¢	TEST HOLE 631
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 827

DRY DENSITY (lbs./Ft.³) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2'		Moderate						
2						CLAY -Silty Organics to 4' Sandy Pebbles Med-high plastic		Ice					Moist	
4														
6								Vc - Vr					Moist	
8					CI		F	High					Free Water	
10					CH			Ice						
12								Vs					Wet	
14								Moderate						
16								Ice						
18														
20								Vc - Vr						
22														
24														
26														
28						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

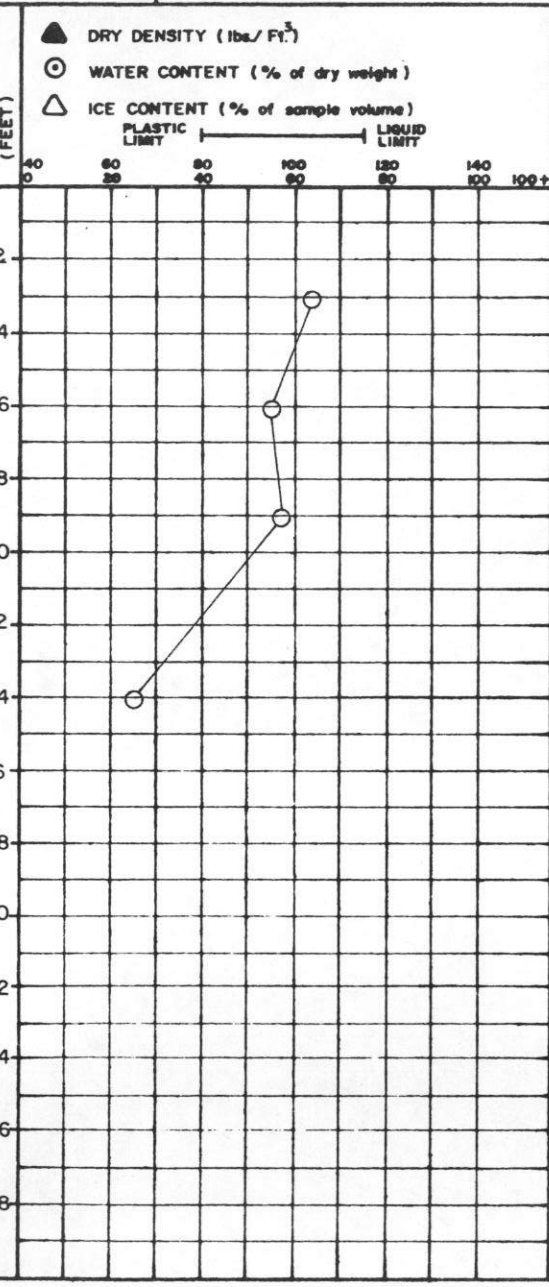
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 23329-216	CHAINAGE. 6023+00	OFFSET. ℄	TEST HOLE 632
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 827

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2						CLAY								
						-Organics to 4'		Moderate					Wet	
4						Silty								
						Sandy								
						Pebbles								
6						High plastic		Ice					Wet	
8					CH		F							
													Wet	
10								Vc - Vr						
12														
14													Moist	
16								Low						
18								Ice						
20														
22								Vx						
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 22/2/74	AIRPHOTO NO. A 23329-216	CHAINAGE. 6033+00	OFFSET. ℄	TEST HOLE 633
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 826

▲ DRY DENSITY (lbs./Ft.³)
⊙ 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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'								
						CLAY -Silty Sandy		Moderate					Sat.	
4														
								To						
6						Pebbles Med plastic							Sat.	
								High						
8														
								Ice					Sat.	
10							F							
					CI									
12								Vc - Vr						
14													Sat.	
16								Vs						
18														
20														
22														
24														
26														
28														
						30'								

BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

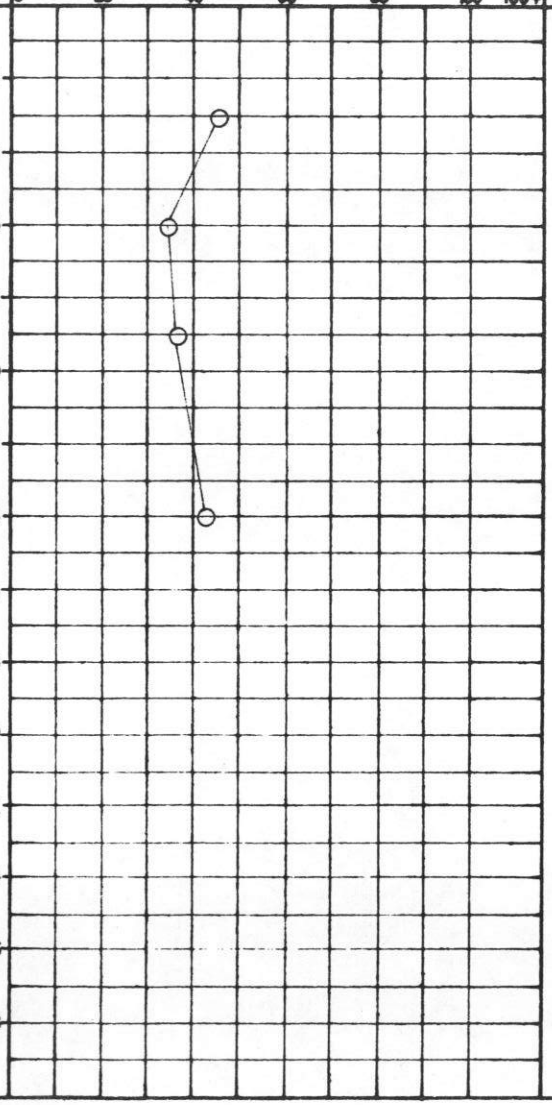
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 23329-216	CHAINAGE. 6044+00	OFFSET. ¢	TEST HOLE 634
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 826

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'								
4						CLAY -Silty Sandy Pebbles Med plastic		High					Free Water	
6								To					Sat.	
8								Moderate						
10					CI		F						Wet	
12								Ice						
14													Sat.	
16								Vs						
18								Vc - Vr						
20														
22														
24														
26														
28														
						30'								

DRY DENSITY (lbs./Ft.^{3})
WATER CONTENT (% of dry weight)
ICE CONTENT (% of sample volume)
PLASTIC LIMIT — LIQUID LIMIT



BOTTOM OF HOLE - 30'

DS-14-5-74 b

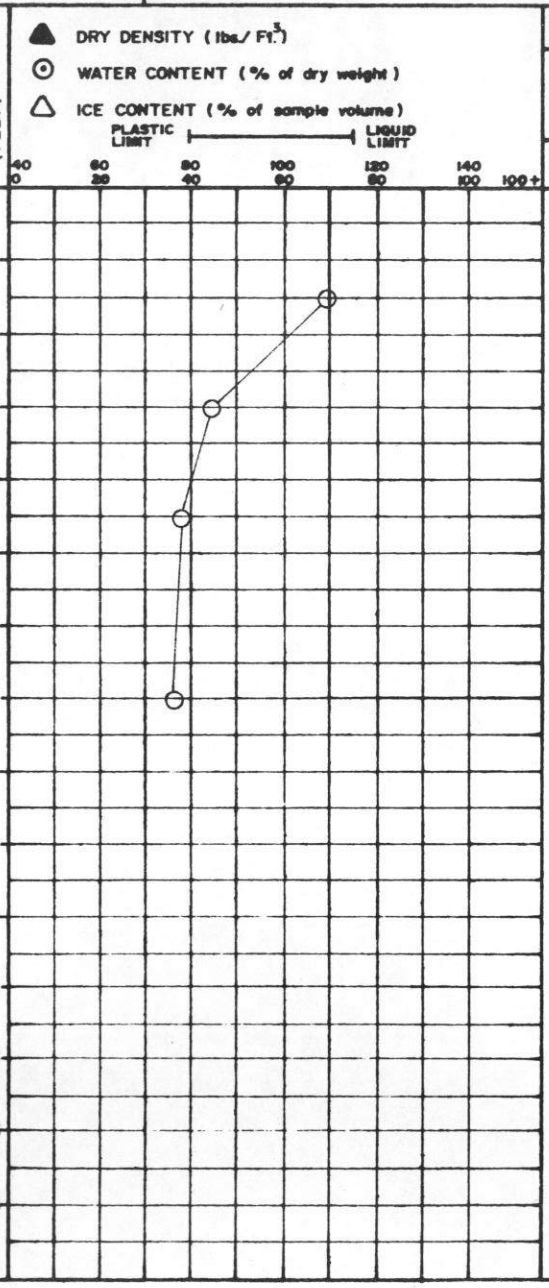
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 23329-216	CHAINAGE. 6054+00	OFFSET. ℄	TEST HOLE 635
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 826

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'		High					Free Water	
4						CLAY -Silty Sandy		To						
6						Pebbles Med plastic							Sat.	
8								Moderate						
10					CI								Wet	
12							F	Ice						
14													Wet	
16								Vs						
18								Vc - Vr						
20														
22														
24								Low						
26								Ice						
28								Vx						
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

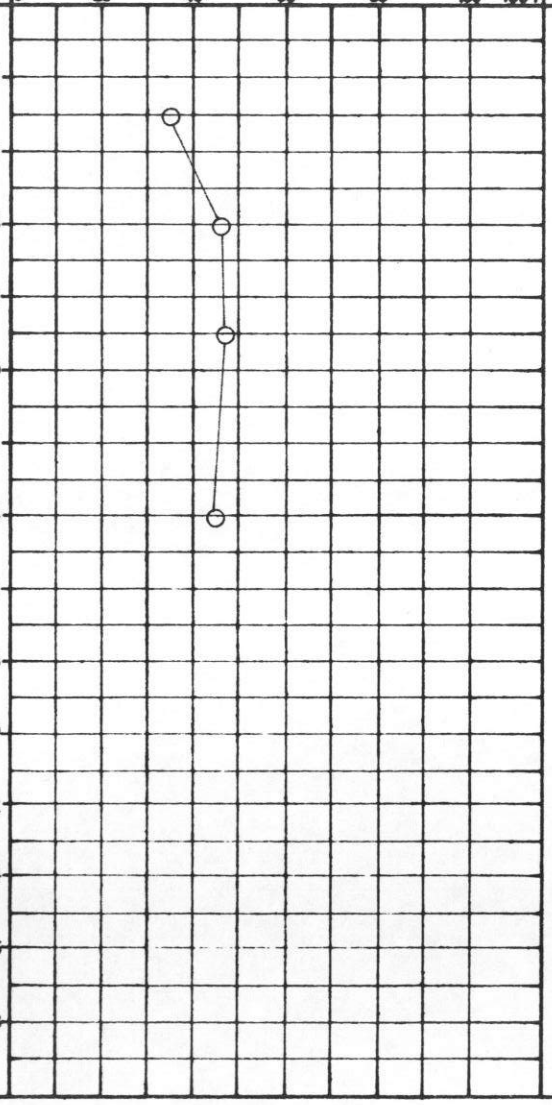
SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 23329-216	CHAINAGE. 606+00	OFFSET. ℄	TEST HOLE 636
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 826

▲ DRY DENSITY (lbs./Ft.³)
⊙ 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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1½'								
2						CLAY -Silty Sandy Pebbles Med plastic		Moderate					Wet	
4								To						
6								High					Sat.	
8					CI			Ice					Sat.	
10							F	Vc - Vr						
12														
14								Vs					Sat.	
16														
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

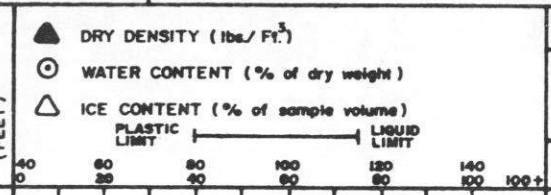
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 23329-216	CHAINAGE. 6077+00	OFFSET. ℄	TEST HOLE 637
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 826

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1½'								
2						CLAY -Silty Sandy Med-high plastic							Free Water	
4								High						
6					CI			Ice					Sat.	
8														
10							F	Vs					Sat.	
12					CH									
14													Sat.	
16														
18														
20														
22								Low						
24								Ice						
26								Vx						
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

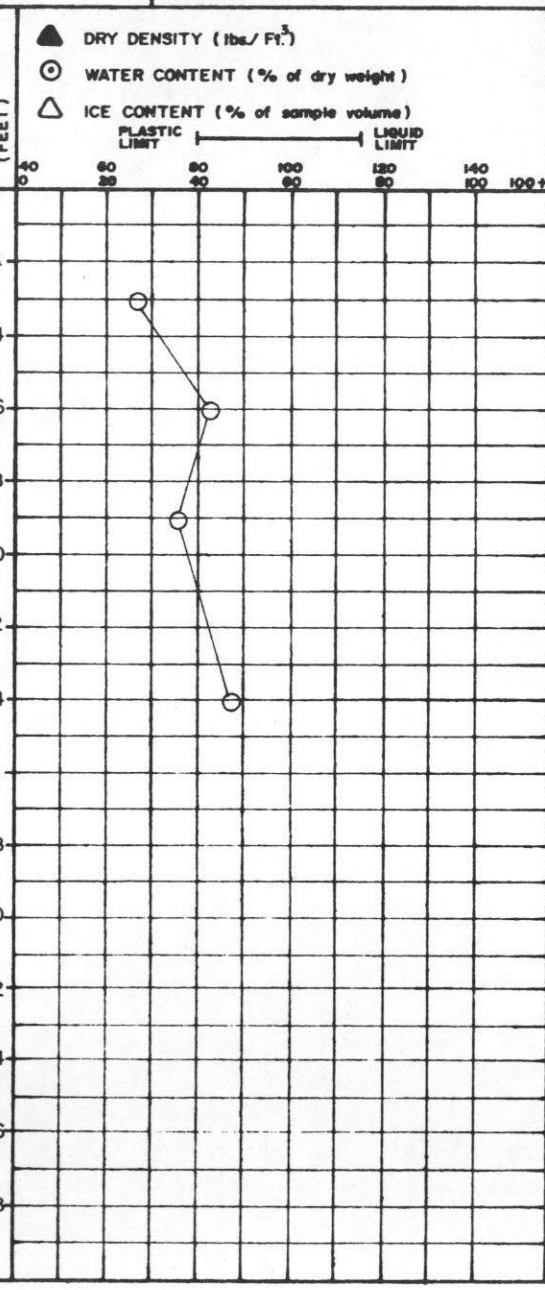
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 23329-216	CHAINAGE. 6091+00	OFFSET. ℄	TEST HOLE 638
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 825

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT									
2						2'		Moderate	2						
4						CLAY -Silty Sandy Pebbles Med plastic		To	4					Wet	
6									6					Wet	
8								High	8						
10					CI			Ice	10					Sat.	
12								Vc - Vr	12						
14							F		14					Free Water	
16								Vs	16						
18									18						
20								Low	20						
22								Ice	22						
24								Vx	24						
26									26						
28									28						
						30'									



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

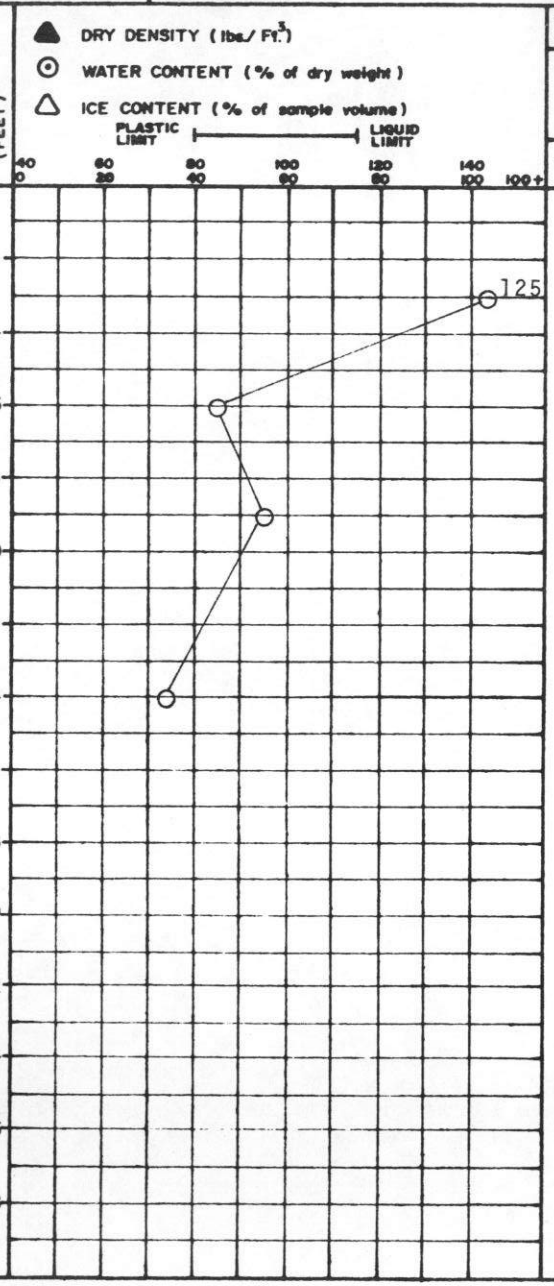
SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 23329-216	CHAINAGE. 6101+00	OFFSET. ℄
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.

TEST HOLE 639

MILE 825

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1½'								
2														
						CLAY -Silty Sandy Med plastic							Free Water	
4														
6								High					Wet	
8								&					Free Water	
10					CI			Moderate						
12								Ice						
14							F	Vs					Wet	
16														
18								Vc - Vr						
20														
22														
24														
26														
28						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

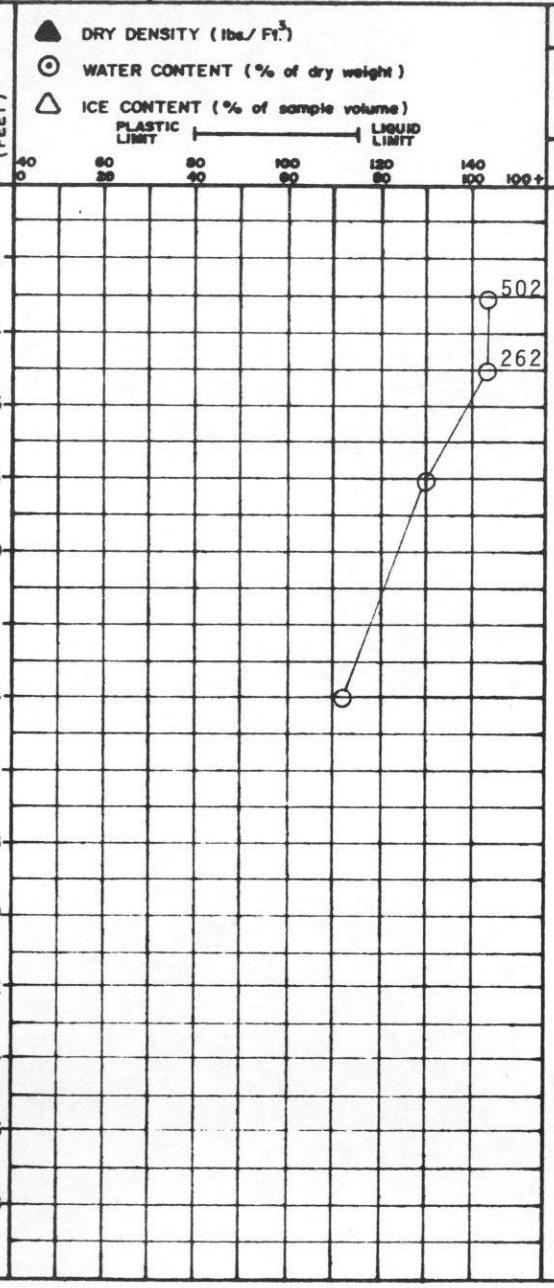
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 23329-218	CHAINAGE. 6107+00	OFFSET. ℄	TEST HOLE 640
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. SLOUGH	VEGETATION. SPRUCE	ELEV.	MILE 825

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2'								
						ICE & ORG. CLAY 5'		ICE & OL CL					Water	
					CI	CLAY -Organic Sandy Silty Med plastic 15'	F	High Ice Vs					Free Water Free Water	
						29'							Wet	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

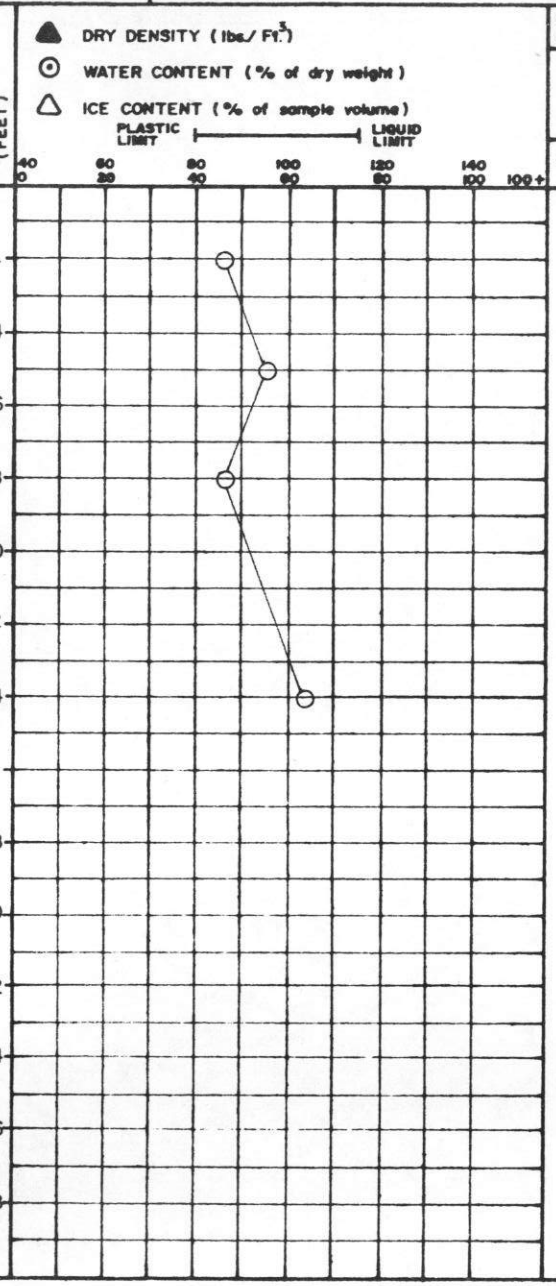
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 23329-218	CHAINAGE. 6115+00	OFFSET. ℄	TEST HOLE 641
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. LEVEL	VEGETATION. SPRUCE	ELEV.	MILE 825

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 1½'								
2						CLAY -Silty Sandy Med plastic							Wet	
4														
6								High					Sat.	
8								Ice					Free Water	
10					CI									
12							F							
14								Vs					Free Water	
16														
18														
20														
22														
24														
26														
28						28'								
						BOTTOM OF HOLE - 28'								



DS-14-5-74 b

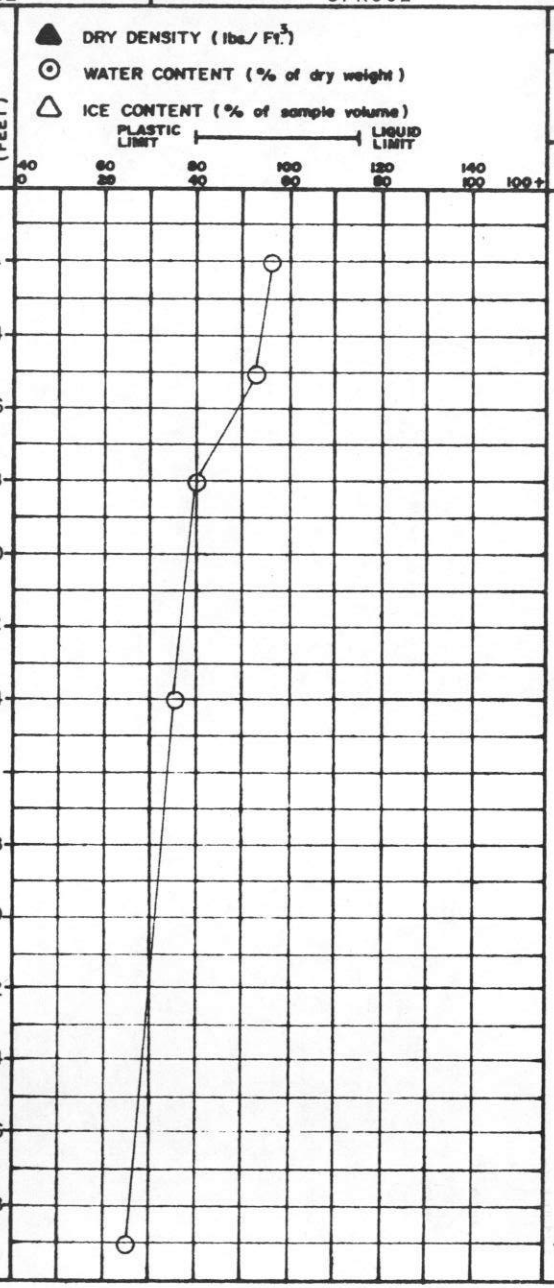
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 23329-218	CHAINAGE. 6126+00	OFFSET. ℄	TEST HOLE 642
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. LEVEL	VEGETATION. SPRUCE	ELEV.	MILE 825

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1½'		High						
2						CLAY			-5	6	44	0	Wet	
						-Organics to 6'		Ice						
4						Sandy								
						Silty			-8	1 -	19	0	Wet	
						High plastic		Vs						
6														
						Silty								
8									-9	4 -	6	0	Moist	
10							F							
12														
					CH									
14								Moderate	-9	8 -	2	0	Moist	
16								Ice						
18								Vc - Vr						
20														
22														
24														
26														
28														
						—29'			-9	6 -	4	0	Damp	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 23329-218	CHAINAGE. 6138+00	OFFSET. ℄
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. FAIR TO WEST	VEGETATION. SPRUCE	ELEV.

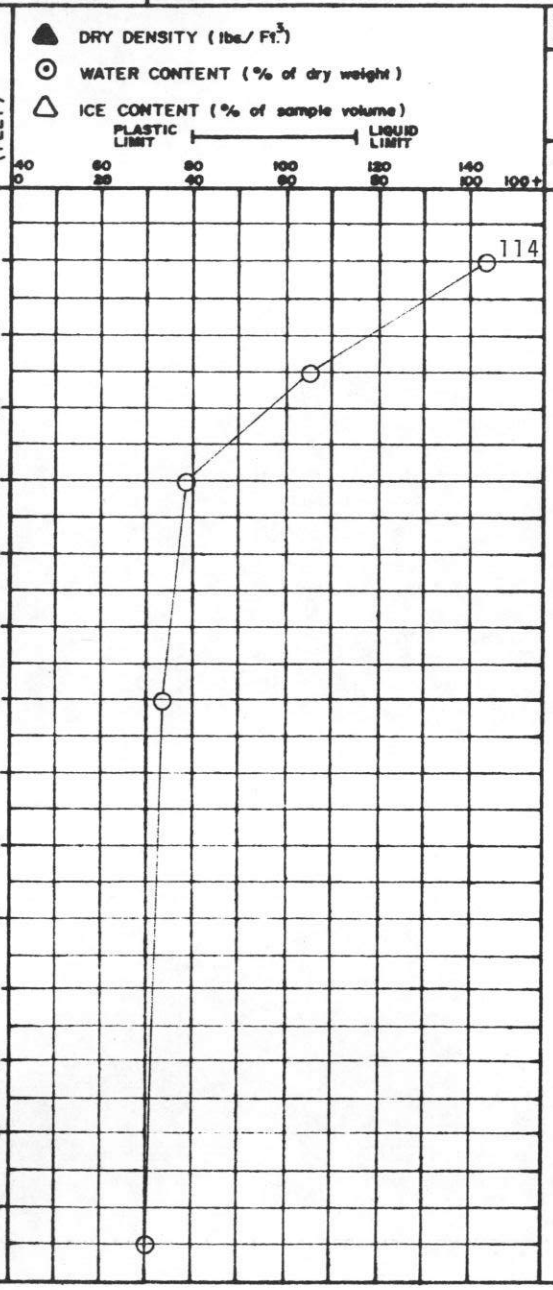
TEST HOLE 643

MILE 824

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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT 1½'							
						ICE 2'		ICE					Free Water
						CLAY -Sandy Silty High plastic		High Ice Vs					Sat.
								Moderate Ice					Wet
					CH		F	Vc - Vr					Moist
						29'							Moist

DRY DENSITY (lbs./Ft.³)
WATER CONTENT (% of dry weight)
ICE CONTENT (% of sample volume)



BOTTOM OF HOLE - 29'

DS-14-5-74 b

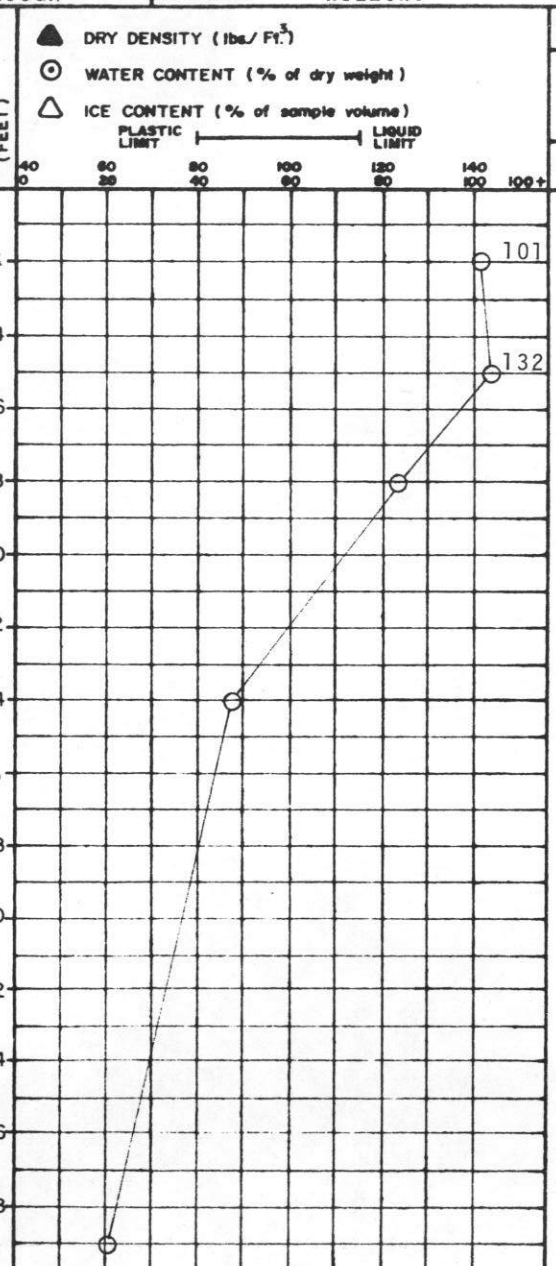
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 23329-218	CHAINAGE. 6151+00	OFFSET. ℄	TEST HOLE 644
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. SLOUGH	VEGETATION. WILLOWS	ELEV.	MILE 824

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
2					Pt	PEAT							Damp	
4						4'		High					Free Water	
6						CLAY -Silty Sandy Pebbles Med-high plastic								
8								Ice					Free Water	
10					CI		F							
12								Vs						
14					CH								Wet	
16														
18														
20														
22														
24														
26														
28								Moderate Ice Vc - Vr						
						29'							Moist	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

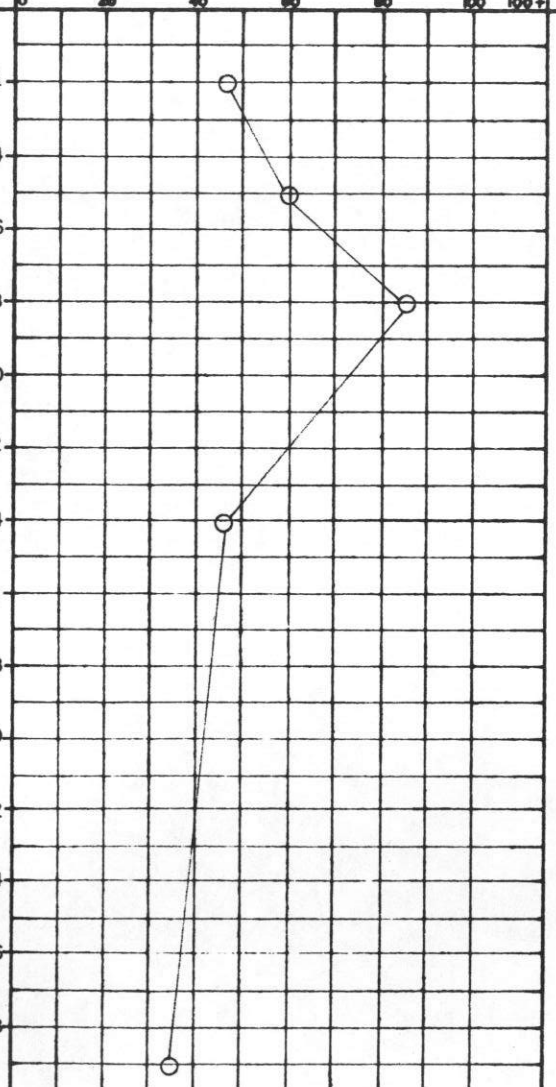
FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 23329-218	CHAINAGE. 6157+00	OFFSET. ℄
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. IN DIP	VEGETATION. SPRUCE	ELEV.

TEST HOLE 645

MILE 824

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
3'														
						CLAY -Silty Sandy Med plastic		High Ice					Moist; Free Water; Free Water	
					CI		F	Vs						
													Free Water	
29'													Wet	

DRY DENSITY (lbs./Ft.³)
WATER CONTENT (% of dry weight)
ICE CONTENT (% of sample volume)
PLASTIC LIMIT — LIQUID LIMIT



BOTTOM OF HOLE - 29'

DS-14-5-74 b

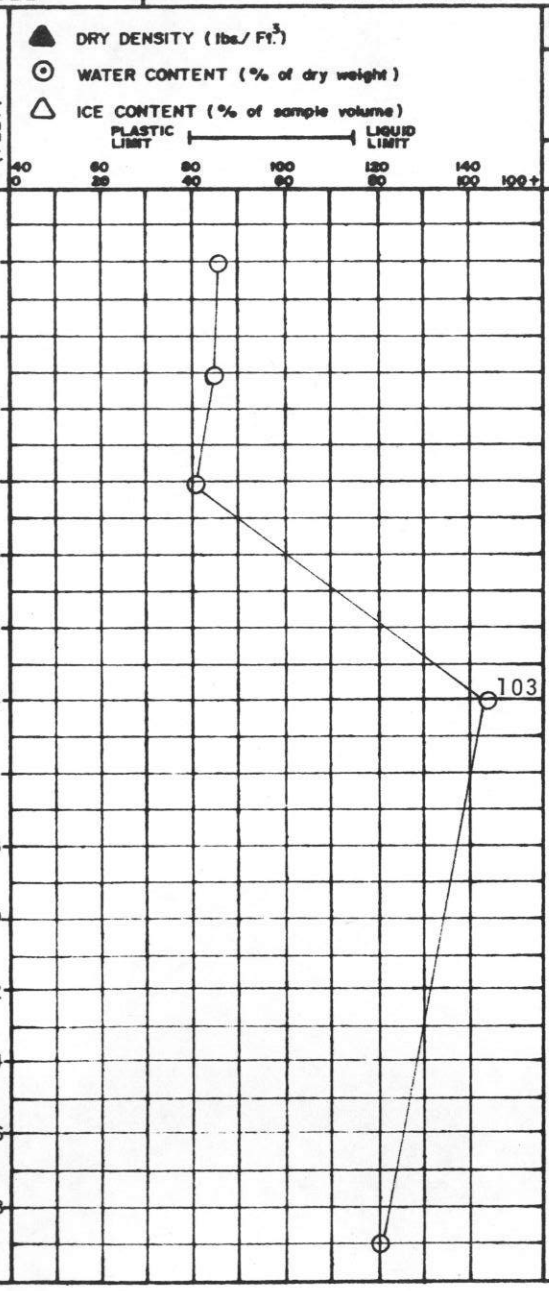
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 23329-218	CHAINAGE. 6169+00	OFFSET. ℄	TEST HOLE 646
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. LEVEL	VEGETATION. SPRUCE MAX. 6"	ELEV.	MILE 824

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2'													Wet	
					CI CH	CLAY -Silty Sandy Med-high plastic	F	High To Moderate Ice Vs Vc - Vr					Sat. Wet Free Water	
						ICE Some Clay Lenses		ICE & CI						
						CLAY -Silty Sandy	F	High Ice Vs					Free Water	
29'														



BOTTOM OF HOLE - 29'

DS-14-5-74 b

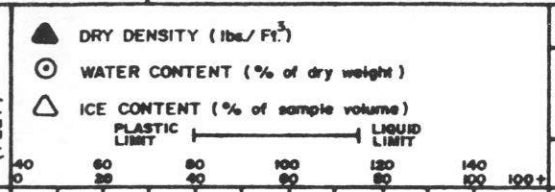
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 23329-218	CHAINAGE. 6178+00	OFFSET. ℄	TEST HOLE 647
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 824

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'								
						CLAY -Organics to 4' Silty Sandy Med plastic		High					Free Water	
4														
6													Free Water	
								Ice						
8													Free Water	
10														
					CI									
12							F	Vs					Free Water	
14														
16														
18														
20														
22														
24														
26														
28														
						29'								



BOTTOM OF HOLE - 29'

DS-14-5-74 b

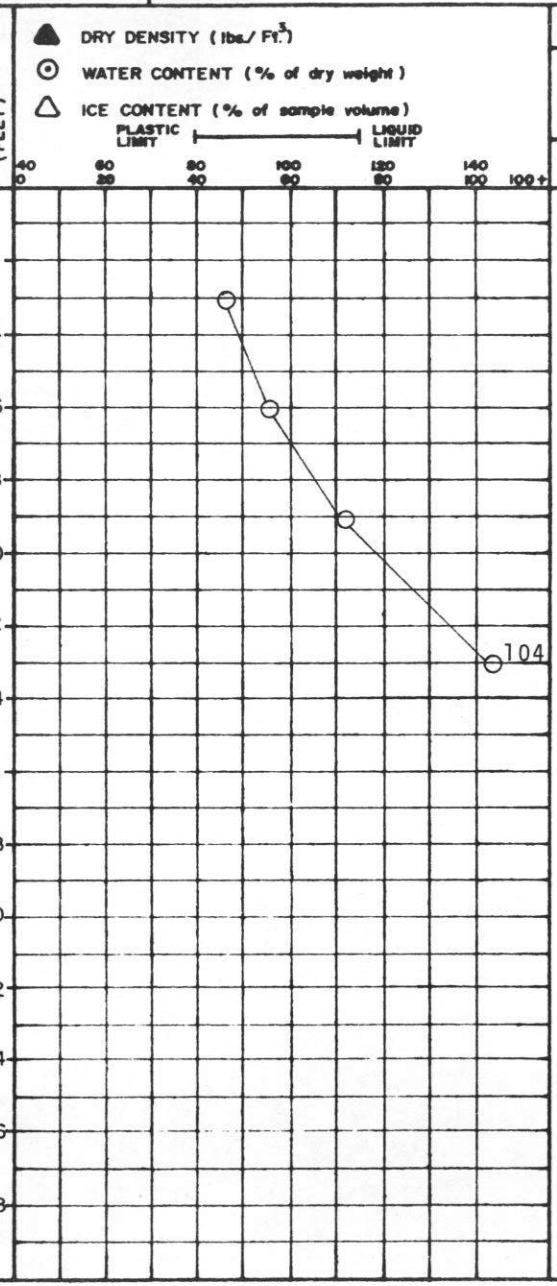
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 23329-218	CHAINAGE. 6185+00	OFFSET. ℄	TEST HOLE 648
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 824

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 1½'								
2														
						CLAY -Silty Sandy Med-high plastic							Sat.	
4														
								High						
6													Sat.	
8								Ice						
					CI								Sat.	
10							F							
					CH									
12								Vs					Free Water	
14														
16														
18														
20														
22														
24														
26														
28														
						29'								



BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 23329-218	CHAINAGE. 6195+00	OFFSET. ℄	TEST HOLE 649
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 823

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
2					Pt	PEAT		High Ice	2					Free Water	
4									4						
6						6'			6					Sat.	
8						CLAY -Silty Organics to 10' Sandy Med plastic		Vs	8					Free Water	
10							F		10						
12					CI				12					Sat.	
14								Moderate Ice Vc - Vr	14						
16								Low Ice Vx	16						
18									18						
20									20						
22									22						
24									24						
26									26						
28									28						
						29'									

▲ DRY DENSITY (lbs/Ft.³)
⊙ WATER CONTENT (% of dry weight)
△ ICE CONTENT (% of sample volume)

PLASTIC LIMIT ⊢——⊣ LIQUID LIMIT

40 0 60 20 80 40 100 60 120 80 140 100 100+

BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

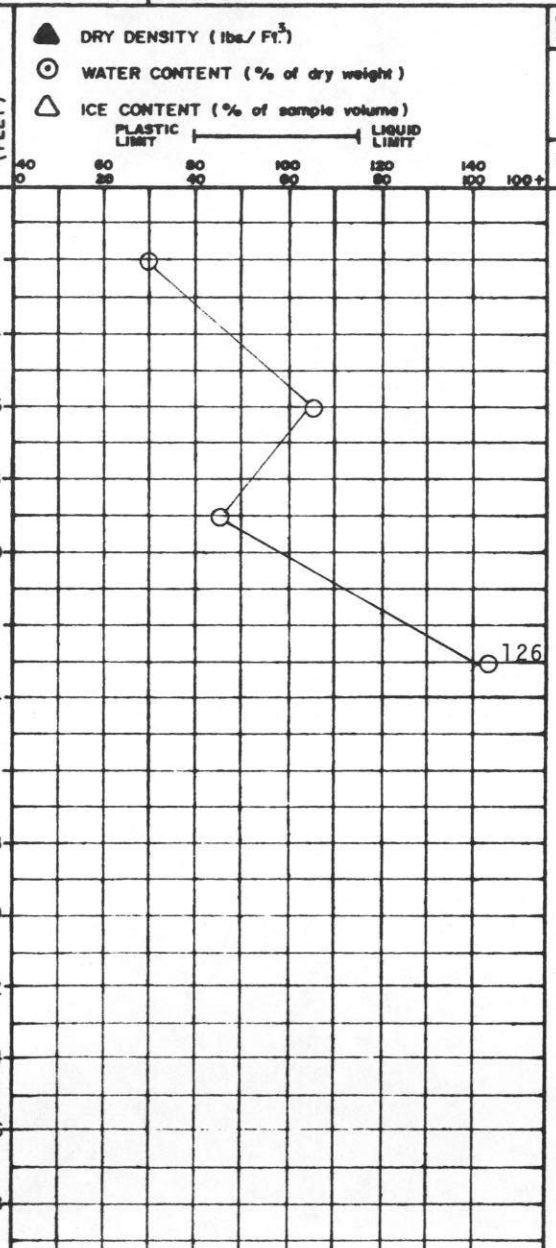
SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 22964-191	CHAINAGE. 6207+00	OFFSET. ℄
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.

TEST HOLE 650

MILE 823

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'							Sat.	
						CLAY -Silty Sandy Low plastic								
4					CL			High						
6													Free Water	
								Ice						
8						Med-high plastic								
10					CI		F						Wet	
12					CH								Free Water	
14								Vs						
16														
18														
20														
22														
24														
						25'								
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

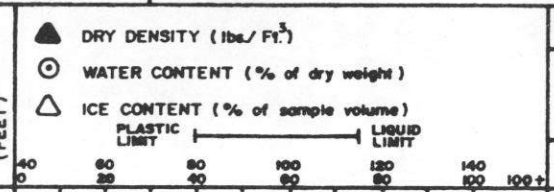
SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 22964-191	CHAINAGE. 6224+56.6-5227+87.4	OFFSET. ℄
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.

TEST HOLE 651

MILE 823

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								CHAINAGE EQUATION
2						2'		High						
						CLAY -Sandy Silty Med-high plastic							Free Water	
4								Ice						
6					CI			Vs					Free Water	
8					CH									
10													Sat.	
							F	Moderate						
12														
								Ice					Moist	
14														
16								Vc - Vr						
18														
								Low						
20														
								Ice						
22														
24								Vx						
26														
28														
						29'								



BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

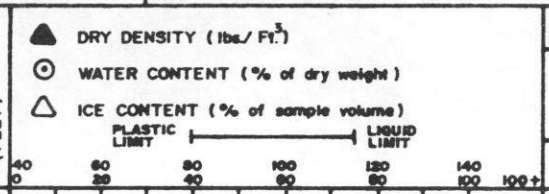
SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 22964-191	CHAINAGE. 5214+80	OFFSET. ¢
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE MAX. 5"	ELEV.

TEST HOLE 652

MILE 823

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'								
						CLAY -Sandy Silty Med-high plastic		Moderate To High Ice					Moist	
4														
6													Sat.	
8					CI									
10													Sat.	
					CH			Vc - Vr						
12							F							
14													Sat.	
16								Vs						
18														
20														
22														
24														
26														
28						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

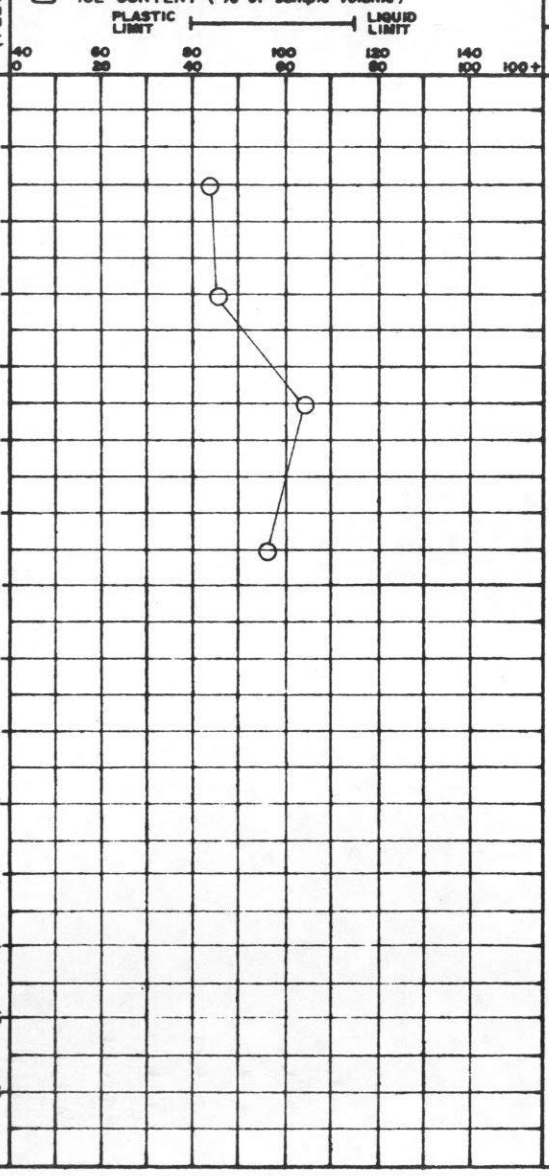
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 22964-191	CHAINAGE. 5201+85	OFFSET. ℄	TEST HOLE 653
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE	ELEV.	MILE 822

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 2'								
						CLAY -Sandy Silty	F	High Ice					Wet	
													Sat.	
													Free Water	
								Vs					Sat.	
						30'								

DRY DENSITY (lbs./Ft.³) ▲
WATER CONTENT (% of dry weight) ⊙
ICE CONTENT (% of sample volume) △



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 22964-191	CHAINAGE. 5191+00	OFFSET. ¢	TEST HOLE 654
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE MAX. 5"	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2'		High						
2													Free Water	
4						CLAY -Silty Sandy Pebbles 5'-7' Med plastic		Ice						
6								Vs						Open Bag
8														
10					CI			Moderate					Wet	
12							F	Ice						
14													Wet	
16														
18								Vc - Vr						
20														
22														
24														
26														
28						30'								

BOTTOM OF HOLE - 30'

DS-14-5-74 b

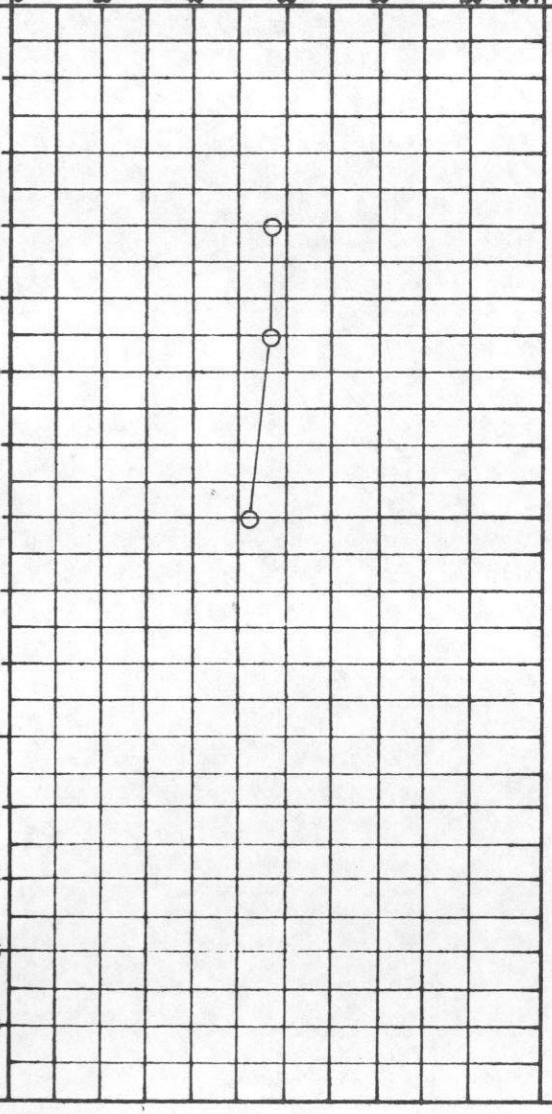
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 22964-191	CHAINAGE. 5177+00	OFFSET. ℄	TEST HOLE 655
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE MAX. 5"	ELEV.	MILE 822

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'								
						CLAY -Sandy Silty Med-high plastic		High						
6													Sat.	
8					CI			Ice						
													Sat.	
10							F							
					CH			Vs						
12														
14													Free Water	
16														
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

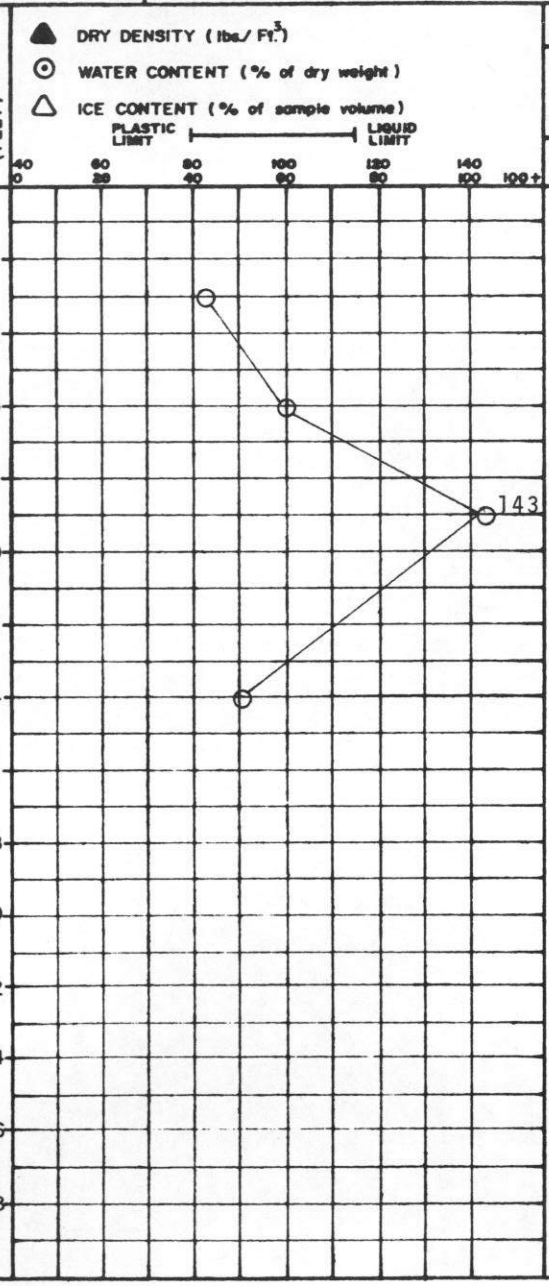
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 22964-193	CHAINAGE. 5167+00	OFFSET. ℄	TEST HOLE 656
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE MAX. 8"	ELEV.	MILE 822

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2'								
2														
4						CLAY -Sandy Silty Med plastic							Moist	Hole in Bag
6								High					Free Water	
8						Organic 8'-10'							Free Water	
10								Ice						
12					CI		F							
14								Vs					Sat.	
16														
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

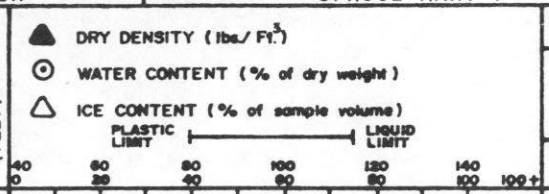
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 22964-193	CHAINAGE. 5161+00	OFFSET. ℄	TEST HOLE 657
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE MAX. 7"	ELEV.	MILE 822

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2'								
2													Free Water	
4						CLAY -Silty Sandy								
6						Pebbles		High					Sat.	
8						Med-high plastic							Sat.	
10					CI			Ice						
12					CH									
14							F	Vs					Sat.	
16														
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

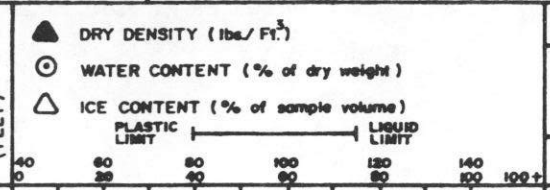
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 22964-193	CHAINAGE. 5152 Ft.	OFFSET. ℄	TEST HOLE 658
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE MAX. 5"	ELEV.	MILE 821

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		High Ice						
2'														
						CLAY -Silty Sandy Med plastic		Vs					Free Water	
					CI		F	Moderate & High Ice					Wet	
													Moist	
								Vc - Vr					Sat.	
								Vs						
30'														

DRY DENSITY (lbs./Ft.³) ▲
WATER CONTENT (% of dry weight) ⊙
ICE CONTENT (% of sample volume) △



BOTTOM OF HOLE - 30'

DS-14-5-74 b

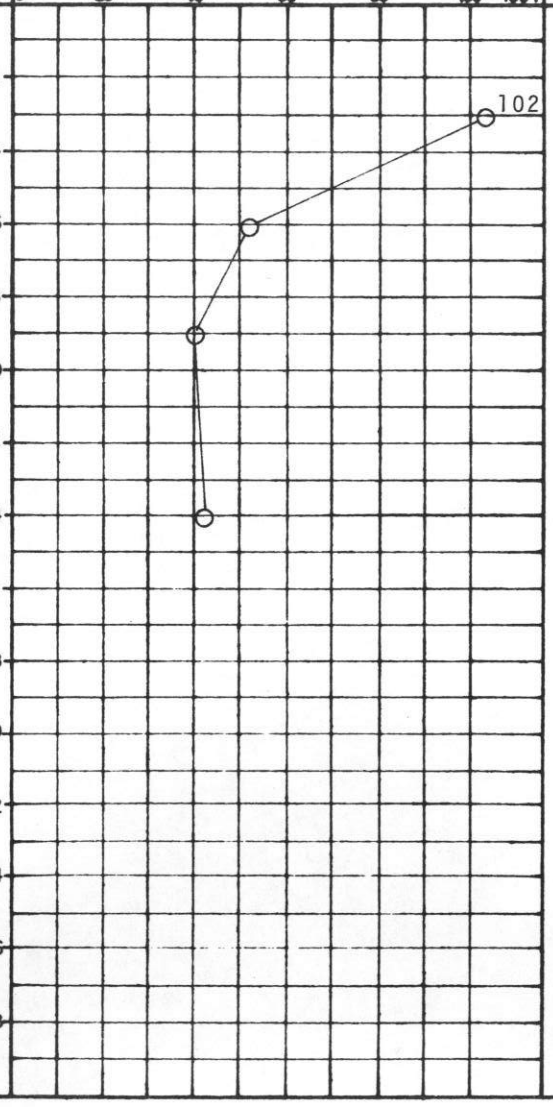
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 22964-193	CHAINAGE. 5145+25	OFFSET. ℄	TEST HOLE 659
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. POOR	VEGETATION. SPRUCE	ELEV.	MILE 821

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		High						
2						2'								
						CLAY -Organic to 4' Silty Sandy		Ice					Free Water	
4														
6						Med-high plastic		Vs					Sat.	
8					CI		F							
								Moderate					Wet	
10					CH									
12														
14								Ice					Moist	
16														
18								Vc - Vr						
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

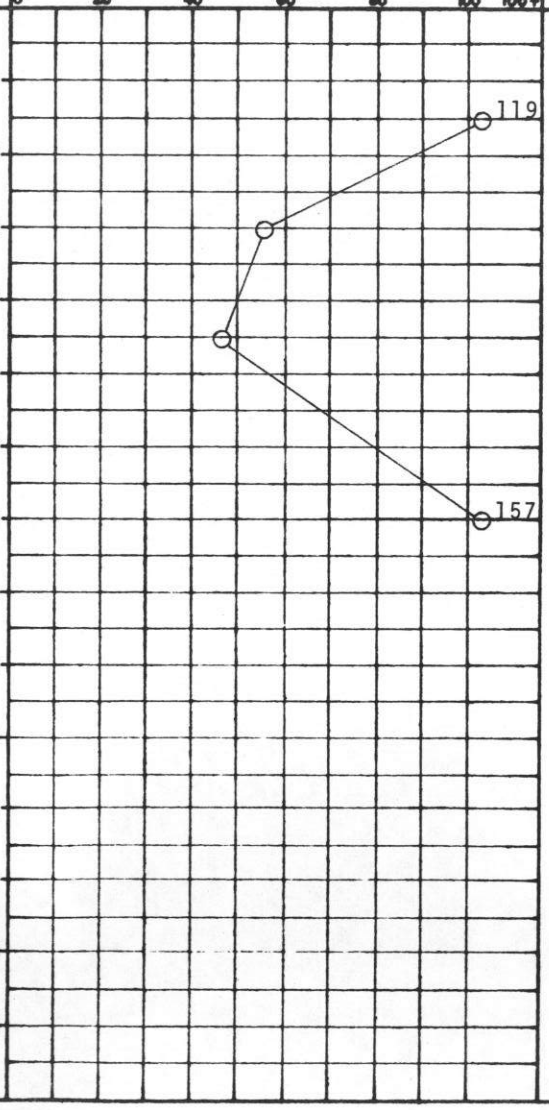
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED.	AIRPHOTO NO. A 22964-193	CHAINAGE. 5137+00	OFFSET. ℄	TEST HOLE 660
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE MAX. 7"	ELEV.	MILE 821

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
2					Pt	PEAT 2'								
4						CLAY -Sandy Silty Med plastic		High					Free Water	
6													Sat.	
8								Ice						
10					CI		F						Sat.	
12														
14								Vs					Free Water	
16														
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

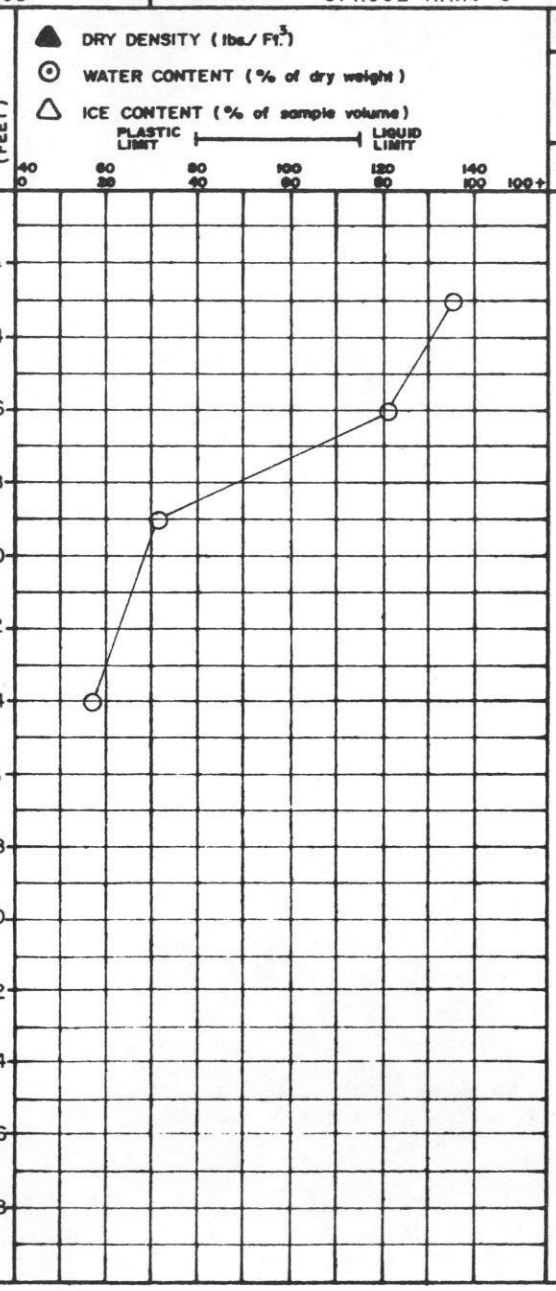
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 22964-193	CHAINAGE. 5131+00	OFFSET. ℄	TEST HOLE 661
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE MAX. 5"	ELEV.	MILE 821

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2'								
2													Free Water	
4						CLAY -Silty Sandy		High						
6						Pebbles		Ice					Free Water	
8						Low plastic								
10													Sat.	
12					CL		F	Vs						
14													Sat.	
16														
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

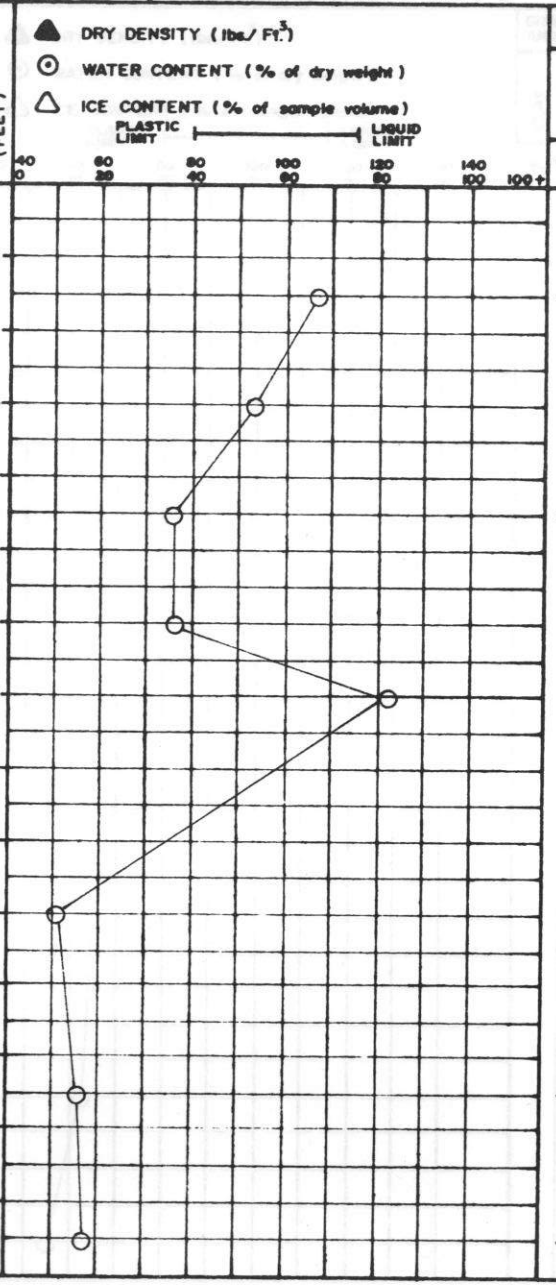
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 22964-193	CHAINAGE. 5124+25	OFFSET. ℄	TEST HOLE 662
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE MAX. 7"	ELEV.	MILE 821

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2'								
2–4						CLAY -Silty Med plastic		High	-96-		4	0	Free Water	
6–8					CI		F	Ice	-98-		2	0	Free Water	
8–10									-98-		2	0	Sat.	
10–12						Sandy		Vs	-87-		13	0	Sat.	
12–14									-93-		7	0	Free Water	
14–16														
16–18														
18–20					SC	SAND -Clayey Gravelly 19' 21'		Moderate	-26-		54	20	Sat.	
20–22					CL	CLAY -Silty Sandy Pebbles Low-med plastic		To						
22–24								Low						
24–26					CI			Ice	-68-		25	7	Moist	
26–28								Vc - Vr						
28–30								Vs	-63-		31	6	Moist	

▲ DRY DENSITY (lbs./Ft.³)
⊙ WATER CONTENT (% of dry weight)
△ ICE CONTENT (% of sample volume)



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 22964-193	CHAINAGE. 5116+45
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE MAX. 5"

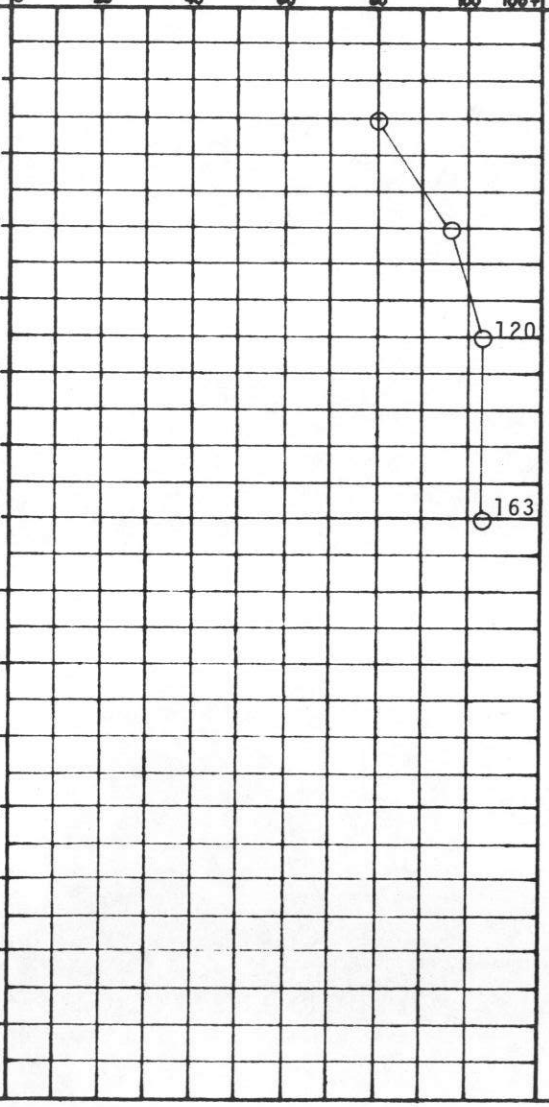
OFFSET. ℄

ELEV.

TEST HOLE 664

MILE 821

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'								
						CLAY -Silty Sandy Low-med plastic		High					Free Water	
4														
6								Ice					Free Water	
8					CL								Free Water	
10					CI		F							
12								Vs						
14													Free Water	
16														
18														
20														
22														
24														
26														
28						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 22964-194	CHAINAGE. 5099+76.3
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE MAX. 5"

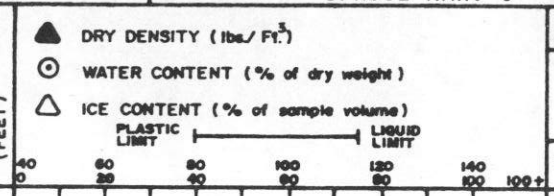
OFFSET. ℄

ELEV.

TEST HOLE 665

MILE 820

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		High						
2						2'								
						CLAY -Silty Sandy Med plastic		To					Sat.	
4														
								Moderate						
6													Wet	
8								Ice						
					CI	Pebbles							Wet	
10														
							F	Vs						
12														
14								Vc - Vr					Wet	
16														
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

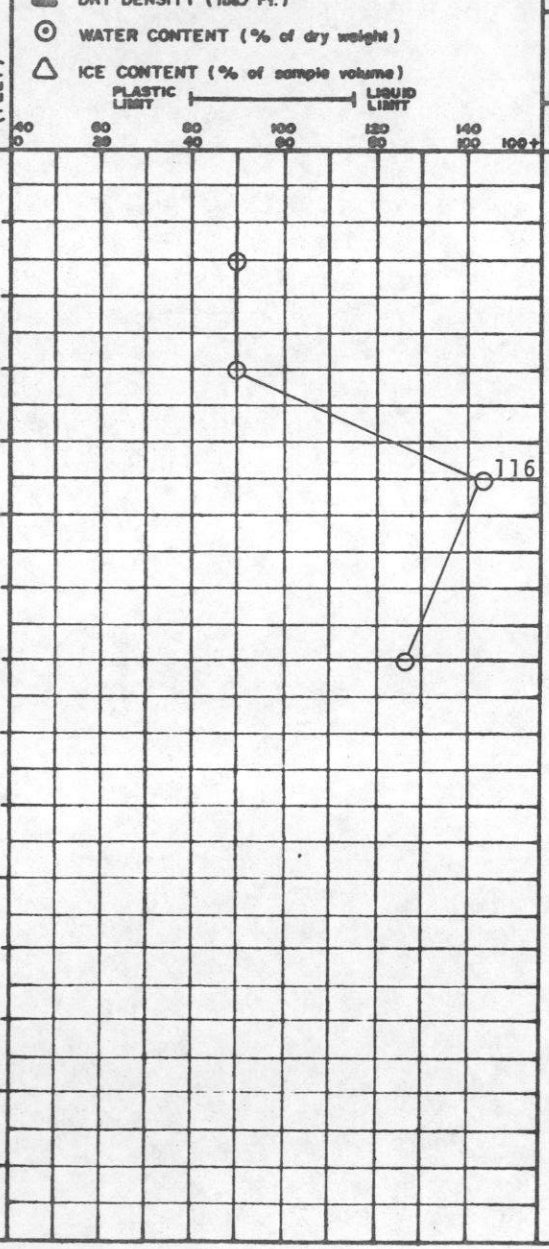
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 22964-194	CHAINAGE. 5091+00	OFFSET. ℄	TEST HOLE 666
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 820

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2'														
						CLAY -Silty Sandy High plastic							Wet	
								High					Wet	
								Ice					Free Water	
					CH		F							
								Vs					Sat.	
30'														

DRY DENSITY (lbs./Ft.³) ▲
WATER CONTENT (% of dry weight) ⊙
ICE CONTENT (% of sample volume) △



BOTTOM OF HOLE - 30'

DS-14-5-74 b

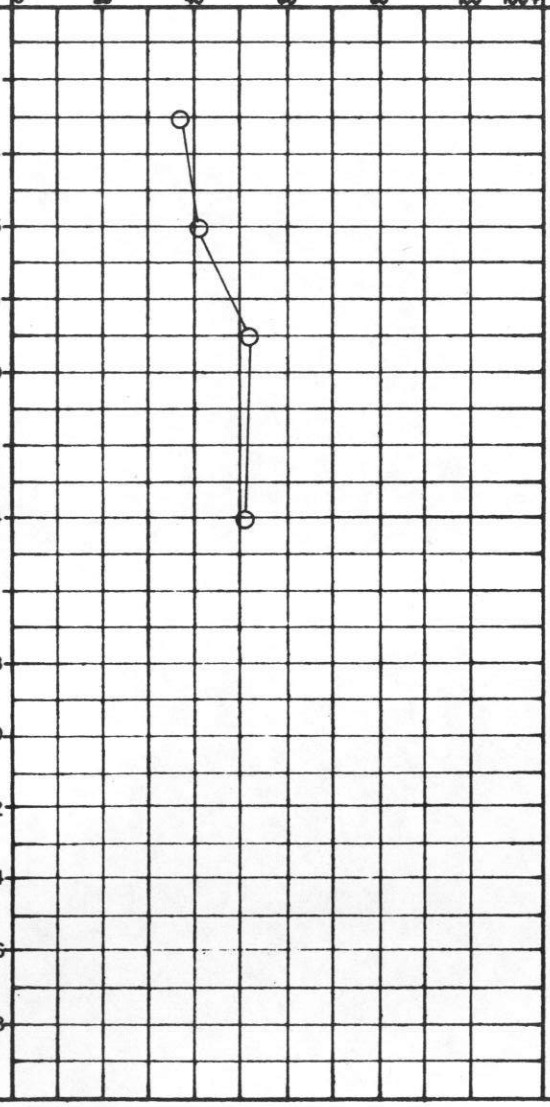
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 22964-194	CHAINAGE. 5084+00	OFFSET. ℄	TEST HOLE 667
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 820

DRY DENSITY (lbs./Ft.³) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'								
						CLAY -Silty Sandy Med plastic		High					Sat.	
4														
6													Sat.	
8								Ice						
													Sat.	
10					CI									
12							F							
14								Vs					Sat.	
16														
18														
20														
22														
24														
26														
28														
						30'								

BOTTOM OF HOLE - 30'

DS-14-5-74 b

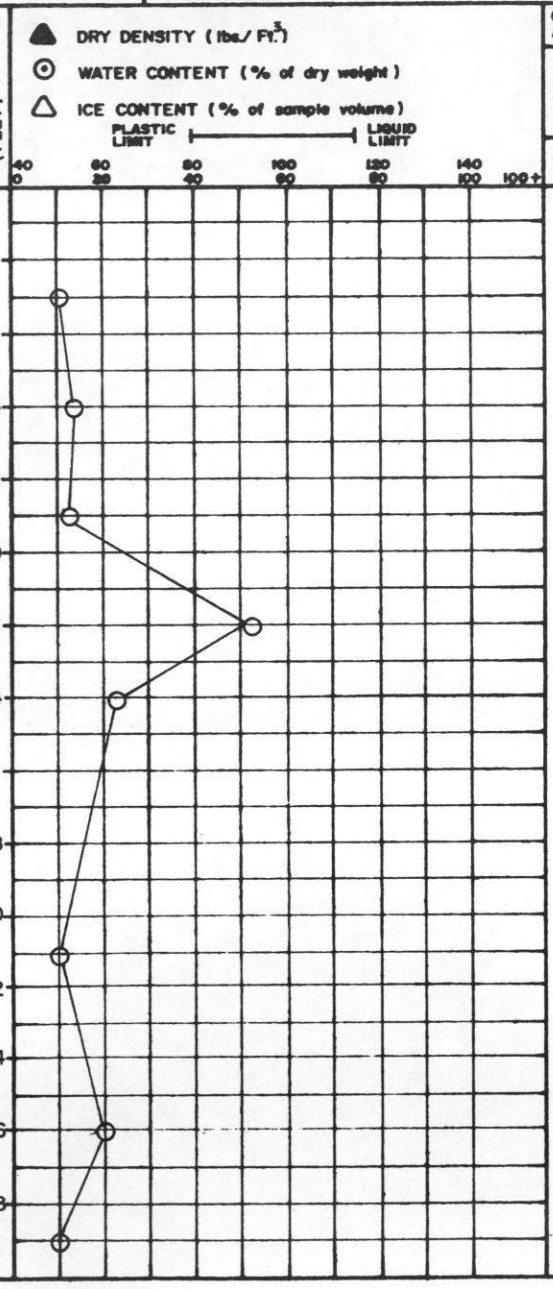
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 22964-194	CHAINAGE. 5073+20	OFFSET. ℄	TEST HOLE 668
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 820

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 1½'								
2					GC	GRAVEL -Sandy Clayey		Moderate					Damp	
4								&						
6								High					Sat.	
8								Ice					Sat.	
10					OL	ORGANIC-SAND-SILT -Pebbles — 10'	F	Vc - Vr					Sat.	
12														
14					GC	GRAVEL -Sandy Clayey — 14'		Vs					Free Water	
16														
18														
20														
22					CI	CLAY -Silty Sandy Pebbles Med plastic — 22'							Sat.	
24														
26													Moist	
28														
						30'							Moist	



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 22964-194	CHAINAGE. 5071+90	OFFSET. ℄	TEST HOLE 669
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 820

▲ DRY DENSITY (lbs./Ft.³)
⊙ 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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1½'								
2						CLAY -Organic to 4' Silty Sandy Med plastic		Moderate					Wet	
4														
6								Ice					Wet	
8													Wet	
10					CI			Vc - Vr						
12						Pebbles	F						Wet	
14														
16													Wet	
18														
20													Sat.	
22														
24														
26													Wet	
28													Wet	
						30'								

BOTTOM OF HOLE - 30'

DS-14-5-74 b

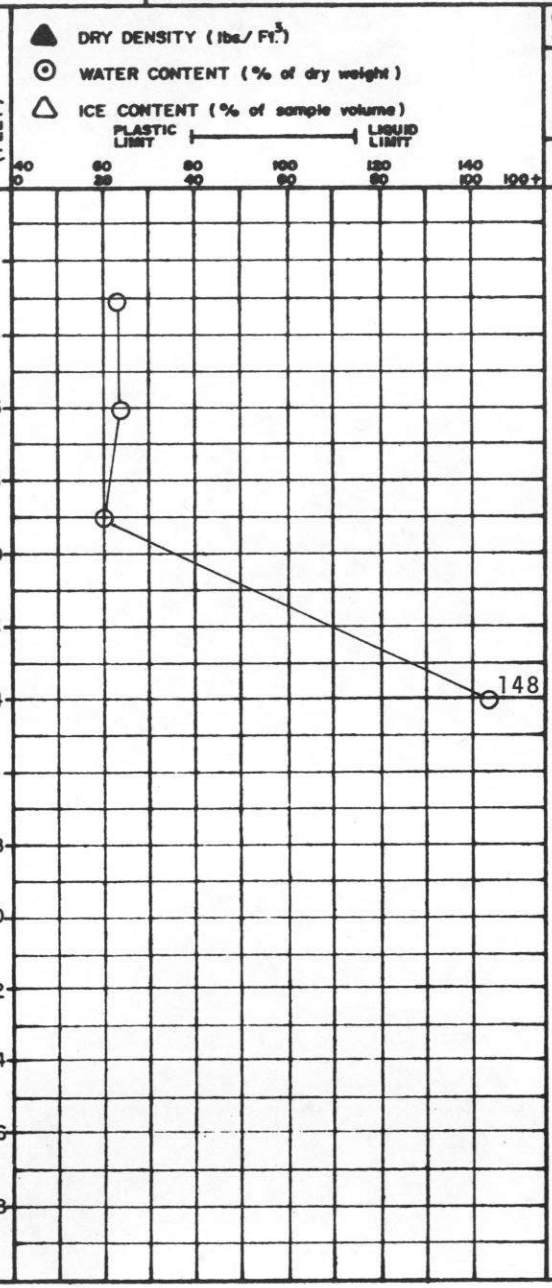
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A 22964-194	CHAINAGE. 5063+00	OFFSET. ℄	TEST HOLE 670
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 820

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1½'		Moderate Ice						
2						CLAY -Silty Sandy Low-med plastic		Vc - Vr					Sat.	
4								Low Ice						
6													Wet	
8					CL			Vx					Damp	
10					CI		F	High Ice						
12														
14													Free Water	
16														
18								Vs						
20														
22														
24														
26														
28						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22964-196	CHAINAGE. 5055+20	OFFSET. ℄
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.

TEST HOLE 671

MILE 820

▲ DRY DENSITY (lbs./ FT.^{3})
⊙ 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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'		Moderate						Hole in Bag
						CLAY							Humid	
4						-Silty		Ice						
						Sandy								
6						Pebbles							Humid	Hole in Bag
						Med plastic								
8														
								Vc - Vr					Moist	Hole in Bag
10					CI		F							
12														
14													Damp	Hole in Bag
16														
18														
20														
								High						
22														
24								Ice						
26														
								Vs						
28														
						30'								

BOTTOM OF HOLE - 30'

DS-14-5-74 b

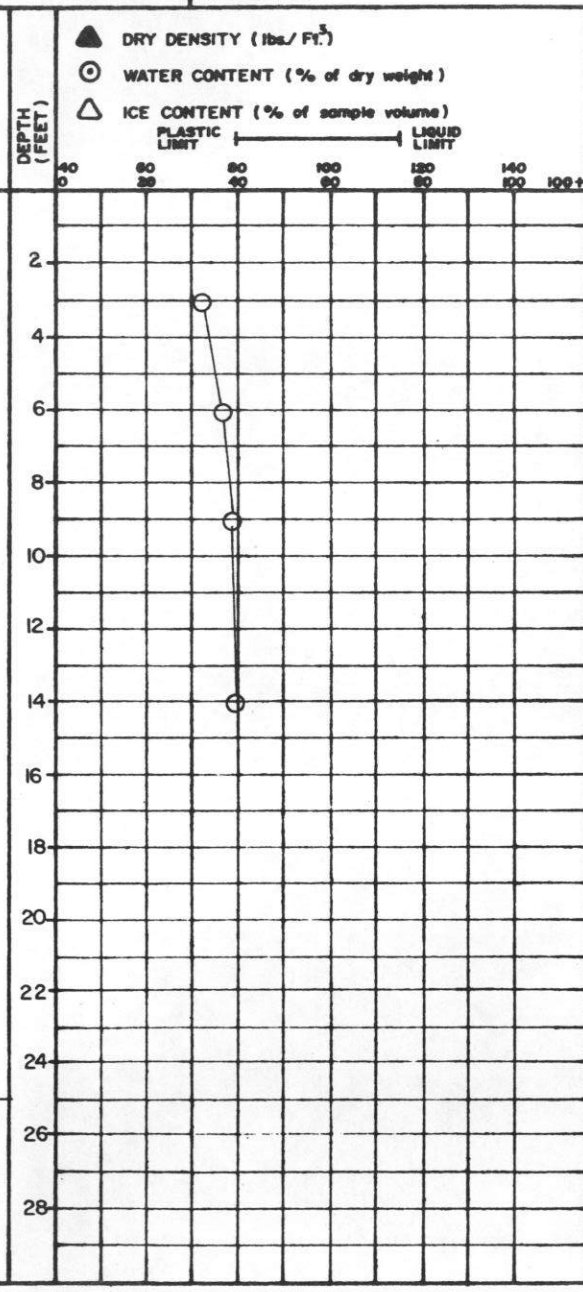
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22964-196	CHAINAGE. 5044+00	OFFSET. ℄	TEST HOLE 672
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 819

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	RELATIVE THAWED MOISTURE CONTENT	REMARKS
0–2					Pt	PEAT				
2–25					CI, CH	CLAY -Silty Sandy Med-high plastic; Pebbles	F	Moderate; Ice; Vc - Vr	Moist; Moist; Moist; Wet	
25						BOTTOM OF HOLE - 25'				



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

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

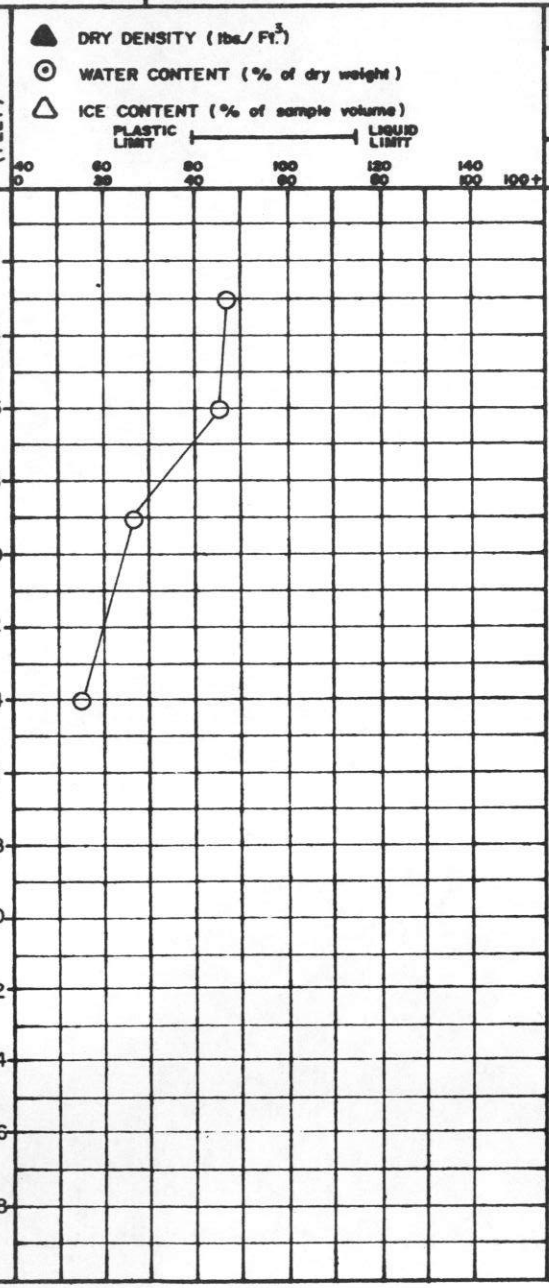
FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22964-196	CHAINAGE. 5030+25	OFFSET. ℄
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.

TEST HOLE 673

MILE 819

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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT		High					
2						2'		Ice					Sat.
4						CLAY -Sandy Silty Med plastic		Vs					
6													Sat.
8					CI			Moderate					
10								To					Wet
12							F	Low					
14						Pebbles							Moist
16								Ice					
18								Vc - Vr					
20								Vs					
22													
24													
26													
						27'							
28						BOTTOM OF HOLE - 27'							



DS-14-5-74 b

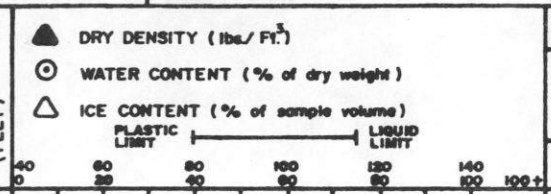
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22964-196	CHAINAGE. 5019+00	OFFSET. ℄	TEST HOLE 674
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 819

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1½'								
2														
						CLAY -Silty Sandy Pebbles Some organics to 15'		High					Sat.	
4														
6													Free Water	
								Ice						
8					CL									
													Sat.	
10						Low-med plastcc	F							
12					CI			Vs						
14													Sat.	
16														
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

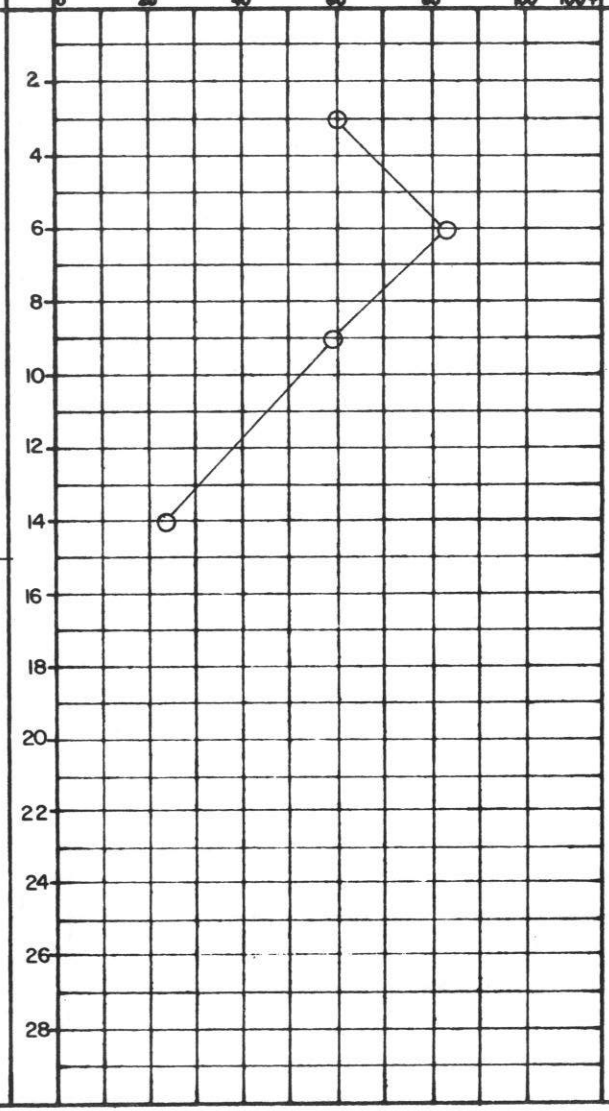
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22964-196	CHAINAGE. 5012+00	OFFSET. ℄	TEST HOLE 675
TECH. JOHNSON	RIG. MAYHEW-#2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 819

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1½'								
2						CLAY -Organic to 4' Silty Sandy Low plastic							Sat.	
4								High						
6													Free Water	
8								Ice					Free Water	
10						Shale fragments soft								
12							F							
14					CL	Pebbles							Sat.	
16								Low						
18								Ice						
20														
22								Vx						
24														
26														
28														
						30'								

DRY DENSITY (lbs./Ft.³)
WATER CONTENT (% of dry weight)
ICE CONTENT (% of sample volume)
PLASTIC LIMIT — LIQUID LIMIT



BOTTOM OF HOLE - 30'

DS-14-5-74 b

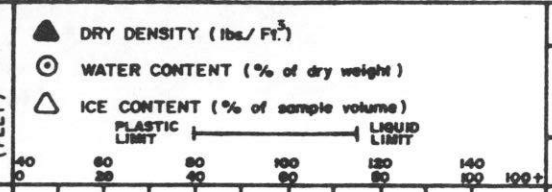
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22853-152	CHAINAGE. 4891+00	OFFSET. ℄	TEST HOLE 687
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE-TAMARACK	ELEV.	MILE 816

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'								
4					CH	CLAY -Sandy Silty Low to High plastic		High					Wet	
6													Sat.	
8					CL			Ice						
10					CH								Sat.	
12					CI		F	Vs						
14													Wet	
16														
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

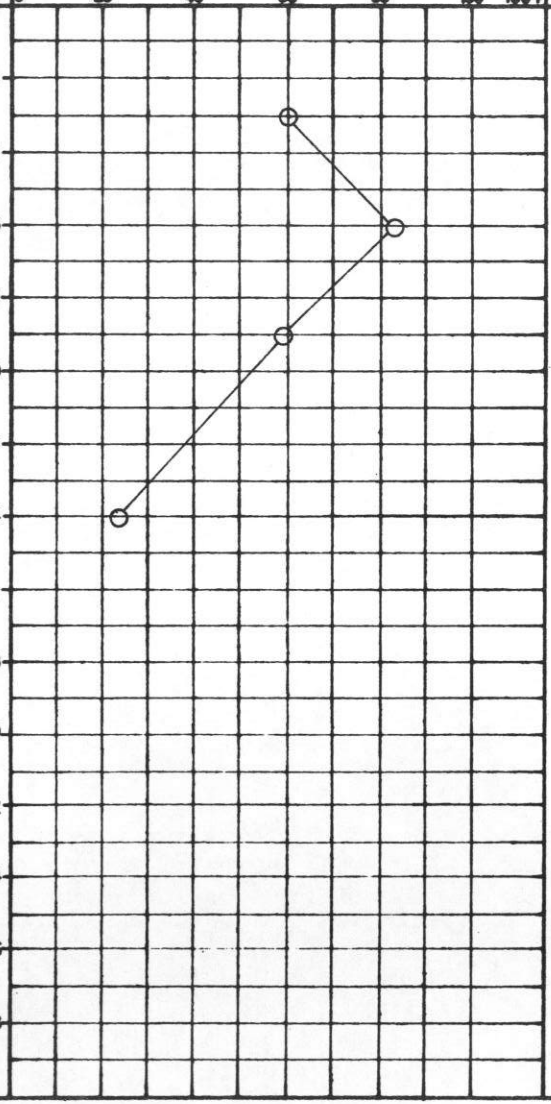
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22964-196	CHAINAGE. 5012+00	OFFSET. ¢	TEST HOLE 675
TECH. JOHNSON	RIG. MAYHEW-#2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 819

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1½'								
2														
4						CLAY -Organic to 4' Silty Sandy Low plastic		High					Sat.	
6													Free Water	
8								Ice						
10						Shale fragments soft							Free Water	
12							F							
14					CL	Pebbles							Sat.	
16								Low						
18								Ice						
20														
22								Vx						
24														
26														
28														
						30'								

DRY DENSITY (lbs./Ft.³)
WATER CONTENT (% of dry weight)
ICE CONTENT (% of sample volume)
PLASTIC LIMIT — LIQUID LIMIT



BOTTOM OF HOLE - 30'

DS-14-5-74 b

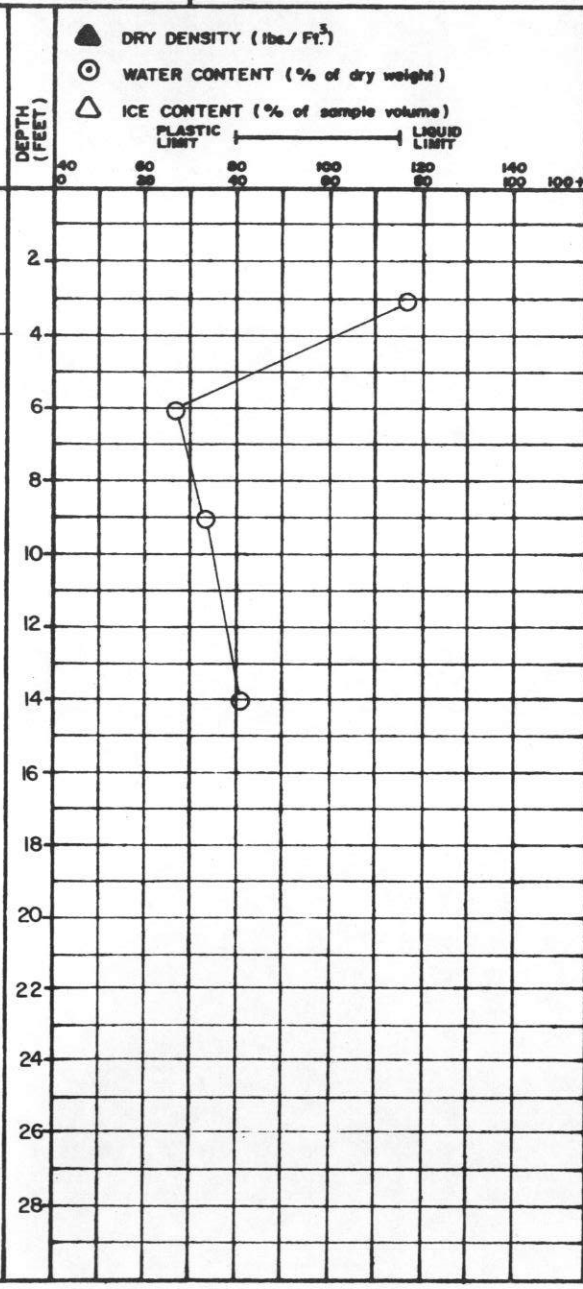
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22964-196	CHAINAGE. 5002+00	OFFSET. ℄	TEST HOLE 676
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 819

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1½'		High						
2						CLAY		Ice					Free Water	
4						-Organics to 4'		Vs						
6						Silty		Moderate					Wet	
8						Sandy		&						
10					CI	Pebbles	F	High					Wet	
12						Soft shale frags.								
14						Med plastic		Ice					Wet	
16								Vc - Vr						
18														
20						20'		Vs						
22					CI	As above with pebbles no shale								
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22964-196	CHAINAGE. 4993+00
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ℄

ELEV.

TEST HOLE 677

MILE 818

REMARKS

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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT								
2						2'			2					
						CLAY		Moderate						Wet
4						-Organics to 4'			4					
						Silty								
						Sandy								
6						Med plastic		Ice	6					Sat.
8									8					
														Wet
10							F		10					
								Vc - Vr						
12					CI				12					
14						Pebbles			14					Wet
16									16					
18									18					
20									20					
22									22					
24									24					
26									26					
28									28					
						30'								

▲ DRY DENSITY (lbs./Ft.³)
⊙ WATER CONTENT (% of dry weight)
△ ICE CONTENT (% of sample volume)

PLASTIC LIMIT ⊢——⊣ LIQUID LIMIT

40 0 60 20 80 40 100 60 120 80 140 100 100+

BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22853-154	CHAINAGE. 4984+00
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ℄

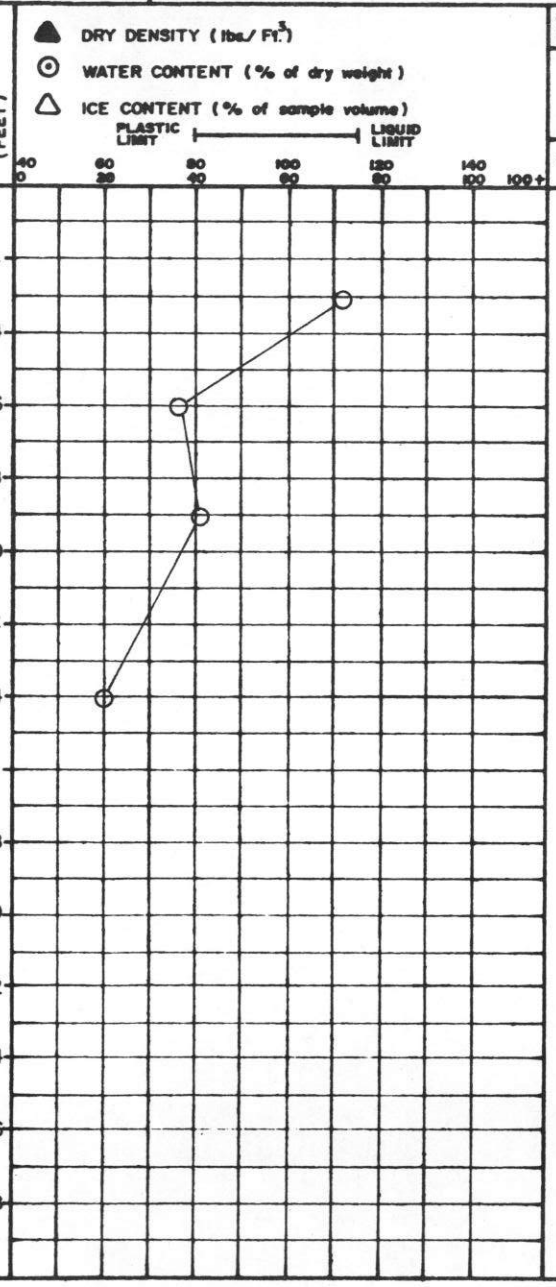
ELEV.

TEST HOLE 678

MILE 818

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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT 1½'		High Ice					
2						CLAY -Organics to 4' Silty Sandy Med plastic		Vs					Free Water
4								Moderate					
6													Wet
8					CI			Ice					
10								Vc - Vr					Sat.
12													
14						Pebbles	F	Low					Damp
16								Ice					
18													
20								Vx					
22													
24													
26													
28													
						30'							



BOTTOM OF HOLE - 30'

DS-14-5-74 b

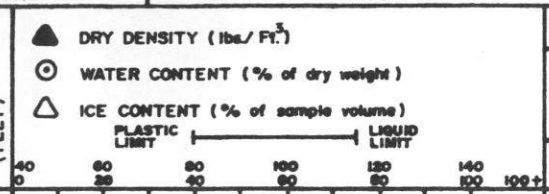
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED.	AIRPHOTO NO. A 22853-154	CHAINAGE. 4975+00	OFFSET. ℄	TEST HOLE 679
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE MAX. 3"	ELEV.	MILE 818

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2'		High Ice					Free Water	
2														
4						CLAY -Silty Sandy Pebbles Low plastic		Vs						
6													Sat.	
8								Moderate To Low Ice					Wet	
10					CL									
12							F							
14													Damp	
16														
18								Vc - Vr						
20														
22								Vx						
24														
26														
28						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

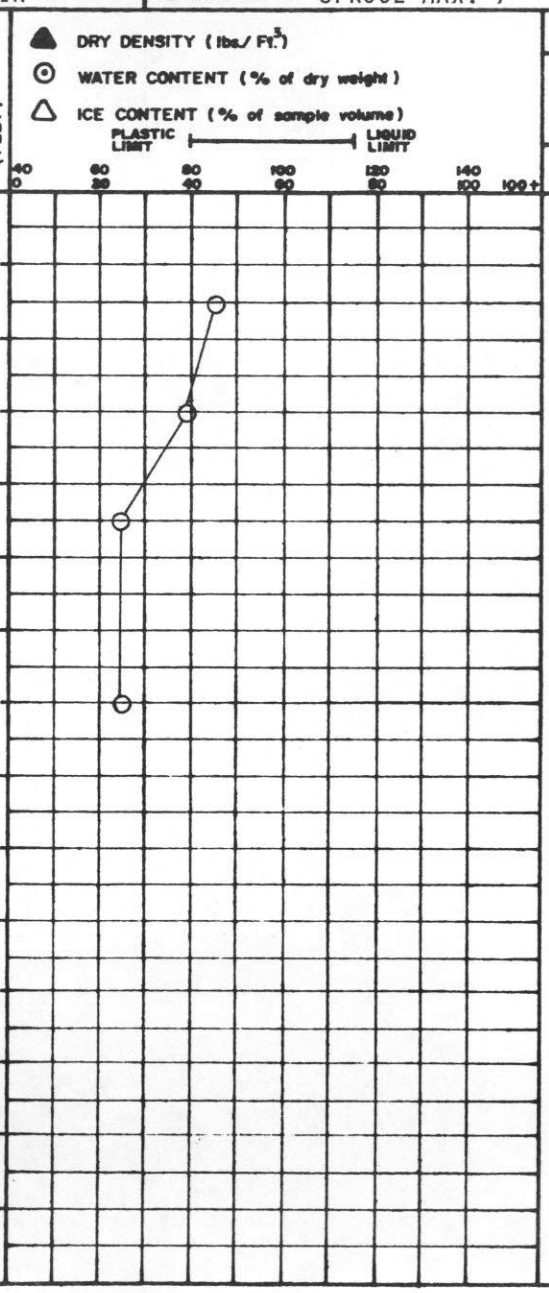
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22853-154	CHAINAGE. 4961+00	OFFSET. ℄	TEST HOLE 680
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE MAX. 7"	ELEV.	MILE 818

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		High						
2						2'		Ice						
4						CLAY -Silty Sandy Med plastic							Sat.	
6								Vs					Sat.	
8								Moderate						
10					CI		F						Wet	
12														
14								Ice					Wet	
16								Vc - Vr						
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

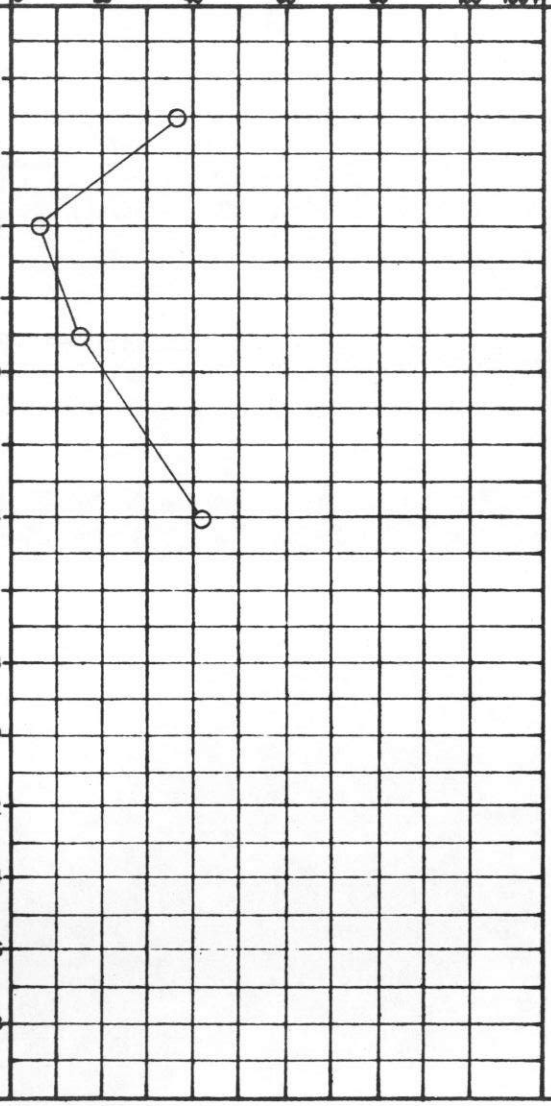
FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22853-154	CHAINAGE. 4950+00
OFFSET. ℄			
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE MAX. 8"
ELEV.			

TEST HOLE 681

MILE 818

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2'		High Ice						
					CL	CLAY -Silty Sandy Pebbles 5'		Vs					Free Water	
								Moderate Ice					Wet	
					GC	GRAVEL -Sandy Clayey 13'	F	Vc - Vr					Wet	
					CL	CLAY -Silty Organic 13'-15' Low-med plastic 30'							Wet	
					CI									

DRY DENSITY (lbs./ft.³)
WATER CONTENT (% of dry weight)
ICE CONTENT (% of sample volume)
PLASTIC LIMIT — LIQUID LIMIT



BOTTOM OF HOLE - 30'

DS-14-5-74 b

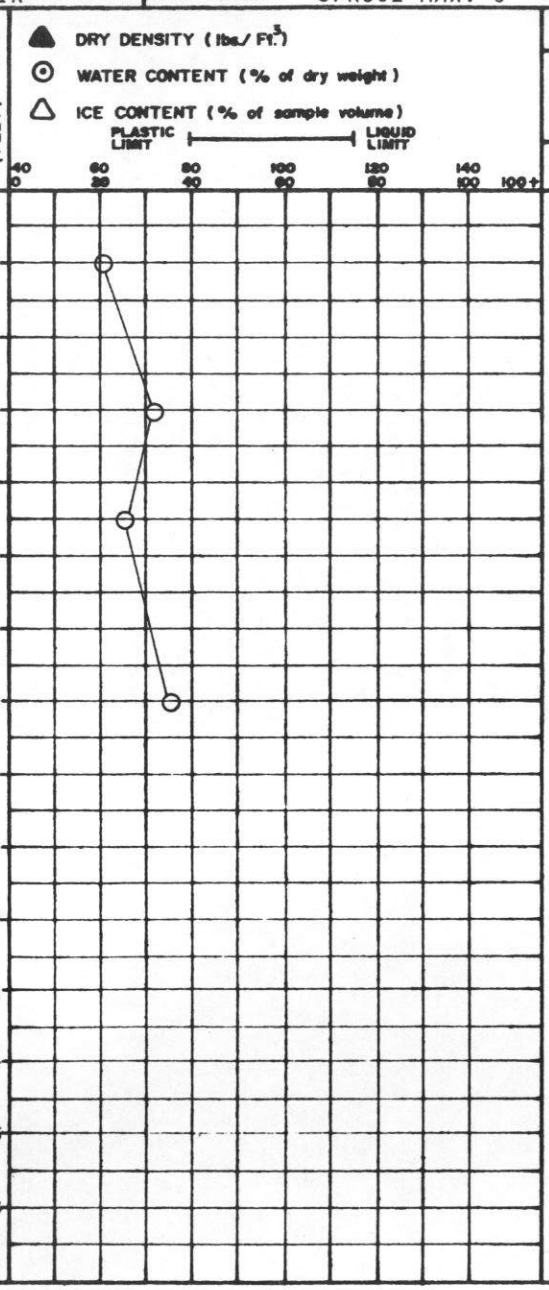
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22853-152	CHAINAGE. 4941+00	OFFSET. ℄	TEST HOLE 682
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE MAX. 5"	ELEV.	MILE 817

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT									
2						2'			2						
						CLAY -Organics to 4' Silty Sandy		Moderate						Moist	
4									4						
					CI	Med plastic		Ice							
6									6					Wet	
8						8'			8						
					SC	SAND-Clayey Silty								Wet	
10						10'		Vc - Vr	10						
						CLAY -Sandy Silty Med plastic	F								
12									12						
14									14					Wet	
					CI										
16									16						
18									18						
20									20						
22									22						
24									24						
26									26						
28									28						
						30'									



BOTTOM OF HOLE - 30'

DS-14-5-74 b

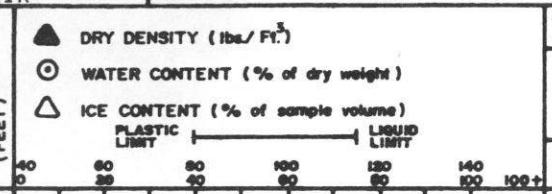
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22853-152	CHAINAGE. 4929+00	OFFSET. ℄	TEST HOLE 683
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE MAX. 5"	ELEV.	MILE 817

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'								
						CLAY -Sandy Silty Med plastic		Moderate Ice					Wet	
4														
6													Wet	
8					CI									
													Wet	
10								Vc - Vr						
12							F							
						Pebbles								
14													Sat.	
16														
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

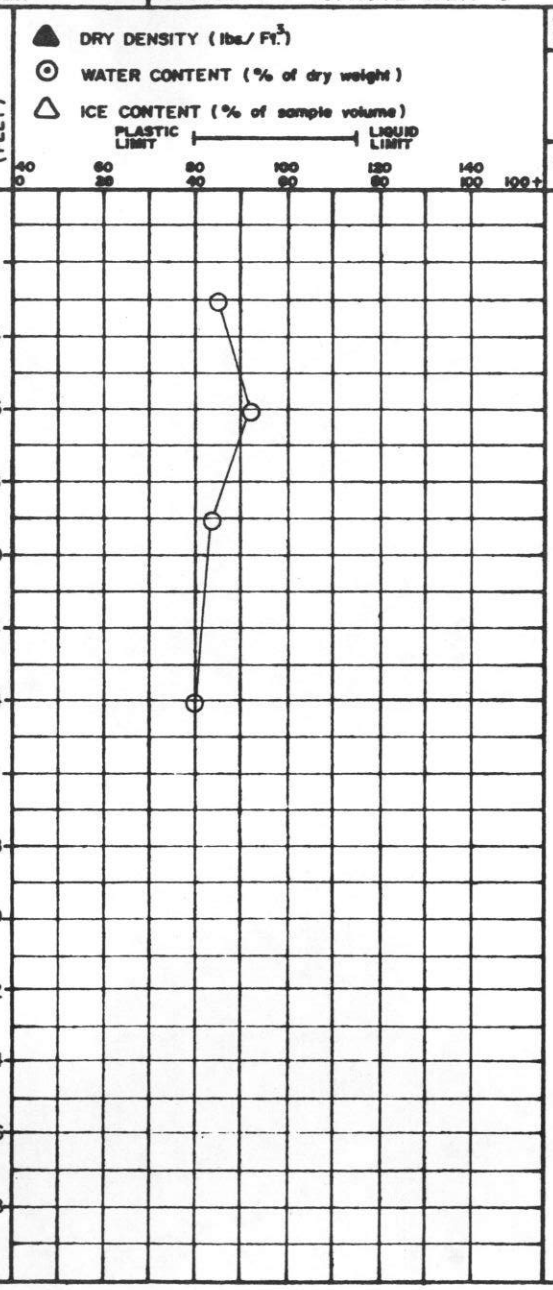
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22853-152	CHAINAGE. 4920+00	OFFSET. ℄	TEST HOLE 684
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE MAX. 5"	ELEV.	MILE 817

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
								High						
2					Pt	PEAT ——— 2'		Ice						
4						CLAY -Sandy Silty Med-high plastic							Sat.	
6								Vs					Sat.	
8					CI								Wet	
10					CH		F	Moderate						
12														
14								Ice					Wet	
16								Vc - Vr						
18														
20														
22														
24														
26														
28						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

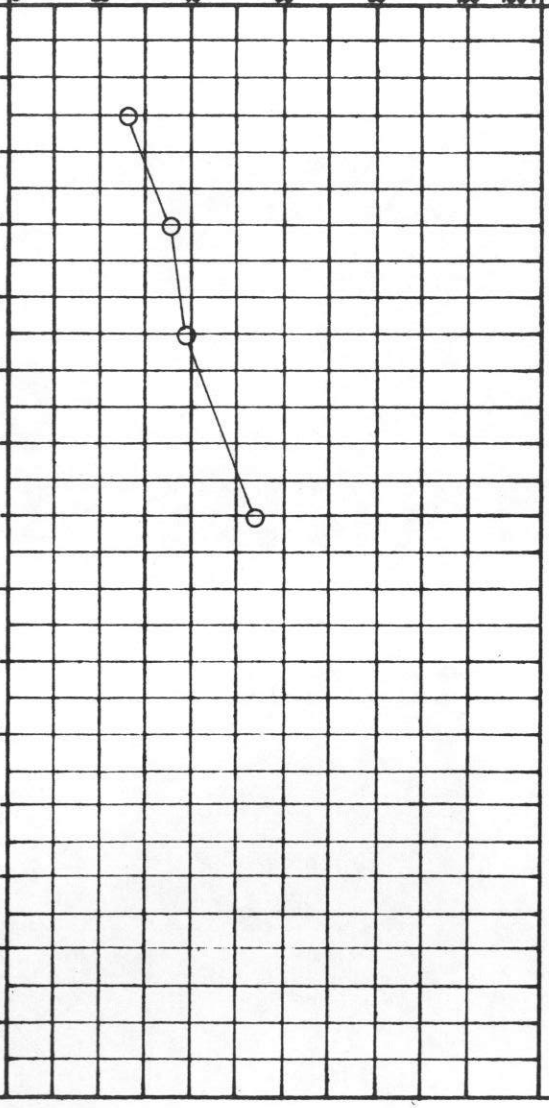
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22853-152	CHAINAGE. 4910+00	OFFSET. ℄	TEST HOLE 685
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. BURNED OVER	ELEV.	MILE 817

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 2'				
2										
4						CLAY -Sandy Silty Pebbles High plastic		Moderate	Moist	
6								Ice	Wet	
8										
10					CH			Vc - Vr	Wet	
12							F			
14								High	Wet	
16								Ice		
18										
20								Vs		
22										
24										
26										
28						30'				

DEPTH (FEET)



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

BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

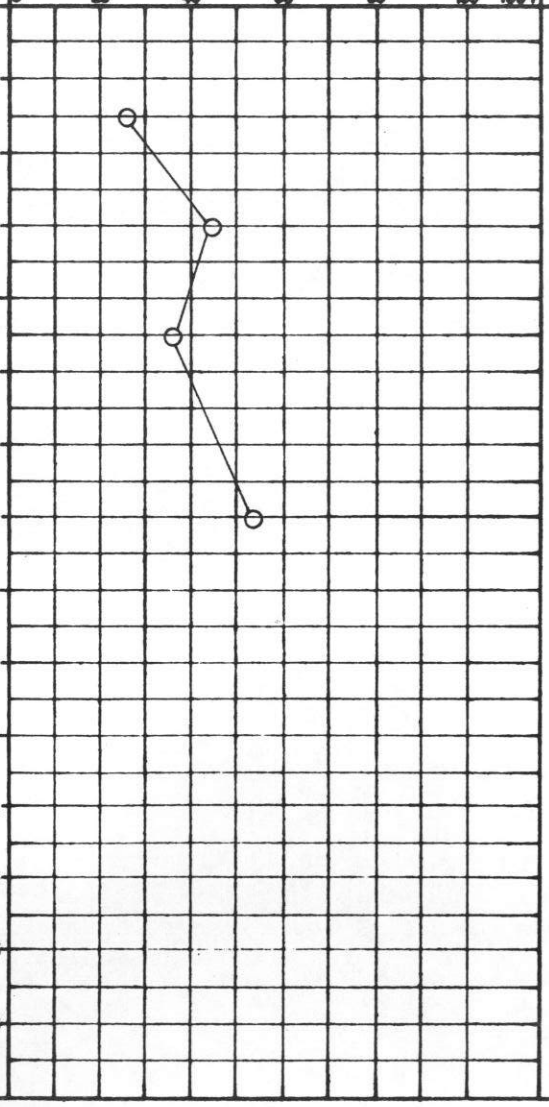
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22853-152	CHAINAGE. 4902+00	OFFSET. ℄	TEST HOLE 686
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE	ELEV.	MILE 817

DRY DENSITY (lbs./Ft.³) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'		Moderate						
						CLAY -Sandy Silty Pebbles to 4' High plastic							Moist	
4														
								Ice						
6													Wet	
8								Vc - Vr						
					CH								Wet	
10														
12							F							
14													Wet	
16														
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

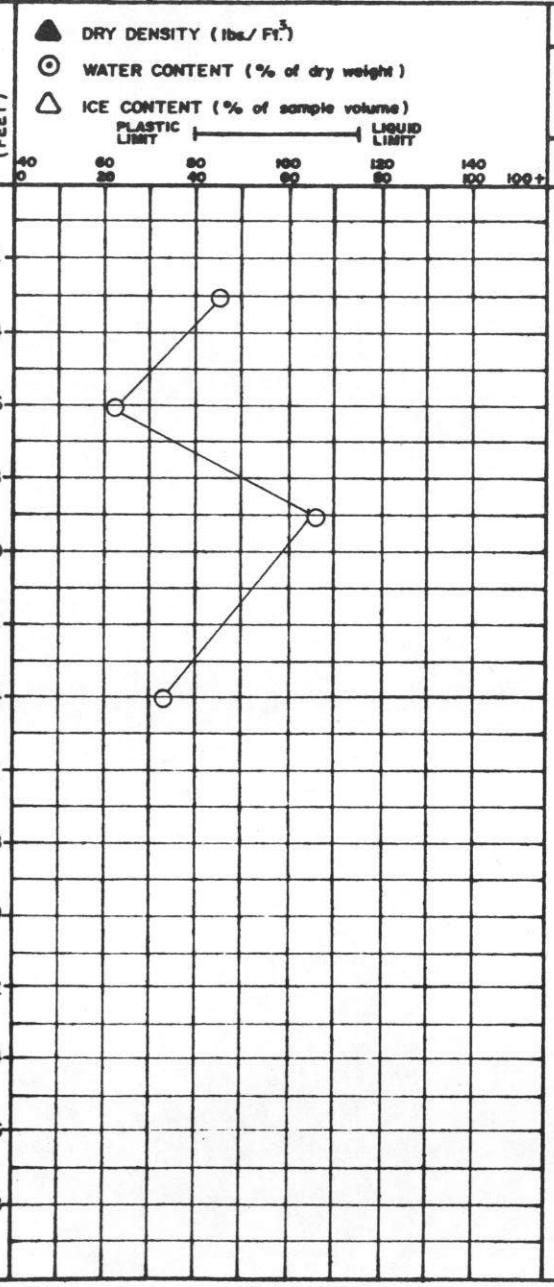
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22853-152	CHAINAGE. 4891+00	OFFSET. ℄	TEST HOLE 687
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE-TAMARACK	ELEV.	MILE 816

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'								
4					CH	CLAY -Sandy Silty Low to High plastic		High					Wet	
6													Sat.	
8					CL			Ice						
10					CH								Sat.	
12					CI		F	Vs						
14													Wet	
16														
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

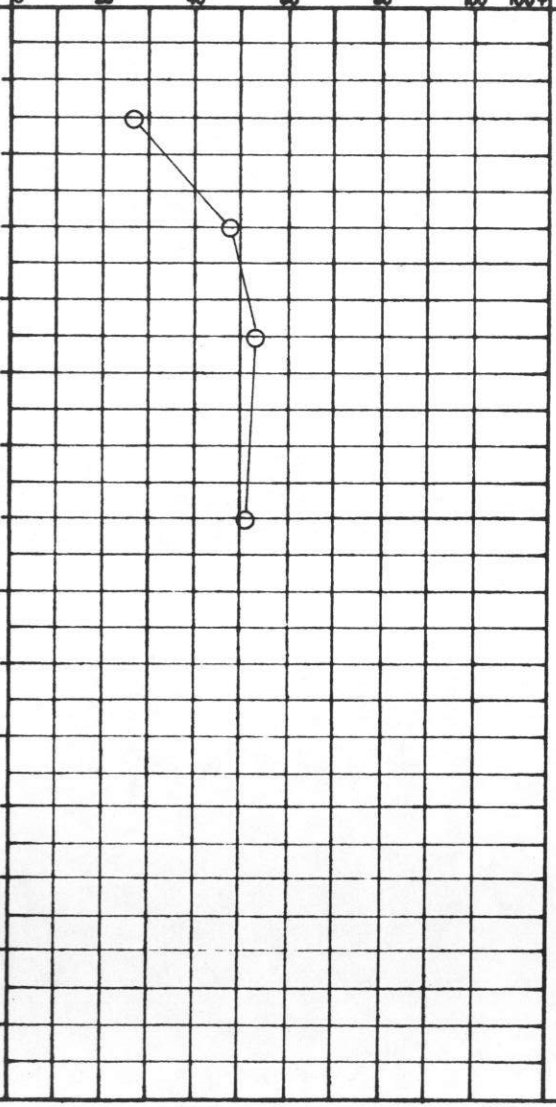
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22853-152	CHAINAGE. 4879+00	OFFSET. ℄	TEST HOLE 688
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE - TAMARACK	ELEV.	MILE 816

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 2'								
2														
4						CLAY -Sandy Silty High plastic		Moderate					Moist	
6													Wet	
8					CH			Ice						
10													Wet	
12							F							
14						Pebbles		Vc - Vr					Wet	
16														
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

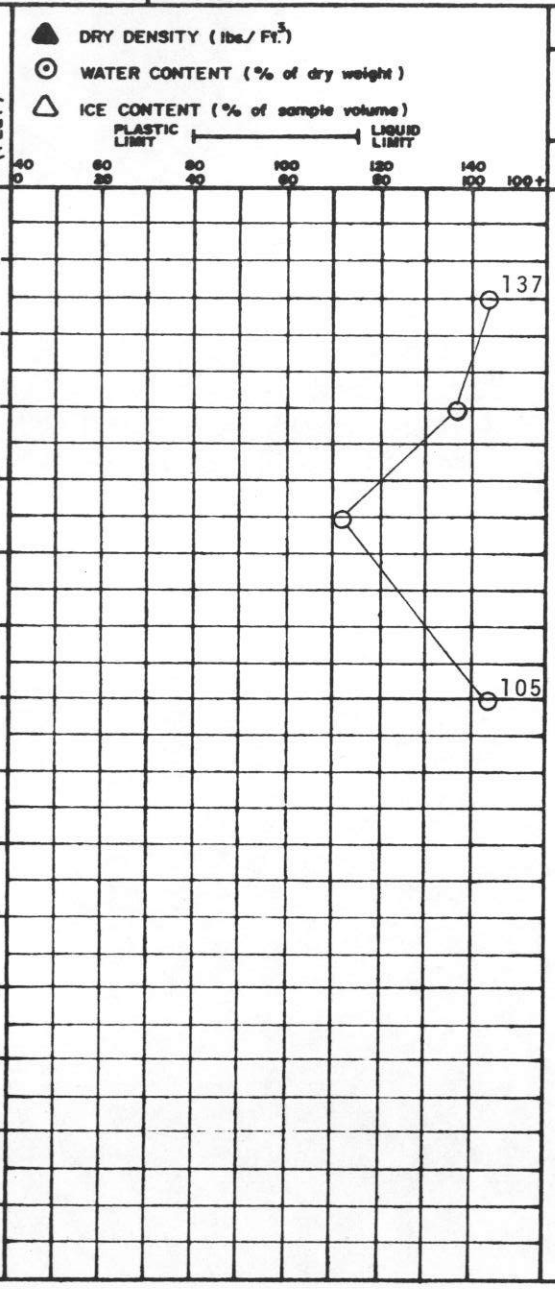
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22853-152	CHAINAGE. 4868+00	OFFSET. ℄	TEST HOLE 689
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE-TAMARACK 6"	ELEV.	MILE 816

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2'								
2													Free Water	
4						CLAY -Sandy Silty Med-high plastic								
6					CI			High					Free Water	
8													Free Water	
10								Ice						
12							F							
14					CH	Pebbles		Vs					Free Water	
16														
18														
20														
22														
24														
26														
28						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

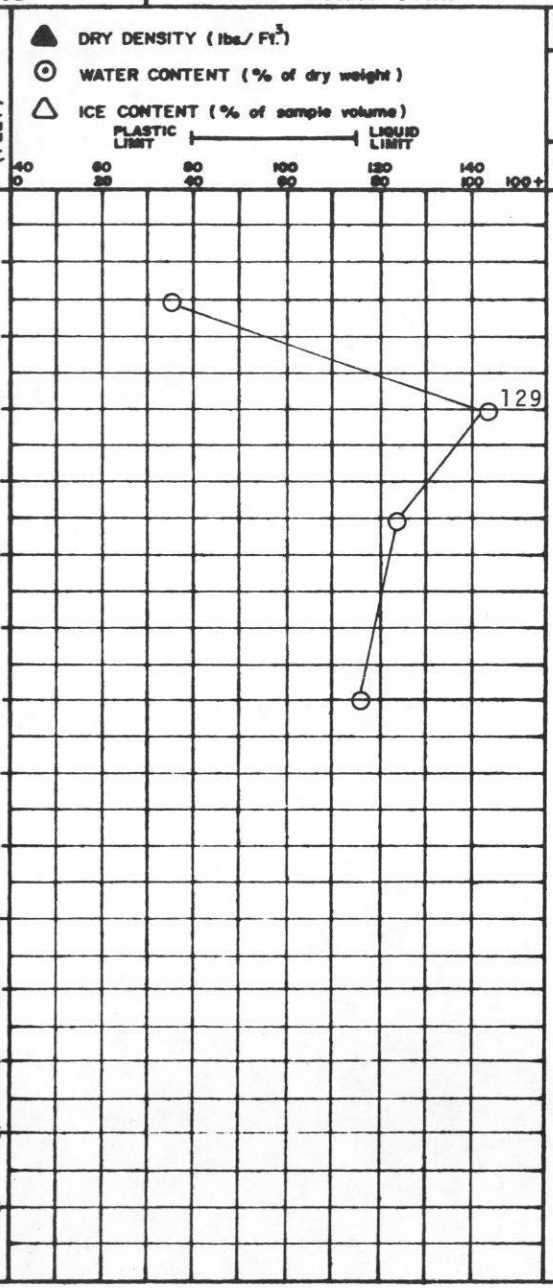
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22853-150	CHAINAGE. 4861+00	OFFSET. ℄	TEST HOLE 690
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. GOOD	VEGETATION. BURNT OVER	ELEV.	MILE 816

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2'								
2														
4						CLAY -Sandy Organics to 4' Silty High plastic							Wet	
6								High					Free Water	
8					CH									
10								Ice					Free Water	
12							F							
14													Sat.	
16								Vs						
18														
20														
22														
24														
26														
28						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

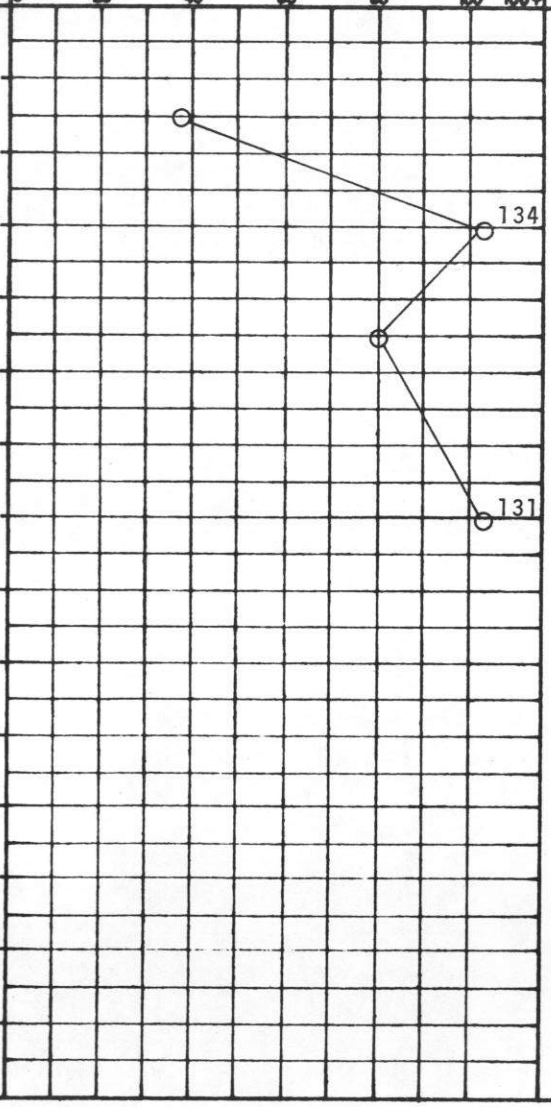
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22853-150	CHAINAGE. 4849+00	OFFSET. ℄	TEST HOLE 691
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. GOOD	VEGETATION. BURNT OVER	ELEV.	MILE 816

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'								
						CLAY -Organics to 4' Sandy High plastic							Wet	
4														
6													Free Water	
8								High						
10							F						Wet	
					CH									
12								Ice						
14													Free Water	
16								Vs						
18														
20														
22														
24														
26														
28														
						30'								

DRY DENSITY (lbs/ Ft.³)
WATER CONTENT (% of dry weight)
ICE CONTENT (% of sample volume)
PLASTIC LIMIT — LIQUID LIMIT



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

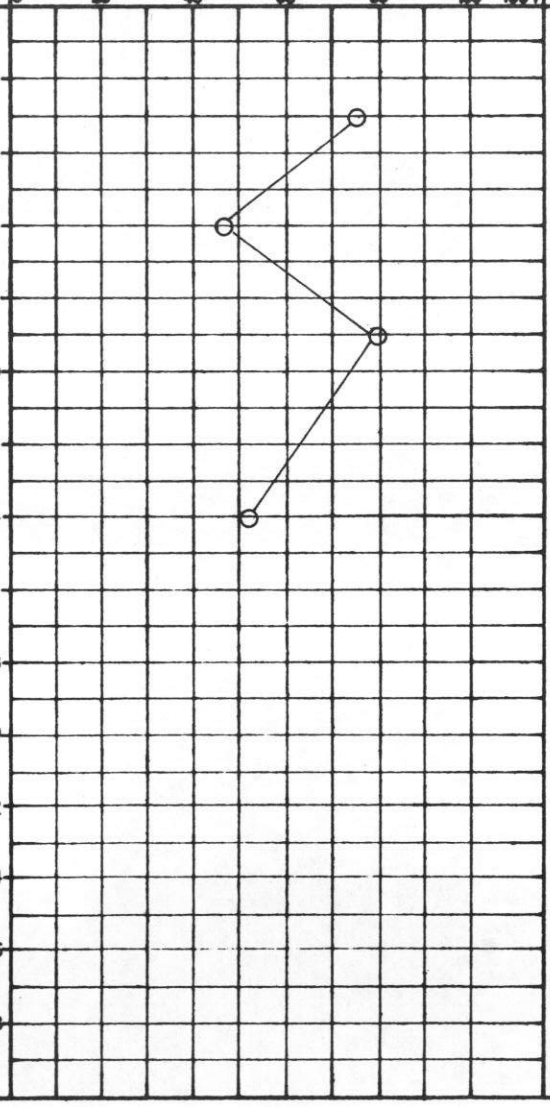
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22853-150	CHAINAGE. 4834+00	OFFSET. ¢	TEST HOLE 692
TECH. MCINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE MAX. 8"	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2'														
						CLAY -Sandy Silty High plastic							Free Water	
								High					Wet	
													Free Water	
					CH			Ice						
							F							
													Wet	
								Vs						
30'														

DRY DENSITY (lbs./Ft.³)
WATER CONTENT (% of dry weight)
ICE CONTENT (% of sample volume)
PLASTIC LIMIT — LIQUID LIMIT



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

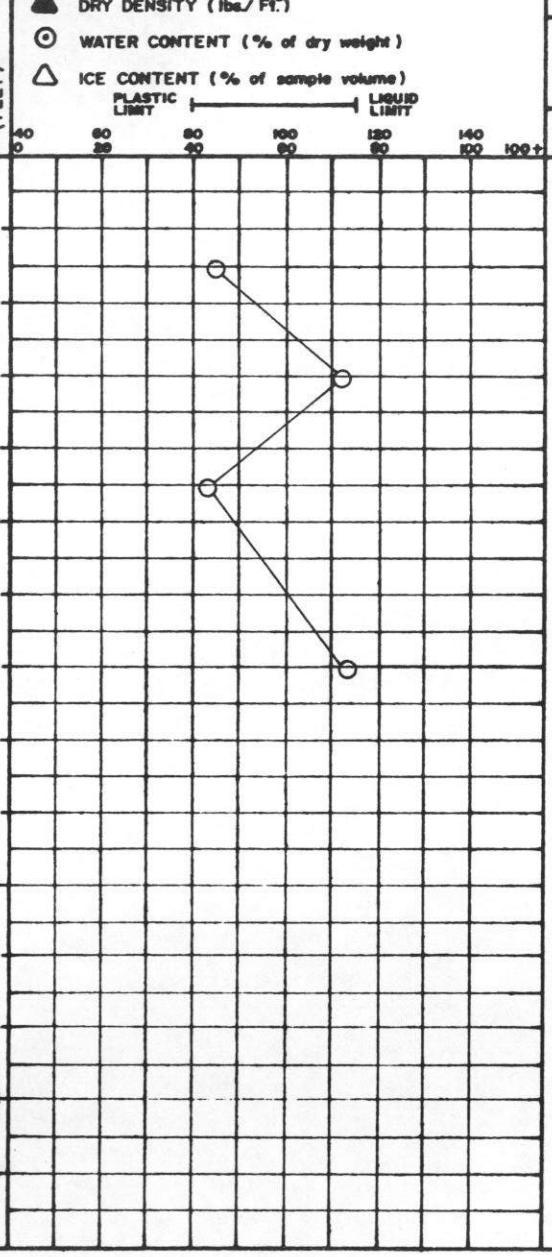
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22853-150	CHAINAGE. 4822+00	OFFSET. ¢	TEST HOLE 693
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE MAX. 7"	ELEV.	MILE 815

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2'								
						CLAY -Sandy Silty Pebbles High plastic		High					Wet	
													Free Water	
								Ice					Sat.	
					CH		F							
								Vs					Sat.	
						30'								

▲ DRY DENSITY (lbs./Ft.³)
⊙ WATER CONTENT (% of dry weight)
△ ICE CONTENT (% of sample volume)



BOTTOM OF HOLE - 30'

DS-14-5-74 b

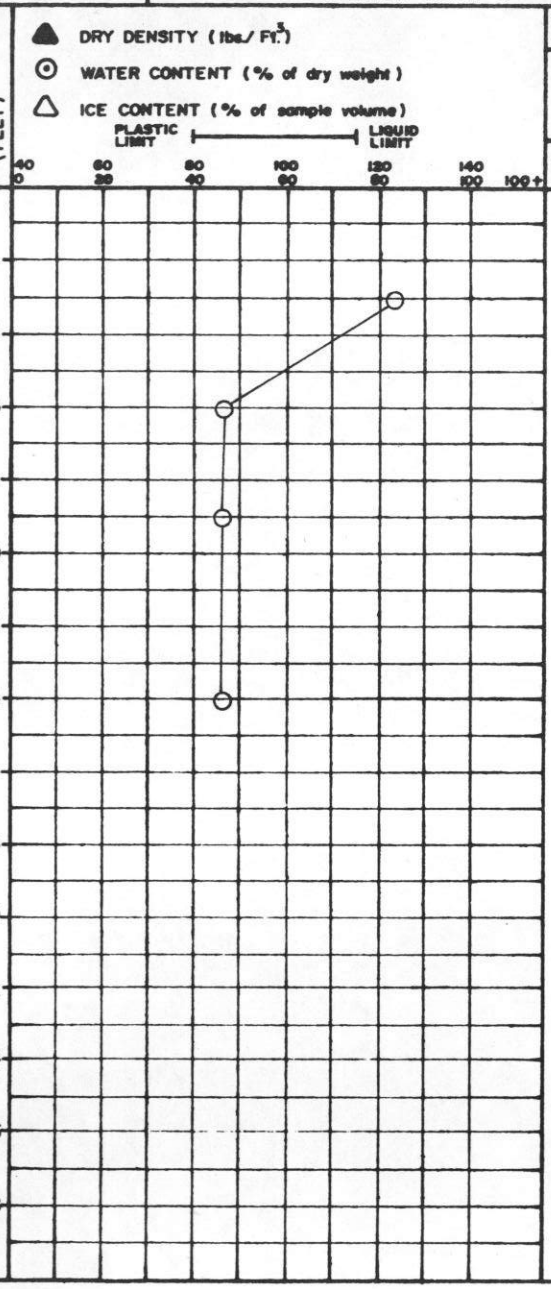
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22853-150	CHAINAGE. 4812+00	OFFSET. ℄	TEST HOLE 694
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE MAX. 8"	ELEV.	MILE 815

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'								
						CLAY -Organic to 4' Sandy Silty High plastic		High					Sat.	
4														
								To						
6													Wet	
8								Moderate						
													Wet	
10														
								Ice						
12					CH		F							
								Vs						
14													Wet	
16														
18								Vc - Vr						
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

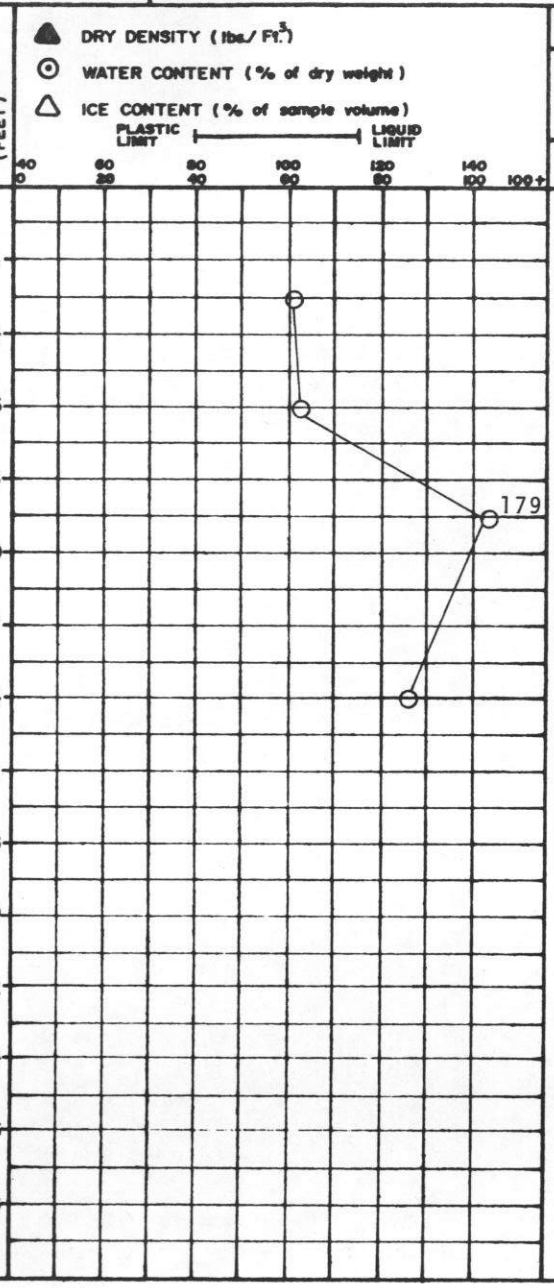
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22853-150	CHAINAGE. 4803+00	OFFSET. ℄	TEST HOLE 695
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 815

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 2'								
						CLAY -Silty Sandy High plastic							Sat.	
													Sat.	
					CH			High					Free Water	
							F	Ice						
													Free Water	
								Vs						
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

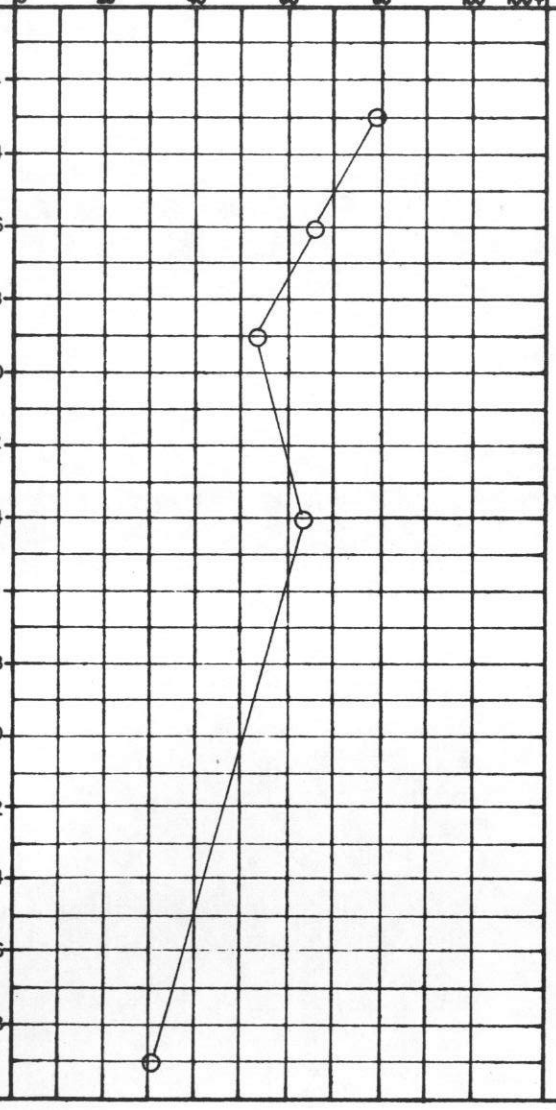
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22853-150	CHAINAGE. 4792+00	OFFSET. ¢	TEST HOLE 696
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 815

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —— 2'								
2														
4						CLAY -Organics to 4' Sandy Silty High plastic		High					Sat.	
6													Sat.	
8								Ice						
10					CH								Sat.	
12							F							
14													Wet	
16								Moderate						
18														
20								Ice						
22								Vc - Vr						
24														
26														
28														
						30'							Wet	



BOTTOM OF HOLE - 30'

DS-14-5-74 b

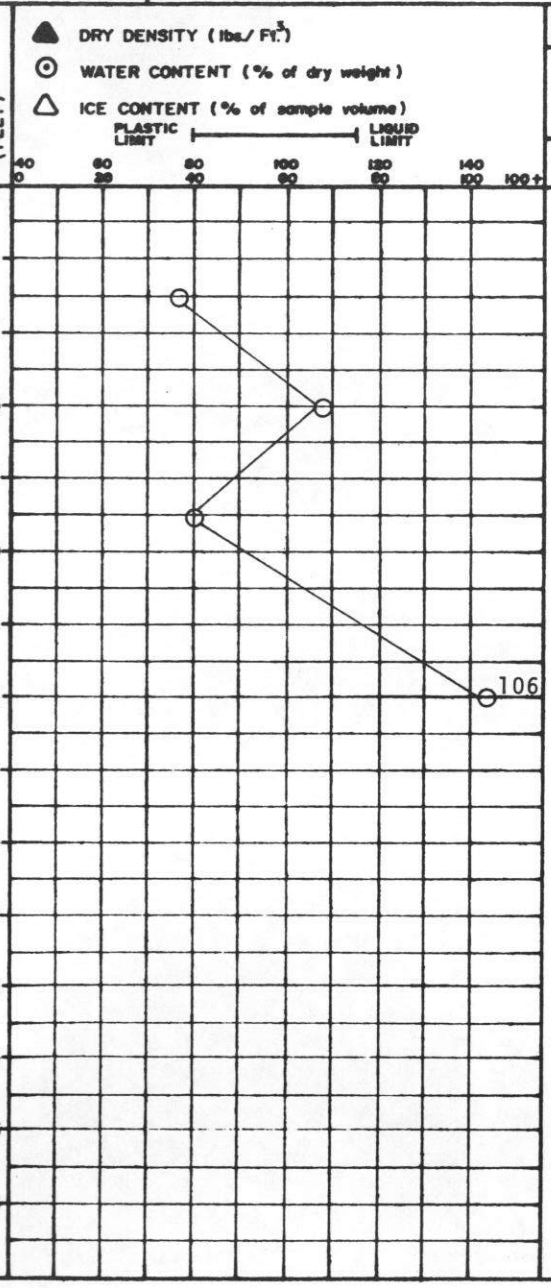
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22853-148	CHAINAGE. 4781+00	OFFSET. ℄	TEST HOLE 697
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 814

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2'								
2														
4						CLAY -Sandy Silty Med-high plastic							Wet	
6													Sat.	
8								High						
10					CI								Sat.	
12					CH		F	Ice						
14													Free Water	
16														
18								Vs						
20														
22														
24														
26														
28						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

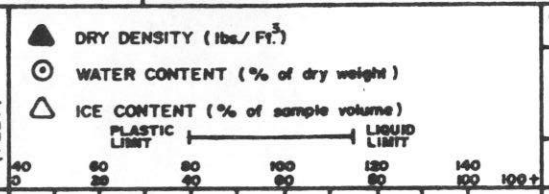
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22853-148	CHAINAGE. 4770+00	OFFSET. ℄	TEST HOLE 698
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2'								
					CH	CLAY -Organics to 4' Sandy Silty High plastic Ice layers 30'	F	High Ice Vs					Free Water Wet Free Water Free Water	



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22853-148	CHAINAGE. 4764+00	OFFSET. ℄	TEST HOLE 699
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE

DRY DENSITY (lbs./Ft.³) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		Moderate						
2						2'								
						CLAY -Organics to 4' Sandy Silty High plastic		Ice					Moist	
4														
6								Vs					Sat.	
8								Moderate					Moist	
10					CH		F							
12								Ice						
14													Moist	
16								Vc - Vr						
18														
20														
22														
24														
26														
28						30'								

BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A 22853-148	CHAINAGE. 4757+00
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ℄

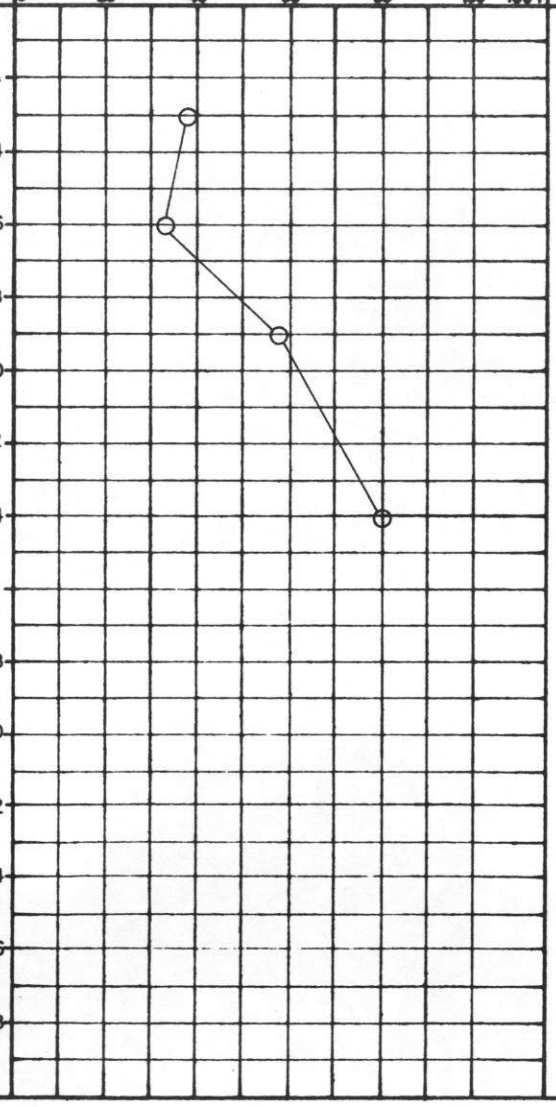
ELEV.

TEST HOLE 700

MILE

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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT 2'		Moderate Ice					
					CI	CLAY -Sandy Silty Med plastic							Wet
								Vc - Vr					Wet
							F						Wet
								High					
						High plastic							Sat.
					CH			Ice					
								Vs					
						30'							



BOTTOM OF HOLE - 30'

DS-14-5-74 b

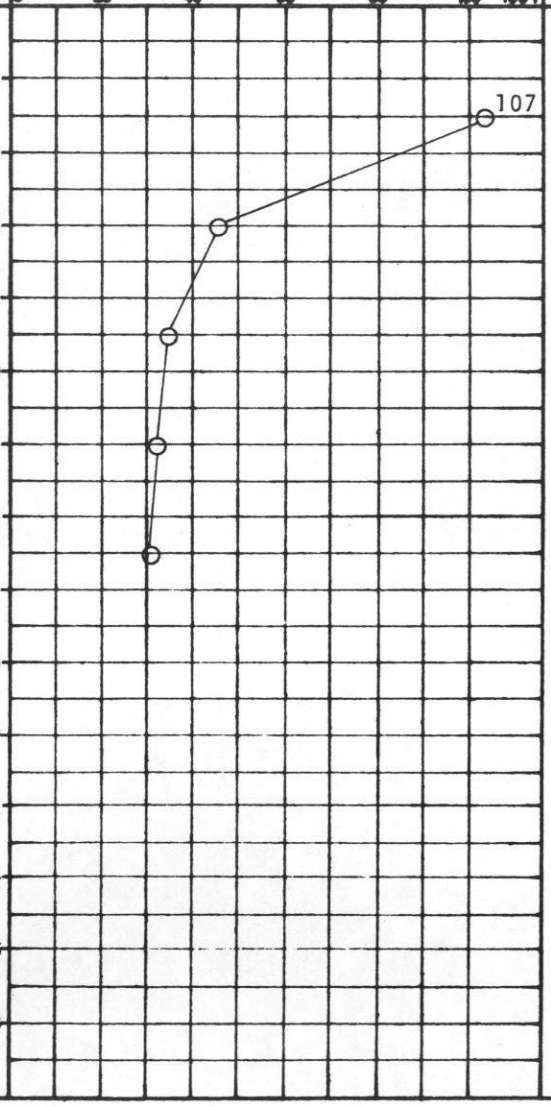
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 26/2/74	AIRPHOTO NO. A 22853-148	CHAINAGE. 4746+00	OFFSET. ℄	TEST HOLE 701
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.3'		High						
2														
					OL	ORGANIC -Sandy Silty		Ice					Wet	
4					CL									
						CLAY								
6								Vs					Wet	
						7'								
8								Moderate						
						CLAY -Sandy Silty High plastic							Moist	
10								Ice						
12							F						Moist	
14								Vc - Vr						
													Moist	
16					CH									
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

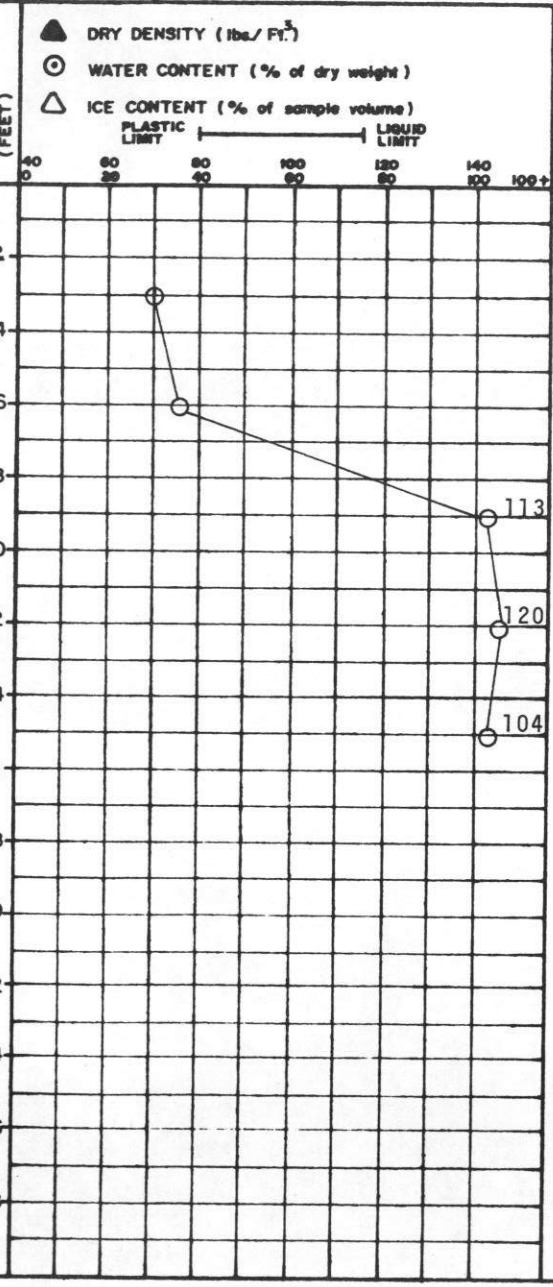
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 26/2/74	AIRPHOTO NO. A 22853-148	CHAINAGE. 4733+00	OFFSET. ℄	TEST HOLE 702
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE MAX. 5"	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'		Moderate						
2														
						CLAY -Sandy Organics to 4' Silty Med-high plastic		Ice					Moist	
4														
6								Vc - Vr					Moist	
8					CI			High					Free Water	
10					CH			Ice						
12							F						Free Water	
14								Vs					Free Water	
16														
18														
20														
22														
24														
26														
28						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

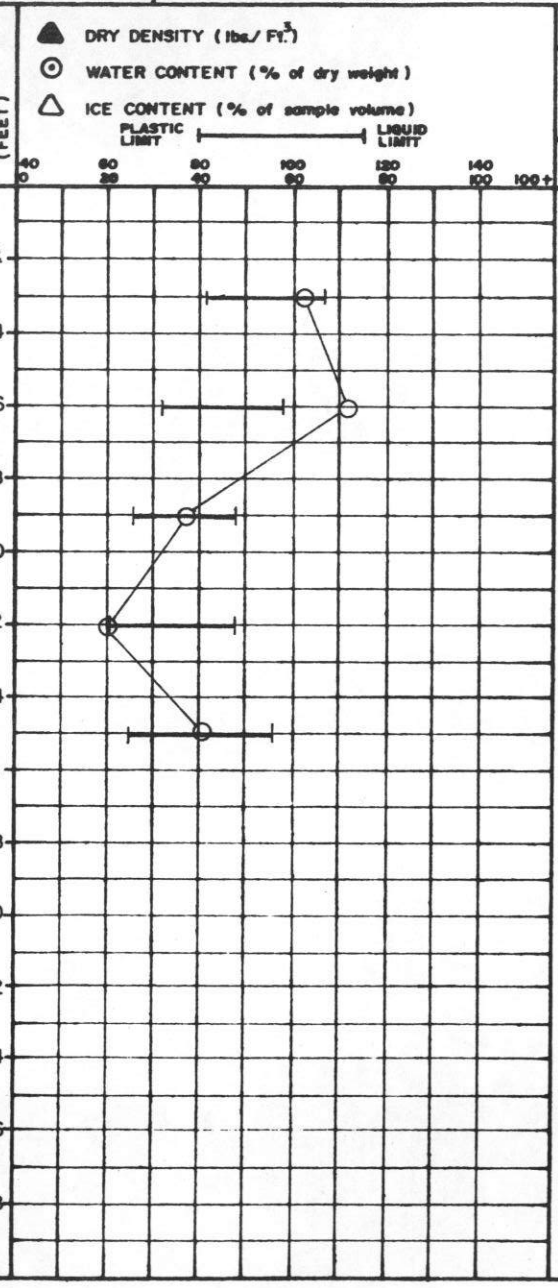
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 22853-148	CHAINAGE. 4722+00	OFFSET. ¢	TEST HOLE 703
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .9'		High						
2						CLAY -Organic to 4' Sandy (Little) Silty High plastic		Ice	-97-		3	0	Moist -WET	
4														
6								Vs	-97-		3	0	Wet	
8								Moderate						
10					CH		F		-92-		8	0	Moist	
12								Ice	-94-		6	0	Moist	
14														
16								Vc - Vr	-98-		2	0	MOIST	
18														
20														
22														
24														
26														
28						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED.	AIRPHOTO NO. A 22853-146	CHAINAGE. 4712+00
TECH. MCINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. POOR	VEGETATION. SPRUCE & ALDER 3"

OFFSET. ℄

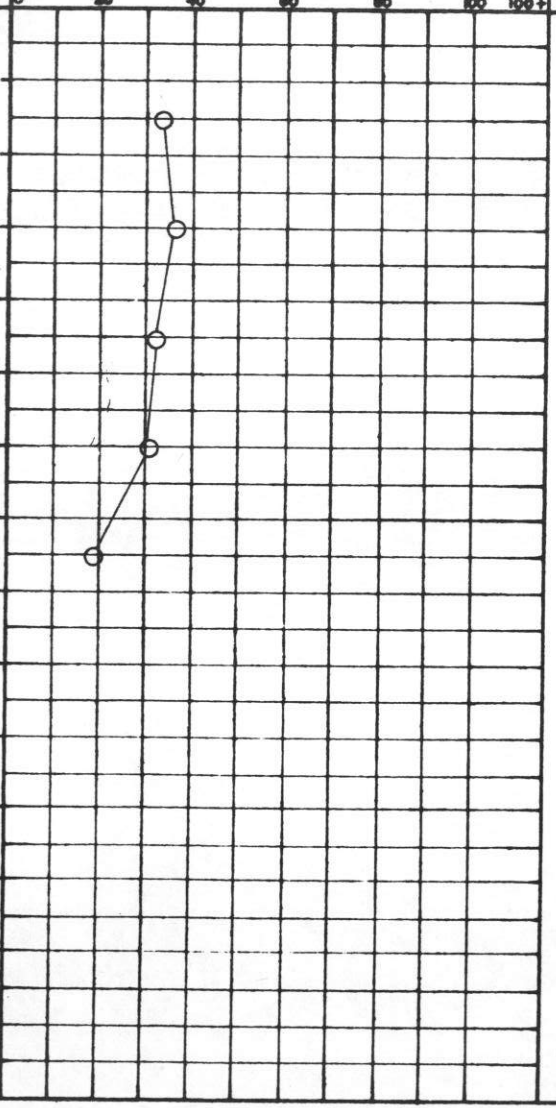
ELEV.

TEST HOLE 704

MILE

DRY DENSITY (lbs./Ft.³)
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2						CLAY								
4						-Organic to 4' Sandy Silty High Plastic		Moderate					Moist	
6													Moist	
8								Ice						
10					CH		F						Wet	
12								Vc - Vr					Moist	
14														
16													Moist	
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

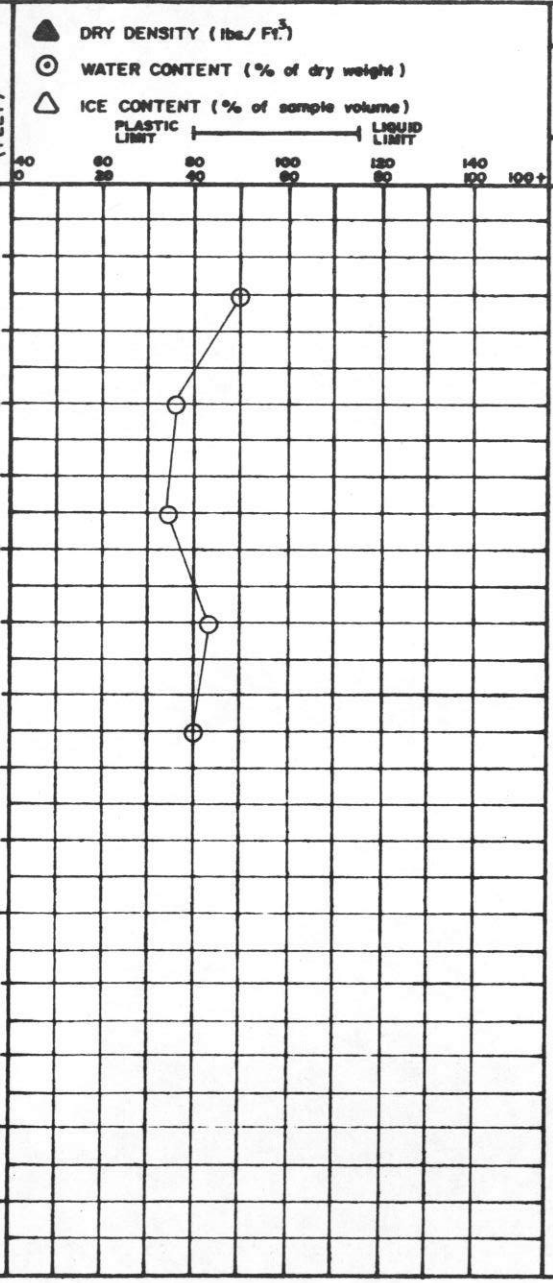
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 22853-146	CHAINAGE. 4703+00	OFFSET. ¢	TEST HOLE 705
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. BURNT OVER	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.7'		High Ice						
2														
						CLAY -Sandy Silty High plastic		Vs					Sat.	
4														
6								Moderate					Wet	
8								Ice						
10					CH								Moist	
12							F	Vc - Vr					Wet	
14														
16													Wet	
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

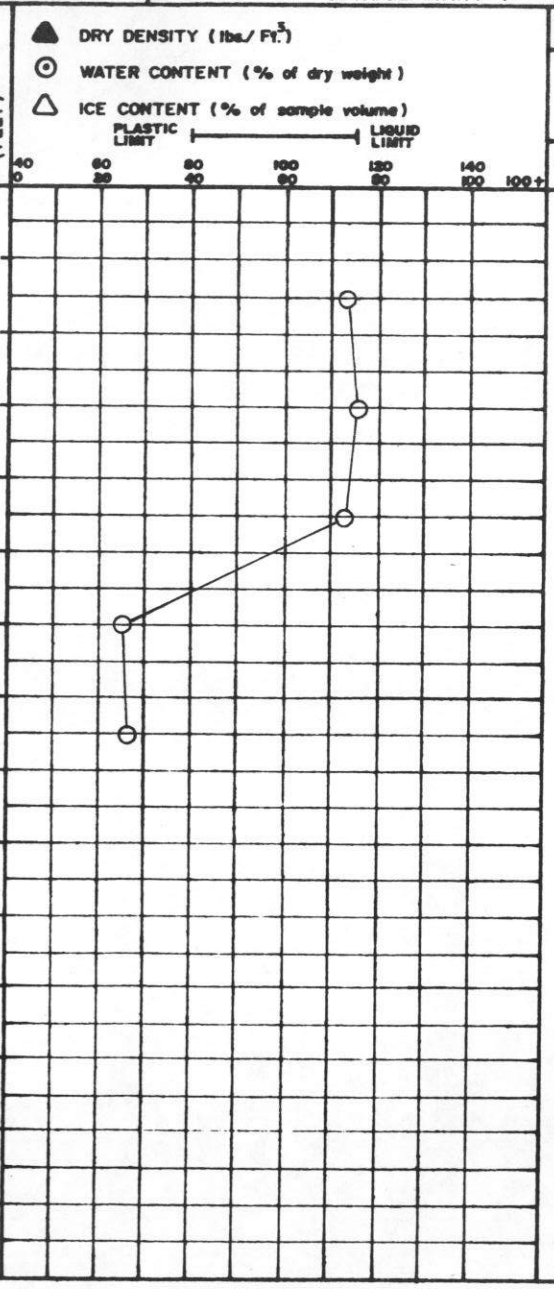
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 22853-146	CHAINAGE. 4691+00	OFFSET. ℄	TEST HOLE 706
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE MAX. 7"	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
						1.4'								
2						CLAY -Silty Sandy High plastic		Moderate Ice					Moist	
4														
6													Wet	
8					CH			Vc - Vr						
10							F						Wet	
12													Moist	
14														
16													Moist	
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

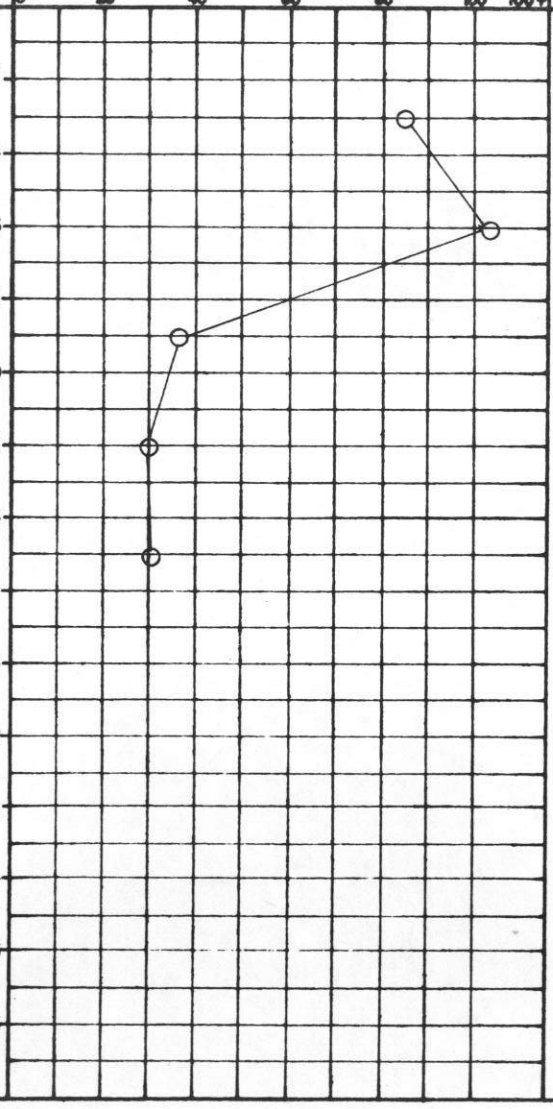
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 22853-146	CHAINAGE. 4677+00	OFFSET. ℄	TEST HOLE 707
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. POOR	VEGETATION. WILLOW & ALDERS	ELEV.	MILE

DRY DENSITY (lbs./Ft.³) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.2'		High						
2														
						CLAY -Organics to 10' Sandy Silty High plastic		Ice					Wet	
4														
								Vs					Free Water	
6														
8														
													Moist	
10					CH			Moderate						
							F							
12								Ice					Moist	
14														
								Vc - Vr					Moist	
16														
18														
20														
22														
24														
26														
28														
						30'								

BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

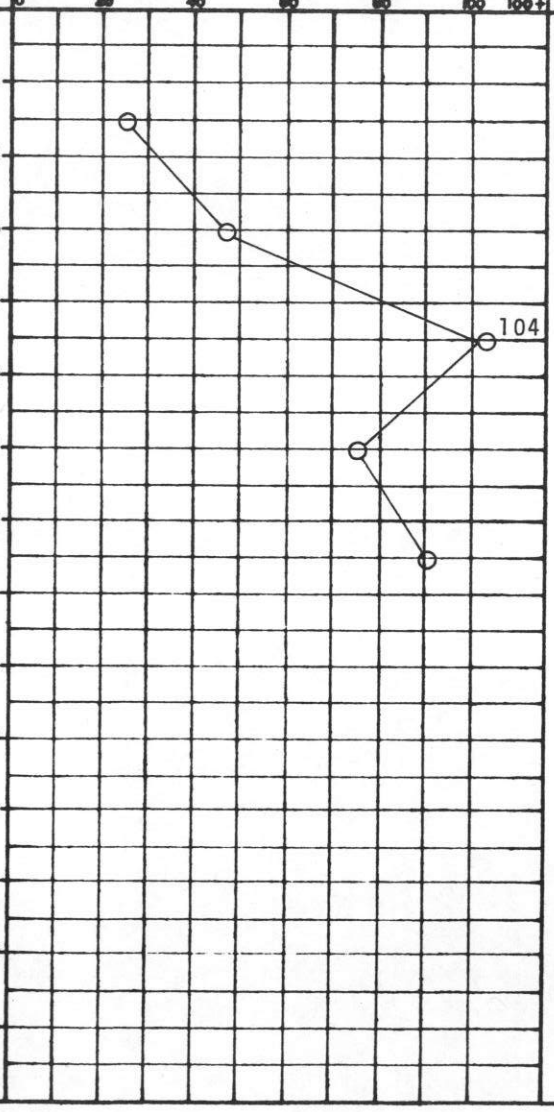
SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 22853-146	CHAINAGE. 4670+00	OFFSET. ℄	TEST HOLE 708
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. POOR	VEGETATION. DEADWOOD	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		Moderate Ice						
1.7'														
						CLAY -Organic to 4' Silty Sandy Med-high plastic		Vc - Vr					Damp	
								High Ice					Sat.	
					CI								Free Water	
					CH		F	Vs					Sat.	
													Free Water	
30'														

DRY DENSITY (lbs./Ft.³) ▲
WATER CONTENT (% of dry weight) ⊙
ICE CONTENT (% of sample volume) △

PLASTIC LIMIT ├──┤ LIQUID LIMIT



BOTTOM OF HOLE - 30'

DS-14-5-74 b

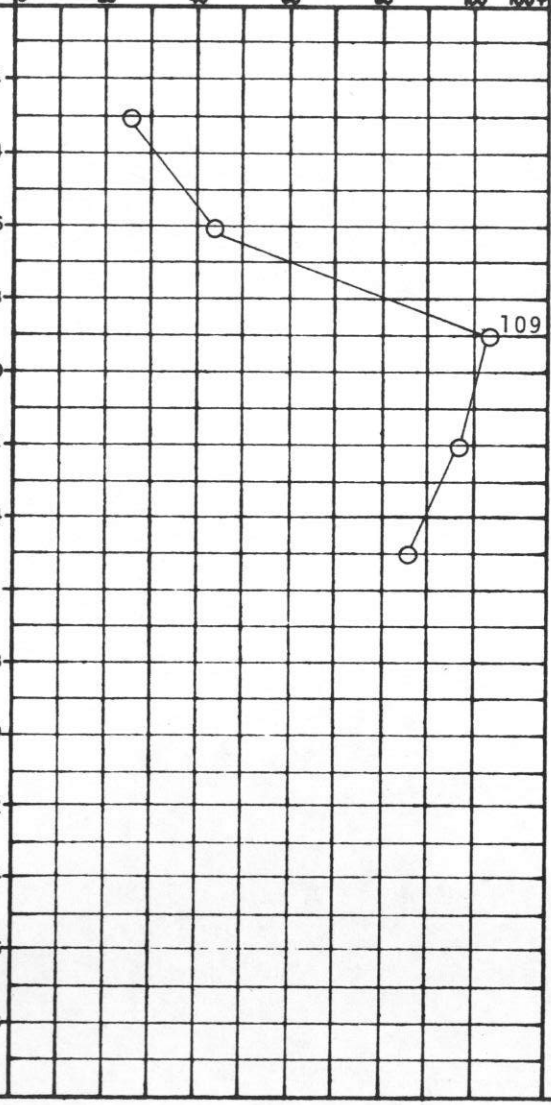
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 22853-146	CHAINAGE. 4659+00	OFFSET. ℄	TEST HOLE 709
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. DEADWOOD	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.4'		Low Ice						
2						CLAY -Silty Sandy Med-high plastic		Vx					Damp	
4								Moderate Ice						
6								Vc - Vr					Wet	
8					CI			High					Free Water	
10					CH		F	Ice						
12													Free Water	
14								Vs					Sat.	
16														
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

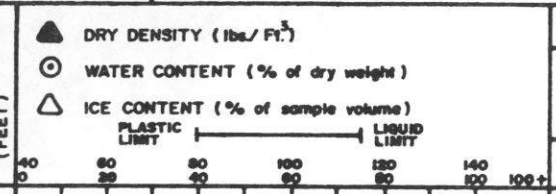
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 22853-146	CHAINAGE. 4649+00	OFFSET. ℄	TEST HOLE 710
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. POOR	VEGETATION. SPRUCE	ELEV.	MILE

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.1'				
2										
						CLAY -Organics to 13' Silty Sandy Med plastic				
4								High	Damp	
6								Ice	Wet	
8										
10								Vs	Wet	
					CI		F			
12									Wet	
14										
								Moderate	Wet	
16								Ice		
18										
20								Vc - Vr		
22										
24										
26										
28										
						30'				



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

BOTTOM OF HOLE - 30'

DS-14-5-74 b

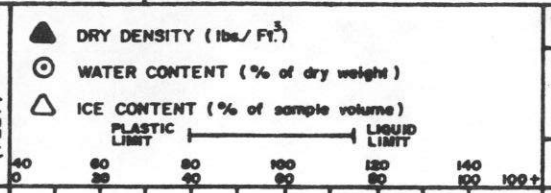
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 22853-146	CHAINAGE. 4637+00	OFFSET. ℄	TEST HOLE 711
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 2'		High						
2														
						CLAY -Organics to 4' Silty Sandy Med-high plastic		Ice					Moist	
4														
6													Sat.	
								Vs						
8														
					CI		F						Sat.	
10														
					CH			Moderate						
12													Moist	
								Ice						
14													Moist	
16														
18								Vc - Vr						
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

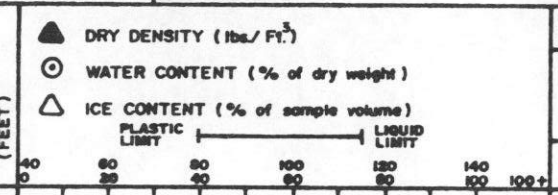
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 22853-144	CHAINAGE. 4629+00	OFFSET. ℄	TEST HOLE 712
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		High Ice						
						1.5'								
2						CLAY -Organics to 4' Silty		Vs					WET	
4								Moderate						
6						Sandy		Ice					Wet	
8					CI	Med-high plastic								
10					CH			Vc - Vr					Wet	
								Moderate						
12							F	To					Damp	
14						Shale fragments		Low					Damp	
16								Ice						
18														
20								Vc - Vr						
22								Vx						
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

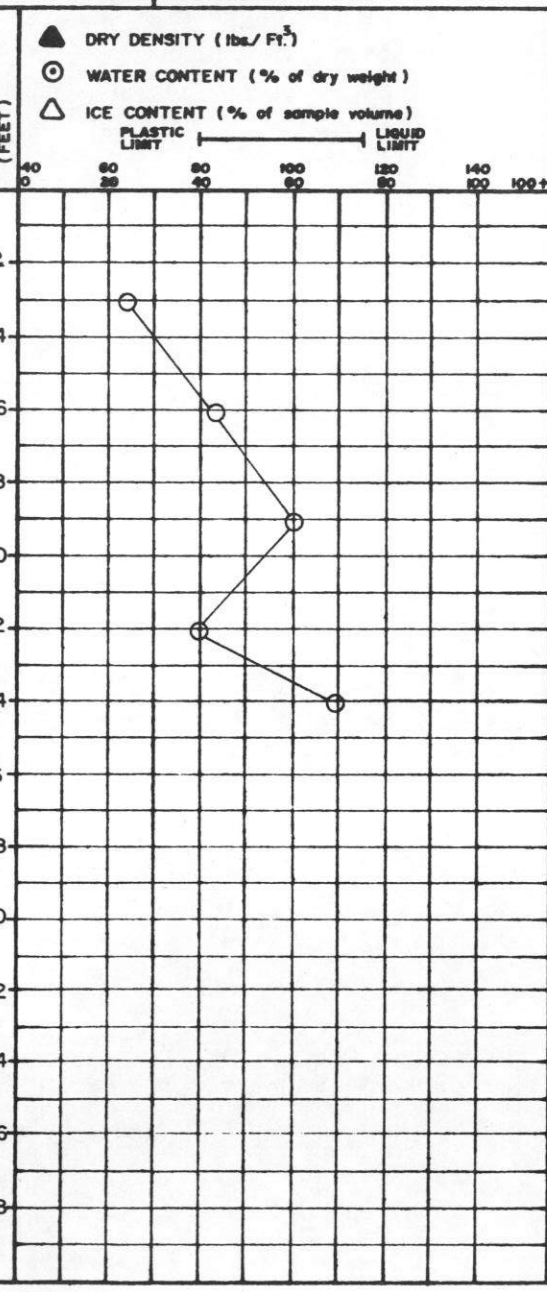
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 22853-144	CHAINAGE. 4619+00	OFFSET. ℄	TEST HOLE 713
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		Low						
2						CLAY -Silty Sandy High plastic		Ice						
4								Vx					Damp	
6								Moderate And High					Sat.	
8					CH			Ice					Wet	
10							F	Vc - Vr						
12								Vs					Wet	
14								High					Sat.	
16								Ice						
18								To 25'						
20														
22								Vs						
24														
26								Moderate						
28						30'		Ice Vc - vr						



BOTTOM OF HOLE - 30'

DS-14-5-74 b

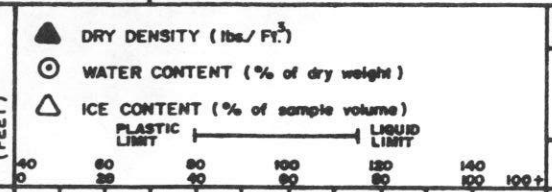
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 22853-144	CHAINAGE. 4610+00	OFFSET. ℄	TEST HOLE 714
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		High Ice						
2						2'								
						CLAY -Silty Sandy		Vs					Sat.	
4								Moderate Ice						
6						Med-high plastic							Wet	
8					CI			Vc - Vr						
10					CH		F						Wet	
12								High Ice					Sat.	
14													Free Water	
16								To 25'						
18														
20								Vs						
22														
24														
26								Moderate Ice						
28														
						30'		Vc - Vr						



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 22853-144	CHAINAGE. 4601+00	OFFSET. ¢	TEST HOLE 715
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE

DRY DENSITY (lbs./Ft.³) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		High						
2						CLAY								
						-Organics to 4'		Ice					Moist	
4						Silty								
						Sandy								
						Med plastic		Vs						
6													Sat.	
8								Moderate						
					CI								Wet	
10							F	Ice						
12													Wet	
								Vc - Vr						
14						Shale fragments							Wet	
16														
18						Pebbles								
20														
22														
24														
26														
28														
						30'								

BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 22853-144	CHAINAGE. 4589+00	OFFSET. ¢	TEST HOLE 716
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE

DRY DENSITY (lbs./Ft.³) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		Low						
2						CLAY -Silty Sandy Pebbles		Ice						
4					CI	Med plastic 5'		Vx					Damp	
6					SC	SAND-SILT MIX. -Clayey Pebbles		Moderate					Wet	
8					ML			Ice					Moist	
10						11'	F	Vc - Vr						
12						CLAY -Silty Sandy Few pebbles							Wet	
14														
16													Wet	
18					CI	Med-high plastic								
20					CH									
22														
24														
26														
28						30'								

BOTTOM OF HOLE - 30'

DS-14-5-74 b

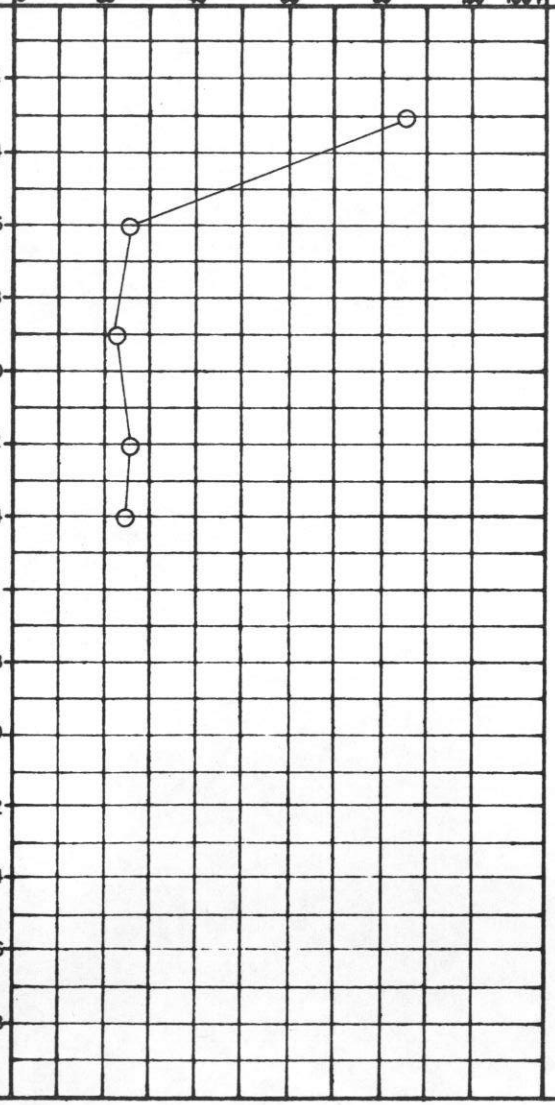
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-126	CHAINAGE. 4578+00	OFFSET. ℄	TEST HOLE 717
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		High Ice						
2'														
					OL	ORGANIC CLAY -Silty Sandy Pebbles		Vs					Wet	
								Moderate Ice					Wet	
7'														
					CL	CLAY -Silty Sandy Low-med plastic	F	Vc - Vr					Wet	
													Wet	
					CI								Wet	
30'														



BOTTOM OF HOLE - 30'

DS-14-5-74 b

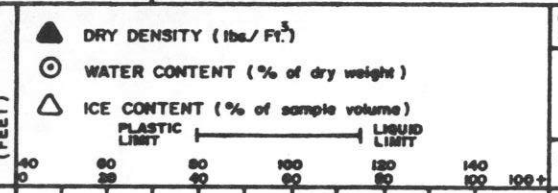
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-126	CHAINAGE. 4565+00	OFFSET. ℄	TEST HOLE 718
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 810

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1.5'		Low						
2						CLAY								
4						-Organics to 4' Silty Sandy Pebbles Low plastic		/					Damp	
6								Moderate					Damp	
8								&						
10							F	Low					Wet	
12								Ice					Wet	
14								Vc - Vr					Sat.	
16								Vx						
18														
20														
22														
24														
26														
28														
						—29'								



BOTTOM OF HOLE - 29'

DS-14-5-74 b

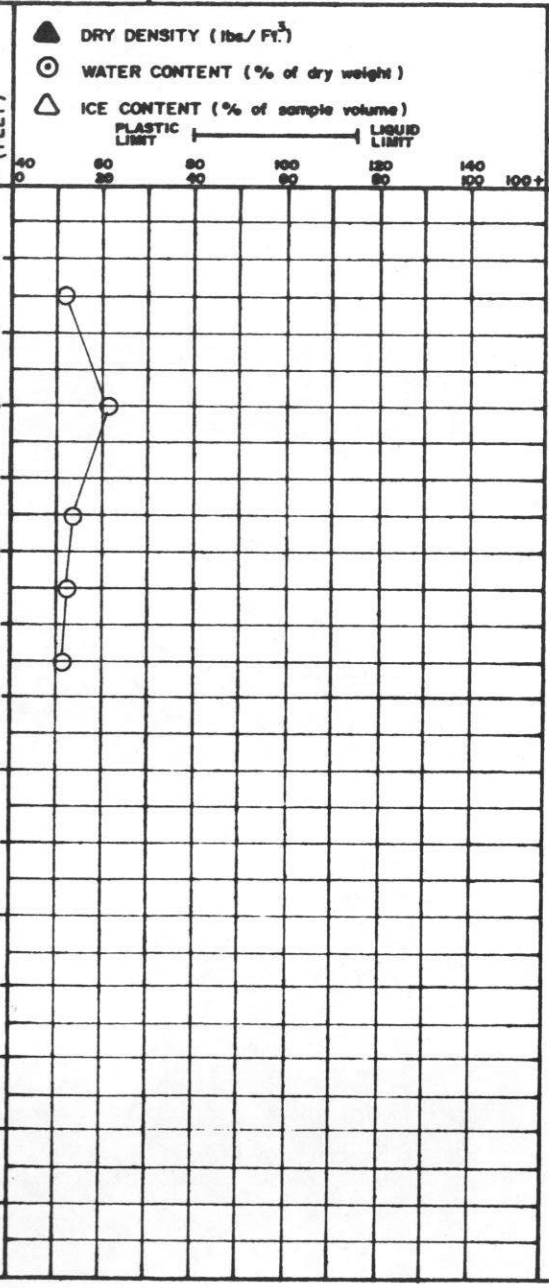
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-126	CHAINAGE. 4547+00	OFFSET. ℄	TEST HOLE 719
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 810

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'								
						CLAY -Silty Sandy Med plastic		Low					Damp	
4														
6								Ice					Wet	
8														
10					CI			Vx					Damp	
12							F						Damp	
14													Damp	
16														
18														
20														
22														
24														
26														
28														
						29'								



BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-126	CHAINAGE. 4529+00	OFFSET. ℄	TEST HOLE 720
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 810

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
								High						
2					Pt	PEAT		Ice						
								Vs					Wet	
4						4'								
						CLAY -Silty Sandy Pebbles Med plastic								
6													Wet	
8								Low						
							F						Damp	
10								Ice						
													Damp	
12					CI									
													Damp	
14														
16								Vx						
18														
20														
22														
24														
26														
28														
						29'								

BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

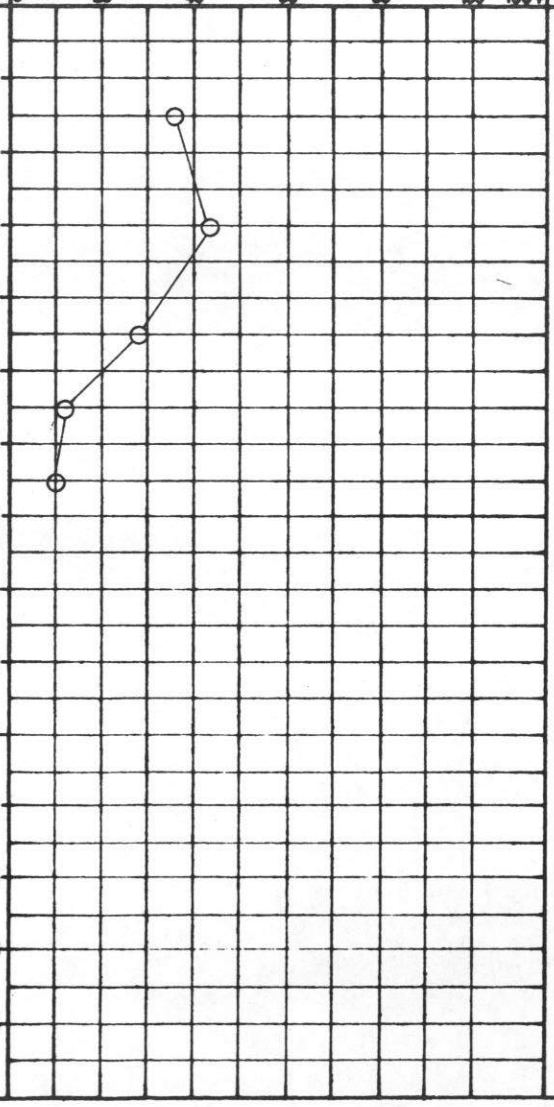
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-124	CHAINAGE. 4515+00	OFFSET. ¢	TEST HOLE 721
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 809

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		Moderate Ice						
2'						CLAY -Silty Sandy Pebbles Med plastic		Vc - Vr					Damp	
								High Ice					Sat.	
					CL			Vs					Sat.	
10'						Low plastic GRAVEL-CLAY MIX.	F	Low Ice					Wet	
					GC								Wet	
15'						CLAY -Silty Sandy Pebbles Med plastic		Vx						
					CI									
29'														

DRY DENSITY (lbs./Ft.³)
WATER CONTENT (% of dry weight)
ICE CONTENT (% of sample volume)
PLASTIC LIMIT — LIQUID LIMIT



BOTTOM OF HOLE - 29'

DS-14-5-74 b

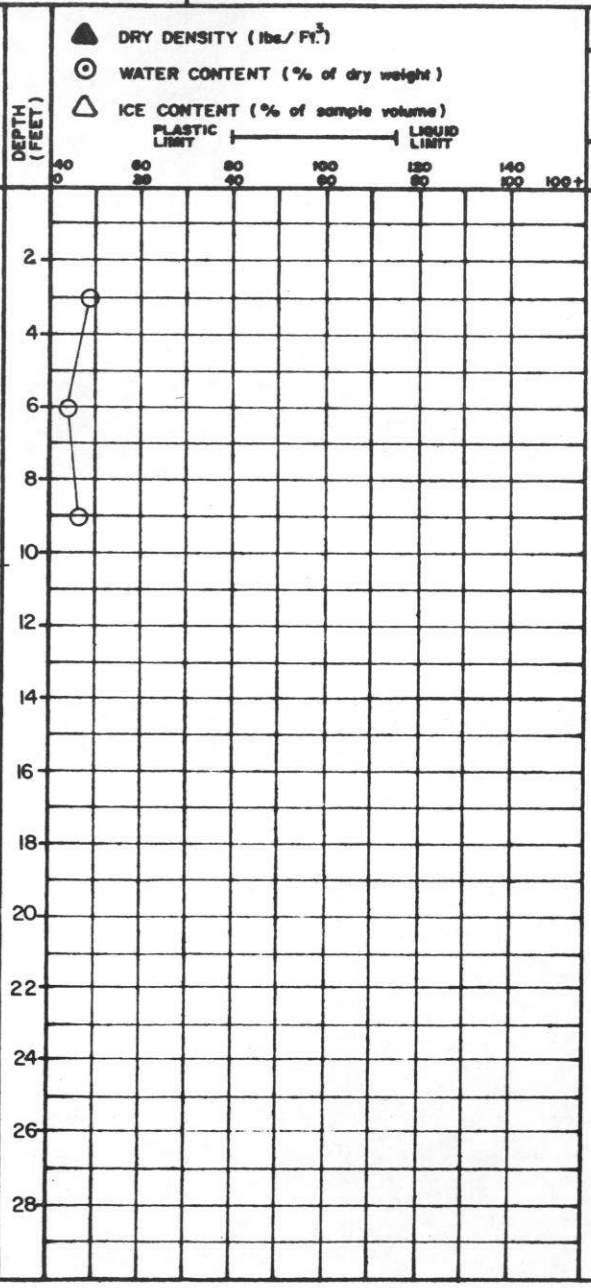
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-124	CHAINAGE. 4503+00	OFFSET. ℄	TEST HOLE 722
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 809

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .5'								
2						SAND -Gravelly Clayey		Low To					Damp	
4														
6					GC	Gravelly only		Nil					Damp	
8						Clayey-gravelly		Ice Vx / Nbn					Moist	
10														
12														
14						ICE		ICE						
16														
18														
20														
22														
24														
26														
28														
						29'								



BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

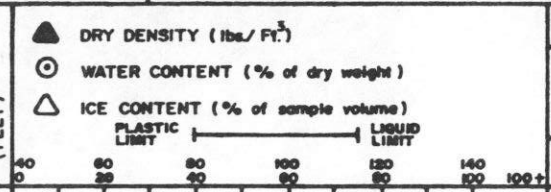
SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-124	CHAINAGE. 4492+00	OFFSET. ℄
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.

TEST HOLE 723

MILE 809

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2						CLAY		High						
						-Sandy							Free	
						Silty		Ice					Water	
4					CL	Pebbles								
						low plastic								
6						Gravelly		Vs					Sat.	
8						8'								
						SAND-Gravelly	F							
					SC	Clayey							Wet	
10						10'		Low						
						CLAY							Wet	
12						-Silty								
						Sandy		Ice						
						Gravelly							Wet	
14														
					CL	Low-med plastic								
16								Vx						
					CI	Pebbles								
18														
20														
22														
24														
26														
28														
						29'								



BOTTOM OF HOLE - 29'

DS-14-5-74 b

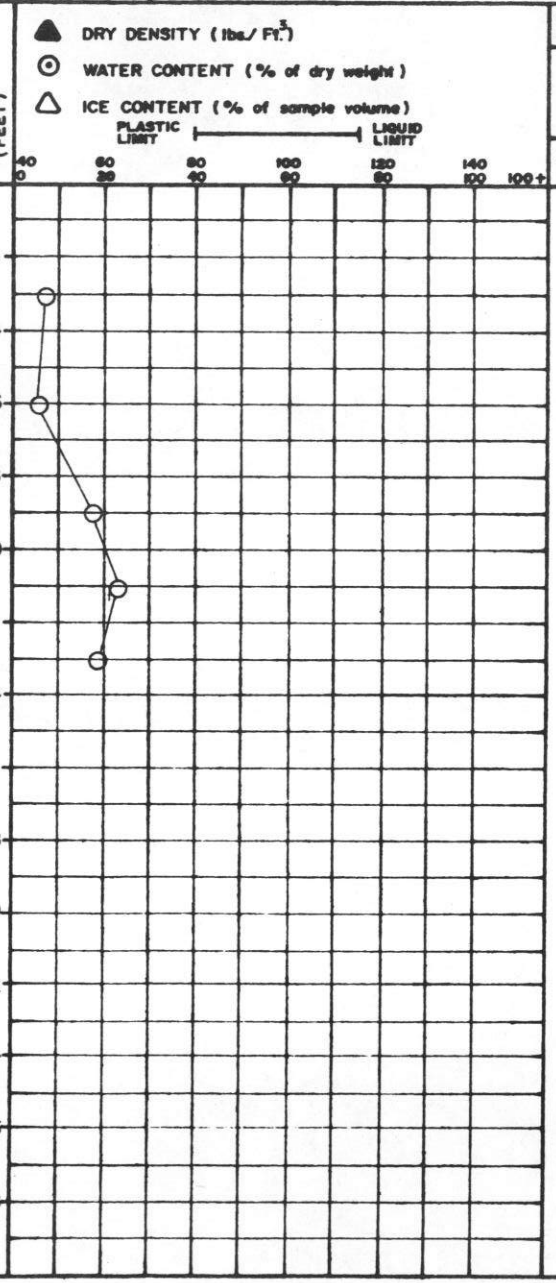
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-124	CHAINAGE. 4481+00	OFFSET. ℄	TEST HOLE 724
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 809

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .5'								
2						CLAY -Silty Sandy Pebbles Low plastic		Low Ice						
4					CL								Moist	
6						5.5'		Vx					Moist	
8					GC	GRAVEL-SAND MIX. -Clayey 8'								
10						CLAY -Silty Sandy Gravelly Med plastic	F	Moderate Ice					Wet Wet	
14					CI	Pebbles		Vc - Vr					Wet	
16														
18														
20														
22														
24														
26														
28														
						29'								



BOTTOM OF HOLE - 29'

DS-14-5-74 b

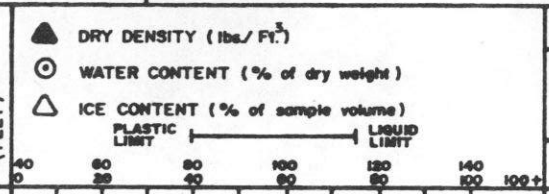
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-124	CHAINAGE. 4467+00	OFFSET. ¢	TEST HOLE 725
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 808

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .5'								
2					CL	CLAY -Silty Sandy Gravelly Low plastic		Low Ice					Moist	
4														
6													Moist	
						7'								
8					SM	SAND -Silty Gravelly	F	Vx					Moist	
10						Pebbles		Moderate					Wet	
12					SC	Clayey		Ice					Sat.	
14								Vc - Vr						
16						16'								
18						ICE		ICE						
20														
22						22'								
24					CI	CLAY -Sandy Silty								
26														
28						29'								



BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-124	CHAINAGE. 4457+00
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ℄

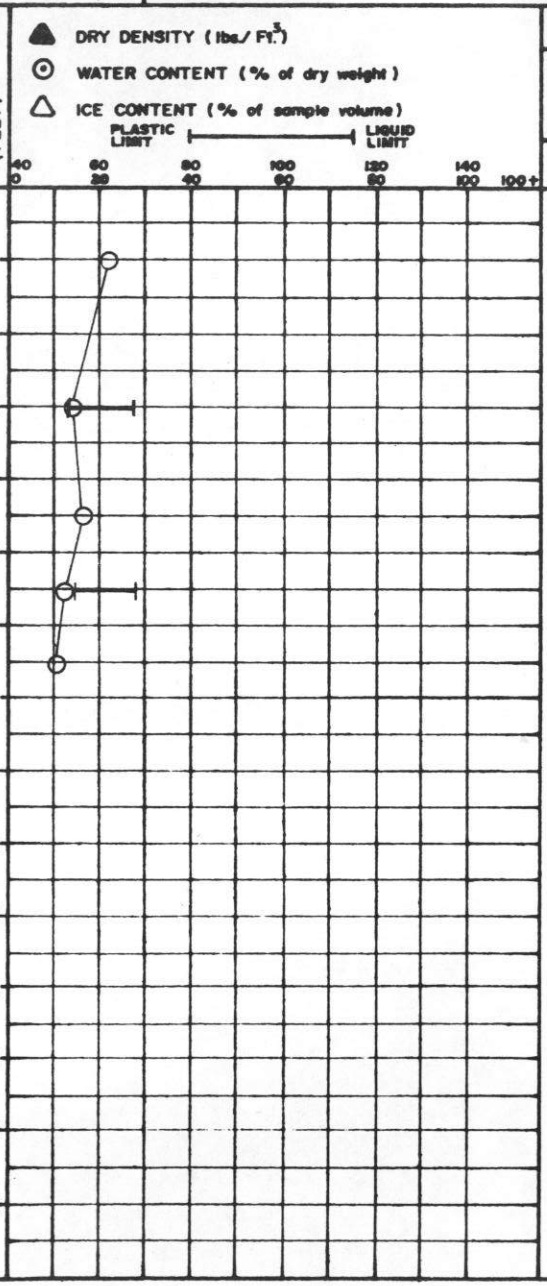
ELEV.

TEST HOLE 726

MILE 808

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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT 1'							
2						CLAY -Silty Sandy Pebbles			-77-		18	5	Moist
4													
6					CL	Low-med plastic Gravelly		Low	-54-		27	19	Moist
8								Ice	-73-		23	4	Moist
10					CI	Pebbles	F		-64-		31	5	Moist
12								Content	-61-		34	5	Moist
14													
16								Vx					
18													
20													
22													
24													
26													
28						29'							



BOTTOM OF HOLE - 29'

DS-14-5-74 b

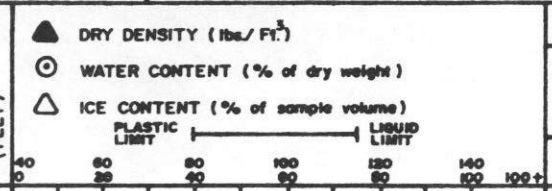
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-123	CHAINAGE. 4445+00	OFFSET. ℄	TEST HOLE 727
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 808

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'								
2					SC	SAND -Silty Clayey —4'							Moist	
4					CL	CLAY -Sandy Silty Pebbles		Low					Moist	
6					CI	Low-med plastic		Ice						
8							F						Wet	
10						—10' GRAVEL-SAND-CLAY MIX		Content					Moist	
12					GC	GRAVEL -Clayey Sandy								
14								Vx					Moist	
16						—16' CLAY -Silty Sandy Pebbles								
18					CL									
20					CI									
22														
24														
26														
28						—29'								



BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-123	CHAINAGE. 4431+50	OFFSET. ℄	TEST HOLE 728
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 808

▲ DRY DENSITY (lbs./Ft.³)
⊙ 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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2						CLAY -Silty Sandy Pebbles Cobbles @ 5' Low-med plastic							Moist	
4								Low						
6													Moist	
8								Ice					Moist	
					CL									
10								Content					Moist	
					CI		F							
12														
14								Vx					Moist	
16														
18														
20														
22														
24														
26														
28														
						29'								

BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-123	CHAINAGE. 4421+00	OFFSET. ℄	TEST HOLE 729
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 807

DRY DENSITY (lbs./Ft.³) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2					CI	CLAY -Silty Organic to 4' Sandy Pebbles Low plastic		Low					Moist	
4								To					Sat.	
6														
8						Gravelly		Moderate					Moist	
10						Pebbles		Ice					Wet	
12					SP	SAND -Medium 12'	F	Vx					Wet	
14								Vc - Vr						
16					ML	SILT -Sandy Clayey Pebbles 16'								
18														
20					CI	CLAY -Sandy Silty Pebbles 20'								
22														
24														
26														
28						29'								

BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-123	CHAINAGE. 4410+00
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ℄

ELEV.

TEST HOLE 730

MILE 807

DRY DENSITY (lbs./Ft.³) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'		Low						
2					SC	SAND -Gravelly Clayey		Ice					Moist	
								Vx						
4						—4'								
						CLAY -Sandy Silty Gravelly Low-med plastic							Wet	
6														
8					CL		F	Moderate					Moist	
10					CI	Pebbles		Ice					Moist	
12								Content					Moist	
14														
16								Vc - Vr						
18														
20														
22						—22'								
24					SC	SAND -Clayey Silty Pebbles								
26														
28														
						—29'								

BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-121	CHAINAGE. 4394+00	OFFSET. ℄	TEST HOLE 731
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 807

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	DEPTH (FEET)	DRY DENSITY (lbs./Ft.³) / WATER CONTENT (% of dry weight) / ICE CONTENT (% of sample volume) — PLASTIC LIMIT — LIQUID LIMIT (40 0, 60 20, 80 40, 100 60, 120 80, 140 100, 100+)	GRAIN-SIZE ANALYSIS CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'										
2					CL	CLAY -Silty Sandy Pebbles Low-med plastic	F	Low Ice	2						Moist	
4									4						Moist	
6									6							
8					CI				8						Moist	
10									10						Moist	
12									12						Moist	
14								No Visible Ice Or Frost From 8'-15'	14							
16									16							
18							F		18							
20									20							
22								Low Ice From 15'-29'	22							
24									24							
26									26							
28									28							
						29'										

BOTTOM OF HOLE - 29'

DS-14-5-74 b

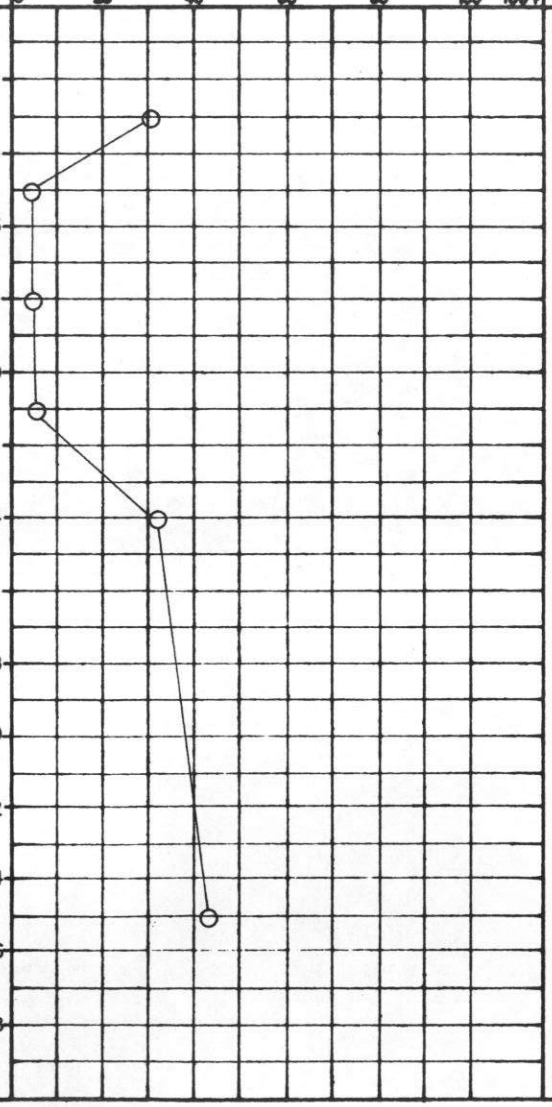
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-121	CHAINAGE. 4364+00	OFFSET. ℄	TEST HOLE 732
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. LEVEL	VEGETATION. SPRUCE	ELEV.	MILE 806

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 1.5'								
2					CI	CLAY -Sandy, silty Organics to 3' — 4'		Moderate					Moist	
4													Moist	
6					GC	GRAVEL -Sandy Clayey		Ice						
8													Wet	
10								Vc - Vr						
12						— 12'	F						Wet	
14					CH	CLAY -Sandy Silty High plastic							Moist	
16														
18														
20														
22														
24						— 25'							Wet	
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

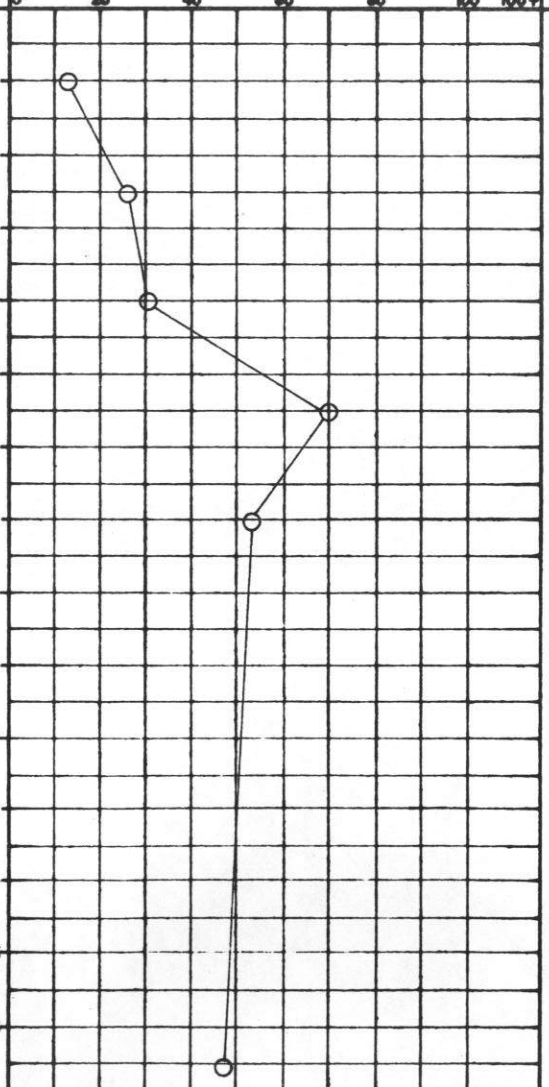
SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-121	CHAINAGE. 4353+00	OFFSET. ℄	TEST HOLE 733
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. LEVEL	VEGETATION. SPRUCE	ELEV.	MILE 806

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'									
2					SC	SAND -Clayey Silty Pebbles Organics to 3' 4½'		Moderate Ice	2					Moist	
4									4					Moist	
6						CLAY -Sandy Silty High plastic		Vc - Vr	6						
8									8					Moist	
10					CH		F		10					Sat.	
12								High Ice	12						
14									14					Sat.	
16									16						
18								Vs	18						
20								Moderate Ice	20						
22									22						
24								Vc - Vr	24						
26									26						
28									28						
						29'								Wet	

▲ DRY DENSITY (lbs./Ft.³)
⊙ WATER CONTENT (% of dry weight)
△ ICE CONTENT (% of sample volume)

PLASTIC LIMIT ⊢——⊣ LIQUID LIMIT



BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

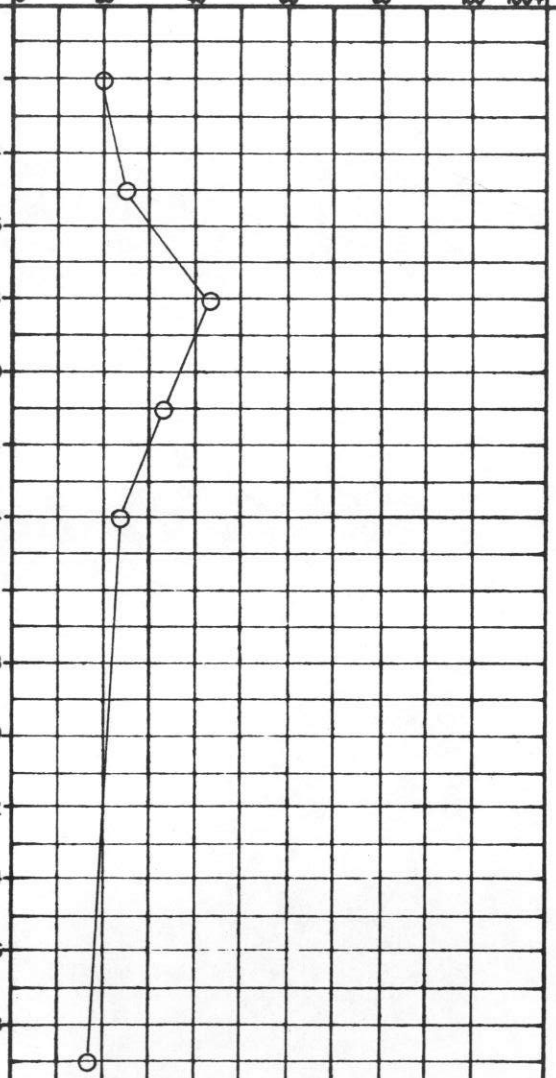
FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-121	CHAINAGE. 4342+00	OFFSET. ℄	TEST HOLE 734
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE-BIRCH-BURNT	ELEV.	MILE 806

AREA.

▲ DRY DENSITY (lbs./Ft.³)
⊙ 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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'		Moderate						
2						CLAY -Sandy Silty Med-high plastic		Ice					Moist	
4														
6					CI CH			Vc - Vr					Moist	
8								High Ice					Sat.	
10							F	Vs					Moist	
12								Moderate						
14								Ice					Moist	
16														
18					GC	GRAVEL-Sandy Clayey —17'		Vc - Vr						
20					SM	SAND-SILT MIXTURE -Clayey —19'								
22					ML									
24														
26														
28						—29'							Wet	



DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

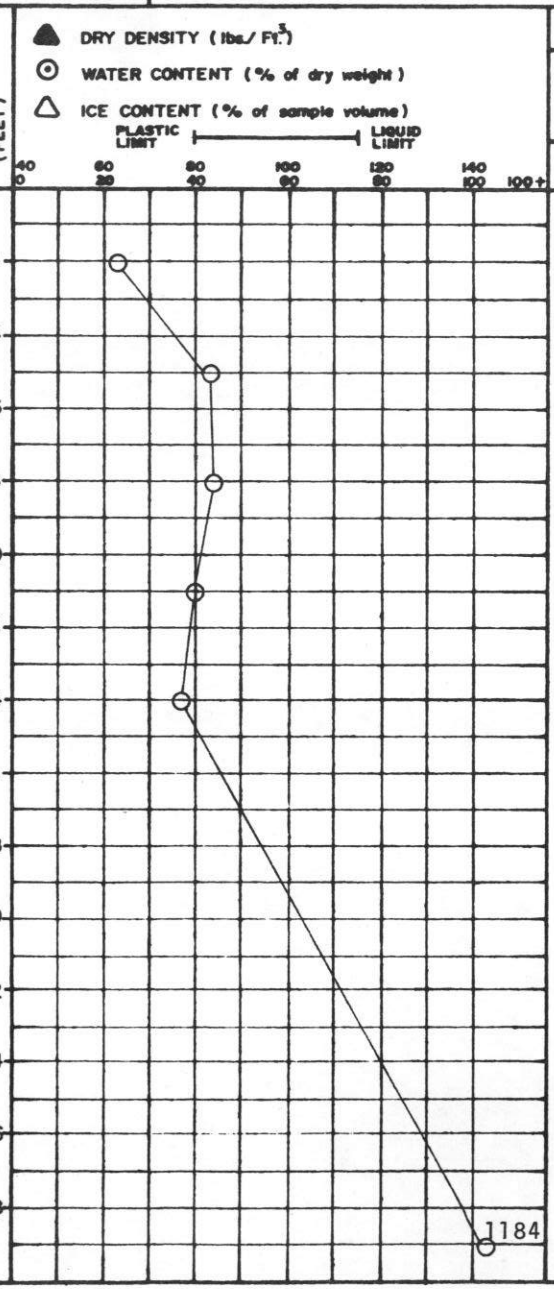
SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-121	CHAINAGE. 4337+00	OFFSET. ℄
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE	ELEV.

TEST HOLE 735

MILE 806

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'							Moist	
4						CLAY -Organics to 9' Sandy Silty Med-high plastic		Moderate To High Ice					Moist	
6														
8					CI	Pebbles							Wet	
10														
12					CH		F	Vc - Vr					Wet	
14								Vs					Wet	
16														
18														
20						ICE Some Clay		ICE & CI						
22														
24														
26														
28														
						29'							Water	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

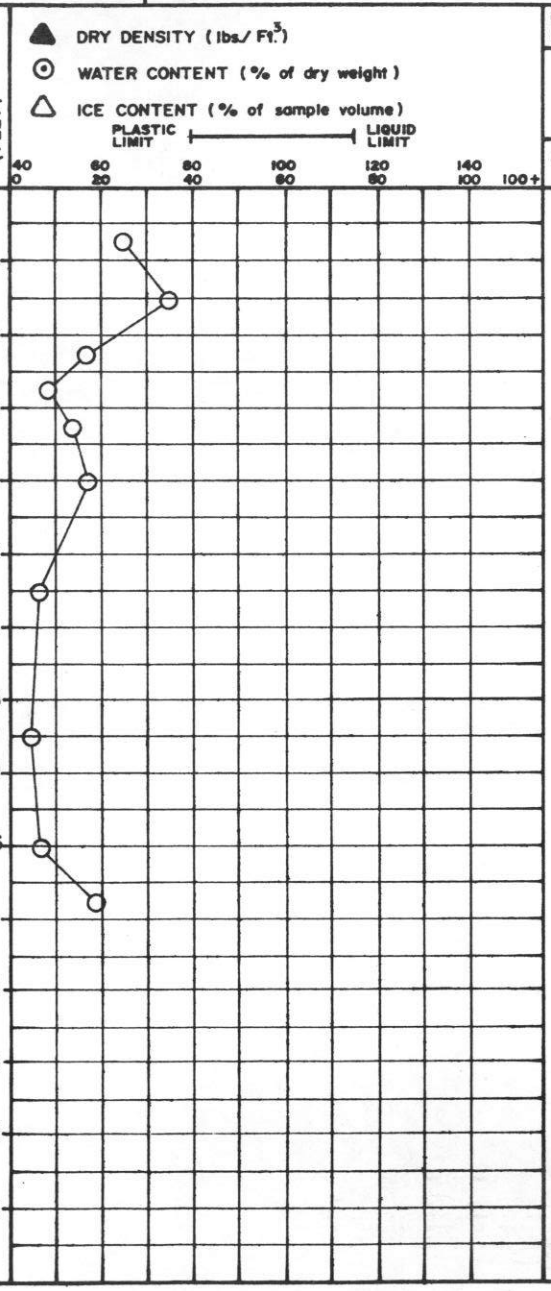
SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-121	CHAINAGE. 4328+00
OFFSET. ¢			
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.			

TEST HOLE: 736

MILE: 805

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
4					CI	CLAY -Sandy Silty		Moderate Ice					Moist	
8					CH	Med-high plastic Gravelly		Vc - Vr					Moist	
						10'							Wet	
12						SAND -Gravelly Clayey Pebbles	F						Wet	
16					SC	Gravelly		High Ice Vs					Wet	
20						21'							Sat.	
24					GC	Gravel -Sandy, clayey		Vc - Vr					Wet	
28					GP	GRAVEL -Sandy None plastic		Low Ice					Wet	
32							F	Vx						
36						37'							Wet	
40					CL	CLAY-Sandy, silty Low plastic 40'							Moist	
44						BOTTOM OF HOLE - 40'								
48														
52														
56														



DS-14-5-74 a

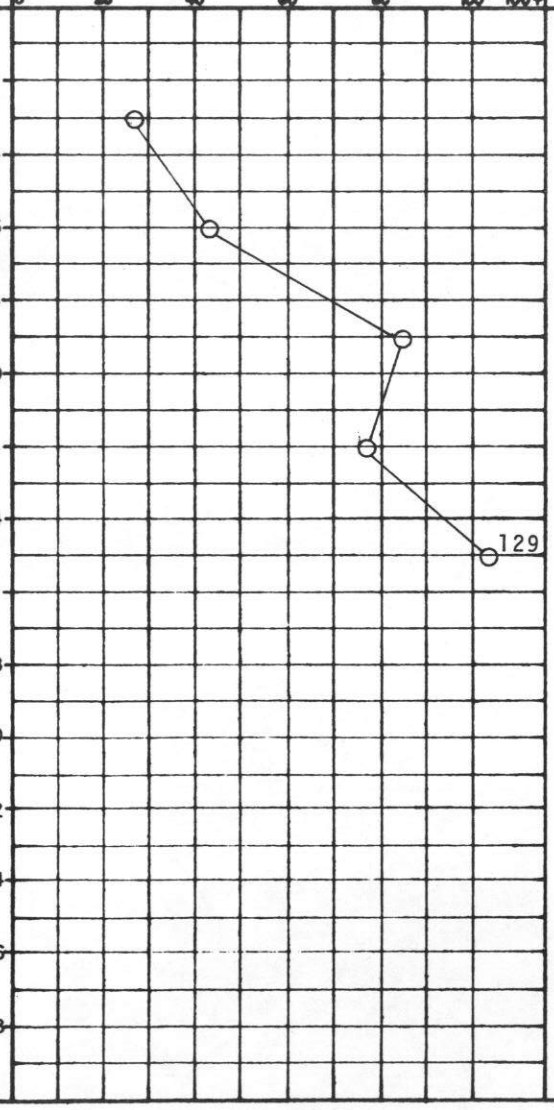
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-120	CHAINAGE. 4319+00	OFFSET. ℄	TEST HOLE 737
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE-ALDERS	ELEV.	MILE 806

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .8'		Moderate						
2						CLAY -Sandy Silty High plastic		Ice					Moist	
4														
6					CH			Vc - Vr					Moist	
8								High					Sat.	
10							F	Ice						
12													Sat.	
14								Vs					Free Water	
16														
18														
20														
22														
24														
26														
28						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

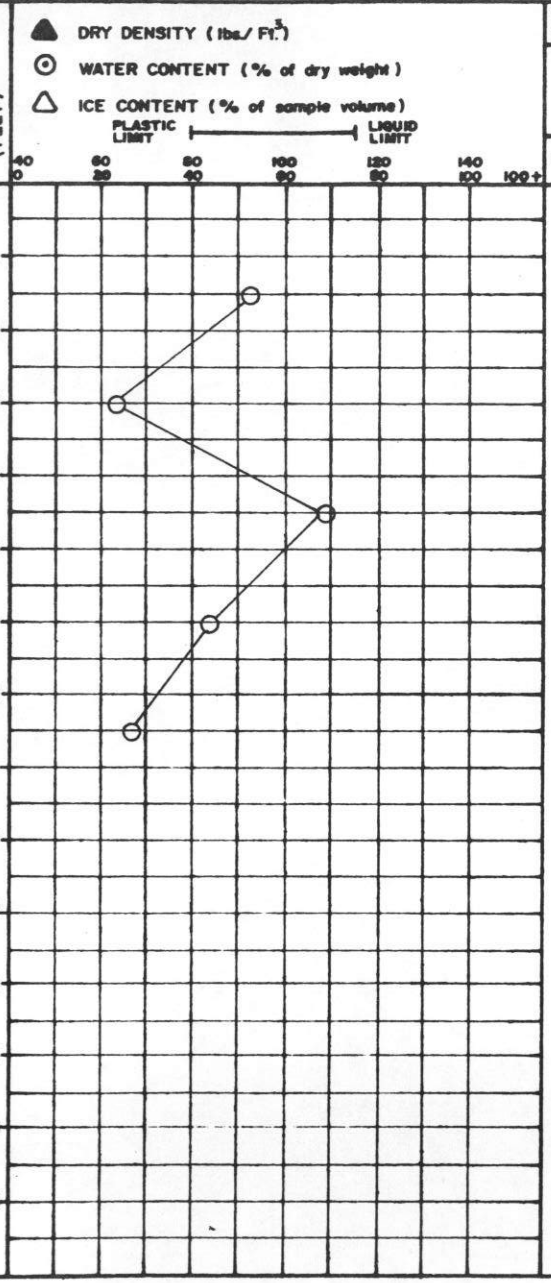
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-120	CHAINAGE. 4310+00	OFFSET. ℄	TEST HOLE 738
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. POOR	VEGETATION. SPRUCE MAX. 7"	ELEV.	MILE 805

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.1'								
2						CLAY								
4						-Organics to 4' Sandy Silty							Wet	
6						Pebbles Gravelly		High					Free Water	
8								Ice						
10					CI	Pebbles Med plastic							Free Water	
12							F	Vs					Wet	
14						Pebbles-gravelly							Sat.	
16														
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

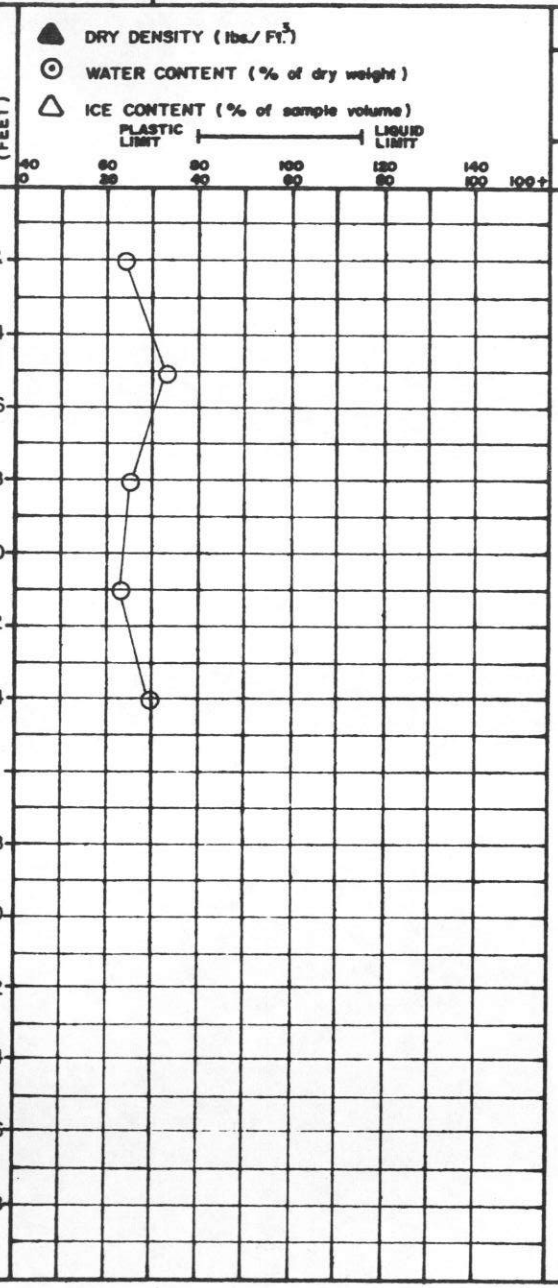
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-120	CHAINAGE. 4302+00	OFFSET. ℄	TEST HOLE 739
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. POOR	VEGETATION. SPRUCE MAX. 4"	ELEV.	MILE 805

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2						CLAY -Silty							Moist	
4					CL	Low-high plastic								
6								Moderate					Wet	
8							F						Moist	
10					CI	Sandy Silty		Ice						
12													Moist	
14								Content					Moist	
16														
18								Vc - Vr						
20					CH									
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-120	CHAINAGE. 4287+00	OFFSET. ¢	TEST HOLE 740
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. POOR	VEGETATION. SPRUCE-ALDERS 3"	ELEV.	MILE 805

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		High						
						1.3'								
2						CLAY		Ice						
4						-Organics to 4' Sandy Silty High plastic							Sat.	
6								Vs					Sat.	
8					CH			Moderate					Moist	
10								Ice						
12							F						Moist	
14														
16								Vc - Vr					Wet	
18														
20														
22														
24														
26														
28														
						30'								

BOTTOM OF HOLE - 30'

DS-14-5-74 b

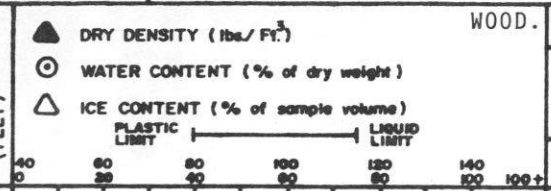
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-120	CHAINAGE. 4273+00	OFFSET. ¢	TEST HOLE 741
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. POOR	VEGETATION. SPRUCE 3" - DEAD-WOOD.	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.1'		Moderate Ice						
2						CLAY -Sandy Silty Organics to 4' High plastic								
4								Vc - Vr					Moist	
6								High					Sat.	
8					CH			Ice						
10								Vs					Sat.	
12							F	Moderate					Moist	
14								Ice						
16													Wet	
18								Vc - Vr						
20														
22														
24														
26														
28						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

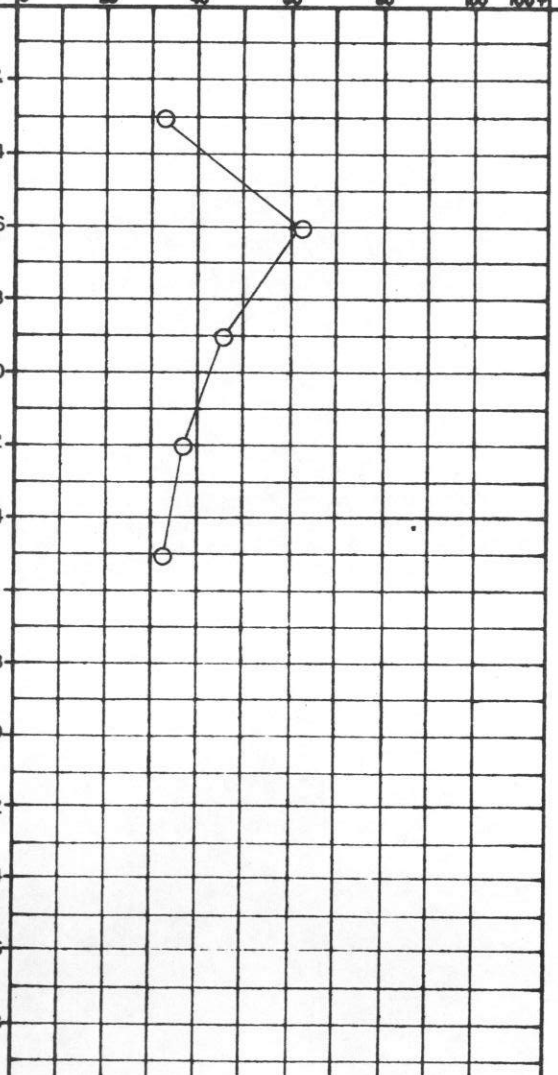
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-118	CHAINAGE. 4259+00	OFFSET. ℄	TEST HOLE 742
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. POOR	VEGETATION. SPRUCE 3" - DEADWOOD	ELEV.	MILE 804

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.1'		Moderate Ice						
2						CLAY -Organics to 4' Silty Sandy Med-high plastic		Vc - Vr					Damp	
4								High Ice						
6								Vs					Sat.	
8					CI									
10					CH		F	Moderate Ice					Wet	
12													Wet	
14						Pebbles							Moist	
16								Vc - Vr						
18														
20														
22														
24														
26														
28						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

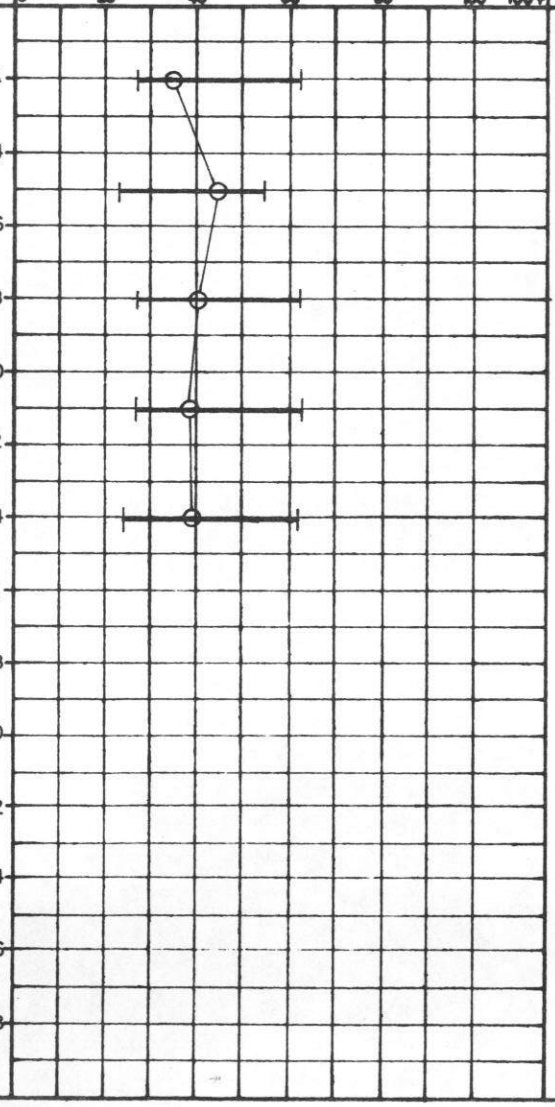
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 27/2/74	AIRPHOTO NO. A 23410-118	CHAINAGE. 4246+00	OFFSET. ℄	TEST HOLE 743
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE - ALDERS 6"	ELEV.	MILE 804

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.7'		Moderate						
2									-95-		4	0	MOIST	
						CLAY -Silty Med plastic High plastic		Ice						
4														
					CI				-98-		2	0	Wet	
6														
								Content						
8									-100		0	0	Moist	
10														
							F		-95-		5	0	Moist	
12														
					CH			Vc - Vr						
14									-95-		4	0	Moist	
16														
18														
					CI									
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

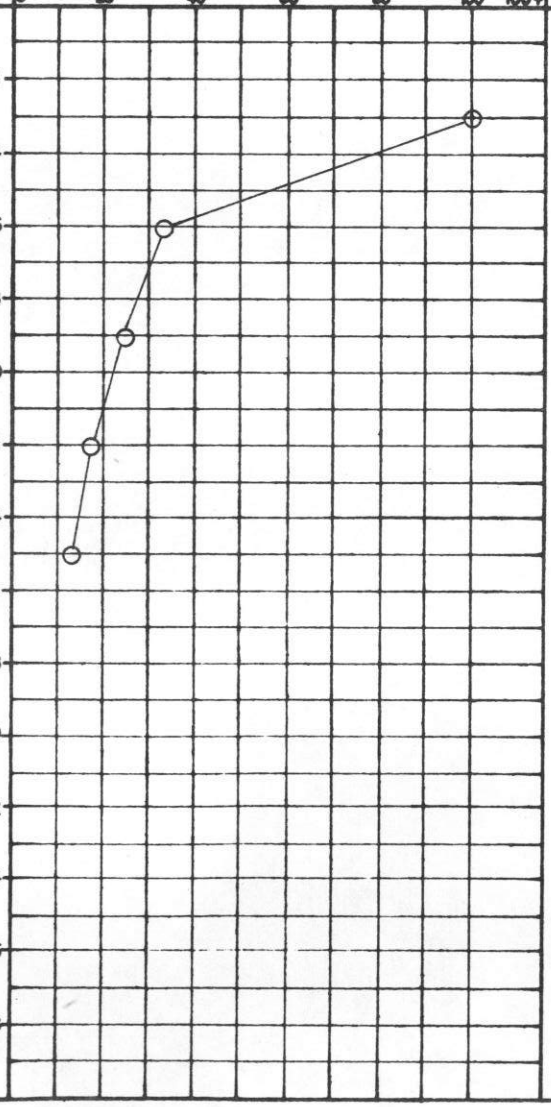
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 28/2/74	AIRPHOTO NO. A 23410-118	CHAINAGE. 4233+00	OFFSET. ℄	TEST HOLE 744
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. POOR	VEGETATION. SPRUCE 5" -DEADWOOD	ELEV.	MILE 804

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2					OL	ORGANIC -Clayey silt 4'		High					Free Water	
6					CL	CLAY -Silty Sandy Pebbles Low plastic 11'		Ice					Free Water	
8													Free Water	
12					SC	SAND -Silty Clayey Pebbles 15'	F	Vs					Sat.	
16					CI	CLAY -Silty Sandy Med plastic 30'							Damp	Hole in Bag



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 28/2/74	AIRPHOTO NO. A 23410-118	CHAINAGE. 4222+00	OFFSET. ℄	TEST HOLE 745
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. POOR	VEGETATION. SPRUCE 3" - BURNT	ELEV.	MILE 804

AREA.

▲ DRY DENSITY (lbs./Ft.³)
⊙ 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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
						1.1'								
2						CLAY -Silty Sandy Med plastic								
4					CI			Moderate					Damp	
6								Ice					Wet	
8						8'								
10					ML	SAND-SILT MIX -Clayey		Vc - Vr					Wet	
12					SC		F						Wet	
14														
						15'							Wet	
16						CLAY -Silty Sandy Low plastic								
18														
20					CL									
22														
24														
26														
28														
						30'								

BOTTOM OF HOLE - 30'

DS-14-5-74 b

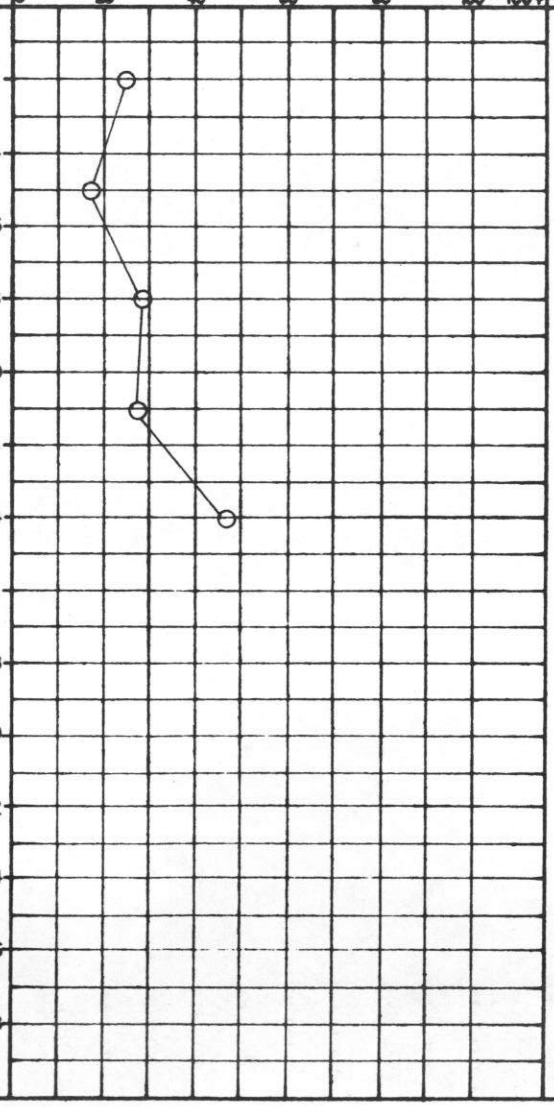
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 28/2/74	AIRPHOTO NO. A 23410-118	CHAINAGE. 4212+00	OFFSET. ¢	TEST HOLE 746
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. POOR	VEGETATION. SPRUCE 3"-BURNT AREA	ELEV.	MILE 804

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 1.5'								
2					CL	CLAY -Sandy, silty							Sat.	
4					CI	Low-med plastic — 4'		Vs						
6					SC	SAND -Clayey Pebbles — 7'		High					Sat.	
8						CLAY -Silty Sandy	F	Ice					Sat.	
10					CL	Low-med plastic Silty @ 11'		Moderate					Moist	
12					CI			Ice						
14						High plastic		Content					Moist -WET	
16					CH									
18						Silty		Vc - Vr						
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

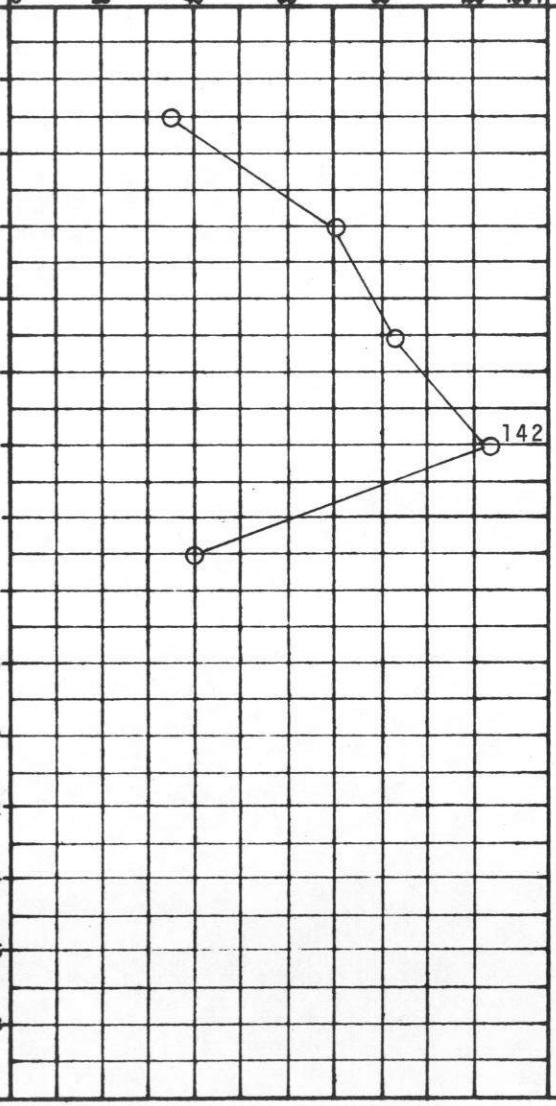
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 28/2/74	AIRPHOTO NO. A 23410-118	CHAINAGE. 4202+00	OFFSET. ℄	TEST HOLE 747
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. POOR	VEGETATION. ALDERS & WILLOWS	ELEV.	MILE 803

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.8'								
2														
						CLAY -Organics to 4' Silty Sandy Med plastic		High					Damp	
4														
6													Sat.	
8								Ice					Free Water	
10					CI									
12							F						Free Water	
14								Vs						
													Sat.	
16														
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 28/2/74	AIRPHOTO NO. A 23410-118	CHAINAGE. 4194+00
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. POOR	VEGETATION. SPRUCE-ALDERS-BURNT

OFFSET. ℄ ELEV.

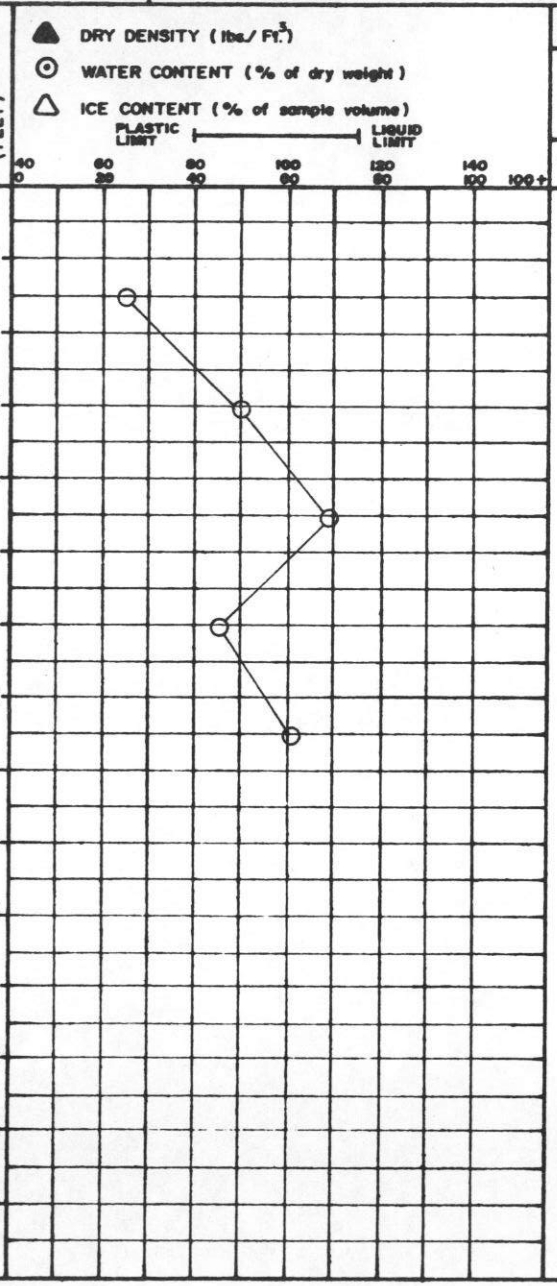
TEST HOLE 748

MILE 803

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.4'				
2						CLAY -Organics to 4' Silty Sandy Med-high plastic		Moderate		
4								&	Damp	
6								High	Wet	
8					CI			Ice		
10					CH			Vc - Vr	Sat.	
12							F		Wet	
14								Vs		
16									Sat.	
18										
20										
22										
24										
26										
28										
						30'				

GRAIN-SIZE ANALYSIS

CLAY %	SILT %	SAND %	GRAVEL %



BOTTOM OF HOLE - 30'

DS-14-5-74 b

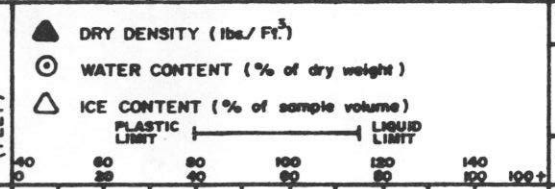
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 28/2/74	AIRPHOTO NO. A 23410-118	CHAINAGE. 4184+00	OFFSET. ℄	TEST HOLE 749
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. BIRCH-SPRUCE-ALDERS	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		Moderate Ice						
2						2'								
						CLAY -Organics to 4' Silty Sandy Med plastic		Vc - Vr					Damp	
4														
6								High Ice					Free Water	
8														
10					CI		F						Sat.	
12								Vs					Free Water	
14													Sat.	
16														
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

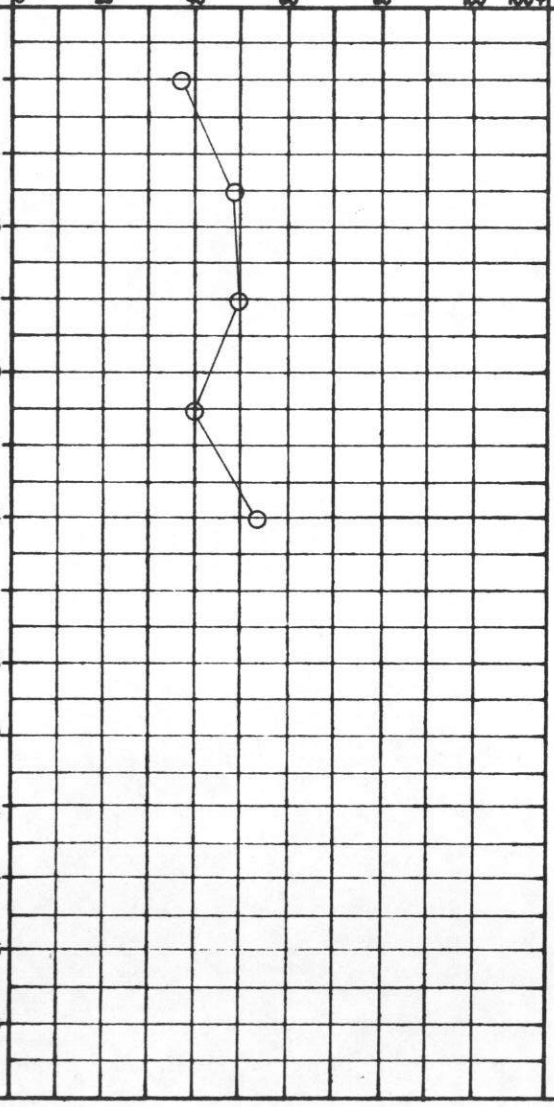
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 28/2/74	AIRPHOTO NO. A 23410-116	CHAINAGE. 4172+00	OFFSET. ¢	TEST HOLE 750
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. POOR	VEGETATION. SPRUCE	ELEV.	MILE 803

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2						CLAY -Silty Med-high plastic		Moderate					Moist	
4								To						
6								High					Sat.	
8					CI			Ice					Wet	
10							F	Content					Moist	
12														
14								Vc - Vr					Moist ~~Wet~~	
16					CI			Vs						
18														
20														
22														
24					CH									
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

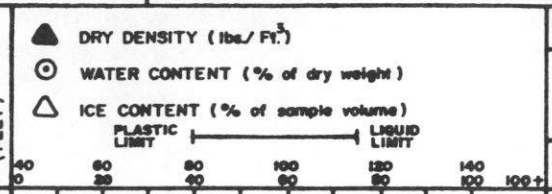
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 28/2/74	AIRPHOTO NO. A 23410-116	CHAINAGE. 4160+00	OFFSET. ¢	TEST HOLE 751
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. POOR	VEGETATION. SPRUCE	ELEV.	MILE 803

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		Moderate						
2					OL	ORGANIC SILT		To					Moist	
4						4'								
6						CLAY -Silty Med-high plastic		High					Wet	
8					CI			Ice					Wet	
10							F							
12								Content					Moist	
14					CH			Vc - Vr					Moist	
16														
18								Vs						
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

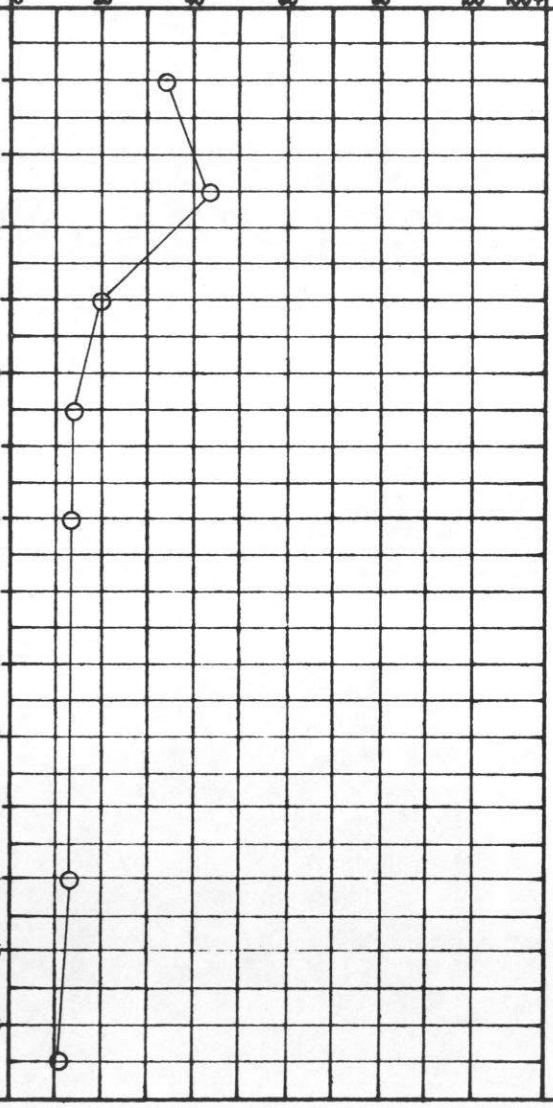
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 28/2/74	AIRPHOTO NO. A 23410-116	CHAINAGE. 4151+00	OFFSET. ℄	TEST HOLE 752
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. POOR	VEGETATION. SPRUCE - DEADWOOD	ELEV.	MILE 802

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .8'		Moderate						
2						CLAY -Silty Med plastic		Ice					Moist	
4								Vc - Vr						
													Sat.	
6								High						
								Ice						
8													Sat.	
						Gravelly Silty Sandy								
10					CI			Vs						
							F						Moist	
12														
								Low						
14													Moist	
						Pebbles								
16								Ice						
18														
								Content						
20														
22														
24						Gravelly							Moist	
26														
28						28'								
					GC	GRAVEL-CLAY MIX -Low-med plastic 30'							Moist	

DRY DENSITY (lbs./Ft.³)
WATER CONTENT (% of dry weight)
ICE CONTENT (% of sample volume)
PLASTIC LIMIT — LIQUID LIMIT



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 28/2/74	AIRPHOTO NO. A 23410-116	CHAINAGE. 4140+00	OFFSET. ℄
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.

TEST HOLE 753

MILE 802

▲ DRY DENSITY (lbs./Ft.³)
⊙ 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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'								
2						CLAY -Silty Sandy High plastic		Moderate Ice					Damp	
4														
6													Moist	
8								Vc - Vr						
10					CH								Moist	
12							F						Moist	
14													Wet	
16														
18														
20														
22														
24														
26														
28						30'								

BOTTOM OF HOLE - 30'

DS-14-5-74 b

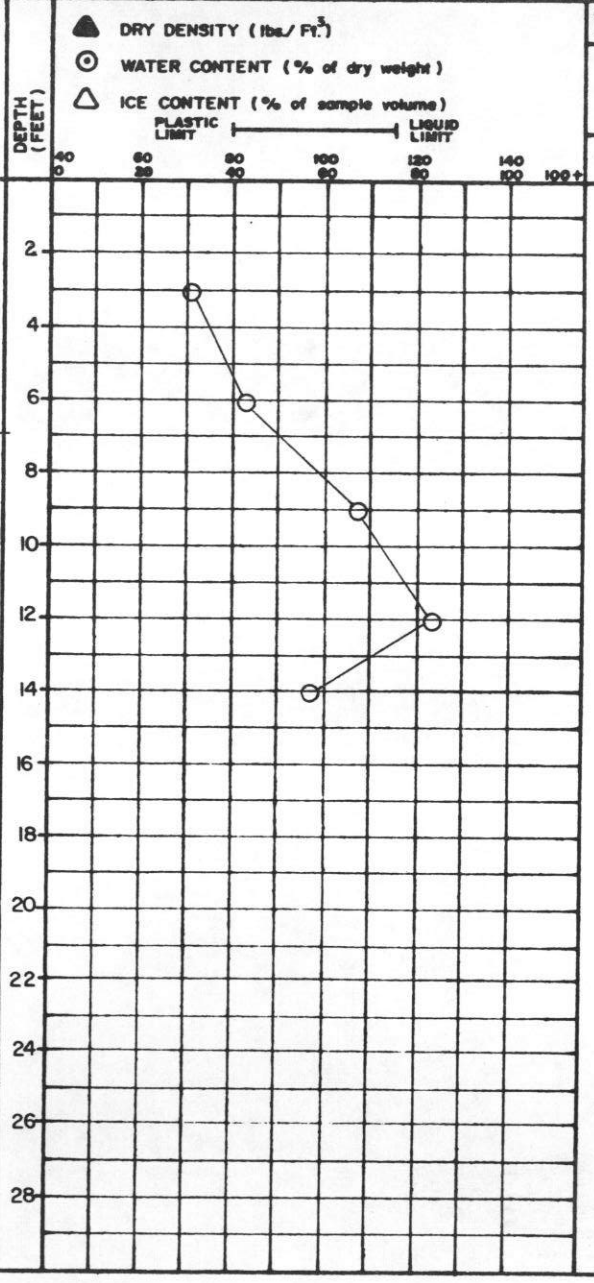
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 28/2/74	AIRPHOTO NO. A 23410-116	CHAINAGE. 4129+00	OFFSET. ℄	TEST HOLE 754
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 802

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'		Moderate						
2						CLAY -Silty Sandy Med-high plastic		Ice					Damp	
4														
6								Vc - Vr					Wet	
8								High						
					CI								Sat.	
10														
					CH			Ice						
12							F						Free Water	
14								Vs					Sat.	
16														
18														
20														
22														
24														
26														
28						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 28/2/74	AIRPHOTO NO. A 23410-116	CHAINAGE. 4115+00	OFFSET. ℄	TEST HOLE 755
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 802

DRY DENSITY (lbs/ Ft.^{3}) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2						CLAY -Silty Sandy Med-high plastic		Moderate					Moist	
4								To						
6								High					Wet	
8					CI			Ice					Wet	
10					CH		F	Vc - Vr						
12													Wet	
14													Sat.	
16								Vs						
18														
20														
22														
24														
26														
28						30'								

BOTTOM OF HOLE - 30'

DS-14-5-74 b

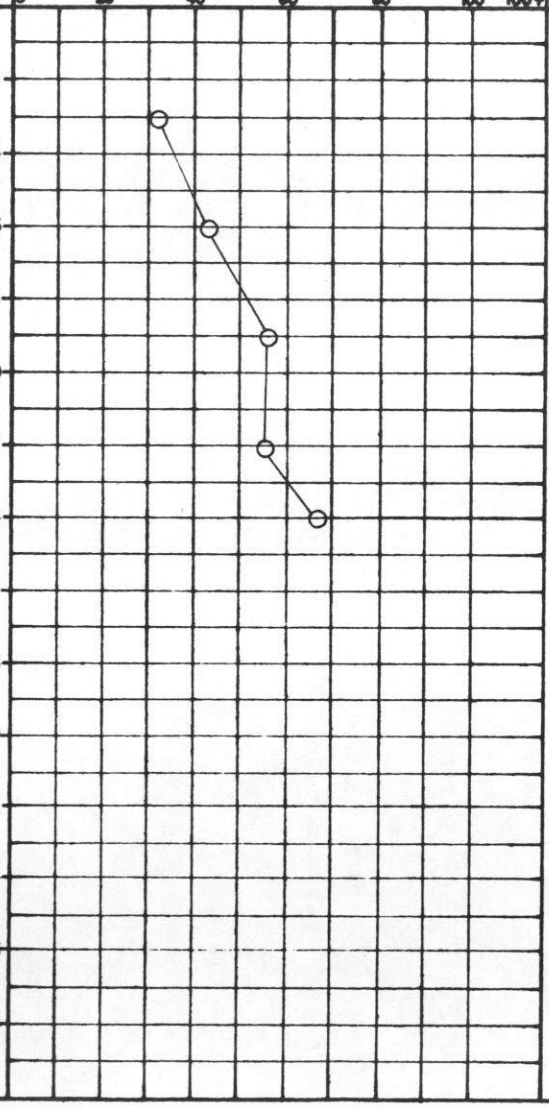
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 28/2/74	AIRPHOTO NO. A 23410-116	CHAINAGE. 4103+00	OFFSET. ℄	TEST HOLE 756
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 802

DRY DENSITY (lbs./Ft.³) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2						CLAY -Organics to 4' Silty Sandy High plastic		Moderate					Damp	
4														
								To						
6													Wet	
								High						
8														
								Ice					Wet	
10														
					CH		F							
12								Vc - Vr					Wet	
14													Sat.	
								Vs						
16														
18														
20														
22														
24														
26														
28														
						30'								

BOTTOM OF HOLE - 30'

DS-14-5-74 b

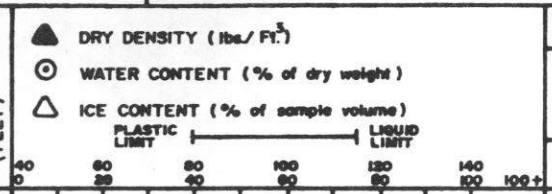
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 28/2/74	AIRPHOTO NO. A 23410-114	CHAINAGE. 4092+00	OFFSET. ℄	TEST HOLE 757
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 801

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		Low						
2						CLAY		Ice						
						-Organics to 7'							Damp	
4						Silty		Vx						
						Sandy								
6						Low-med plastic							Sat.	
						Shale fragments		High						
8					CL								Free Water	
10								Ice						
12					CI		F						Free Water	
14								Vs					Sat.	
16														
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

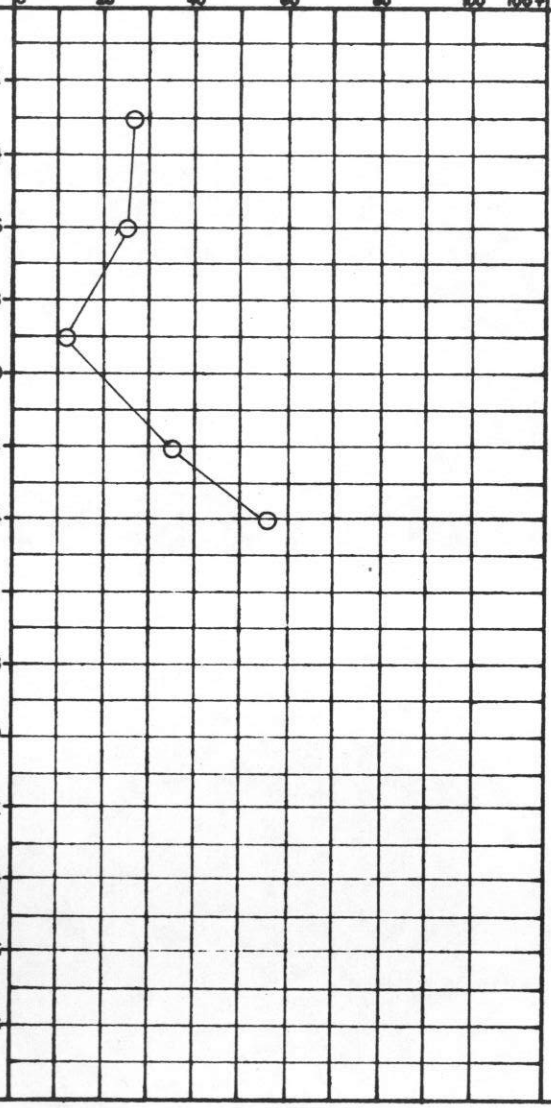
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 28/2/74	AIRPHOTO NO. A 23410-114	CHAINAGE. 4083+00	OFFSET. ℄	TEST HOLE 758
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 801

DRY DENSITY (lbs./Ft.³) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		Low						
2						CLAY -Organics to 7' Silty Sandy		Ice					Moist	
4					CI									
6						Pebbles & Shale fragments Med plastic		Vx					Moist	
8						8'								
					GC	GRAVEL -Sandy Clayey 10'		Moderate					Sat.	
10							F							
12						CLAY -Silty Sandy Pebbles		Ice					Wet	
14								Vc - Vr					Wet	
16					CI	Med-high plastic								
18					CH			High Ice						
20								Vs						
22								Moderate						
24								Ice						
26														
28								Vc - Vr						
						30'								

BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 28/2/74	AIRPHOTO NO. A 23410-114	CHAINAGE. 4072+50
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ℄

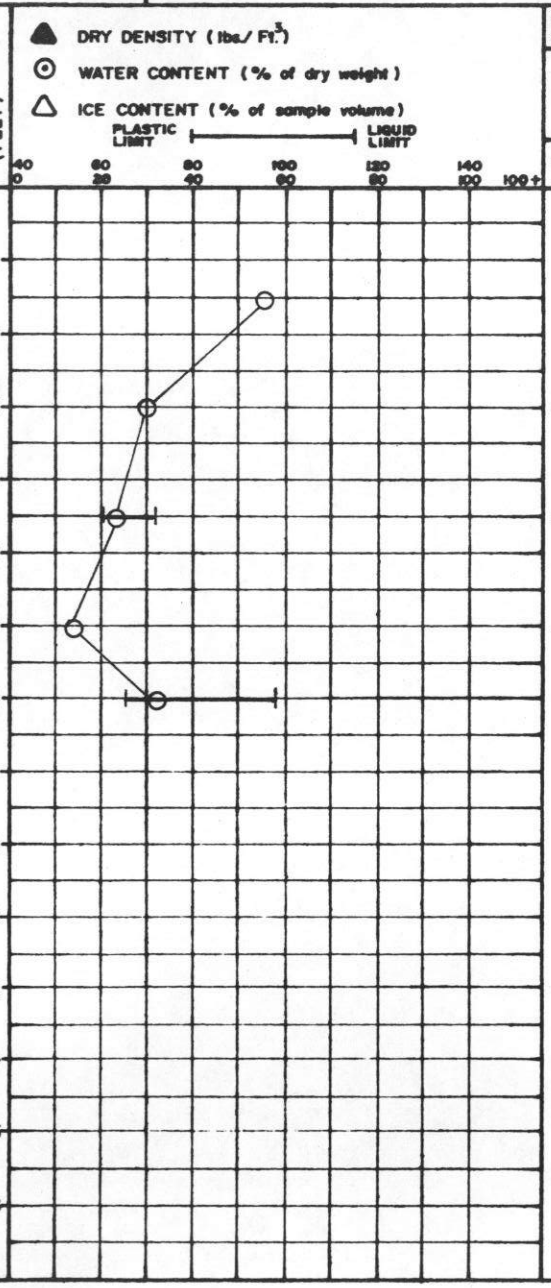
ELEV.

TEST HOLE 759

MILE 801

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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT							
						1.5'		Moderate					
2						CLAY -Silty, sandy							
4					CI	Med plastic 4'		&	-64-		36	0	Sat.
						SAND -Silty Clayey Pebbles Gravelly		High					
6									-46-		53	1	Damp
8					SC			Ice					
10									-16-		62	22	Sat.
								Vc - Vr					
12							F		-19-		46	35	Sat.
						13'							
14						CLAY -Silty Sandy Pebbles High plastic		Vs	-84-		6	10	Moist
16					CH								
18													
20													
22													
24													
26													
28						30'							



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

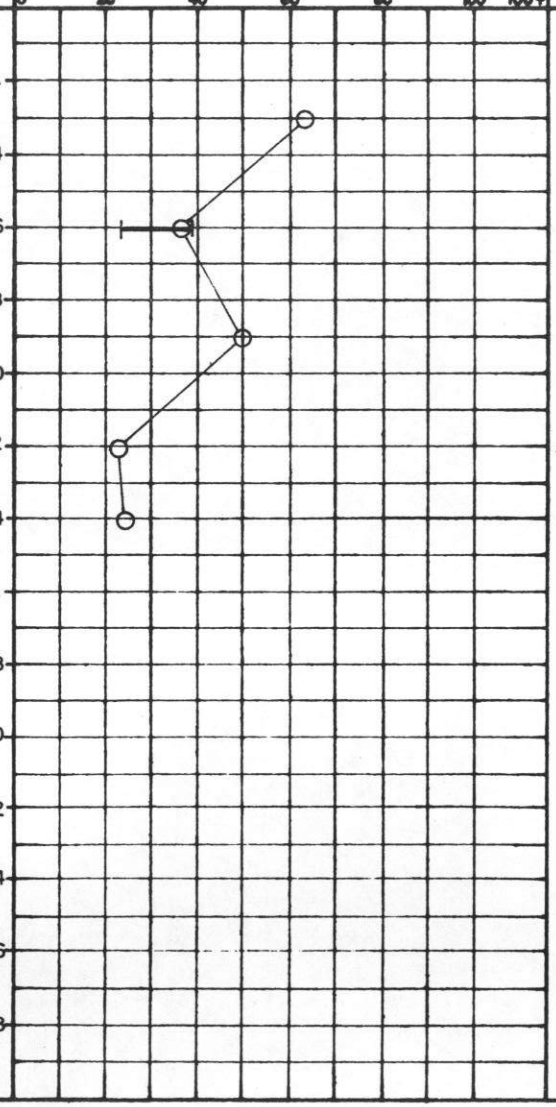
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 28/2/74	AIRPHOTO NO. A 23410-114	CHAINAGE. 4072+90	OFFSET. CREEK BANK	TEST HOLE 759-A
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 801

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2'														
					CI	CLAY-Organics to 4' Silty, sandy			-87-		13	0	Wet	
4'														
					SC	SAND -Silty Clayey Gravelly		High	-25-		51	24	Sat.	
					CL	SAND-CLAY MIX		Ice						
8'														
					CL	CLAY-SAND MIX. -Low plastic	F		-45-		53	1	Sat.	
11'								Vs						
					SC	SAND -Clayey Gravelly			-16-		67	17	Sat.	
									-13-		70	17	Wet	
15'														
					GC	GRAVEL -Sandy Siltstone frags.		Moderate Ice						
22'								Vc - Vr						
					CI	CLAY -Silty Med plastic								
30'														

DRY DENSITY (lbs./Ft.³)
WATER CONTENT (% of dry weight)
ICE CONTENT (% of sample volume)
PLASTIC LIMIT — LIQUID LIMIT



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

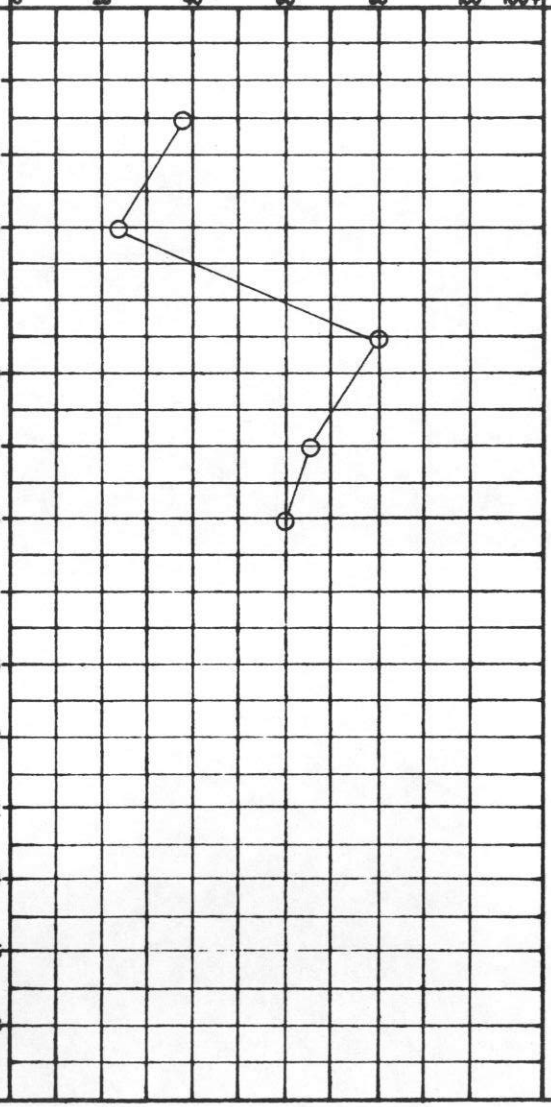
DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 28/2/74	AIRPHOTO NO. A 23410-114	CHAINAGE. 4068+00	OFFSET. ℄	TEST HOLE 760
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 801

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2'														
						CLAY -Organics to 4' Silty Sandy Pebbles		High					Sat.	
					CL			Ice					Wet	
						Low-med plastic								
					CI								Free Water	
								Vs						
							F						Free Water	
													Free Water	
15'														
						GRAVEL-SAND MIX -Clayey		Low To Moderate Ice						
					GC									
								Vx						
								Vc - Vr						
30'														

DRY DENSITY (lbs./Ft.³)
WATER CONTENT (% of dry weight)
ICE CONTENT (% of sample volume)
PLASTIC LIMIT — LIQUID LIMIT



BOTTOM OF HOLE - 30'

DS-14-5-74 b

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

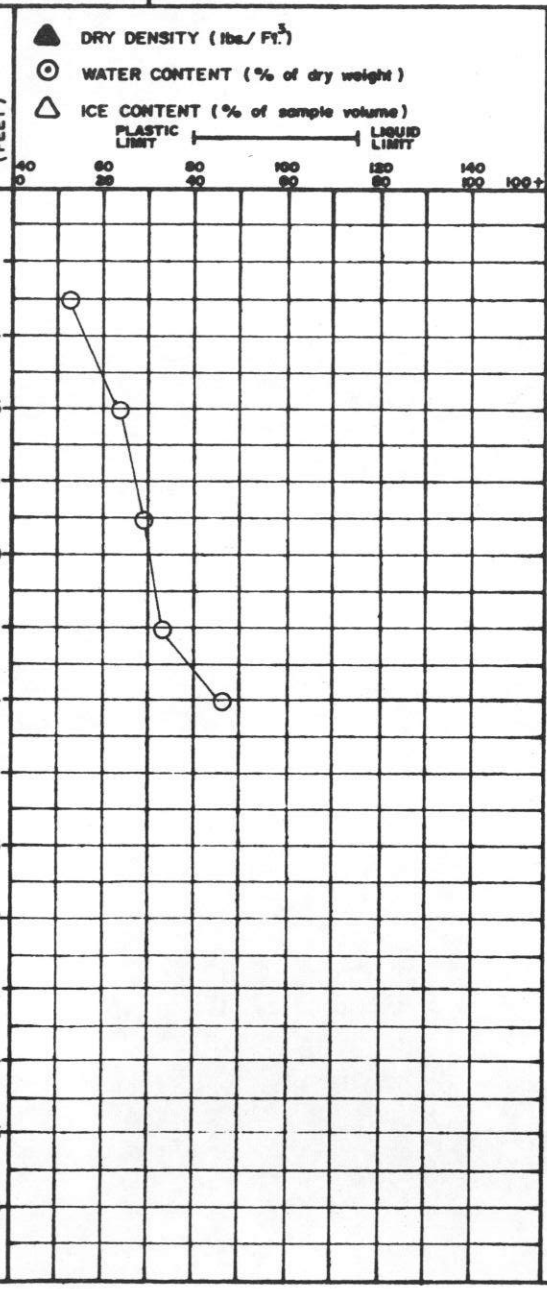
SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 28/2/74	AIRPHOTO NO. A 23410-114	CHAINAGE. 4058+00	OFFSET. ¢
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.

TEST HOLE 761

MILE 801

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1½'								
2														
						CLAY		Moderate					Moist	
4						-Silty								
						Sandy								
						Pebbles								
6						Med plastic		Ice					Wet	
8														
10					CI			Vc - Vr					Wet	
12							F						Wet	
14													Wet	
16														
18														
20														
22														
24														
26														
28						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

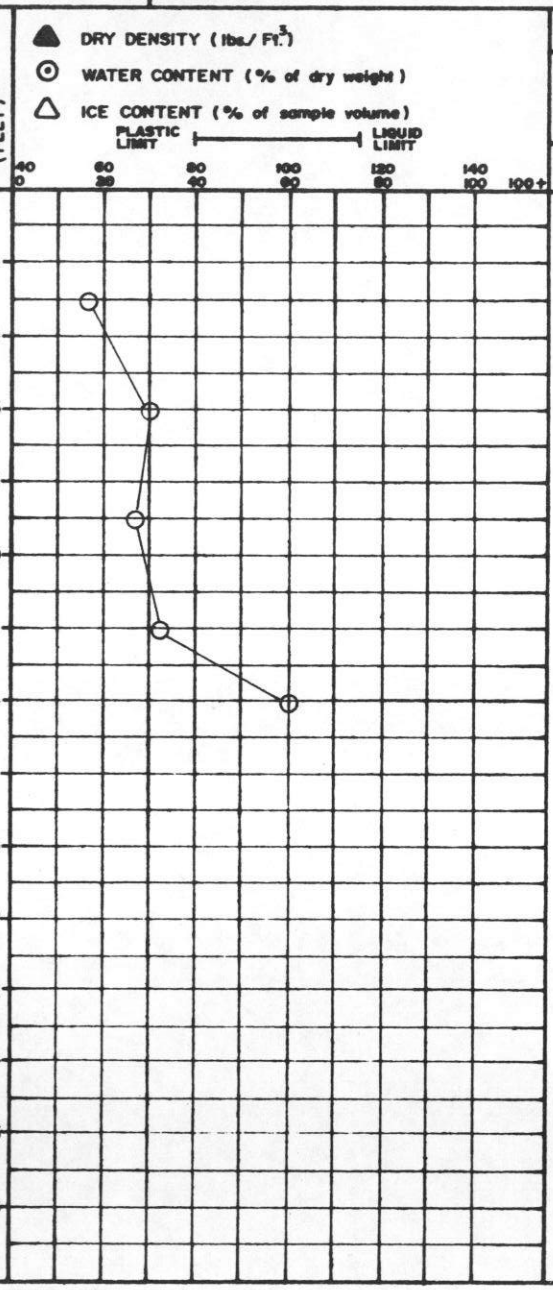
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 28/2/74	AIRPHOTO NO. A 23410-114	CHAINAGE. 4048+00	OFFSET. ℄	TEST HOLE 762
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 800

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
						1.5'								
2														
						CLAY -Silty Sandy Pebbles & rock chips to 4' Med plastic		Moderate					Wet	
4														
6								Ice					Wet	
8					CI									
													Wet	
10								Vc - Vr						
12							F						Wet	
14													Wet	
16														
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

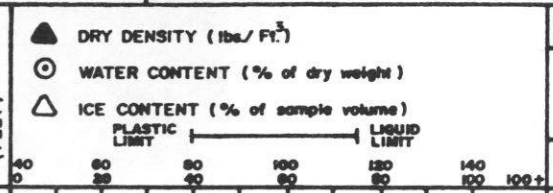
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 28/2/74	AIRPHOTO NO. A 23410-114	CHAINAGE. 4036+00	OFFSET. ℄	TEST HOLE 763
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 800

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'								
						CLAY -Silty Sandy Med-high plastic		Moderate					Moist	
4														
6								Ice					Wet	
8					CI			Vc - Vr					Wet	
10					CH									
12							F						Wet	
14								High					Sat.	
16														
18								Ice						
20								Vs						
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

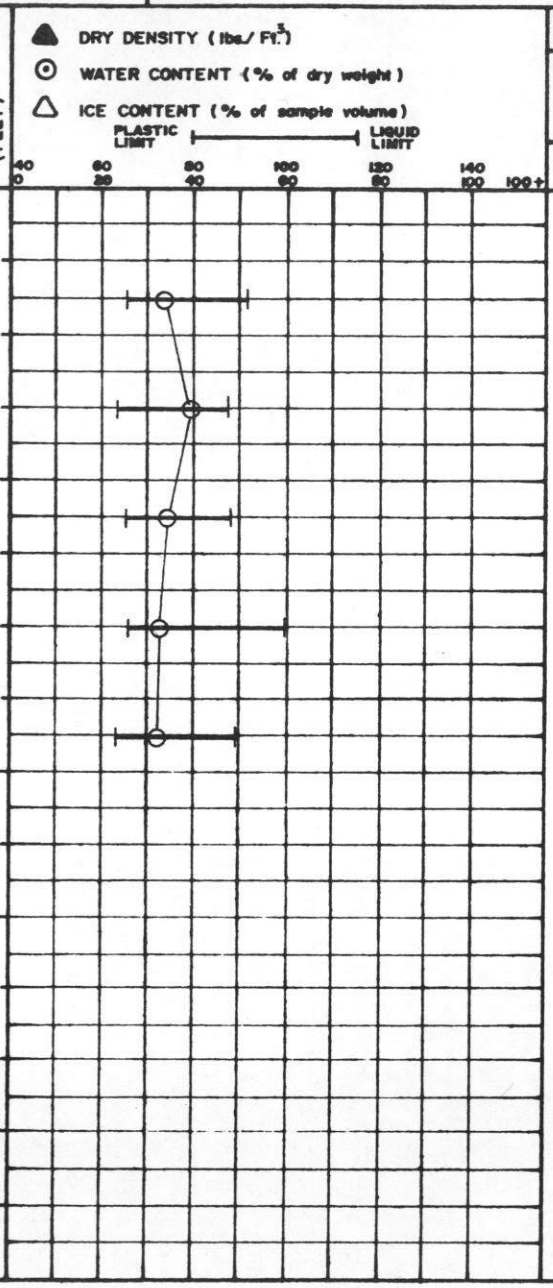
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 28/2/74	AIRPHOTO NO. A 23410-114	CHAINAGE. 4032+00	OFFSET. ℄	TEST HOLE 764
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. ALDERS	ELEV.	MILE 800

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .9'								
2						CLAY -Organics to 4' Silty Med-high plastic								
4								Moderate	-99-		1	0	Moist	
6								Ice	-99-		1	0	Wet	
8					CI				-99-		1	0	Moist-Wet	
10								Vc - Vr						
12					CH		F		-99-		1	0	Moist	
14									-99-		1	0	Moist	
16								High						
18								Ice						
20														
22								Vs						
24								Moderate						
26								Ice						
28														
						30'		Vc - Vr						



BOTTOM OF HOLE - 30'

DS-14-5-74 b

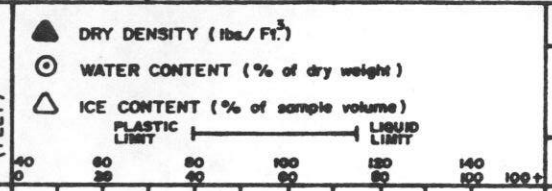
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 28/2/74	AIRPHOTO NO. A 23410-114	CHAINAGE. 4025+00	OFFSET. ℄	TEST HOLE 765
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE 3" DEADWOOD	ELEV.	MILE 800

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.4'								
2														
						CLAY -Silty Sandy Med-high plastic		Moderate					Damp	
4														
								Ice						
6													Wet	
					CI									
8														
					CH			Vc - Vr					Wet	
10														
							F							
12													Wet	
14														
													Moist	
16														
18														
20														
22														
24														
26														
28														
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

BORROW PIT 91

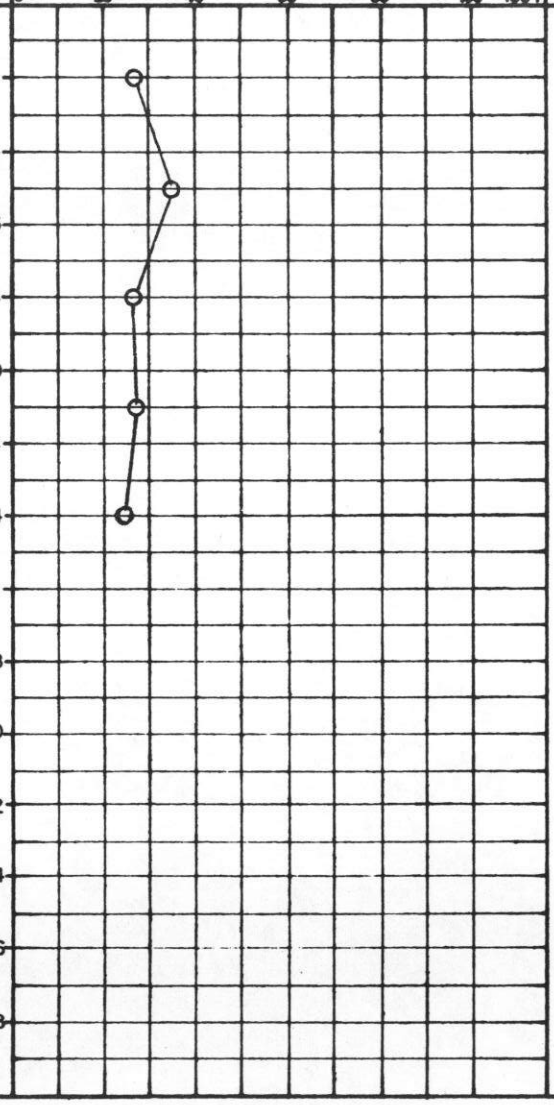
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 1
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. FAIR	VEGETATION. BURNED OUT AREA	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'		Moderate Ice						
2													Wet	
						Clay -Silty Med. Plastic								
4													Sat.	
6					Cl	Silty Sandy	F							
								Vc-Vr						
8						Silty							Wet	
10														
													Wet	
12						Silty Sandy								
14						14'							Wet	
						BOTTOM OF HOLE 14'								
16														
18														
20														
22														
24														
26														
28														



DS-14-5-74 b

BORROW PIT 91

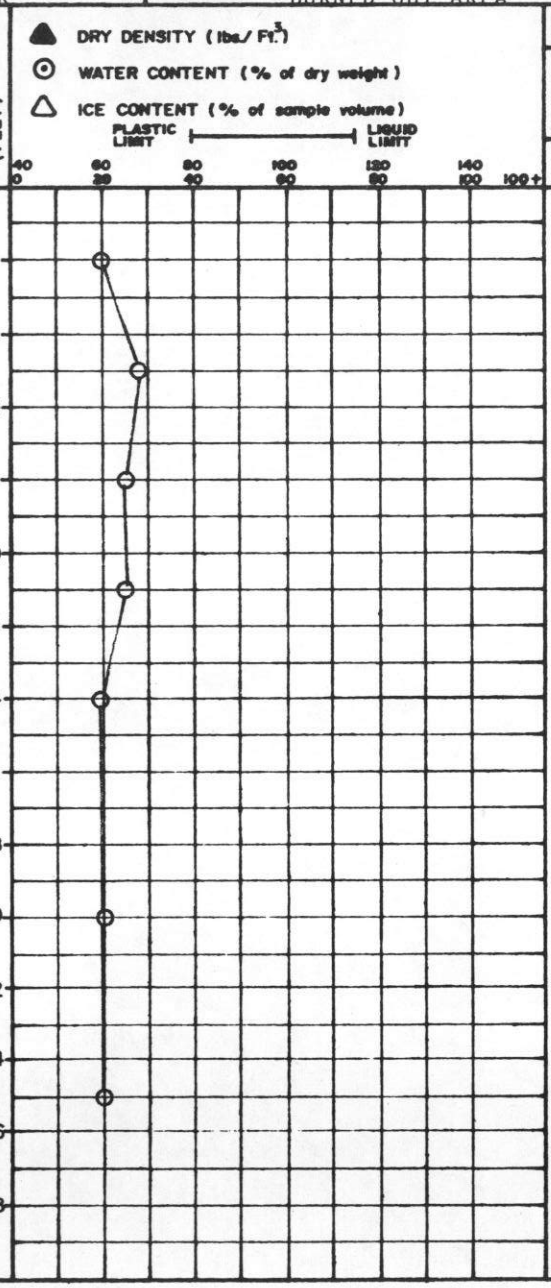
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 2
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. FAIR	VEGETATION. BURNED OUT AREA	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'		Moderate					Moist	
2														
4						Clay -Silty Sandy Few Pebbles Med. Plastic		Ice					Sat.	
6								Vc-Vr						
8							F						Wet	
10					Cl								Wet	
12														
14													Sat.	
16														
18														
20													Wet	
22														
24						25'							Wet	
26						BOTTOM OF HOLE 25'								
28														



DS-14-5-74 b

BORROW PIT 92

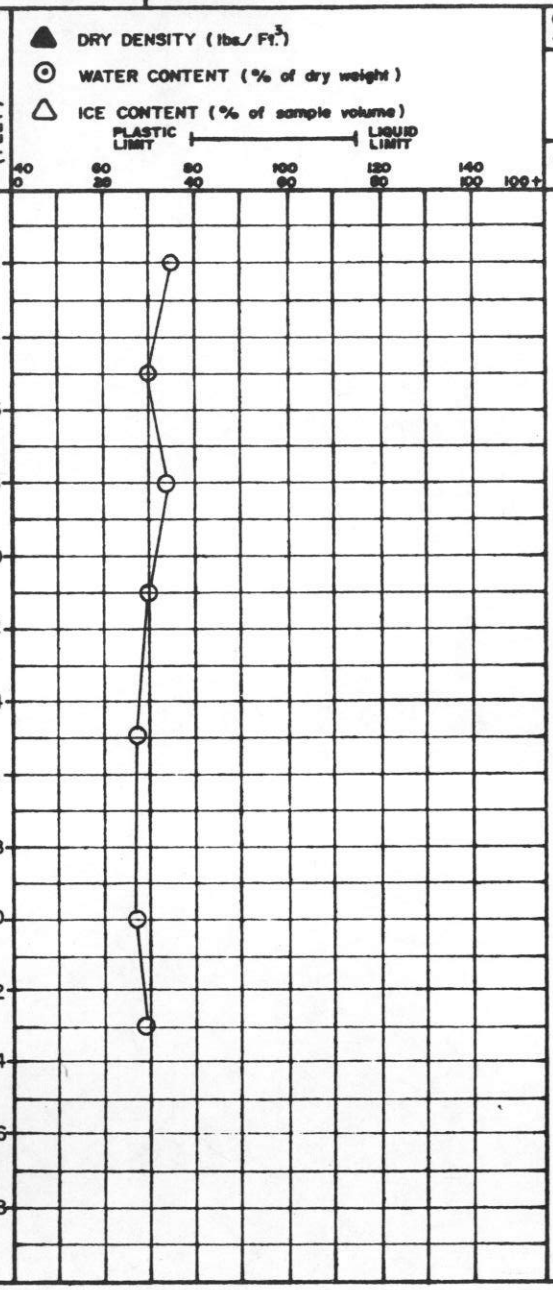
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 1
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2					Cl	Clay -Sandy Silty Pebbles from 5' Med. Plastic		Moderate To High Ice					Sat.	
4													Wet	
6														
8													Sat.	
10						11'							Wet	
12					ML	Silt -Clayey		VS						
14													Wet	
16								Vc-Vr						
18														
20													Moist	
22													Wet	
24						25'								
26						BOTTOM OF HOLE 25'								
28														



DS-14-5-74 b

BORROW PIT 92

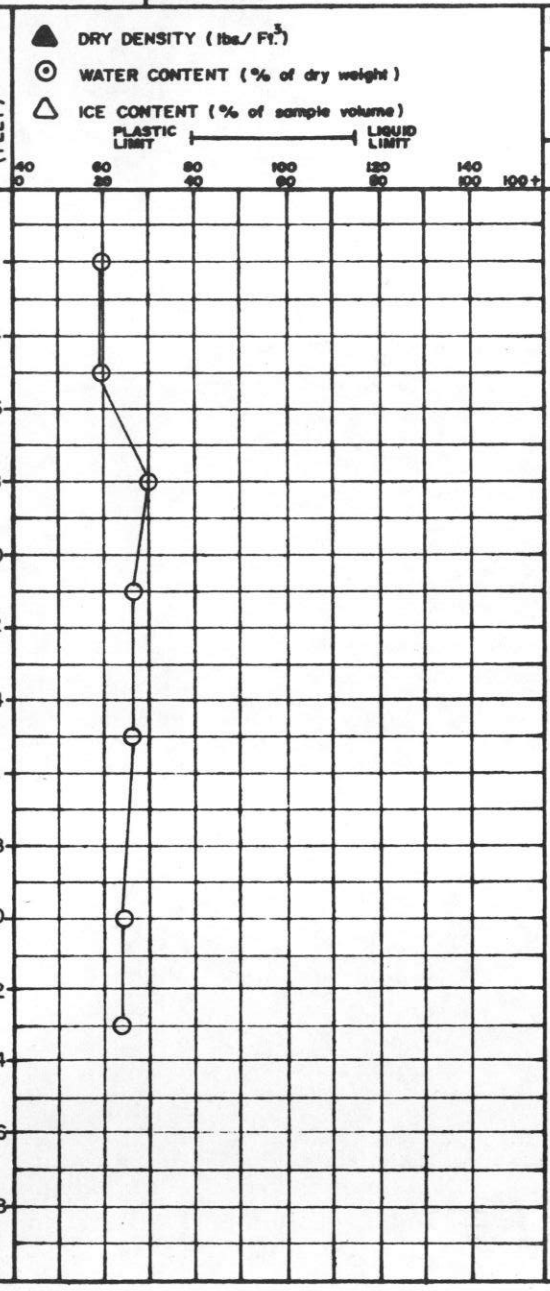
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 2		
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.	MILE		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'							Moist	
					CL	Clay -Sandy Silty Low Plastic								
4													Sat.	
6								High						
8						8'		VS and					Sat.	
10								Moderate						
						Silt -Clayey Low Plastic	F						Wet	
12								Ice						
14					ML									
16								Vc-Vr					Wet	
18														
20													Moist	
22													Moist	
24						25'								
26						BOTTOM OF HOLE 25'								
28														



DS-14-5-74 b

BORROW PIT 92

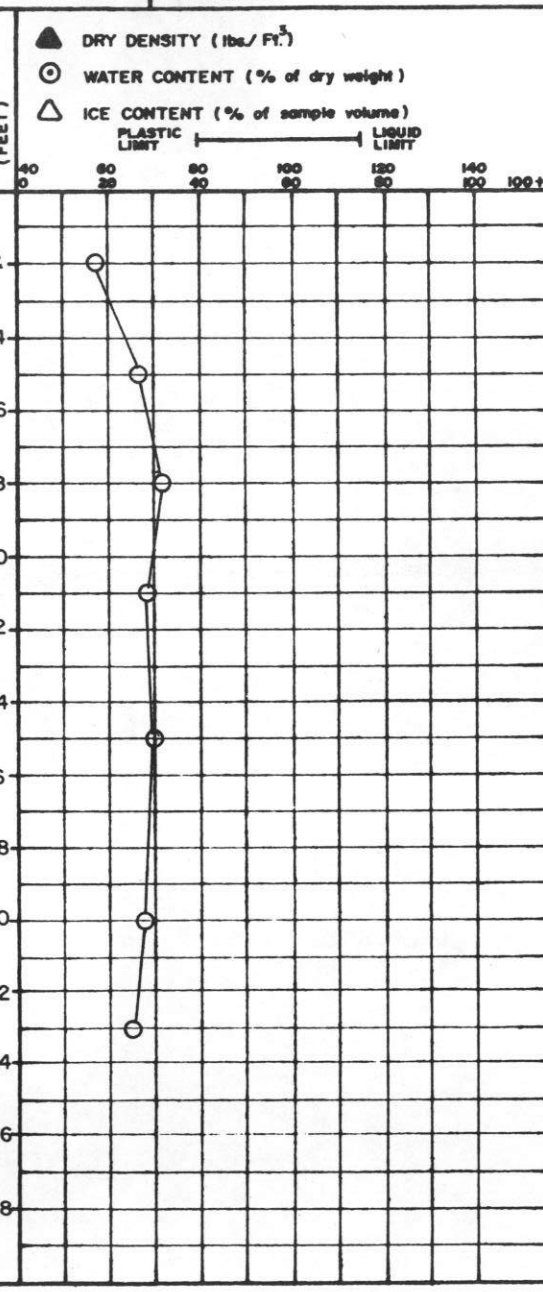
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 3
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
2					Pt	PEAT 2'							Moist	
4					ML	Silt-Clayey		Moderate					Moist	
6					ML	Silt-Clayey-Clay Silty								
8					CL	8'		Ice					Wet	
10						Clay -Silty	F	Vc-Vr					Wet	
12					CL	Low-Med. Plastic								
14													Wet	
16														
18					Cl									
20													Wet	
22					CL								Wet	
24						25'								
26						BOTTOM OF HOLE 25'								
28														



DS-14-5-74 b

BORROW PIT 92

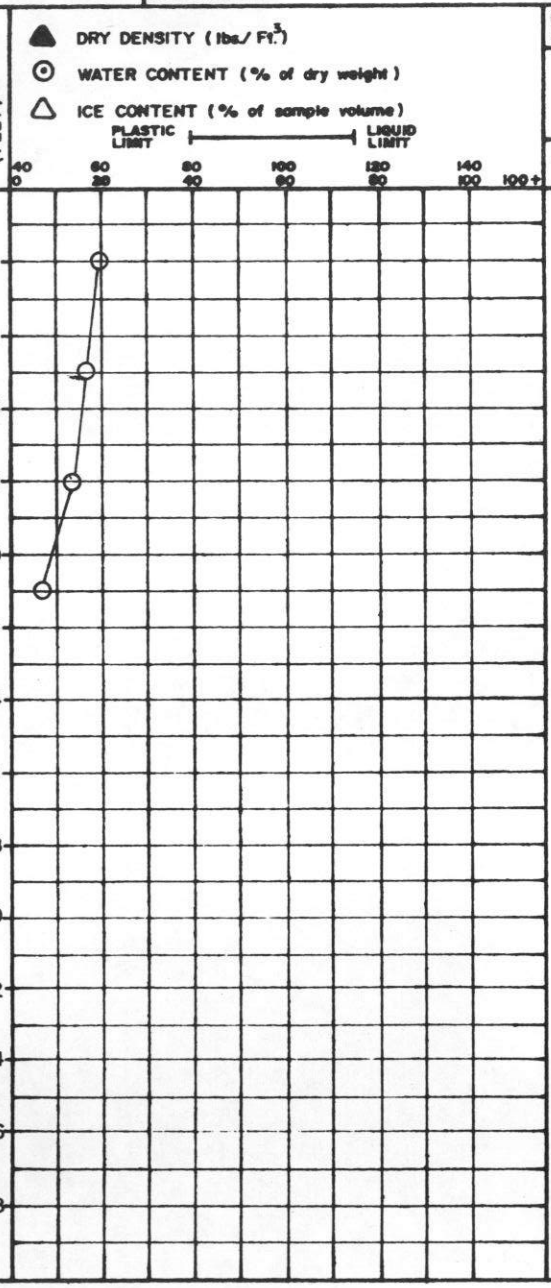
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE	4
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE	

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2					Cl	Clay -Sandy Silty Pebbles 5'	F	Moderate To High VS					Moist	
4													Moist	
6					GC	Gravel-Clay Mixture 8'		Ice						
8													Free Water	
10					GW	Gravel -Sandy 15'		Vc-Vr					Wet	
12														
14														
16														
18						Ice		Ice						
20														
22														
24						25'								
26						BOTTOM OF HOLE 25'								
28														



DS-14-5-74 b

BORROW PIT 93

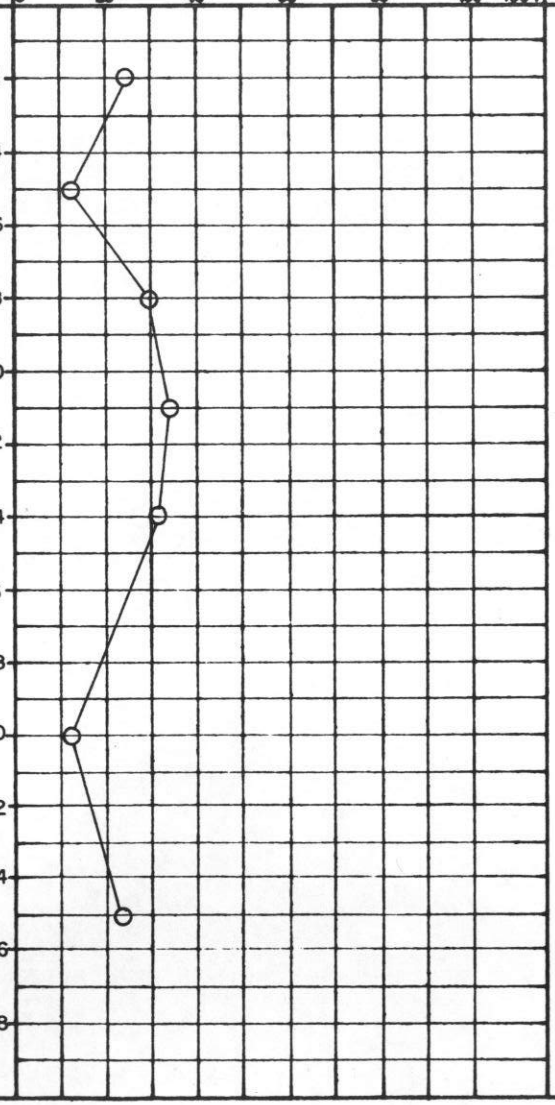
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 2
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. RIDGE	VEGETATION. SPRUCE	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .5								
2					Cl	Clay -Sandy Silty Med. Plastic		Low Ice VX					Moist	
4													Damp	
6						7'	F							
8					SC	Silt-Sandy Clayey		VS					Free Water	
10													Free Water	
12					SM ML	Sand-Silt Mixture		High Ice						
14						14'							Free Water	
16					SM	Sand -Silty-Fine								
18						18'								
						Ice 19'		Ice						
20						20'							Sat.	
					GW	Gravel-Sandy		VS						
22						Ice		Ice						
24					Cl	Clay-Gravelly Silty-Sandy 25'		Vc-Vr					Wet	
26						BOTTOM OF HOLE 25'								
28														



DS-14-5-74 b

BORROW PIT 93

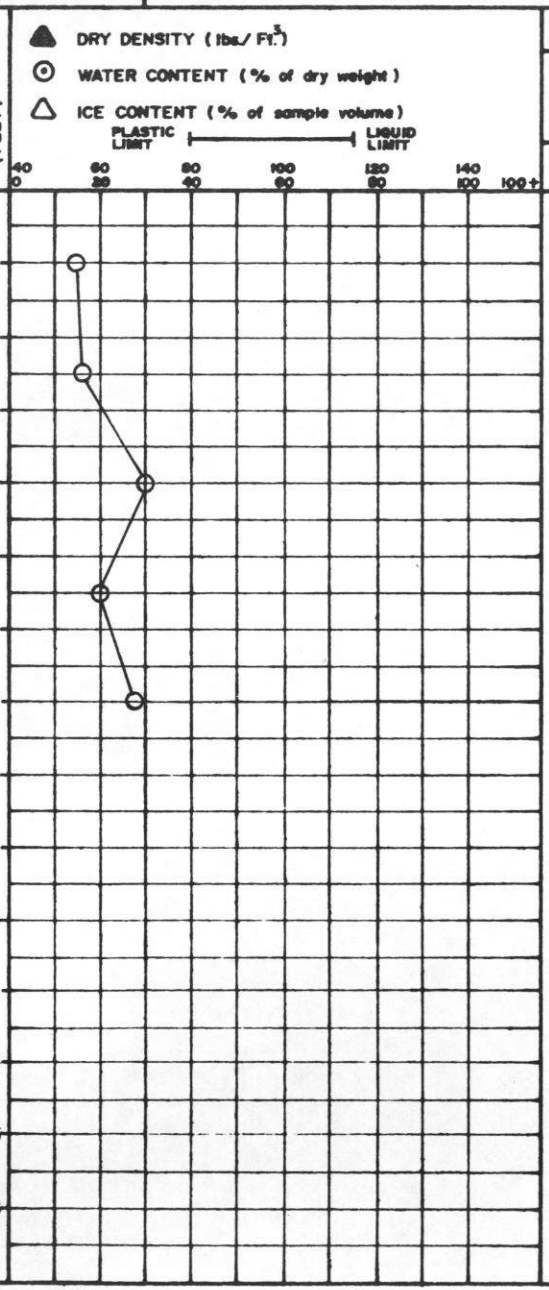
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 4		
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. RIDGE	VEGETATION. SPRUCE
ELEV.	MILE		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2					Cl	Clay-Sandy Silty Pebbles 4'		Moderate To High Ice					Moist	
4					SC	Sand-Gravelly Clayey 8'	F	VS					Sat.	
6														
8					Cl	Clay-Silty Med. Plastic 11'							Wet	
10														
12					SC ML	Sand-Silty Clayey Silt-Sandy Clayey 14'		Vc-Vr					Sat.	
14						BOTTOM OF HOLE 14'							Sat.	
16														
18														
20														
22														
24														
26														
28														



DS-14-5-74 b

BORROW PIT 94

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

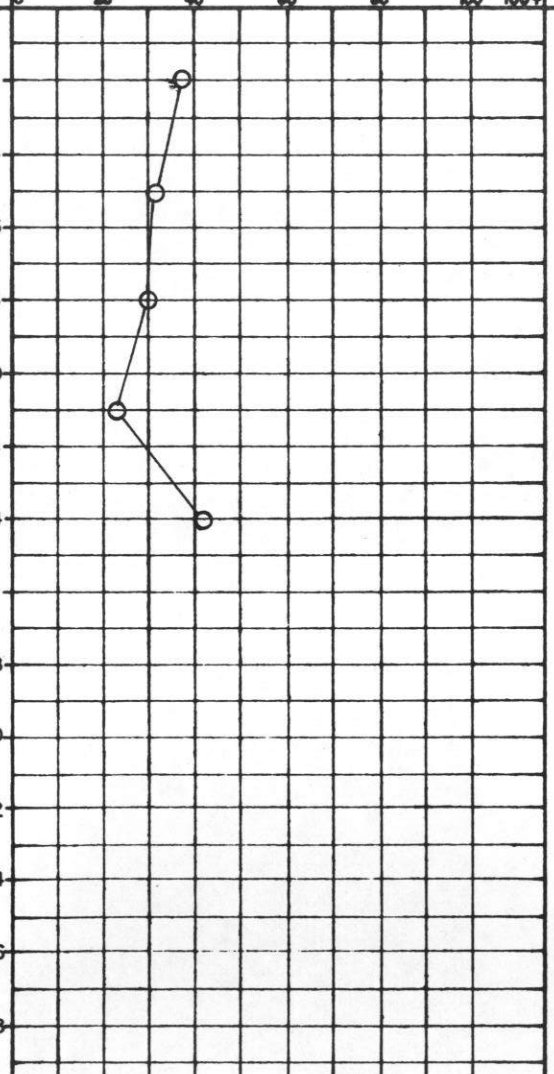
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. IN DIP	VEGETATION. SPRUCE

OFFSET. ELEV. TEST HOLE 1 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2					Cl	Clay-Sandy Silty Low-Med. Plastic	F	Moderate Ice					Moist	
4														
6													Wet	
8						Pebbles		Vc-Vr					Wet	
10						Pebbles							Moist	
12														
14						Gravelly 14'							Wet	
16						BOTTOM OF HOLE 14'								
18														
20														
22														
24														
26														
28														



DS-14-5-74 b

BORROW PIT 94

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

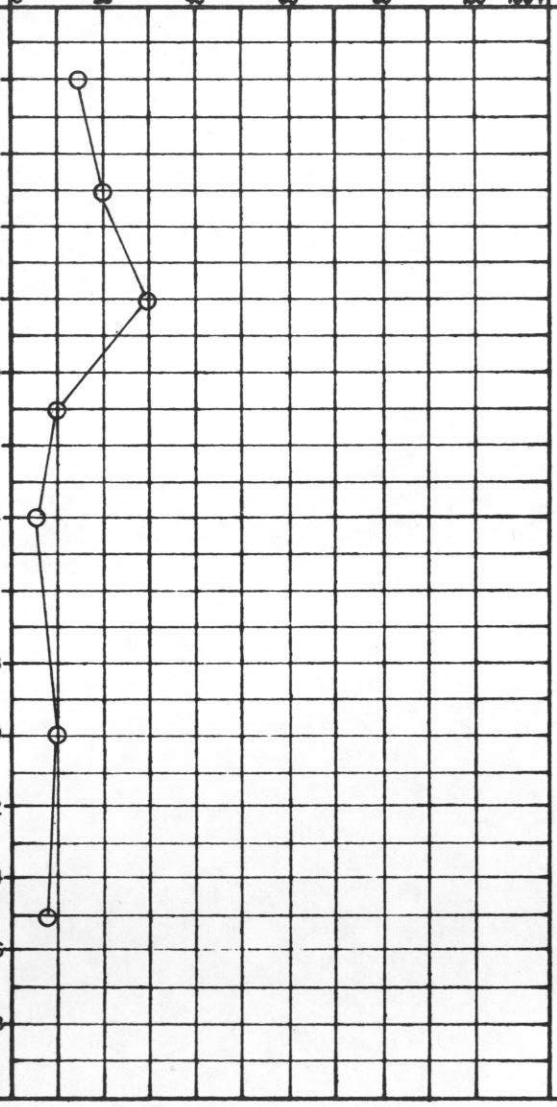
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. RIDGE	VEGETATION. SPRUCE

OFFSET. ELEV. TEST HOLE 2 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .5"								
2					CL	Clay-Silty Sandy Pebbles							Damp	
4						4'								
6					SM	Sand-Silty Clayey		Moderate					Wet	
8					ML SM	Sand-Silt Mixture Pebbles	F	and					Sat.	
10						10'		Low Ice						
12					GW	Gravel-Sandy							Sat.	
14								Vc-Vr					Wet	
16								VX						
18														
20						20'							Moist	
22					SC	Sand-Gravelly Clayey								
24						25'								
26						BOTTOM OF HOLE 25'							Wet	
28														



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BORROW PIT 94

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

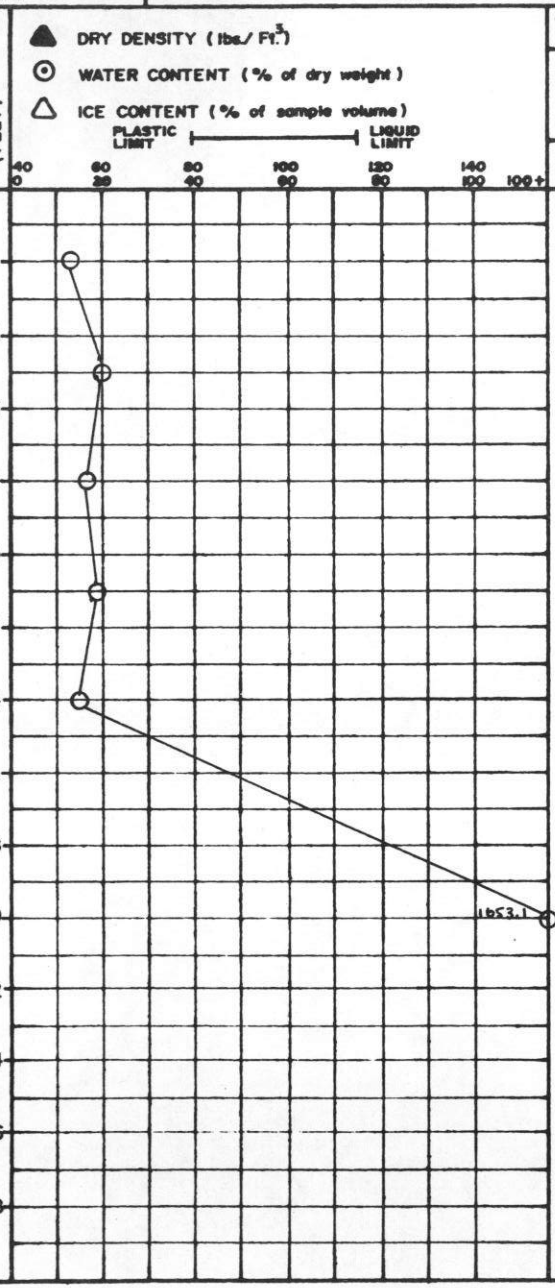
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. RIDGE	VEGETATION. SPRUCE

OFFSET. ELEV. TEST HOLE 3 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					OH	ORGANIC 4"								
2					CL	Clay-Gravelly Silty Sandy Low Plastic	F	Moderate Ice Vc-Vr					Damp	
4														
6													Moist	
8						8'							Sat.	
10					SC	Sand-Clayey Med. Coarse Pebbles		High Ice VS						
12													Free Water	
14													Sat.	
16					SP	Sand								
18														
20						Ice		Ice & SP					Water	
22						22'								
24						BOTTOM OF HOLE 22'								
26														
28														



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BORROW PIT 95

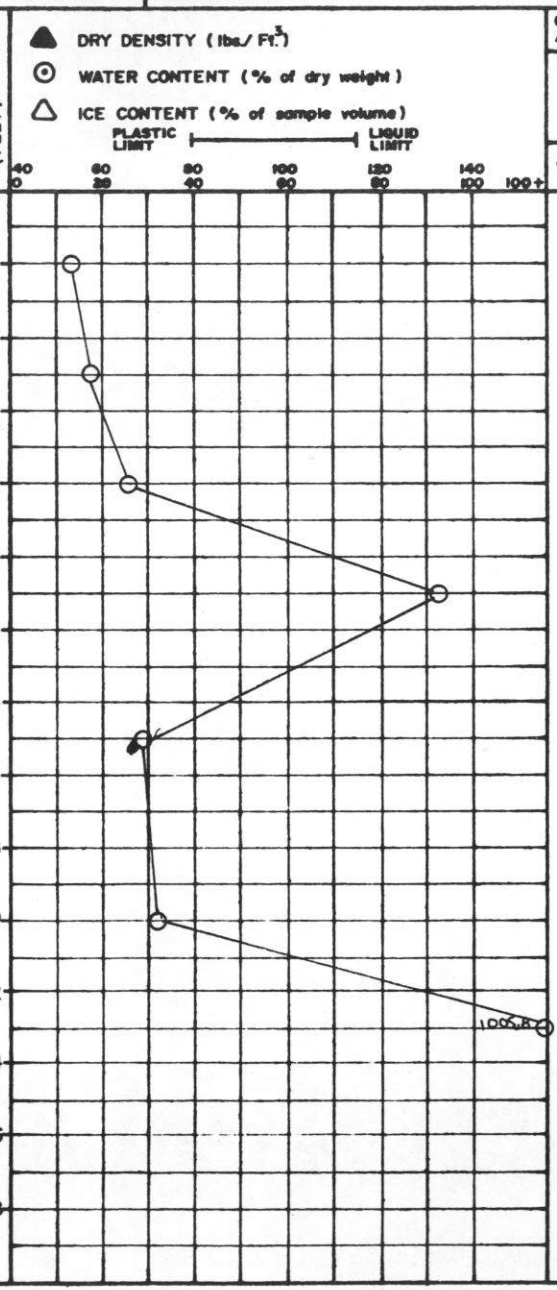
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 8/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 1		
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.	MILE		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'		Moderate					Moist	
					Cl	Clay-Sandy Silty Pebbles Med. Plastic		Ice						
4													Moist	
6							F							
8						8'		Vc-Vr					Wet	
					ML	Silt-Sandy Clayey Pebbles								
10						10'								
						11.5							Free Water	
12					Cl	Clay-Sandy Silty and Ice								
14								Ice & Cl						
						15'							Moist	
16					Cl	Clay -Sandy Silty Pebbles Med. Plastic		Moderate						
18							F	Ice						
20													Wet	
22								Vc-Vr					Water	
						23'								
24						Ice		Ice						
						25'								
26						BOTTOM OF HOLE 25'								
28														



DS-14-5-74 b

BORROW PIT 95

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

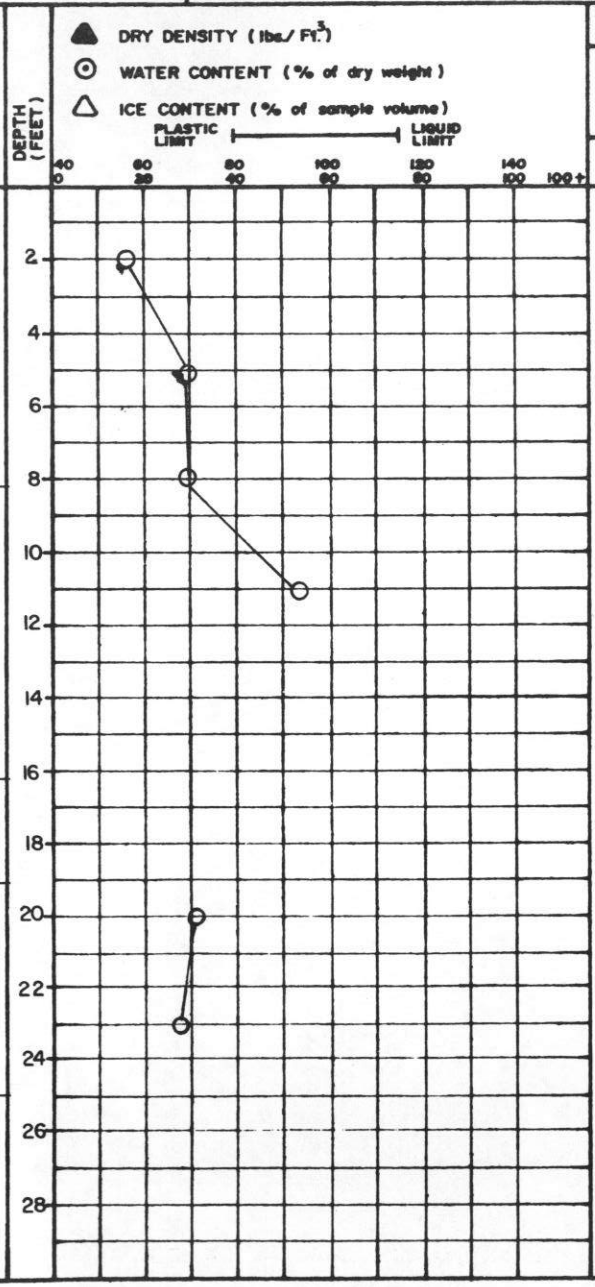
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 8/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV. TEST HOLE 2 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2'		Moderate					Moist	
					Cl	Clay -Sandy Silty Pebbles from 5' Med. Plastic Gravelly @ 8'	F	Ice Vc-Vr High Ice					Wet Sat.	
						Pebbles		VS					Free Water	
						Ice		Ice						
					Cl	Clay-Sandy Silty Gravelly Med. Plastic Pebbles 25'	F	Moderate Ice Vc-Vr					Sat. Wet	
						BOTTOM OF HOLE 25'								



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BORROW PIT 95

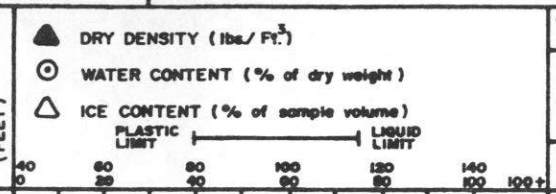
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 8/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 8
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'							Moist	
						Clay		Moderate						
4						-Sandy		Ice						
						Silty							Moist	
						Med. Plastic								
6					Cl	Pebbles								
8													Moist	
								Vc-Vr						
10														
							F						Moist	
12						Gravelly								
14														
													Moist	
16						Sandy Silty								
18														
20						20'							Sat.	
					GC	Gravel-Clayey		High Ice						
22													Sat.	
						Gravel-Clay Mix		VS						
24														
						25'								
26						BOTTOM OF HOLE 25'								
28														



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BORROW PIT 96

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

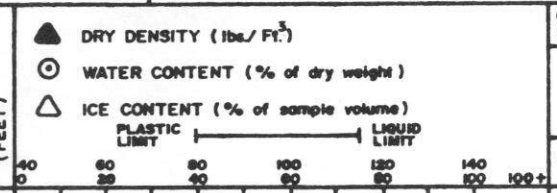
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 8/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV. TEST HOLE 1 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1"								
2						Clay -Silty Sandy Gravelly Med. Plastic		Low Ice					Moist	
4								VX						
6													Moist	
8							F						Moist	
10														
12					Cl	Pebbles							Moist	
14								Moderate Ice					Moist	
16														
18								Vc-Vr						
20						Gravelly							Wet	
22														
24						25'		High Ice VS					Free Water	
26						BOTTOM OF HOLE 25'								
28														



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BORROW PIT 96

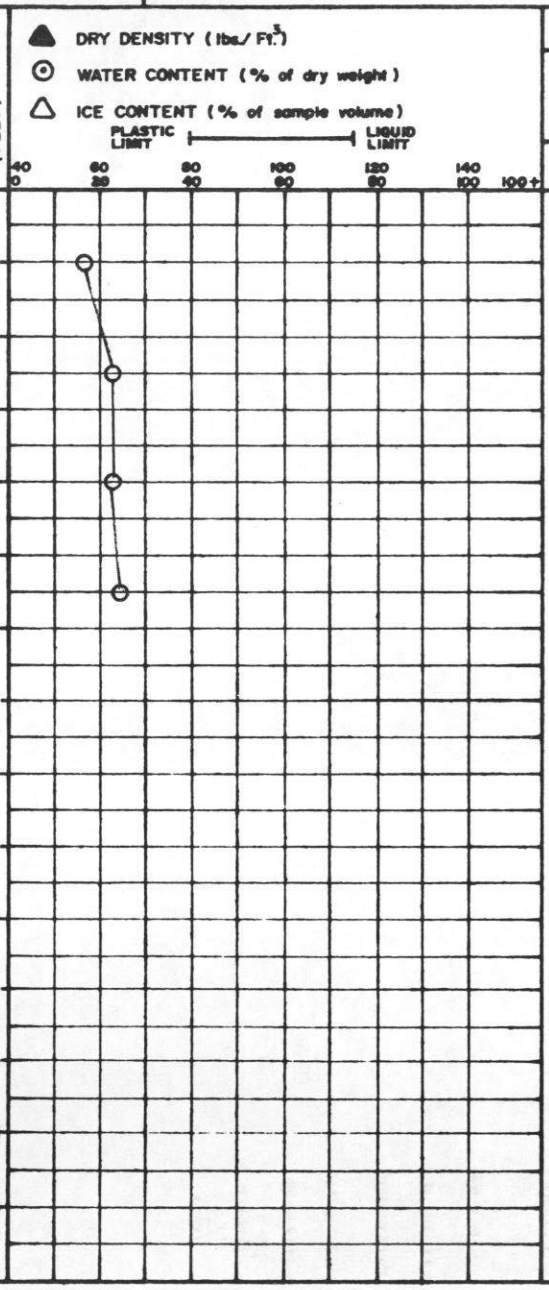
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 8/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 2
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT									
2						2'		Moderate	2					Moist	
						Clay									
4						-Sandy Silty Gravelly		Ice	4					Moist	
6					Cl	Med. Plastic		Vc-Vr	6						
8							F		8					Moist	
10									10						
12									12					Wet	
14						14'			14						
						BOTTOM OF HOLE 14'									
16									16						
18									18						
20									20						
22									22						
24									24						
26									26						
28									28						



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BORROW PIT 96

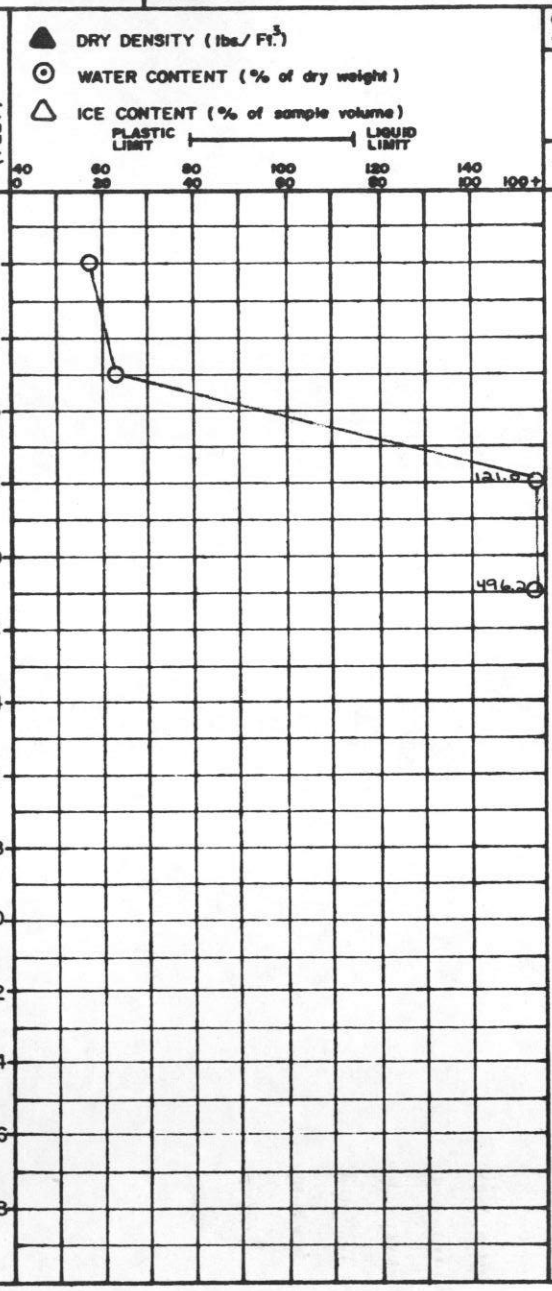
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 8/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 3
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		Moderate						
2						Clay		Ice					Moist	
4						-Sandy Silty Pebbles		Vc-Vr					Wet	
6					Cl	Gravelly	F							
8						Gravelly		High Ice					Free Water	
10								VS					Free Water	
12														
14						14'								
						BOTTOM OF HOLE 14'								
16														
18														
20														
22														
24														
26														
28														



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BORROW PIT 96

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 8/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.

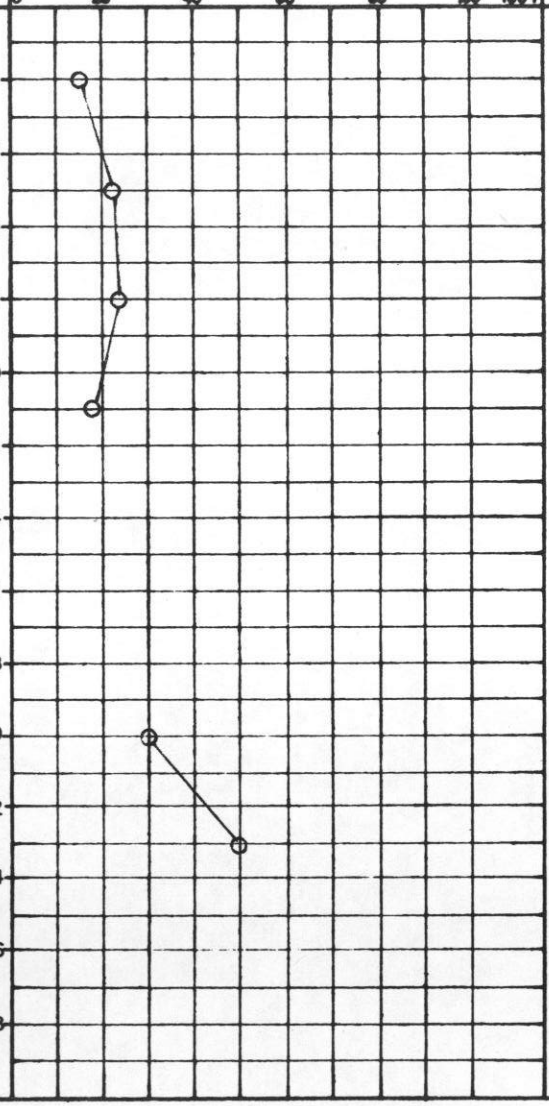
OFFSET. ELEV.

TEST HOLE 4

MILE

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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT 1'							
2					Cl	Clay-Silty Gravelly Sandy Pebbles Med. Plastic	F	Moderate Ice Vc-Vr					Moist
4													
6													Wet
8						8'							Free Water
10					GC	Gravel -Sandy Clayey		VS High Ice					Free Water
12													
14													
16						Ice		Ice					
18													
20					Cl	Clay -Sandy Silty Gravelly Med. Plastic		High Ice					Sat.
22						Pebbles		VS					
24						25'							Free Water
26						BOTTOM OF HOLE 25'							
28													



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BORROW PIT 96

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

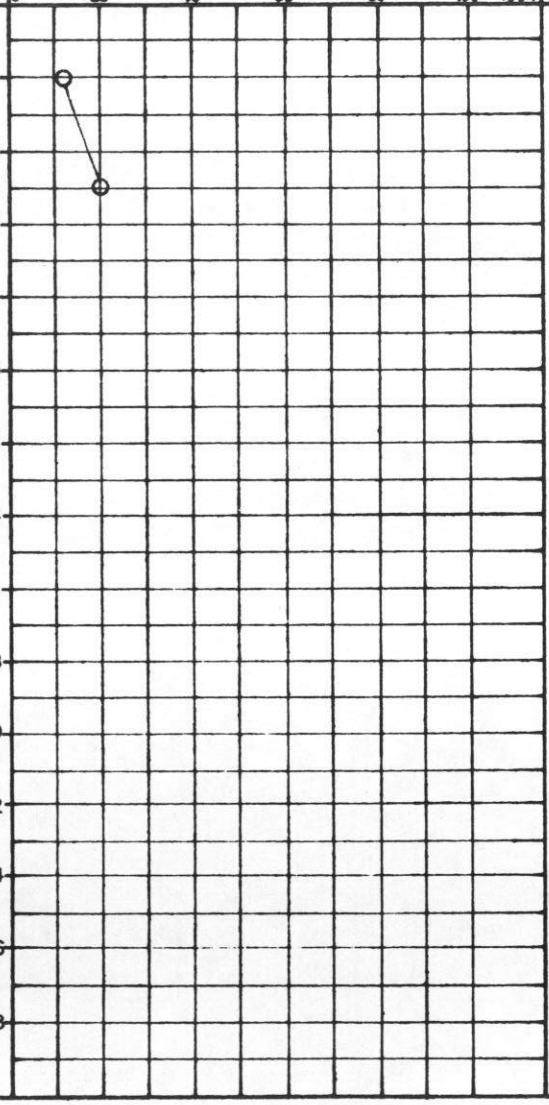
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 8/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 5
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE

DRY DENSITY (lbs./Ft.³) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		Low to						
2					CL	Clay-Gravelly Silty		Moderate					Moist	
4					Cl	Low-Med. Plastic Sandy	F	Ice VX					Wet	
6						7'		Vc-Vr						
8						Ice		Ice						
10														
12														
14						14'								
16						BOTTOM OF HOLE 14'								
18														
20														
22														
24														
26														
28														



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BORROW PIT 96

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

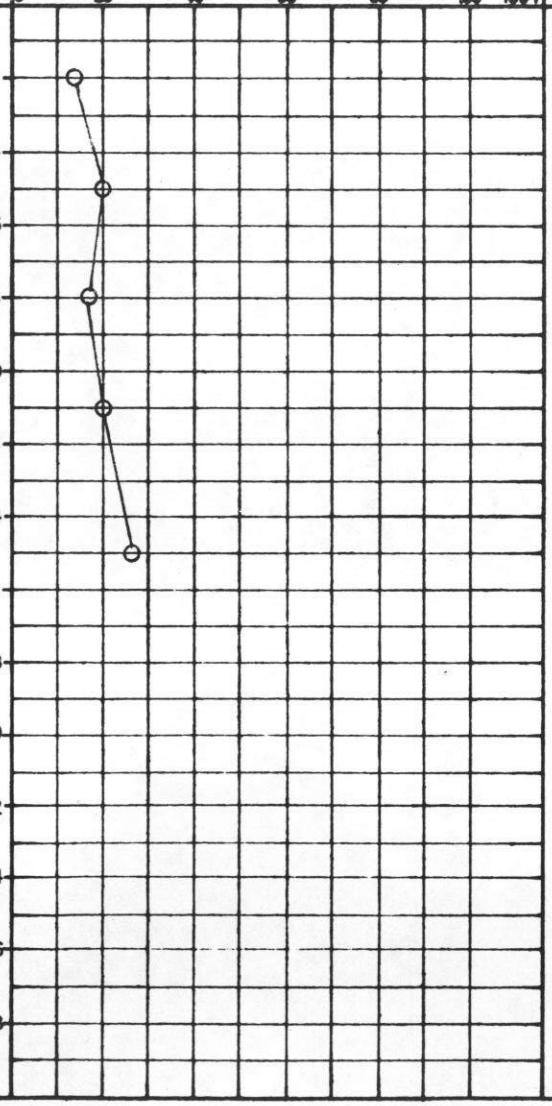
SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 8/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE	6
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE	

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2					Cl	Clay -Sandy Silty Pebbles Med. Plastic		Moderate Ice					Moist	
4														
6													Moist	
8							F						Moist	
10								Vc-Vr						
12													Moist	
14													Wet	
16														
18														
20														
22														
24						25'								
26						BOTTOM OF HOLE 25'								
28														

▲ DRY DENSITY (lbs./Ft.³)
⊙ WATER CONTENT (% of dry weight)
△ ICE CONTENT (% of sample volume)

PLASTIC LIMIT ⊢——⊣ LIQUID LIMIT



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BORROW PIT 96

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

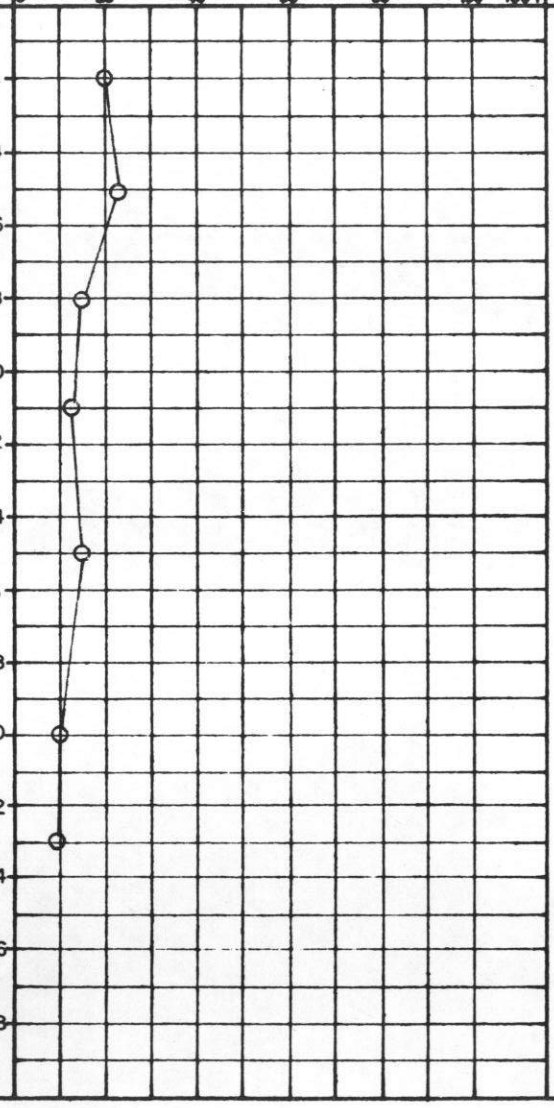
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 8/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV. TEST HOLE 7 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2						Clay-Silty-Org. to 4'		Moderate					Moist	
4						Sandy		and						
						Gravelly 4'-17'							Moist	
6						Med. Plastic								
								Low Ice						
8													Moist	
10					Cl		F							
													Moist	
12														
14														
								Vc-Vr					Moist	
16														
								VX						
18														
20						20'							Wet	
					GC	Gravel-Clayey Sandy								
22													Wet	
24						25'								
26						BOTTOM OF HOLE 25'								
28														



DS-14-5-74 b

BORROW PIT 97

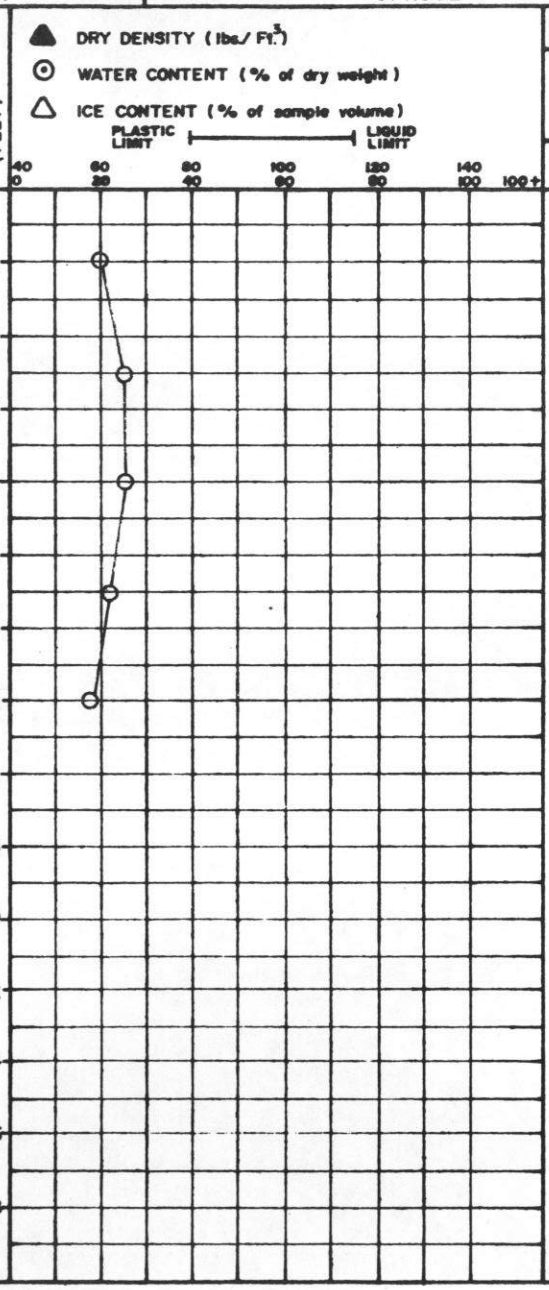
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 8/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 1		
TECH. PRONYCH	RIG.	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE
ELEV.	MILE		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'								
2						Clay -Silty Sandy Pebbles		Moderate Ice					Moist	
4					Cl									
6					CH	Med.-High Plastic	F						Wet	
8								Vc-Vr					Wet	
10													Moist	
12														
14						14'							Moist	
16						BOTTOM OF HOLE 14'								
18														
20														
22														
24														
26														
28														



DS-14-5-74 b

BORROW PIT 97

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

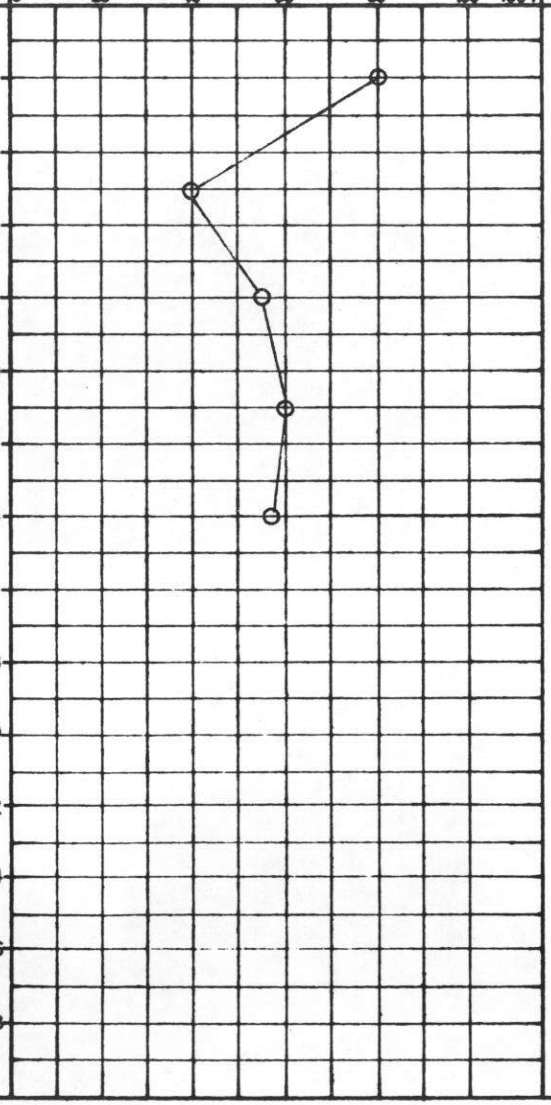
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 8/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE

OFFSET. ELEV. TEST HOLE 2 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2'								
						Clay -Silty Sandy Pebbles 14'	F	VS High Ice						
						BOTTOM OF HOLE 14'								



Free Water
Free Water
Free Water
Free Water
Free Water

DS-14-5-74 b

BORROW PIT 98

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

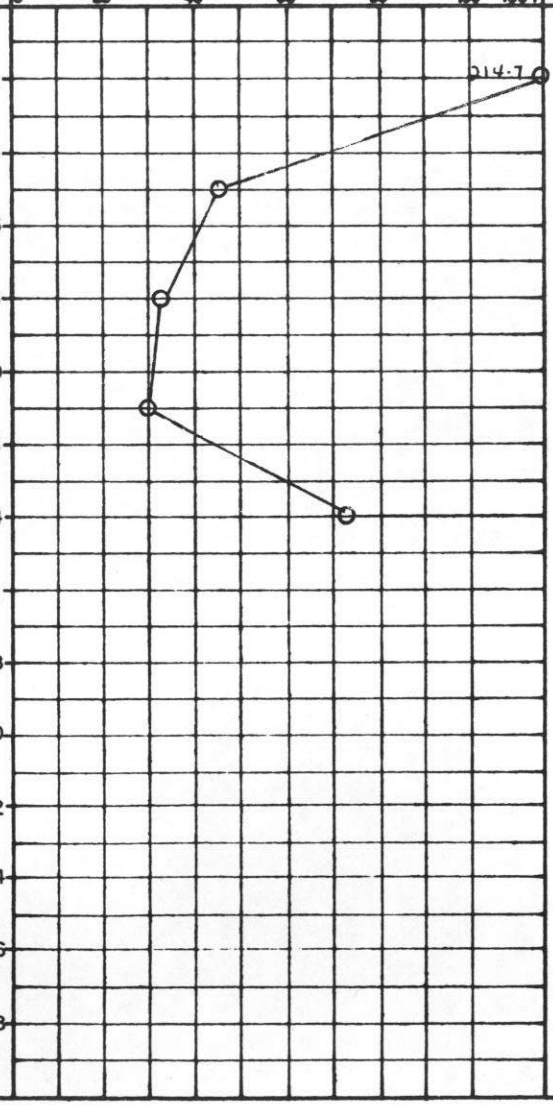
FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. LEVEL	VEGETATION. SPRUCE MAX.: 6"	ELEV.

TEST HOLE: 1

MILE:

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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT 2'							Free Water
					CL	Clay-Organic to 4' Sandy-Silty Pebbles Low-Med. Plastic	F	VS					Sat.
					Cl	Gravelly		High Ice					Wet
						Pebbles 14'							Wet
						BOTTOM OF HOLE 14'							Free Water



DS-14-5-74 b

BORROW PIT 98

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

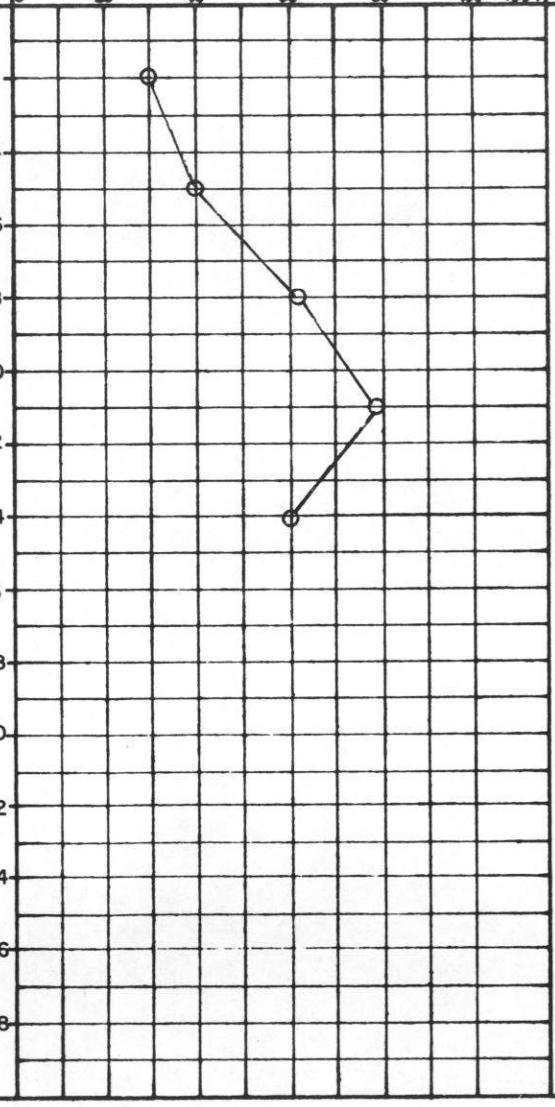
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. LEVEL	VEGETATION. SPRUCE MAX.

OFFSET. ELEV. TEST HOLE 2 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'								
2					Cl	Clay -Silty Sandy Med. Plastic		VS					Free Water	
4														
6													Free Water	
8						Silty	F	High Ice					Free Water	
10													Free Water	
12						Silty								
14						14'							Free Water	
16						BOTTOM OF HOLE 14'								
18														
20														
22														
24														
26														
28														



DS-14-5-74 b

BORROW PIT 98

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

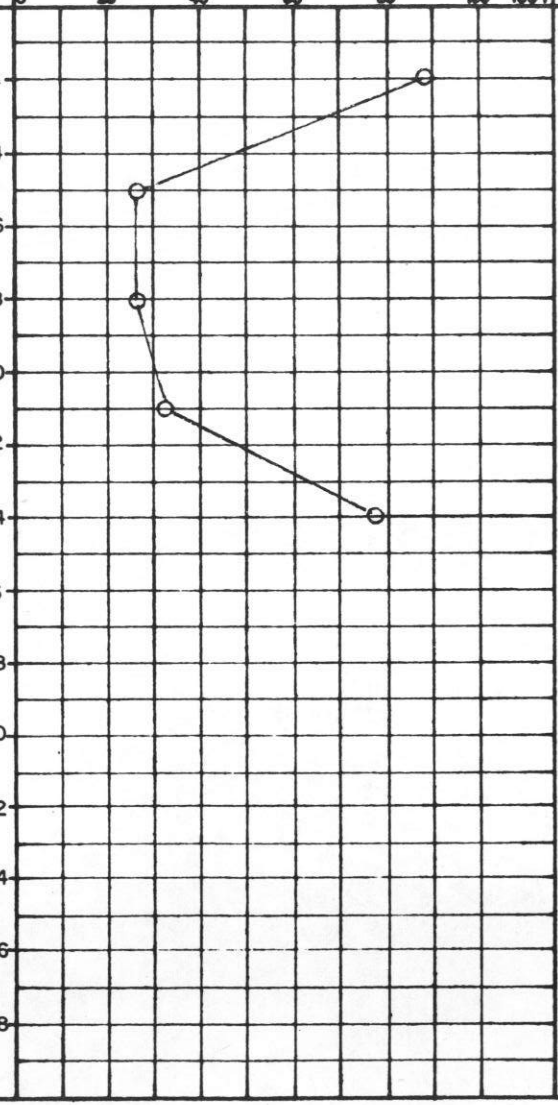
SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 6/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. LEVEL	VEGETATION. SPRUCE	ELEV.

TEST HOLE: 3

MILE:

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'								
2					CL	Clay-Silty Sandy Ice		Ice & Cl					Free Water	
4														
6						Clay -Silty Sandy		High Ice					Wet	
8					Cl	Pebbles Med. Plastic	F	VS					Wet	
10														
12													Sat.	
14						High Ice 14'		High Ice					Free Water	
16						BOTTOM OF HOLE 14'								
18														
20														
22														
24														
26														
28														



DS-14-5-74 b

BORROW PIT 99

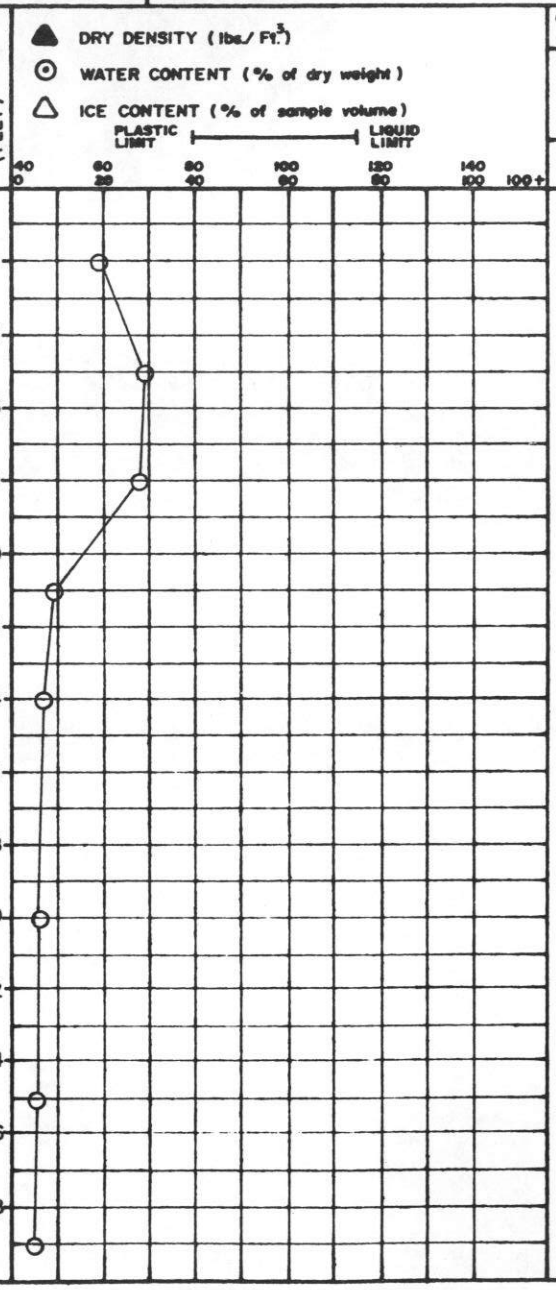
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 7/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.	OFFSET.	TEST HOLE 1
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE	ELEV.	MILE 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1.5'		Moderate							
2						CLAY -Sandy Silty Med. plastic		Ice	2					Moist	
4									4						
6					CI			Vc - Vr	6					Wet	
8						Soft sand & Siltstone fragments @ 8'-10'			8					Sat.	
10						—10'			10						
12						SILTSTONE -Sandstone very soft Soft-hard	F		12					Moist	
14									14					Damp	
16								Frozen	16						
18								Nbn	18						
20									20					Damp	
22						Soft-med. hard			22						
24									24						
26									26					Humid	
28									28						
						—29'								Humid	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 99

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

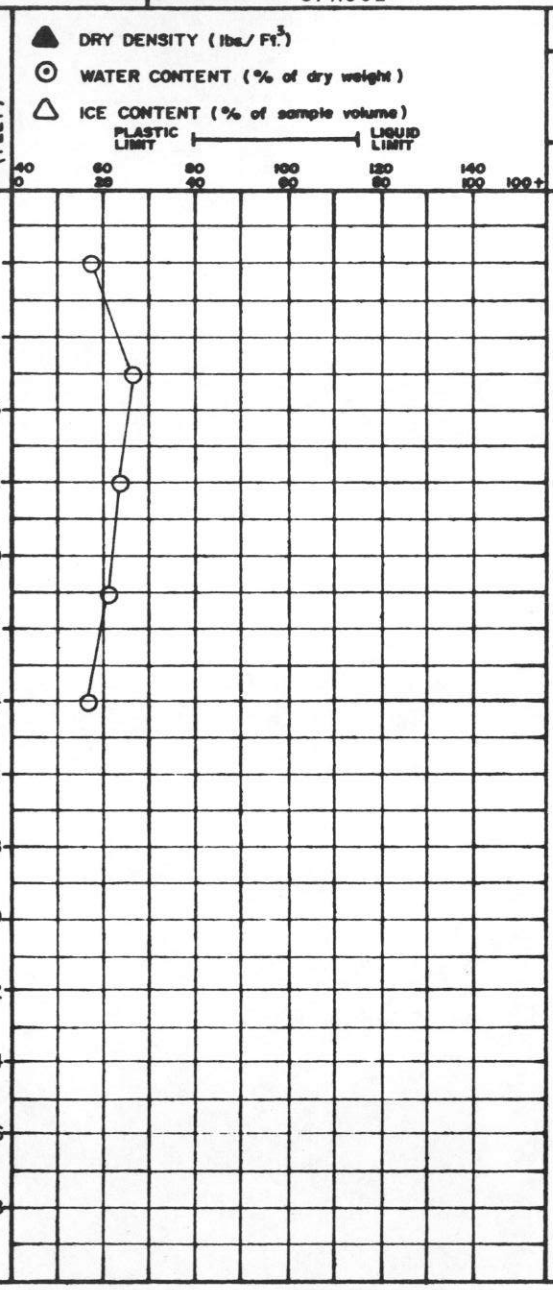
SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 7/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.	OFFSET.
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE	ELEV.

TEST HOLE: 2

MILE: 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'		Moderate						Useable from 1.5'
2						CLAY							Moist	
						-Sandy								
						Silty		Ice						
4						Pebbles								
						Till							Wet	
6						Med. plastic								
					CI									
8							F						Moist	
10								Vc - Vr						
													Moist	
12														
14						14'							Moist	
						BOTTOM OF HOLE - 14'								
16														
18														
20														
22														
24														
26														
28														



DS-14-5-74 b

BORROW PIT 99

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

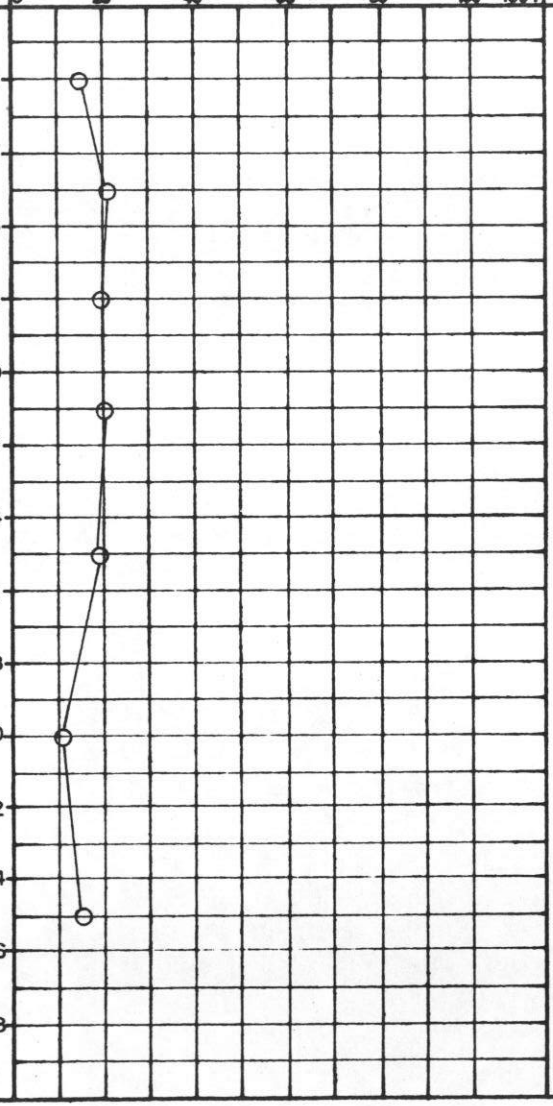
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 7/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.	OFFSET.	TEST HOLE 3
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE	ELEV.	MILE 829.2

▲ DRY DENSITY (lbs./Ft.³)
⊙ 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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'								Useable from 1'
2					CI	CLAY -Sandy Silty Pebbles from 8' Till Med. plastic	F	Moderate Ice Vc - Vr					Moist	
4														
6													Wet	
8													Moist	
10													Wet	
12														
14													Moist	
16														
18														
20													Moist	
22														
24														
						—25'							Moist	
26						BOTTOM OF HOLE - 25'								
28														

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BORROW PIT 99

DEPARTMENT OF PUBLIC WORKS, CANADA
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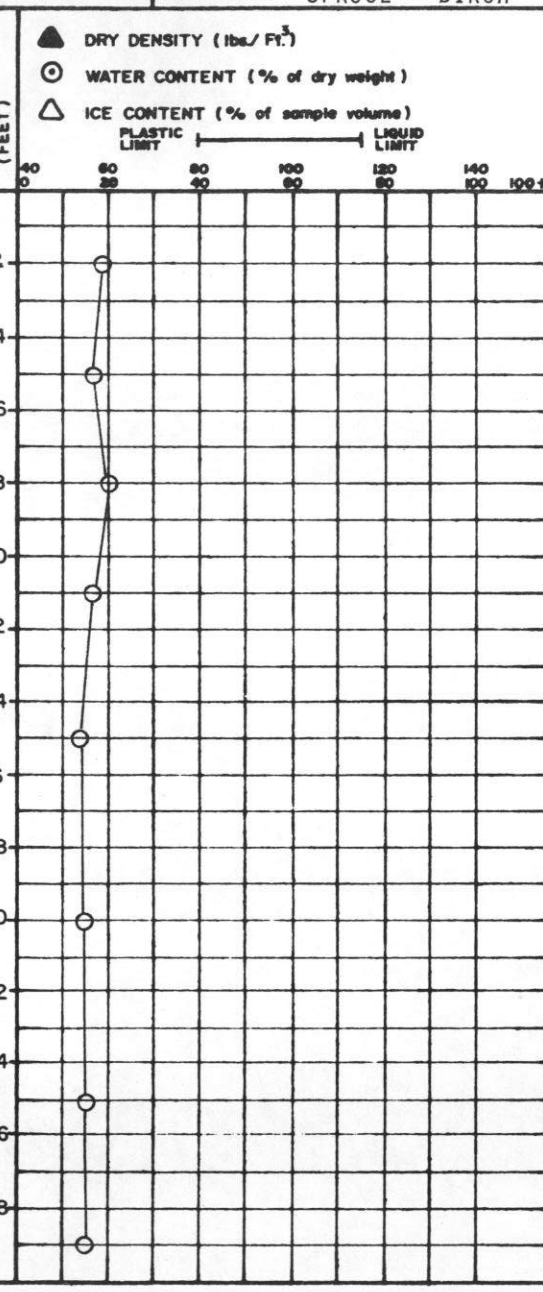
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 7/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.	OFFSET.	TEST HOLE 4
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE - BIRCH	ELEV.	MILE 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		Moderate						Useable from 1'
2						CLAY -Sandy Silty Pebbles Med. plastic Till		To					Moist	
4								Low					Moist	
6														
8													Moist	
10					CI		F	Ice					Moist	
12								Vc - Vr						
14													Moist	
16														
18								Vx						
20													Moist	
22														
24													Moist	
26														
28						29'							Moist	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 99

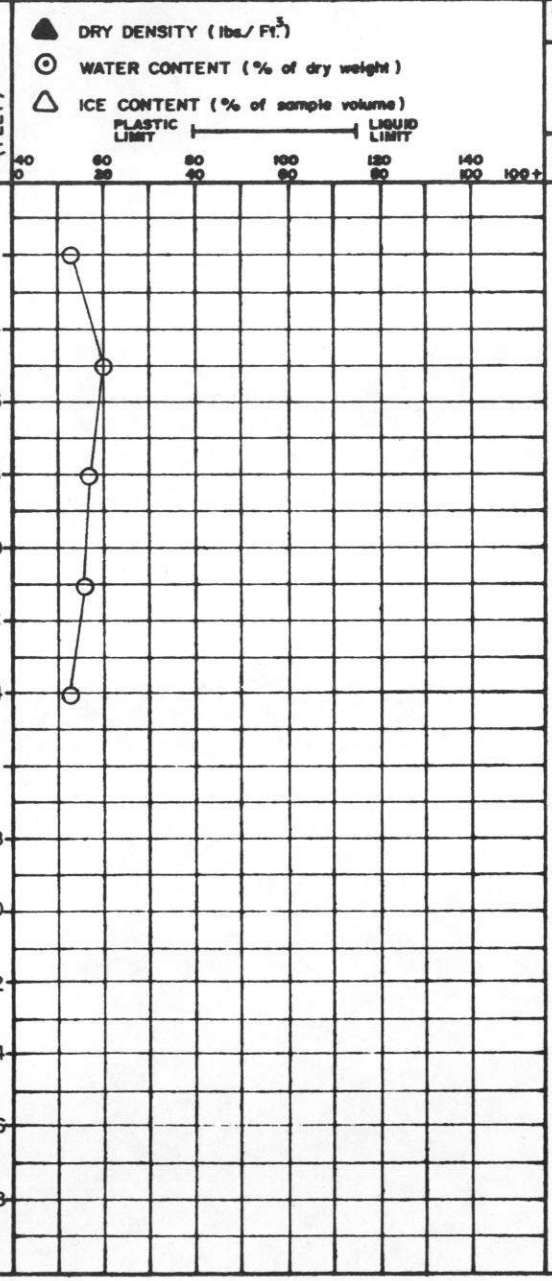
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 7/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.	OFFSET.	TEST HOLE 5
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE - BIRCH	ELEV.	MILE 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		Low						
2						CLAY							Moist	
						-Sandy		To						
4						Silty								
						Pebbles								
						Med. plastic		Moderate					Moist	
6						Till								
								Ice						
8					CI		F						Moist	
								Vx						
10														
													Moist	
12								Vc - Vr						
14						14'							Moist	
						BOTTOM OF HOLE - 14'								
16														
18														
20														
22														
24														
26														
28														



DS-14-5-74 b

BORROW PIT 99

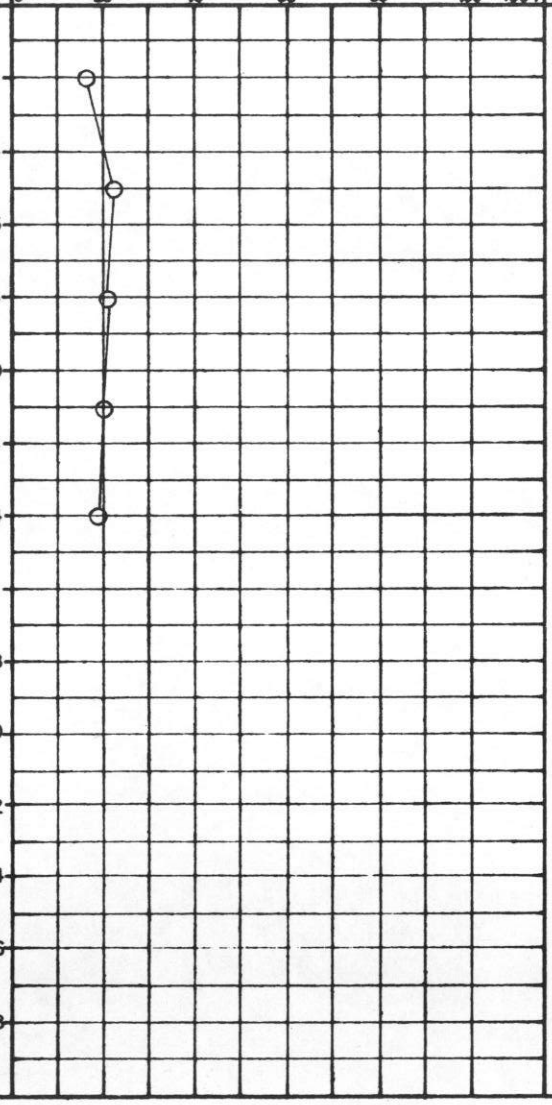
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 7/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.	OFFSET.	TEST HOLE 6
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE - BIRCH	ELEV.	MILE 829.2

DRY DENSITY (lbs./Ft.³) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1½'		Moderate						Useable from 1.5'
2						CLAY							Moist	
						-Sandy		Ice						
4						Silty								
						Pebbles from 8'							Wet	
6						Till								
						Med. plastic	F							
8					CI								Moist	
10								Vc - Vr						
													Moist	
12														
14						—14'							Moist	
						BOTTOM OF HOLE - 14'								
16														
18														
20														
22														
24														
26														
28														

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BORROW PIT 99

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

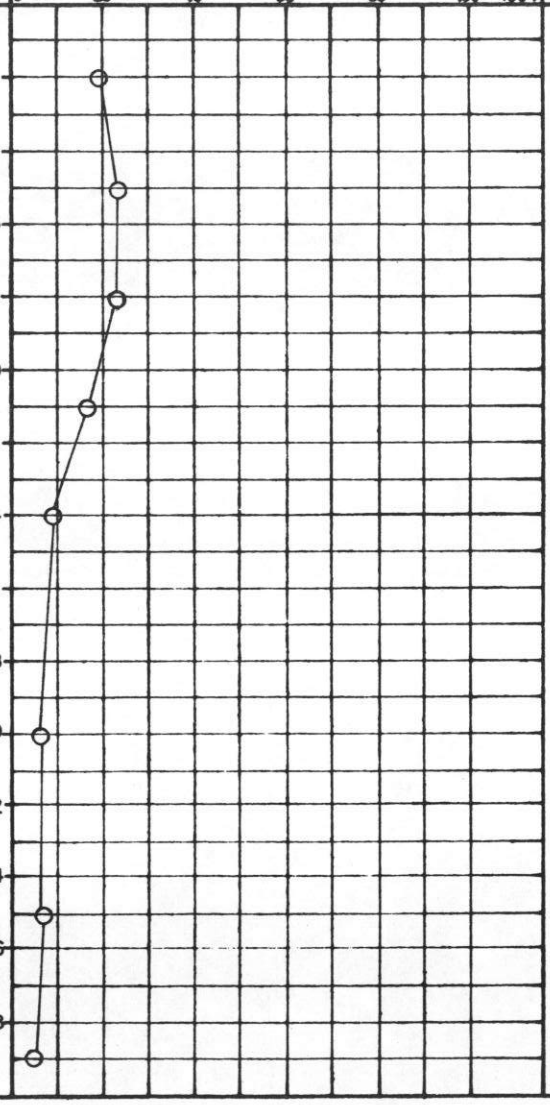
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 7/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.	OFFSET.	TEST HOLE 7
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE	ELEV.	MILE 829.2

▲ DRY DENSITY (lbs/ Ft.³)
⊙ 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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		Moderate						Useable from 1'
2					CL	CLAY -Sandy Silty Pebbles Low plastic		Ice					Moist	
4														
6								Vc - Vr					Wet	
8													Moist	
10							F							
12													Moist	
14						14'							Damp	
16						SILTSTONE-SANDSTONE -Soft		Frozen						
18								Nbn						
20						Soft-med. hard							Damp	
22														
24														
26													Humid	
28						Med. hard - hard 29'							Humid	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 99

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

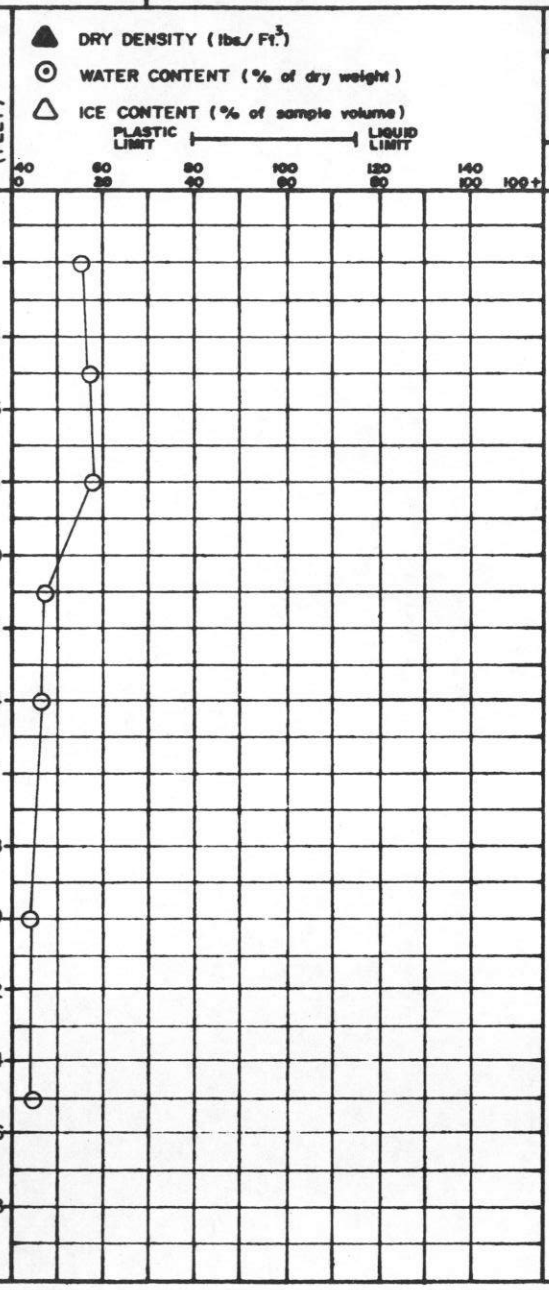
SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 7/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.	OFFSET.
TECH.	RIG.	SURFACE DRAINAGE.	VEGETATION.	ELEV.

TEST HOLE: 8

MILE: 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								Useable from 1'
2					CL	CLAY -Sandy Silty		Low					Damp	
4					CI	Low-med. plastic		To						
						5'		Moderate					Moist	
6						CLAY -Silty Siltstone		Ice						
8					CI	Sandstone soft		Vx					Moist	
10						10'	F	Vc - Vr						
12						SILTSTONE-SANDSTONE -Soft-med. hard							Humid	
14								Frozen					Humid	
16								Nbn						
18														
20													Humid	
22						Soft-hard								
24														
						25'							Humid	
26						BOTTOM OF HOLE - 25'								
28														



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BORROW PIT 99

DEPARTMENT OF PUBLIC WORKS, CANADA
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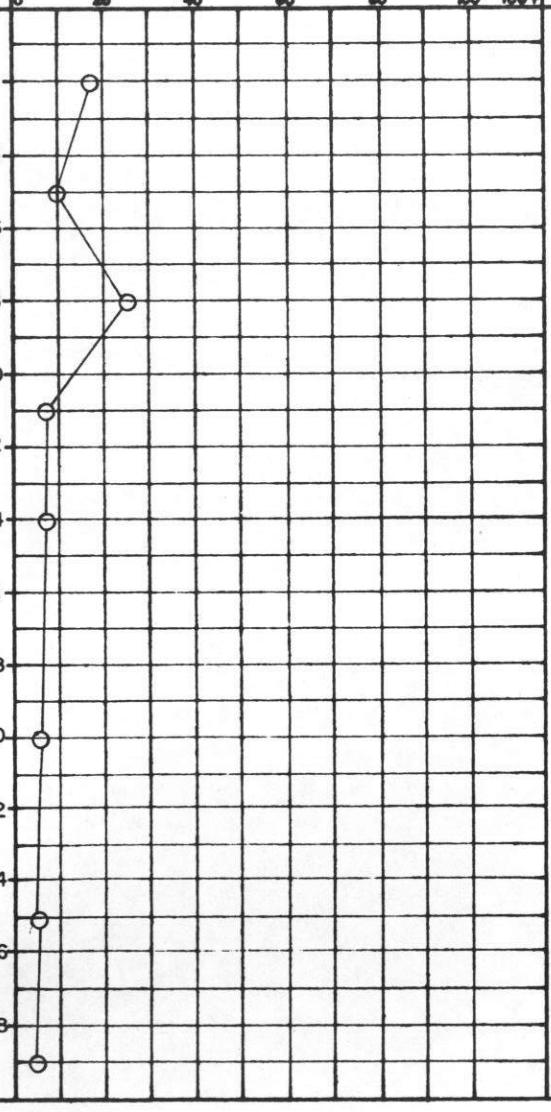
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 7/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.	OFFSET.	TEST HOLE 9
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE	ELEV.	MILE 829.2

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'	F	Low To Moderate Ice Vx Vc - Vr	Moist	Useable from 1.5'
2						CLAY -Sandy Silty Siltstone-Sandstone fragments from 5'-7'				
4									Damp	
6					CI	Med. plastic				
8									Moist	
10						11'			Damp	
12						SILTSTONE-SANDSTONE -Soft-med. hard		Frozen Nbn		
14									Damp	
16										
18										
20									Damp	
22										
24										
26									Humid	
28						29'			Humid	



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

BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 99

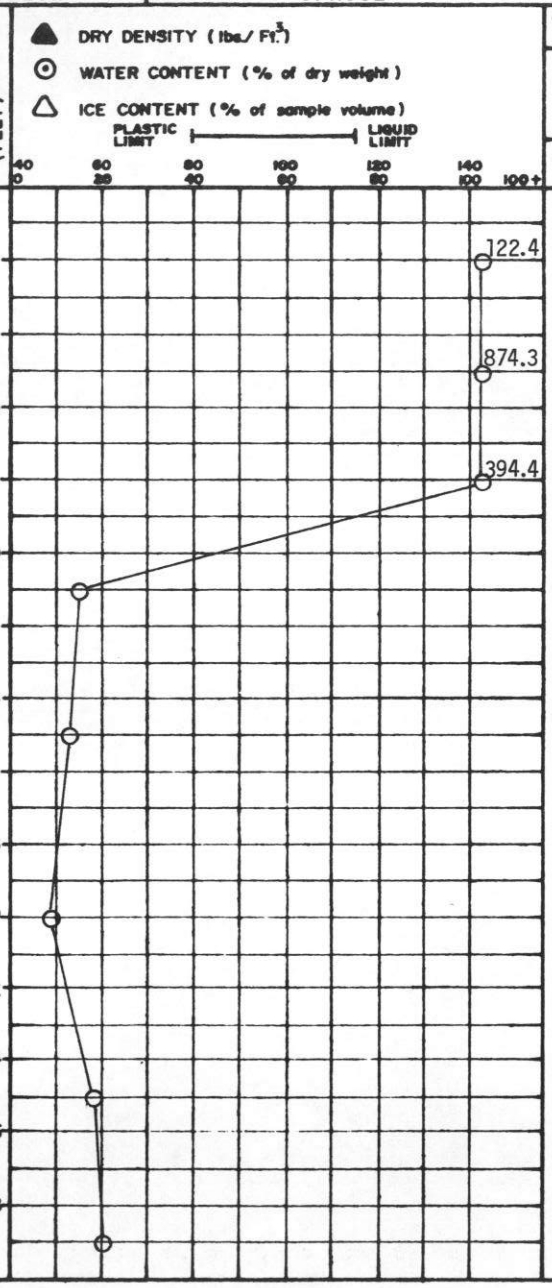
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.	OFFSET.	TEST HOLE 10
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. IN HOLLOW	VEGETATION. SPRUCE	ELEV.	MILE 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
2								High					Free Water	
4					Pt	PEAT		Ice						
6													Free Water	
8								Vs					Free Water	
10						10'								
12					CL	CLAY -Sandy Silty Gravelly Pebbles @ 15' Low-med. plastic	F						Wet	
14								Moderate						
16					CI			Ice					Moist	
18						18'								
20					SC	SAND -Coarse Gravelly Clayey		Vc - Vr					Sat.	
22						22'								
24					CL	CLAY -Sandy Silty Pebbles Low plastic							Damp	
26														
28														
						29'							Moist	
						BOTTOM OF HOLE - 29'								



DS-14-5-74 b

BORROW PIT 99

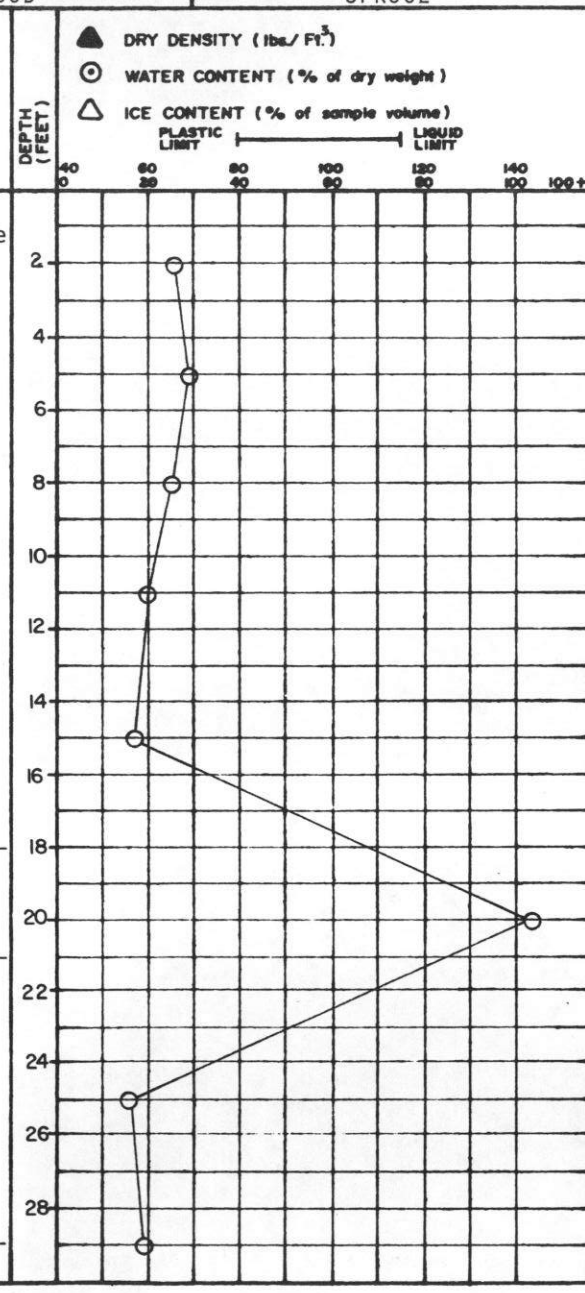
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.	OFFSET.	TEST HOLE 11
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE	ELEV.	MILE 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1½'		Moderate						
2						CLAY -Sandy Silty Pebbles		To					Wet	
4					CL	Low-med. plastic		High					Free Water	
6								Ice						
8					CI								Wet	
10							F	Vc - Vr						
12								Vs					Wet	
14														
16													Wet	
18														
20						ICE		ICE					Water	
22						GRAVEL -Sandy Clayey		High						
24					GC			Ice						
26							F	Vs					Free Water	
28						SHALE -Black Soft 29'							Moist	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 99

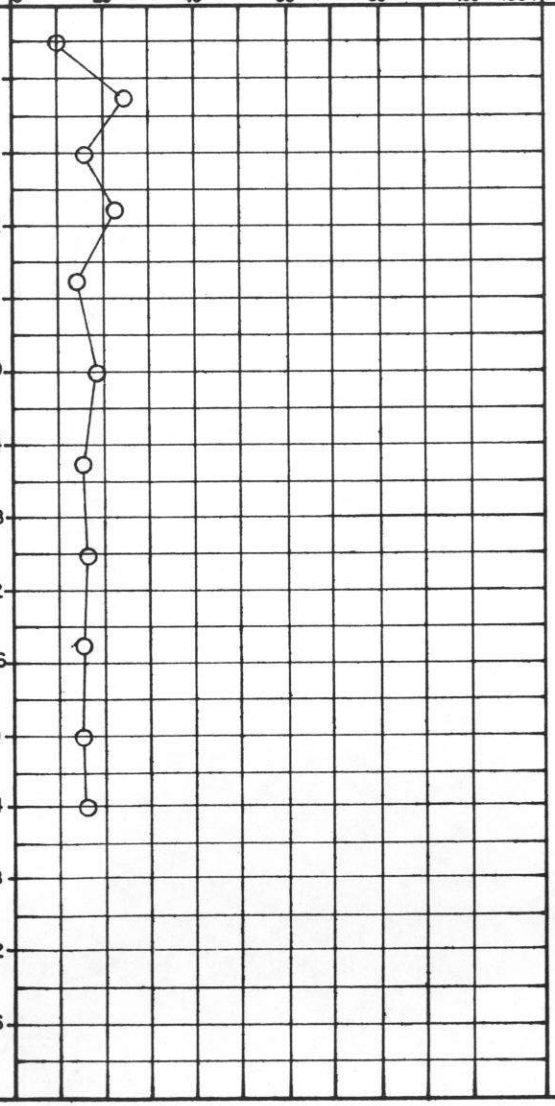
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED.	AIRPHOTO NO. A23329-251/2	CHAINAGE.
OFFSET.	TEST HOLE 12		
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE
ELEV.	MILE 829.2		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1½'									
						CLAY -Sandy Silty Gravelly Pebbles from 5' Low-med. plastic		Moderate Ice						Moist	
4									4					Wet	
8					CL				8					Moist	
12					CI			Vc - Vr	12					Wet	
16							F		16					Moist	
20									20					Moist	
24								Vx	24					Moist	
28									28						
						30'								Moist	
32						CLAY -Sandy Silty Pebbles Med. plastic		Low	32						
36					CI				36					Moist	
40								Ice	40					Damp	
44						44'		Vx	44					Damp	
48						BOTTOM OF HOLE - 44'			48						
52									52						
56									56						



DS-14-5-74 a

BORROW PIT 99

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

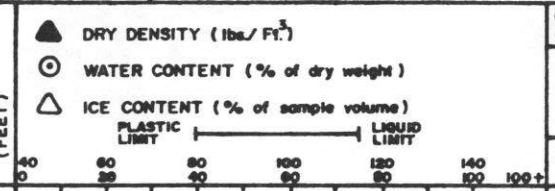
SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.
OFFSET.			
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE
ELEV.			

TEST HOLE 13

MILE 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'		Moderate						
2						CLAY -Silty Sandy Pebbles Med. plastic		To					Wet	
4														
6					CI			Low					Moist	
8								Ice					Moist	
10							F	Vc - Vr					Moist	
12														
14								Vx					Moist	
16														
18														
20													Moist	
22														
24													Damp	
26														
28														
						29'							Damp	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 99

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

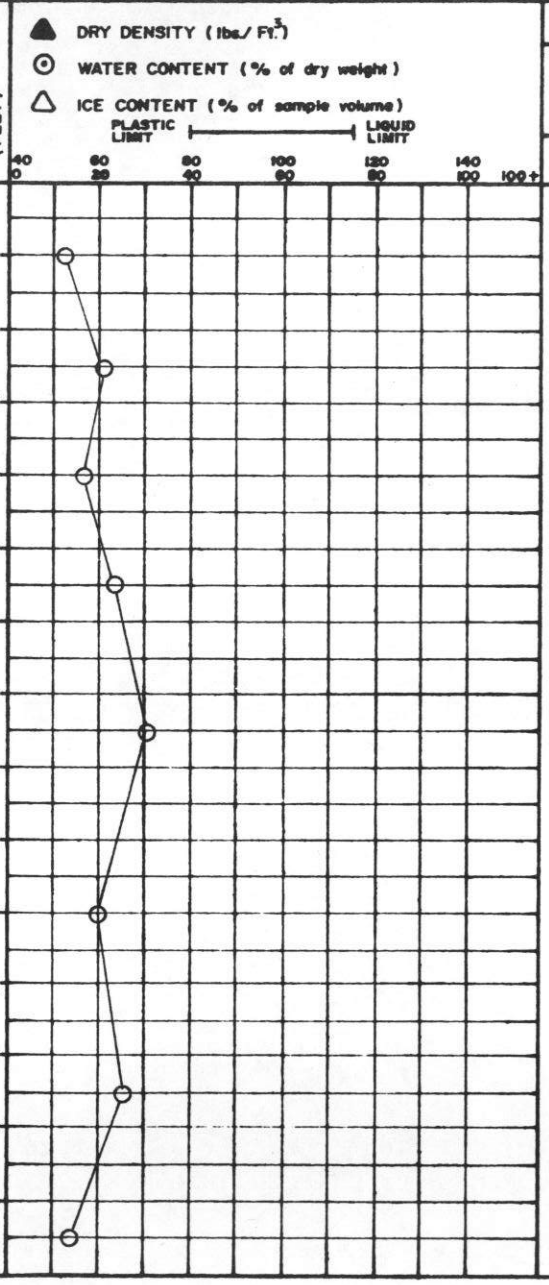
SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.
OFFSET.			
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE
ELEV.			

TEST HOLE 14

MILE 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2						CLAY -Sandy Silty Pebbles Med.-high plastic		Moderate					Moist	
4														
6								Ice					Wet	
8					CI								Wet	
10							F	Vc - Vr						
12													Wet	
14														
16													Sat.	
18														
20													Moist	
22														
24														
26													Moist	
28														
						29'							Damp	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 99

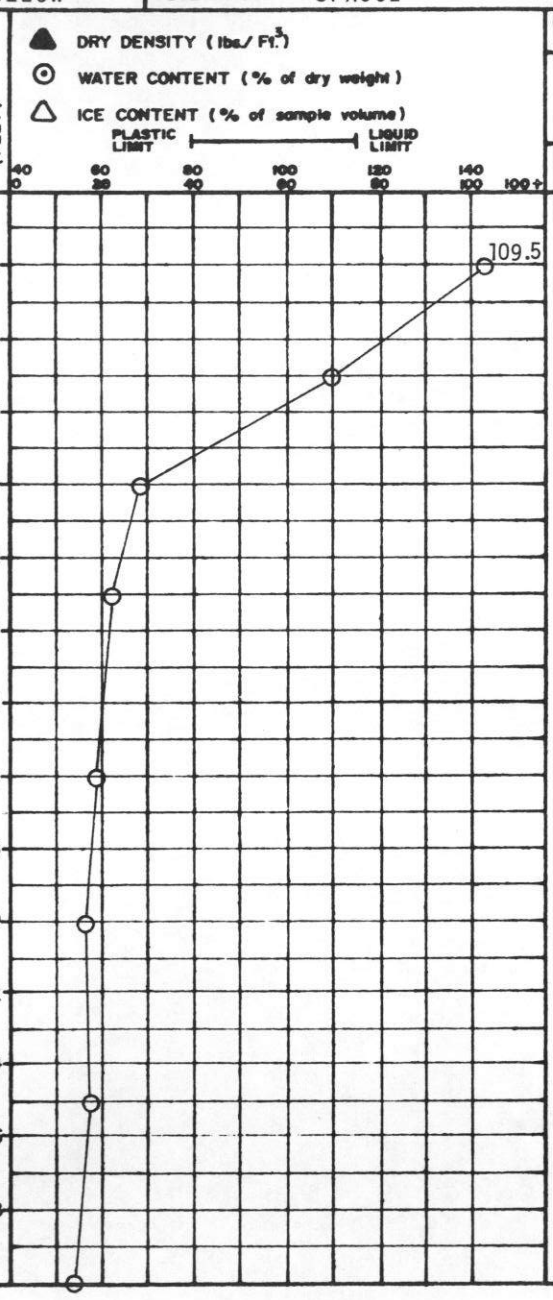
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.
OFFSET.	TEST HOLE 15		
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. IN HOLLOW	VEGETATION. SPRUCE
ELEV.	MILE 829.2		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
2					Pt	PEAT		High					Sat.	
4						4'		Ice					Free Water	
6						CLAY -Silty Sandy Pebbles Low-med. plastic		Vs						
8													Sat.	
10					CL CI		F	Vs					Wet	
12								Moderate						
14								To						
16								Low					Wet	
18								Ice						
20													Moist	
22								Vc - Vr						
24								Vx						
26													Moist	
28														
						30'							Damp	



BOTTOM OF HOLE - 30'

DS-14-5-74 b

BORROW PIT 99

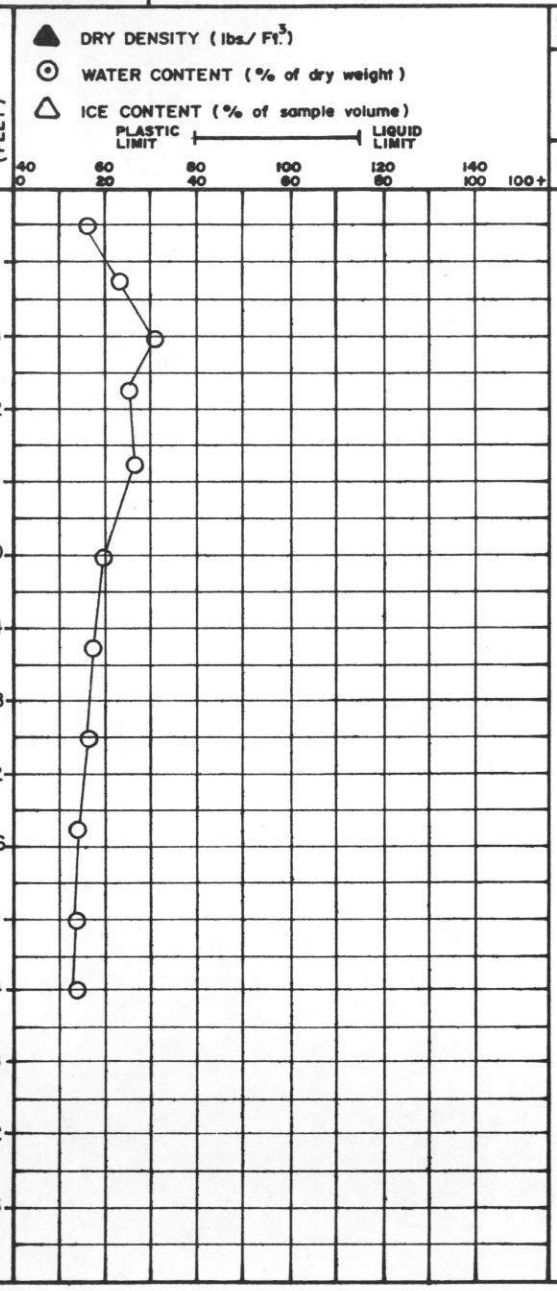
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.	OFFSET.	TEST HOLE 16
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. EDGE OF BANK	VEGETATION. SPRUCE	ELEV.	MILE 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
4						CLAY -Silty Sandy Pebbles Med. plastic Till		Low &					Damp	
8													Moist	
12					CI		F	Moderate Ice					Wet	
16													Wet	
20								Vx					Sat.	
24								Vc - Vr					Moist	
28													Moist	
32													Moist	
36													Moist	
40													Moist	
44						44'							Moist	
48						BOTTOM OF HOLE - 44'								
52														
56														



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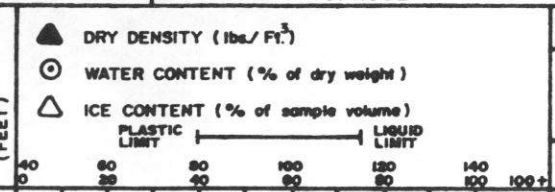
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.	OFFSET.	TEST HOLE 17
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE	ELEV.	MILE 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'									
2						CLAY -Silty Sandy Pebbles-Till Med. plastic		Moderate	2					Wet	
4									4						
6								Ice	6					Wet	
8									8					Wet	
10					CI		F		10						
12									12					Wet	
14									14						
16								Vc - Vr	16					Wet	
18									18						
20									20					Moist	
22									22						
24									24						
26									26					Moist	
28									28						
						29'								Moist	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 99

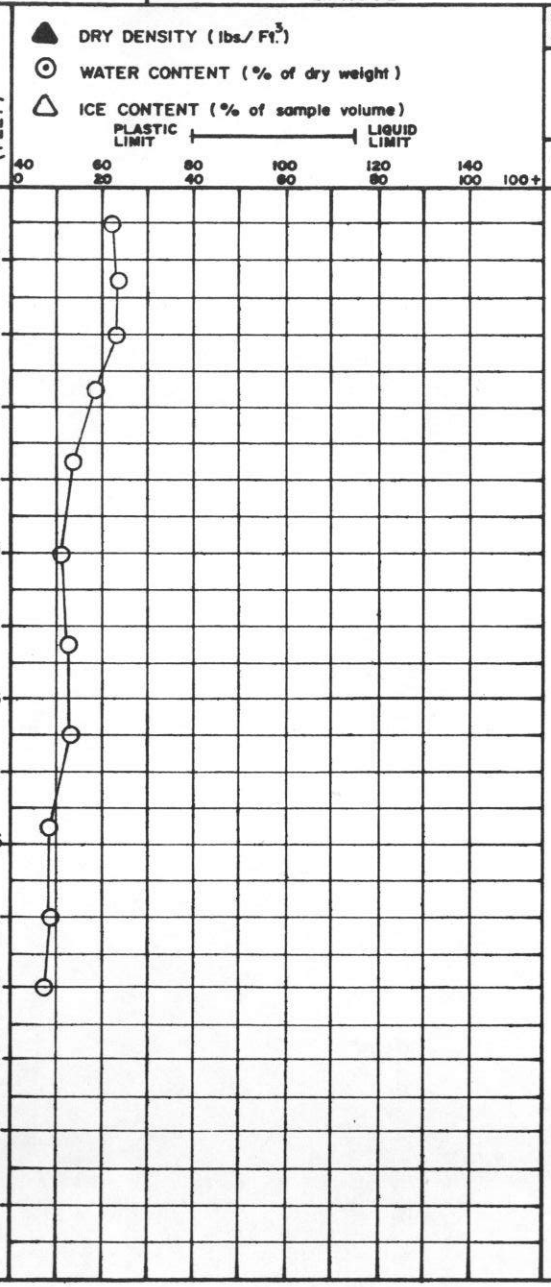
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.
OFFSET.	TEST HOLE 18		
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE
ELEV.	MILE 829.2		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1½'									
4					CL CI	CLAY -Silty Sandy Pebbles Low-Med. plastic	F	Moderate Ice Vc - Vr	4					Moist	
8									8					Wet	
12									12					Wet	
16								Low Ice Vx	16					Moist	
20									20					Moist	
24									24					Moist	
28									28					Damp	
32									32						
36						35' CLAY -Silty, sandy Siltstone-Sandstone-Shale Soft-hard Very hard @ 36'		Frozen Nbn	36					Moist	
40									40					Damp	
44						44' BOTTOM OF HOLE - 44'			44					Humid	
48									48						
52									52						
56									56						



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BORROW PIT 99

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

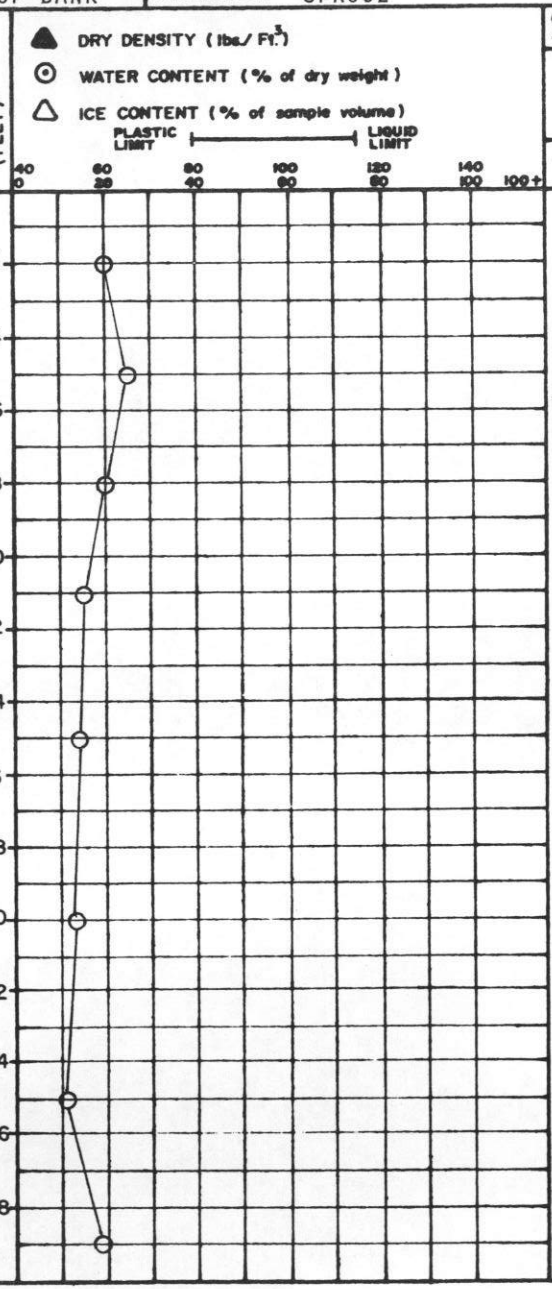
FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.	OFFSET.
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. EDGE OF BANK	VEGETATION. SPRUCE	ELEV.

TEST HOLE: 19

MILE: 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT —1.5'		Moderate					
2						CLAY							Wet
4						-Silty Sandy Pebbles Till Med. plastic		Ice					Wet
6								Vc - Vr					
8													Wet
10					CI		F						Wet
12								Low					
14								Ice					Moist
16													
18								Vx					
20													Moist
22													
24													Moist
26													
28													
						—29'							Moist



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 99

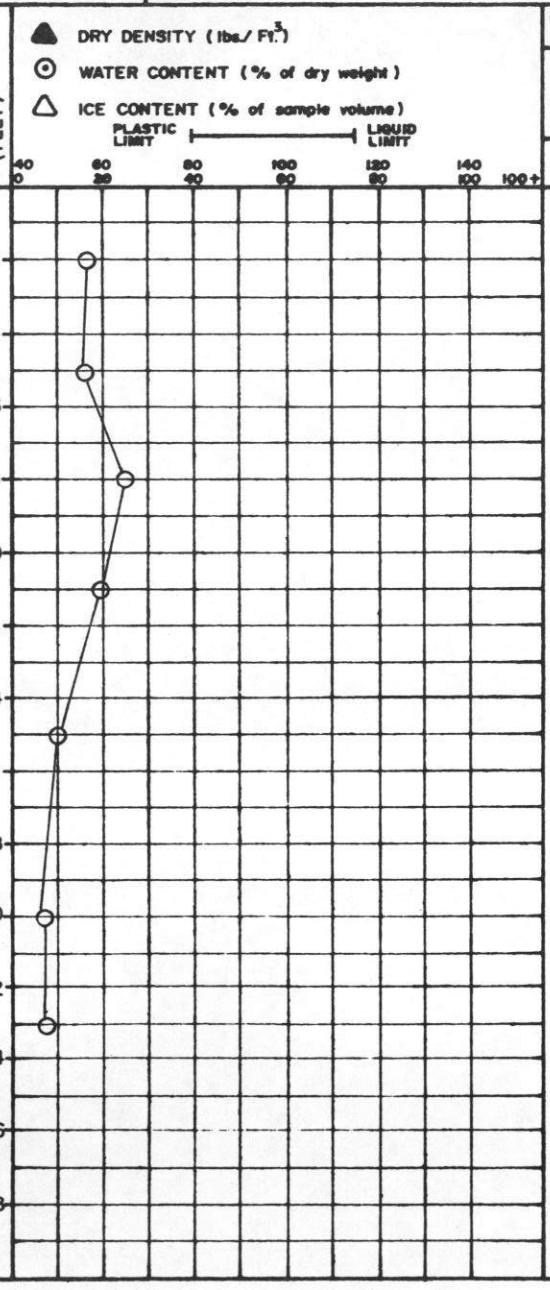
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.	OFFSET.	TEST HOLE 20
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'								
2					CL	CLAY -Silty Sandy Pebbles Low-med. plastic		Moderate					Moist	
4								Ice						
6					CI								Wet	
8							F						Wet	
10								Vc - Vr						
12													Moist	
14						—14'								
16						SILTSTONE-SANDSTONE -Soft		Low					Wet	
18								Ice						
20													Wet	
22								Vx						
24													Wet	
						—25'								
26						BOTTOM OF HOLE - 25'								
28														



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BORROW PIT 99

DEPARTMENT OF PUBLIC WORKS, CANADA
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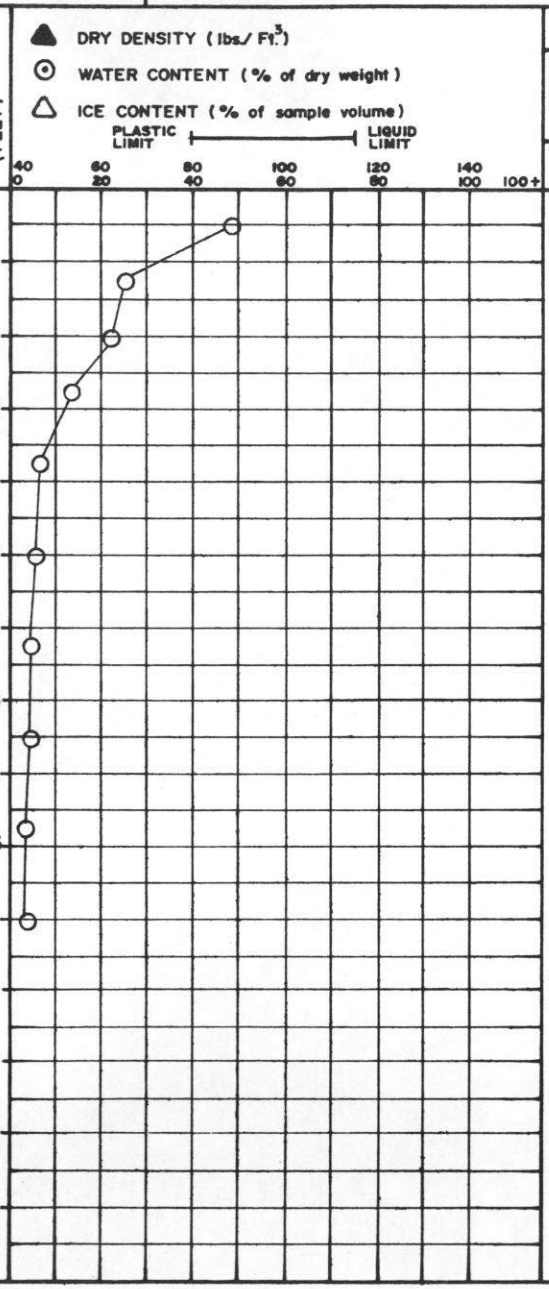
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.
OFFSET.	TEST HOLE 21		
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.	MILE 829.2		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
						CLAY -Silty		Moderate					Wet	
4					CL	Low-med. plastic		Ice					Wet	
8					CI								Moist	
						Siltstone-Sandstone frags.	F							
12								Vc - Vr					Damp	
						13'								
16						SILTSTONE SANDSTONE SHALE -Soft-hard							Humid	
								Frozen						
20													Humid	
24								Nbn						
													Humid	
28														
													Humid	
32														
36													Humid	
40													Humid	
						42'								
44						BOTTOM OF HOLE - 42'								
48														
52														
56														



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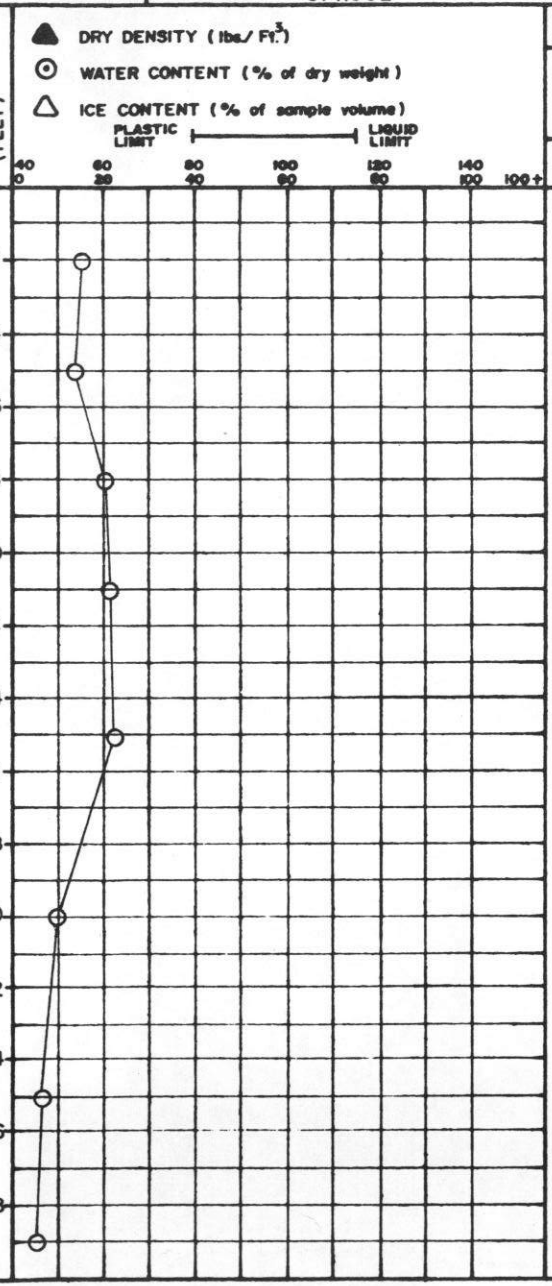
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.	OFFSET.	TEST HOLE 22
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE	ELEV.	MILE 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'		Moderate						
2						SAND -Clayey Silty Pebbles							Wet	
4								Ice						
6													Moist	
8					SC			Vc - Vr					Moist	
10							F							
12						Silt & Sandstone fragments 15-17'							Moist	
14														
16													Moist	
						—17'								
18						SILTSTONE-SANDSTONE -Soft-hard		Low						
20								To					Moist	
22								Nil Ice						
24								Vx						
26								Nbn					Humid	
28														
						—29'							Humid	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

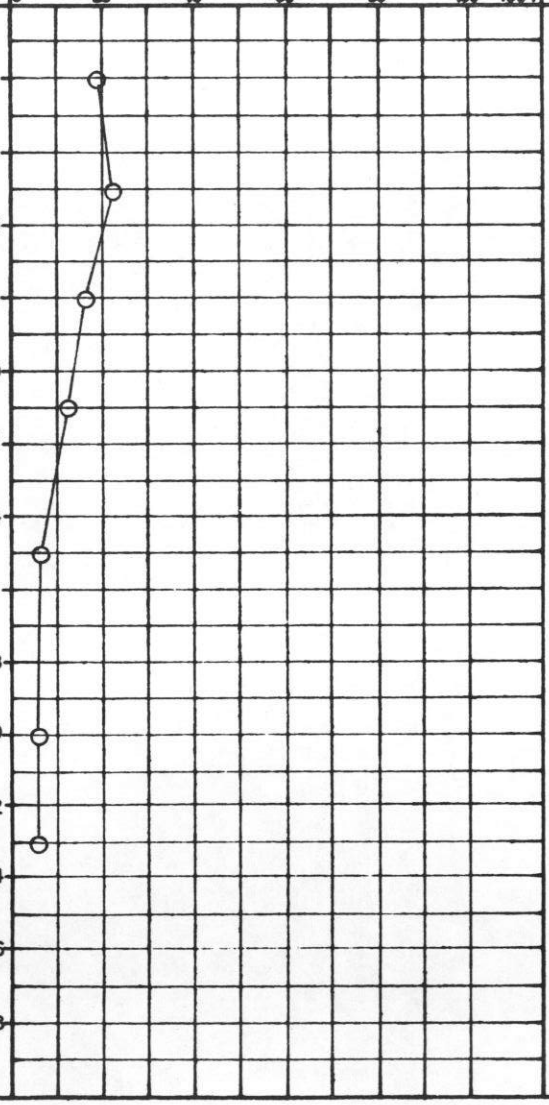
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.	OFFSET.	TEST HOLE 23
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'								
2					CI	CLAY -Silty Sandy Pebbles Med. plastic	F	Low To Moderate Ice Vx Vc - Vr					Moist	
4														
6													Wet	
8													Moist	
10						—11'							Damp	
12						SILTSTONE-SANDSTONE SHALE								
14														
16								Frozen Nbn					Damp	
18														
20													Humid	
22														
24													Humid	
26						—25'								
28						BOTTOM OF HOLE - 25'								



DS-14-5-74 b

BORROW PIT 99

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

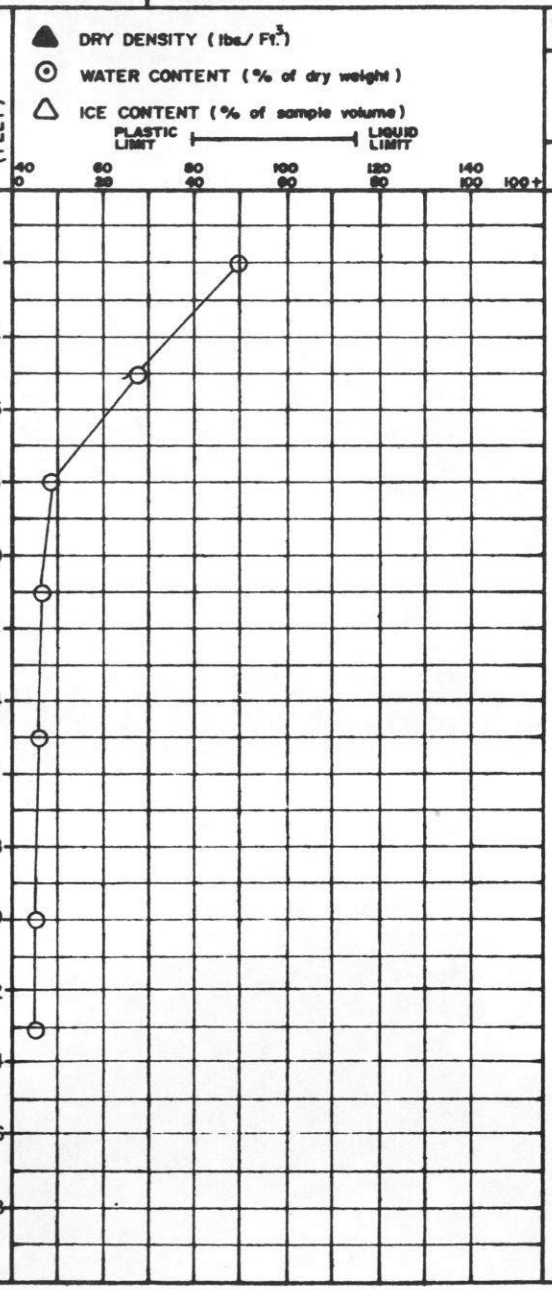
FIELD ENG. A. HANNA	DATE DRILLED. 19/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV.

TEST HOLE 24

MILE 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
2					Pt	PEAT		High Ice					Moist	
4						4.5'								
6					CI	CLAY-Silty, sandy Siltstone-Sandstone frags.		Vs					Wet	
						7'								
8						SILTSTONE SANDSTONE SHALE -Soft-hard	F						Damp	
10													Damp	
12														
14								Frozen Nbn						
16													Damp	
18														
20													Damp	
22														
24													Damp	
						25'								
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 99

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

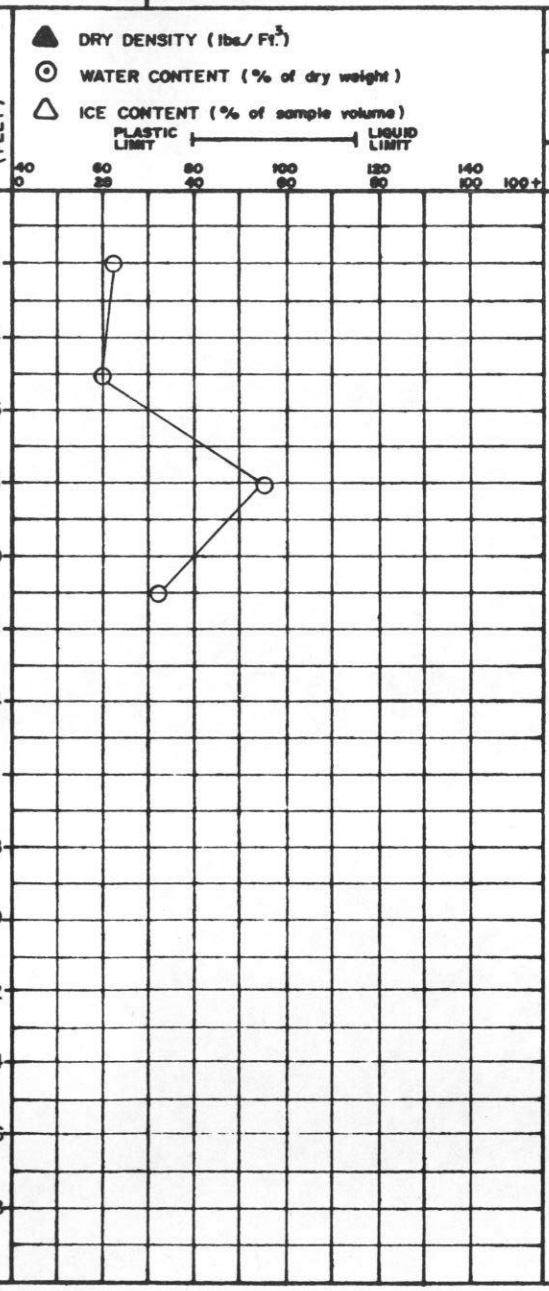
SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 19/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.	OFFSET.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.

TEST HOLE: 25

MILE: 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 2'		Moderate Ice Vc - Vr					Wet	
						CLAY -Sandy Silty Pebbles Med. plastic	F						Moist	
					CI			High Ice Vs					Free Water	
						14'							Sat.	
						BOTTOM OF HOLE - 14'								



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BORROW PIT 99

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

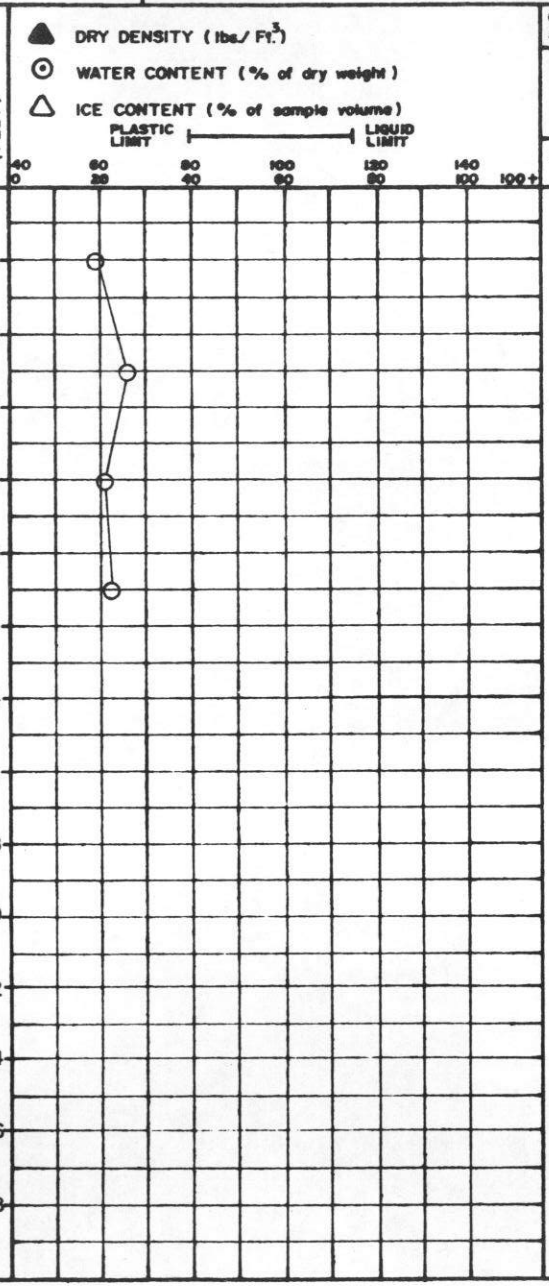
FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.	OFFSET.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.

TEST HOLE: 27

MILE: 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT		Moderate					
2						2'							Moist
						CLAY -Silty Sandy Pebbles Low plastic		Vc - Vr					
4													Free Water
6					CL			High Ice Vs					
8							F	Vc - Vr					Wet
10								Ice					Wet
12													
14						14'							
						BOTTOM OF HOLE - 14'							
16													
18													
20													
22													
24													
26													
28													



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BORROW PIT 99

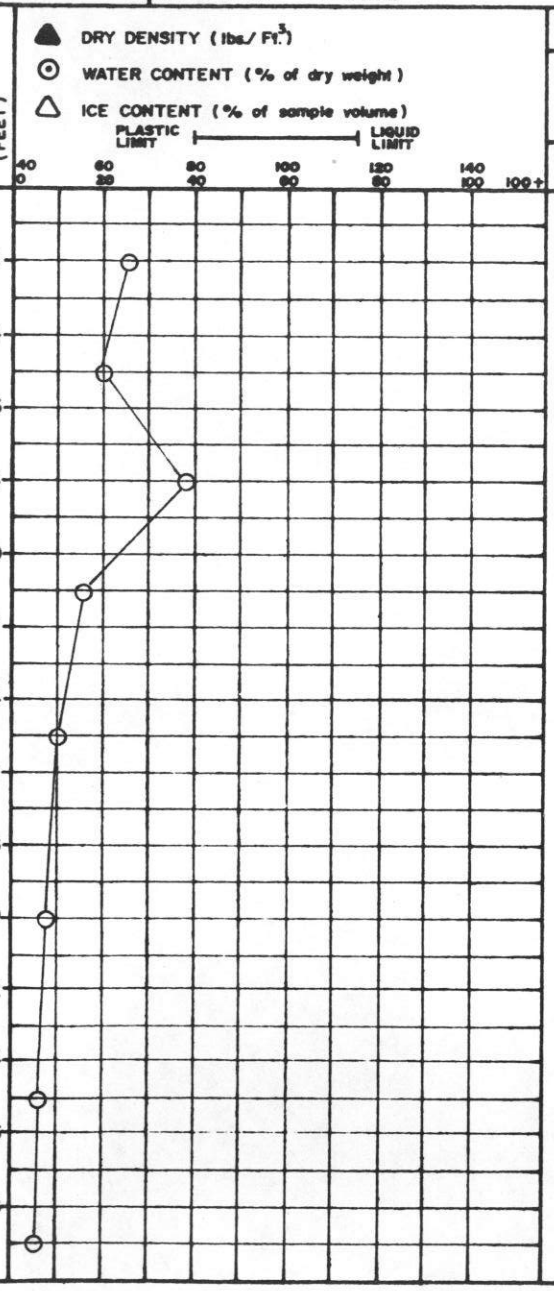
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.	OFFSET.	TEST HOLE 28
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE	ELEV.	MILE 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		Moderate						
2					OH ML	SILT-ORGANIC		Ice					Moist	
4						4'								
6						CLAY -Silty Sandy Pebbles Low plastic		Vc - Vr					Wet	
8					CL								Free Water	
10						Fragments of Silt & Sandstone 11-13'	F	High Ice Vs					Sat.	
12						13'								
14						SILTSTONE -Sandstone		Low					Moist	
16								To						
18						SHALE -Soft-med. hard		Nil						
20								Ice					Damp	
22								Vx						
24								Nbn						
26													Humid	
28														
						29'							Humid	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 99

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE

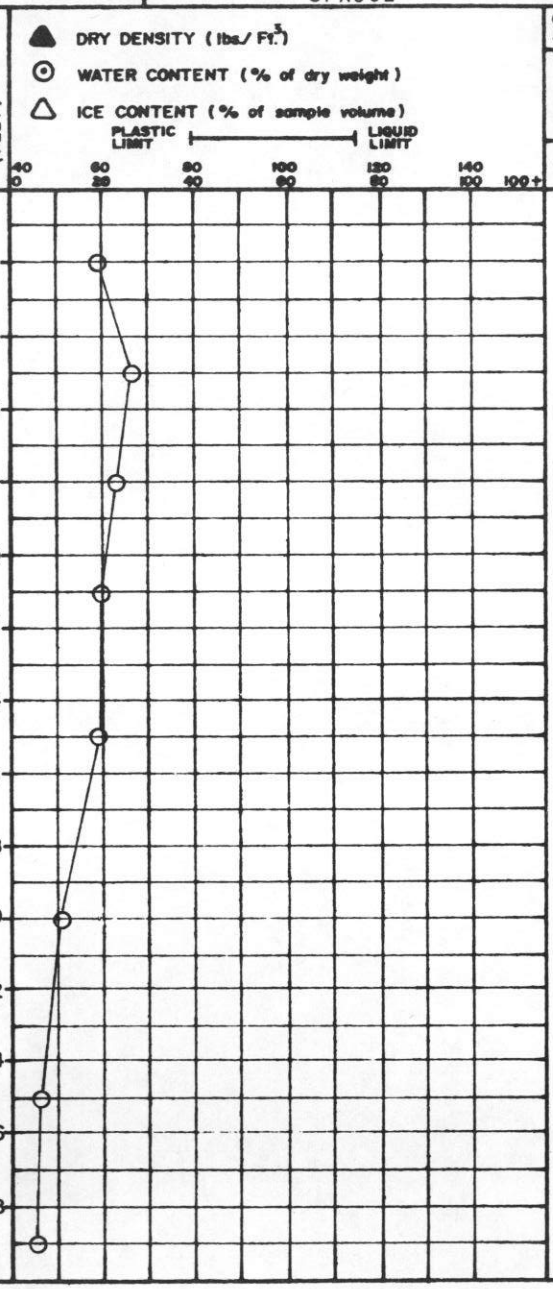
OFFSET. ELEV.

TEST HOLE 29

MILE 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT 1½'		Moderate					
2						CLAY							Moist
						-Silty							
						Sandy							
4						Pebbles		Ice					
					CL	Low-med. plastic							Wet
6													
8													Wet
								Vc - Vr					
10					CI		F						
													Wet
12													
14													
													Moist
16						16'							
						SILTSTONE-SANDSTONE		Low					
18								To					
20								Nil					Moist
22								Ice					
24						SHALE @ 25'		Vx					
						-Soft-med. hard							Humid
26								Nbn					
28													
						29'							Humid



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 99

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

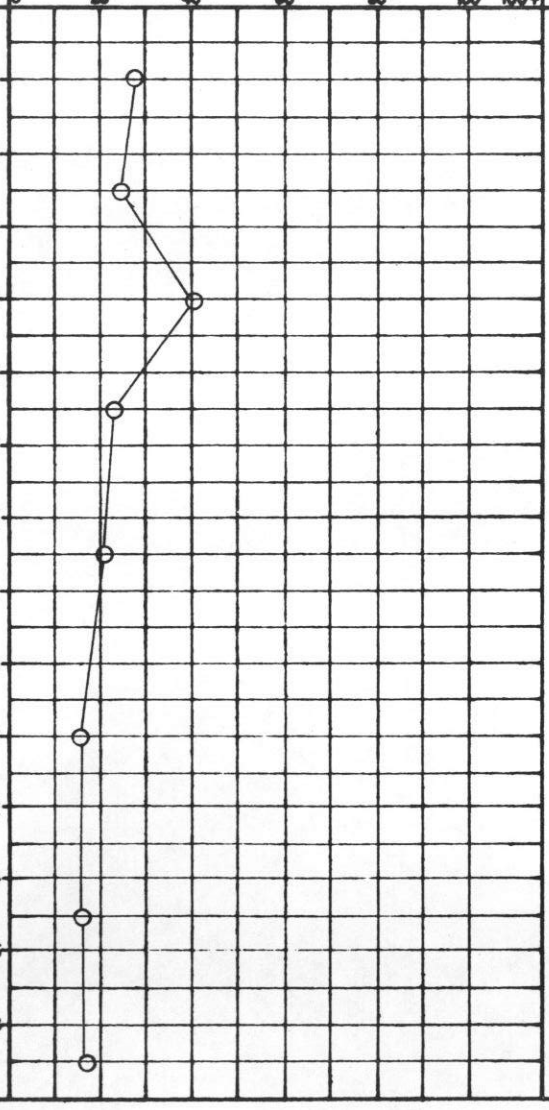
FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.
OFFSET.			
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE
ELEV.			

TEST HOLE 30

MILE 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —2'		Moderate Ice					Wet	
						CLAY -Silty Sandy Pebbles from 8'								
													Wet	
					CL	Low-med. plastic		Vc - Vr						
													Free Water	
								High Ice Vs						
					CI	Till	F						Wet	
								Moderate Ice						
													Wet	
								Vc - Vr						
													Moist	
								Low Ice						
								Vx					Moist	
						—29'							Moist	

DRY DENSITY (lbs./Ft.³)
WATER CONTENT (% of dry weight)
ICE CONTENT (% of sample volume)
PLASTIC LIMIT — LIQUID LIMIT



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 99

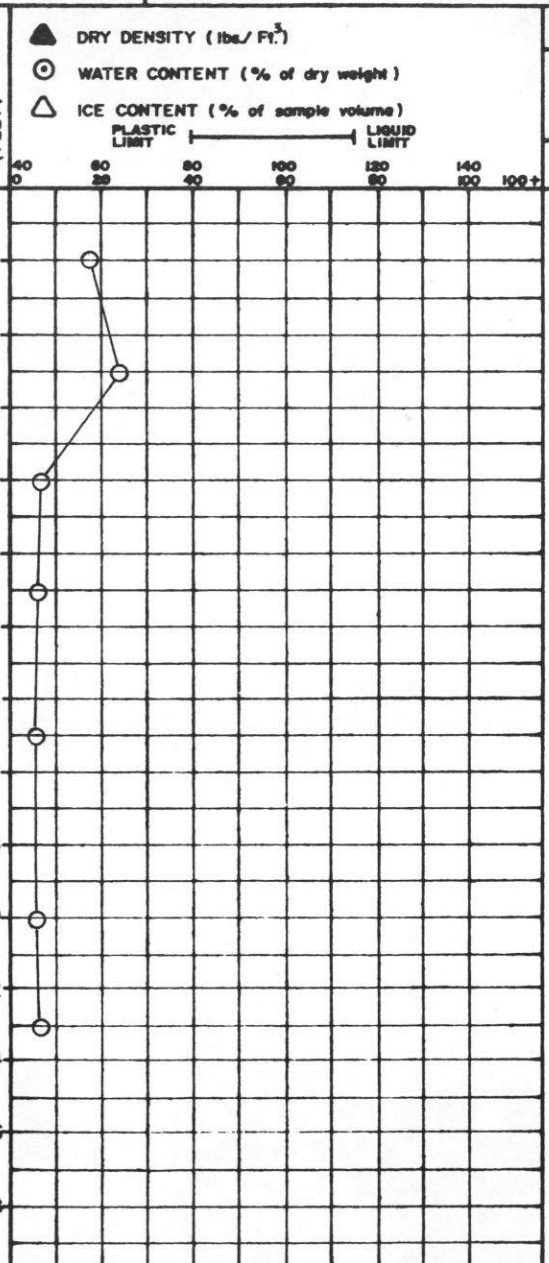
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.
OFFSET.			
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.			
TEST HOLE	31	MILE	829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		Moderate						
2					CL	CLAY -Silty Sandy Low-med. plastic		Ice					Moist	
4														
6					CI			Vc - Vr					Wet	
						7'								
8						SILTSTONE-SANDSTONE SHALE -Soft-hard							Damp	
10														
12							F						Damp	
14								Frozen						
16								Nbn					Humid	
18														
20													Humid	
22														
24													Humid	
						25'								
26						BOTTOM OF HOLE - 25'								
28														



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BORROW PIT 99

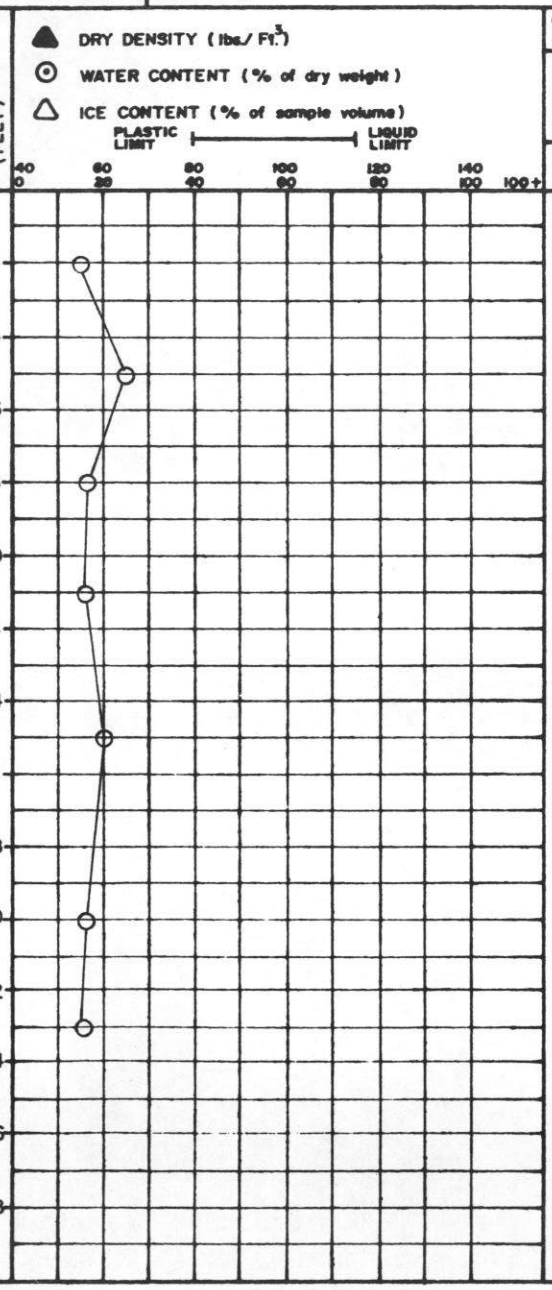
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-251/2	CHAINAGE.	OFFSET.	TEST HOLE 32
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'								
2						CLAY -Sandy Silty Pebbles Low-med. plastic							Moist	
4								Moderate						
6					CL			Ice					Wet	
8													Moist	
10					CI									
12							F						Moist	
14								Vc - Vr						
16													Wet	
18														
20													Moist	
22														
24													Moist	
						—25'								
26						BOTTOM OF HOLE - 25'								
28														



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BORROW PIT 3101

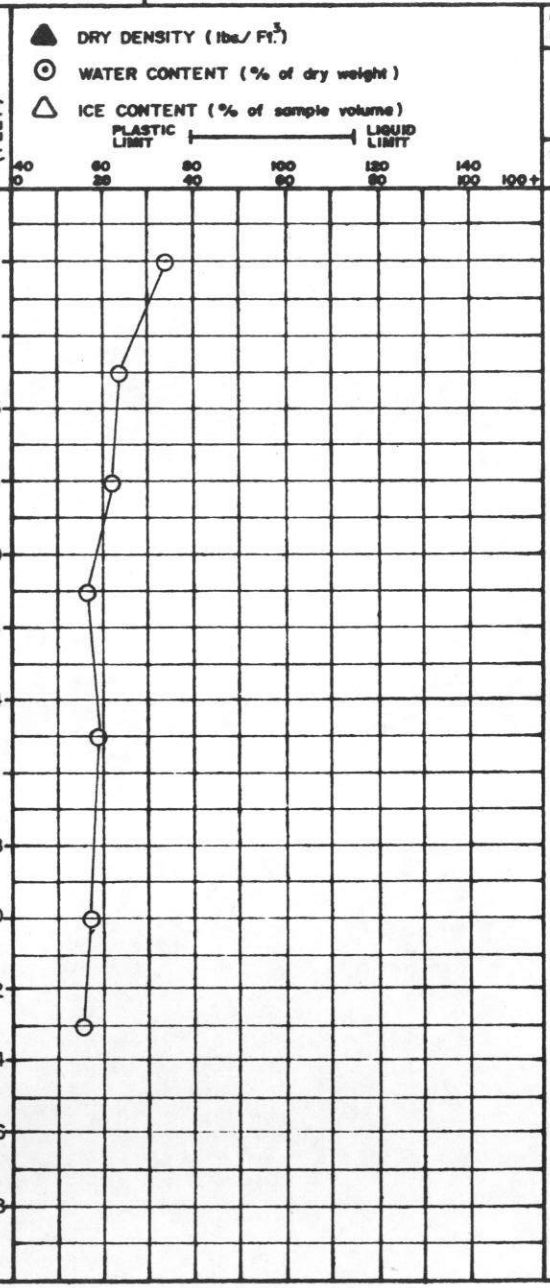
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-253/4	CHAINAGE.	OFFSET.	TEST HOLE 2
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 830.7 from Seismic Line

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'		High Ice					Free Water	
2						CLAY -Sandy Silty Pebbles Siltstone Sandstone Fragments Low-med. plastic		Vs						
4								Moderate					Wet	
6														
8								Ice					Wet	
10					CL									
12					CI		F						Moist	
14								Vc - Vr						
16													Moist	
18														
20													Moist	
22														
24													Moist	
26						—25' BOTTOM OF HOLE - 25'								
28														



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BORROW PIT 101

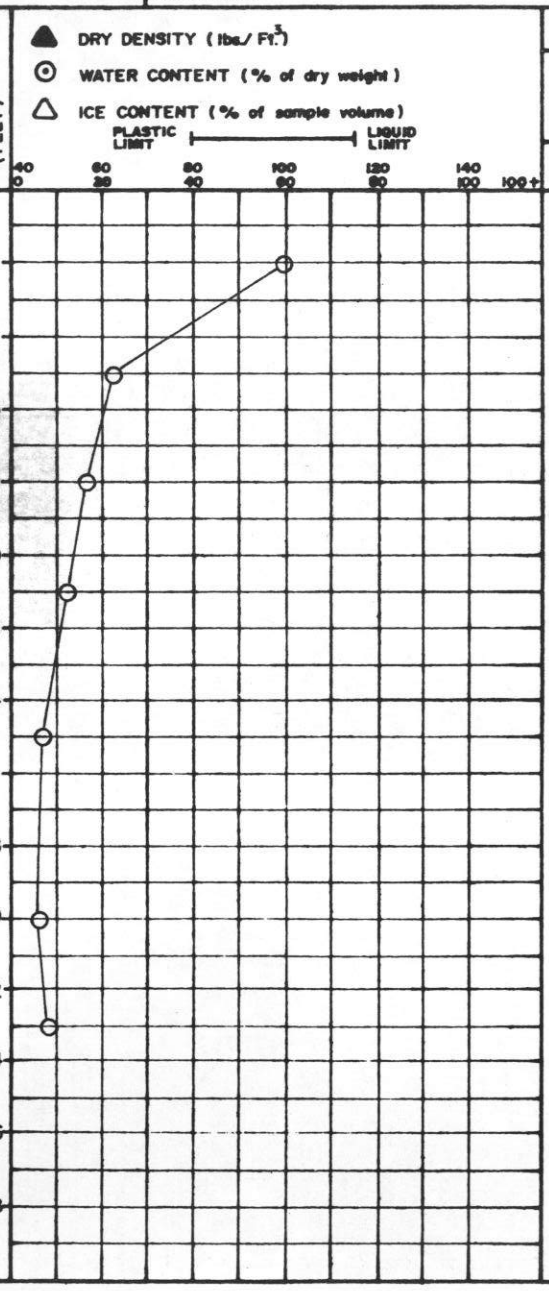
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-253/4	CHAINAGE.
OFFSET.	TEST HOLE 3		
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.	MILE 830.7 from Seismic Line		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2						CLAY -Silty Sandy Pebbles		High					Free Water	
4					CL	4'		Ice						
6						SILTSTONE-SANDSTONE SHALE -Soft	F	Vs					Sat.	
8													Sat.	
10														
12													Wet	
14								Frozen						
16						Soft-med. hard		Nbn					Damp	
18														
20						Med.-hard							Humid	
22														
24													Damp	
26						25' BOTTOM OF HOLE - 25'								
28														



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BORROW PIT 101

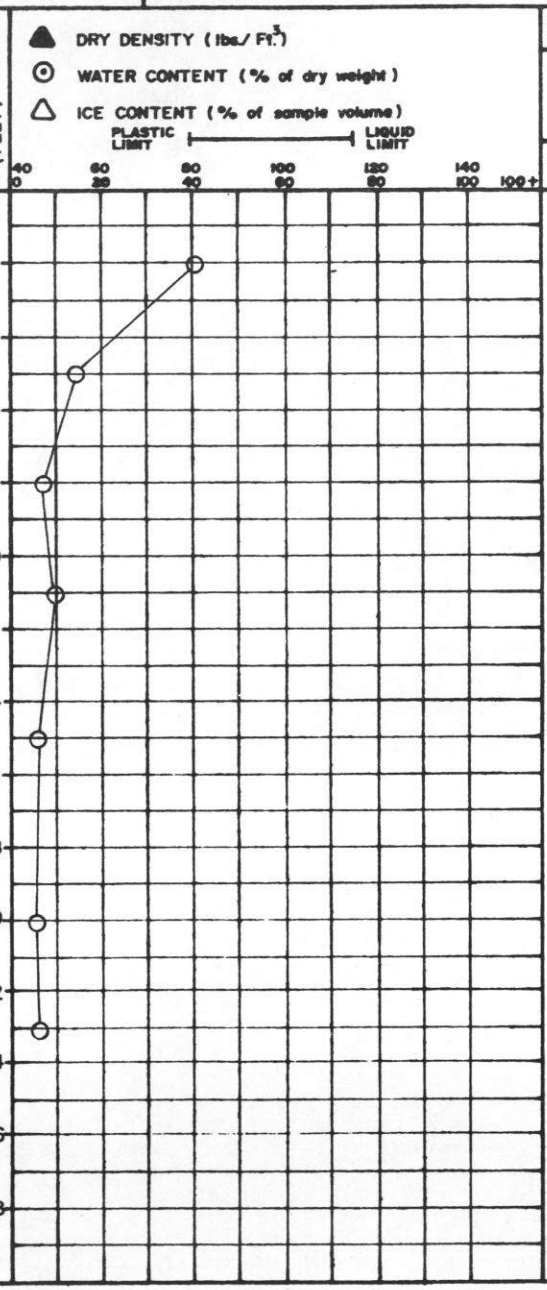
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-253/4	CHAINAGE.	OFFSET.	TEST HOLE 4
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 830.7 from Seismic Line

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 1'		High Ice					Free Water	
2					CL	CLAY -Silty Sandy Pebbles — 4'		Vs						
4						SILTSTONE-SANDSTONE -Soft-med. hard		Low Ice Vx					Wet	
6														
8													Damp	
10														
12							F	Frozen					Damp	
14								Nbn						
16													Damp	
18														
20													Humid	
22														
24													Humid	
26						25'								
28						BOTTOM OF HOLE - 25'								



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BORROW PIT 101

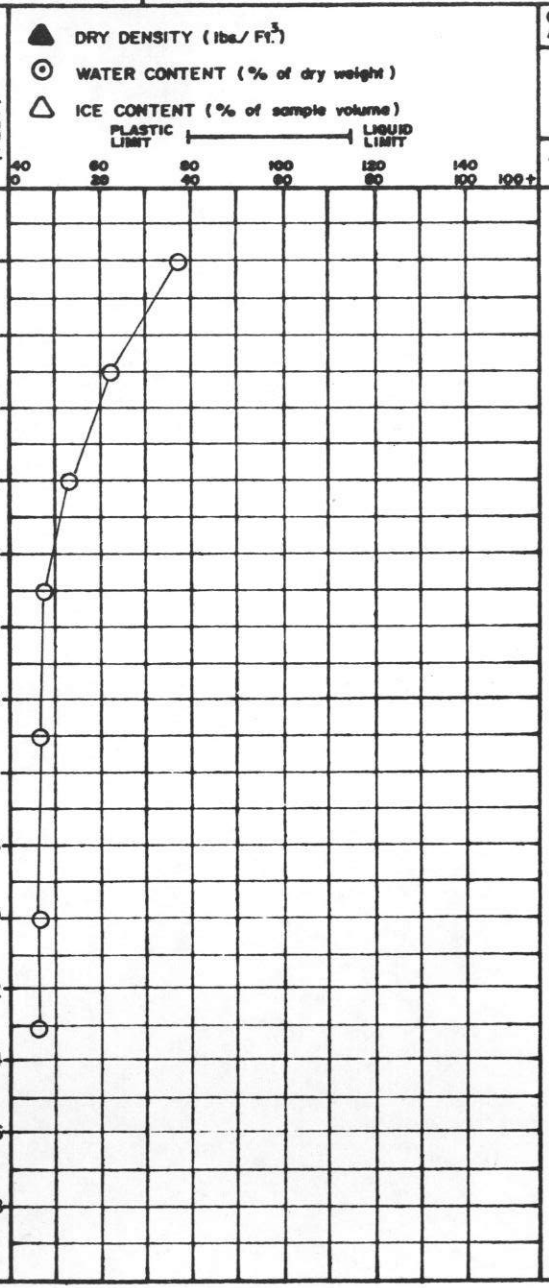
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-253/4	CHAINAGE.
OFFSET.	TEST HOLE 5		
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.	MILE 830.7 from Seismic Line		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		High						
2						CLAY -Silty Sandy		Ice					Free Water	
4					CL	Siltstone & Shale fragments 5'-7'		Vs					Sat.	
6						7'								
8						SILTSTONE-SANDSTONE SHALE -Soft-med. hard		Low Ice					Moist	
10							F	Vx					Damp	
12														
14								Frozen					Damp	
16								Nbn						
18														
20													Damp	
22													Damp	
24						25'								
26						BOTTOM OF HOLE - 25'								
28														



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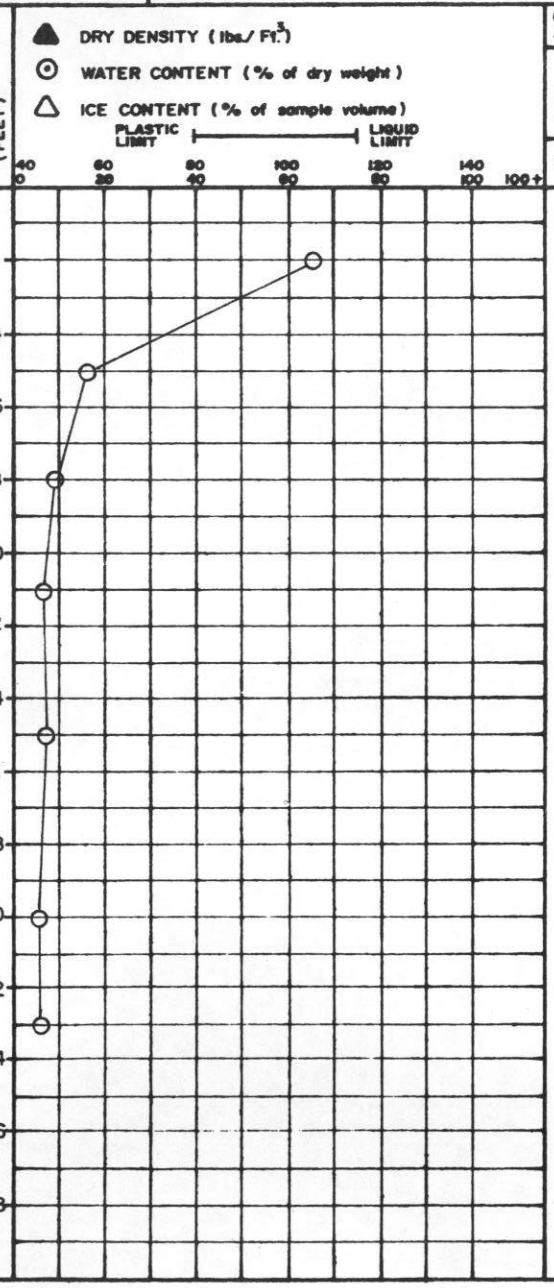
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-253/4	CHAINAGE.	OFFSET.	TEST HOLE 6
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 830.7 from Seismic Line

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		High						
2					CL	CLAY -Silty Sandy Pebbles 4'		Ice					Free Water	
4								Vs						
6						SILTSTONE-SANDSTONE SHALE -Soft-med. hard		Low Ice					Sat.	
8								Vx					Moist	
10														
12													Moist	
14							F	Frozen						
16						Med. hard - hard		Nbn					Damp	
18														
20													Humid	
22														
24													Humid	
26						25' BOTTOM OF HOLE - 25'								
28														



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BORROW PIT 101

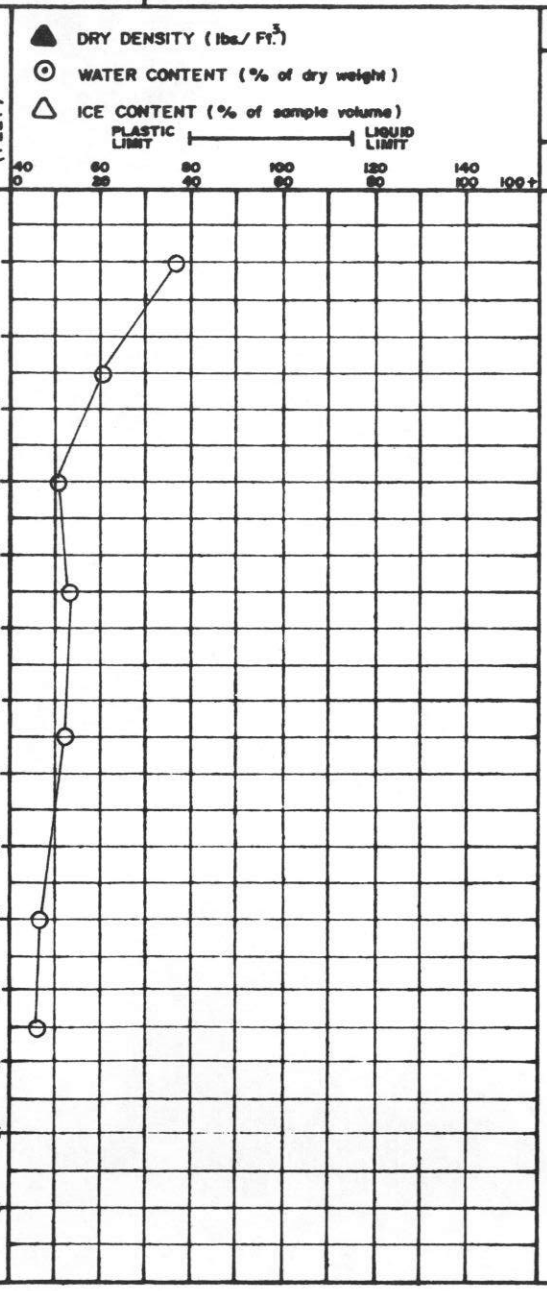
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-253/4	CHAINAGE.
OFFSET.	TEST HOLE	7	
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.	MILE	830.7 from Seismic Line	

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		High						
2						CLAY -Silty Sandy Pebbles		Ice					Free Water	
4					CL	Silt & Sandstone fragments		Vs						
6					CI	Low-med. plastic		Moderate Ice					Wet	
8						8'	F	Vc - Vr					Moist	
10						SILTSTONE-SANDSTONE SHALE -Soft		Low To					Moist	
12								Nil						
14								Ice					Damp	
16								Vx						
18								Nbn						
20													Damp	
22													Damp	
24						Soft-med. hard 25'								
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 101

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

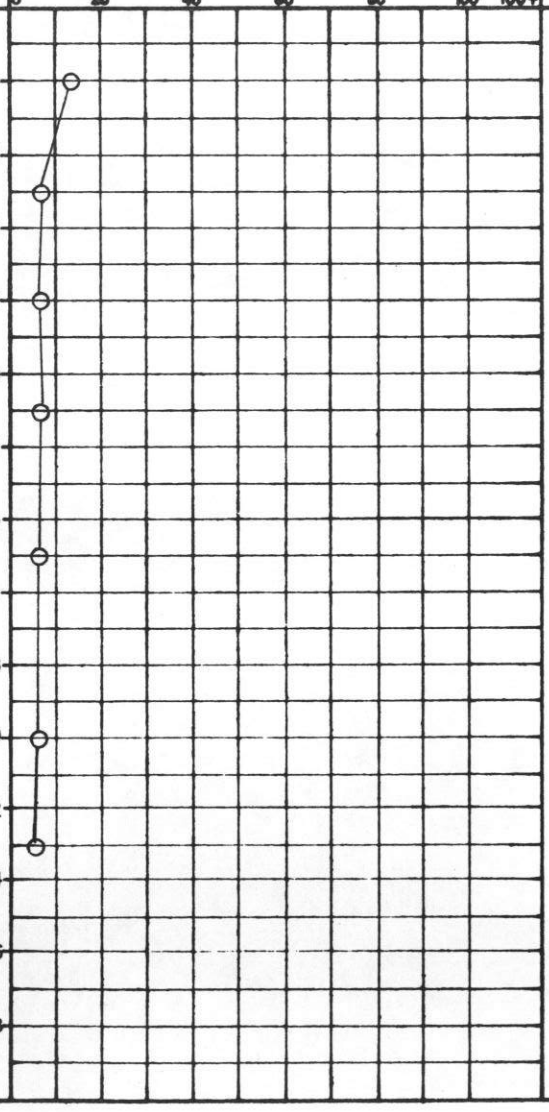
SITE:

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-253/4	CHAINAGE.
OFFSET.	TEST HOLE 10		
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.	MILE 830.7 from Seismic Line		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		Low Ice						
2						SILTSTONE-SANDSTONE SHALE -Soft		Vx					Wet	
4													Moist	
6														
8						Soft-hard							Damp	
10							F							
12								Frozen					Damp	
14								Nbn						
16													Damp	
18														
20													Damp	
22														
24													Damp	
						25'								
26						BOTTOM OF HOLE - 25'								
28														

▲ DRY DENSITY (lbs./Ft.^{3})
⊙ WATER CONTENT (% of dry weight)
△ ICE CONTENT (% of sample volume)

PLASTIC LIMIT ⊢——⊣ LIQUID LIMIT



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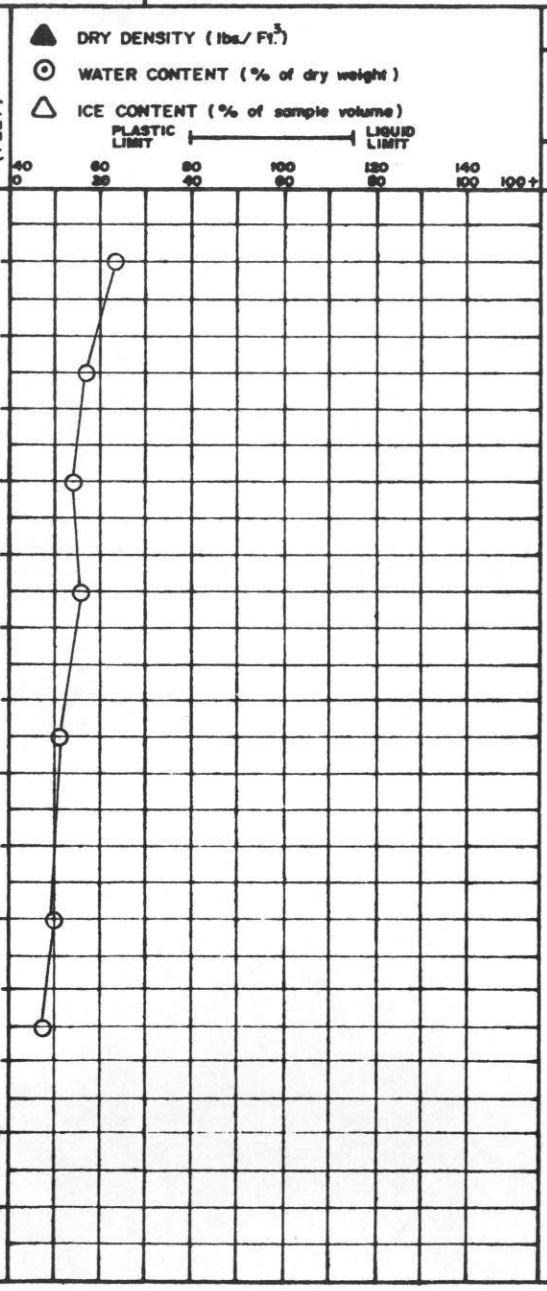
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-253/4	CHAINAGE.	OFFSET.	TEST HOLE 11
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 830.7 from Seismic Line

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 1'		Moderate						
2					CI	CLAY -Silty Sandy Siltstone & Sandstone fragments 5'-7'		Ice					Sat.	
4														
6						— 6'		Vc - Vr					Wet	
8						SILTSTONE-SANDSTONE SHALE -Soft		Low					Moist	
10								To						
12							F	Nil					Moist	
14								Ice						
16								Vx					Moist	
18								Nbn						
20						Soft-med. hard							Damp	
22														
24													Damp	
26						— 25'								
28						BOTTOM OF HOLE - 25'								



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DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-253/4	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

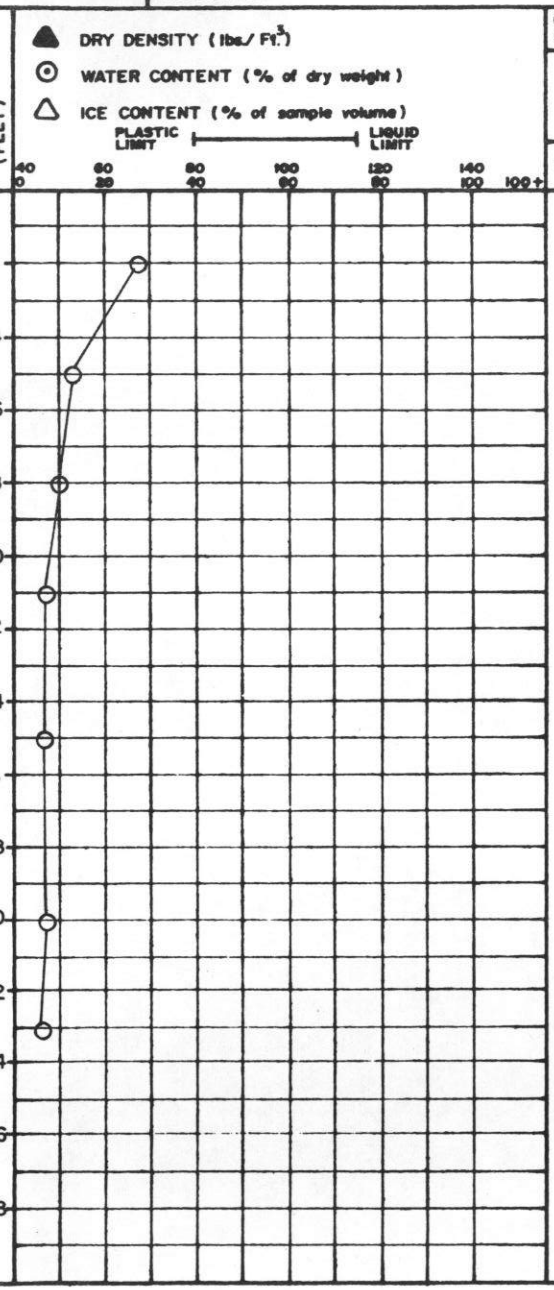
OFFSET. ELEV.

TEST HOLE 12

MILE 830.7 from Seismic Line

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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT 1'		Moderate					
2					CI	CLAY -Silty Sandy Silt & Sandstone fragments		Ice					Wet
4													
6						6'		Vc - Vr					Wet
8						SILTSTONE-SANDSTONE SHALE -Soft-hard		Low Ice					Moist
10								Vx					
12							F						Damp
14								Frozen					
16								Nbn					Damp
18													
20													Damp
22						Soft-med. hard							
24													Humid
26						25'							
28						BOTTOM OF HOLE - 25'							



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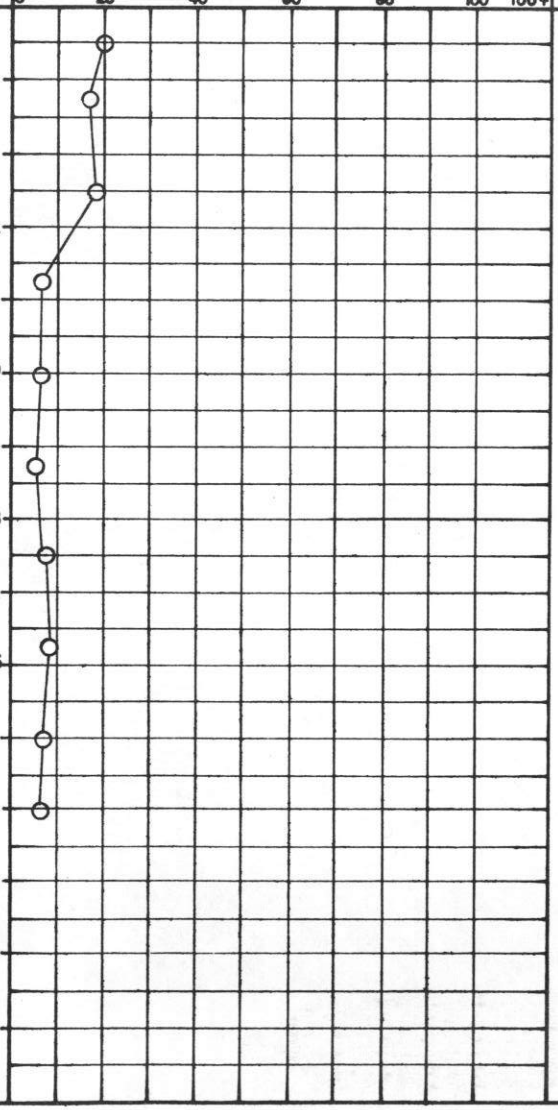
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO. A23329-253/4	CHAINAGE.
OFFSET.	TEST HOLE 13		
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE MAX. 6"
ELEV.	MILE 830.7 from Seismic Line		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'		Moderate Ice						
4					CL	CLAY-Silty Few pebbles 4'		Vc - Vr					Wet	
						SILTSTONE - SHALE SOFT TO HARD							Moist	
8							F	Low						
12								To Nil					Damp	
16								Ice Vx					Damp	
20						20' SHALE -Med.-hard		Nbn					Humid	
24													Humid	
28						30' SILTSTONE -Soft							Damp	
32														
36								Frozen					Damp	
40								Nbn					Damp	
44						44'							Humid	
48						BOTTOM OF HOLE - 44'								
52														
56														



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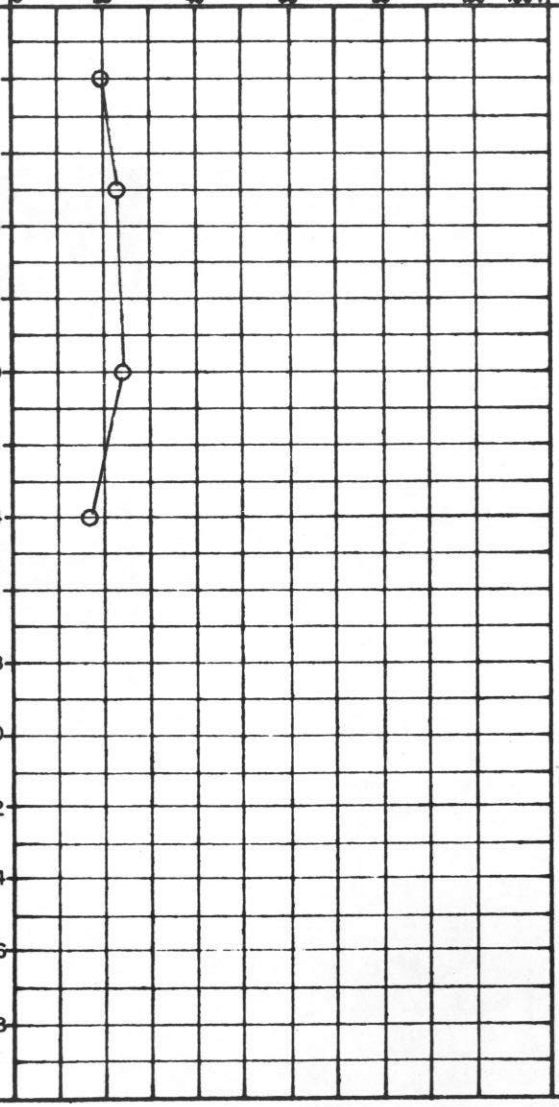
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 1		
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE
ELEV.	MILE		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'								
2						Clay							Damp	
						-Silty		Moderate						
4						Sandy								
					CL	Pebbles	F							
								Ice					Wet	
6					Cl	Low-Med. Plastic								
								Vc-Vr						
8														
10													Moist	
12														
14						14'							Moist	
						BOTTOM OF HOLE 14'								
16														
18														
20														
22														
24														
26														
28														



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BORROW PIT 102

DEPARTMENT OF PUBLIC WORKS, CANADA
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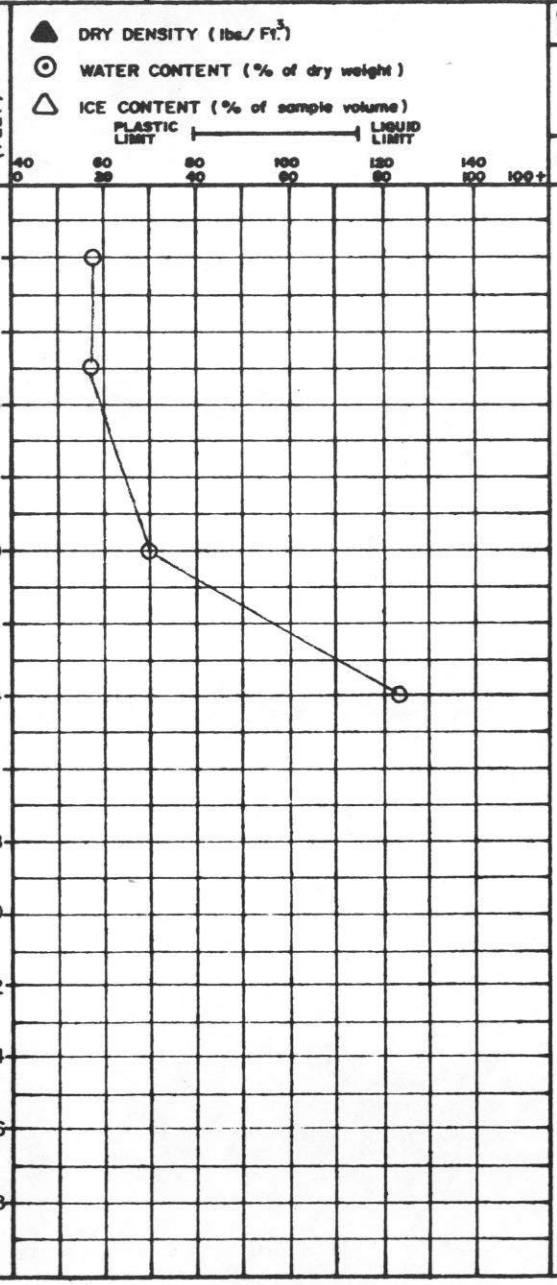
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 2		
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE
ELEV.	MILE		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'								
2						Clay -Silty Sandy Pebbles Med. Plastic							Moist	
4								Moderate Ice						
6					Cl		F						Moist	
8								Vc-Vr						
10													Sat.	
12								VS High Ice						
14						14'							Free Water	
						BOTTOM OF HOLE 14'								
16														
18														
20														
22														
24														
26														
28														



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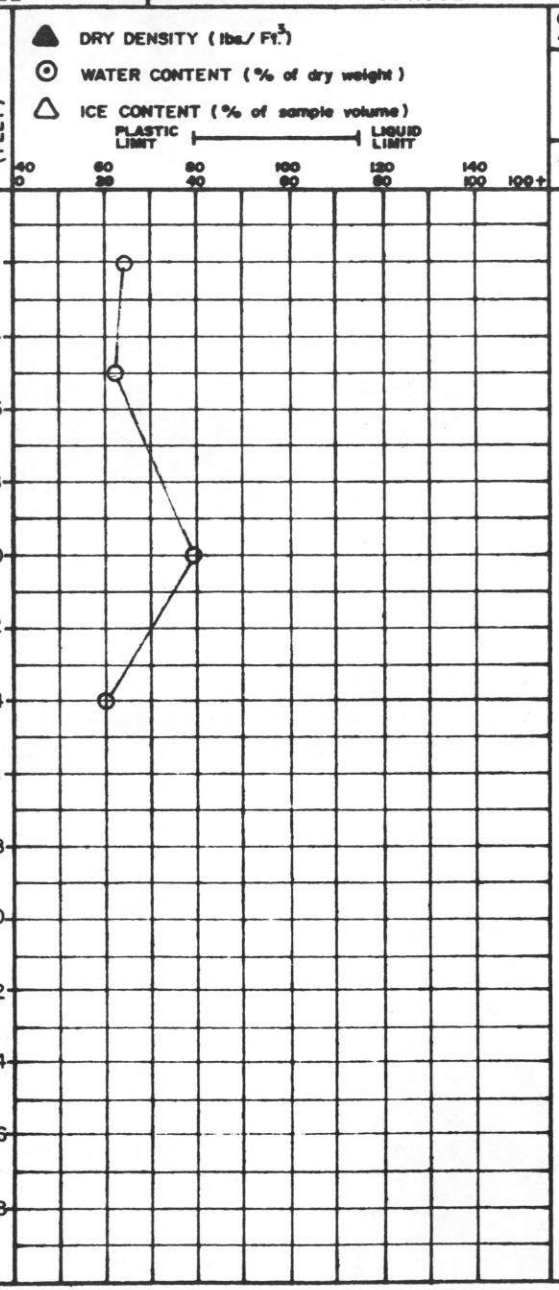
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 10/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. LEVEL	VEGETATION. SPRUCE

OFFSET. ELEV. TEST HOLE 3 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'		Vc-Vr						
2						Clay							Wet	
						-Silty		Moderate						
4						Sandy								
						Pebbles		Ice					Wet	
6						Med. Plastic								
					Cl		F							
8								High Ice						
10													Sat.	
								VS						
12														
14													Free Water	
16														
18								High Ice						
20														
22								VS						
24														
						25'								
26						BOTTOM OF HOLE 25'								
28														



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DRILL HOLE REPORT

SITE: SECTION D

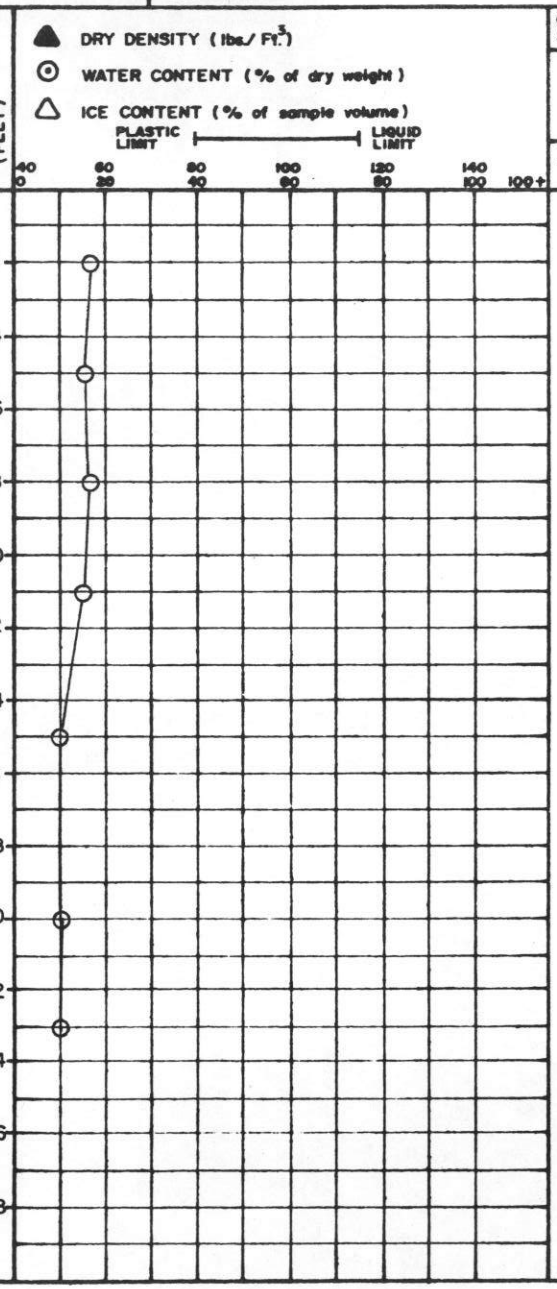
FIELD ENG. A. HANNA	DATE DRILLED. 4/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV.

TEST HOLE: 1

MILE: 829.2

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .5'				
2					CI	CLAY -Sandy Silty Pebbles Gravelly 5'-7' Med. plastic	F	Low To Moderate Ice Vx	Moist	
4										
6									Moist	
8									Moist	
10								Vc - Vr		
						11'			Moist	
12						SHALE -Silty (Black) Soft		Low Ice Vx		
14										
									Damp	
16								Frozen Nbn		
18										
20									Damp	
22										
									Damp	
24										
						25'				
26						BOTTOM OF HOLE - 25'				
28										



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

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DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 9/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV.

TEST HOLE: 2

MILE: 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .5'		Moderate							
4					CL CI	CLAY -Sandy Silty Pebbles Low-med. plastic	F	To Low Ice Vc - Vr	4					Moist	
8									8					Moist	
12									12					Moist	
						13.5'		Vx							
16						SHALE -Black Silty Soft		Low	16					Damp	
20								Ice	20					Damp	
24								Vx	24					Damp Damp	
28									28						
32									32					Damp	
36									36					Damp	
40						40'			40					Damp	
44						BOTTOM OF HOLE - 40'			44						
48									48						
52									52						
56									56						

▲ DRY DENSITY (lbs./Ft.³)
⊙ WATER CONTENT (% of dry weight)
△ ICE CONTENT (% of sample volume)

PLASTIC LIMIT ⊢——⊣ LIQUID LIMIT

40 0 60 20 80 40 100 60 120 80 140 100 100+

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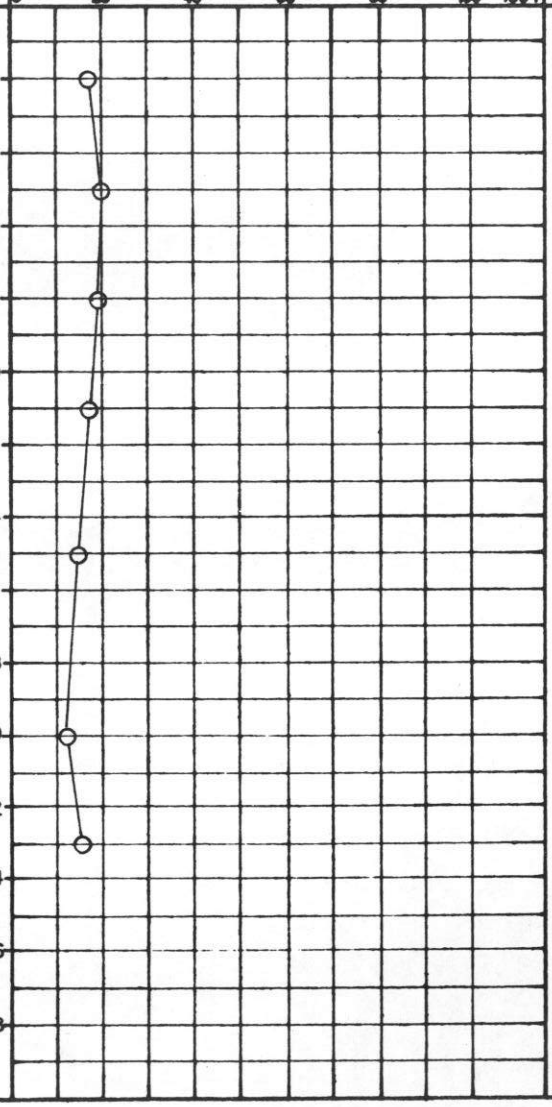
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 9/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 3
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 829.2

DRY DENSITY (lbs./Ft.³) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'		Moderate						
2						CLAY -Sandy Silty Pebbles Med. plastic							Moist	
4								Ice						
6													Moist	
					CI									
8													Moist	
10														
12							F	Vc - Vr					Moist	
14														
16													Moist	
18														
20													Damp	
22														
24													Moist	
						—25'								
26						BOTTOM OF HOLE - 25'								
28														



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DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 9/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

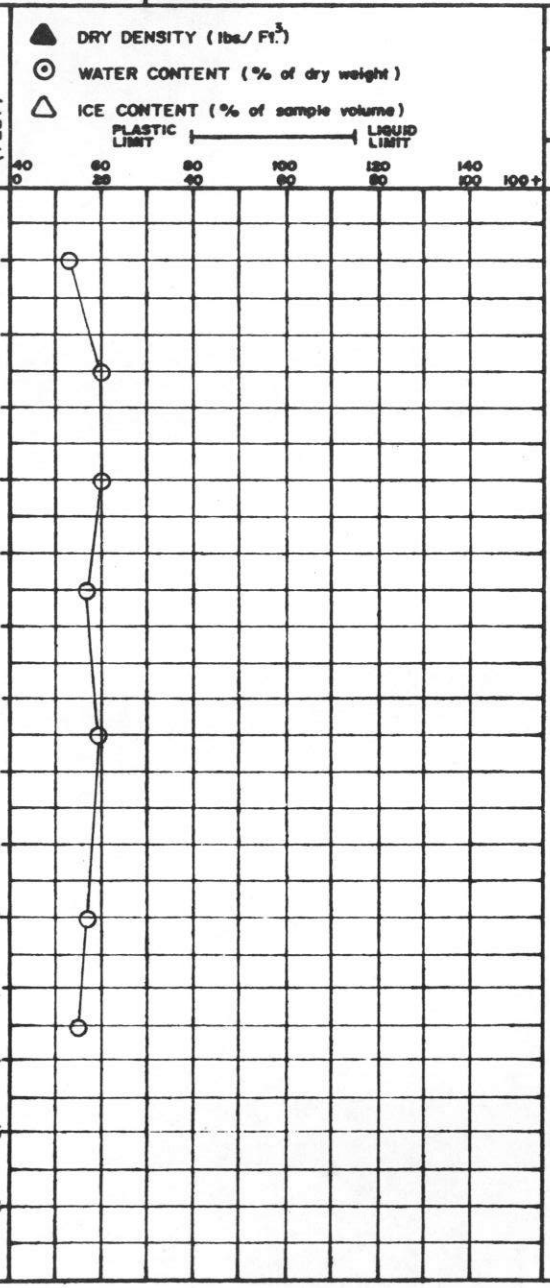
OFFSET. ELEV.

TEST HOLE 4

MILE 829.2

REMARKS

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT 1'			
2						CLAY -Gravelly to 7' Silty Sandy Pebbles Med. plastic		Moderate Ice Vc - Vr	Moist
4									
6									Wet
8									Moist
10					CI				
12							F		Moist
14									
16									Moist
18									
20									Moist
22									
24									Moist
26						25'			
28						BOTTOM OF HOLE - 25'			



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

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BORROW PIT 103

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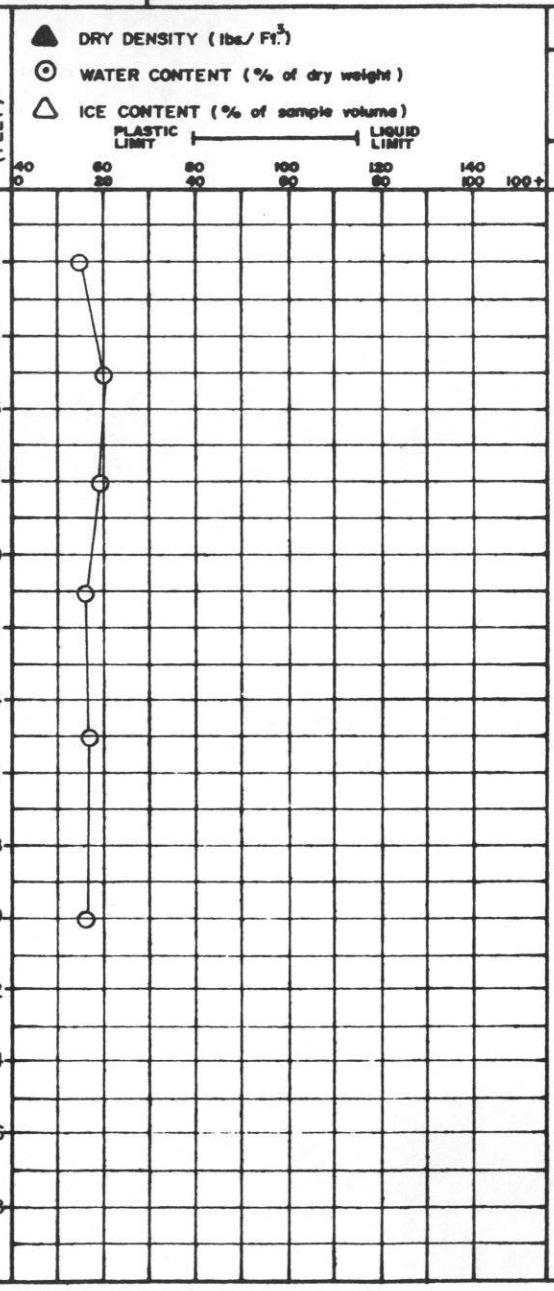
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 9/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 5
TECH.	RIG.	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2						CLAY -Sandy Silty Pebbles Gravelly from 5'-7' 11'-13' Med. plastic		Moderate					Moist	
4								Ice						
6													Wet	
8													Moist	
10					CI		F						Moist	
12														
14														
16								Vc - Vr					Moist	
18														
20						Boulders @ 22'							Moist	
22						22'								
24						BOTTOM OF HOLE - 22'								
26														
28														



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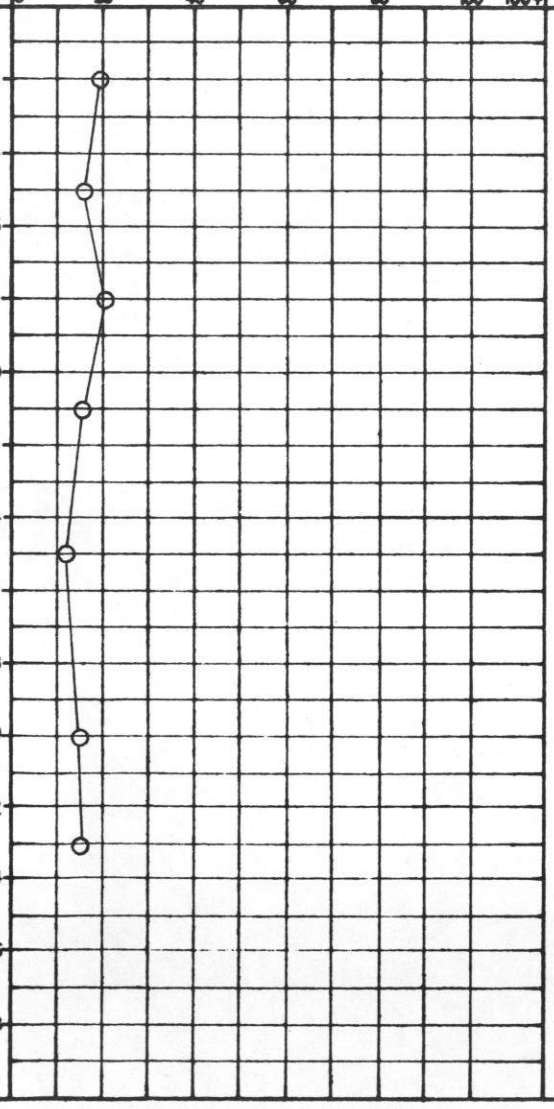
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 9/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 6
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2						CLAY -Sandy Silty Pebbles Gravelly from 5'-7' 11'-17' Med. plastic		Moderate					Moist	
4								Ice						
6													Moist	
8													Moist	
10					CI		F						Moist	
12														
14													Moist	
16								Vc - Vr						
18														
20													Moist	
22														
24													Moist	
						25'								
26						BOTTOM OF HOLE - 25'								
28														

DRY DENSITY (lbs./Ft.³)
WATER CONTENT (% of dry weight)
ICE CONTENT (% of sample volume)
PLASTIC LIMIT — LIQUID LIMIT



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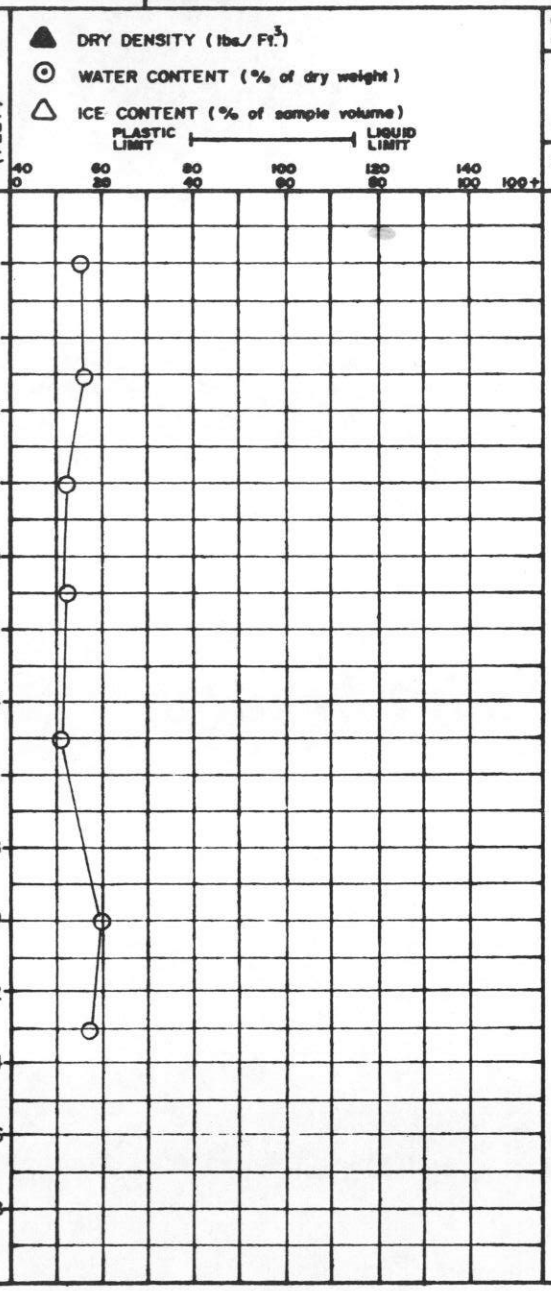
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 9/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 7
TECH.	RIG.	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 829.2

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		Moderate						
2						CLAY -Sandy Silty Pebbles		&					Moist	
4					CI									
						5'		Low					Moist	
6						SHALE -Black Silty Soft		Ice						
8													Moist	
10														
							F						Damp	
12														
14								Vc - Vr						
													Damp	
16														
18								Vx						
20													Moist	
22														
													Damp	
24														
						25'								
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 104

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

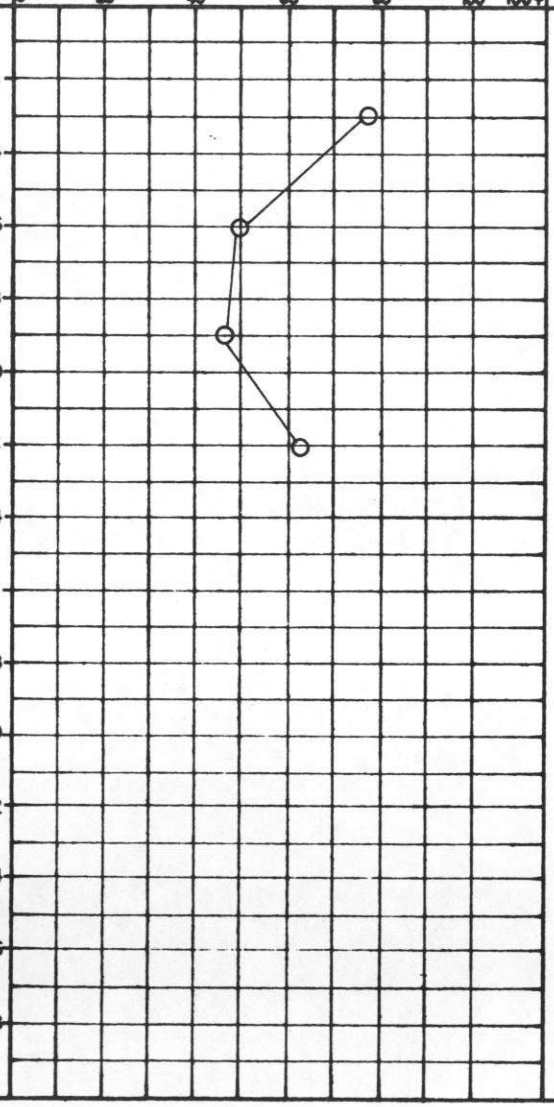
SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV. TEST HOLE 1 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2'								
					CL	Silty Clay Wet on Thawing	F	High Ice VS					Free Water	
													Sat.	
													Wet	
													Sat.	
						14'								
						BOTTOM OF HOLE 14'								

DRY DENSITY (lbs./Ft.³) ▲
WATER CONTENT (% of dry weight) ⊙
ICE CONTENT (% of sample volume) △
PLASTIC LIMIT — LIQUID LIMIT



DS-14-5-74 b

BORROW PIT 104

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

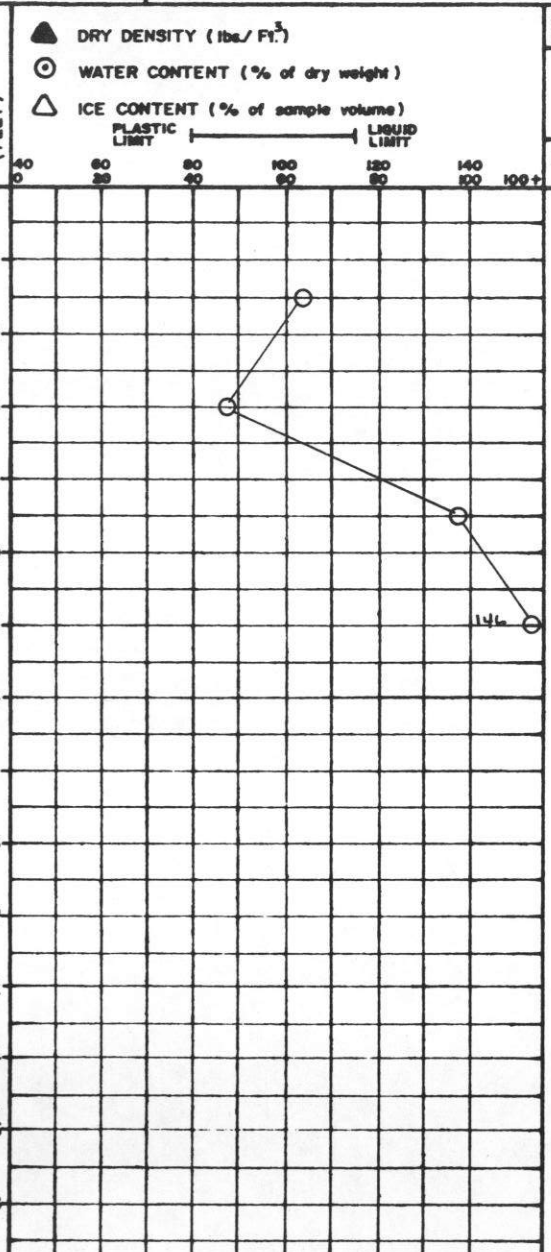
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV. TEST HOLE 2 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'		High Ice						
						Silty Clay							Free Water	
4						Wet on Thawing								
6					Cl	Med.-High Plastic	F						Wet	
8					CH			VS						
													Free Water	
10														
12													Free Water	
14						14'								
						BOTTOM OF HOLE 14'								
16														
18														
20														
22														
24														
26														
28														



DS-14-5-74 b

BORROW PIT 105

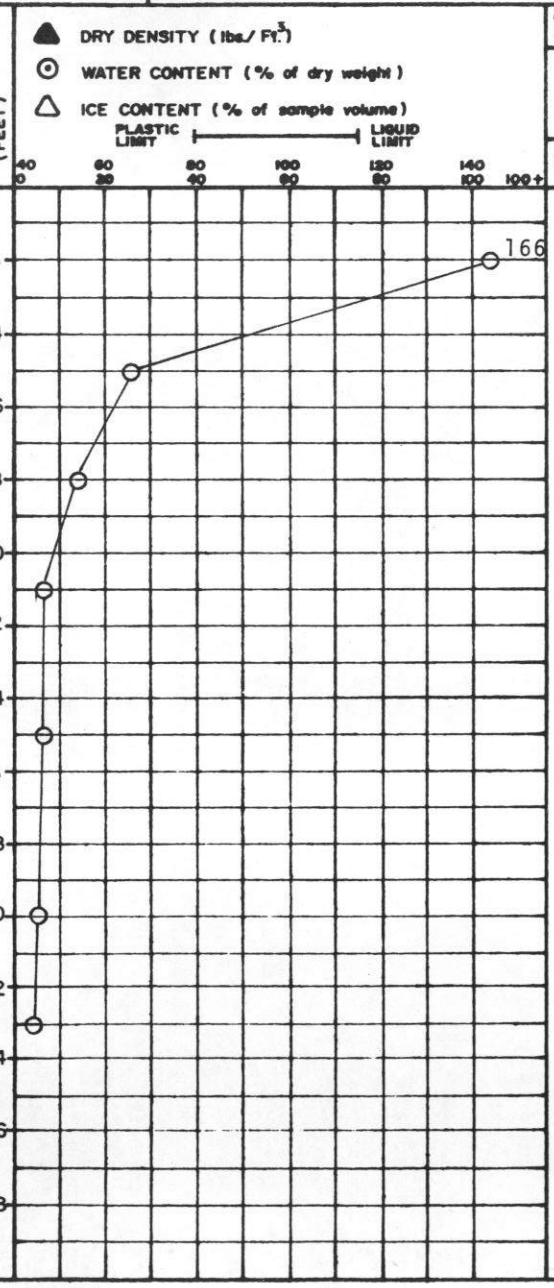
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.	OFFSET.	TEST HOLE 1
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 823.3

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		High Ice					Free Water	
2						2'								
						CLAY -Silty Sandy		Vs						
4														
					CL	Siltstone-Sandstone fragments from 5'-10'		Moderate Ice					Sat.	
6														
					CI									
8													Moist	
								Vc - Vr						
10						10'	F							
						SILTSTONE-SANDSTONE SHALE -Med. hard - hard							Damp	
12														
14														
													Damp	
16														
								Frozen						
18														
								Nbn						
20													Damp	
22														
													Damp	
24														
						25'								
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 105

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

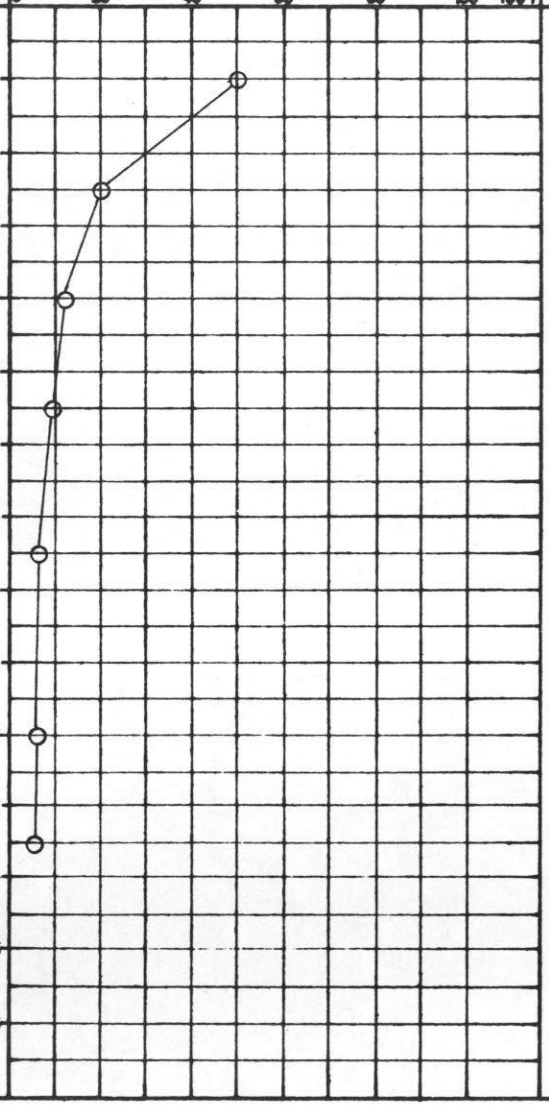
SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.
OFFSET.			
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.			

TEST HOLE: 2

MILE: 823.3

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		High Ice					Free Water	
2'														
					ML	SILT -Sandy Clayey Pebbles Sandstone-Siltstone fragments 5'-7'		Vs					Wet	
								Moderate Ice Vc - Vr						
7'														
						SILTSTONE-SANDSTONE SHALE	F	Low Ice Vx					Moist	
													Damp	
								Frozen Nbn					Damp	
						SHALE -Med. hard								
													Damp	
													Humid	
25'														
						BOTTOM OF HOLE - 25'								



DS-14-5-74 b

BORROW PIT 105

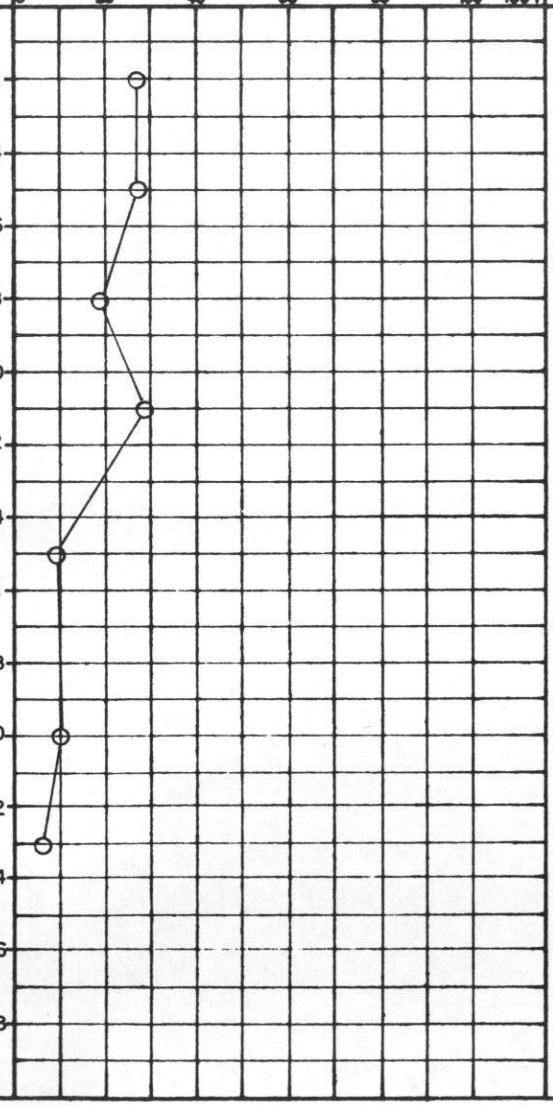
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.	OFFSET.	TEST HOLE 3
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 823.3

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		High						
2						2'							Sat.	
4					CL	CLAY -Sandy Silty Low plastic		Ice					Sat.	
6						7'								
8					ML	SILT -Sandy Clayey Siltstone-Sandstone fragments	F	Vs					Moist	
10														
12													Sat.	
14														
						15'							Moist	
16						SILTSTONE-SANDSTONE SHALE		Low						
18								To						
								Nil						
20								Vx					Damp	
22								Frozen						
24								Nbn					Damp	
						25'								
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 105

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

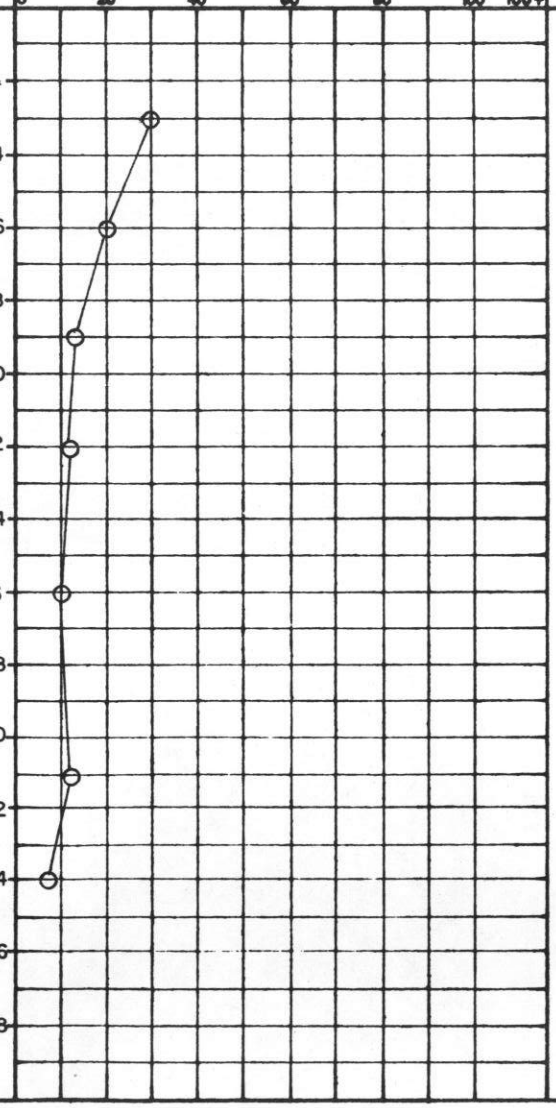
FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV.

TEST HOLE 4

MILE 823.3

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		Heavy Ice Lenses 0-4'						
2						2'							Sat.	
					CL	CLAY -Silty Sandy		Vs						
4						4'		Moderate Ice Crystals 4-8'						
					CL	SANDY CLAY SILT -Siltstone, Sandstone And Shale fragments Soft to hard								
6													Wet	
8								Vc - Vr						
					CI			Low					Moist	
10							F							
12								Ice					Moist	
14														
						15'								
16						SILTSTONE-SANDSTONE SHALE -Soft-hard							Moist	
18								Vx						
20														
													Wet	
22														
24													Damp	
26						26'								
						BOTTOM OF HOLE - 26'								
28														



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BORROW PIT 105

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

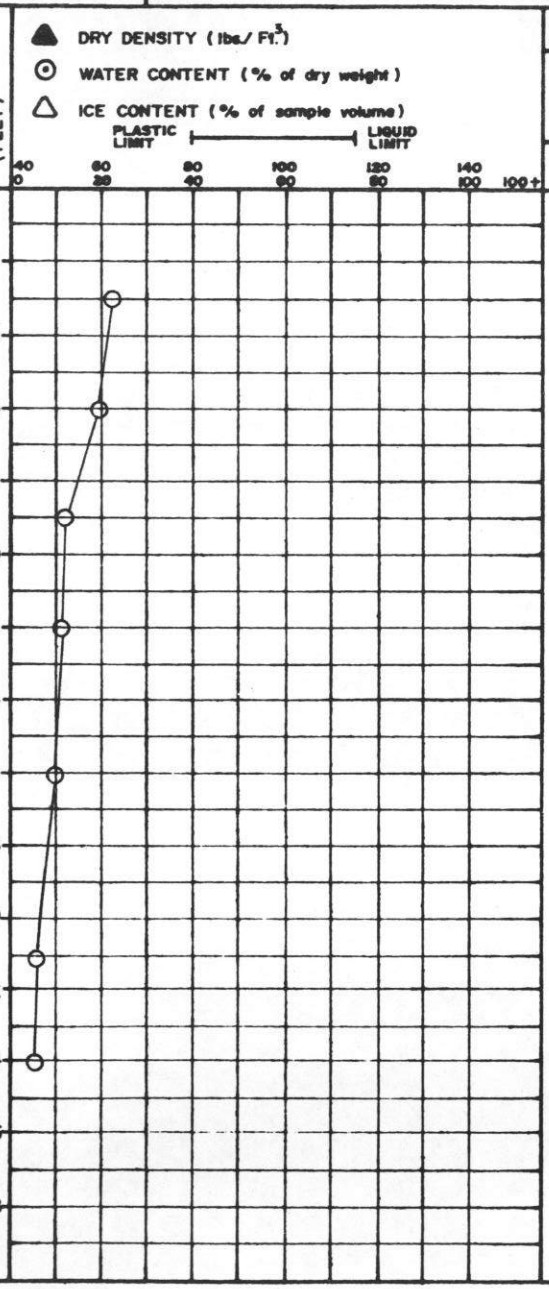
FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV.

TEST HOLE 5

MILE 823.3

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'		Low						
2					CL	SANDY CLAY SILT -Siltstone & Sandstone fragments		Ice						
4					ML			Content					Moist	
						—5'		Few Ice						
6						SILTSTONE SANDSTONE SHALE		Crystals To 8'					Moist	
8								Vx						
10							F						Damp	
12						-Hard below 20'		Low					Damp	
14								To						
16								Nil					Damp	
18								Ice						
20								Vx						
22								Nbn					Damp	
24													Damp	
						—25'								
26						BOTTOM OF HOLE - 25'								
28														



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BORROW PIT 105

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV.

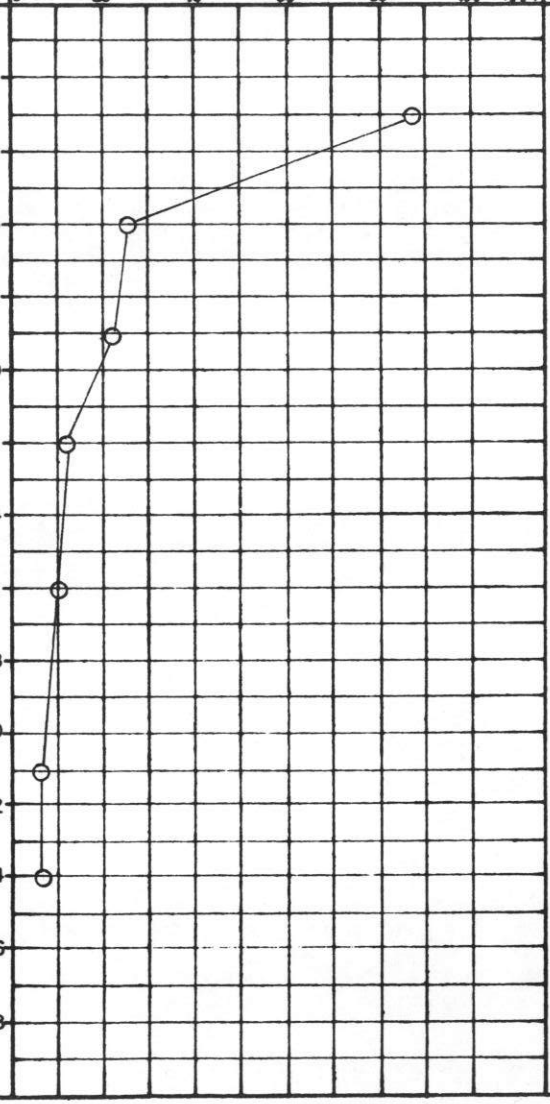
TEST HOLE 6

MILE 823.3

▲ DRY DENSITY (lbs./Ft.³)
⊙ 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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'		Heavy Ice Lenses To 4'						
2					CL ML	CLAY -Silty Sandy Wet on through to 6'		Vs					Free Water	
4								Moderate Ice						
6													Wet	
8								Vc - Vr					Moist	
10							F							
12						—12'							Damp	
14						SILTSTONE SHALE SANDSTONE		Low To Nil Ice						
16													Damp	
18								Vx						
20														
22								Nbn					Damp	
24													Damp	
26						—25' BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 105

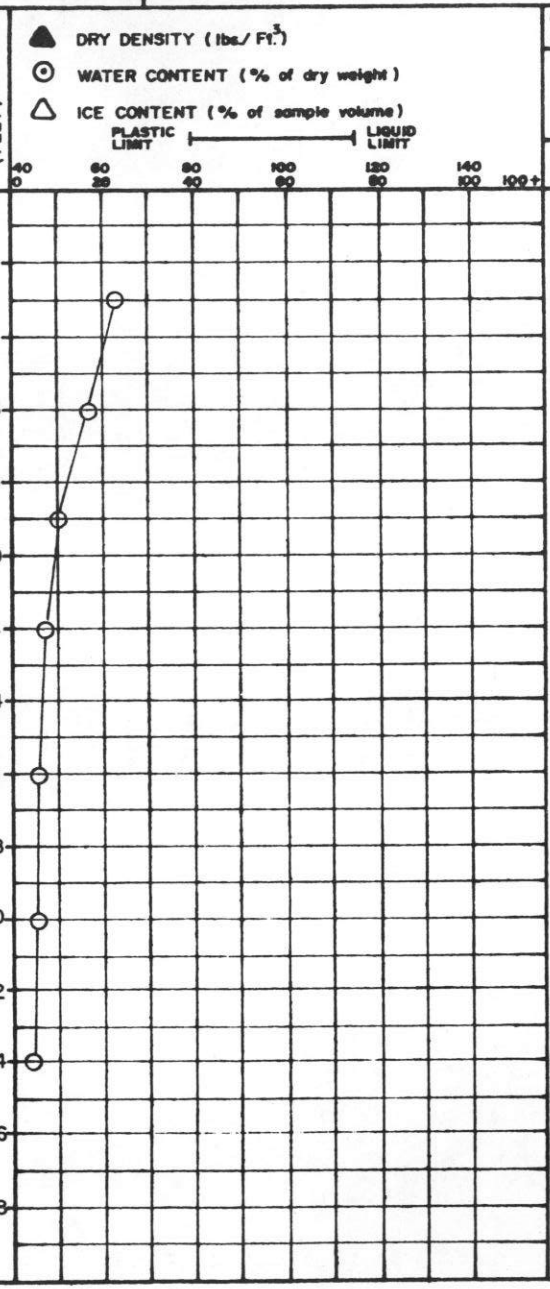
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.	OFFSET.	TEST HOLE 7
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 823.3

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'		Moderate						
2					CL	CLAY-SILT		To						
								Low					Wet	
4						—4'		Ice						
6						SILTSTONE SANDSTONE SHALE		Vc-Vr-Vx					Moist	
8								Low					Moist	
10								To						
12							F	Nil					Damp	
14								Ice						
16								Vx					Damp	
18														
20								Nbn					Damp	
22														
24													Damp	
						—25'								
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 105

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

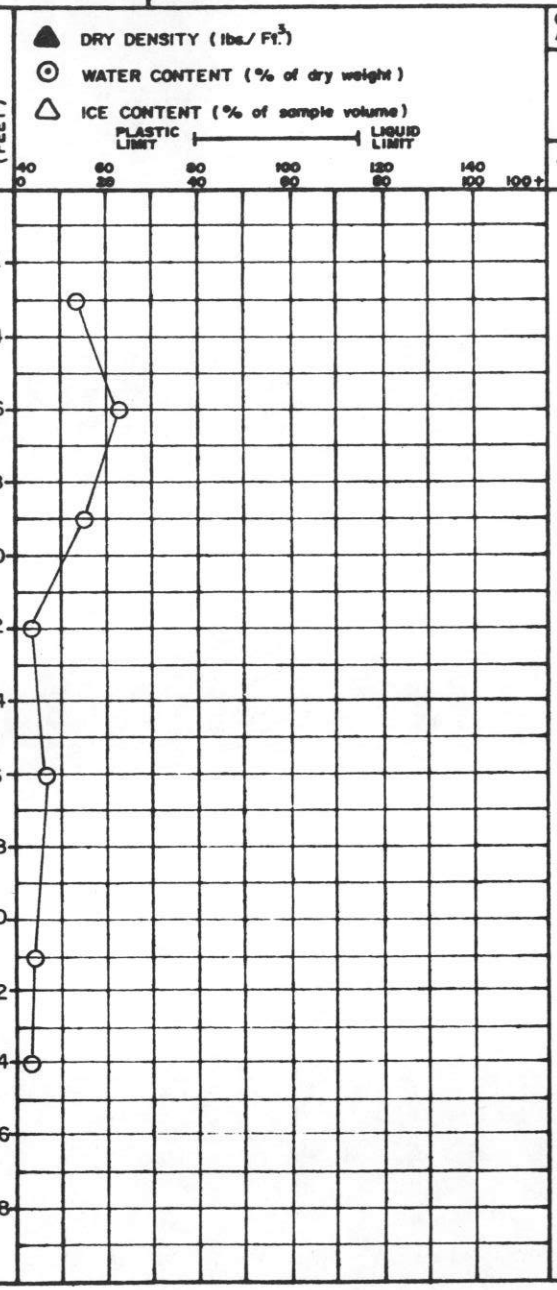
FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.
OFFSET.			
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.			

TEST HOLE: 8

MILE: 823.3

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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT							
1'													
2					CL ML	CLAY & SILT -With Sandstone & Siltstone fragments		Low Ice Content					Damp
4													
6								Moderate Ice					Wet
8													
10							F	Vx-Vc-Vr					Moist
11'													
12						SILTSTONE SHALE SANDSTONE							Humid
14								Frozen					
16								Nbn					Humid
18													
20													
22													Humid
24													Humid
25'													
26						BOTTOM OF HOLE - 25'							
28													



DS-14-5-74 b

BORROW PIT 105

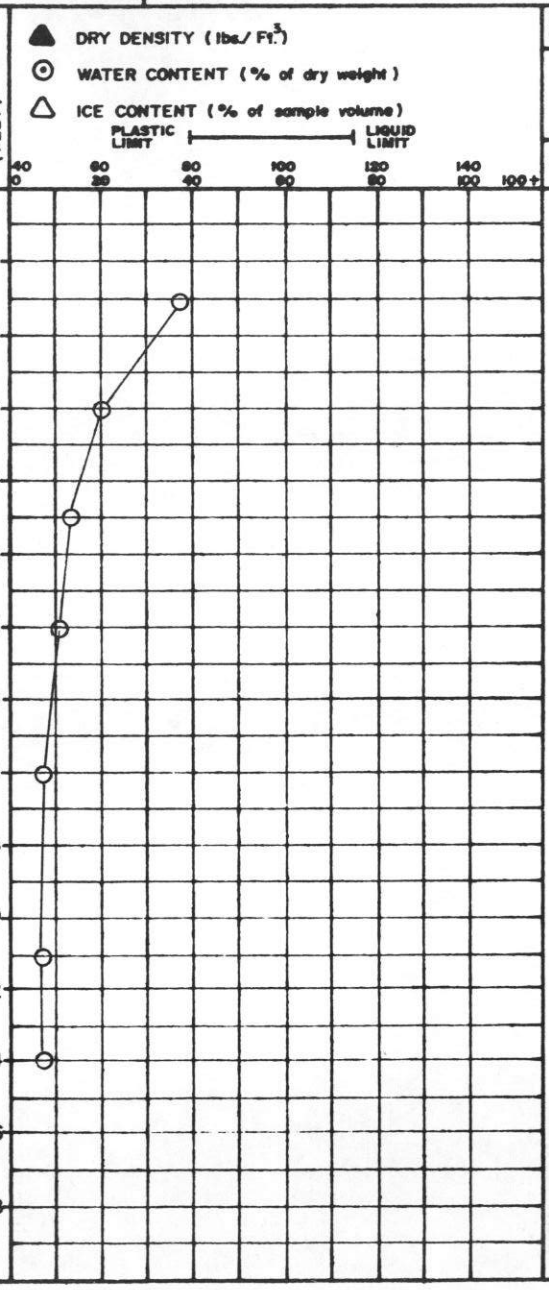
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.
OFFSET.	TEST HOLE 9		
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.	MILE 823.3		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'		Heavy Ice Lenses 0-4' Vs						
2						SANDY-SILT-CLAY -Siltstone & Sandstone fragments Low plastic							Free Water	
4					CL									
6								Moderate To Low Ice Vc - Vr Vx					Wet	
8						—8' SILTSTONE & SHALE							Moist	
10														
12						-Medium to hard Shale below 15'	F						Moist	
14														
16								Frozen Nbn					Damp	
18														
20														
22													Damp	
24													Damp	
26						—25' BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 105

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

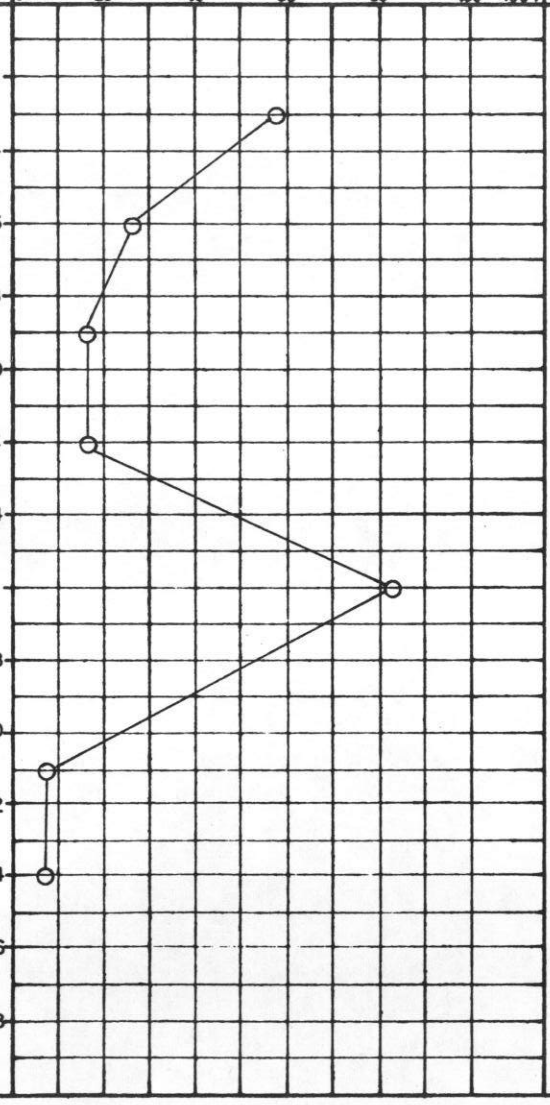
FIELD ENG. A. HANNA	DATE DRILLED. 22/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV.

TEST HOLE 10

MILE 823.3

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		Heavy Ice Lenses 0-4' Vs						
2						SILT & CLAY -With Siltstone & Sandstone fragments							Free Water	
4								Moderate To Low Ice Vc - Vr Vx						
6					CL								Wet	
8													Moist	
10							F							
12													Wet	
14						14'								
16						ICE		ICE 14'-18'					Free Water	
18						18'								
20						SHALE & SILTSTONE	F	Nbn Frozen						
22													Damp	
24													Damp	
26						25' BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 105

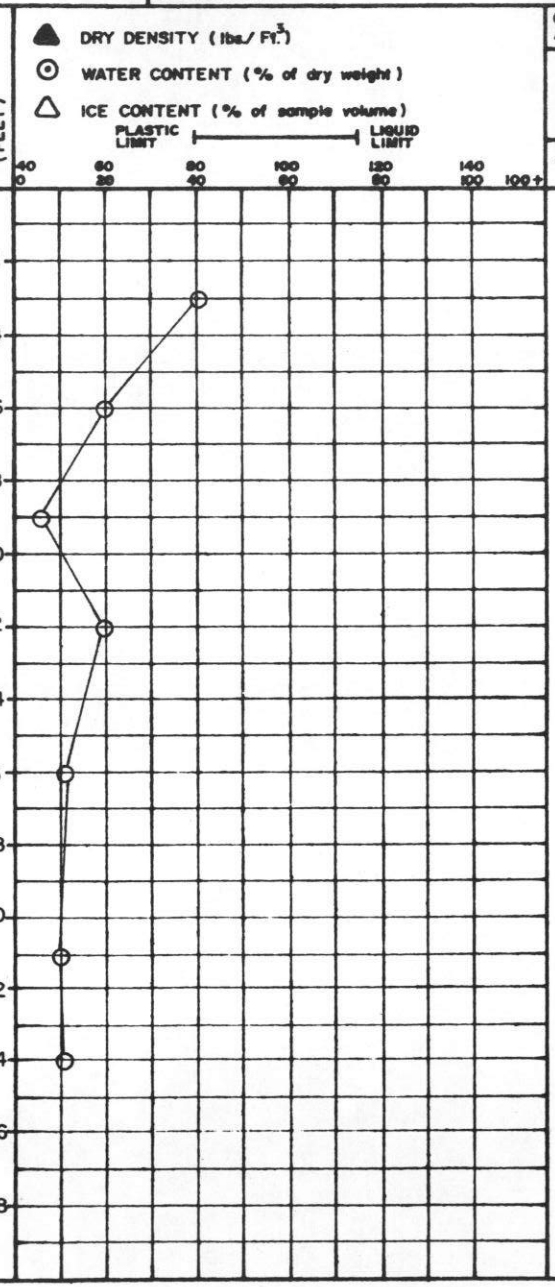
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.	OFFSET.	TEST HOLE 11
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 823.3

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		Heavy Ice Lenses To 4' Vs						
2'														
					OL	ORGANIC MATERIAL -With soft Shale fragments							Sat.	
5'														
						SHALE -Soft to hard Black	F	Ice Crystals Through-out Shale Low Ice Vx					Wet	
													Damp	
													Wet	
													Moist	
													Damp	
													Damp	
25'														
						BOTTOM OF HOLE - 25'								



DS-14-5-74 b

BORROW PIT 105

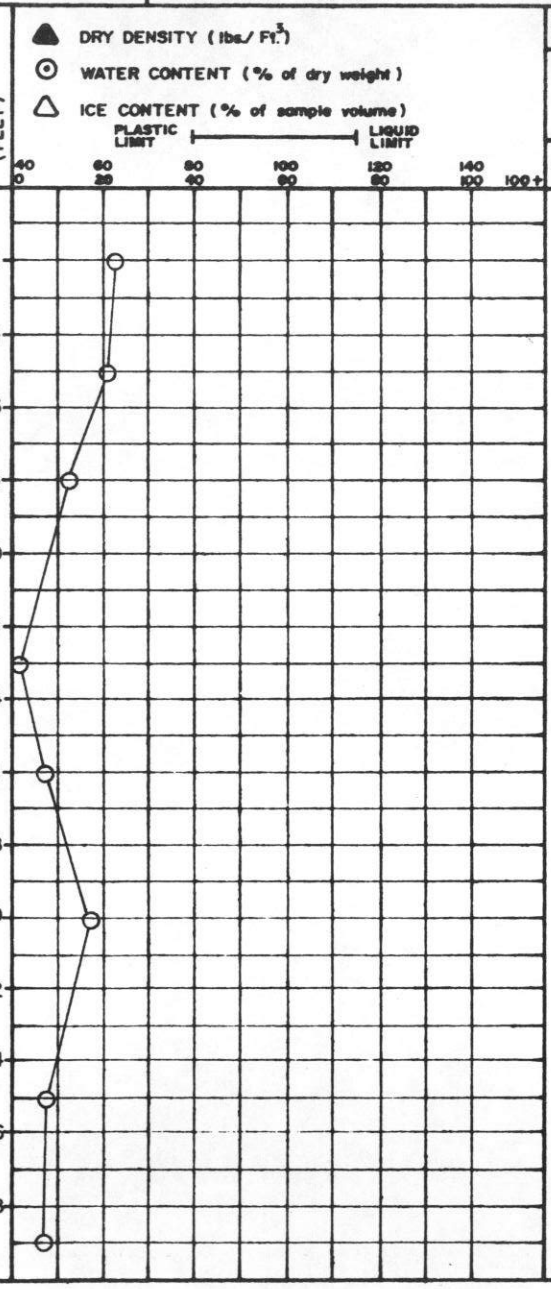
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.
OFFSET.	TEST HOLE 12		
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE
ELEV.	MILE 823.3		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 1'	F	High Ice To Moderate Vs-Vc-Vr						
2					CL CI	CLAY -Sandy, silty — 3'							Moist	
4						SHALE SILTSTONE SANDSTONE								
6													Sat.	
8								Moderate & Low Ice Vc - Vr					Wet	
10						— 10'								
						SANDSTONE ? -Very hard drilling								
12														
14													Dry	
16						— 16'		Vx					Damp	
						SHALE SILTSTONE SANDSTONE								
18														
20													Wet	
22														
24													Damp	
26														
28														
						— 29'							Damp	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 105

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

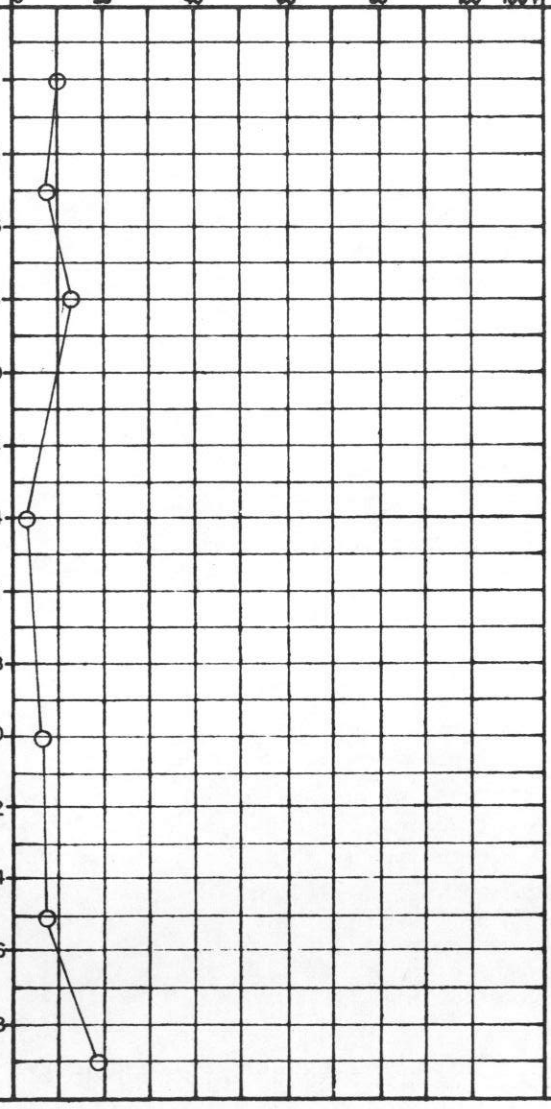
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.	OFFSET.	TEST HOLE 13
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE	ELEV.	MILE 823.3

▲ DRY DENSITY (lbs./Ft.³)
⊙ 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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2					CL	CLAY - Silty 2'							Damp	
						SILTSTONE SHALE								
4								Low						
													Damp	
6														
								Ice						
8													Wet	
10							F	Vx						
12														
14													Humid	
16														
18														
20													Damp	
22														
24														
													Damp	
26														
						CLAY & SILT -With Shale Below 26'								
28														
						29'							Moist	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 105

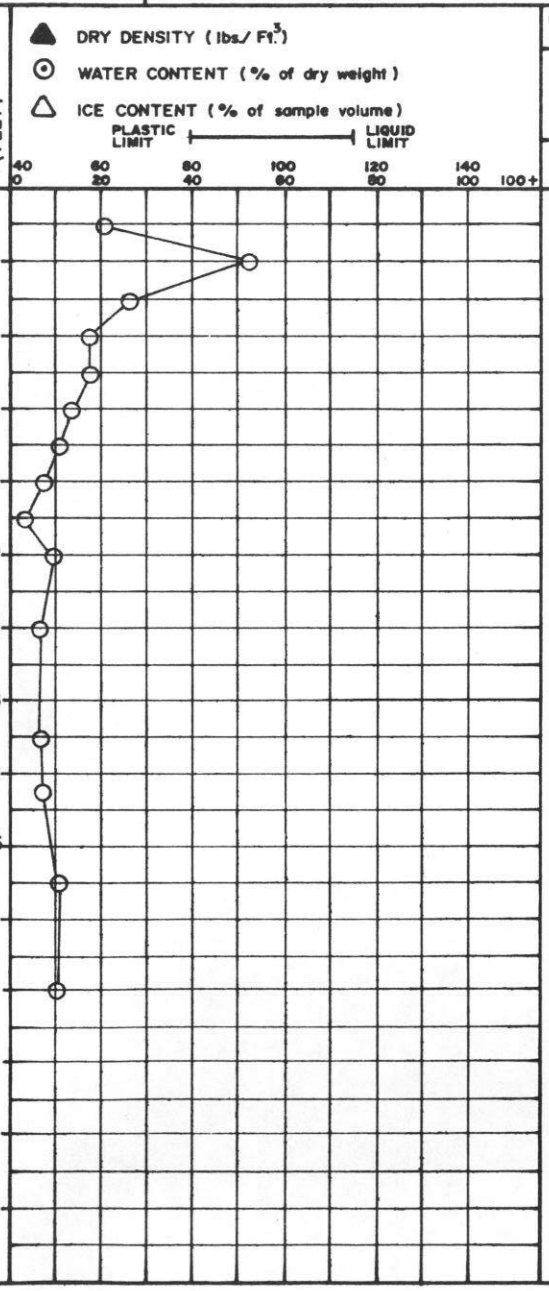
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 11/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.	OFFSET.	TEST HOLE 14
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE	ELEV.	MILE 823.3

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		High Ice Vs					Moist	
4					CI	CLAY -Silty Sandy							Free Water	
8								Moderate Ice					Wet	
						10'	F						Moist	
12						SHALE -Soft to hard Black 23'-29'		Vc - Vr					Wet	
16								Low					Moist	
20								To Nil Ice					Moist	
24								Vx Nbn					Damp	
28													Humid	
32								Frozen					Humid	
36								Nbn					Humid	
						37'								
40						SILTSTONE SANDSTONE		Low Ice Vx					Damp	
						41'		Some Ice 41'-44'						
44						As above but Some ice 44'							Moist	
48						BOTTOM OF HOLE - 44'								
52														
56														



DS-14-5-74 a

BORROW PIT 105

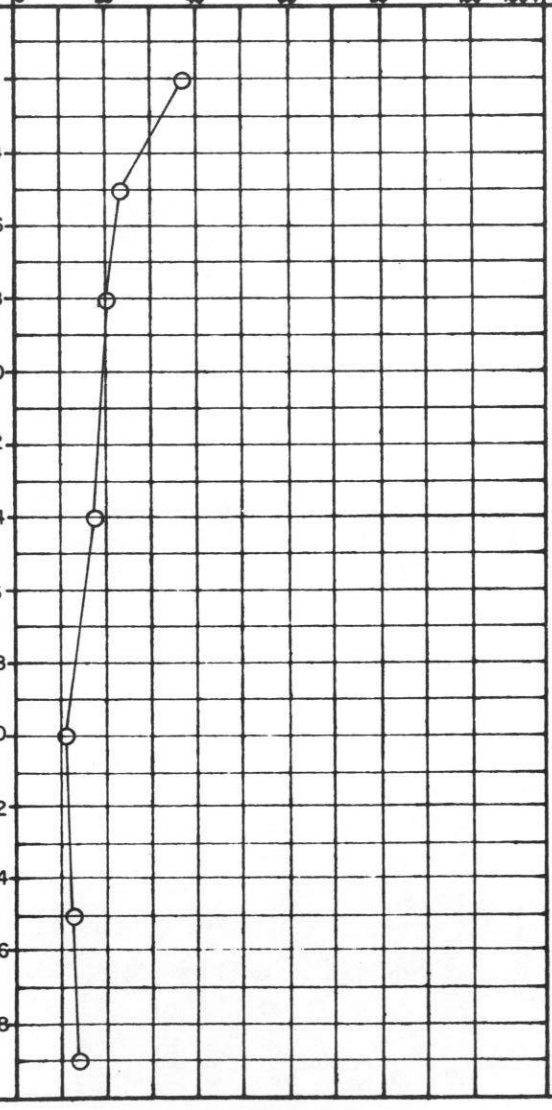
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.
OFFSET.	TEST HOLE 16		
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. EDGE OF RIDGE	VEGETATION. SPRUCE
ELEV.	MILE 823.3		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		Ice						
2					CL	CLAY - Silty 2'		Lenses					Sat.	
						SHALE-SILTSTONE -Black		In						
4								Fractures						
						Soft to med. hard		To 9'					Sat.	
6								High						
								Ice						
8						Wet to 9'		Vs					Wet	
10							F							
12								Low						
14								Ice					Moist	
16														
18								Vx						
20													Damp	
22														
24														
26													Damp	
28														
						29'							Damp	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 105

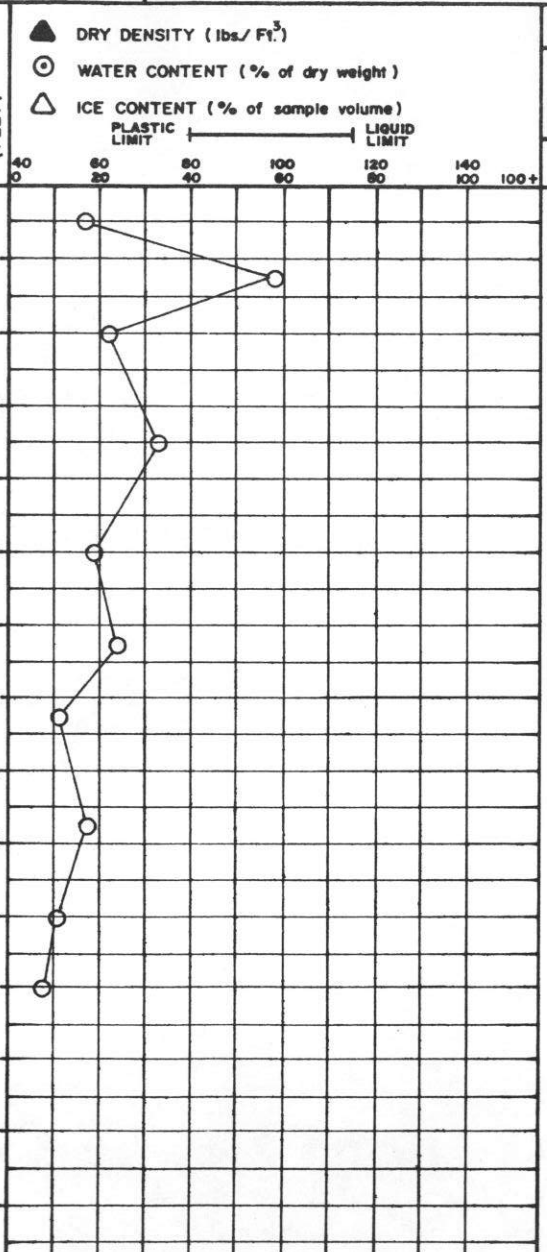
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.	OFFSET.	TEST HOLE 17=
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. DIP	VEGETATION. SPRUCE	ELEV.	MILE 823.3

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 2'		Vs						Moist	
4					CL	CLAY -Sandy, silty Shale fragments Below 7'-8' Wet on thawing — 9'		Vc - Vr	4					Free Water	
8								High	8					Wet	
12						SHALE -Black Soft to med. hard Moist to wet on thawing	F	Ice & Moderate Ice	12					Free Water	
16								Moderate Ice	16						
20									20					Wet	
24								Vc - Vr	24					Moist	
28						SILTSTONE SANDSTONE -Soft to hard Dry to damp — 27'		Low & Moderate Ice	28					Damp	
32									32						
36									36					Wet	
40								Vx	40					Moist	
44						44'		Vc - Vr	44					Damp	
48						BOTTOM OF HOLE - 44'			48						
52									52						
56									56						



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BORROW PIT 105

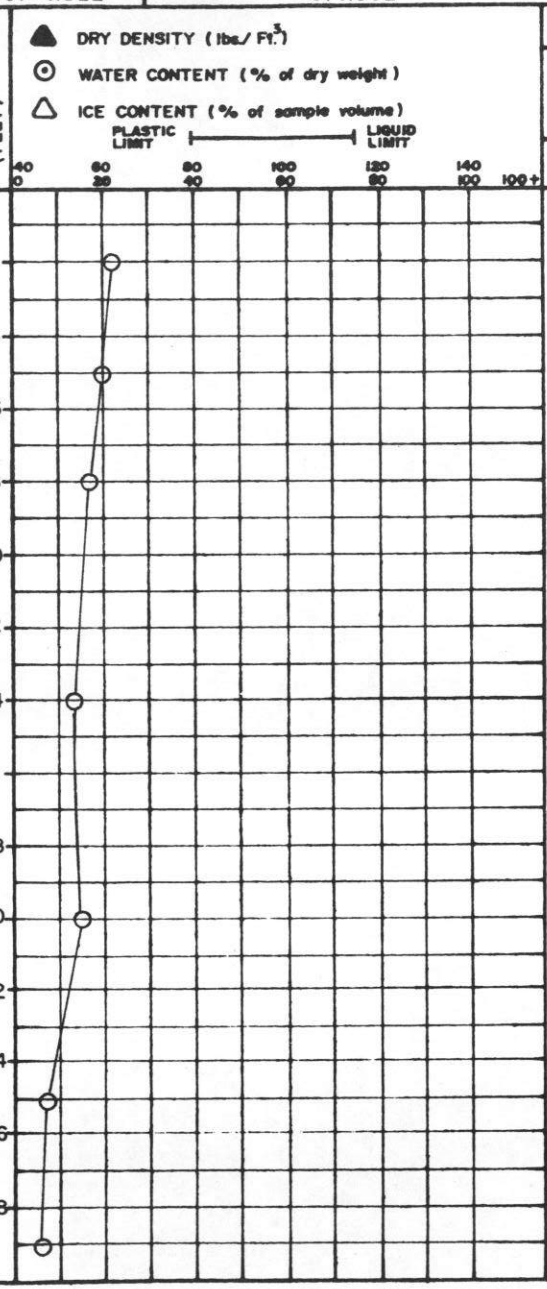
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.	OFFSET.	TEST HOLE 18
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. EDGE OF HILL	VEGETATION. SPRUCE	ELEV.	MILE 823.3

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'		Moderate						
2						SILT SAND CLAY -Pebbles							Wet	
4					CL			To						
6								Low					Wet	
						—7'		Ice						
8						SHALE -Black Soft to hard							Wet	
10							F	Vc - Vr						
12														
14													Moist	
16														
18								Vx						
20													Moist	
22														
24														
26													Damp	
28														
						—29'							Damp	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 105

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

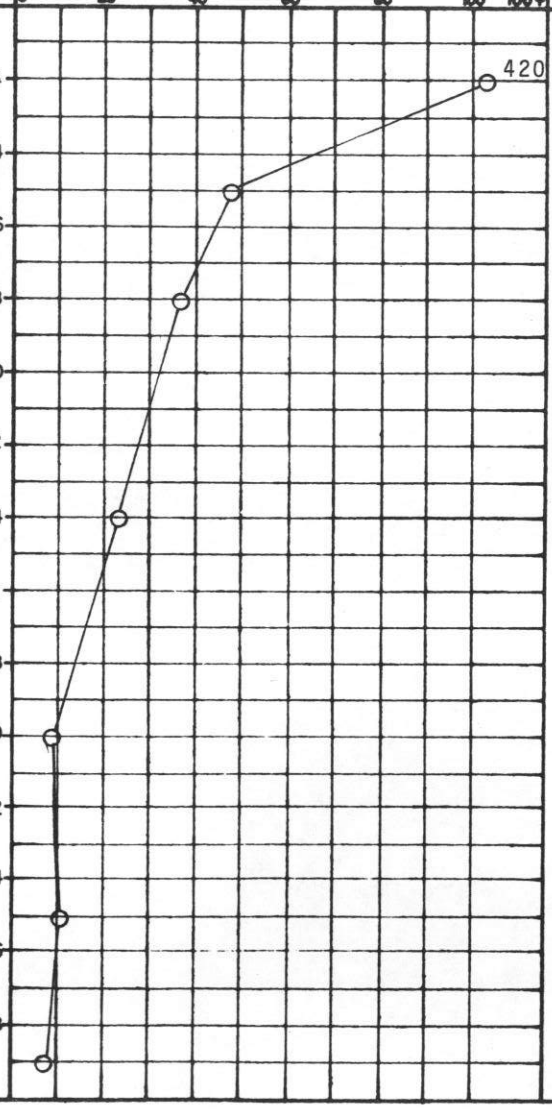
FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. LEVEL	VEGETATION. SPRUCE

OFFSET. ELEV.

TEST HOLE 19

MILE 823.3

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		High Ice Vs					Sat.	
3'														
					CI	CLAY -Silty Med. high plastic		Moderate Ice					Wet	
					CH		F	Vc - Vr					Wet	
						Sandy							Wet	
16'														
						SHALE -Soft-hard		Low Ice Vx					Moist	
													Damp	
29'													Damp	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 105

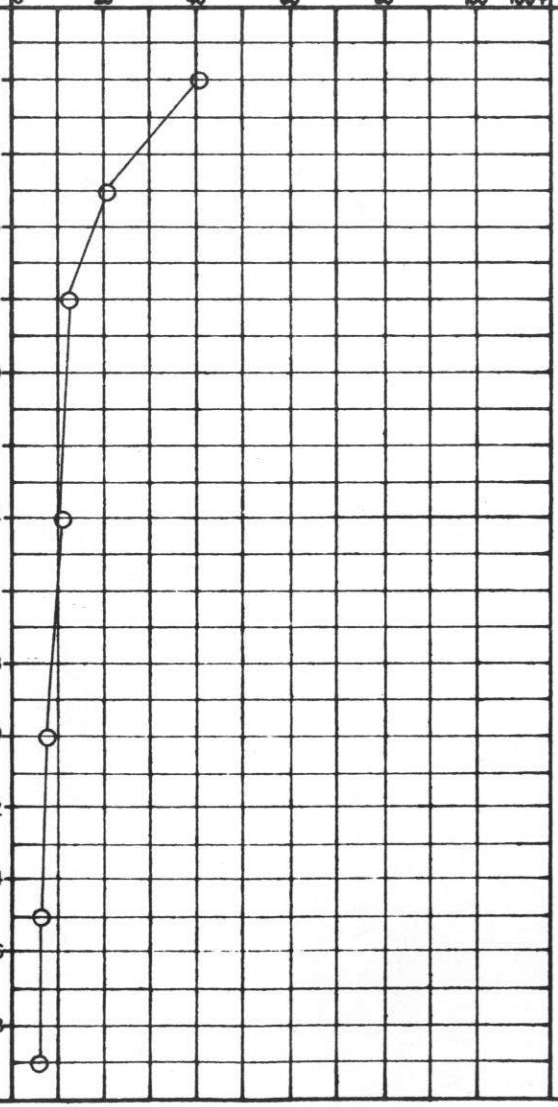
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.	OFFSET.	TEST HOLE 21
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. LEVEL	VEGETATION. SPRUCE	ELEV.	MILE 823.3

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'		High To Moderate Ice Lenses To 7' Vs Vc - Vr						Sat.	
2					CL CI	CLAY -Silty Sandy Pebbles Wet on Thawing			2						
4									4					Wet	
6						7'			6						
8						SILTSTONE & SHALE SANDSTONE -Broken Soft to hard	F	Low Ice To 16'	8					Moist	
10									10						
12									12						
14									14					Moist	
16						16'		Traces Of Ice To 20' Vx	16						
18						As above but Less broken mtl. Hard drilling			18						
20									20					Moist	
22								Frozen Nbn	22						
24									24						
26									26					Humid	
28						29'			28					Humid	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 105

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

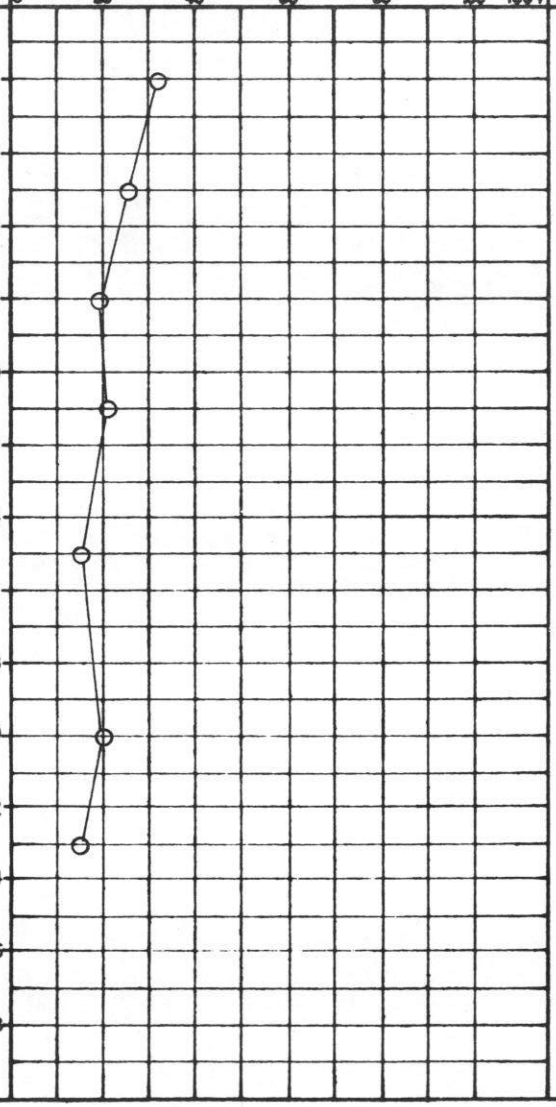
OFFSET. ELEV.

TEST HOLE 23

MILE 823.3

REMARKS

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	RELATIVE THAWED MOISTURE CONTENT
2					Pt	PEAT		Ice Content Moderate To High Vc-Vr-Vs	Wet
4						4'			
6						SHALE -Black Soft-hard		Ice Content	Sat.
8								Moderate	Wet
10								To	Free Water
12							F	Vs	
14								Low	
16								Vc - Vr	Moist
18								Vx	
20									Moist
22									
24									Damp
26						25'			
28						BOTTOM OF HOLE - 25'			



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

DS-14-5-74 b

BORROW PIT 105

DEPARTMENT OF PUBLIC WORKS, CANADA
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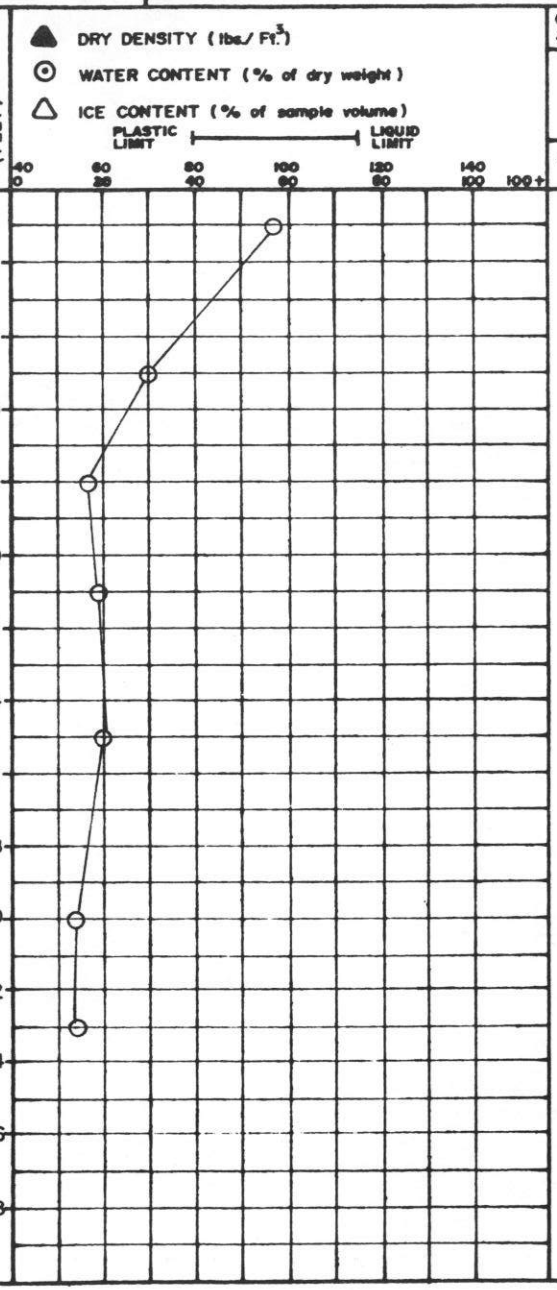
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.	OFFSET.	TEST HOLE 24
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 823.3

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		High					Free Water	
2					OL CL	CLAY -Sandy Organic		Moderate Ice						
4						4' SHALE -Soft		Vs					Wet	
6								Vc - Vr						
8							F						Damp	
10								Low						
12						Soft-med. hard		Ice					Damp	
14														
16								Vx					Moist	
18														
20													Damp	
22														
24						Soft-hard							Humid	
26						25' BOTTOM OF HOLE - 25'		Nbn						
28														



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BORROW PIT 105

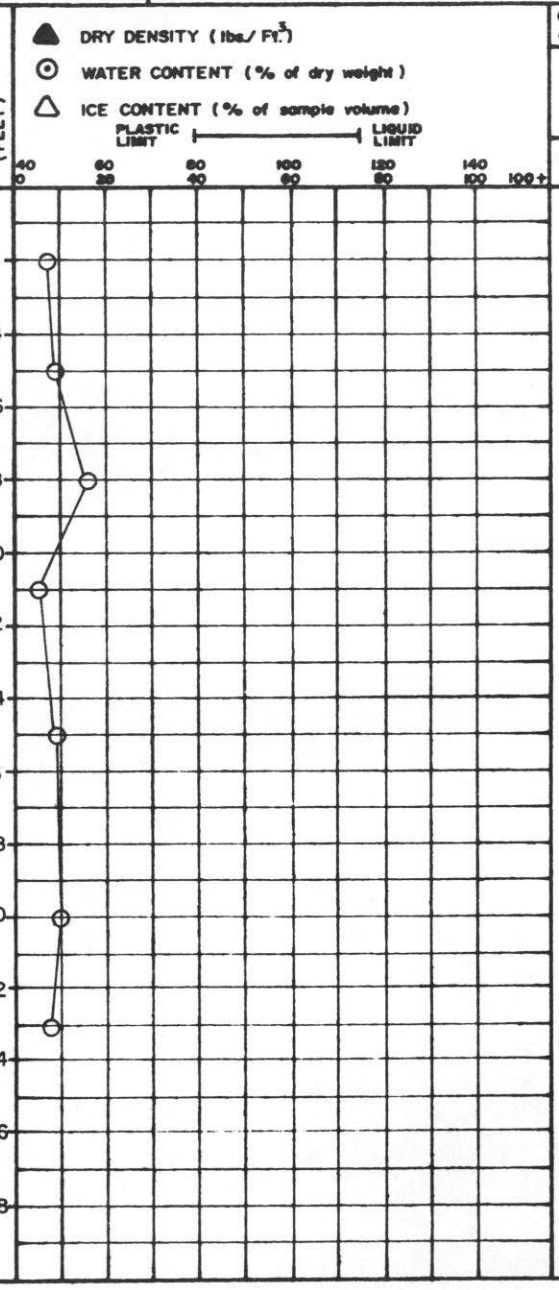
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.
OFFSET.	TEST HOLE 25		
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.	MILE 823.3		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'							Damp	
						SHALE -Hard								
4														
													Wet	
6														
8													Wet	
10							F	Low						
													Damp	
12								&						
14								Moderate						
													Damp	
16								Ice						
18								Vx						
20								Vc - Vr					Damp	
22														
													Moist	
24														
						25'								
26						BOTTOM OF HOLE - 25'								
28														



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BORROW PIT 105

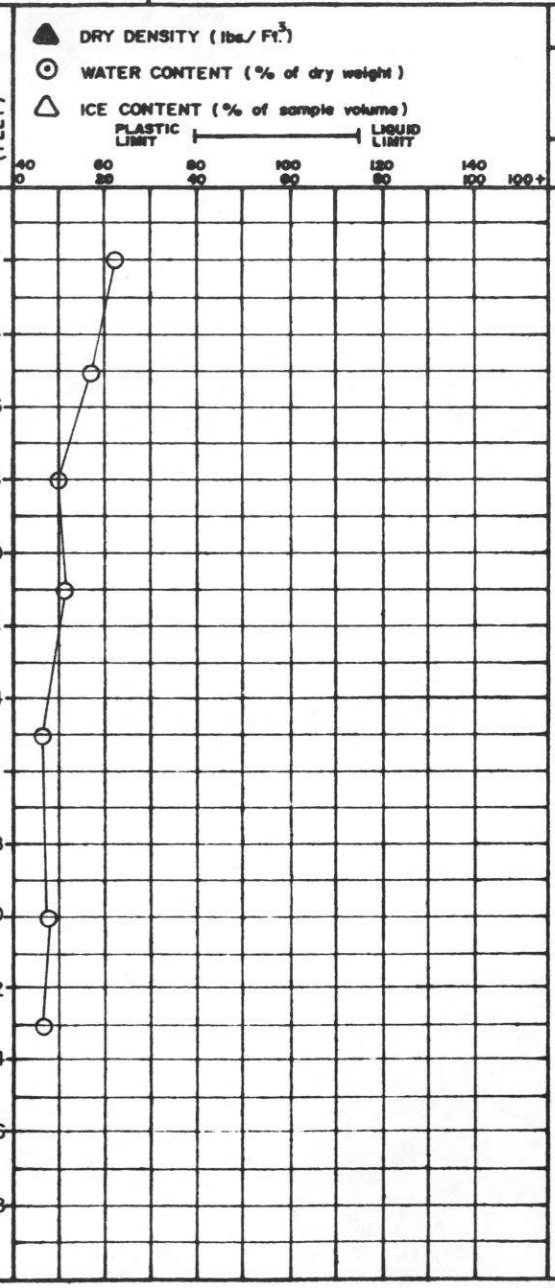
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.
OFFSET.	TEST HOLE 26		
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.	MILE 823.3		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT ½'								
2					CL	CLAY -Sandy Silty Shale fragments		Moderate Ice					Wet	
4						4'								
6						SILTSTONE-SANDSTONE SHALE -Soft-hard		Vc - Vr					Wet	
8													Moist	
10							F	Low						
12								To					Moist	
14								Nil						
16								Ice					Damp	
18								Vx						
20						20'							Damp	
22						SHALE -Hard								
24								Nbn					Humid	
26						25'								
28						BOTTOM OF HOLE - 25'								



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BORROW PIT 105

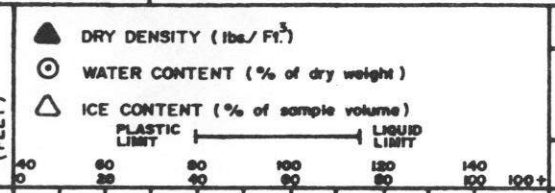
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.
OFFSET.	TEST HOLE 27		
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.	MILE 823.3		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT ½'		Moderate						
2						SHALE -Soft-hard		And					Moist	
4								High						
6								Ice					Sat.	
8								Vc - Vr						
10								Vs					Sat.	
12						Hard	F						Wet	
14								Low						
16								Ice					Wet	
18														
20								Vx					Damp	
22														
24													Damp	
26						25' BOTTOM OF HOLE - 25'								
28														



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BORROW PIT 105

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

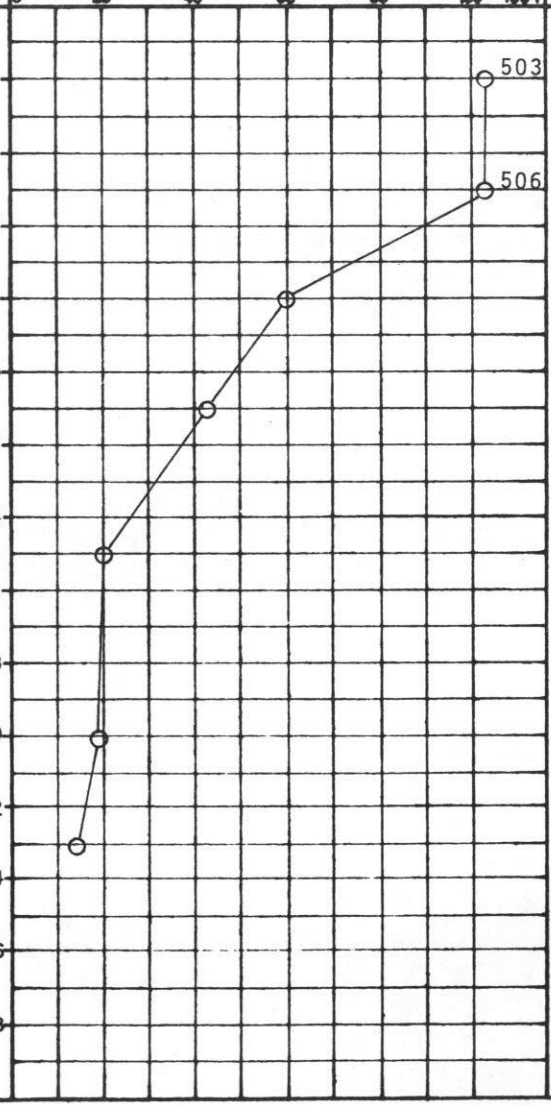
FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A23329-221/2	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV.

TEST HOLE 28

MILE 823.3

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
2					Pt	PEAT		High Ice					Sat.	
4														
6													Sat.	
8						8'		Vs					Free Water	
10						CLAY -Sandy Silty Hard Shale fragments Silt & Sandstone fragments High percentage Low plastic							Free Water	
12														
14														
16													Sat.	
18					CL			Moderate Ice						
20													Wet	
22								Vc - Vr						
24													Wet	
						25'								
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 106

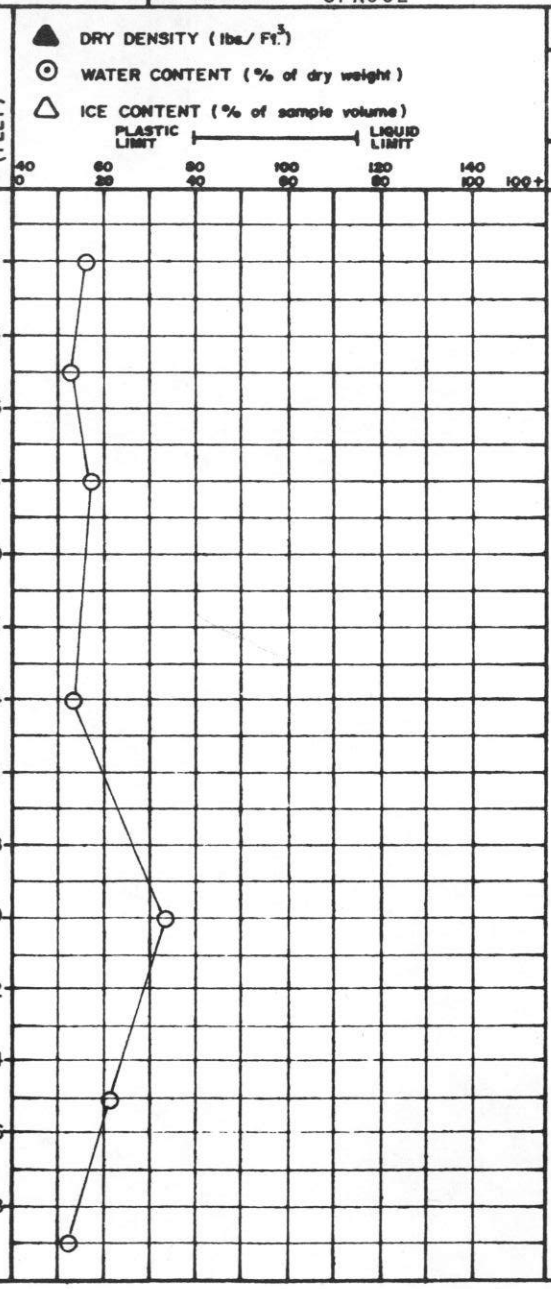
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO A22853/156/155	CHAINAGE.
OFFSET.	TEST HOLE 1		
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE
ELEV.	MILE 820		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2					ML	SILT -Clayey Sandy							Moist	
4						4'								
6					CL	CLAY -Gravelly Silty Sandy Hard shale frags. Low-med. plastic	F	Moderate Ice Vc - Vr					Wet	
8													Wet	
10														
12					CI									
14													Wet	
16														
18						ICE		ICE						
20						50%	F	Moderate To High Ice Vc - Vr Vs					Free Water	
22														
24						60%							Sat.	
26														
28						29'							Moist	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 106

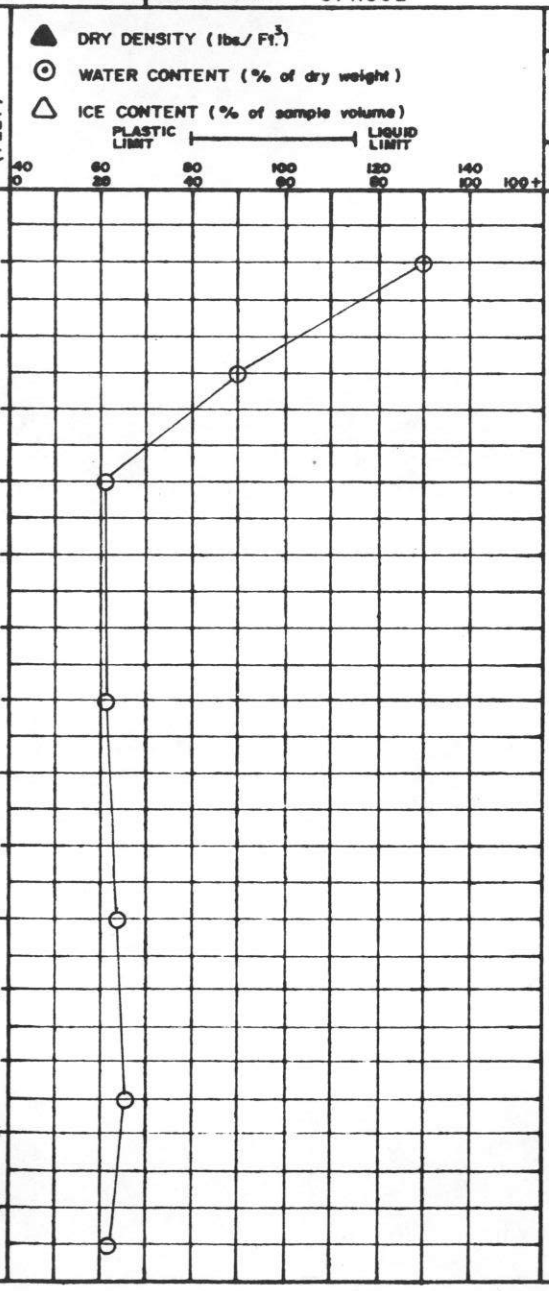
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A22853/156/155	CHAINAGE.	OFFSET.	TEST HOLE 2
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE	ELEV.	MILE 820

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2					CL	CLAY -Silty Sandy Pebbles Shale fragments Low-med. plastic Organic 5'-6'	F	High Ice Vs					Free Water	
4														
6													Moist	
8													Sat.	
10														
12														
14					CI	Gravelly							Sat.	
16														
18														
20													Free Water	
22														
24														
26						25' SHALE -Soft		Low Ice Vx					Damp	
28						29'							Moist	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 106

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

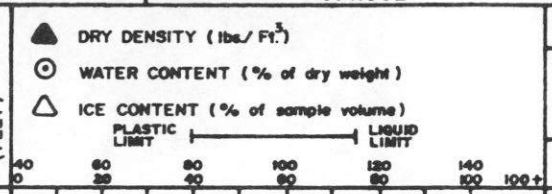
SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A22853/156/155	CHAINAGE.	OFFSET.
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. POOR	VEGETATION. SPRUCE	ELEV.

TEST HOLE: 3

MILE: 820

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT ½'								
2					ML	SILT -Clayey Sandy 3'							Moist	
4					CL	CLAY -Sandy Silty Pebbles-gravelly Low plastic		Low					Wet	
6								To						
8								Moderate					Moist	
10								Ice						
12							F	Vx						
14								Vc - Vr					Wet	
16														
18														
20													Wet	
22														
24														
26													Wet	
28														
						29'							Wet	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 106

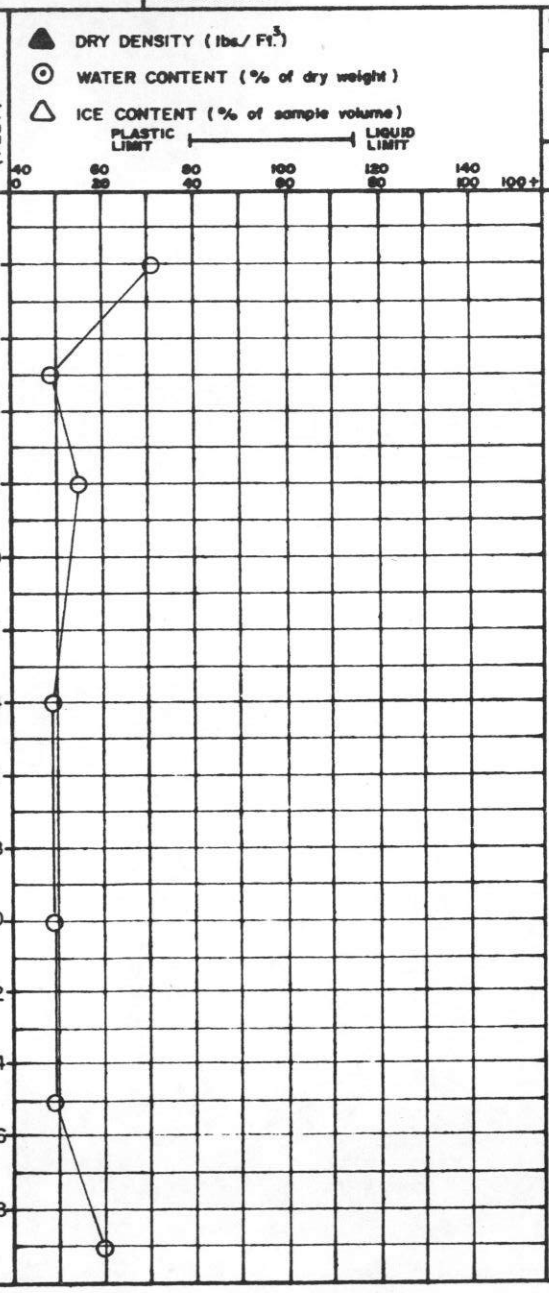
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A22853-156/155	CHAINAGE.
OFFSET.			
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.			
TEST HOLE	4	MILE	820

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT ½'		High						
2					ML	SILT -Clayey Sandy Pebbles 4'		Ice Vs					FREE WATER	
4					GC	GRAVEL-CLAY-SAND MIXTURE 7'							WET	
6								Low						
8					CL	CLAY -Gravelly Sandy Low plastic	F	To					WET	
10								Moderate						
12								Ice						
14					GC	GRAVEL -Clayey Sandy Shale fragments 14'		Vx					MOIST	
16														
18								Vc - Vr						
20													MOIST	
22														
24														
26					GC	CLAY-GRAVEL-SAND MIXTURE 25'							WET	
28					SM	SAND -Silty @ 29' 29'							MOIST	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 106

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

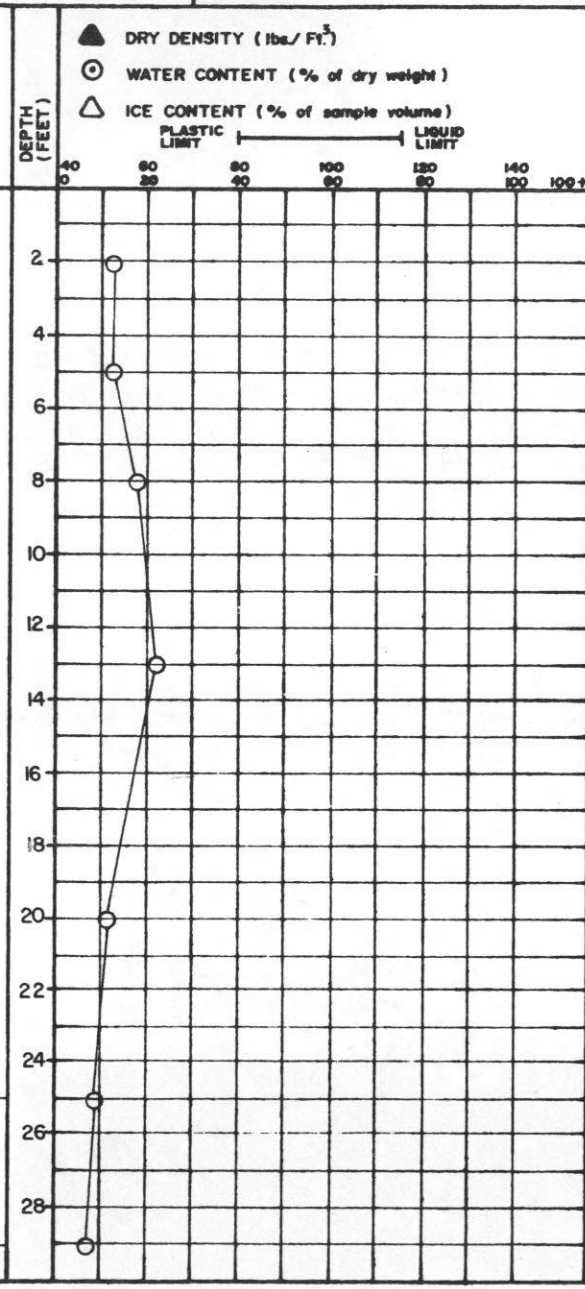
SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO A22853-156/155	CHAINAGE.	OFFSET.
TECH.	RIG.	SURFACE DRAINAGE.	VEGETATION.	ELEV.

TEST HOLE: 5

MILE: 820

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2					CL	CLAY -Silty Sandy Pebbles Low plastic							Moist	
4														
6								Low					Moist	
8								To					Moist	
10							F	Moderate						
12								Ice						
14								Vx					Moist	
16														
18								Vc - Vr						
20						Gravelly							Moist	
22														
24						25'								
26						SHALE -Soft		Low					Damp	
28								Ice						
						29'		Vx					Damp	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 106

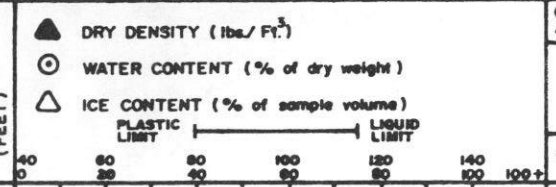
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO A22853-156/155	CHAINAGE.	OFFSET.	TEST HOLE 6
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE MAX. 6"	ELEV.	MILE 820

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 1'								
2					SC	SAND -Gravelly Clayey							Damp	
4														
6								Low					Damp	
8						— 8'							Moist	
10						GRAVEL -Clayey Sandy	F	Ice						
12														
14					GC								Moist	
16								Vx						
18														
20													Wet	
22														
24														
26					SC	— 25' SAND -Gravelly Clayey		Vs High Ice					Wet	
28													Free Water	
						— 29'								



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 106

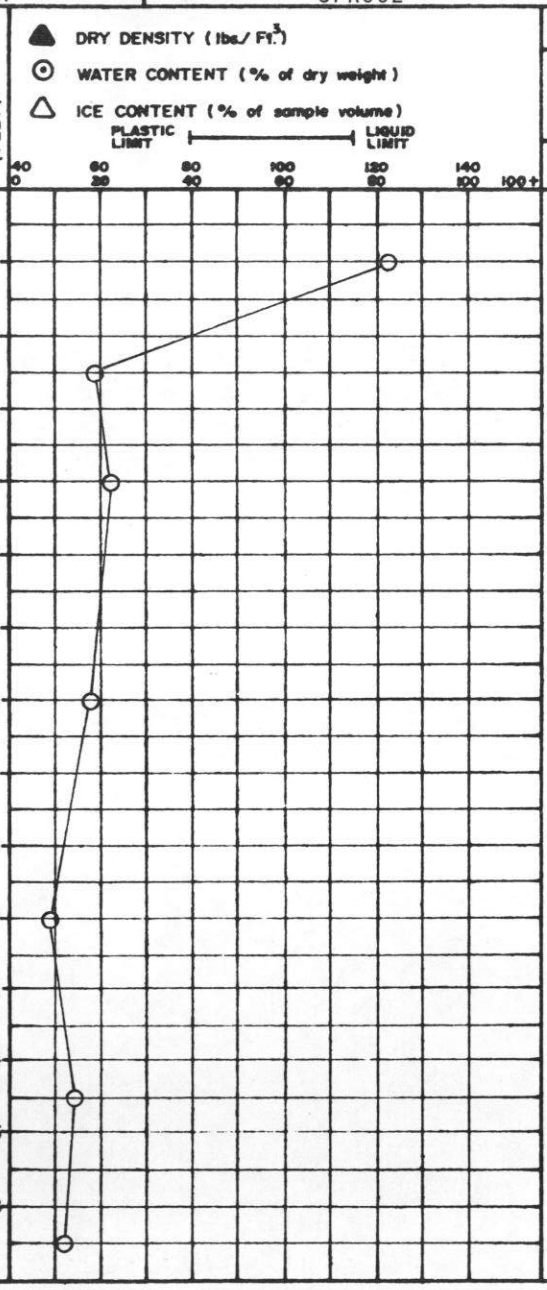
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO. A22853/156/155	CHAINAGE.	OFFSET.	TEST HOLE 7
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE	ELEV.	MILE 820

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2'					OL	ORGANIC SILT							Moist	
4'					CI	CLAY -Gravelly Silty Sandy Med. plastic	F	Low To Moderate Ice					Wet	
													Moist	
					CL	Pebbles Low plastic		Vx Vc - Vr					Moist	
													Damp	
25'						SHALE -Black Soft							Moist	
29'													Damp	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 106

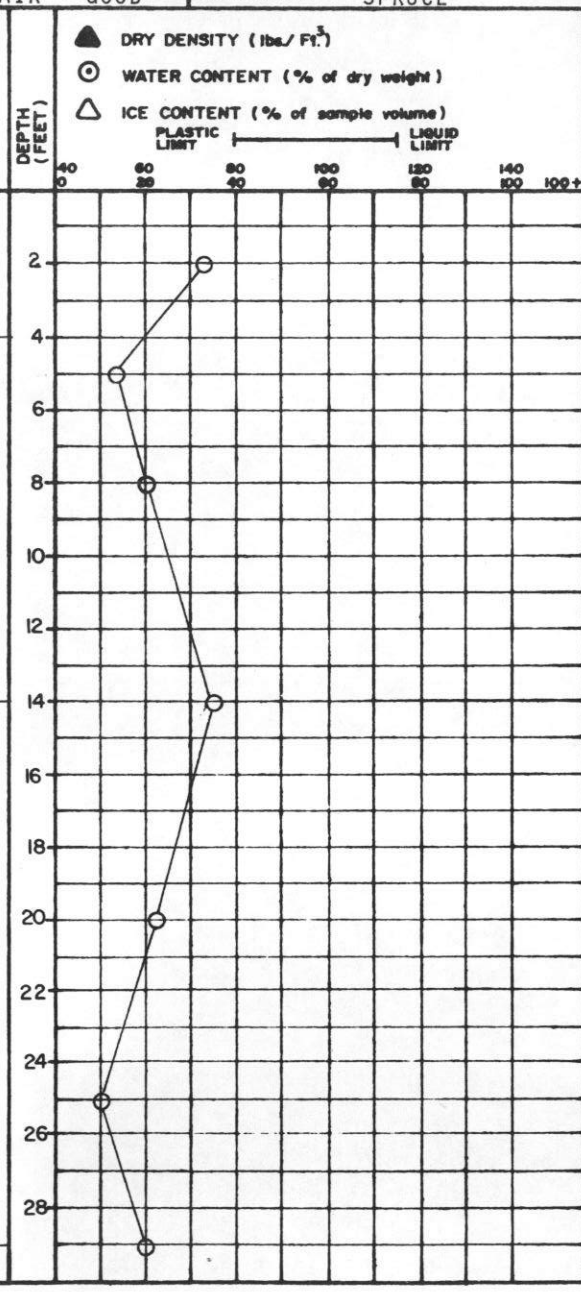
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO A22853-156/155	CHAINAGE.	OFFSET.	TEST HOLE 8
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. FAIR - GOOD	VEGETATION. SPRUCE	ELEV.	MILE 820

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 1'		High						
2					GC	GRAVEL -Sandy Clayey		Ice					Free Water	
4								Vs						
6								Moderate					Sat.	
8						— 8'	F	Ice					Moist	
10					CL	CLAY -Silty Sandy Pebbles Low plastic		Vc - Vr						
12														
14													Free Water	
16								High						
18								Ice						
20								Vs					Free Water	
22														
24						— 25'								
26					GC	GRAVEL -Sandy, clayey							Sat.	
28					CL	CLAY -Silty sandy Pebbles — 29'								



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 106

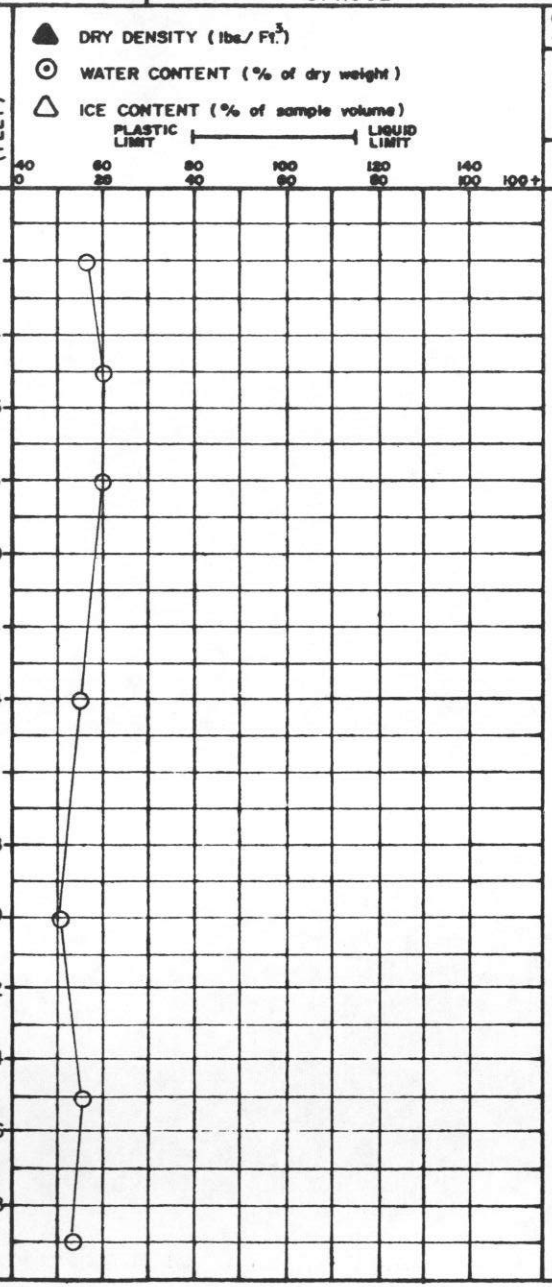
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 12/2/74	AIRPHOTO NO A22853-156/155	CHAINAGE.	OFFSET.	TEST HOLE 9
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE	ELEV.	MILE 820

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
						1.5'								
2						CLAY -Sandy Silty Pebbles Low-med. plastic							Moist	
4														
6					CL			Low					Moist	
8						Gravelly from 8'-15'	F	To					Moist	
10								Moderate						
12					CI			Ice						
14								Vx					Moist	
16								Vc - Vr						
18														
20						Pebbles & Shale							Damp	
22														
24														
26													Moist	
28														
						29'							Damp	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 106

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

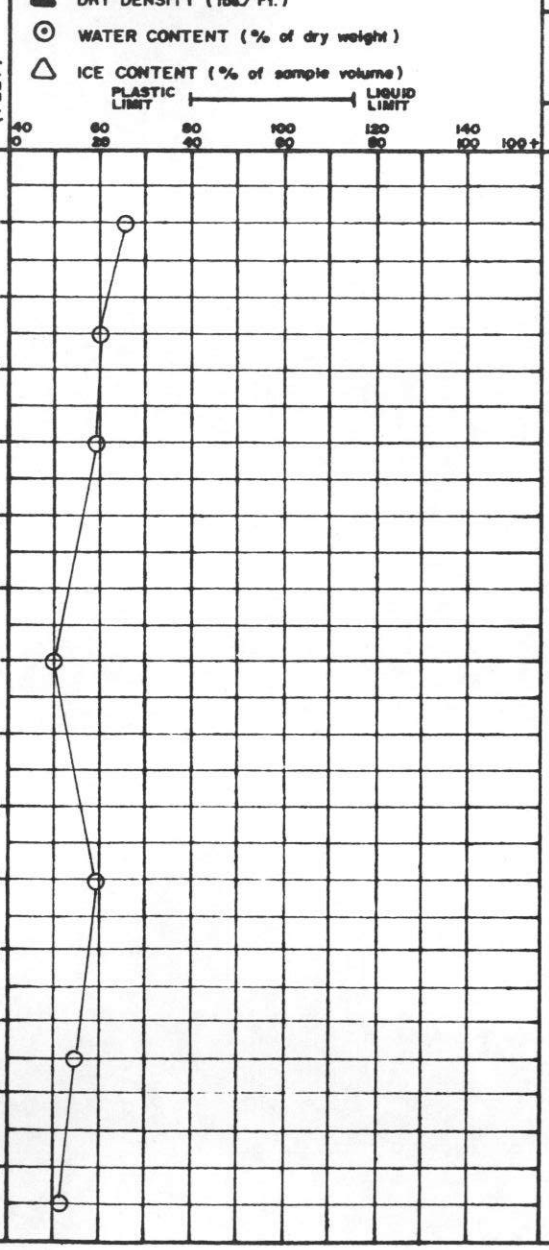
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO A22853-156/155	CHAINAGE.	OFFSET.	TEST HOLE 10
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. EDGE OF HILL	VEGETATION.	ELEV.	MILE 820

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		High Ice Vs						
2					CL	CLAY -Silty Sandy Pebbles Low plastic							Free Water	
4														
6													Wet	
8							F	Moderate Ice					Wet	
10														
12								Vc - Vr						
14					GC	GRAVEL -Clayey Sandy 14'							Moist	
16														
18					CL	CLAY -Silty Sandy Pebbles 17'								
20													Free Water	
22														
24														
26						SAND -Clayey Pebbles-gravelly 25'							Moist	
28						29'							Moist	

DRY DENSITY (lbs./Ft.³) ▲
WATER CONTENT (% of dry weight) ⊙
ICE CONTENT (% of sample volume) △



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 107

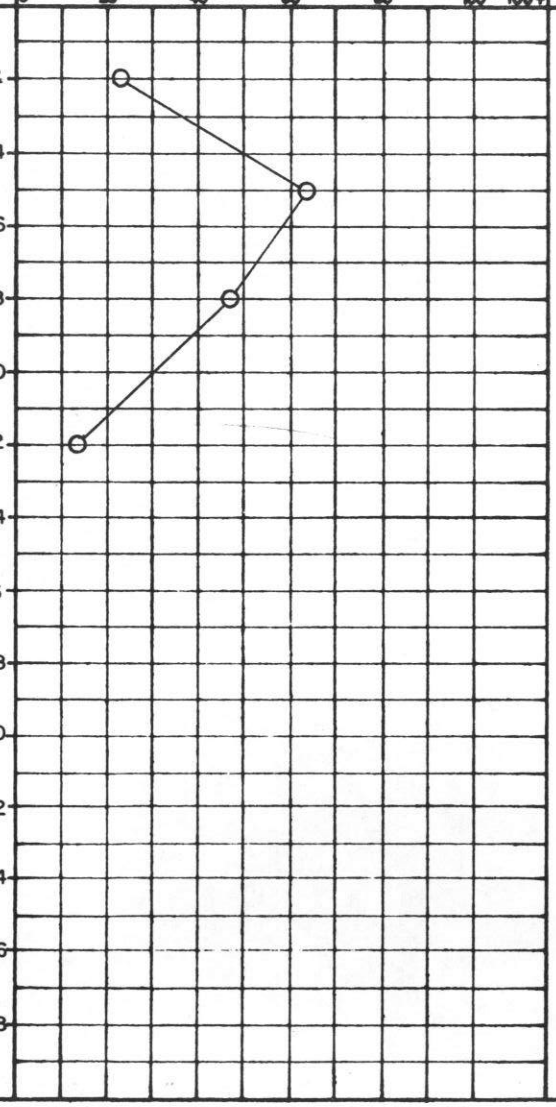
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 1		
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. FAIR	VEGETATION. SEISMIC LINE
ELEV.	MILE		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'		Vc-Vr						
2						Clay -Silty		Moderate					Moist	
4													Sat.	
6					Cl			Tp						
8							F	High Ice					Sat.	
10					CH			VS						
12						Silt and Sandstone Fragments							Moist	
14						14'								
16						BOTTOM OF HOLE 14'								
18														
20														
22														
24														
26														
28														



DS-14-5-74 b

BORROW PIT 107

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

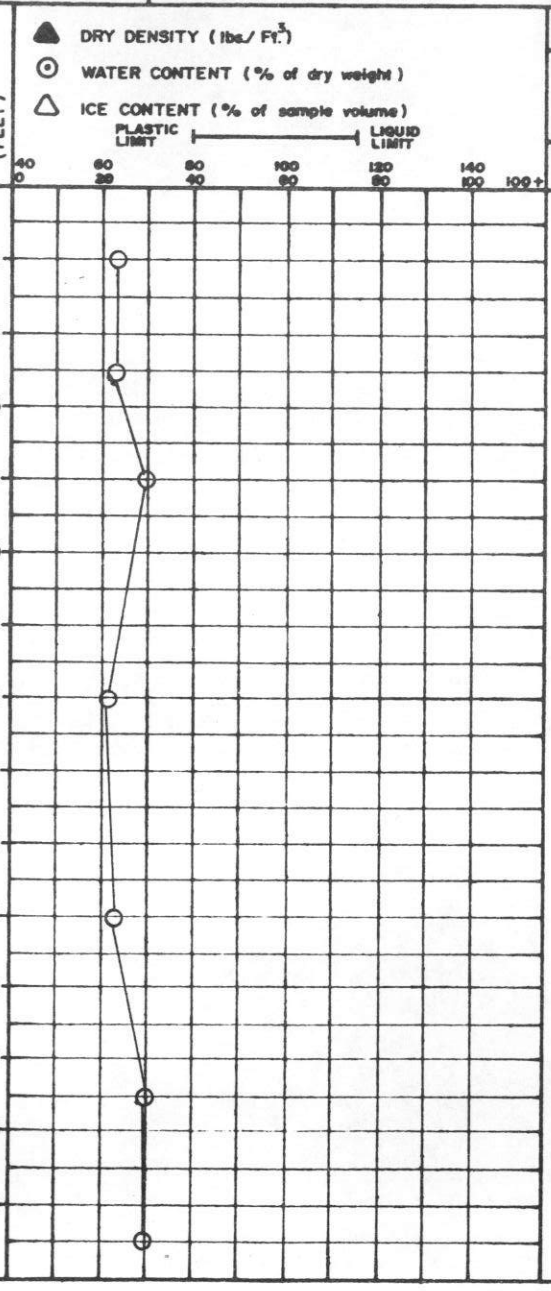
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION. SPRUCE-BIRCH

OFFSET. ELEV. TEST HOLE 2 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						Clay -Silty Sandy		Moderate					Moist	
4														
6					CL	Low-Med. Plastic		Ice					Moist	
8							F	Vc-Vr					Moist	
10														
12														
14					Cl								Damp	
16														
18						Pebbles								
20													Moist	
22														
24													Sat.	
26														
28														
						29' BOTTOM OF HOLE 29'							Wet	



DS-14-5-74 b

BORROW PIT 107

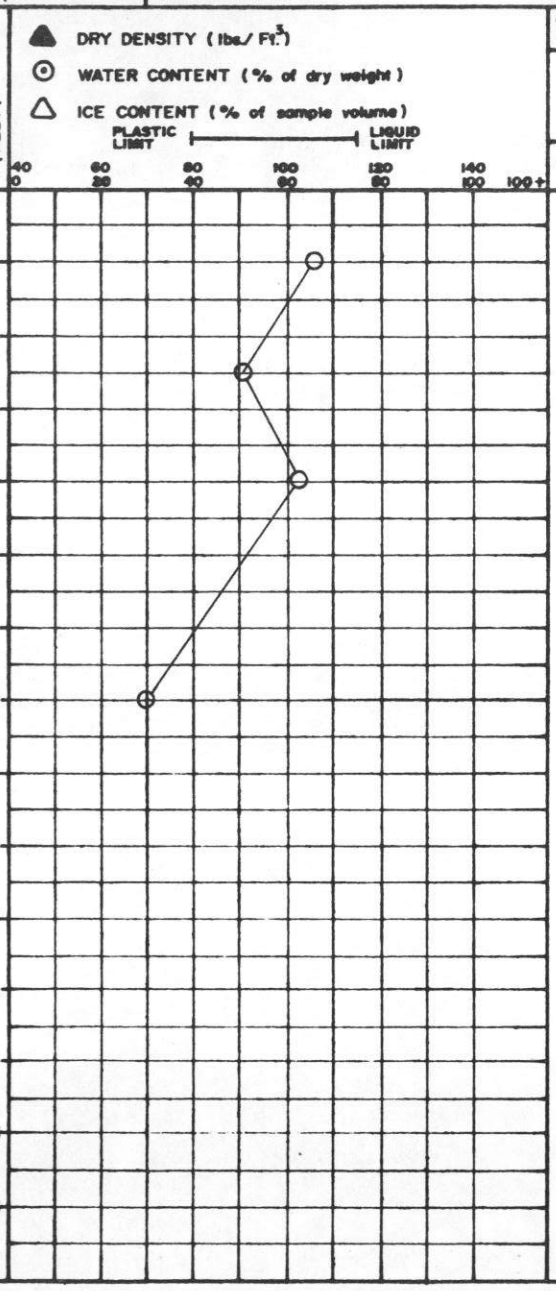
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 3		
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. FAIR	VEGETATION.
ELEV.	MILE		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'		High Ice					Moist	
					OL CL	Organic Silty Clay	4'							
4													Free Water	
						Clay -Sandy Silty Pebbles								
6					CL		F	VS						
8					Cl	Low-Med. Plastic							Free Water	
10														
12														
14						14'							Moist	
						BOTTOM OF HOLE 14'								
16														
18														
20														
22														
24														
26														
28														



DS-14-5-74 b

BORROW PIT 107

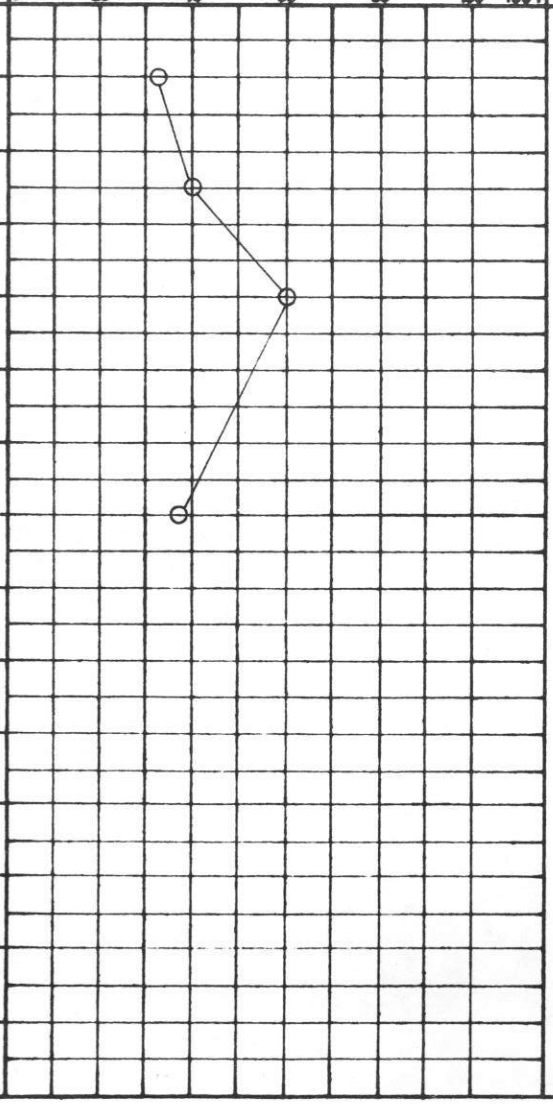
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 4		
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE MAX.: 14"
ELEV.	MILE		

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	CLAY %	SILT %	SAND %	GRAVEL %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2						Clay -Silty Sandy		Vc-Vr					Moist	
4								Moderate						
					CL	Low-Med. Plastic		To					Free Water	
6							F							
					Cl	Shale Fragments		High Ice						
8								VS					Free Water	
10														
12														
14						14'							Sat.	
						BOTTOM OF HOLE 14'								
16														
18														
20														
22														
24														
26														
28														



GRAIN-SIZE ANALYSIS

DS-14-5-74 b

BORROW PIT 108

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

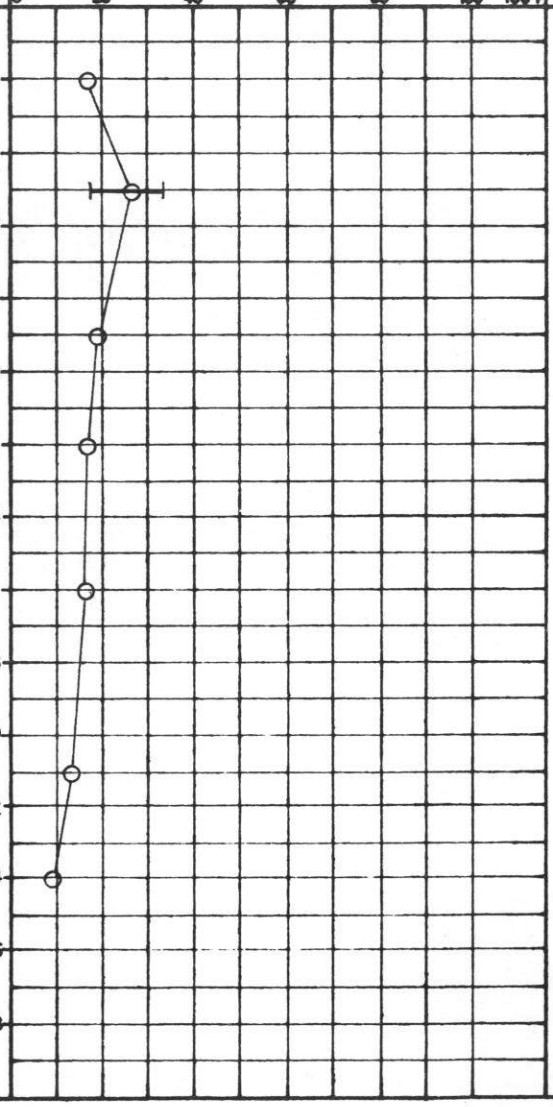
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO. A22853/152/153	CHAINAGE.
OFFSET.	TEST HOLE 1		
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.	MILE 816.7		

DRY DENSITY (lbs./Ft.³) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		Moderate						
2						CLAY -Sandy Silty Gravelly to 8' Pebbles 8'-15' Med. plastic		Ice					Moist	
4								Vc - Vr	-5	9-	37	4	Wet	
6														
8								Low					Moist	
10							F							
12					CI			Ice					Moist	
14														
16						Gravelly 15-23'		Vx					Moist	
18														
20														
22													Moist	
24						Pebbles 25'							Moist	
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 108

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

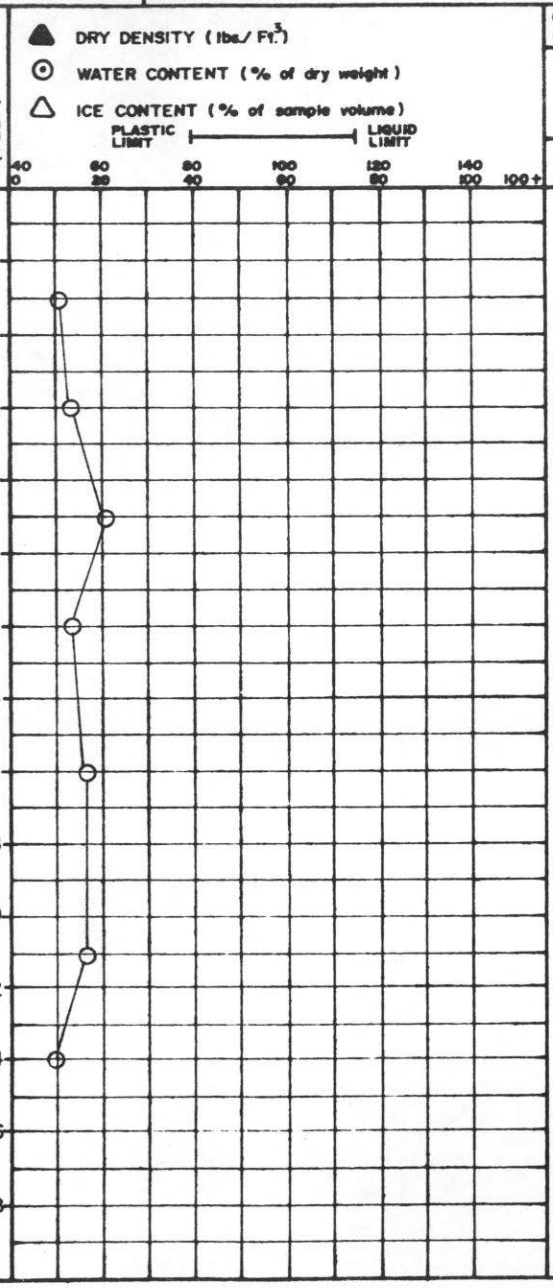
SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO. A22853/152/153	CHAINAGE.
OFFSET.			
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.			

TEST HOLE: 2

MILE: 816.7

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 1'								
2						CLAY -Sandy Silty Pebbles Med. plastic		Moderate & Low Ice					Moist	
4														
6													Moist	
8						Shale fragments from 8'								
10							F	Vc - Vr					Moist	
12					CL			Vx					Moist	
14														
16													Moist	
18														
20						20'								
22						SHALE -Silty Med. hard							Moist	
24													Damp	
26						25' BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 108

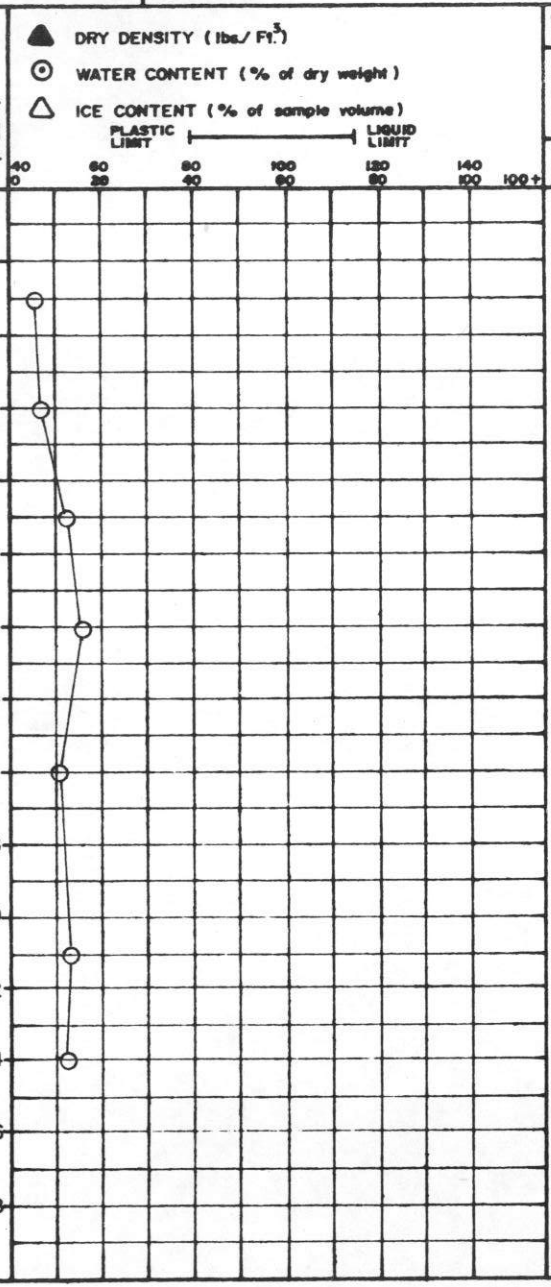
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO A22853/152/153	CHAINAGE.
OFFSET.	TEST HOLE 3		
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.	MILE 816.7		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2					CI	CLAY -Gravelly Sandy Silty Med. plastic	F	Low Ice Vx					Moist	
4														
6													Moist	
8													Moist	
10														
12													Moist	
14														
16													Moist	
18														
20														
22													Moist	
24													Moist	
						25'								
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 108

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

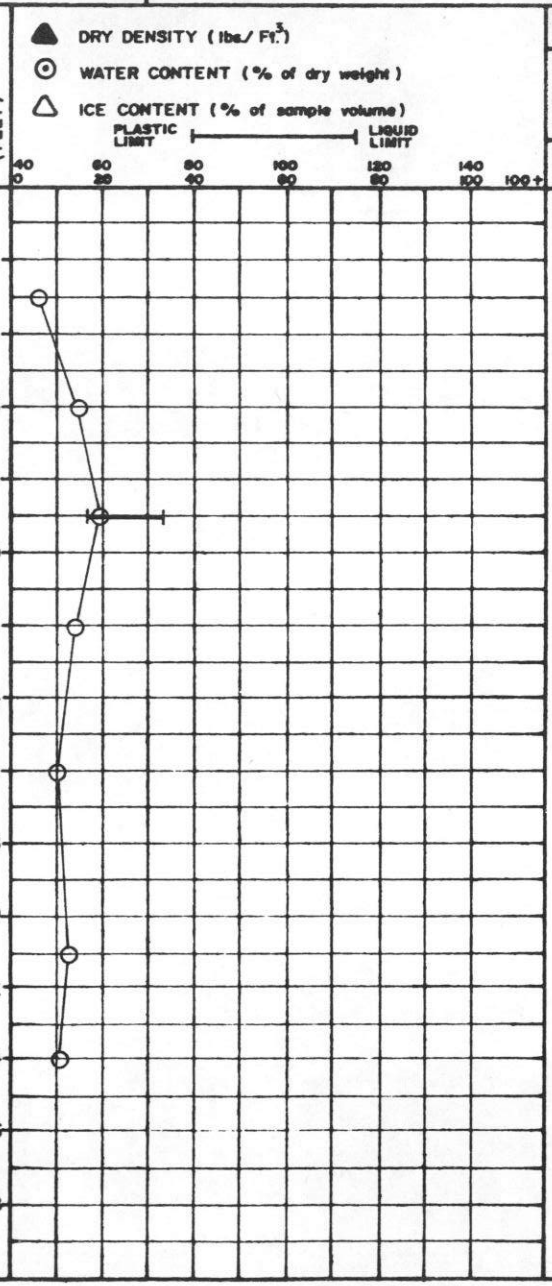
FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO. A22853/152/153	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV.

TEST HOLE 4

MILE 816.7

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 1.5'				
2					GC	GRAVEL -Clayey Sandy — 4'				
4								Low	Moist	
6						CLAY -Sandy Silty Gravelly to 7' Pebbles from 7-11'		Ice	Moist	
8					CI	Med. plastic				
10						— 11'			Moist	
12						SHALE -Silty Med. hard - hard	F	Vx	Moist	
14										
16									Moist	
18										
20										
22									Moist	
24									Moist	
26						— 25'				
28						BOTTOM OF HOLE - 25'				



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

DS-14-5-74 b

BORROW PIT 108

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO A22853/152/153	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

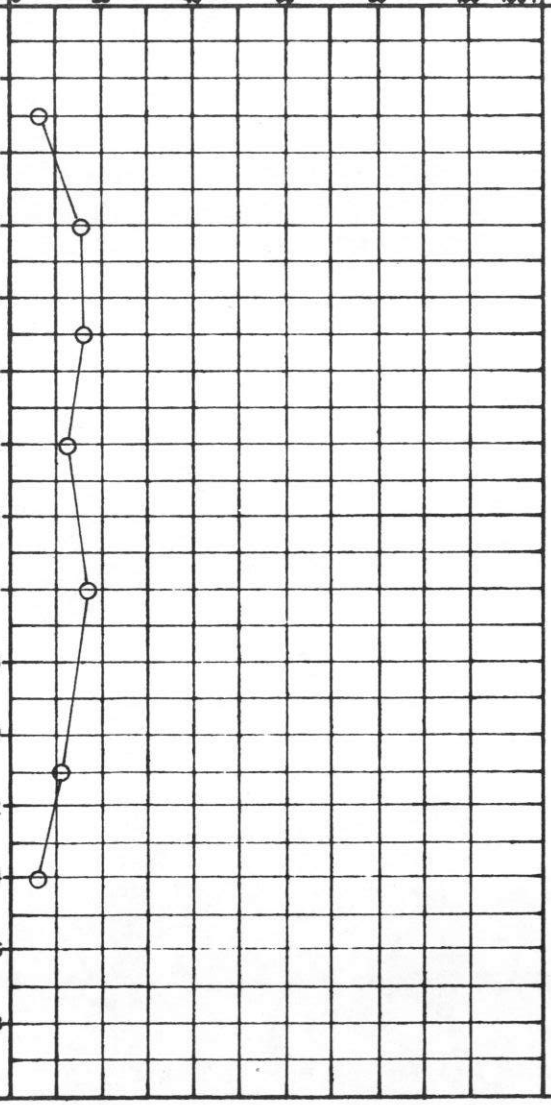
OFFSET. ELEV.

TEST HOLE 5

MILE 816.7

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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT							
2						2'							
						CLAY -Gravelly to 4' Pebbles from 4' Sandy							Moist
4													
					CL	Silty Low-med. plastic		Low					Moist
6													
					CI			Ice					
8													
							F						Moist
10													
						11'							
						SHALE -Silty Med. - hard							Moist
12													
14								Vx					
						Soft-med. hard							Moist
16													
18													
20						20'							
						CLAY -Sandy Silty Siltstone-sandstone Shale fragments							Damp
22													
24													Damp
						25'							
26						BOTTOM OF HOLE - 25'							
28													



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BORROW PIT 108

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

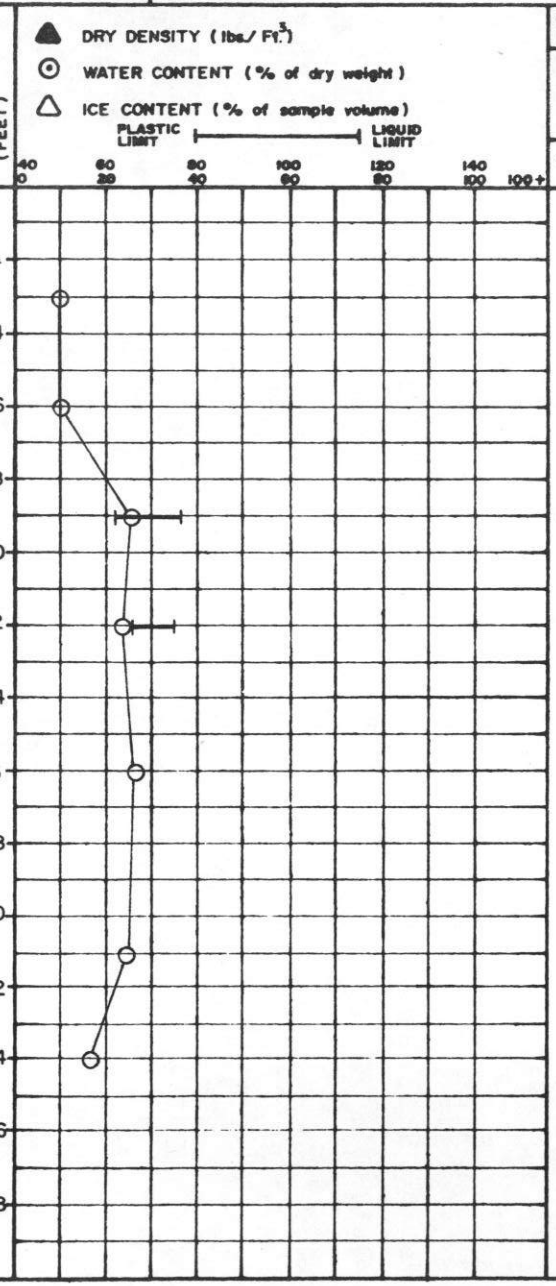
FIELD ENG. A. HANNA	DATE DRILLED. 13/4/74	AIRPHOTO NO A22853/152/153	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV.

TEST HOLE 6

MILE 816.7

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 1½'								
2					CI	CLAY -Sandy, silty Pebbles — 4'		Moderate					Moist	
4						SHALE -Silty Med. hard — 7'		To						
6													Wet	
8					CI	CLAY -Sandy, silty Pebbles Med. plastic — 10'		Low Ice	-75-		24	1	Wet	
10							F							
12						SHALE -Soft — 15'		Vc - Vr					Moist	
14														
16						CLAY -Sandy Silty Some Sandstone & Sandstone fragments Lime ? — 25'		Vx					Moist	
18														
20														
22													Damp	
24													Humid	
26						BOTTOM OF HOLE - 25'								
28														



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BORROW PIT 108

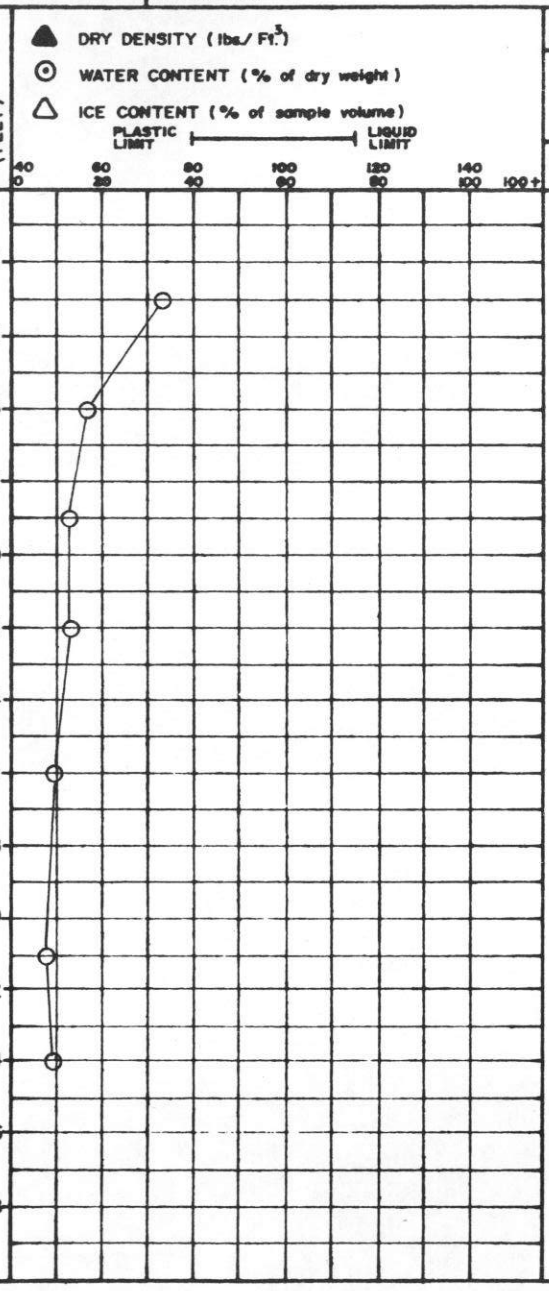
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/4/74	AIRPHOTO NO A22853/152/153	CHAINAGE.
OFFSET.	TEST HOLE 7		
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.	MILE 816.7		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		High Ice						
2					CI	CLAY -Sandy Silty Pebbles Med. plastic		Vs					Sat.	
4														
6								Low Ice					Wet	
8						8'								
10						SHALE -Silty Soft	F	Vx					Moist	
12													Moist	
14														
16													Damp	
18								Frozen Nbn						
20														
22													Damp	
24						Soft-med. hard							Damp	
						25'								
26						BOTTOM OF HOLE - 25'								
28														



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BORROW PIT 108

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

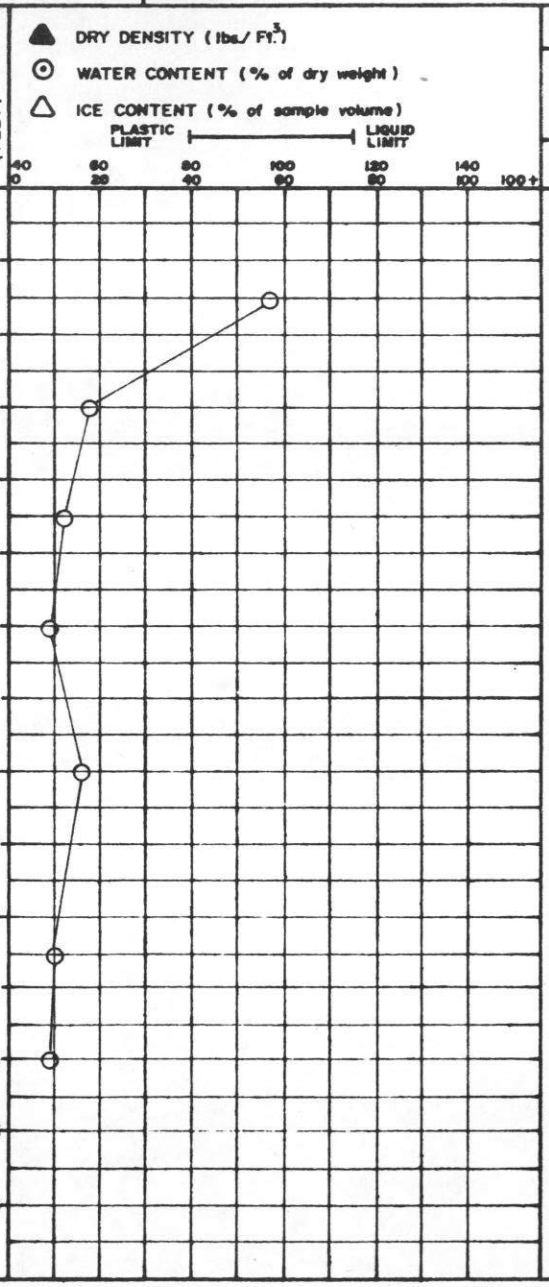
SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/4/74	AIRPHOTO NO. A22853/152/153	CHAINAGE.
OFFSET.			
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.			

TEST HOLE: 8

MILE: 816.7

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		High Ice						
2'													Free Water	
					GC	GRAVEL -Clayey Sandy Low plastic								
6								Vs					Sat.	
8							F							
10								Low Ice					Sat.	
12													Wet	
14'														
16					CL CI	CLAY -Sandy Silty Pebbles Siltstone fragments Low-med. plastic		Vx					Moist	
20'														
22'					GC	GRAVEL -Clayey Sandy							Moist	
24						SHALE -Silty Med. hard							Moist	
25'														
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 108

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

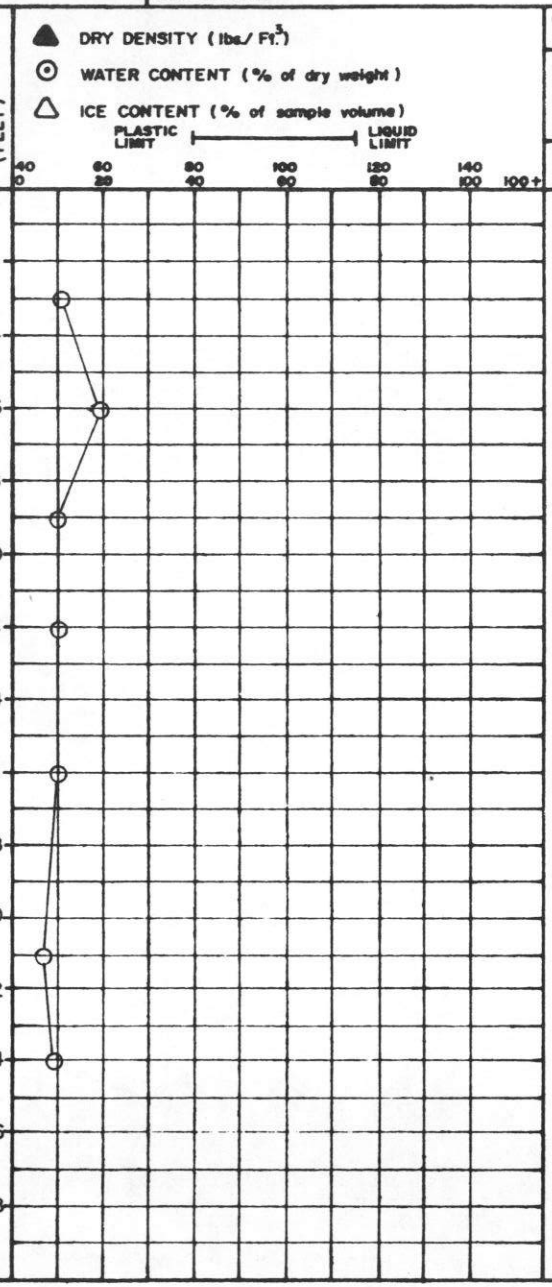
FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO A22853/152/153	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV.

TEST HOLE 9

MILE 816.7

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1.5'								
2														
						CLAY -Gravelly Sandy Silty Low-med. plastic		Low					Moist	
4					CL									
								To						
6					CI								Moist	
								Nil						
8														
								Ice					Moist	
10						—10'								
						SILTSTONE -Soft	F							
12								Vx					Damp	
14														
16													Damp	
								Nbn						
18														
20														
22													Damp	
24													Damp	
						—25'								
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 108

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

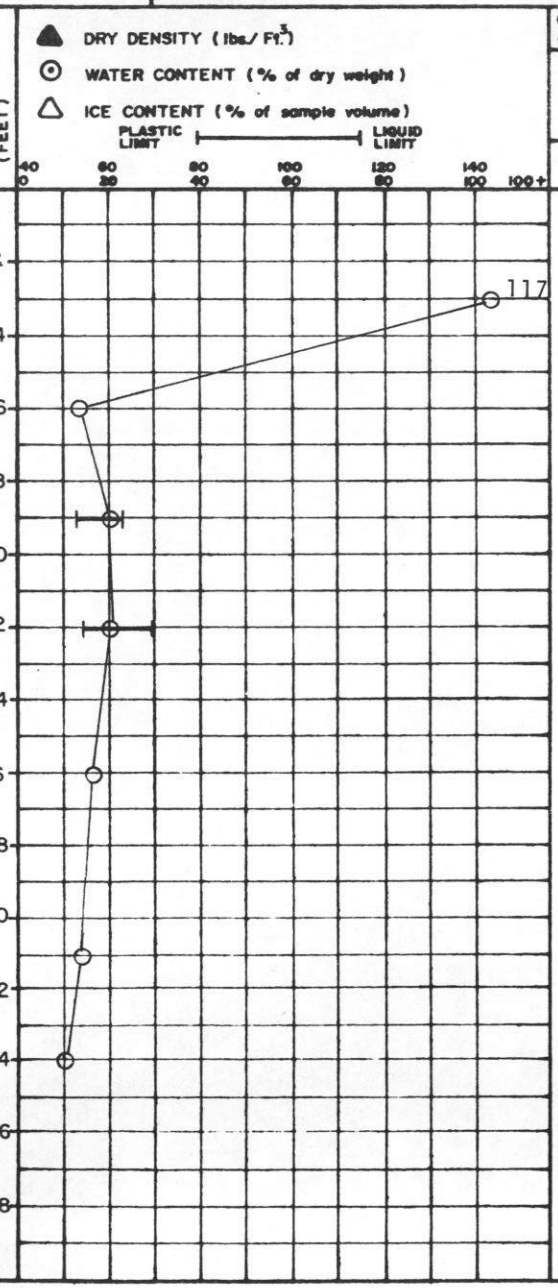
FIELD ENG. A. HANNA	DATE DRILLED. 13/4/74	AIRPHOTO NO A22853/152/153	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV.

TEST HOLE 10

MILE 816.7

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		High Ice						
2'					CL	CLAY -Pebbles to gravelly Sandy Silty Low plastic Organic to 2'-4'	F	Vs						Free Water
								Moderate Ice Vc - Vr	-35-		56	9	Wet / Moist	
13'					CL	CLAY -Sandy Silty Pebbles Low-med. plastic		Low Ice Vx					Moist	
22'					CI	SHALE -Silty Soft							Moist / Damp	
25'						BOTTOM OF HOLE - 25'								



DS-14-5-74 b

BORROW PIT 108

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

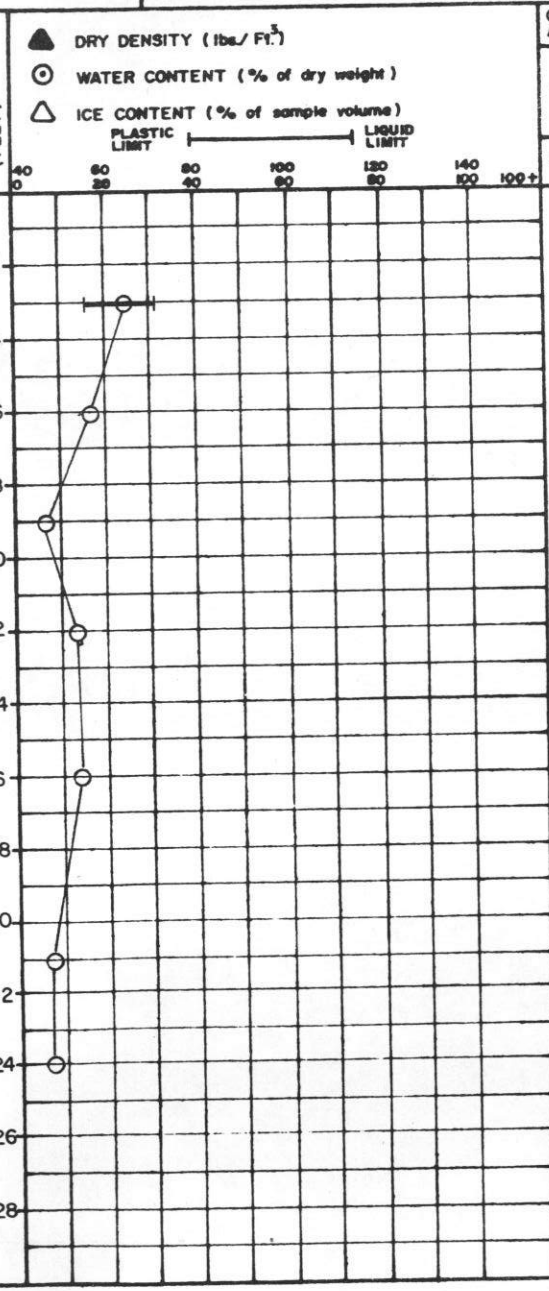
FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO. A22853/152/153	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV.

TEST HOLE 11

MILE 816.7

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		Moderate Ice						
2'						CLAY -Sandy Silty Pebbles-Gravelly		Vc - Vr					Sat.	
								Low Ice					Moist	
					CL	Low-med. plastic	F						Moist	
					CI	Siltstone fragments 11'-13'		Vx					Moist	
						Shale & Siltstone fragments from 20'-25'							Moist	
													Moist	
25'						BOTTOM OF HOLE - 25'								



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BORROW PIT 108

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

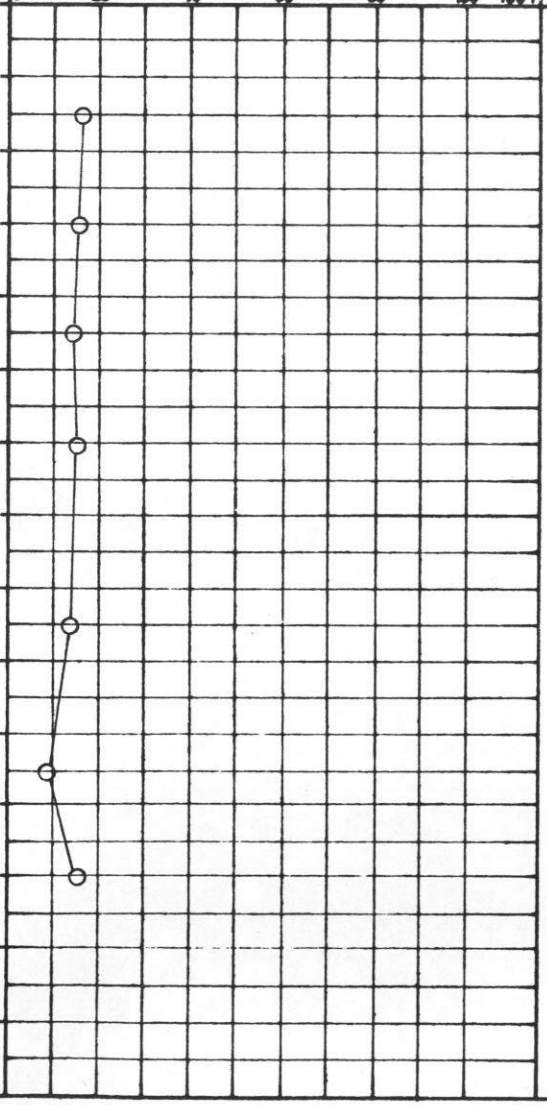
FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO. A22853/152/153	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV.

TEST HOLE 12

MILE 816.7

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 1'								
2						CLAY -Sandy Silty Pebbles Med. plastic								
4								Low					Damp	
6					CI			Ice					Moist	
8							F							
10													Moist	
12								Vx					Moist	
14						Siltstone fragments								
16														
18													Damp	
20						— 20'								
22					GC	GRAVEL -Clayey Sandy							Humid	
						— 23'								
24					CL	CLAY -Silty, pebbles							Damp	
						— 25'								
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 108

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

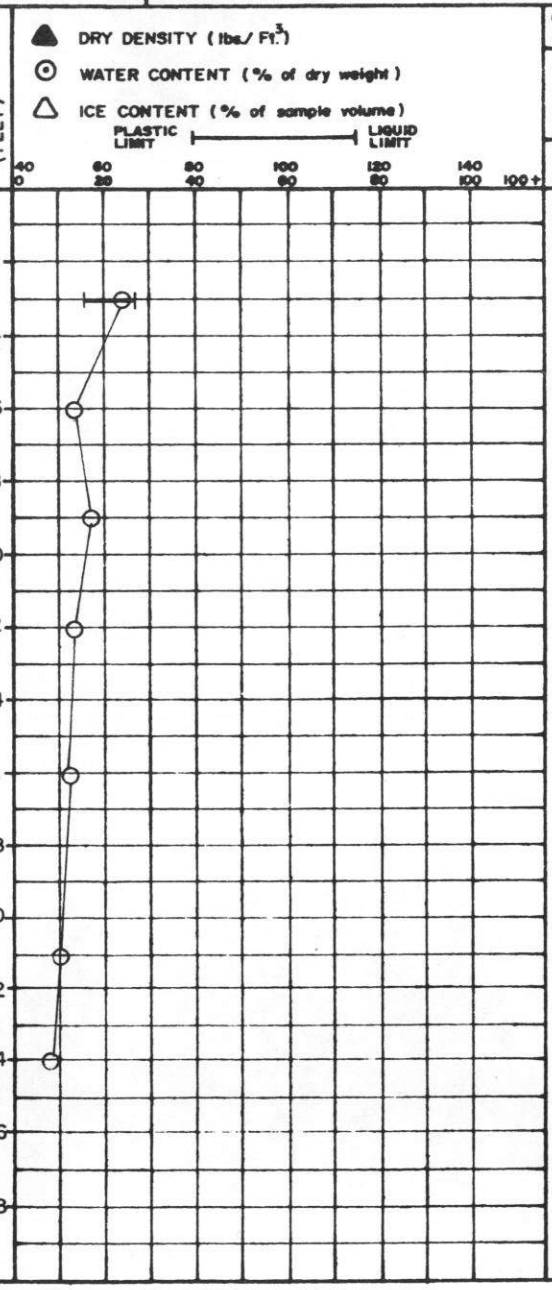
SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO A22853/152/153	CHAINAGE.	OFFSET.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.

TEST HOLE: 13

MILE: 816.7

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		Moderate Ice						
2						2'								
					CL	CLAY -Gravelly sandy Silty org. material Low plastic		Vc - Vr					Sat.	
4						5'								
6						SHALE -Silty Soft		Low					Damp	
						7'								
8					CI	CLAY -Sandy silty Pebbles Med. plastic		Ice					Moist	
10						10'	F							
12						SHALE -Silty Soft		Vx					Damp	
14														
16						Med. hard							Damp	
18														
20													Damp	
22														
24						Soft-med. hard							Damp	
						25'								
26						BOTTOM OF HOLE - 25'								
28														



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BORROW PIT 109

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

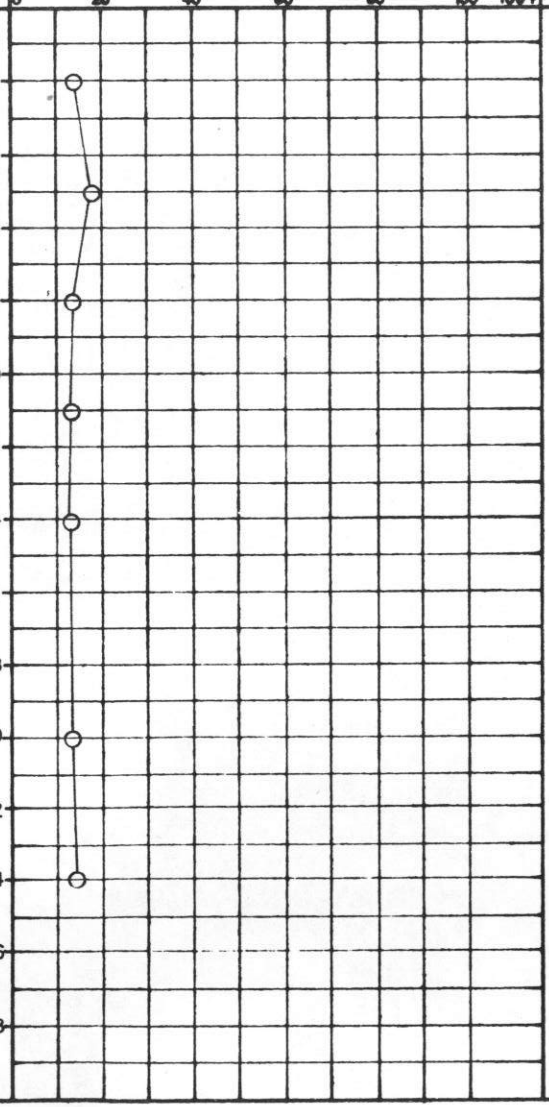
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 1
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 814.4

▲ DRY DENSITY (lbs./Ft.³)
⊙ 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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'								
2					CL	CLAY -Sandy Silty Pebbles Low-medium plastic	F	Low Ice Content Vx					Moist	
4													Moist	
6														
8													Moist	
10														
12													Damp	
14					CI								Damp	
16														
18														
20													Moist	
22														
24													Moist	
						—25'								
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 109

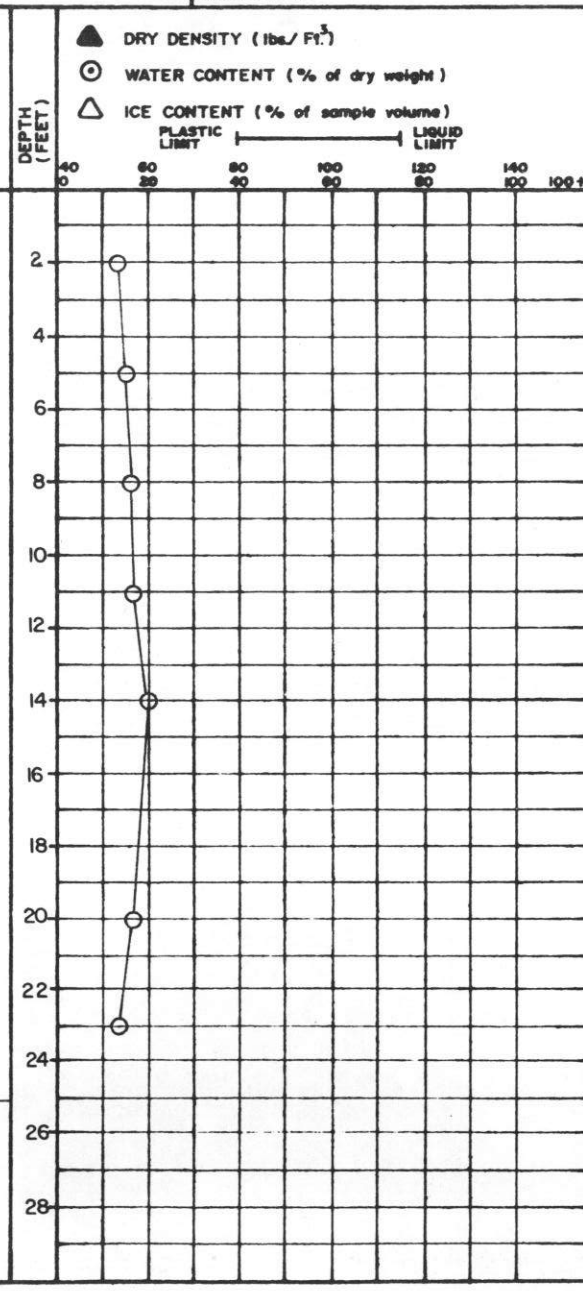
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 2
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 814.4

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'							Moist	
					CL	CLAY -Silty Sandy Pebbles Low plastic		Low					Moist	
8						8'		To					Moist	
					SC	SAND -Clayey Pebbles	F	Moderate						
11						11'							Wet	
					CI	CLAY -Silty Sandy Pebbles Med. plastic		Ice Vx Vc - Vr					Wet	
20													Moist	
25						25'							Moist	
						BOTTOM OF HOLE - 25'								



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BORROW PIT 109

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. JOHNSON	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

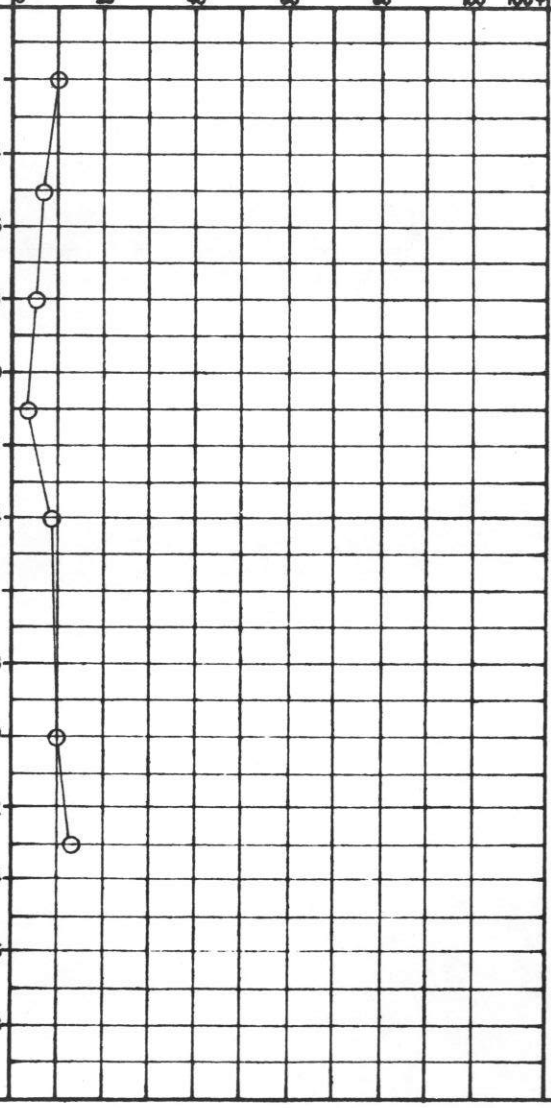
OFFSET. ELEV.

TEST HOLE 3

MILE 820

DRY DENSITY (lbs./Ft.³) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'								
2					CL	CLAY -Silty Sandy Pebbles-gravelly Low plastic							Damp	
4														
6													Damp	
8						—8'		Low					Damp	
10					SC	SAND -Clayey Gravelly	F	Ice					Damp	
12														
14								Vx					Moist	
16														
18														
20													Moist	
22														
24					CL CI	—23' CLAY-Gravelly, silty Sandy —25'							Moist	
26						BOTTOM OF HOLE - 25'								
28														



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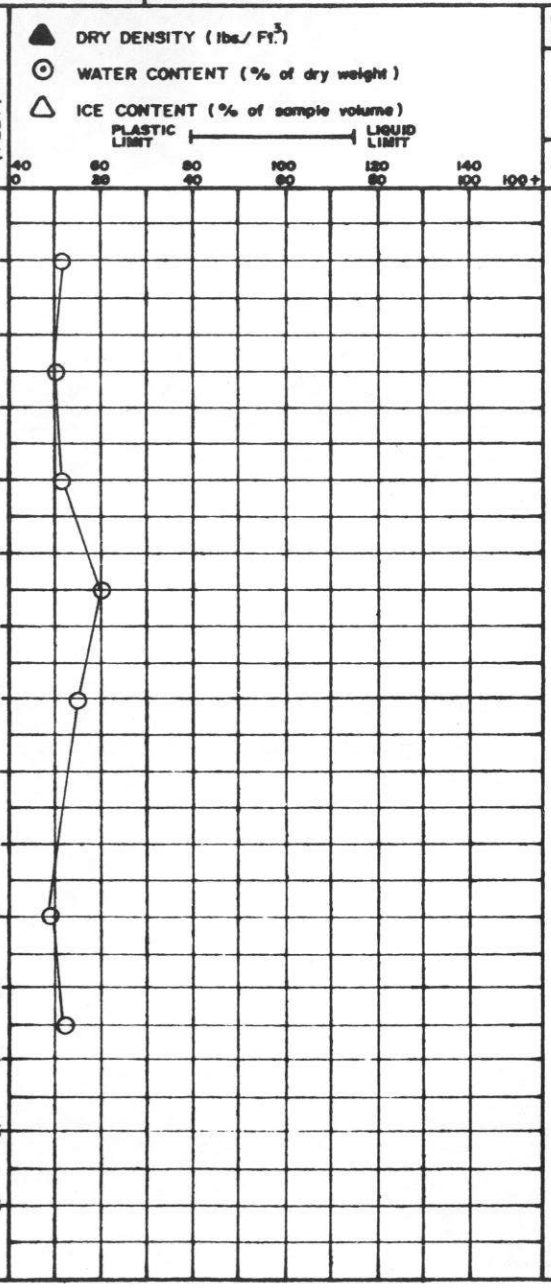
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 3A
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 820

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .5'								
2					CL	CLAY -Sandy Silty Pebbles Low plastic Med. plastic		Low					Damp	
4														
6													Damp	
8					CI			Ice					Damp	
10							F							
12								Vx					Moist	
14					SC	SAND -Gravelly Clayey 13'							Wet	
16														
18														
20													Moist	
22														
24					CL	CLAY-Gravelly Silty sandy 23' 25'							Moist	
26						BOTTOM OF HOLE - 25'								
28														



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DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

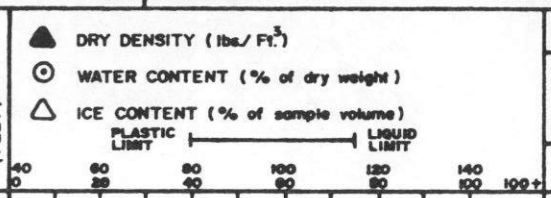
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV. TEST HOLE 1 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2					CL	Clay-Gravelly Sandy Silty Low Plastic	F	Moderate Ice					Moist	
4														
6								Vc-Vr					Wet	
8						8'								
					GC	Gravel-Clayey Sandy		High Ice					Sat.	
10														
12						Gravel-Clay-Sand Mix								
14								VS					Free Water	
16														
18						18'								
					CL	Clay-Gravelly Sandy Silty Low Plastic							Free Water	
20														
22														
24													Free Water	
						25'								
26						BOTTOM OF HOLE 25'								
28														



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BORROW PIT 110

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

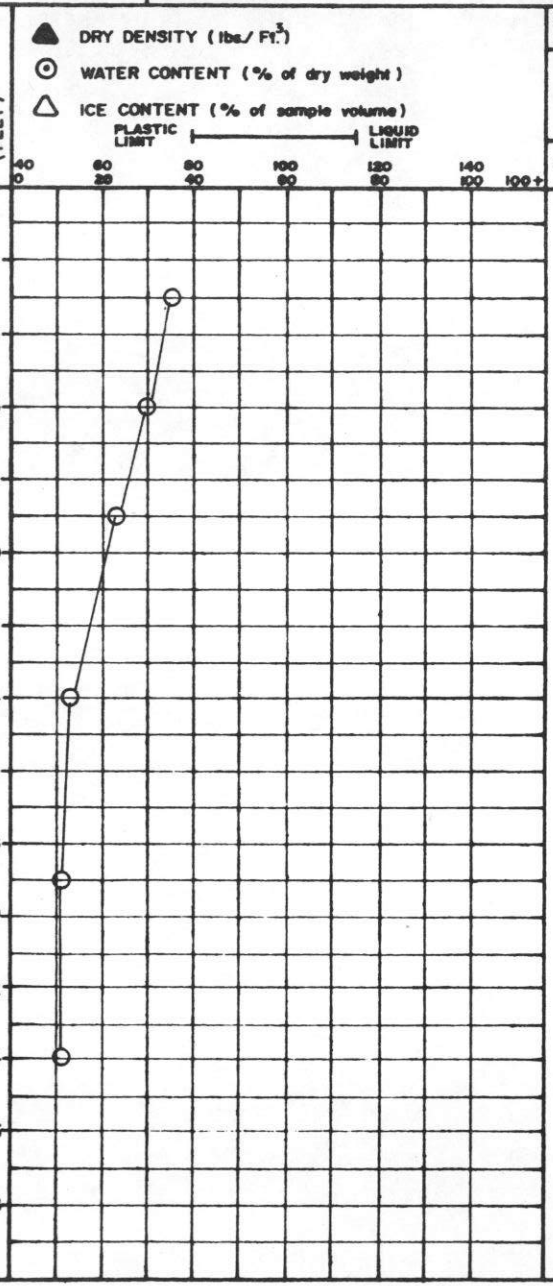
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV. TEST HOLE 2 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2'		High Ice VS						
2													Sat.	
4						Clay-Gravelly Silty Sandy Med. Plastic								
6													Sat.	
8					Cl		F							
10								Low to Moderate Ice Vc-Vr VX					Wet	
12														
14													Moist	
16														
18													Moist	
20														
22														
24						25'							Moist	
26						BOTTOM OF HOLE 25'								
28														



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BORROW PIT 110

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.

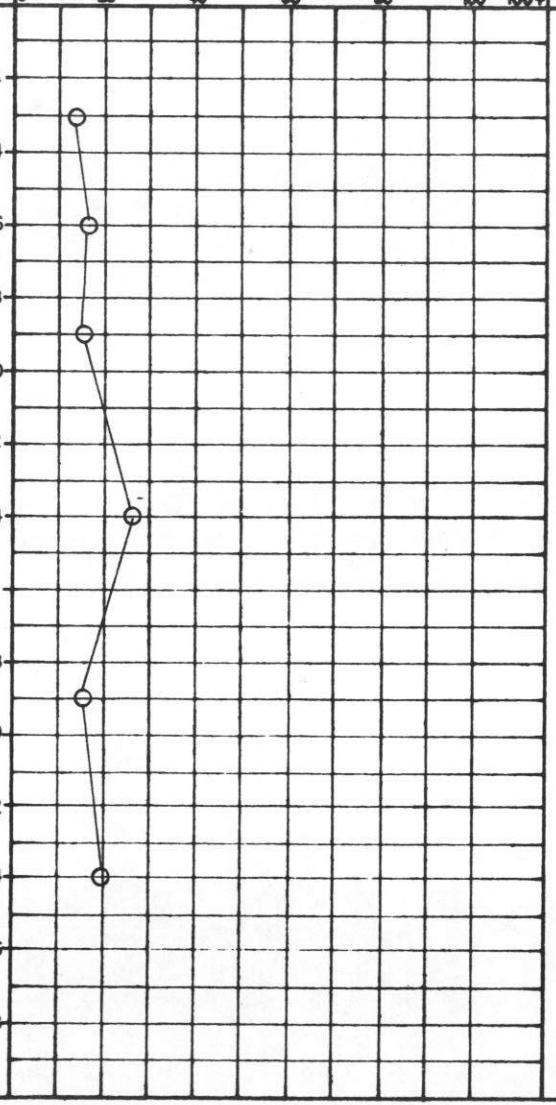
OFFSET. ELEV.

TEST HOLE: 3

MILE:

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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT 1'							
2													
4						Clay -Gravelly Silty Sandy Med. Plastic		Moderate					Moist
6								Ice					Moist
8					Cl		F						Wet
10								Vc-Vr					
12													
14													Sat.
16													
18													
20													Wet
22													
24													Wet
						25'							
26						BOTTOM OF HOLE 25'							
28													



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DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

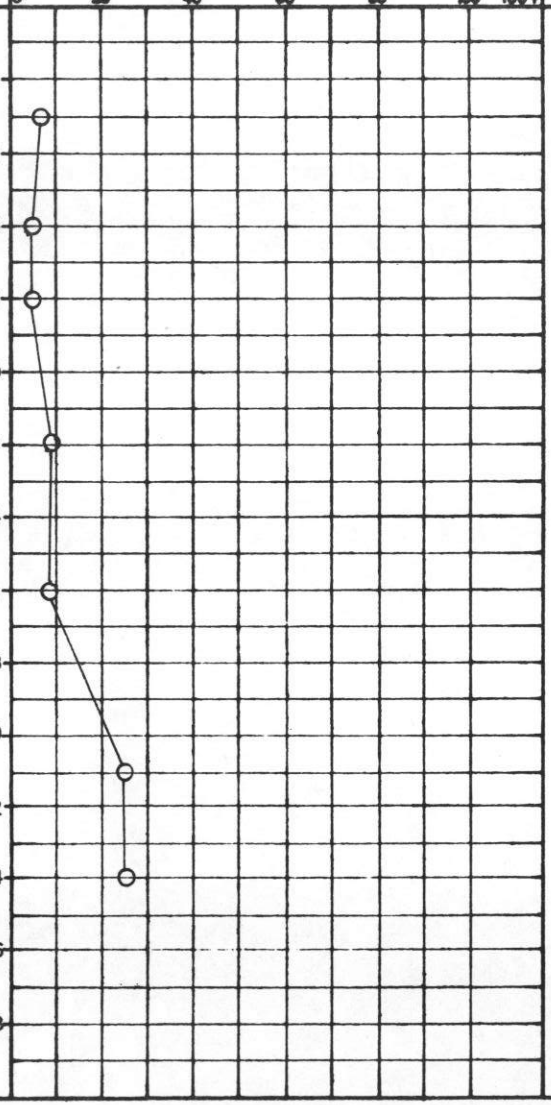
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 1
TECH. JOHNSON	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE

DRY DENSITY (lbs/ Ft.^{3}) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .5								
2														
4								Low Ice					Damp	
					GW	Gravel -Sandy								
6													Damp	
8							F						Damp	
10														
						Silty Sandy								
12								VX					Wet	
					GC									
14														
16						Clayey Sandy							Sat.	
18														
								High Ice						
20						Sandy								
22								VS					Free Water	
24													Free Water	
						25'								
26						BOTTOM OF HOLE 25'								
28														



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BORROW PIT 111

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

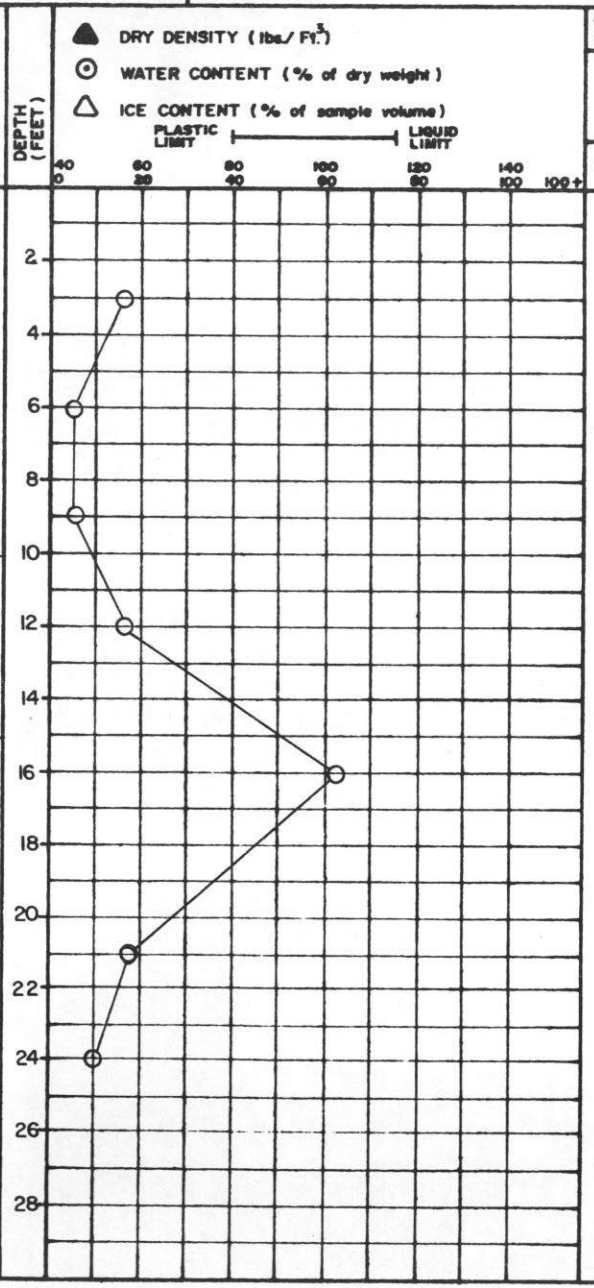
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. JOHNSON	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV. TEST HOLE 2 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2					CL	Clay-Gravelly Sandy Silty		Low Ice					Wet	
4					Cl	Low-Med. Plastic	F							
6													Moist	
8						8'								
													Damp	
10					GC	Gravel -Sandy Clayey								
12								Moderate Ice					Sat.	
14						15'		Vc-Vr						
16					CL	Clay-Gravelly Sandy Silty 17'		High Ice					Free Water	
18						Gravel-Sandy Clayey		VS						
20					GC								Free Water	
22					GW	Sandy		High Ice						
24						25'							Sat.	
26						BOTTOM OF HOLE 25'								
28														



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MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. JOHNSON	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.

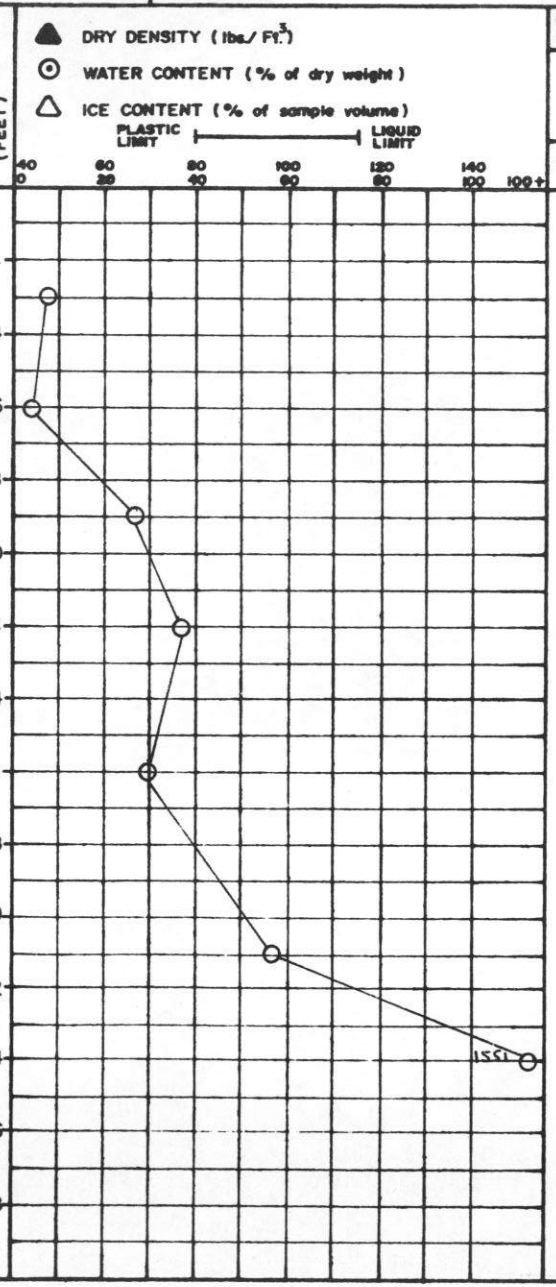
OFFSET. ELEV.

TEST HOLE 3

MILE

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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT 2'		Low Ice					
					GC	Gravel-Org. to 4' Clayey Sandy		VX					Moist
													Moist
						8'	F						
					Cl	Clay-Gravelly Silty Sandy Pebbles Med. Plastic		High Ice					Free Water
								VS					Sat.
													Sat.
						20'							
					SC	Sand-Clayey Med. to Coarse							Free Water
						Ice 25'		Ice					Water
						BOTTOM OF HOLE 25'							



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MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. JOHNSON	RIG. MAYHEW #2	SURFACE DRAINAGE.	VEGETATION.

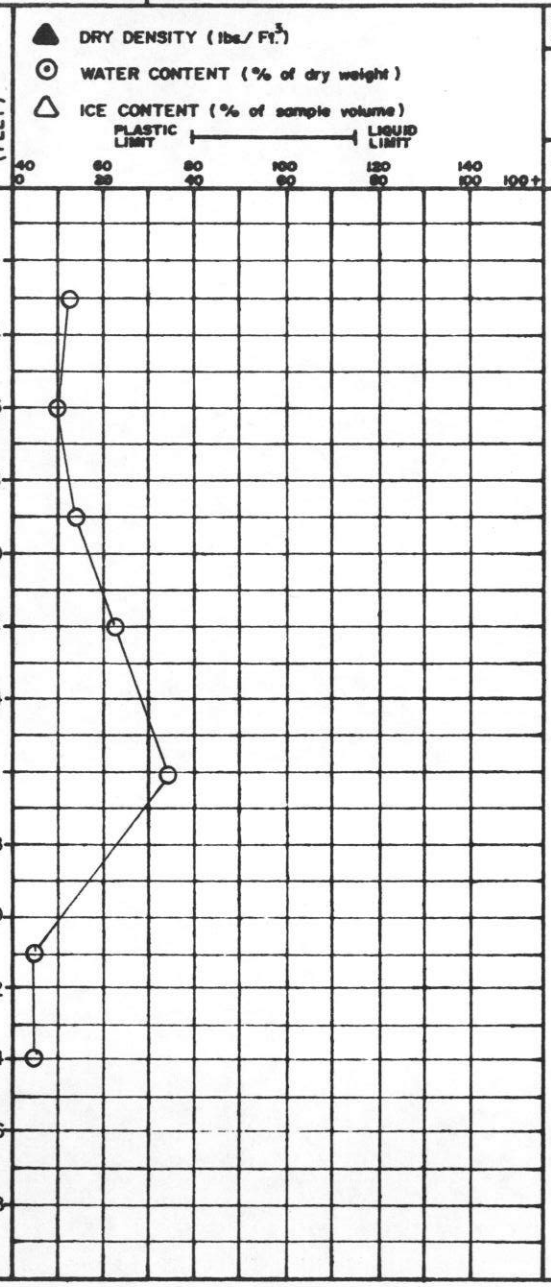
OFFSET. ELEV.

TEST HOLE 4

MILE

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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT							
2					Cl	Clay-Sandy-Silty Pebbles Med. Plastic		Low Ice					Moist
4						4'							
6					GC	Gravel-Sandy Clayey	F	VX					Moist
8						8'							Moist
10					Cl	Clay -Sandy Silty Pebbles Med. Plastic		Moderate Ice					
12													Wet
14													
16													Sat.
18								Vc-Vr					
20						20'							
22					GC	Gravel-Sandy Clayey		Low Ice VX					Moist
24						25'							Moist
26						BOTTOM OF HOLE 25'							
28													



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BORROW PIT 111

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

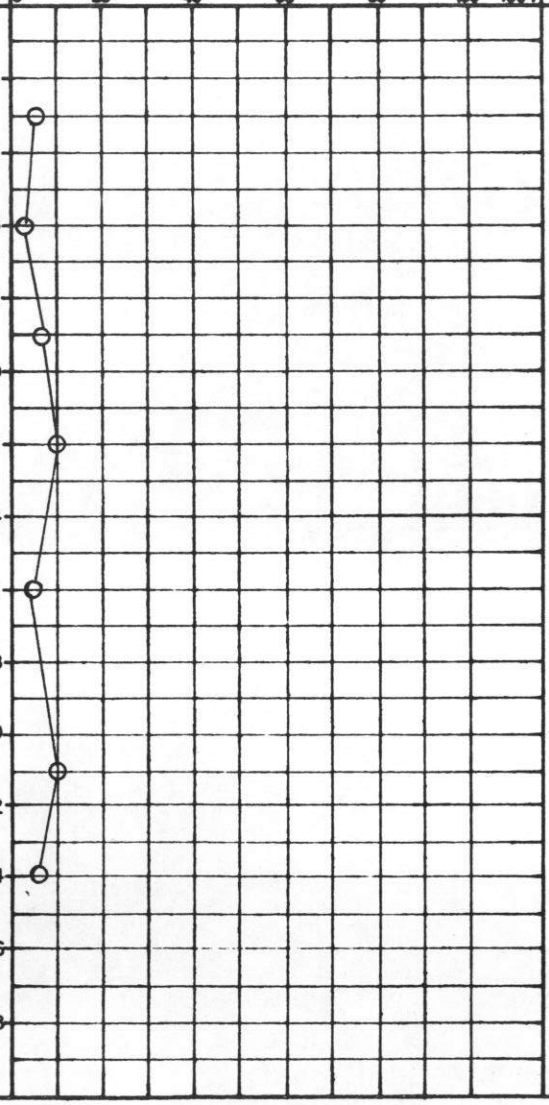
SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. JOHNSON	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV. TEST HOLE 5 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2													Damp	
4					GC	Gravel -Sandy		VX						
6								Low Ice					Damp	
8														
						Clayey	F						Moist	
10														
12								Moderate					Wet	
14								Ice						
16													Wet	
18								Vc-Vr						
20													Wet	
22														
24													Wet	
						25'								
26						BOTTOM OF HOLE 25'								
28														

DRY DENSITY (lbs./Ft.^{3})
WATER CONTENT (% of dry weight)
ICE CONTENT (% of sample volume)
PLASTIC LIMIT — LIQUID LIMIT



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BORROW PIT 111

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

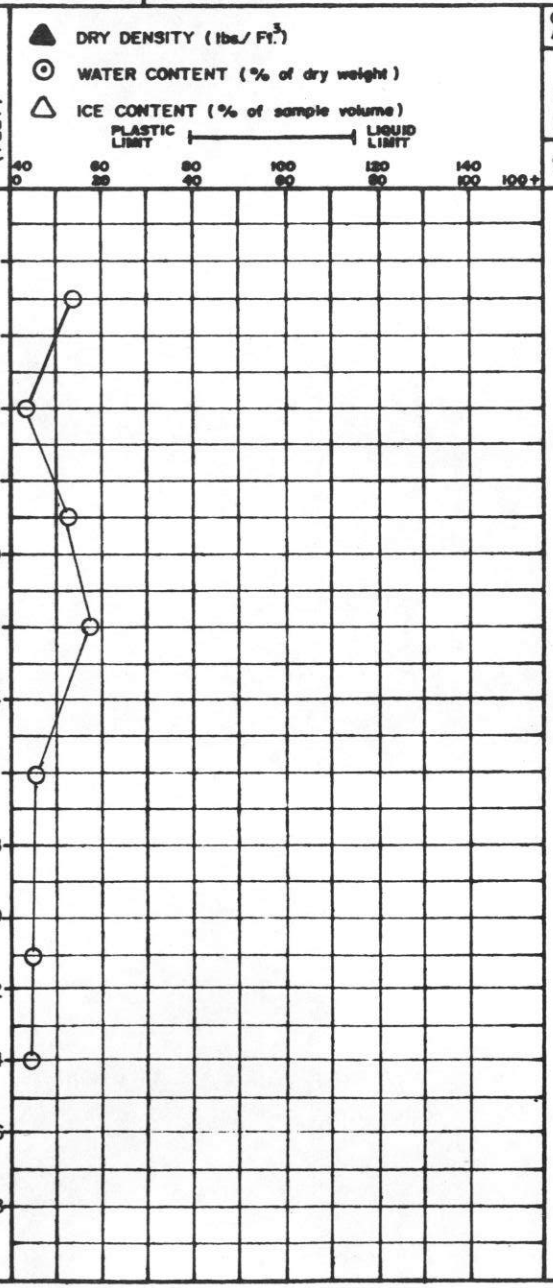
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 13/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. JOHNSON	RIG. MAYHEW #2	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV. TEST HOLE 6 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2					CL	Caly-Sandy Silty Pebbles		VX					Damp	
4						5'		Low to						
6						Gravel -Clayey Sandy		Moderate					Damp	
8					GC	Gravel-Clay-Sand Mixture	F	Ice					Moist	
10														
12													Sat.	
14														
16						Gravel-Clayey Sandy		Vc-Vr					Wet	
18														
20														
22													Moist	
24						25'							Moist	
26						BOTTOM OF HOLE 25'								
28														



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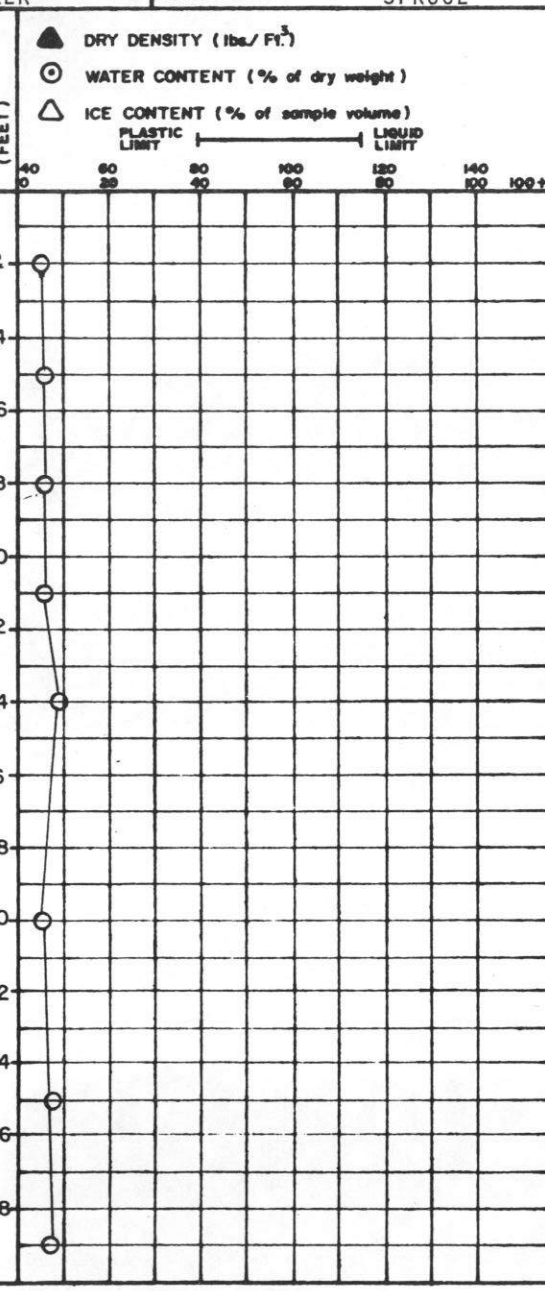
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 14/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 7
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. ESKER	VEGETATION. SPRUCE	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2"								
2						Gravel -Clayey Sandy		Nbn					Damp	
4								VX					Damp	
6							F							
8								Frozen					Damp	
10								Low Ice					Damp	
12														
14													Sat.	
16								Moderate and Low Ice						
18														
20													Wet	
22								Vc-Vr VX						
24													Wet	
26														
28						29'							Wet	
						BOTTOM OF HOLE 29'								



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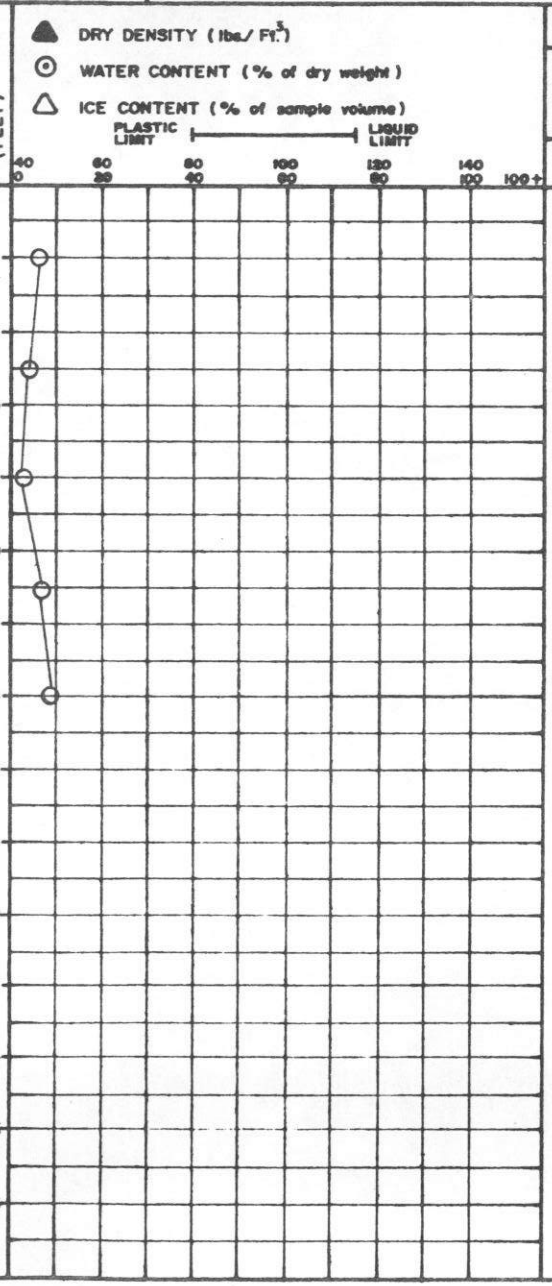
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 14/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 8
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. ESKER	VEGETATION. SPRUCE	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2"								
2						Gravel-Clay-Sand Mix.		Nbn					Damp	
4					GC	Gravel-Clayey Sandy							Damp	
6														
8					GW		F	Frozen To					Damp	
10					GW			Low Ice					Moist	
12								VX						
14					GC	14'							Wet	
16						BOTTOM OF HOLE 14'								
18														
20														
22														
24														
26														
28														



DS-14-5-74 b

BORROW PIT 111

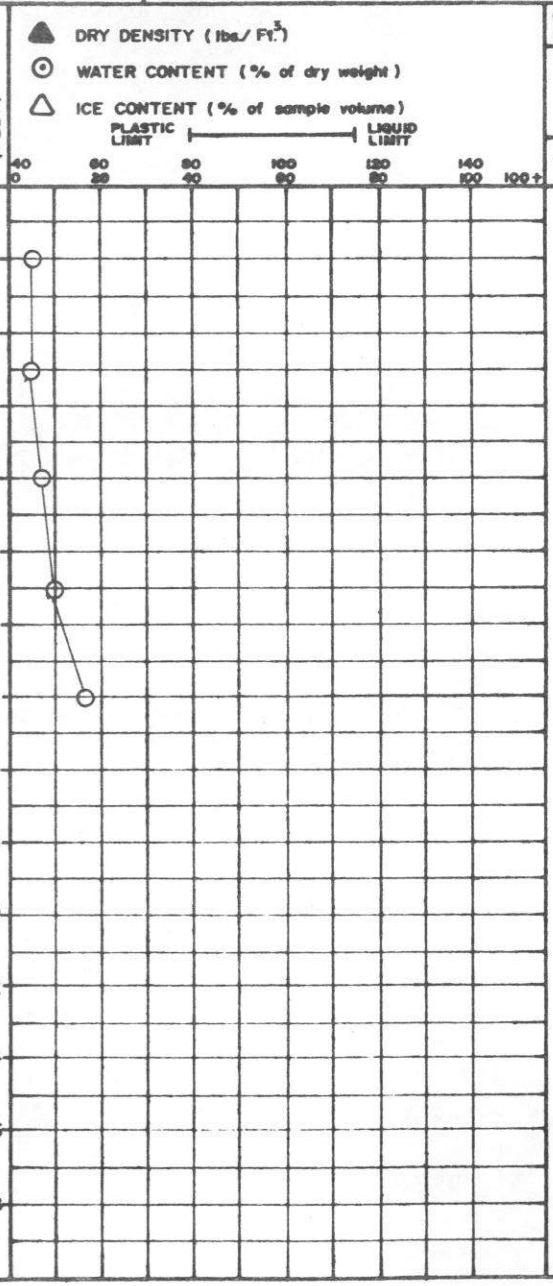
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 14/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 9	MILE	
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. ESKER	VEGETATION. SPRUCE
ELEV.			

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2"								
2						Gravel -Sandy		Nbn Frozen					Damp	
4														
6					GC		F						Damp	
8						Clayey		Low to Moderate					Moist	
10						Gravel-Clay-Sand Mixture		Ice						
12								VX Vc-Vr					Moist	
14						14'							Sat.	
16						BOTTOM OF HOLE 14'								
18														
20														
22														
24														
26														
28														



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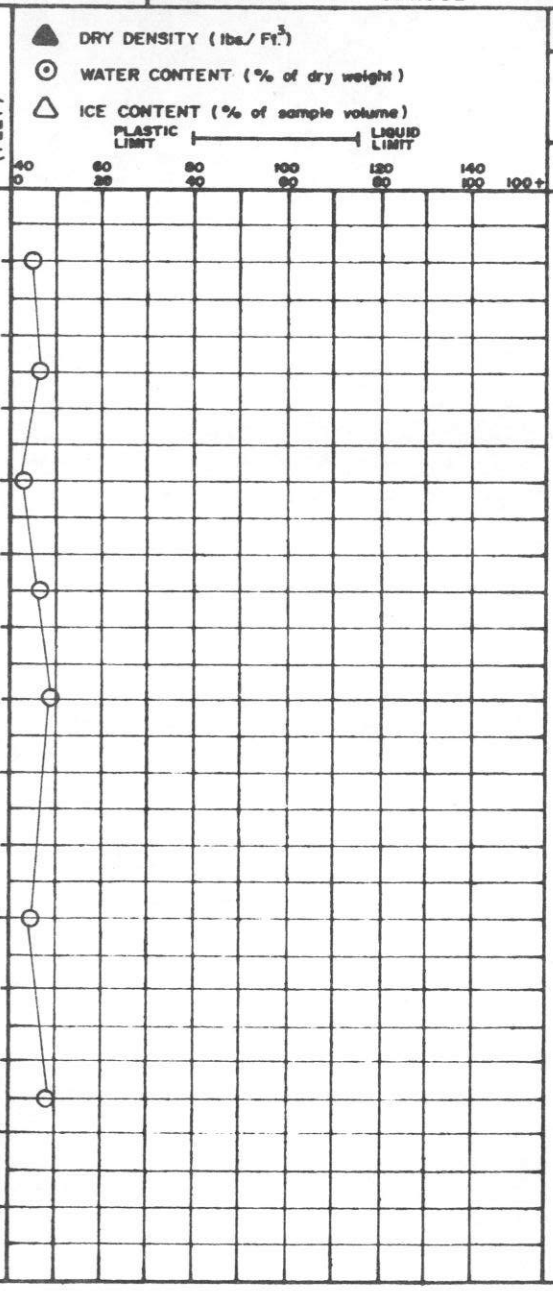
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 14/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 10		
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. ESKER	VEGETATION. SPRUCE
ELEV.	MILE		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2"								
2						Gravel-Clayey Sandy							Damp	
4														
6													Damp	
						Gravel-Clay-Sand Mix.		Low Ice						
8													Damp	
10						Gravel-Clayey Sandy		VX						
							F						Damp	
12					GC									
14													Moist	
16														
18														
20													Wet	
22														
						Gravel-Clay-Sand Mix. 25'								
24													Wet	
26						BOTTOM OF HOLE 25'								
28														



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BORROW PIT 111

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

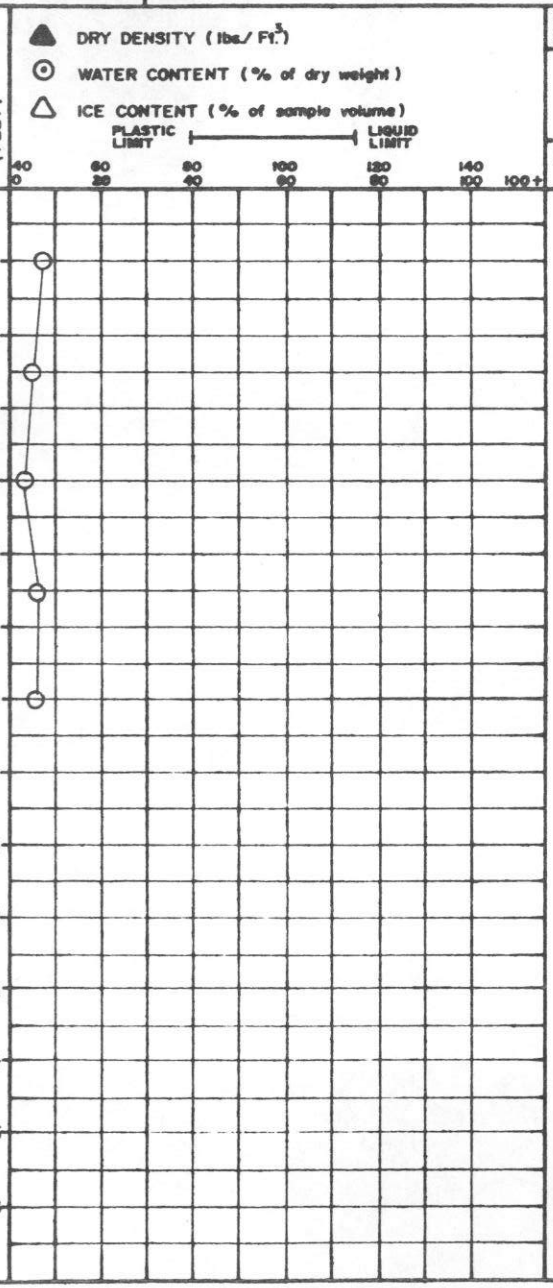
SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 14/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. ESKER	VEGETATION. SPRUCE

OFFSET. ELEV. TEST HOLE 11 MILE

DRY DENSITY (lbs./Ft.³) ▲
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						Gravel-Clay-Sand Mix.							Damp	
4								Frozen						
6						Gravel -Clayey Sandy		Nbn					Damp	
8							F						Damp	
10														
12													Damp	
14						14'							Damp	
16						BOTTOM OF HOLE 14'								
18						Hole Caving in								
20														
22														
24														
26														
28														



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BORROW PIT 111

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

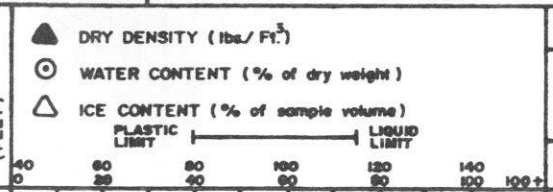
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 14/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. ESKER	VEGETATION. SPRUCE

OFFSET. ELEV. TEST HOLE 12 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2"								
2						Gravel -Sandy Clayey							Moist	
4														
6													Damp	
8							F	Frozen					Damp	
10								Nbn						
12													Damp	
14						Sand-Gravel Mix. 14'							Damp	
16						BOTTOM OF HOLE 14'								
18						Hole Caving in								
20														
22														
24														
26														
28														



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BORROW PIT 111

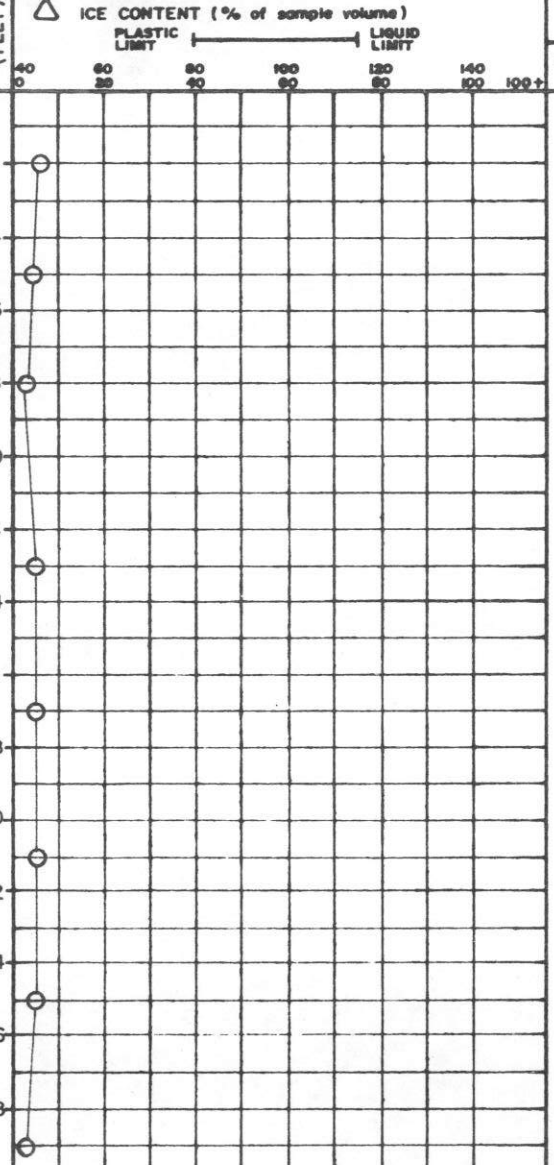
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 14/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 13		
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. ESKER	VEGETATION. SPRUCE
ELEV.	MILE		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2"								
2					SP	Sand -Pebbles		Nbn					Damp	
4						4'		Frozen-					Damp	
6						Gravel-Sand Mix.		Low Ice						
8													Damp	
10					GW	Gravel-Sandy	F	VX						
12													Damp	
14														
16								Moderate					Wet	
18					GC	Clayey Sandy		Ice						
20								Vc-Vr						
22													Sat.	
24													Wet	
26														
28														
						29'							Moist	
						BOTTOM OF HOLE 29'								



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BORROW PIT 111

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

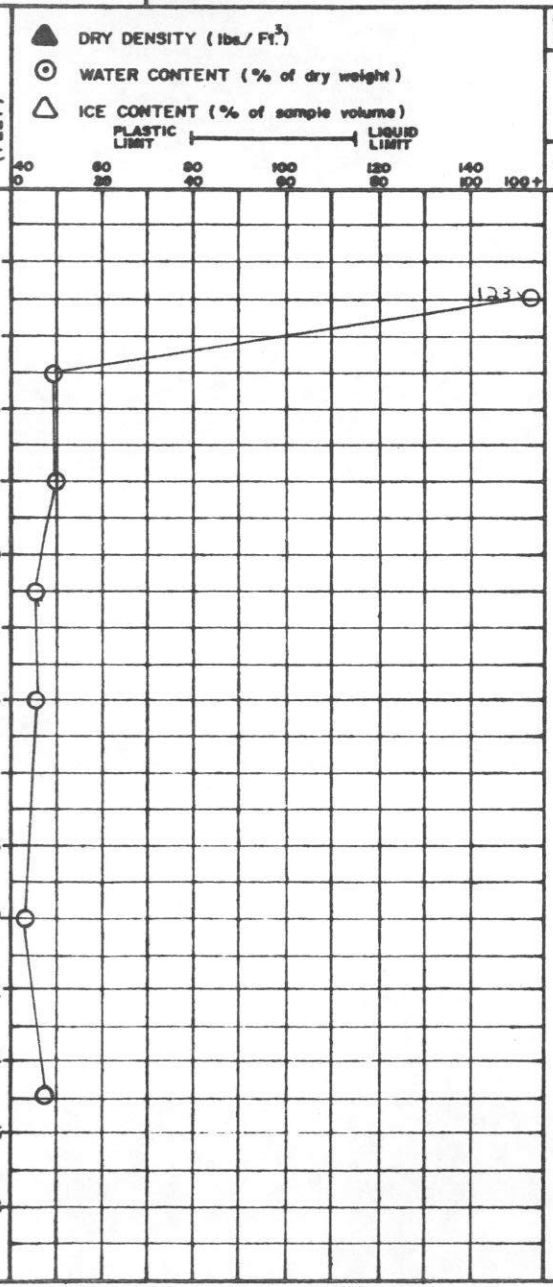
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 14/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. PRONYCH	RIG.	SURFACE DRAINAGE. LEVEL	VEGETATION. SPRUCE

OFFSET. ELEV. TEST HOLE 14 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
2					Pt	PEAT								
													Damp	
4						4'		VX						
						Gravel-Clayey Sandy							Wet	
6								Low Ice						
8							F	And					Wet	
10					GC			Moderate					Wet	
12														
14								Ice					Wet	
16								Vc-Vr						
18														
20													Damp	
22														
24														
						25'							Wet	
26						BOTTOM OF HOLE 25'								
28														



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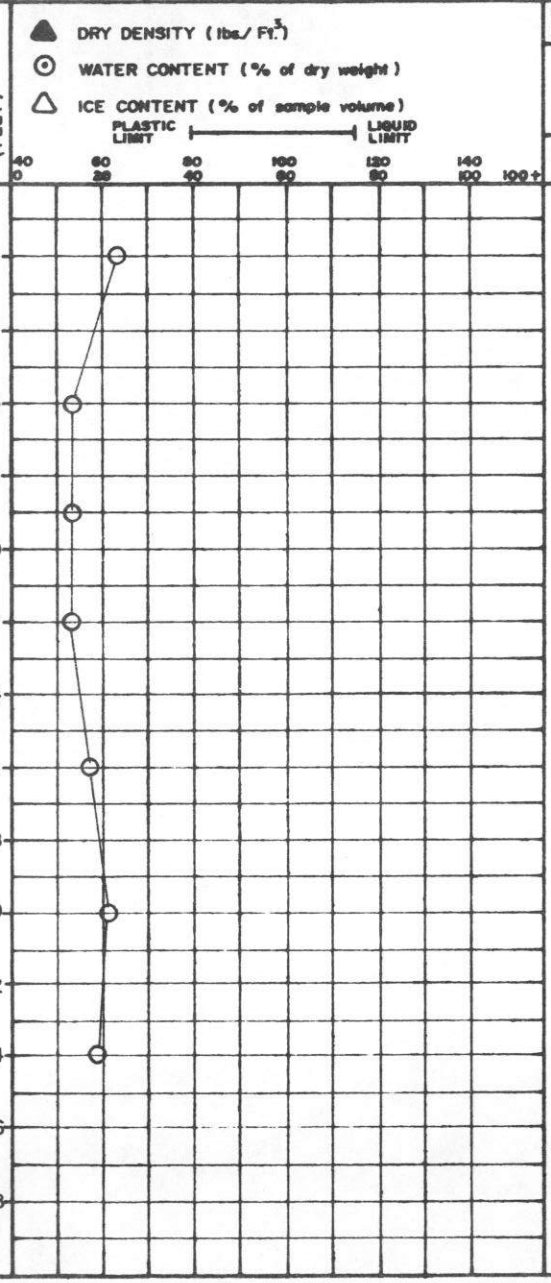
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. A. HANNA	DATE DRILLED. 14/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 15		
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. LEVEL	VEGETATION. SPRUCE
ELEV.	MILE		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1"								
2					GC	Gravel-Clay-Sand Mixture							Sat.	
4														
6							F	Moderate					Wet	
8								Ice						
10						10'		Vc-Vr					Moist	
12					CL	Clay-Sandy Silty Pebbles							Moist	
14						Low-Med. Pebbles								
16					Cl								Moist	
18														
20													Moist	
22														
24						Gravelly 25'							Wet	
26						BOTTOM OF HOLE 25'								
28														



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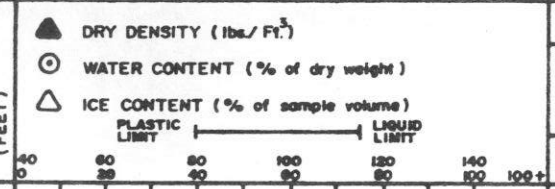
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGES	DATE DRILLED. 26/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 1
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. ESKER	VEGETATION. BURNT OUT AREA	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2"									
2					SM	Sand-Silty Fine		Nbn	2					Humid	
4						Pebbles		Low To	4					Humid	
6								Nil Ice	6						
8					SP	Fine-Medium			8					Humid	
10									10						
12					SW	Gravelly Med.-Coarse	F	Content	12					Damp	
14									14					Damp	
16						Med.-Coarse		VX	16						
18									18						
20						Pebbles			20					Moist	
22									22						
24									24						
26									26						
28									28						
						29'								Moist	
						BOTTOM OF HOLE 29'									



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BORROW PIT 112

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

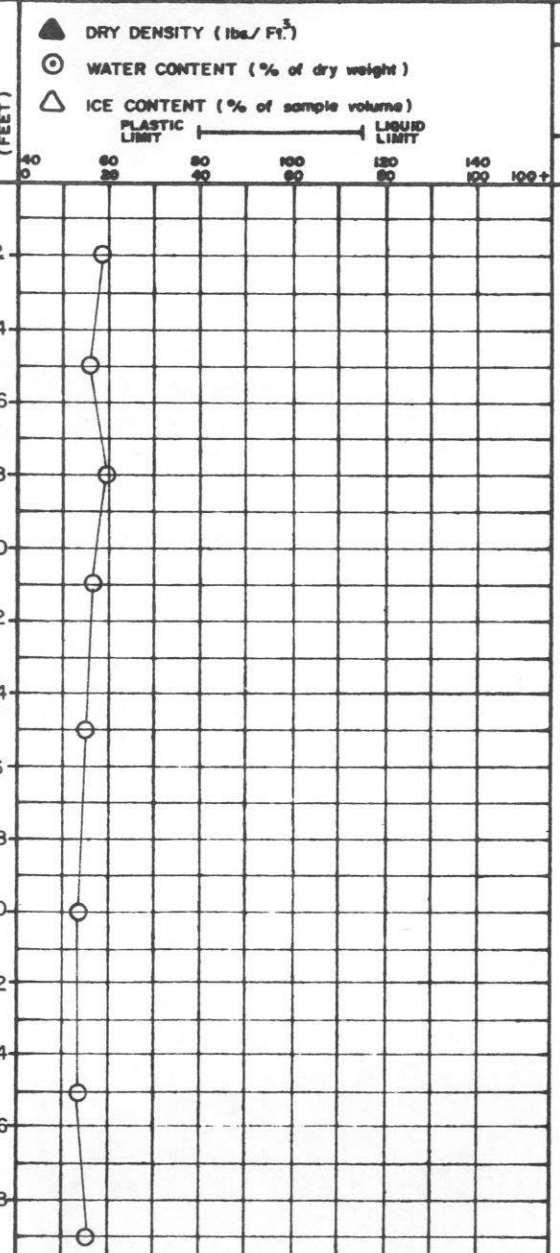
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGES	DATE DRILLED. 26/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. FAIR	VEGETATION. BURNT OUT AREA

OFFSET. ELEV. TEST HOLE 2 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						Clay -Silty Sandy Pebbles							Moist	
4					CL			Low To						
6						Low-Med. Plastic	F	Moderate					Moist	
8								Ice					Moist	
10					Cl			VX						
12								Vc-Vr					Moist	
14														
16													Moist	
18														
20													Moist	
22														
24													Moist	
26														
28														
						29							Moist	
						BOTTOM OF HOLE 29'								



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BORROW PIT 112

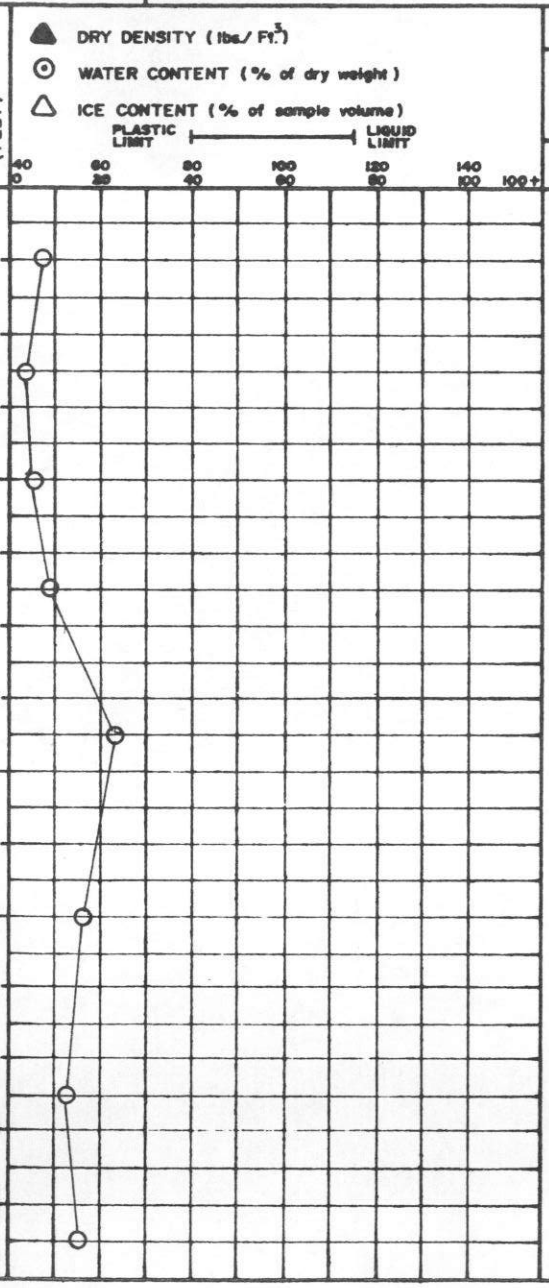
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 27/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 3		
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. FAIR	VEGETATION. BIRCH & SPRUCE
ELEV.	MILE		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2"								
2					SC	Sand-Gravelly Clayey 3'		VX					Damp	
4													Damp	
6					GP	Gravel -Sandy		Low to Ice						
8						8'							Damp	
10					SP	Sand-Gravelly 11'		Ice					Moist	
12					GC	Gravel-Sand-Clay Mixture 13'	F	Moderate						
14						Clay -Silty Sandy Pebbles							Sat.	
16					CL	Low-Med. Plastic		Vc-Vr						
18					Cl	Gravelly							Moist	
20														
22						Pebbles								
24													Moist	
26														
28						29'							Moist	
						BOTTOM OF HOLE 29'								



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BORROW PIT 112

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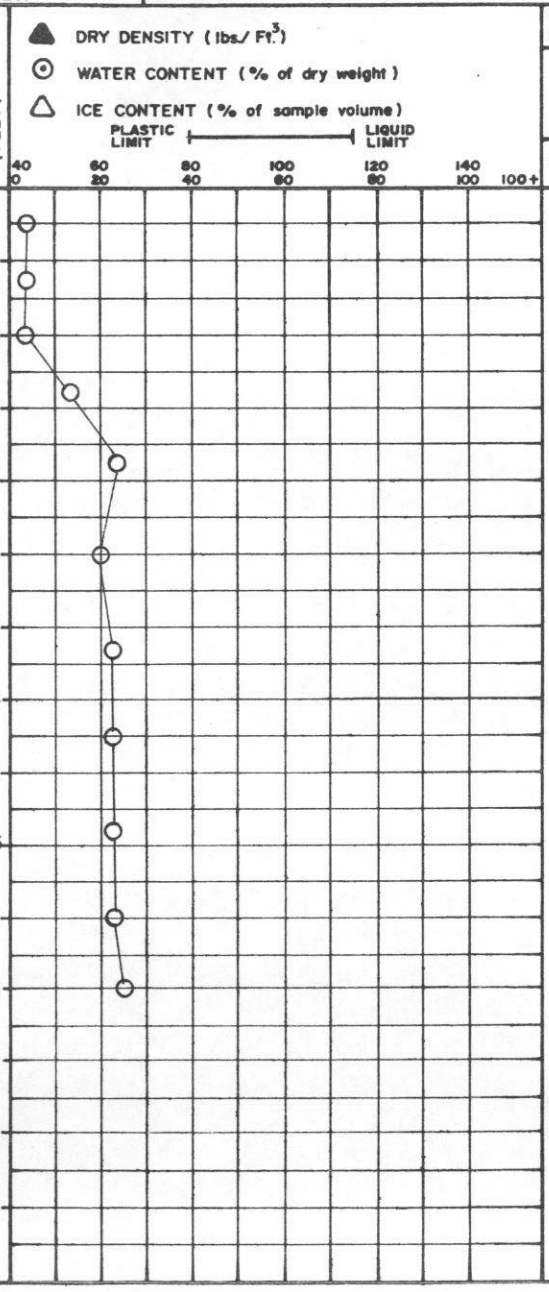
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 4		
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. ESKER	VEGETATION.
ELEV.	MILE		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2"								
					SW	Sand-Fine to Coarse Gravelly		Nil to Low Ice Nbn					Humid	
4					SP	Fine-Medium							Damp	
8					SM	Silty Fine		VX					Damp	
								Vc-Vr					Moist	
12								Moderate						
16							F	To Low					Sat.	
								Ice						
20								Content					Wet	
24								VS					Sat.	
28														
					SM	Sand-Silty Fine							Sat.	
32								High Ice						
36							F	Contnet					Sat.	
40								VS					Sat.	
44						44'							Sat.	
						BOTTOM OF HOLE 44'								
48														
52														
56														



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BORROW PIT 112

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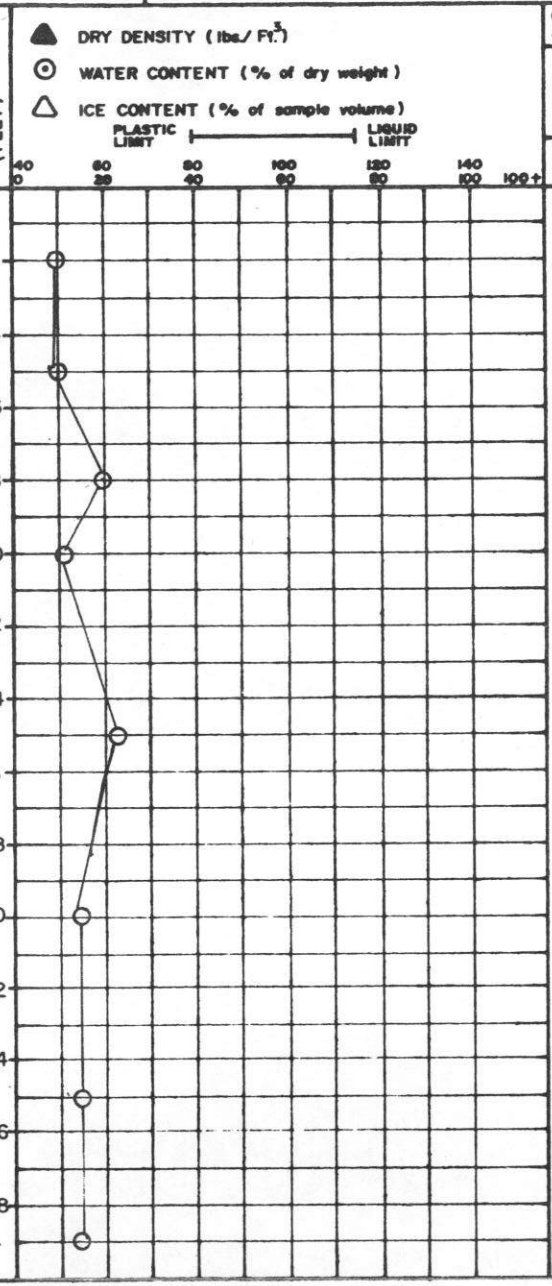
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 27/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION. SPRUCE

OFFSET. ELEV. TEST HOLE 5 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2					SW	Sand -Med.-Coarse							Moist	
4						Pebbles							Moist	
6								Moderate						
8													Sat.	
					SM	Silty-Fine-Med.		Ice						
10						Gravelly @ 11'	F						Wet	
12														
14								Vc-Vr						
					SM	Silty Fine @ 15'							Sat.	
16														
18														
20					CL	Clay-Pebbles Silty-Sandy							Moist	
22					Cl	Low-Med. Plastic								
24													Moist	
26														
28														
						29'							Moist	
						BOTTOM OF HOLE 29'								



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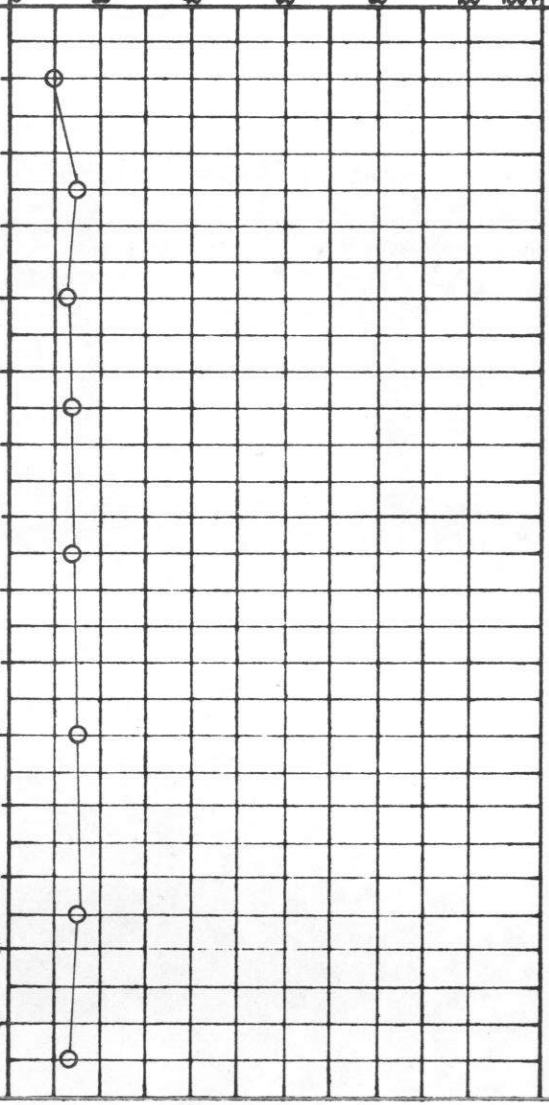
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 26/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 1
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. FAIR	VEGETATION. BURNT OUT AREA	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						Clay -Silty Sandy Pebbles							Moist	
4								Low Ice					Moist	
					CL	Low-Med. Plastic								
6							F							
8						Gravelly							Moist	
10													Moist	
12														
					Cl			VX						
14						Pebbles								
16													Moist	
18														
20						Gravelly							Moist	
22														
24						Pebbles							Moist	
26														
28														
						29' BOTTOM OF HOLE 29'							Moist	



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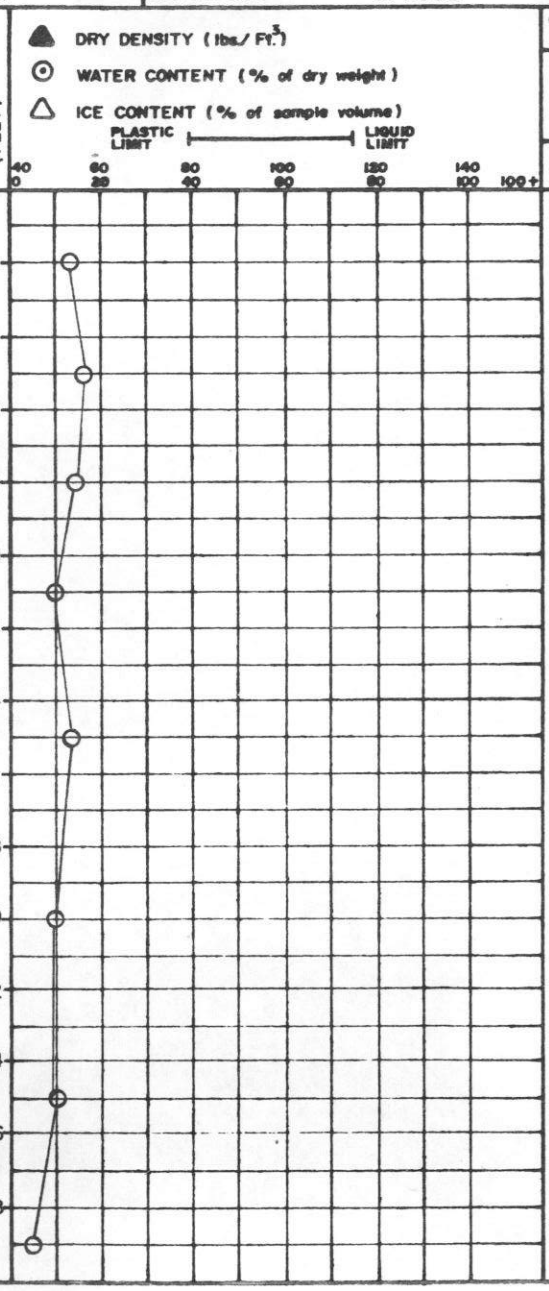
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 26/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 2	MILE	
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE
ELEV.			

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		VX						
2						Clay -Silty Sandy Pebbles Med. Plastic		Low Ice					Moist	
4					Cl								Moist	
6														
8													Moist	
10						11'								
12					SC	Sand-Clayey Gravelly		Moderate					Wet	
14								Ice Vc-Vr					Wet	
16														
18						Ice		Ice						
20					SC	Sand-Clayey Gravelly		Low to Moderate					Wet	
22								Ice VX Vc-Vr						
24													Wet	
26					GC	Gravel-Clayey Sandy @ 29'								
28						29'							Wet	
						BOTTOM OF HOLE 29'								



DS-14-5-74

BORROW PIT 113

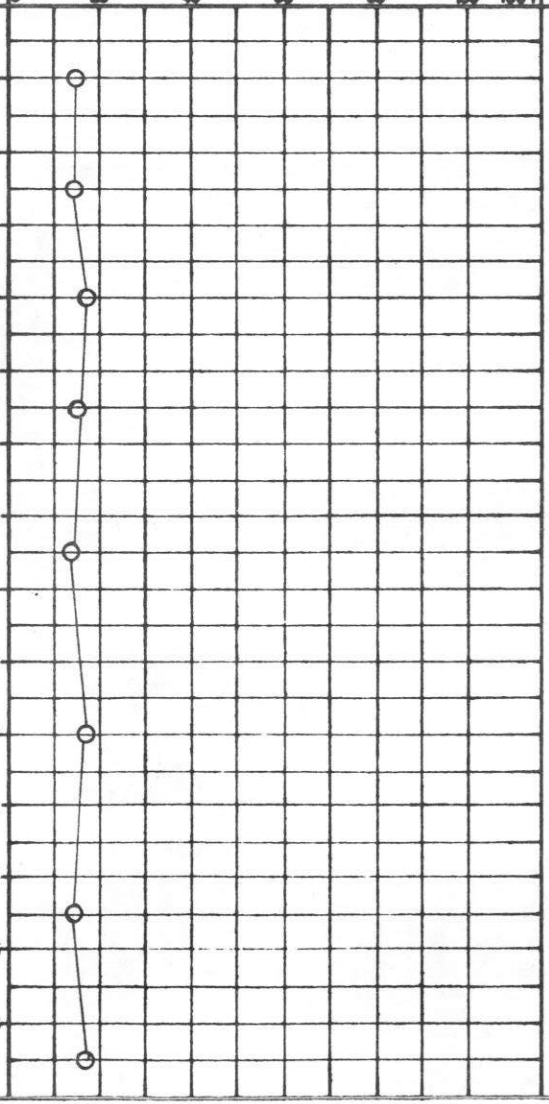
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 26/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 3
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'									
2									2					Moist	
						Clay -Sandy Silty Pebbles		VX							
4									4					Moist	
6					CL	Low-Med. Plastic		Low Ice	6						
8									8					Moist	
10							F		10						
														Moist	
12								VX	12						
14									14						
														Moist	
16									16						
					Cl										
18									18						
20									20					Moist	
22									22						
24						Gravelly			24					Moist	
26									26						
28						Pebbles 29'			28					Moist	
						BOTTOM OF HOLE 29'									



DS-14-5-74 b

BORROW PIT 113

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 26/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE

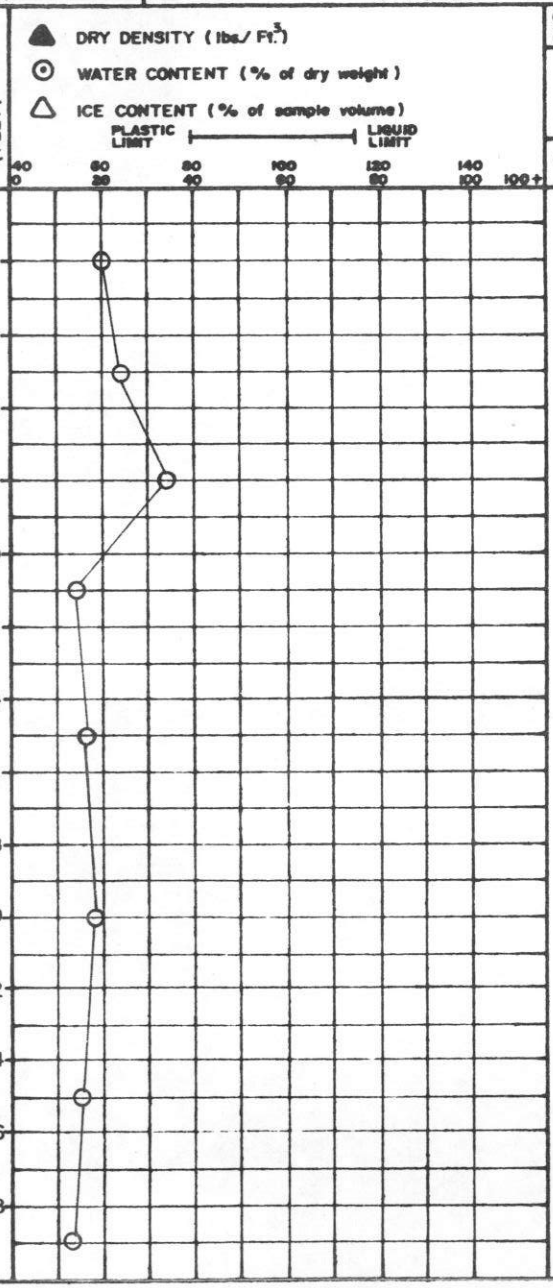
OFFSET. ELEV.

TEST HOLE 4

MILE

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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT 1'							
2						Clay -Sandy Silty Pebbles Med. Plastic							Moist
4													Moist
6								Moderate					
8					Cl		F	Ice					Wet
10								Vc-Vr					Moist
12													
14													Moist
16													
18													
20													Wet
22													
24													Moist
26													
28													Moist
						29' BOTTOM OF HOLE 29'							



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BORROW PIT 113

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 28/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.

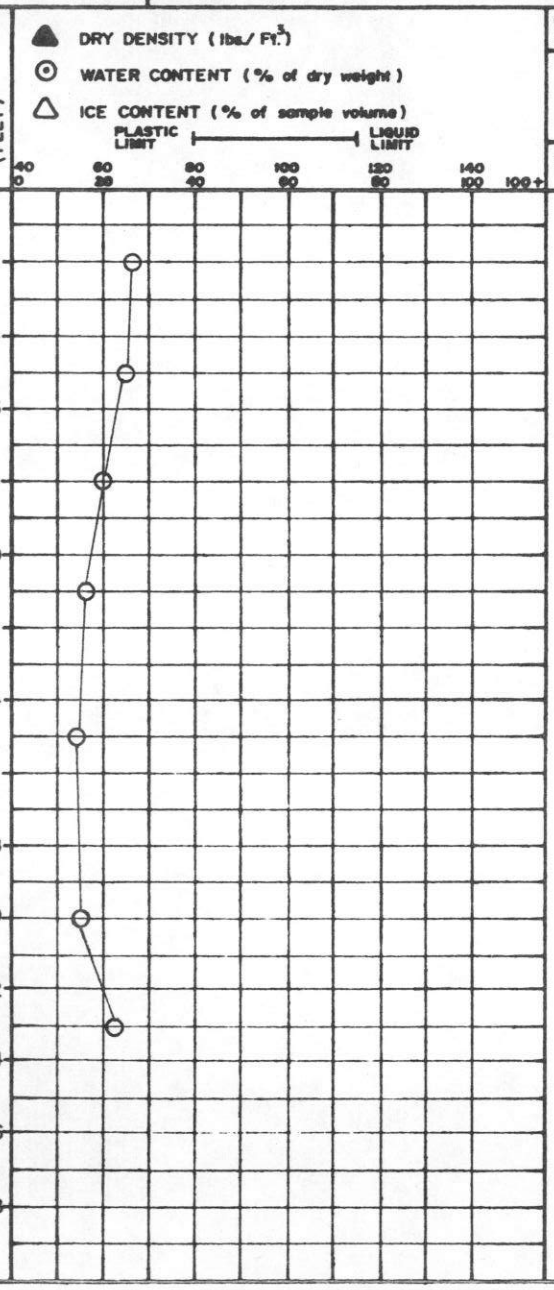
OFFSET. ELEV.

TEST HOLE: 5

MILE:

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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT 1'							
2						Clay -Silty Sandy Pebbles		Moderate					Moist
4													
6					CL	Low-Med. Plastic		To					Moist
8								Low Ice					Moist
10					Cl		F	Content					
12								Vc-Vr					Moist
14													Moist
16								VX					
18													
20													Moist
22													Wet
24						25'							
26						BOTTOM OF HOLE 25'							
28													



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BORROW PIT 113

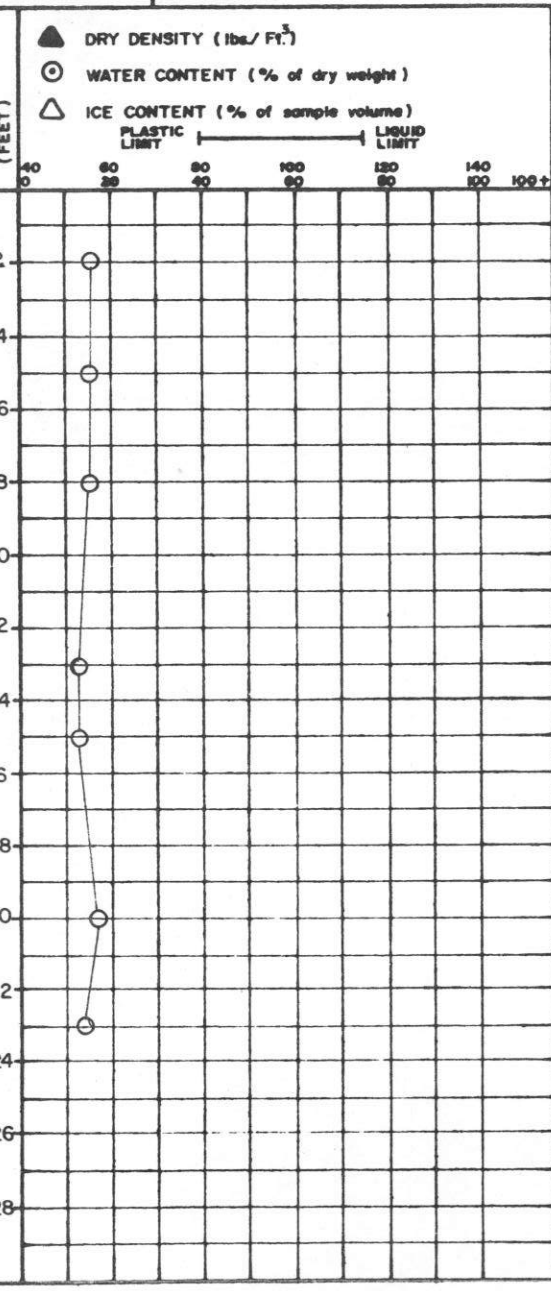
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 28/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 6
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .5'								
2						Clay -Silty Sandy Pebbles		Low Ice					Moist	
4						Gravelly							Moist	
6								Content						
8					CL	Pebbles							Moist	
10						Low-Med. Plastic	F							
12					Cl								Moist	
14								VX					Moist	
16														
18														
20													Moist	
22													Moist	
24						25'								
26						BOTTOM OF HOLE 25'								
28														



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BORROW PIT 113

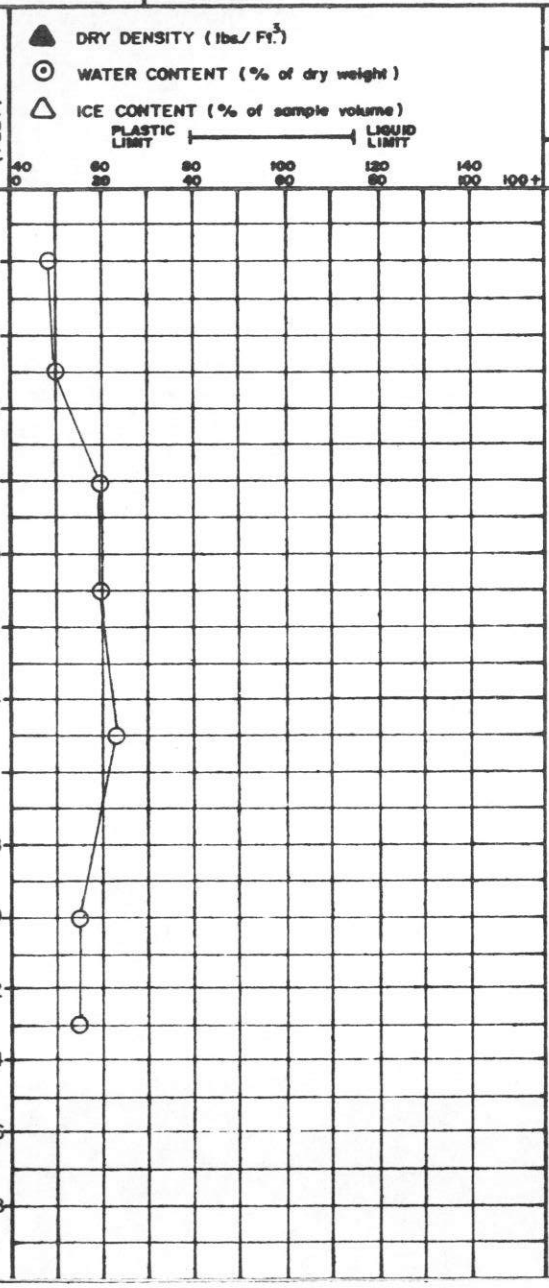
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 28/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 7		
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.	MILE		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 4"								
2					CL SC	Clay-Sandy Sand-Clayey Pebbles		VX					Moist	
4						4'		Low Ice					Moist	
6						Clay-Sandy Silty Gravelly								
8					CL	Pebbles	F						Wet	
10						Low-Med. Plastic		Moderate						
12													Wet	
14								Ice						
16					Cl			Vc-Vr					Wet	
18														
20													Moist	
22													Mosit	
24						25'								
26						BOTTOM OF HOLE 25'								
28														



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BORROW PIT 113

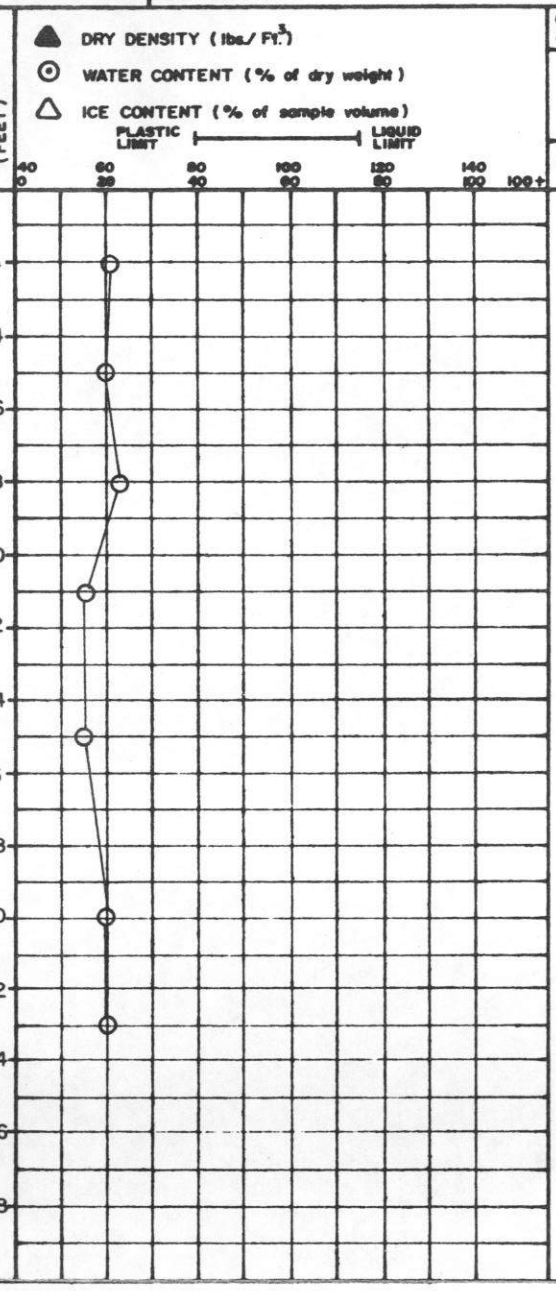
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 28/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 8
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .5								
2						Clay -Silty Sandy Pebbles		VX					Moist	
4								Low to					Moist	
6					CL	Low-Med. Plastic		Moderate						
8								Ice					Wet	
10					Cl		F							
12								Vc-Vr					Moist	
14						Boulders @ 14'							Moist	
16														
18														
20													Wet	
22													Moist	
24						25'								
26						BOTTOM OF HOLE 25'								
28														



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BORROW PIT 113

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 28/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.
TECH. BAINE	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.

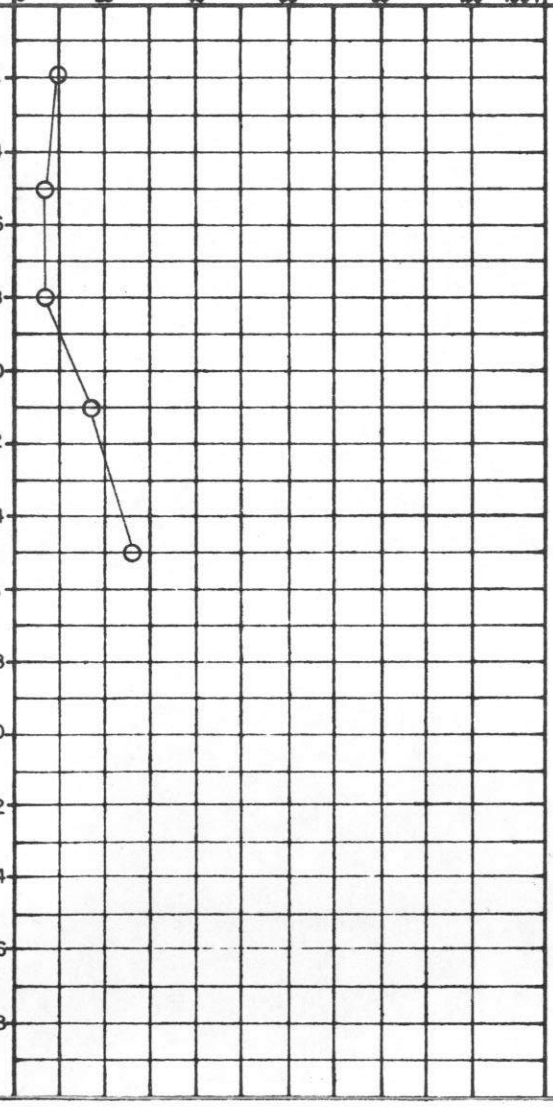
TEST HOLE: 9

MILE:

▲ DRY DENSITY (lbs./Ft.^{3})
⊙ 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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
2					CL	Clay-Silty Sandy Gravelly	F	Low Ice					Moist	
4						4'								
6					SM	Sand-Gravelly Silty							Moist	
8						8'							Wet	
10					GC	Gravel-Sandy Clayey								
12						11'							Wet	
14					CL	Clay-Silty Sandy Pebbles							Sat.	
16								Moderate Vc-Vr Ice						
18						Ice		Ice						
20						20'								
22						BOTTOM OF HOLE 20'								
24														
26														
28														



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BORROW PIT 114

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

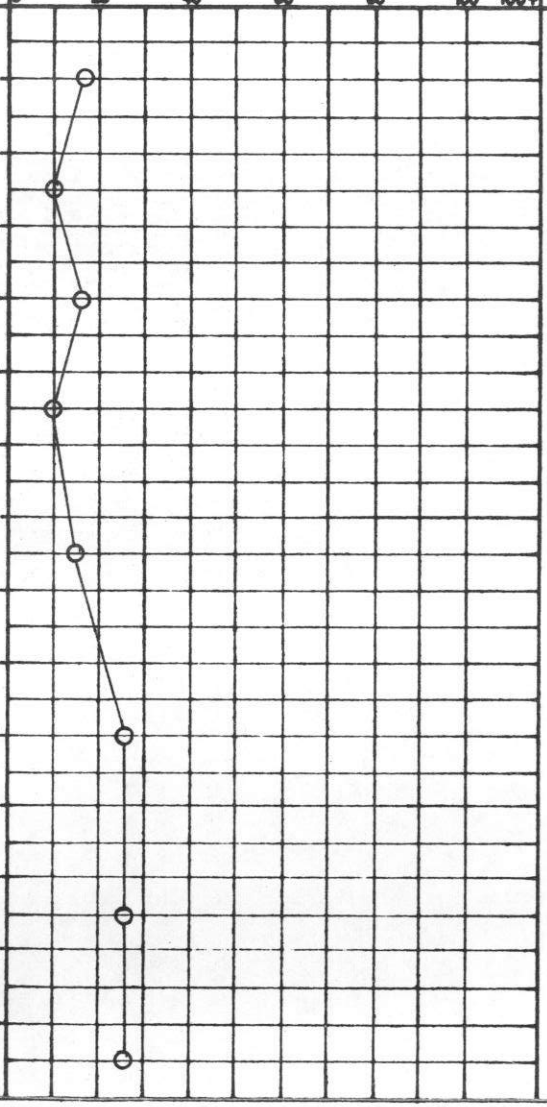
SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 27/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE

OFFSET. ELEV. TEST HOLE 1 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT 1'							
2					CL	Clay-Gravelly Sandy Silty Low Plastic 4'							Moist
4													Damp
6						Gravel-Sand-Clay Mix.							
8					GC		F						Wet
10								Moderate					
12						Gravel-Sandy Clayey		Ice					Wet
14								Vc-Vr					Moist
						15'							
16					CL	Clay-Gravelly Sandy Silty Low Plastic							
18						19'							
20					ML	Silt-Sand Mix							Wet
22					SM								
24													Wet
26					SM	Sand-Silty Fine							
28													Wet
						29'							
						BOTTOM OF HOLE 29'							



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BORROW PIT 114

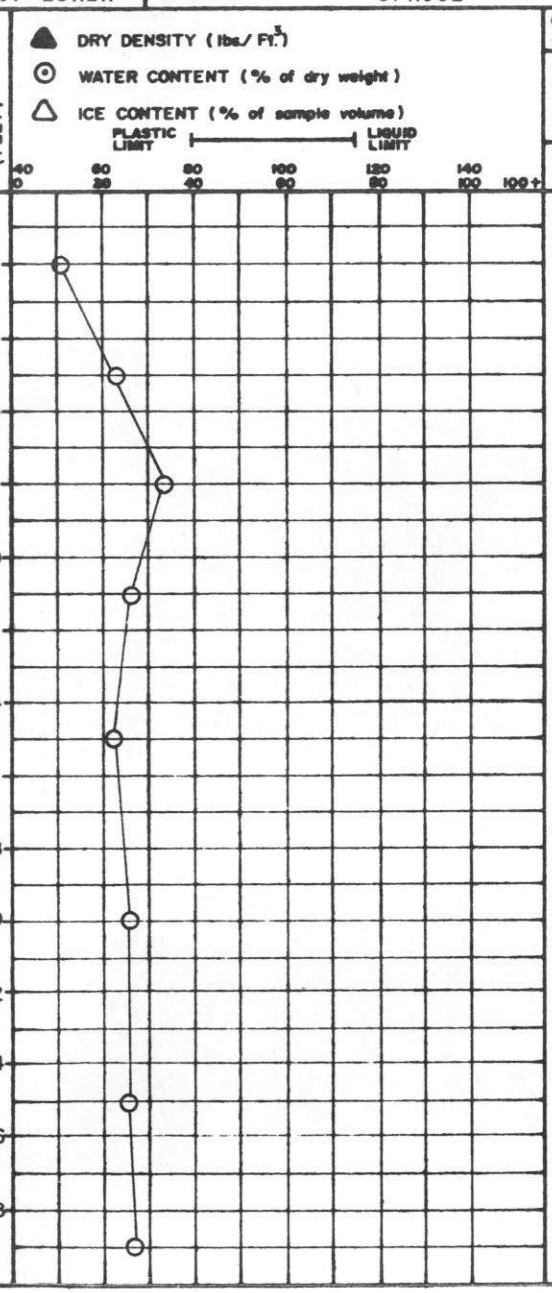
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 27/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 2
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. EDGE OF ESKER	VEGETATION. SPRUCE	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2"								
2					SP	Sand-Gravelly 3'		Moderate Ice					Damp	
4					CL	Clay -Sandy Silty Pebbles		Vc-Vr					Moist	
6					Cl	Low-Med. Plastic								
8							F	High Ice					Free Water	
10						11'		VS						
12					ML SM	Sand-Silt Mix.							Free Water	
14						15'							Sat.	
16					SM	Sand-Silty Fine								
18														
20													Free Water	
22														
24					ML SM	Sand-Silt Mix.								
26													Free Water	
28						29'								
						BOTTOM OF HOLE 29'								



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BORROW PIT 114

DEPARTMENT OF PUBLIC WORKS, CANADA
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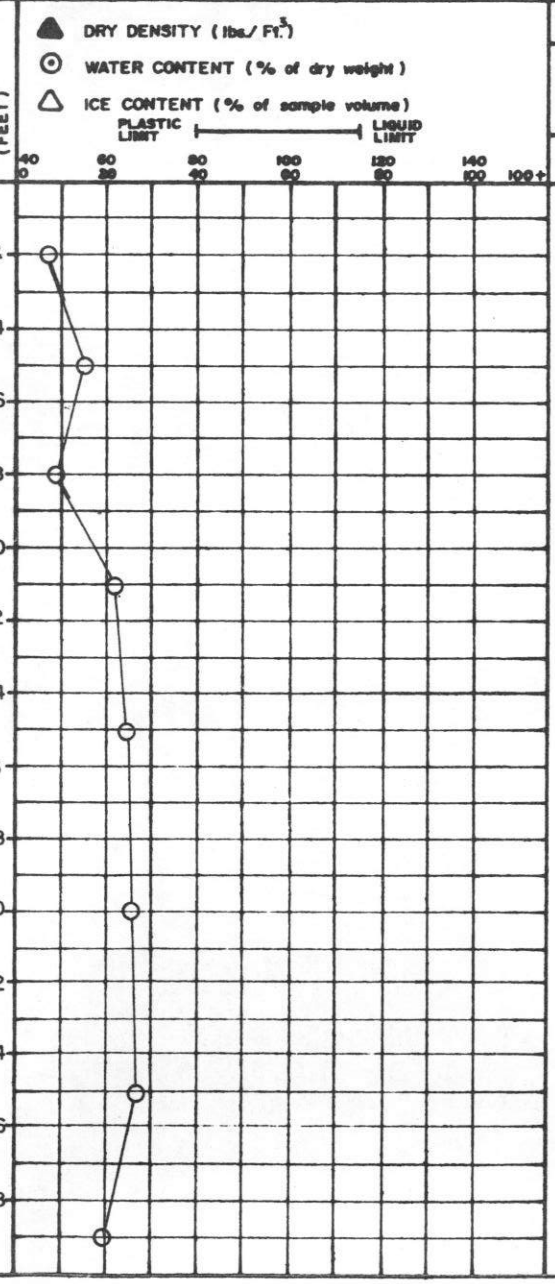
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 27/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 3
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2"								
2					SP	Sand-Gravelly		Low To VX					Damp	
4						4'		Moderate					Moist	
					CL	Clay-Silty Sandy Few Pebbles 6'		Ice Vc-Vr						
8					SC	Sand-Clayey Silty Pebbles	F						Damp	
10														
12								High Ice					Free Water	
14														
16					SM	Silty Fine		VS					Free Water	
18														
20													Free Water	
22					SM	Silty								
24													Sat.	
26														
28						29'							Sat.	
						BOTTOM OF HOLE 29'								



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BORROW PIT 114

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

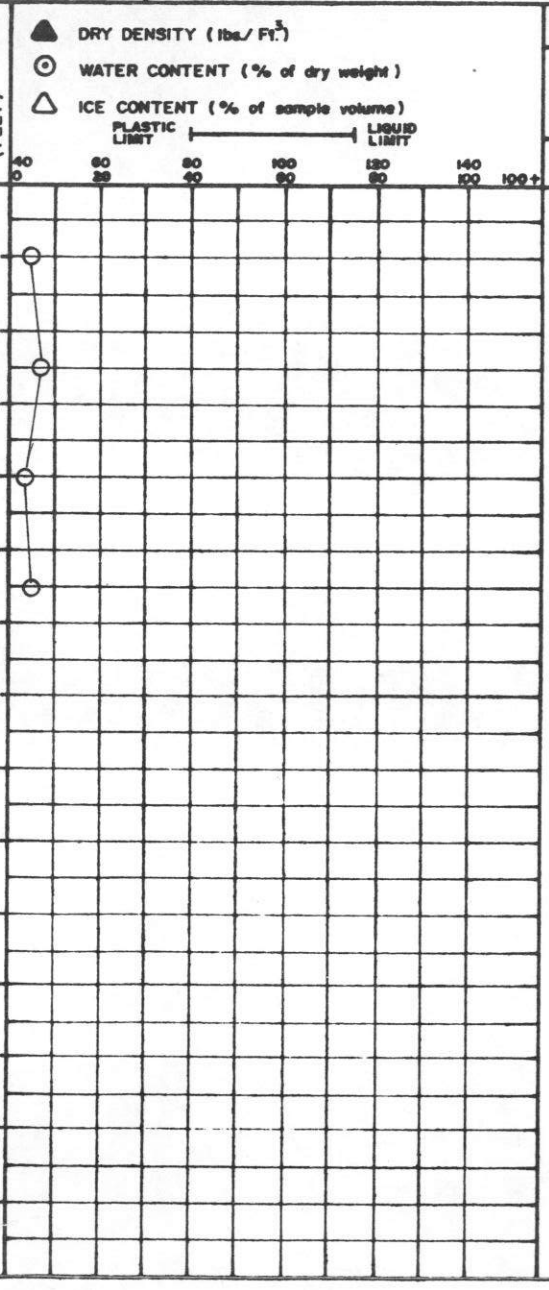
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 27/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. ESKER	VEGETATION. SPRUCE

OFFSET. ELEV. TEST HOLE 4 MILE

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2"				
2					GP	Gravel-Sand Mix. 3.5'		VX Low To Nil Ice	Humid	
4					SC	Sand-Gravelly Clayey Pebbles			Damp	
6								Nbn		
8							F		Moist	
10					SM	Silty Fine 14'			Damp	
12										
14						BOTTOM OF HOLE 14'				
16										
18										
20										
22										
24										
26										
28										



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

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BORROW PIT 114

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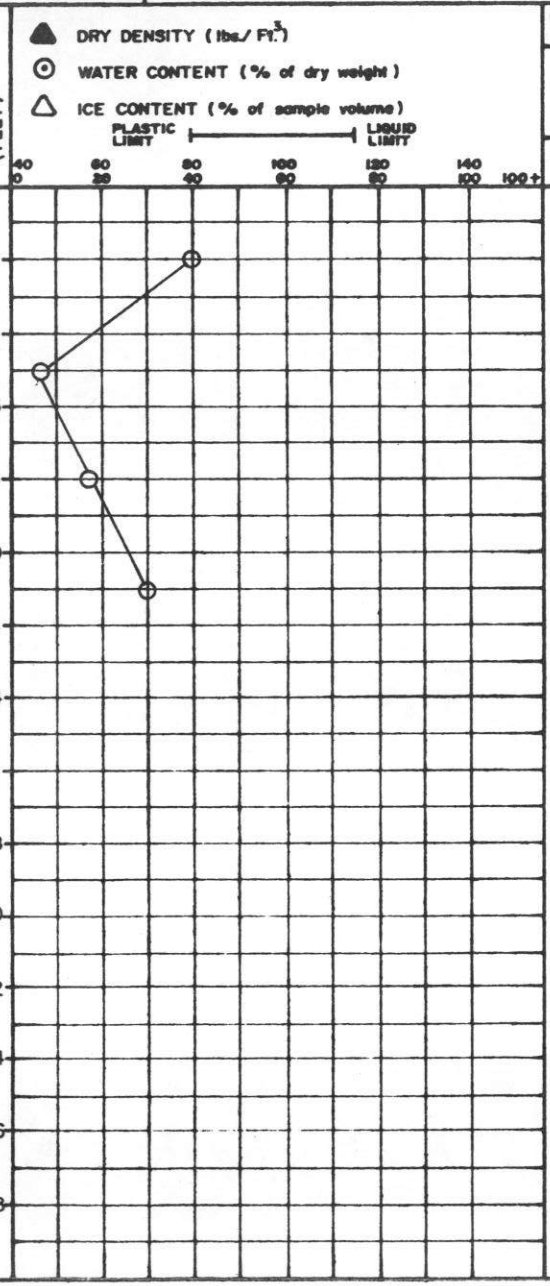
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 27/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 5		
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. EDGE OF ESKER	VEGETATION. SPRUCE
ELEV.	MILE		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2"								
2					Cl	Clay-Silty Sandy 3'		Moderate Ice					Moist	
4						Gravel-Sand-Clay Mix. 6'	F	Vc-Vr					Moist	
6														
8					CL	Clay-Sandy Silty Pebbles							Moist	
10					Cl	Low-Med. Plastic 11.5'		High Ice VS					Sat.	
12						Ice 14'		Ice						
14						BOTTOM OF HOLE 14'								
16														
18														
20														
22														
24														
26														
28														



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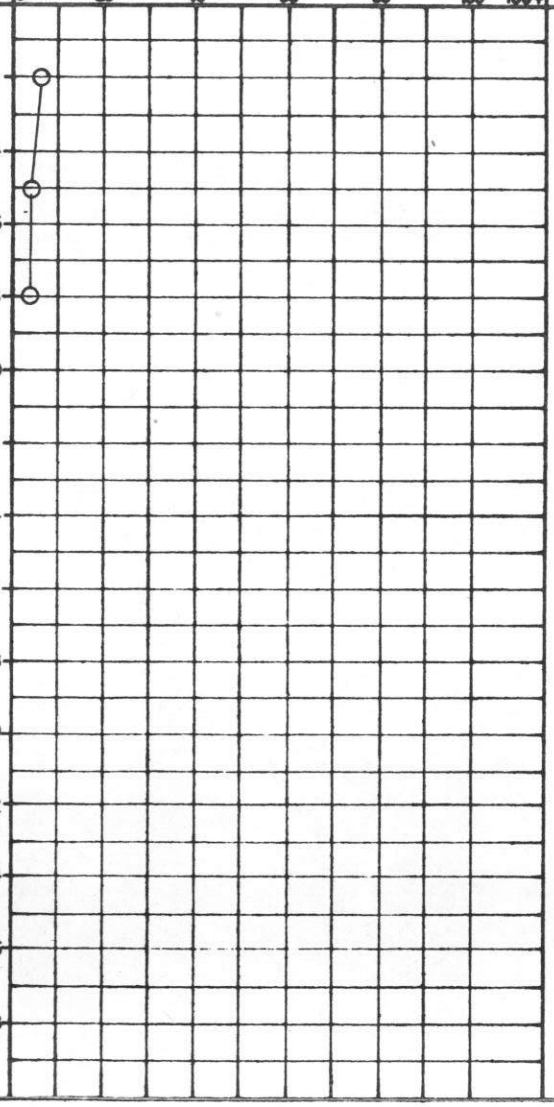
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 28/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 6
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. EDGE OF KNOLL	VEGETATION. SPRUCE	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2"								
2					SP	Sand-Gravelly 3'		VX Low to Nil Ice					Damp	
4					GW	Gravel-Sandy	F						Damp	
6								Nbn						
8													Damp	
10														
12						Ice		Ice						
14						14'								
16						BOTTOM OF HOLE 14'								
18														
20														
22														
24														
26														
28														



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DRILL HOLE REPORT

SITE: SECTION D

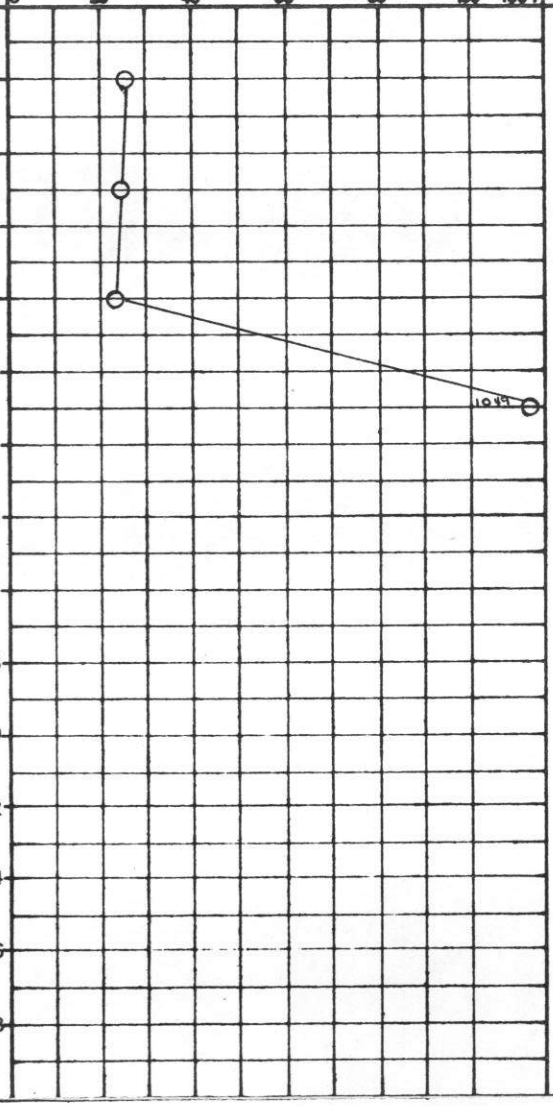
FIELD ENG. N. BURGESS	DATE DRILLED. 28/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. EDGE OF ESKER	VEGETATION. SPRUCE	ELEV.

TEST HOLE 7

MILE

DRY DENSITY (lbs/ Ft.³)
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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 4"								
2					CL	Clay-Silty Sandy Low Plastic 3'		Vc-Vr Moderate Ice To High Ice VS					Moist	
4					SM	Sand-Silt Mixture	F						Sat.	
6					ML									
8													Sat.	
10						Ice		Ice					Water	
12														
14						14'								
16						BOTTOM OF HOLE 14'								
18														
20														
22														
24														
26														
28														



DS-14-5-74 b

BORROW PIT 114

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 28/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. TOP OF ESKER	VEGETATION.

OFFSET. ELEV. TEST HOLE 8 MILE

▲ DRY DENSITY (lbs./Ft.³) ⊙ 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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1"								
2					SP	Sand-Gravelly Few Shale Fragments (Hard)	F	Low Ice To Nil					Damp	
4														
6								Ice					Damp	
8						No Return After 10'		VX					Damp	
10								Nbn						
12														
14						14'								
						BOTTOM OF HOLE 14'								
16														
18														
20														
22														
24														
26														
28														

DS-14-5-74 b

BORROW PIT 114

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

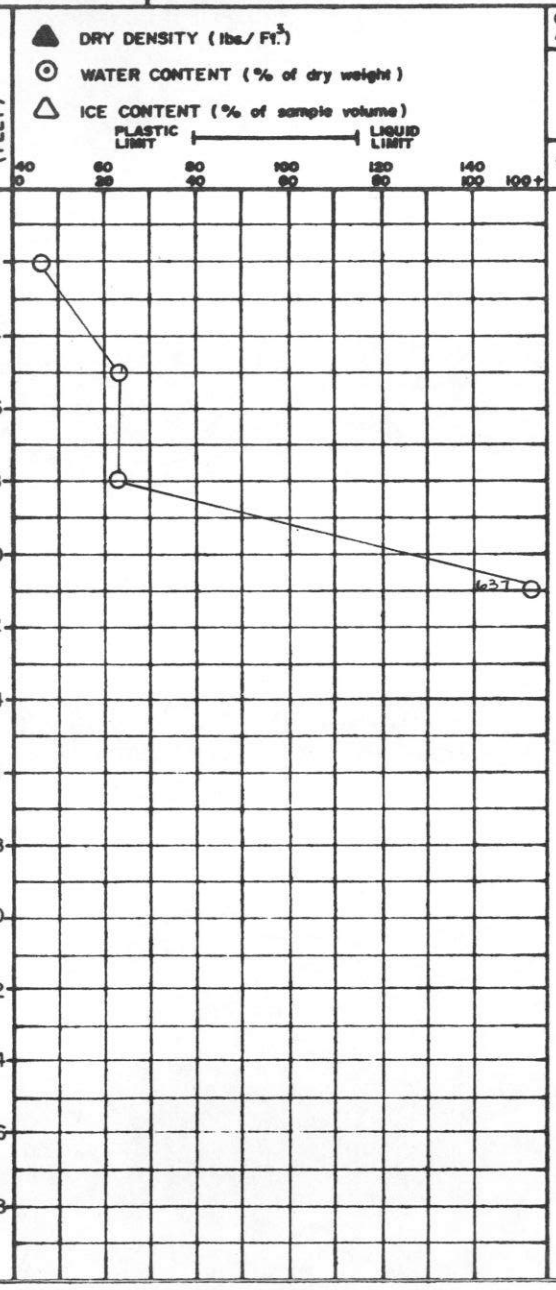
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 28/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE.	VEGETATION. SPRUCE

OFFSET. ELEV. TEST HOLE 9 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2"								
2					SP	Sand -Medium Pebbles		Moderate Ice					Moist	
4														
6					SM	Silty Fine	F	Vc-Vr					Sat.	
8						8'							Wet	
					Cl	Clay-Silty Sandy								
10													Water	
12						Ice		Ice						
14						14'								
						BOTTOM OF HOLE 14'								
16														
18														
20														
22														
24														
26														
28														



DS-14-5-74 b

BORROW PIT 116

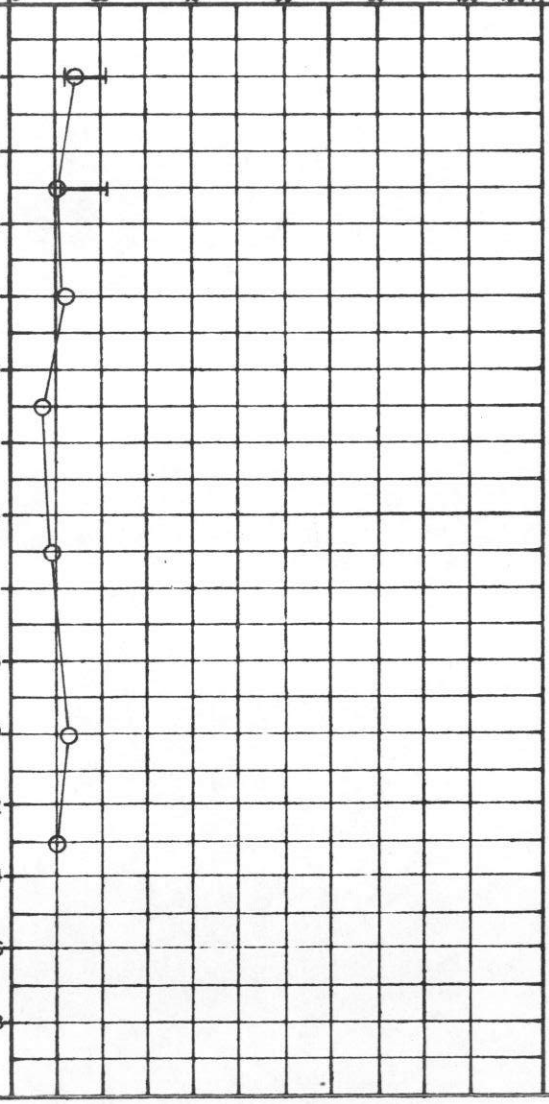
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 28/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 1		
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.	MILE 807		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
						CLAY -Silty Sandy Pebbles		Low						
2													Damp	
4					CL	Low plastic		Ice						
6					CI								Damp	
8						Gravelly							Moist	
10							F							
						11'							Damp	
12						SHALE -Soft-hard								
14														
16						Soft-med. hard							Damp	
18														
20													Moist	
22						Soft		Vx						
24													Damp	
						25'								
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 116

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 28/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

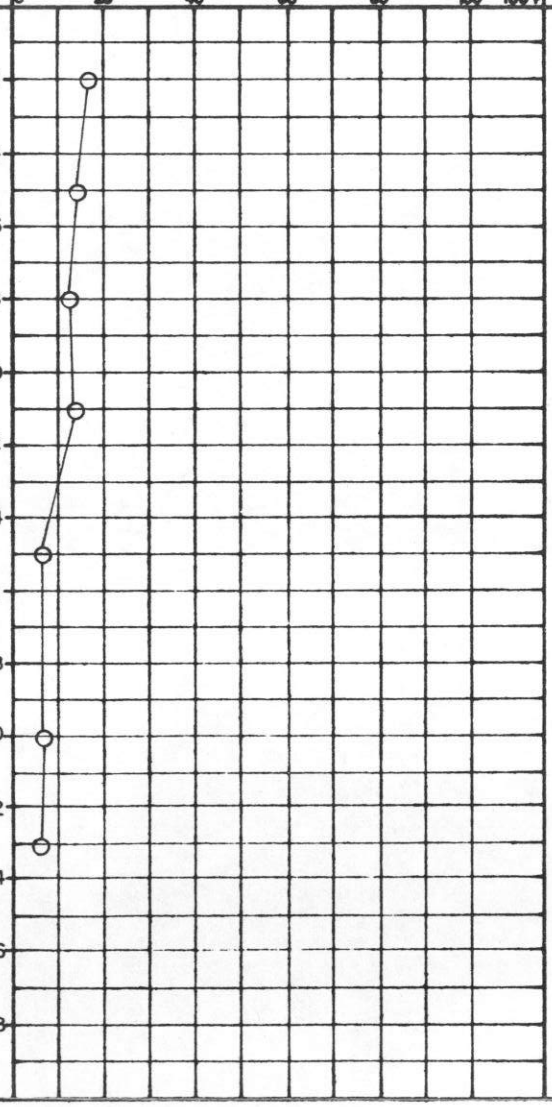
OFFSET. ELEV.

TEST HOLE 2

MILE 807

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 %	RELATIVE THAWED MOISTURE CONTENT
					CL CI	CLAY -Sandy Silty Pebbles Soft shale frags. from 5'-15' Low-med. plastic	F	Low Ice Vx					Moist Moist Damp Moist
						15'							Damp
						SHALE -Soft-med. hard		Frozen Nbn					Damp Damp
						25'							
						BOTTOM OF HOLE - 25'							



DS-14-5-74 b

BORROW PIT 116

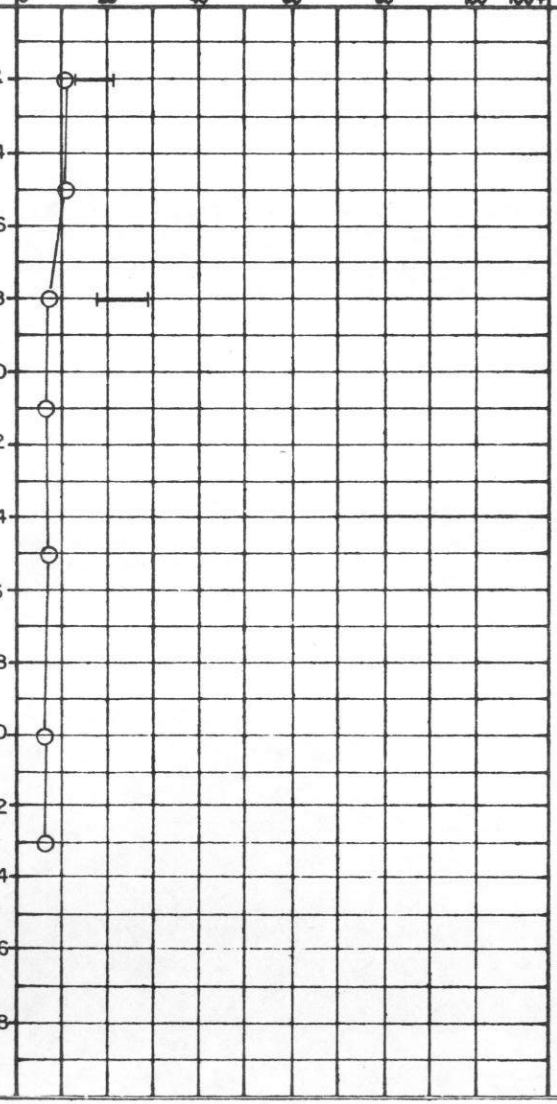
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 28/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 3		
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.	MILE 807		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
2					CL	CLAY -Silty Sandy Pebbles Low plastic	F	Low Ice Vx					Damp	
4													Damp	
5'														
6						SHALE -Soft-med. hard		No Visible Ice Nbn					Damp	
8													Damp	
10													Damp	
12														
14													Damp	
16														
18														
20													Humid	
22													Humid	
24														
25'														
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 116

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

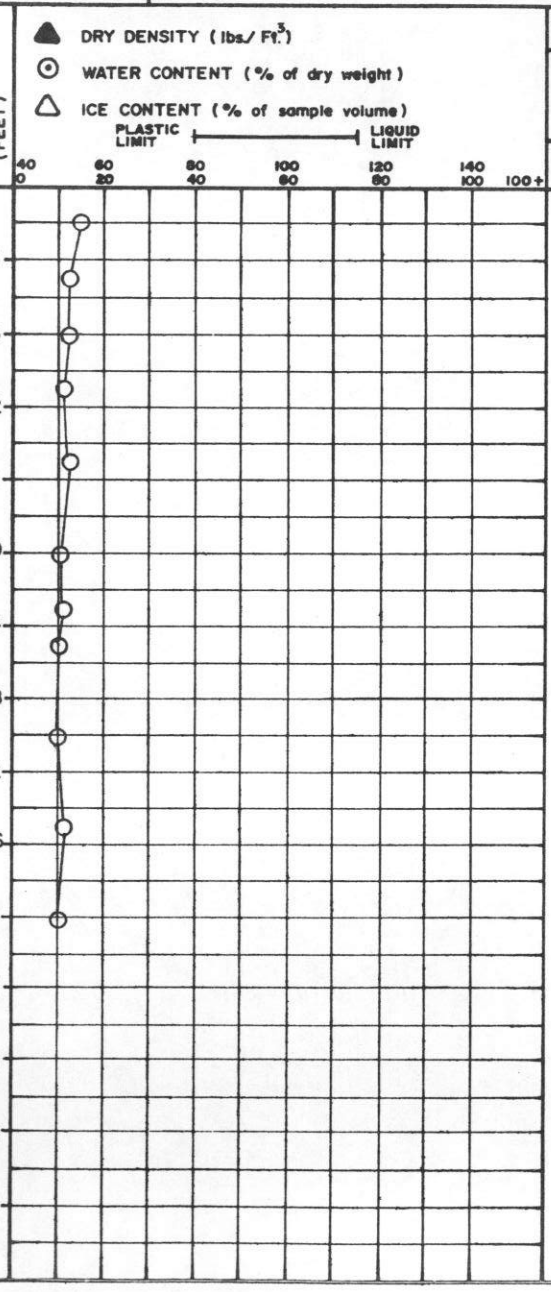
FIELD ENG. N. BURGESS	DATE DRILLED.	AIRPHOTO NO.	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV.

TEST HOLE 4

MILE 807

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .5'				
4					CL CI	CLAY -Sandy, silty With soft Shale from 5'-8'		Low	Moist	
8						8'			Moist	
12						SHALE -Soft	F		Damp	
16								Ice	Damp	
20									Damp	
24								Vx	Damp	
28									Damp	
32						Soft-med. hard		No	Moist	
36						Soft-hard		Visible Ice	Damp	
40						40'		Nbn	Damp	
44						BOTTOM OF HOLE - 40'				
48										
52										
56										



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

DS-14-5-74 a

BORROW PIT 116

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

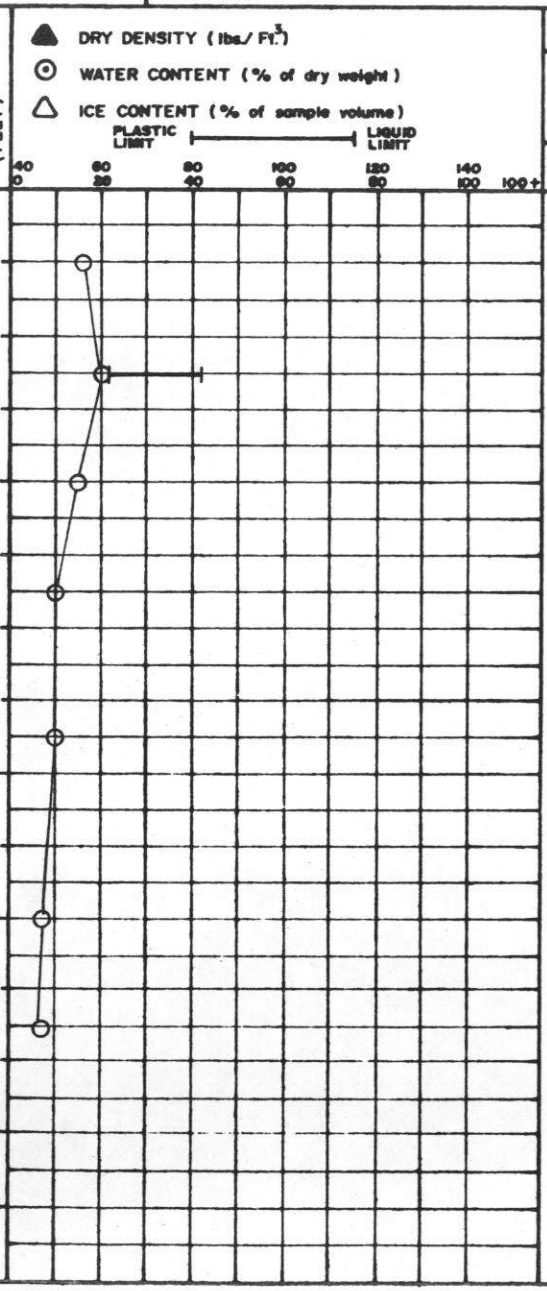
FIELD ENG. N. BURGESS	DATE DRILLED. 28/2/74	AIRPHOTO NO.	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV.

TEST HOLE 5

MILE 807

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .5'								
2					CI	CLAY -Silty Shale fragments Soft 8'-10' Med. plastic		Low Ice Vx					Moist	
4													Moist	
6														
8						9'							Moist	
10						SILT & SANDSTONE -Soft	F	Nil					Damp	
12														
14								Ice					Damp	
16						SHALE -Soft-med. hard Silt & Sandstone		Nbn						
18														
20													Humid	
22														
24													Damp	
26						25' BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 116

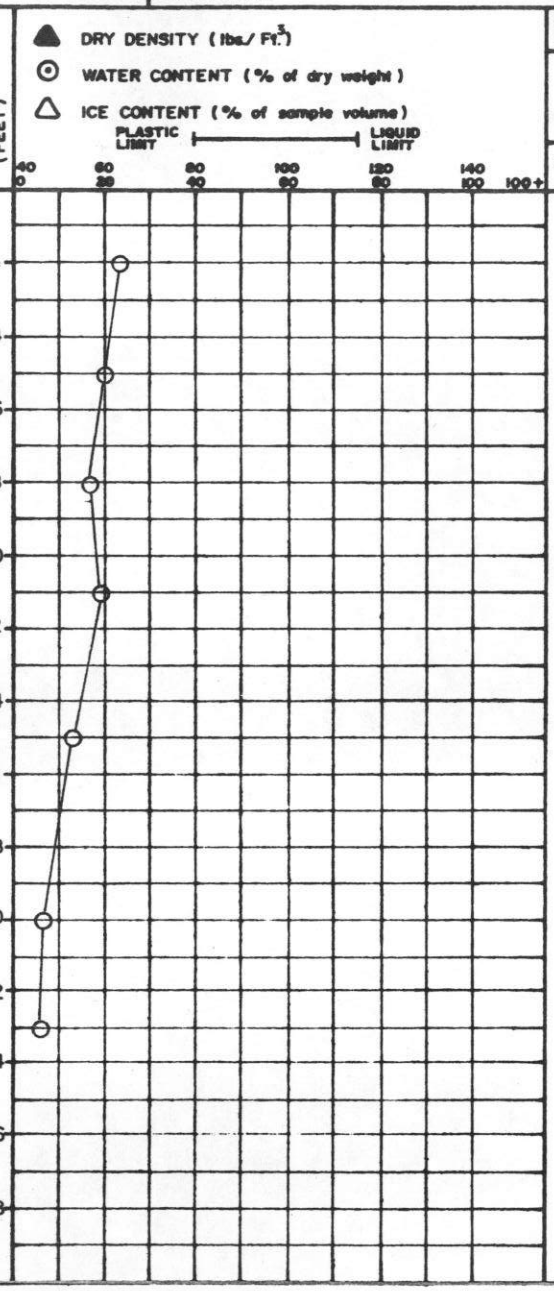
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 28/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 6		
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.	MILE 807		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		Moderate						
2					CL	CLAY -Sandy Silty Low-med. plastic Pebbles		To					Wet	
4								Low					Wet	
6								Ice						
8						Shale fragments from 11'-17'	F	Content					Moist	
10								Vc - Vr						
12					CI								Moist	
14								Vx						
16													Moist	
						17'								
18						SHALE -Soft-med. hard		Frozen						
20								Nbn					Damp	
22													Damp	
24														
						25'								
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 116

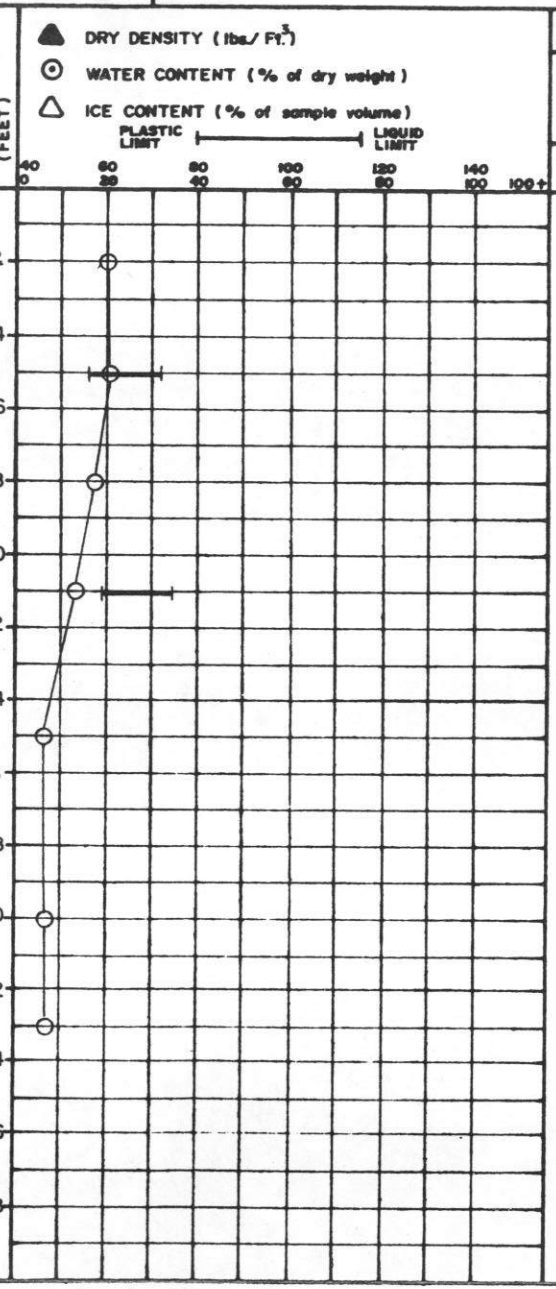
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 28/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 7
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 807

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'								
2						CLAY -Sandy Silty Pebbles Med. plastic							Moist	
4								Low						
6								To					Moist	
8					CI			Moderate Ice Content					Moist	
10						CLAY -Silty SHALE -Soft 11'-15'		Vx						
12							F						Moist	
14								Vc - Vr						
						—15'								
16						SHALE Soft-med. hard		Frozen					Damp	
18														
20								Nbn					Damp	
22														
24													Damp	
						—25'								
26						BOTTOM OF HOLE - 25'								
28														



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BORROW PIT 116

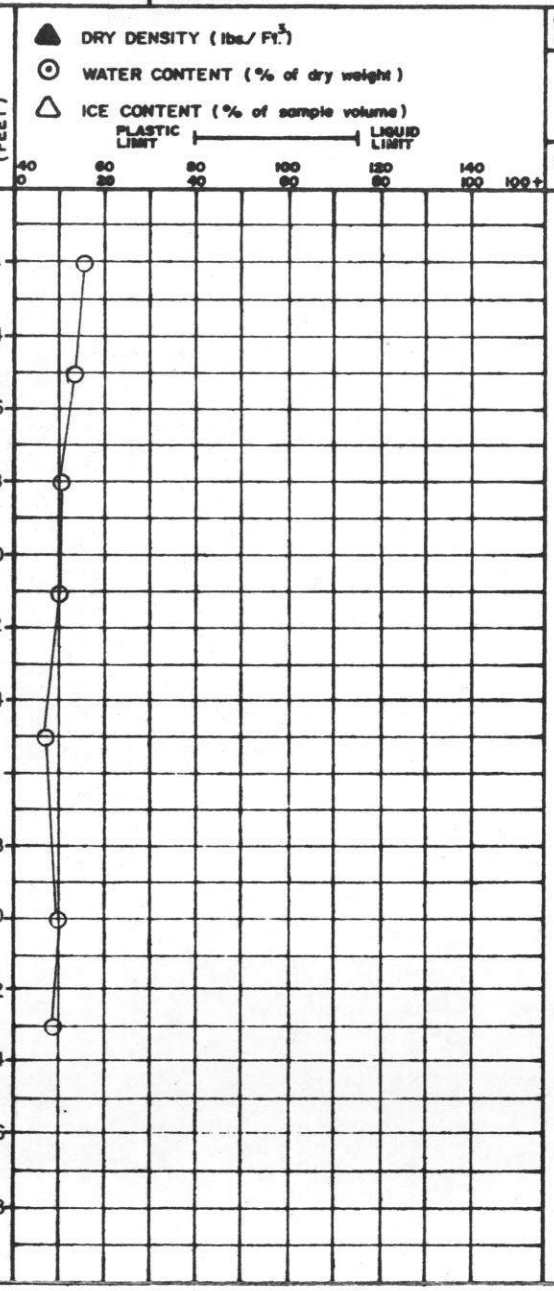
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 28/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 8		
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.
ELEV.	MILE 807		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'								
2						CLAY -Sandy Silty Pebbles		Vx Low Ice Content Partially Frozen					Moist	
4					CL	Low-med. plastic								
6					CI								Moist	
8						—8'							Damp	
10						SHALE -Soft	F							
12						Siltstone-Sandstone Soft-hard		Frozen					Damp	
14								Nbn						
16						SHALE -Soft-med.-hard							Damp	
18														
20													Damp	
22														
24													Damp	
						—25'								
26						BOTTOM OF HOLE - 25'								
28														



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BORROW PIT 116

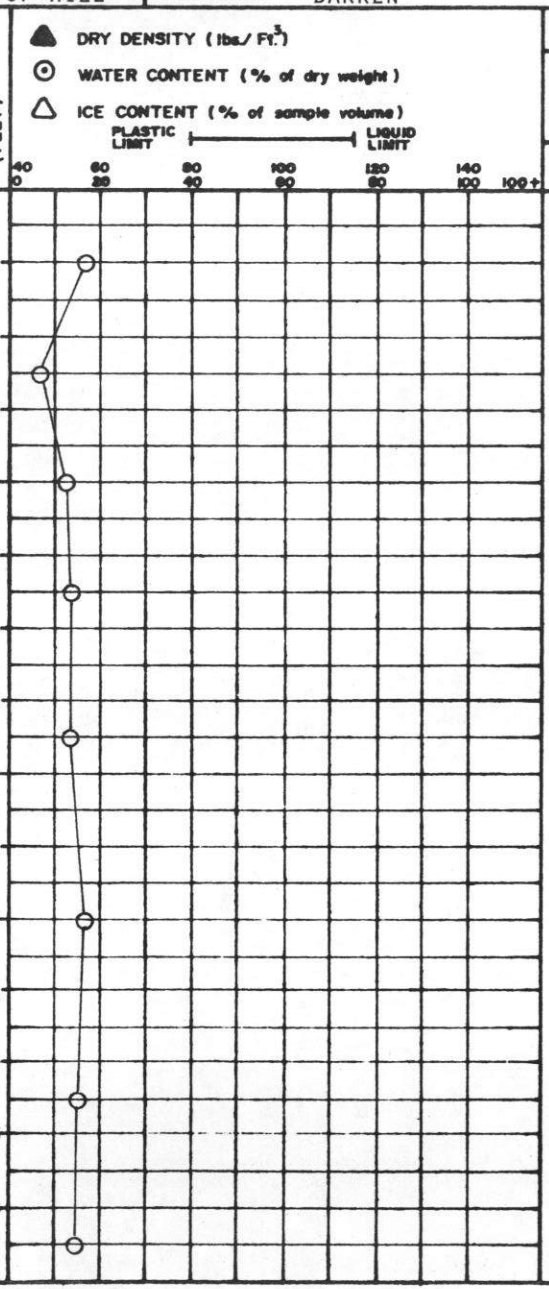
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 28/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 9
TECH. PRONYCH	RIG. MAYHEW - #1	SURFACE DRAINAGE. EDGE OF HILL	VEGETATION. BARREN	ELEV.	MILE 807

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 2"								
2					CL	CLAY-Sandy Silty Low plastic — 3'							Moist	
4					SP	SAND -Medium Pebbles							Moist	
6						— 6'		Low						
8						CLAY -Sandy Silty Pebbles Med. plastic		Ice					Moist	
10							F							
12													Moist	
14					CI			Content						
16													Moist	
18						Shale fragments @ 20'								
20								Vx					Moist	
22						— 21' SHALE -Black Soft								
24														
26						Soft-med. hard							Damp	
28														
						— 29'							Damp	



BOTTOM OF HOLE - 29'

DS-14-5-74 b

BORROW PIT 116

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

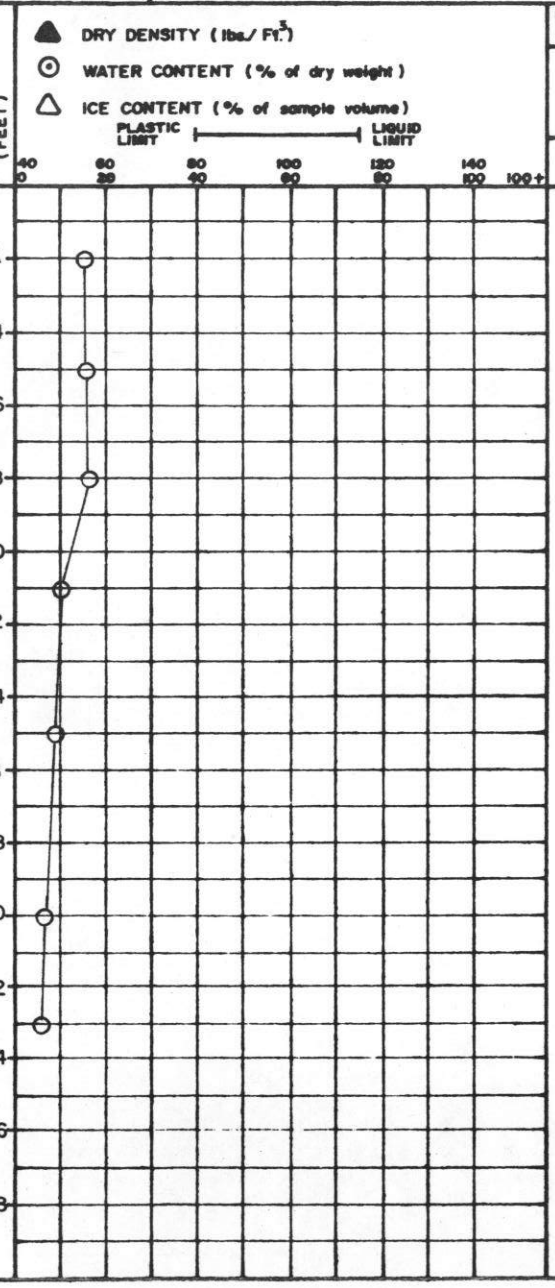
FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV.

TEST HOLE 11

MILE 807

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 4"								
2						CLAY -Sandy Silty Pebbles		Low Ice					Moist	
4					CL	Low plastic							Moist	
6								Vx						
8													Moist	
10							F							
						11'							Moist	
12						SHALE-SILTSTONE -Soft-hard								
14								Frozen						
16													Damp	
18								Nbn						
20													Damp	
22														
24													Damp	
						25'								
26						BOTTOM OF HOLE - 25'								
28														



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BORROW PIT 116

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

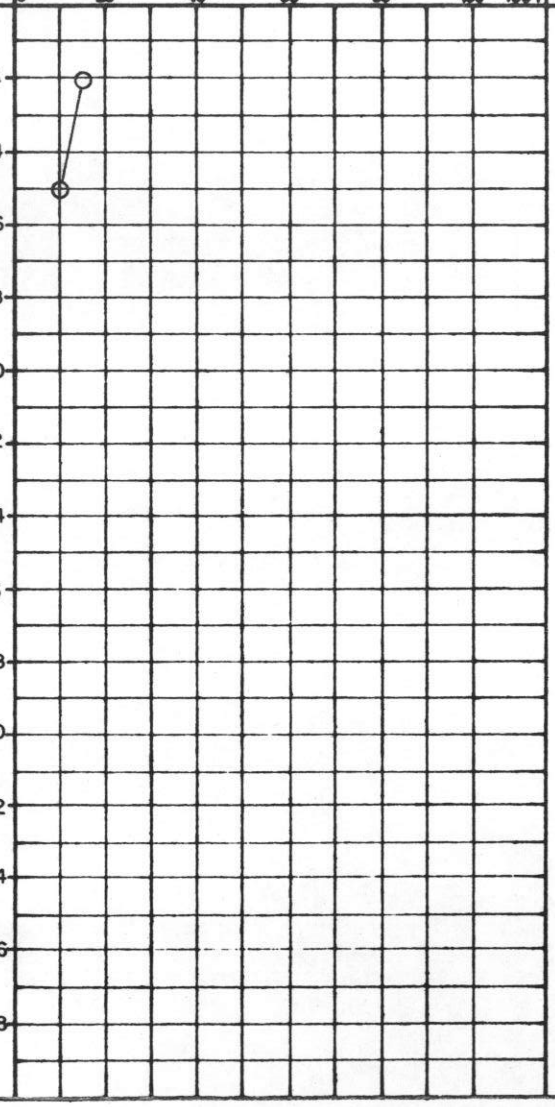
OFFSET. ELEV.

TEST HOLE 12

MILE 807

▲ DRY DENSITY (lbs./Ft.³)
⊙ 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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 4"		Low						
2					CL	CLAY -Sandy Silty Pebbles		Vx					Moist	
4								Ice						
						5'							Damp	
6						SHALE - Soft 6'		Cracks						
8						Core Sample 100%		Filled With						
10						Recovery	F	Ice						
12						SHALE & SILTSTONE		Low Ice						
14								Vx						
16								Nbn						
18														
20								Frozen						
22														
24														
						25'								
26						BOTTOM OF HOLE - 25'								
28														



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BORROW PIT 116

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

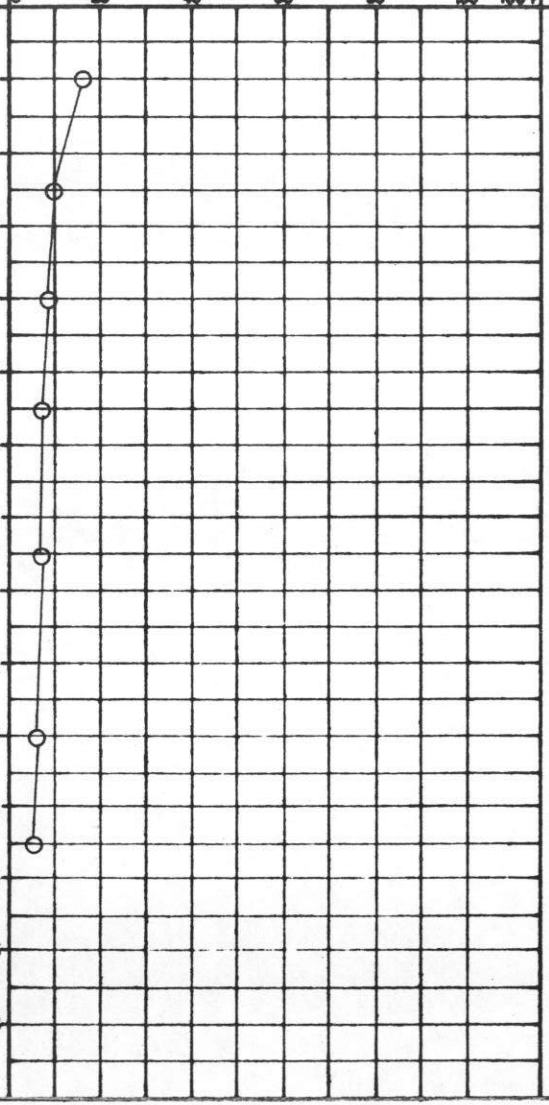
FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV.

TEST HOLE 13

MILE 807

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .5'		Low							
2					CL	CLAY -Sandy Silty Low plastic		Ice	2					Moist	
4						4'		Vx	4						
6						SHALE -Soft SILTSTONE -Soft-hard			6					Damp	
8									8					Damp	
10							F		10					Damp	
12								Frozen	12						
14								Nbn	14					Damp	
16									16						
18									18						
20									20					Humid	
22						SHALE -Med. hard			22					Humid	
24									24						
						25'									
26						BOTTOM OF HOLE - 25'			26						
28									28						



DS-14-5-74 b

BORROW PIT 116

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

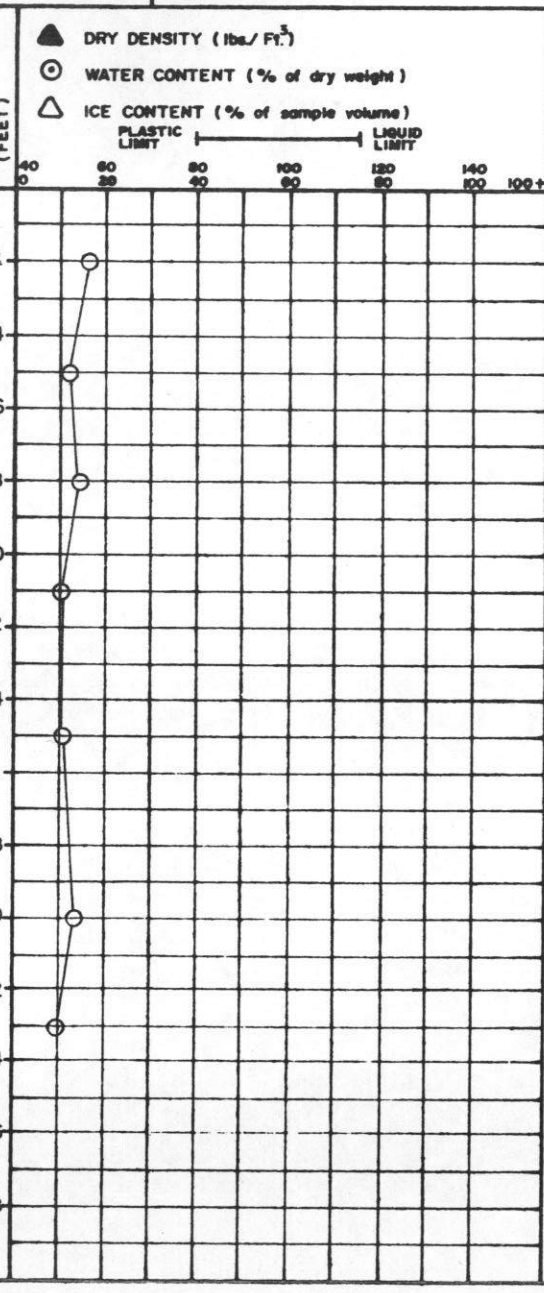
SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.

TEST HOLE: 14

MILE: 807

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2						CLAY -Sandy Silty Pebbles 50% Shale & Siltstone from 5'		Low					Moist	
4								Ice						
6					CL	Low plastic		Vx					Damp	
8						8'								
						SHALE & SILTSTONE -Soft-med. hard	F	No					Moist	
10								Ice						
12								Visible					Damp	
14								Frozen						
16								Nbn To					Damp	
18								Low						
20								Ice					Moist	
22						SHALE -Soft								
24								Vx					Damp	
26						25' BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 116

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

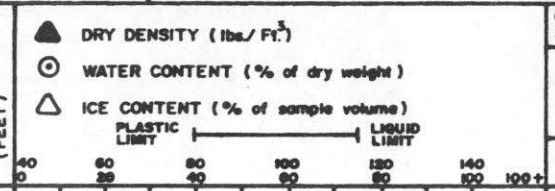
FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV.

TEST HOLE 15

MILE 807

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .5'								
2						CLAY -Sandy Silty Pebbles Low-med. plastic		Vx					Moist	
4								No						
6					CL			Visible					Moist	
8								Ice					Moist	
10					CI			Very					Moist	
12							F	Low						
14								Ice					Moist	
16														
18														
20						SHALE & SILTSTONE FRAGMENTS -Soft		Vx					Moist	
22													Moist	
24						25'								
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 116

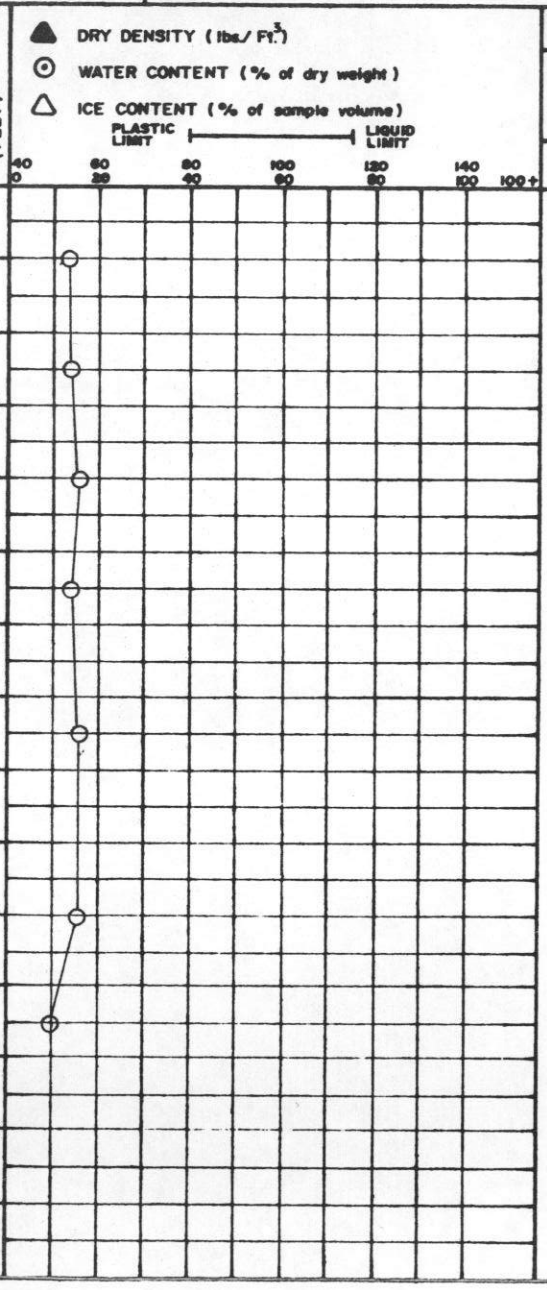
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 16
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 807

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .5'								
2						CLAY -Sandy Silty Pebbles Low-med. plastic							Moist	
4								Low						
6					CL			Ice					Moist	
8							F	Content					Moist	
10					CI	Siltstone fragments from 8'-10'								
12													Moist	
14								Vx						
16													Moist	
18														
20													Moist	
22						22'								
24						SHALE & SILTSTONE -Soft-hard		Nbn Frozen					Damp	
26						25' BOTTOM OF HOLE - 25'								
28														



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BORROW PIT 116

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

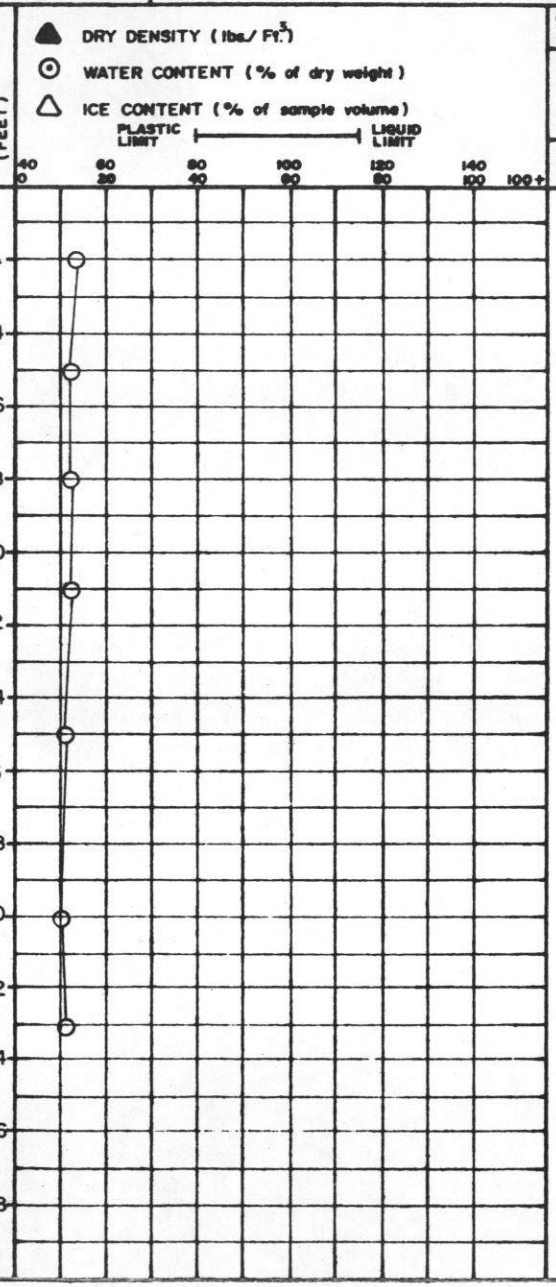
FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE.
TECH. BAINE	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV.

TEST HOLE 17

MILE 807

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .5'								
2					CL	CLAY -Sandy Silty Pebbles							Moist	
4								Low						
						5'							Moist	
6						SHALE & SILTSTONE -Soft-hard		Ice						
8						8'							Moist	
10						SHALE -Soft	F	Vx						
													Moist	
12						Siltstone		Frozen						
14						SHALE -Soft-med. hard								
16													Damp	
18								Nbn						
20													Damp	
22						Soft								
24													Damp	
						25'								
26						BOTTOM OF HOLE - 25'								
28														



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BORROW PIT 117

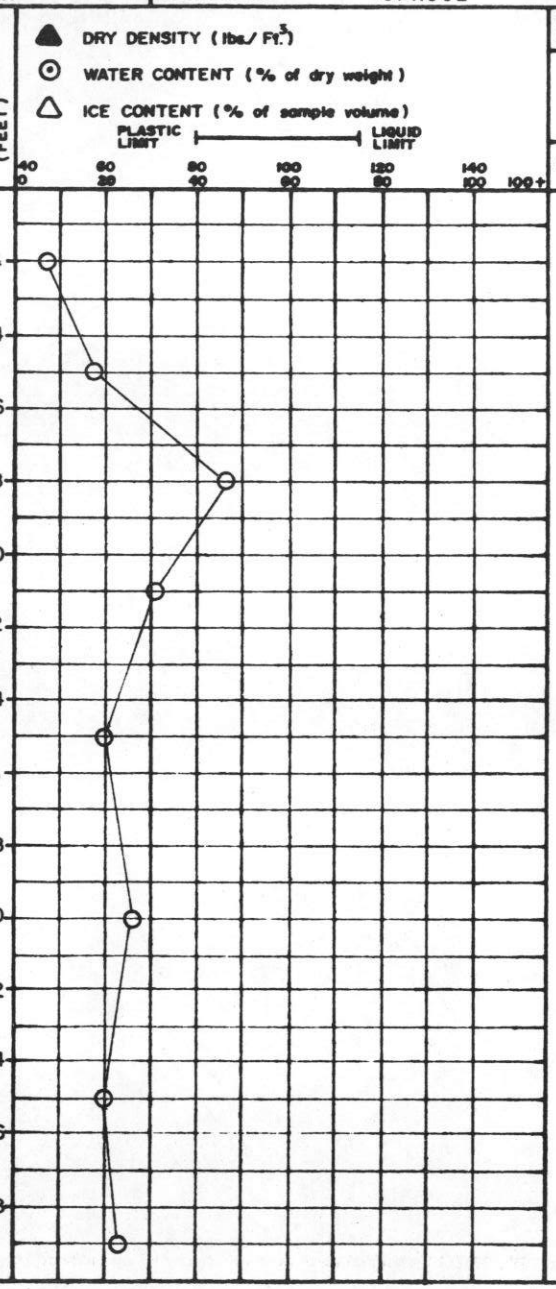
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 1A		
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE
ELEV.	MILE		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .5								
2					SC	Sand-Clayey-Pebbles 3'		Vc-Vr					Damp	
4					CL	Clay -Silty Sandy Pebbles	F	Moderate To High Ice					Moist	
6														
8					Cl	Low-Med. Plastic							Free Water	
10														
12						12'							Free Water	
14					SC	Sand-Clayey Silty		VS						
16													Wet	
18						18'	F							
20					CL	Clay-Sandy Silty Pebbles Low Plastic							Sat.	
22														
24					ML SM	Silt-Sand Mixture							Wet	
26														
28						29'							Wet	
						BOTTOM OF HOLE 29'								



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BORROW PIT 117

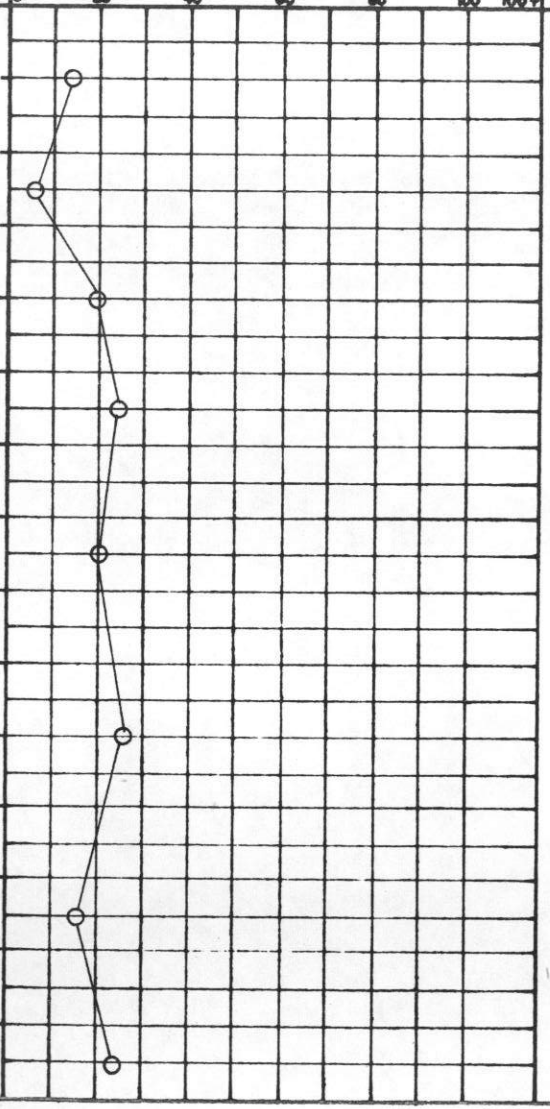
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 1		
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. EDGE OF RIDGE	VEGETATION. BURNT OUT AREA
ELEV.	MILE		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2"								
2					SC	Sand-Clayey Silty							Damp	
4					SM	Silty Fine		Vc-Vr					Damp	
6						7'								
8					CL	Clay-Sandy Silty Pebbles	F	Moderate Ice and High Ice					Wet	
10						11'							Sat.	
12					SC ML	Silt-Sand Mix. Clayey								
14						14'								
16					SC	Sand-Clayey Silty		VS					Sat.	
18														
20					SM	Silty Fine							Free Water	
22														
24					SM	Pebbles							Moist	
26														
28						29'								
						BOTTOM OF HOLE 29'							Moist	



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BORROW PIT 117

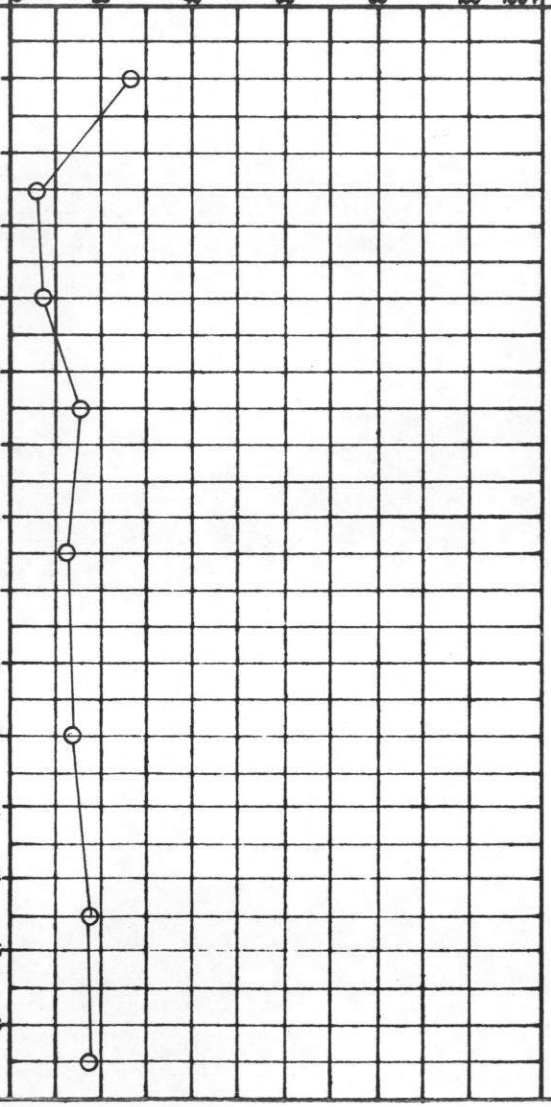
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 3		
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE
ELEV.	MILE		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2					CL	Clay-Sandy Silty 3'							Moist	
4					SP	Sand-Med.-Coarse Pebbles 6'							Damp	
6								Low Ice						
8						Gravel-Sandy Clayey	F	VX					Damp	
10													Sat.	
12					GC			Moderate						
14								Ice					Sat.	
16								Content						
18								Vc-Vr						
20													Sat.	
22						23'								
24					ML	Silt Sandy-Sand Silty								
26					SC	Clayey 26'							Moist	
28					CL	Gravelly Clay-Silty Sandy 29'							Moist	
						BOTTOM OF HOLE 29'								



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BORROW PIT 117

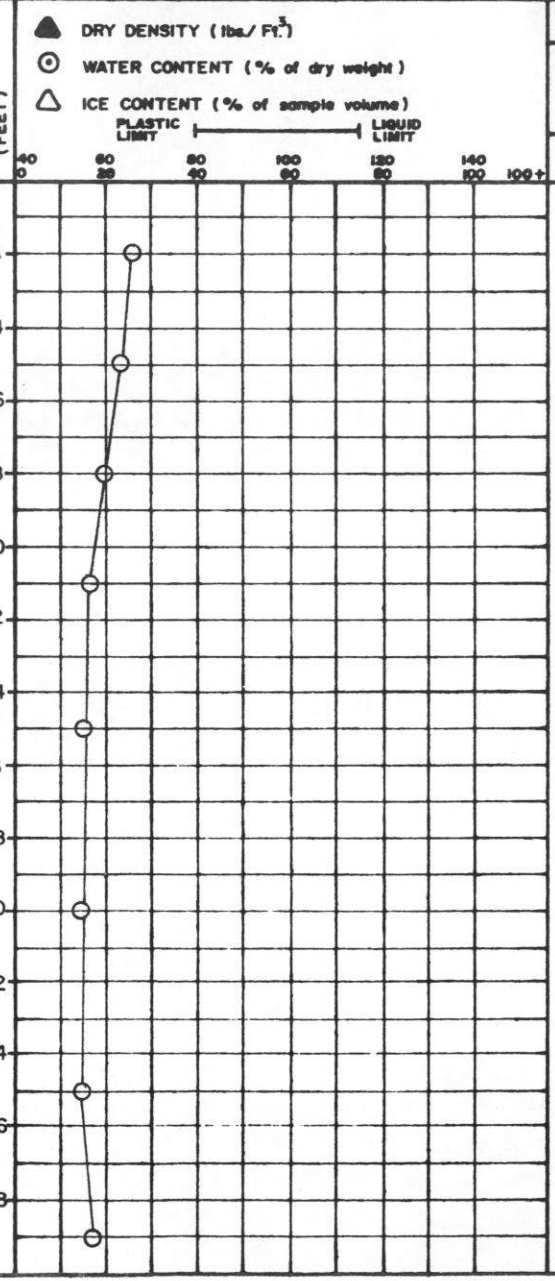
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 3A
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 8"								
2						Clay -Sandy Silty Pebbles		Moderate					Sat.	
4					CL	Low-Med. Plastic	F	Ice					Wet	
6								Content						
8													Wet	
10					Cl			Vc-Vr						
12													Moist	
14													Moist	
16														
18														
20													Moist	
22														
24													Moist	
26														
28						Pebbles 29'							Moist	
						BOTTOM OF HOLE 29'								



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BORROW PIT 117

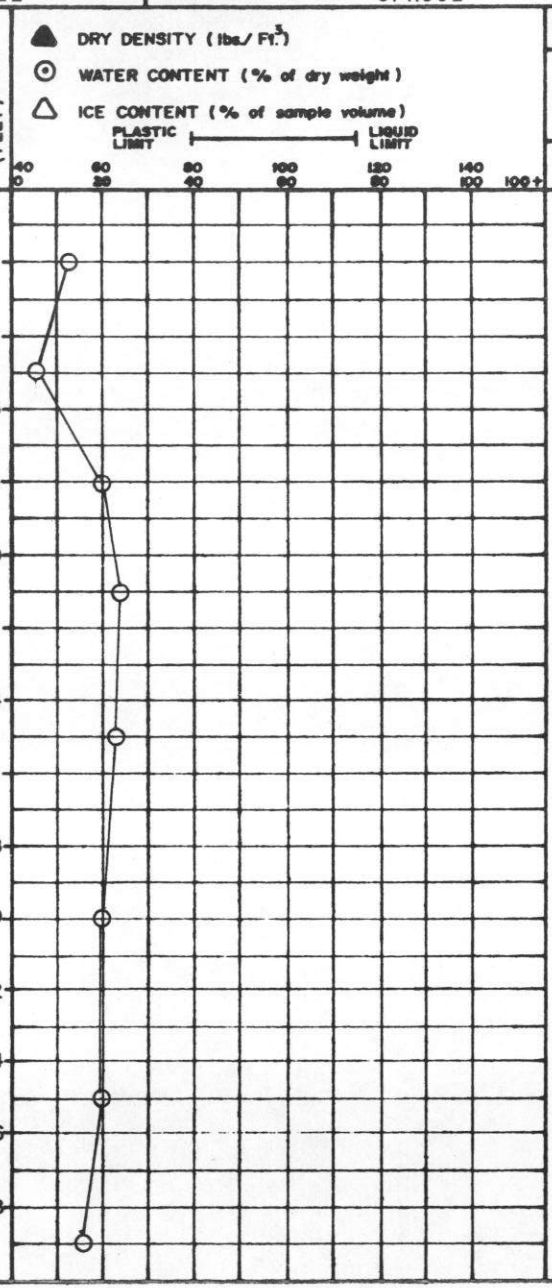
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 4	MILE	
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. LEVEL	VEGETATION. SPRUCE
ELEV.			

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2					SM	Sand -Silty		Low Ice VX					Damp	
4														
6													Humid	
8					SC	Silty-Clayey	F						Sat.	
10								High Ice VS						
12					SM	Silty							Free Water	
14						15'		Moderate Ice					Wet	
16					CL SC	Clay-Silty Sandy Sand-Clayey Silty Pebbles								
18								Vc-Vr						
20						20'							Moist	
22					CL	Clay-Silty Sandy Pebbles Low Plastic								
24													Wet	
26					CL									
28						29'								
						BOTTOM OF HOLE 29'							Moist	



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BORROW PIT 118

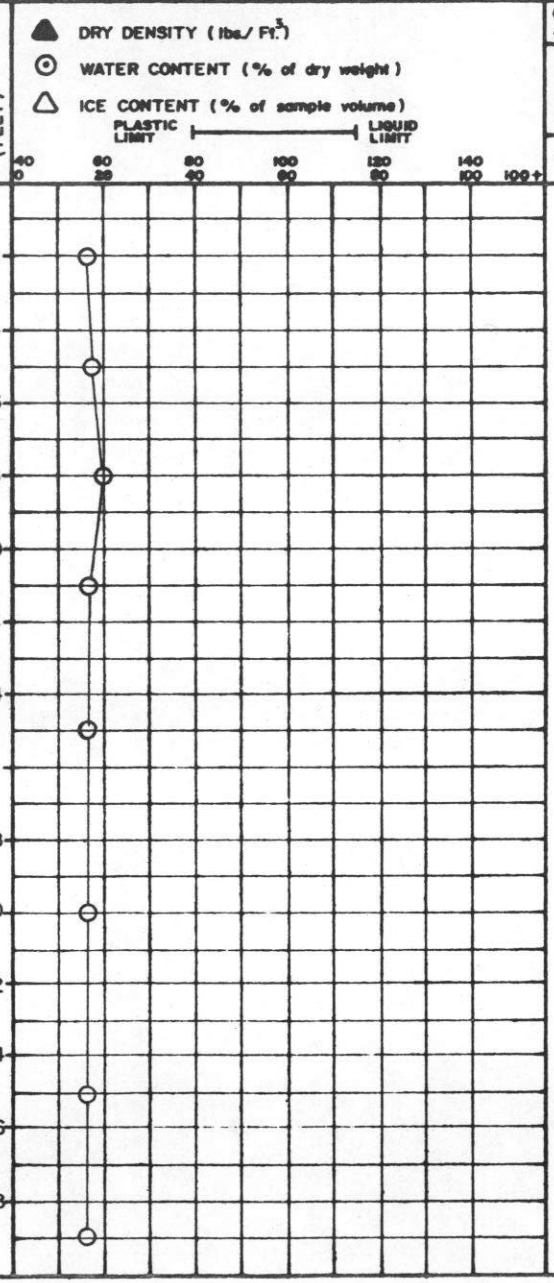
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 28/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 1		
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE
ELEV.	MILE		

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'				
2						Clay-Silty Sandy Pebbles		Moderate	Moist	
4					CL	Low-Med. Plastic		Ice	Wet	
6										
8							F		Moist	
10					Cl			Content	Moist	
12										
14								Vc-Vr	Moist	
16										
18										
20									Moist	
22										
24									Moist	
26										
28						29'			Moist	
						BOTTOM OF HOLE 29'				



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

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BORROW PIT 118

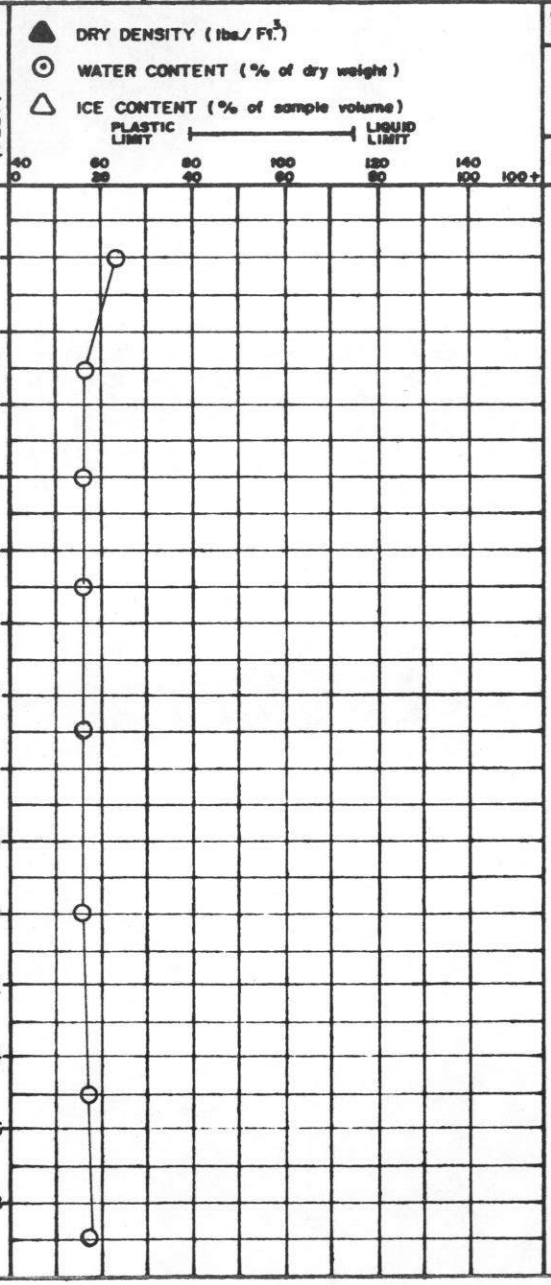
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 2
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE	ELEV.	MILE

DEPTH (FEET)	SAMPLE NUMBER	SAMPLE TYPE	% RECOVERY	PENETRATION RESISTANCE	UNIFIED SOIL SYMBOL	SOIL DESCRIPTION	LIMITS OF FROZEN GROUND	ICE DESCRIPTION	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 12"				
2								VX	Moist	
								Low to		
4						Clay		Moderate		
						-Silty			Wet	
						Sandy				
6						Pebbles				
					CL	Low-Med. Plastic	F	Ice		
8									Moist	
					Cl					
10								Content		
									Moist	
12										
								Vc-Vr		
14									Moist	
16										
18										
20									Moist	
22										
24									Wet	
26										
28										
						29'			Wet	
						BOTTOM OF HOLE 29'				



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

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BORROW PIT 118

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DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 28/2/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 3
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. TOP OF KNOLL	VEGETATION. SPRUCE	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'									
2					CL	Clay -Silty Sandy Pebbles			2					Wet	
4								Moderate	4					Moist	
6						6'		Ice	6						
					SM	Sand-Silty									
8									8					Damp	
							F	Content							
10									10					Wet	
12					SC	Clayey Silty Pebbles			12						
14								Vc-Vr	14						
														Wet	
16									16						
18									18						
20									20					Wet	
22					CL	Clay-Silty Sandy Pebbles Low Plastic			22						
24									24					Moist	
26									26						
28									28						
						29'								Moist	
						BOTTOM OF HOLE 29'									

▲ DRY DENSITY (lbs./Ft.³)
⊙ WATER CONTENT (% of dry weight)
△ ICE CONTENT (% of sample volume)

PLASTIC LIMIT ├──┤ LIQUID LIMIT

40 0 60 20 80 40 100 60 120 80 140 100 100+

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BORROW PIT 118

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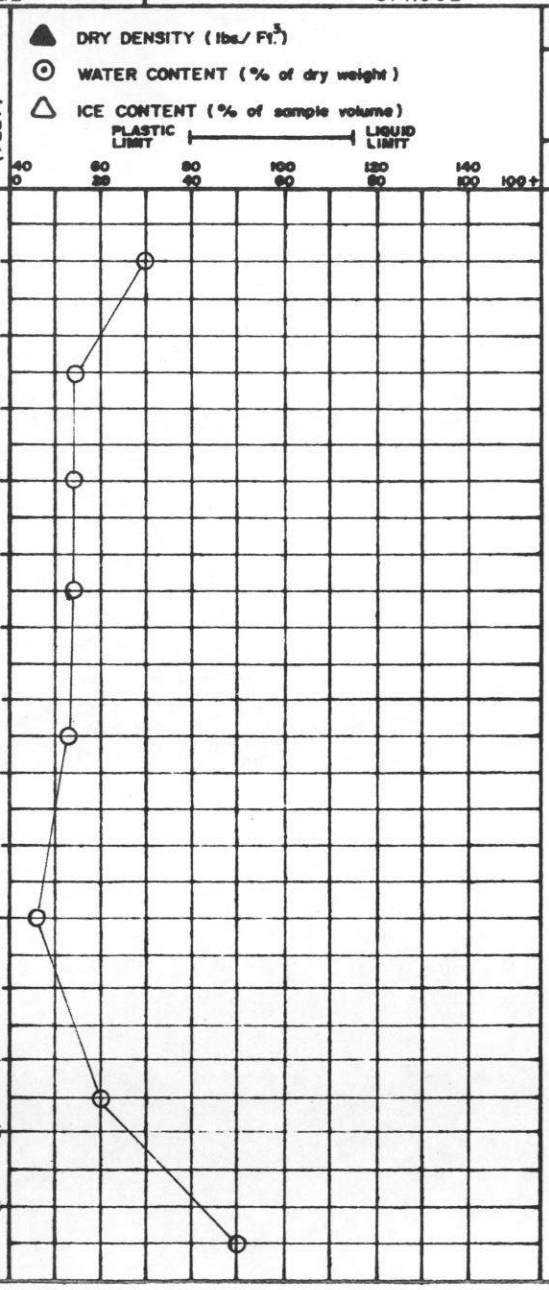
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 28/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 4		
TECH. PRONYCH	RIG. MAYHEW #1	SURFACE DRAINAGE. RIDGE	VEGETATION. SPRUCE
ELEV.	MILE		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2–4					CL	Clay -Sandy Silty Low Plastic		VX Low to Moderate Ice Content					Moist	
4–6													Damp	
6–8						Gravelly	F						Moist	
8–10														
10–11'								Vc-Vr					Moist	
11'–12					GC	Gravel-Clay-Sand-Mix.								
12–14														
14–15'													Wet	
15'–16						Sand-Gravelly-Clayey 17'								
16–18					GC	Gravel-Sandy Clayey								
18–20													Wet	
20–22														
22–23'														
23'–24					CL	Clay-Silty Sandy Pebbles Low Plastic		High Ice VS					Moist	
24–26														
26–28														
28–29'													Free Water	
29'						BOTTOM OF HOLE 29'								



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BORROW PIT 121

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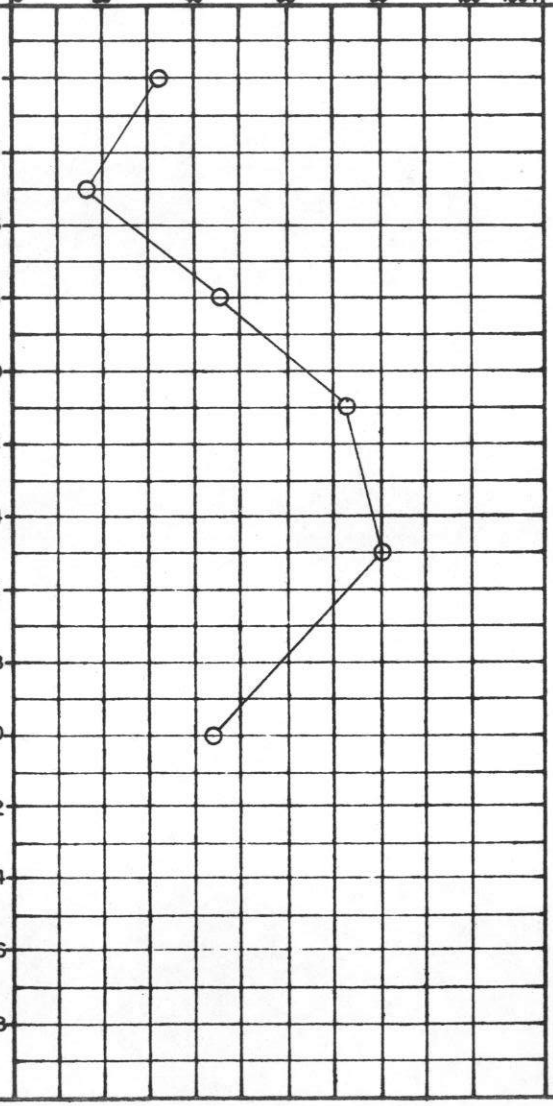
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 28/2/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 1		
TECH. McINTOSH	RIG. MAYHEW #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE
ELEV.	MILE		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.2								
2					Cl	Clay-Silty Sandy Pebbles 4'							Wet	
4					GC	Gravel-Clayey Sandy		High Ice					Sat.	
6								Content						
8						8'	F						Sat.	
10					CH	Clay -Silty Sandy								
12						Silty High Plastic		VS					Sat.	
14													Sat.	
16														
18														
20													Wet	
22														
24						24'								
26						BOTTOM OF HOLE 24'								
28														



DS-14-5-74 b

BORROW PIT 121

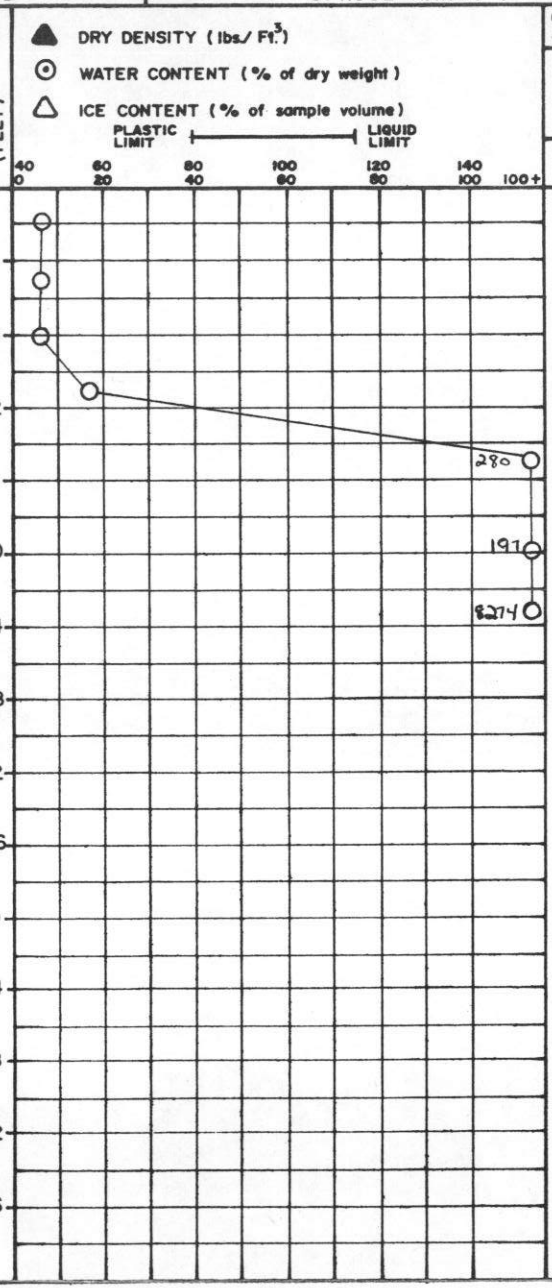
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 3		
TECH. McINTOSH	RIG. MAYHEW #2	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE MAX.: 7"
ELEV.	MILE		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		Low Ice					Moist	
4					GC	Gravel-Clayey Sandy 7'		Content					Moist	
8					SP	Sand-Coarse Gravelly	F						Damp	
12					SC	Fine-Coarse Clayey 15'							Sat.	
16													Free Water	
20													Free Water	
24						Ice to 45'		Ice					Free Water	
28														
32														
36														
40														
44						45'								
48						BOTTOM OF HOLE 45'								
52														
56														



DS-14-5-74 a

BORROW PIT 122

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

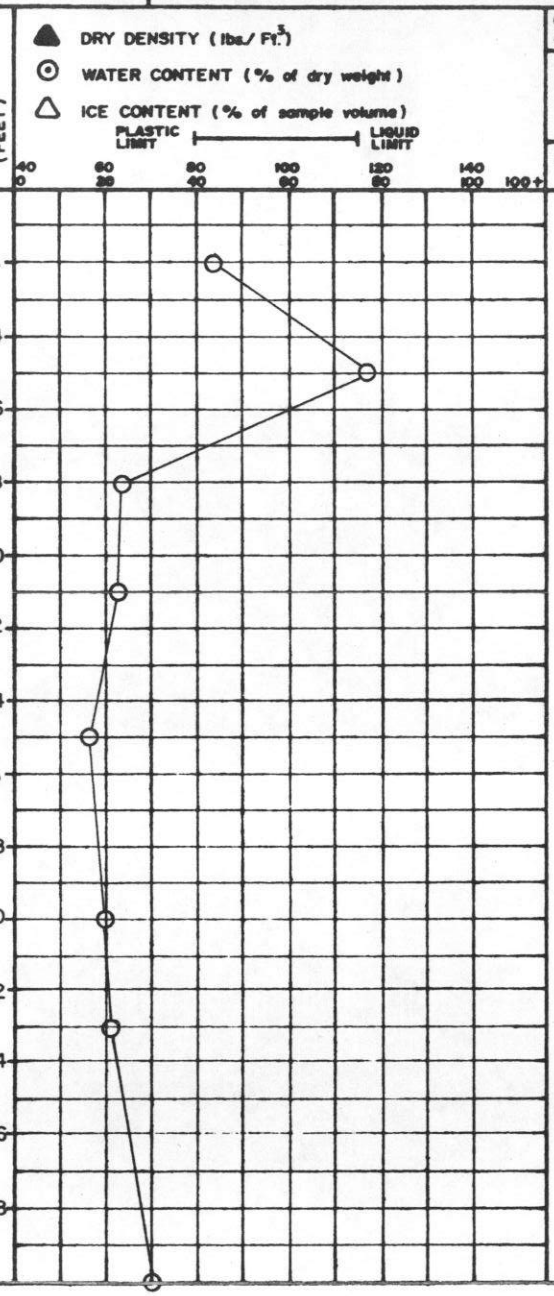
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE.
TECH. McINTOSH	RIG. MAYHEW #2	SURFACE DRAINAGE. GOOD	VEGETATION. BURNT OVER

OFFSET. ELEV. TEST HOLE 1 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .7								
2						Clay-Sandy Silty Pebbles Organic Mat. to 7' Gravelly from 5'		VS					Moist	
4								High to						
6													Free Water	
8					CL	Low-Med. Plastic	F						Sat.	
10								Moderate					Wet	
12								Ice						
14					Cl			Content					Moist	
16								Vc-Vr						
18														
20													Wet	
22						Pebbles							Moist	
24						Soft Coal								
26														
28														
						30'							Sat.	



BOTTOM OF HOLE 30'

DS-14-5-74 b

BORROW PIT 122

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

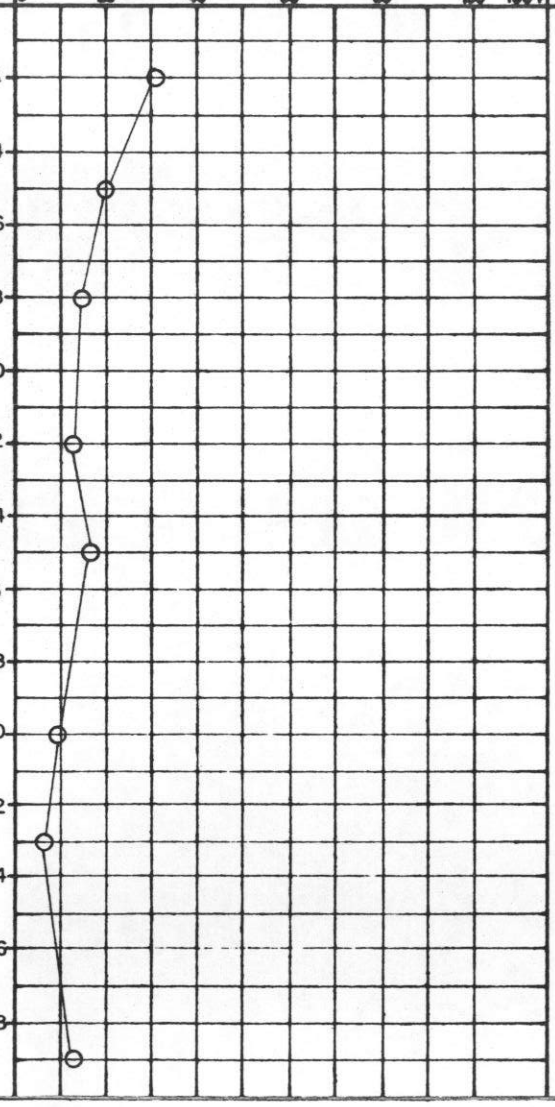
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE.
TECH. McINTOSH	RIG. MAYHEW #2	SURFACE DRAINAGE. GOOD	VEGETATION. BURNT OVER

OFFSET. ELEV. TEST HOLE 2 MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		High Ice						
2					CL	Gravel-Clay-Sand Mixture		VS					Free Water	
4						Low-Med. Plastic							Sat.	
6					Cl		F							
8								Low Ice					Wet	
10								Content						
12													Moist	
14								VX						
						15'							Moist	
16					CL	Clay-Silty Sandy Pebbles								
18					Cl	Gravelly								
20													Moist	
22														
						23'							Damp	
24					GC	Gravel-Clayey Sandy								
26					CL Cl	Clay-Gravelly Silty Sandy								
28													Moist	
						30'								



BOTTOM OF HOLE 30'

DS-14-5-74 b

BORROW PIT 122

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

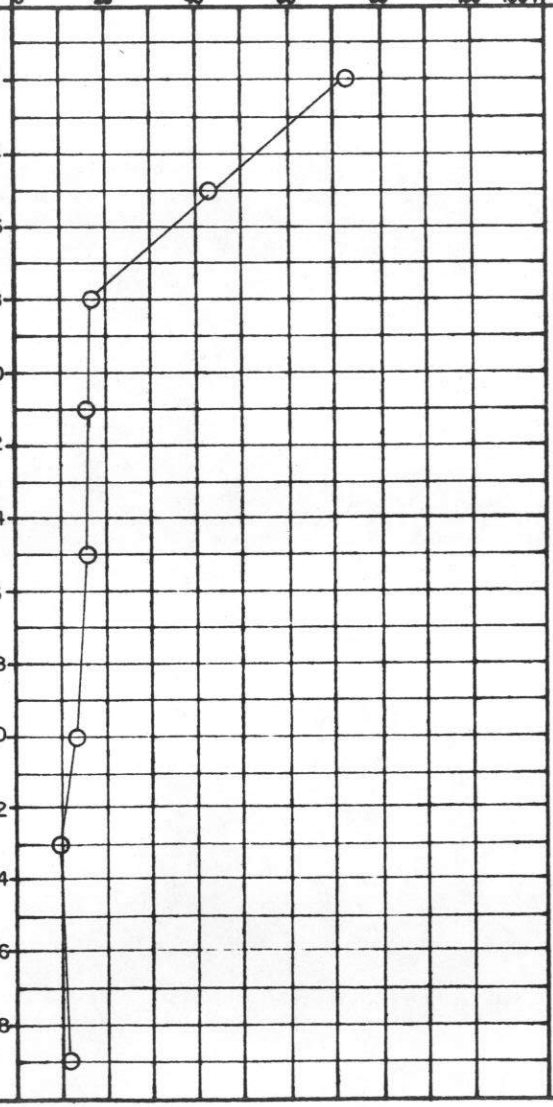
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE.
TECH. McINTOSH	RIG. MAYHEW #2	SURFACE DRAINAGE. GOOD	VEGETATION. BURNT OVER

OFFSET. ELEV. TEST HOLE 3 MILE 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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT 1'		High Ice					
2						Clay -Sandy Silty Pebbles		VX					Free Water
4					CL	Low-Med. Plastic							Wet
6													
8						Gravelly 8'-15'							Moist
10							F	Vc-Vr					Moist
12								Moderate To					
14					Cl	Pebbles							Moist
16								Low Ice Content					
18													
20						20'		VX					Wet
22					GC	Gravel-Clayey Sandy							
24						Gravel-Clay-Sand Mix.							Wet
26													
28						28'							
					Cl	Clay-Silty Sandy Pebbles 30'							Moist



BOTTOM OF HOLE 30'

DS-14-5-74 b

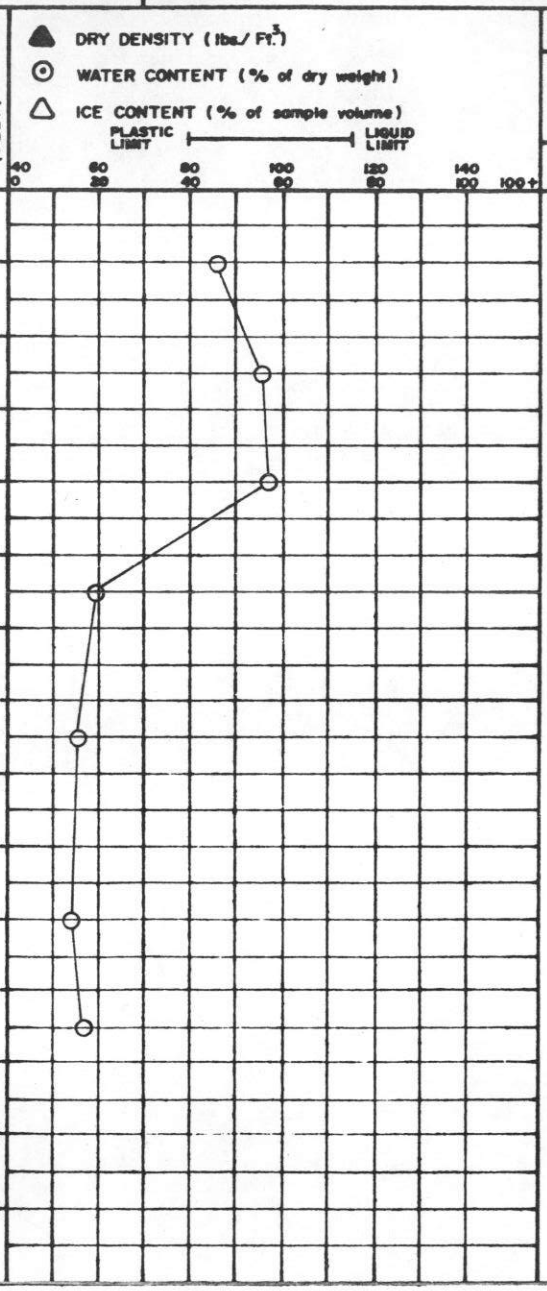
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE:

FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE. 4083+00	OFFSET.	TEST HOLE 1
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT								
2						2'							Moist	
						CLAY -Organic to 4' Silty		High						
4													Free Water	
6					CL	Low-med.-high plastic Gravelly-sandy from 5'		Ice						
8					CH	Organic 8'-10' Pebbles from 8'		Vs					Wet	
10					CI		F							
12													Moist	
14								Moderate To						
16						Gravelly		Vc - Vr					Wet	
18								High Ice Content						
20						20'							Sat.	
22					GC	GRAVEL -Sandy Clayey		Vs						
24													Sat.	
26						25' BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 123

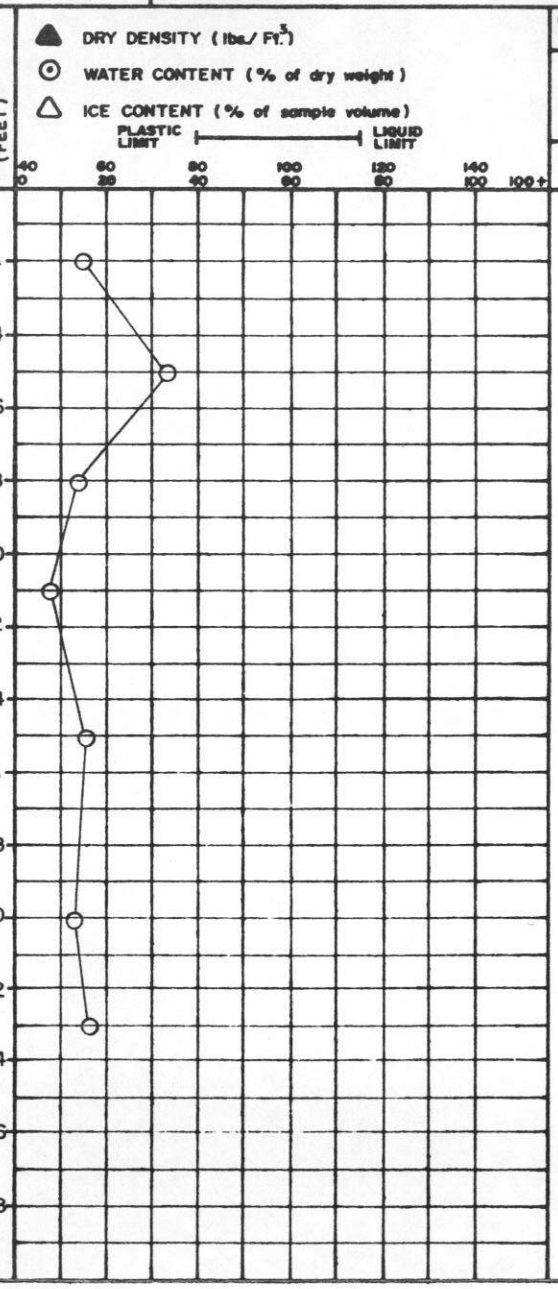
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE. 4083+00	OFFSET.	TEST HOLE 2
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 1'								
2–4					CL, CI	CLAY -Sandy Silty Pebbles Low-med. plastic		Moderate Ice Content					Wet; Wet	
8						— 8'							Wet	
10–12					GC	GRAVEL -Sandy Clayey	F						Sat.	
15						— 15'								
16–18					SW	SAND -Med. - coarse Pebbles-gravelly		Vc - Vr					Sat.	
20						— 20'								
22					GC	GRAVEL-CLAY-SAND MIXTURE							Wet	
23						— 23'								
24					SM	SAND-Silty Pebbles							Sat.	
25						— 25'								
26–28						BOTTOM OF HOLE - 25'								



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BORROW PIT 123

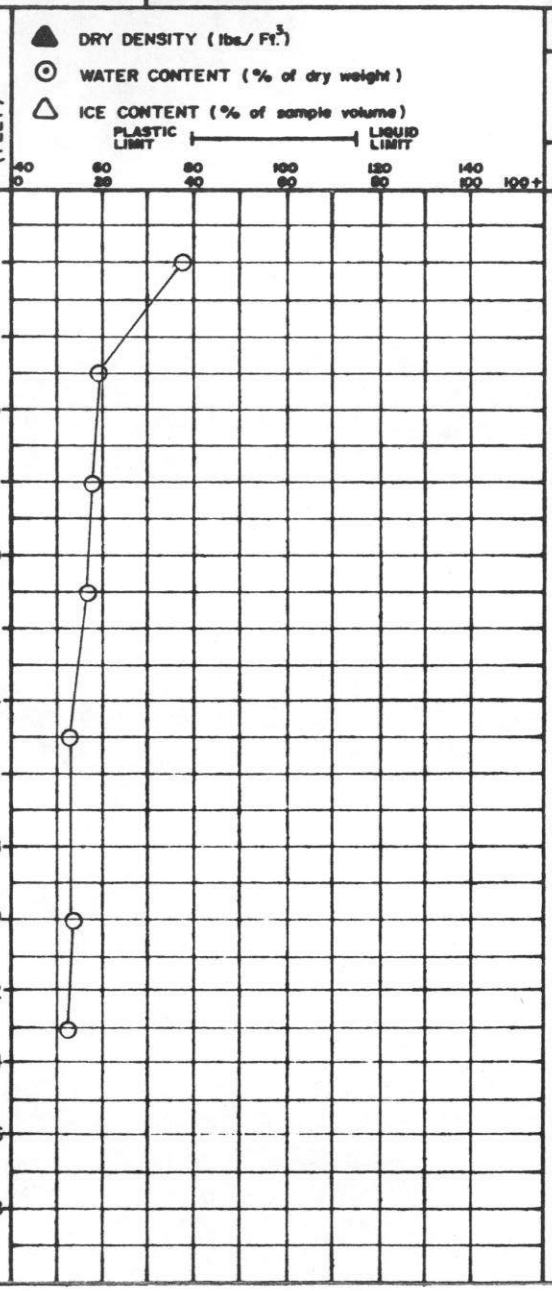
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE. 4083+00	OFFSET.	TEST HOLE 3
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		High Ice						
2						2'							Sat.	
						CLAY -Silty Sandy Gravelly Low-med. plastic		Vs						
4														
													Wet	
6														
					CL			Low Ice Content						
8													Moist	
10							F							
													Moist	
12														
14					CI									
													Damp	
16														
18								Vx						
20													Damp	
22													Damp	
24														
						25'								
26						BOTTOM OF HOLE - 25'								
28														



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BORROW PIT 123

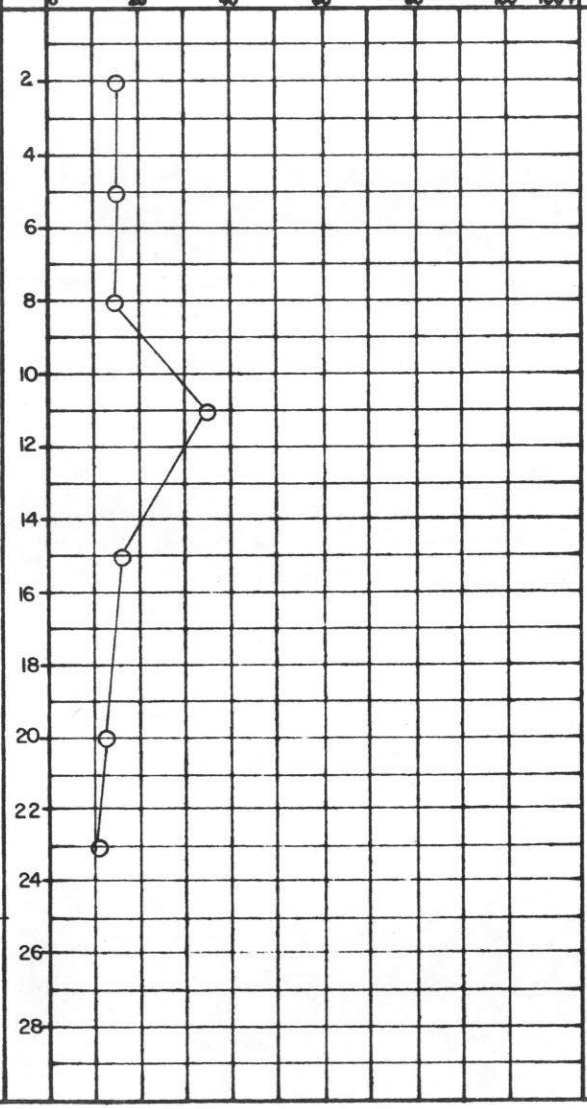
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE. 4083+00	OFFSET.	TEST HOLE 4
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2						CLAY							Moist	
						-Silty		Low						
4						Sandy								
						Pebbles								
					CI	Med. plastic		Ice					Moist	
6						Gravelly 5'-11'								
								Content						
8													Moist	
							F							
10								Vx						
						11'							Moist	
12						CLAY								
						-Organic								
						Soft Shale								
14						Siltstone								
						Coal particles							Moist	
16														
18														
20						20'							Damp	
						SHALE								
						-Organic								
22						Soft-med. hard								
													Damp	
24														
						25'								
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 123

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

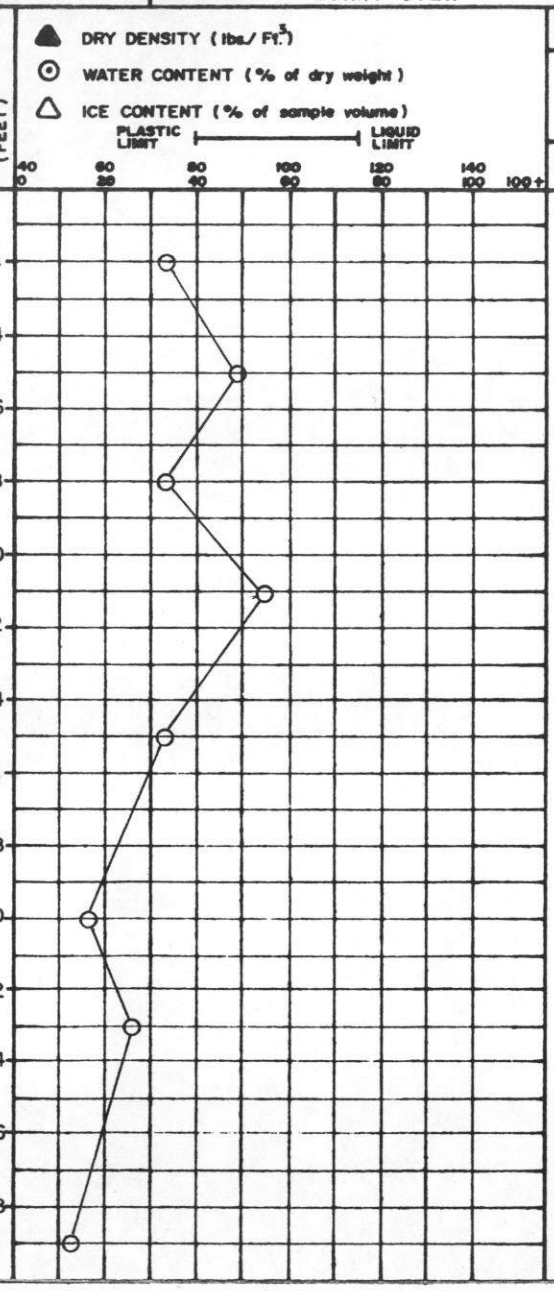
FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE. 4083+00
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. BURNT OVER

OFFSET. ELEV.

TEST HOLE 5

MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.3'								
2						CLAY -Sandy Silty Low-med. plastic							Moist	
4								High					Free Water	
6					CL	Hard shale fragments 5'-7'		Ice						
8						Pebbles	F	Content					Sat.	
10														
12					CI	Organic material (Wood) 11'-13'							Wet	
14								Vs						
16													Sat.	
18														
20						Pebbles		Moderate					Sat.	
22														
23'								Ice					Sat.	
24					GC	GRAVEL-CLAY-SAND MIXTURE		To						
26								High						
								Ice						
28														
28'					CL SC	CLAY-Silty, sandy SAND-Clayey, silty 30'		Vc-Vr-Vs					Sat.	



BOTTOM OF HOLE - 30'

DS-14-5-74 b

BORROW PIT 123

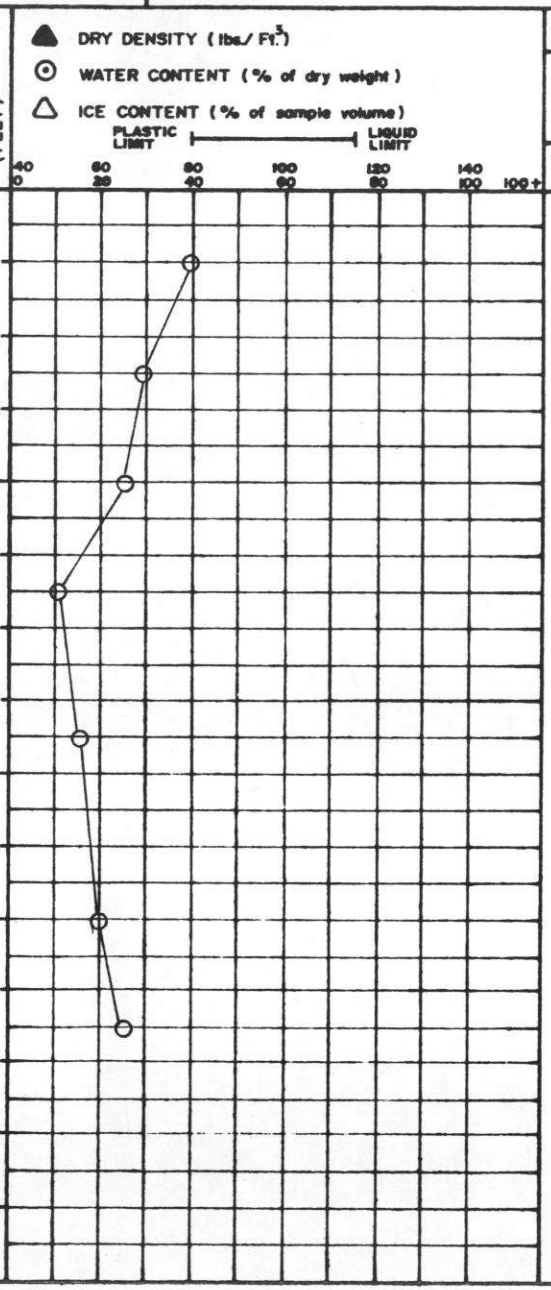
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 2/3/74	AIRPHOTO NO.	CHAINAGE. 4083+00
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.
OFFSET.	ELEV.	TEST HOLE 6	MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'								
2						CLAY -Silty Sandy Gravelly Pebbles Low plastic		High Ice Vs					Free Water	
4													Free Water	
6														
8													Wet	
10					CL		F	Low To Vx					Moist	
12														
14													Moist	
16								Moderate Ice						
18														
20													Moist	
22								Vc - Vr						
24													Moist	
26														
28						30'								



BOTTOM OF HOLE - 30'

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BORROW PIT 123

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

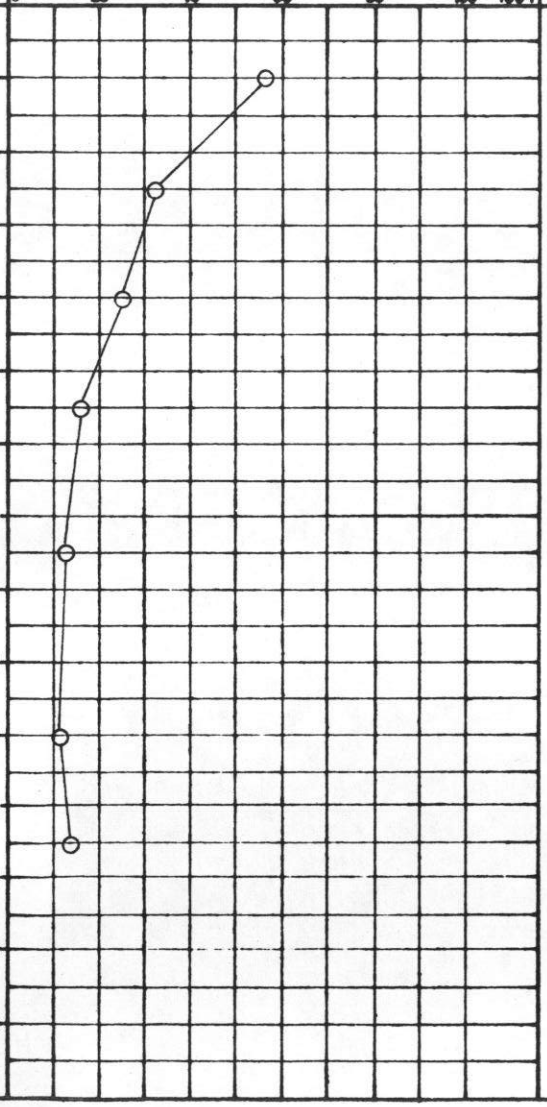
FIELD ENG. N. BURGESS	DATE DRILLED. 2/3/74	AIRPHOTO NO.	CHAINAGE. 4083+00
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV.

TEST HOLE 7

MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'		High					Free Water	
2														
						CLAY -Sandy Silty Pebbles		Ice						
4														
					CL	Low-med. plastic							Sat.	
6								Vs						
8													Sat.	
					CI		F	Moderate						
10								To					Moist	
12								Vc - Vr						
14								Low					Moist	
16								Ice						
18								Content						
20								Vx					Moist	
22														
						23'							Moist	
24						SHALE - Soft CLAY - Silty								
						25'								
26						BOTTOM OF HOLE - 25'								
28														



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BORROW PIT 123

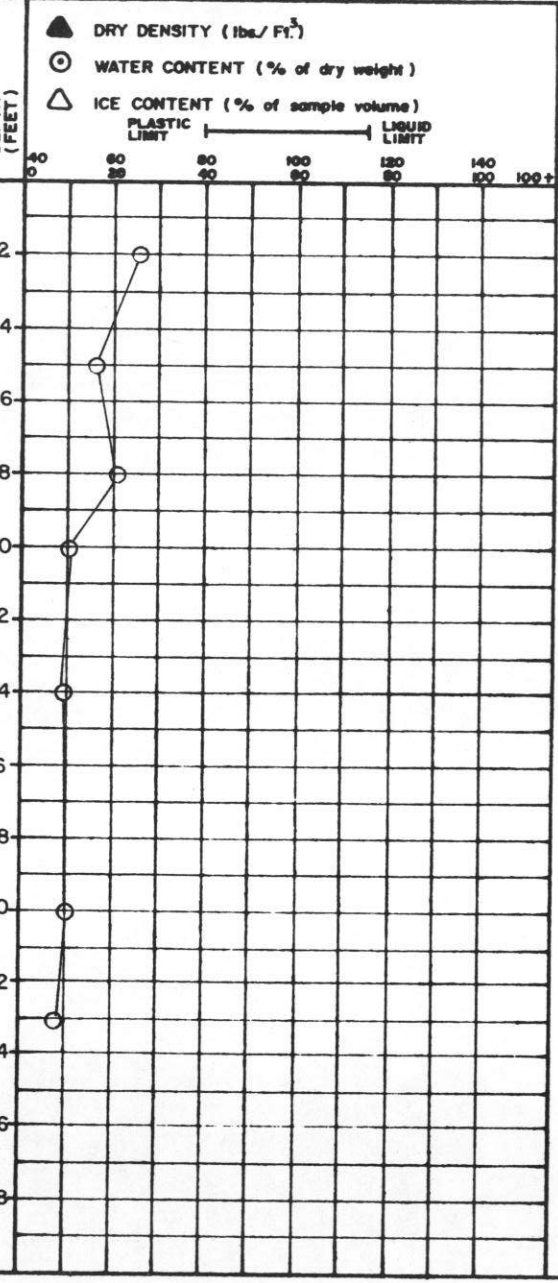
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 2/3/74	AIRPHOTO NO.	CHAINAGE. 4083+00	OFFSET.	TEST HOLE 8
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1.5'								
2						CLAY -Sandy Silty Pebbles Low-med. plastic		Moderate Ice Vc - Vr					Sat.	
4														
6					CL								Moist	
8							F						Wet	
10													Damp	
12					CI			Low Ice Content						
14														
16						Gravelly							Damp	
18						50% Shale frags. from 20'-22'								
20													Damp	
22						Gravelly		Vx						
24													Damp	
						—25'								
26						BOTTOM OF HOLE - 25'								
28														



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BORROW PIT 123

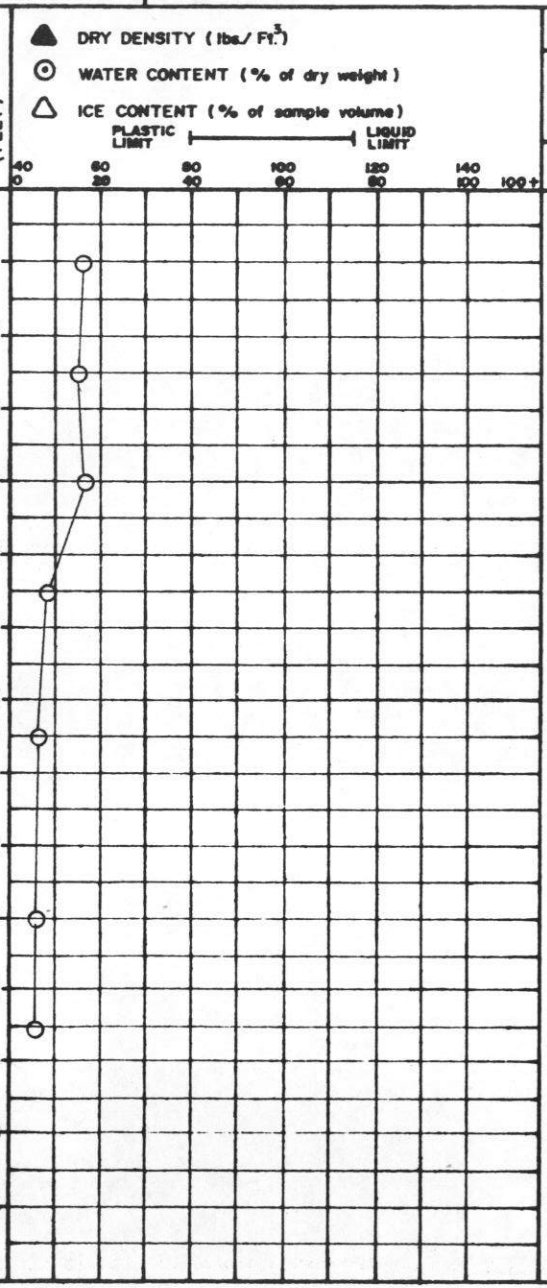
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 2/3/74	AIRPHOTO NO.	CHAINAGE. 4083+00	OFFSET.	TEST HOLE 9
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2					CL CI	CLAY -Silty Sandy Pebbles Low-med. plastic	F	Low Ice Content Vx					Moist	
4														
6													Moist	
8													Moist	
10														
						11'							Damp	
12						SHALE -Soft-med. hard								
14														
16								Frozen					Damp	
18								Nbn						
20													Damp	
22														
24													Damp	
						25'								
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 123

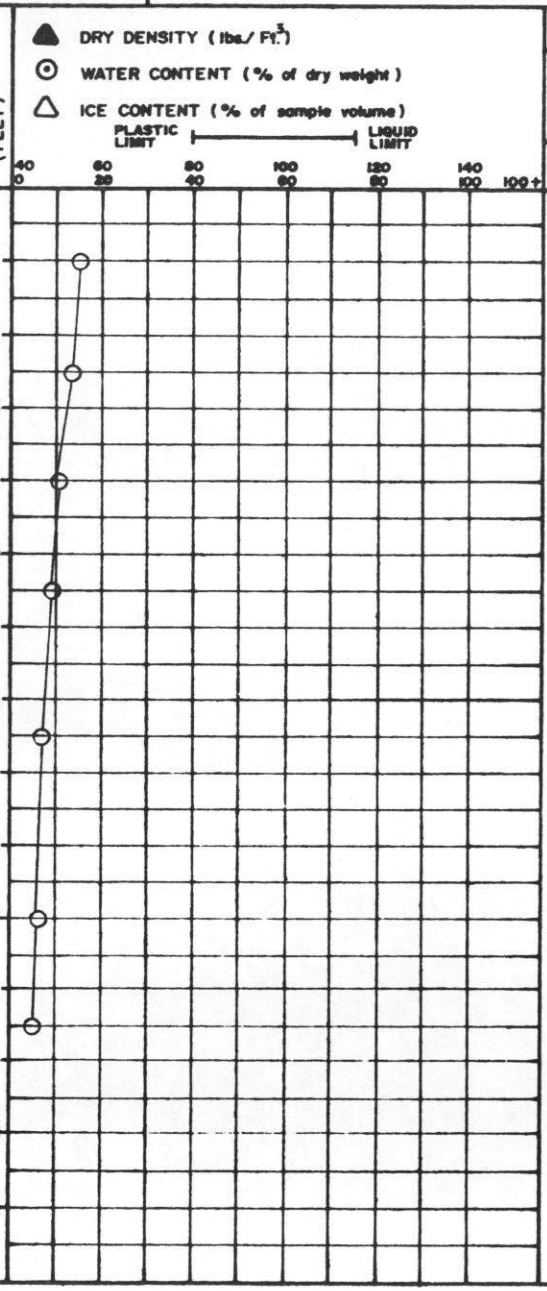
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 2/3/74	AIRPHOTO NO.	CHAINAGE. 4083+00	OFFSET.	TEST HOLE 10
TECH. JOHNSON	RIG. MAYHEW - #1	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2						CLAY -Silty Sandy Pebbles Med. plastic		Vx					Moist	
4								Low						
6					CI								Moist	
8						Shale fragments from 8'-10'		Ice					Moist	
						10'								
10						SHALE -Soft	F						Moist	
12														
14								Frozen						
16						Soft-med. hard							Damp	
18								Nbn						
20													Damp	
22														
24						Soft-hard							Humid	
						25'								
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 123

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

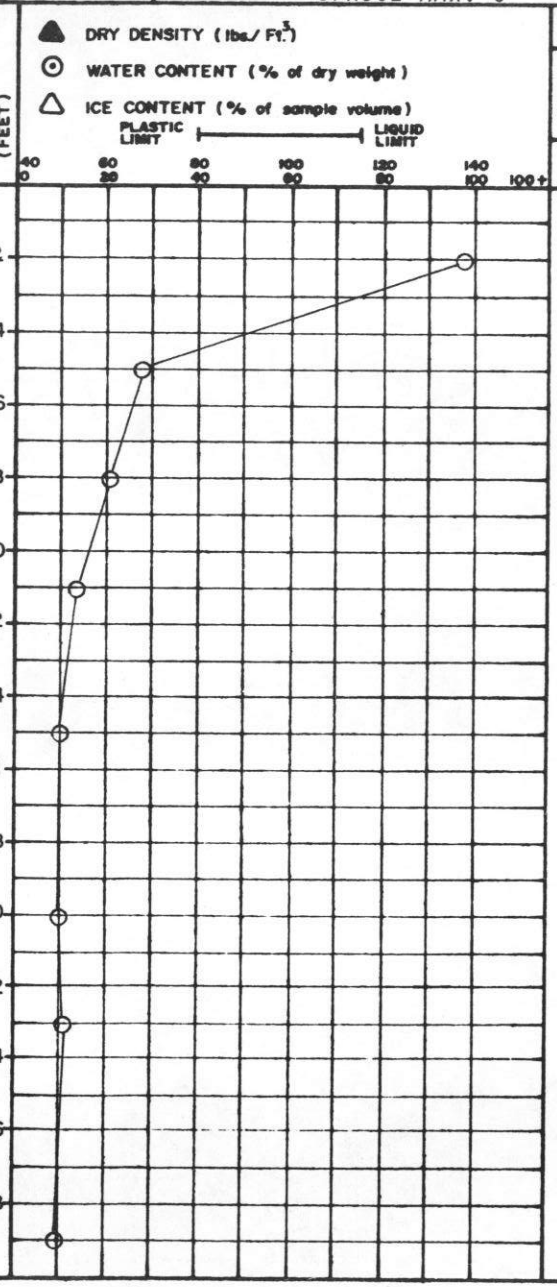
FIELD ENG. N. BURGESS	DATE DRILLED. 6/3/74	AIRPHOTO NO.	CHAINAGE. 4083+00
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE MAX. 5"

OFFSET. ELEV.

TEST HOLE 11

MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'		High Ice Vs					Free Water	
2						CLAY -Organic mat. to 4' Sandy Silty Pebbles Med. plastic								
4														
6								Vc - Vr					Sat.	
8					CI			Moderate					Wet	
10							F	Ice						
12								Content					Wet	
14														
						—15'								
16						SHALE -Soft							Wet	
18								Low						
20						Soft-med. hard		Ice					Moist	
22								Vx						
24													Moist	
26														
28														
						30'							Moist	



BOTTOM OF HOLE - 30'

DS-14-5-74 b

BORROW PIT 123

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

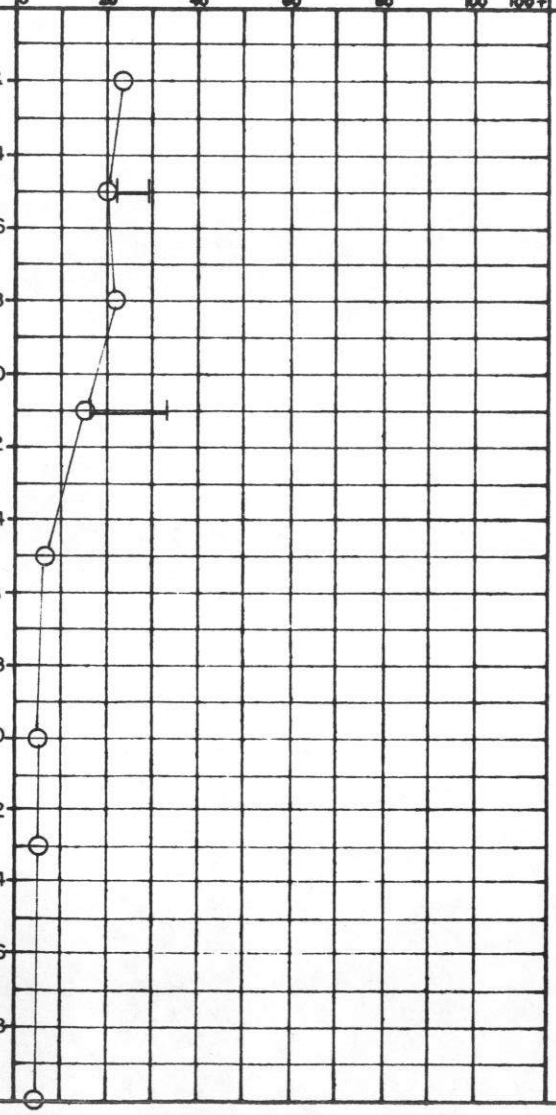
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. B. CONSTANT	DATE DRILLED. 5/3/74	AIRPHOTO NO.	CHAINAGE. 4083 + 00
TECH. McINTOSH	RIG. Mayhew #2	SURFACE DRAINAGE. Good	VEGETATION. Spruce Max. 5"

OFFSET. | ELEV. | TEST HOLE 12 | MILE | 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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT 1.5'							
2						CLAY - SANDY - SILTY - PEBBLES		MODERATE					MOIST
4													
6					Cl	LOW - MED. PLASTIC		ICE					WET
8					Ci			Vc - Vr					WET
10							F						MOIST
12								LOW ICE Vx					
14						14'							MOIST
16						SHALE - SOFT - HARD							
18								FROZEN					
20						HARD		Nbη					HUMID
22													
24						MED. HARD - HARD							HUMID
26													
28													HUMID



BOTTOM OF HOLE - 30'

DS-14-5-74 b

BORROW PIT 123

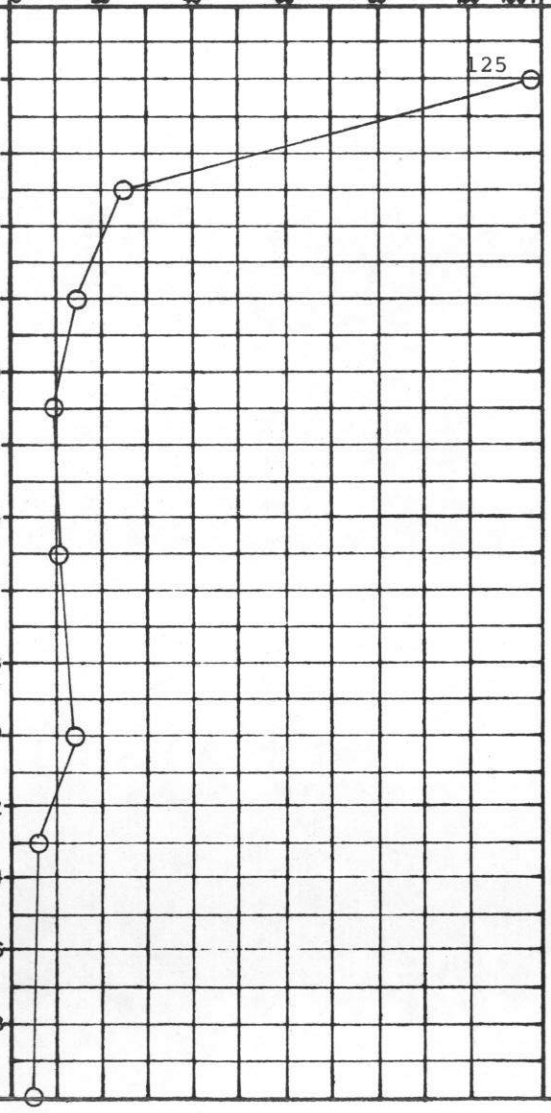
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. B.CONSTANT	DATE DRILLED. 6/3/74	AIRPHOTO NO.	CHAINAGE. 4082 + 00	OFFSET.	TEST HOLE 13
TECH. McINTOSH	RIG. Mayhew #2	SURFACE DRAINAGE. Good	VEGETATION. Spruce Max. 3"	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2'		HIGH ICE Vs					FREE WATER	
					Ol Cl	ORGANIC SILT-SAND-CLAY 4'								
					Ci	CLAY - SILTY - SANDY - PEBBLES MED. PLASTIC 11'	F	MODERATE					SAT. WET WET	
						SHALE - SOFT - MED. HARD		ICE					MOIST	
						SOFT - HARD		CONTENT						
						SOFT - MED. HARD		Vc - Vr					WET WET	
						MED. HARD - HARD							WET	



BOTTOM OF HOLE - 30'

DS-14-5-74 b

BORROW PIT 123

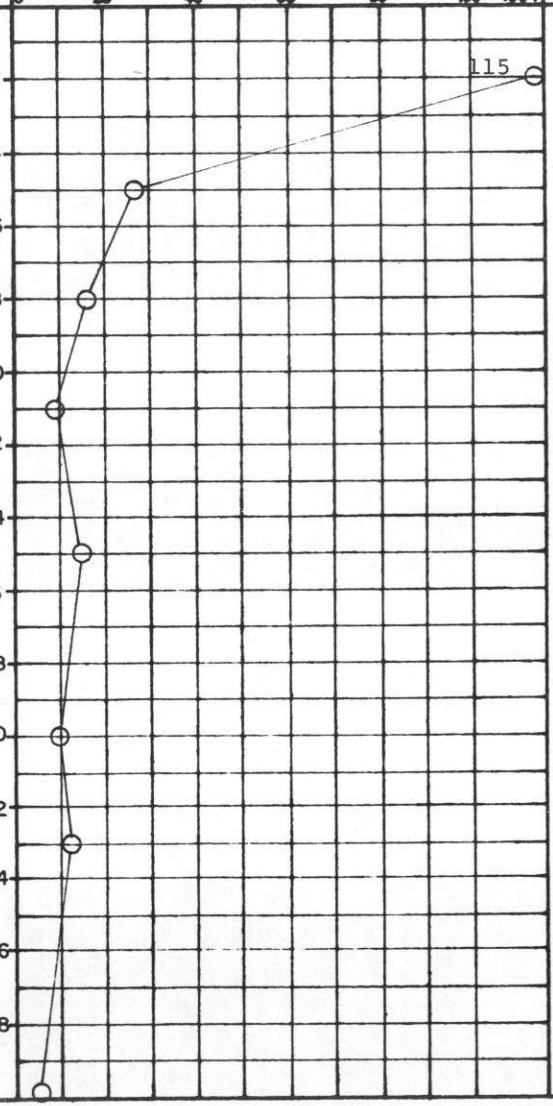
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. B.CONSTANT	DATE DRILLED. 5/3/74	AIRPHOTO NO.	CHAINAGE. 4082 + 00	OFFSET.	TEST HOLE 14
TECH. McINTOSH	RIG. Mayhew #2	SURFACE DRAINAGE. Fair	VEGETATION. Spruce Max. 3"	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		HIGH						
2					Ml	SILT - SANDY - ORGANIC PEBBLES 4'		ICE Vs					FREE WATER	
4													SAT.	
6						CLAY - SILTY SANDY PEBBLES & SHALE FRAGMENTS FROM 8' MED. PLASTIC		MODERATE ICE Vc - Vr						
8													MOIST	
10					Ci		F						MOIST	
12														
14								LOW					MOIST	
16								ICE						
18						19'								
20						SHALE - SOFT - HARD		CONTENT					MOIST	
22								Vx					MOIST	
24						SOFT								
26														
28						MED. HARD - HARD							DAMP	



BOTTOM OF HOLE - 30'

DS-14-5-74 b

BORROW PIT 123

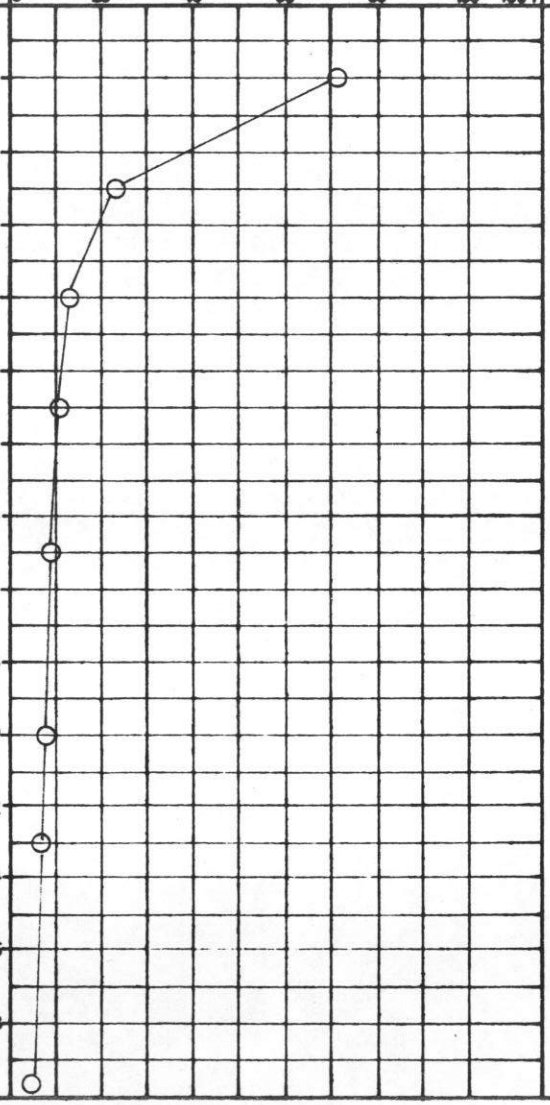
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. B.CONSTANT	DATE DRILLED. 5/3/74	AIRPHOTO NO.	CHAINAGE. 4083 + 00	OFFSET.	TEST HOLE 15
TECH. McINTOSH	RIG. Mayhew #2	SURFACE DRAINAGE. Fair	VEGETATION. Spruce Max. 3"	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'								
2					Cl	ORG. MAT. TO 4' CLAY - SANDY - SILTY - GRAVELLY LOW - MED. PLASTIC		HIGH ICE Vs					FREE WATER	
4														
6													FREE WATER	
8					Ci	PEBBLES & BOULDER CHIPS		LOW					MOIST	
10						10.5							WET	
12						SHALE - MED. HARD - HARD	F	ICE						
14														
16								CONTENT					WET	
18														
20						MED. HARD		Vx					WET	
22														
24													WET	
26														
28													MOIST	



BOTTOM OF HOLE - 30'

DS-14-5-74 b

BORROW PIT 123

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

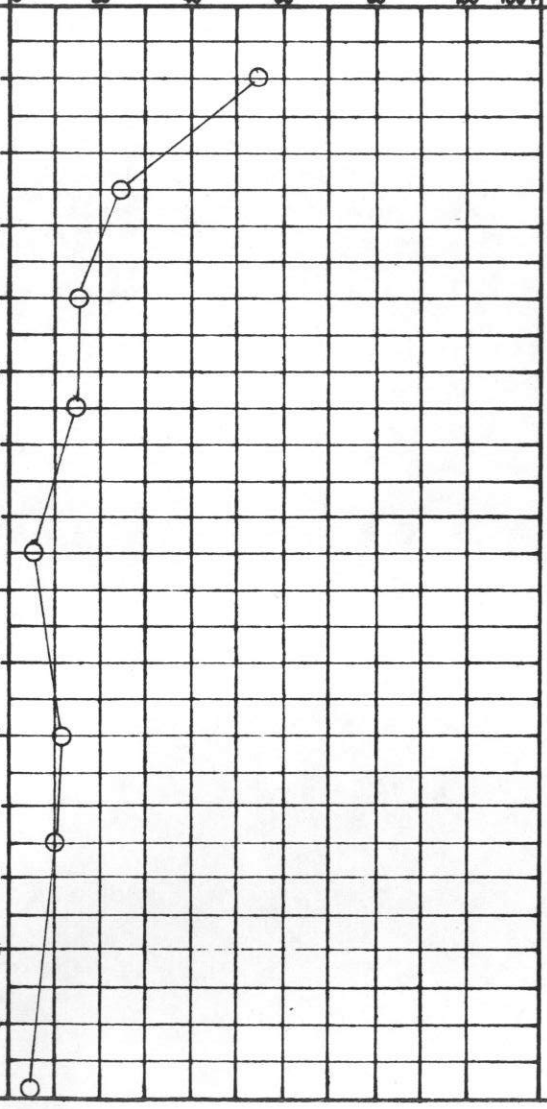
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. B.CONSTANT	DATE DRILLED. 5/3/74	AIRPHOTO NO.	CHAINAGE. 4083 + 00
TECH. McINTOSH	RIG. Mayhew #2	SURFACE DRAINAGE. Good	VEGETATION. Spruce Max. 4"

OFFSET. | ELEV. | TEST HOLE 16 | MILE | 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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT 1.7'		HIGH ICE Vs					
2						ORG. MAT. TO 4'							FREE WATER
4					Cl	CLAY - SILTY - SANDY							SAT.
6						LOW - MED. PLASTIC		MODERATE ICE					
8													MOIST
10					Ci		F	Vc - Vr					MOIST
12						PEBBLES & SHALE FRAGMENTS							
14						15'		LOW ICE					MOIST
16													
18								CONTENT					
20						MED. HARD							MOIST
22								Vx					MOIST
24						SOFT - MED. HARD							
26													
28						MED. HARD - HARD							MOIST



BOTTOM OF HOLE - 30'

DS-14-5-74 b

BORROW PIT 123

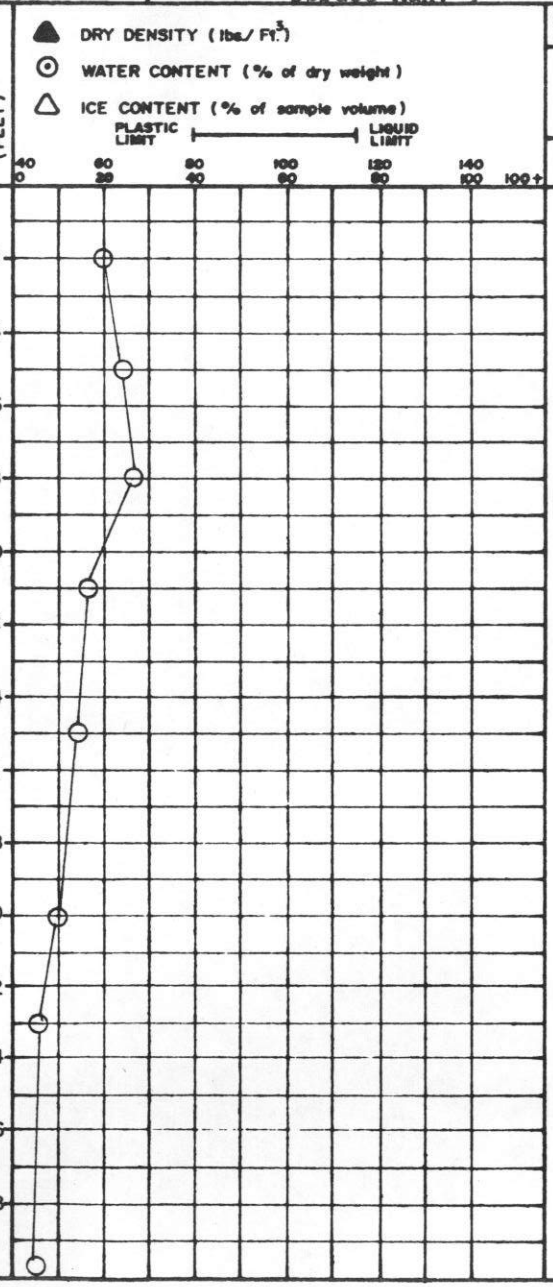
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. B.CONSTANT	DATE DRILLED. 5/3/74	AIRPHOTO NO.	CHAINAGE. 4083 + 00
OFFSET.	TEST HOLE 17		
TECH. McINTOSH	RIG. Mayhew #2	SURFACE DRAINAGE. Good	VEGETATION. Spruce Max. 4"
ELEV.	MILE		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 2'		MODERATE					MOIST	
						ORG. MAT. TO 4'								
						CLAY - SILTY - SANDY - PEBBLES							WET	
					Ci	MED. PLASTIC	F	Vc - Vr					WET	
													MOIST	
						SHALE FRAGMENTS 11' - 13'		ICE						
								CONTENT					MOIST	
						18'								
						SHALE - SOFT. - MED.		FROZEN					MOIST	
							F	Nbη					HUMID	
						MED. HARD - HARD								
													HUMID	



BOTTOM OF HOLE - 30'

DS-14-5-74 b

BORROW PIT 123

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

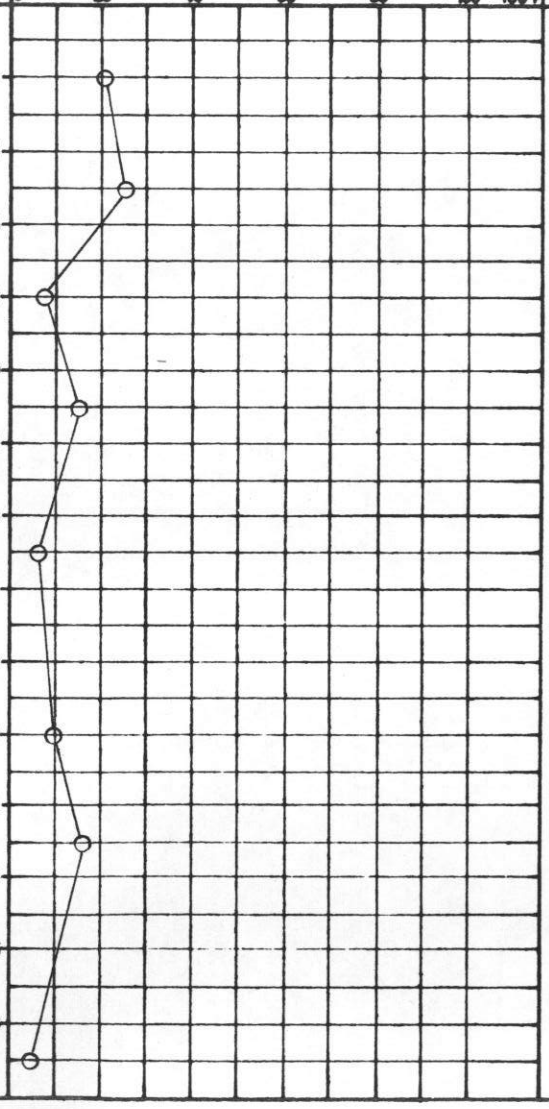
SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 6/3/74	AIRPHOTO NO.	CHAINAGE. 4083+00
OFFSET.			
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE MAX. 5"
ELEV.			

TEST HOLE 18

MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .7'								
2						CLAY -Organic mat. to 4' Silty Sandy Pebbles Med. plastic		Moderate And Low Ice Content					Wet	
4														
6													Wet	
8					CI	Gravelly							Moist	
10						Pebbles	F						Moist	
12														
14														
						15'		Vc - Vr					Wet	
16						SHALE -Soft-hard								
18								Vx						
20						Med. hard - hard							Moist	
22														
24						Soft - Clay							Moist	
26						Soft-med. hard								
28														
						30'							Damp	



BOTTOM OF HOLE - 30'

DS-14-5-74 b

BORROW PIT 123

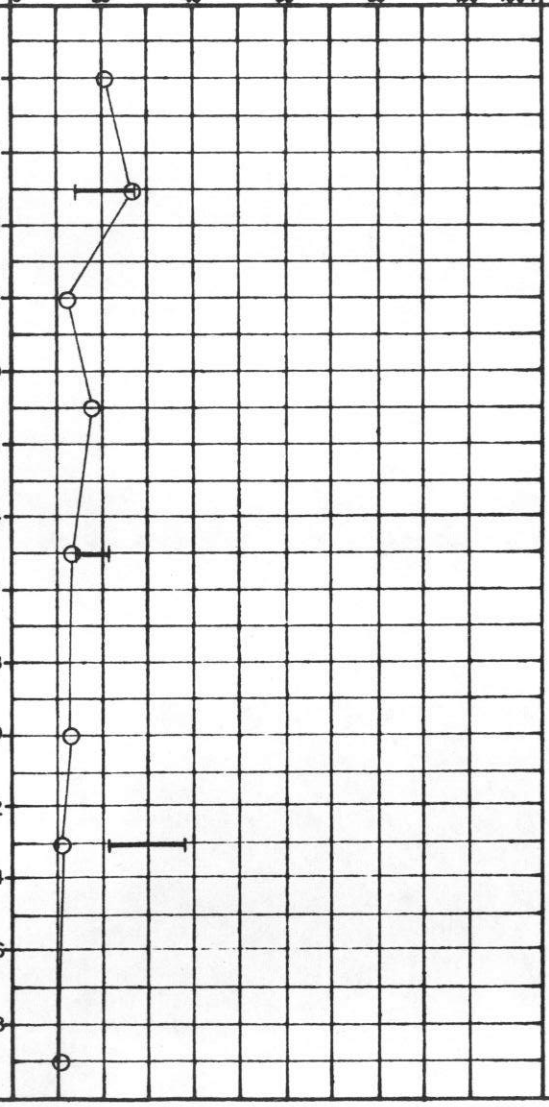
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 6/3/74	AIRPHOTO NO.	CHAINAGE. 4083+00	OFFSET.	TEST HOLE 19
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE MAX. 3"	ELEV.	MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.7'								
2								Moderate					Wet	
						CLAY -Organic mat. to 4' Sandy Silty Pebbles Low plastic		Ice						
4													Wet	
6														
8					CL								Moist	
10								Vc - Vr						
12							F						Moist	
14						Shale fragments							Moist	
16								Low						
18								Ice						
20						20'							Moist	
						SHALE -Soft-hard		Content						
22													Moist	
24						Soft-med. hard		Vx						
26														
28													Wet	
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

BORROW PIT 123

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

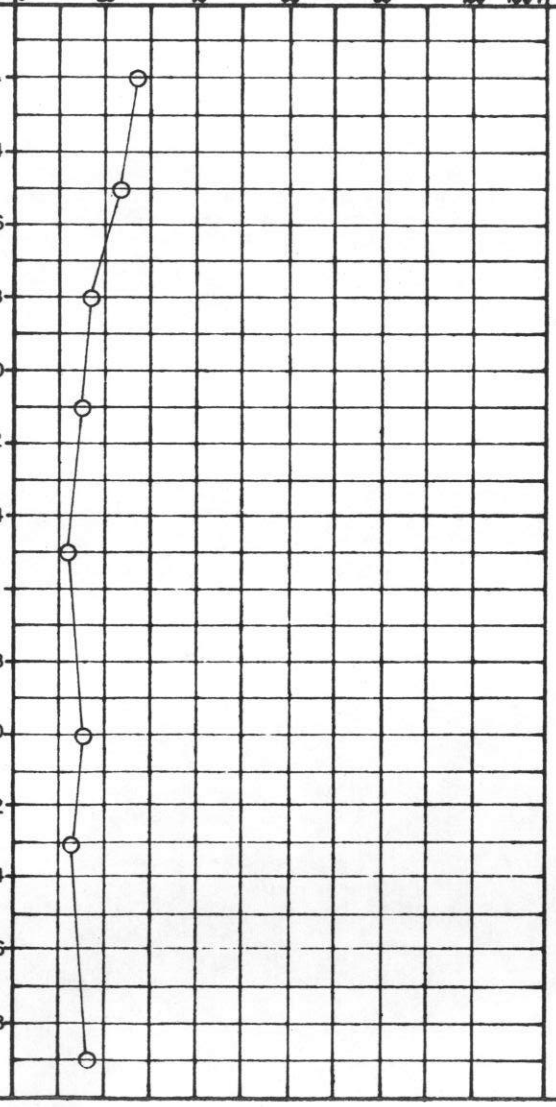
FIELD ENG. N. BURGESS	DATE DRILLED. 6/3/74	AIRPHOTO NO.	CHAINAGE. 4083+00
TECH. MCINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE MAX. 4"

OFFSET. ELEV.

TEST HOLE 20

MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.2'		High						
2					ML	SILT -Gravelly Organic		Ice					Free Water	
4						4'								
6						CLAY -Silty Sandy Pebbles		Vs					Sat.	
8					CI	CLAY & SOFT SHALE							Sat.	
10						-30% soft Shale fragments	F	Low					Moist	
12								Ice						
14						14'								
16						SHALE -Soft Broken down		Content					Moist	
18														
20													Wet	
22								Vx						
24						Soft-med. hard							Wet	
26														
28						Soft							Wet	
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

BORROW PIT 123

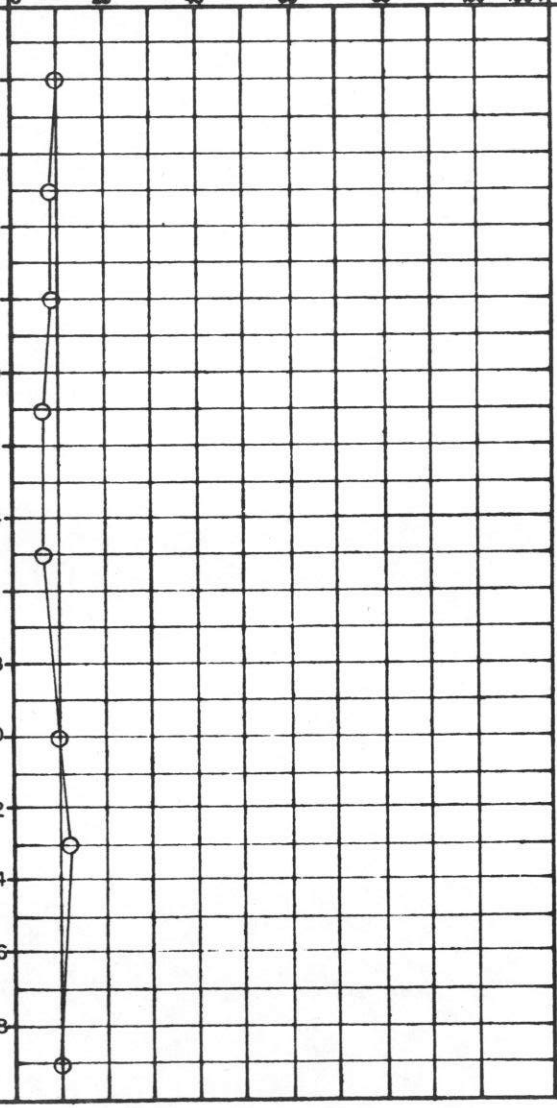
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 6/3/74	AIRPHOTO NO.	CHAINAGE. 4083+00	OFFSET.	TEST HOLE 21
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE MAX. 3"	ELEV.	MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'									
2					CL	CLAY -Silty, sandy Pebbles & Boulders Chips			2					Damp	
4					CI	Shale fragments 5'			4					Damp	
6						SHALE -Med. hard			6						
8						Soft-med. hard			8					Damp	
10								Low	10					Damp	
12						Med. hard - hard	F	Ice	12						
14									14					Damp	
16						Med. hard		Content	16						
18									18						
20								Vx	20					Damp	
22						Soft-hard			22					Moist	
24						Soft			24						
26									26						
28						Soft-med. hard 30'			28					Damp	



BOTTOM OF HOLE - 30'

DS-14-5-74 b

BORROW PIT 123

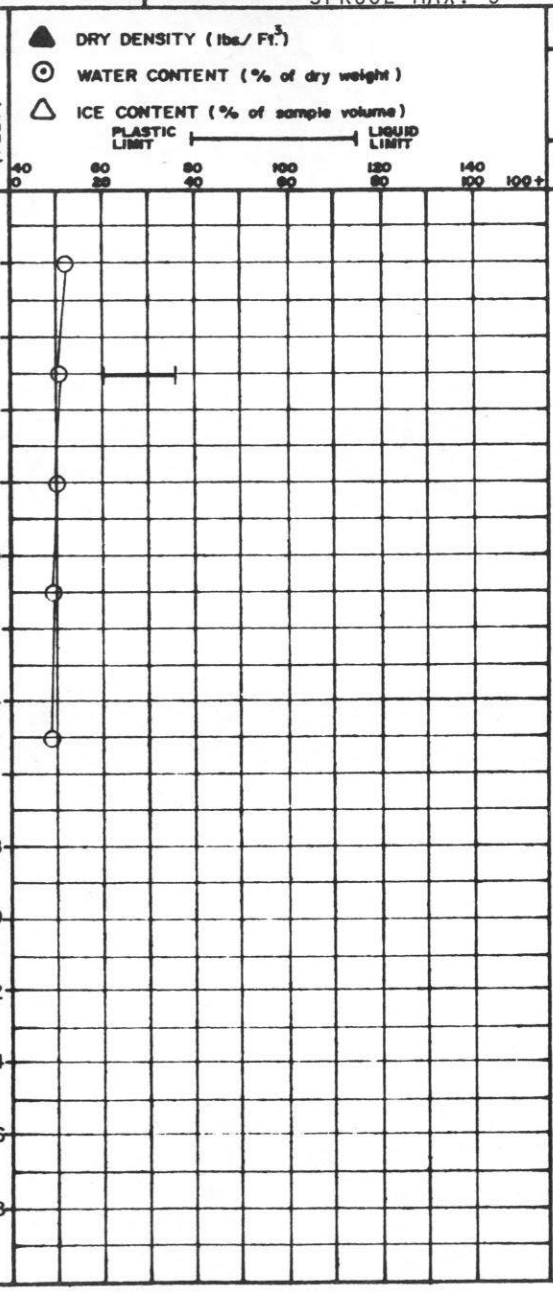
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 6/3/74	AIRPHOTO NO.	CHAINAGE. 4083+00	OFFSET.	TEST HOLE 22
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. SPRUCE MAX. 5"	ELEV.	MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.7'								
2						SHALE -Soft		Low					Damp	
4														
6						Soft-med. hard		Ice					Damp	
8													Damp	
10								Content						
12						Soft	F						Damp	
14								Vx						
16						Soft-med. hard							Damp	
						17'								
18						BOTTOM OF HOLE - 17'								
20														
22														
24														
26														
28														



DS-14-5-74 b

BORROW PIT 123

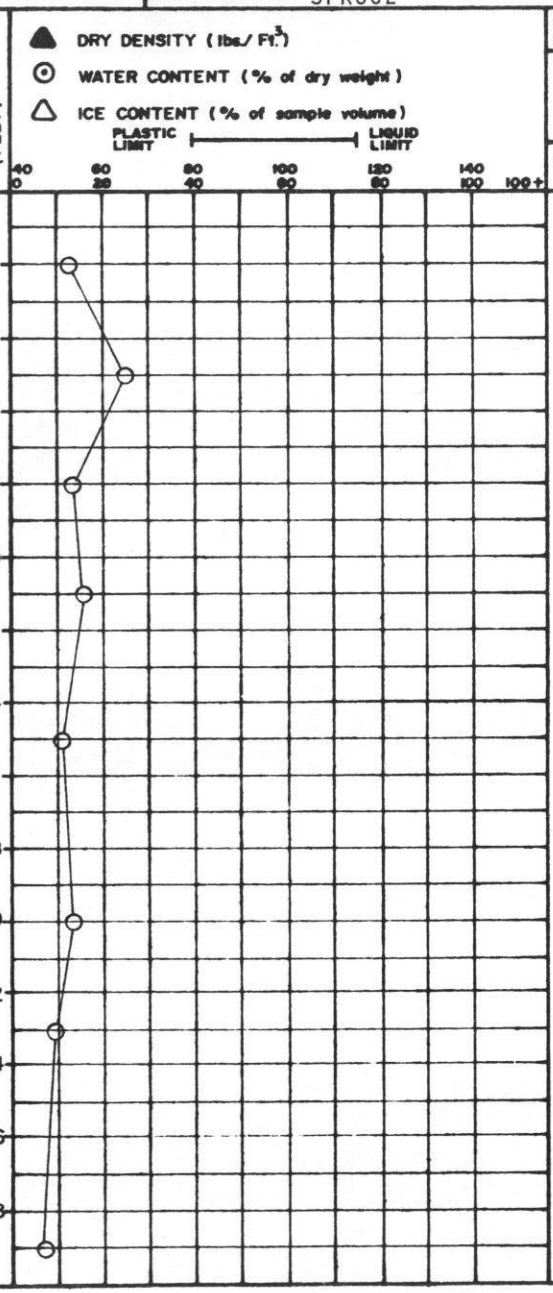
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 6/3/74	AIRPHOTO NO.	CHAINAGE. 4083+00	OFFSET.	TEST HOLE 23
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE	ELEV.	MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.4'								
2					CL	CLAY -Sandy, silty Pebbles & Shale fragments		Moderate					Moist	
4								Ice					Sat.	
5'														
6						SHALE -Soft								
8								Content					Wet	
						Soft-hard								
10							F	Vc - Vr					Wet	
12						Soft-med. hard								
14								Low					Damp	
16								To						
18								Vx						
20													Damp	
22								Nil					Damp	
24								Ice						
26								Nbn						
28													Humid	
30'														



BOTTOM OF HOLE - 30'

DS-14-5-74 b

BORROW PIT 123

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

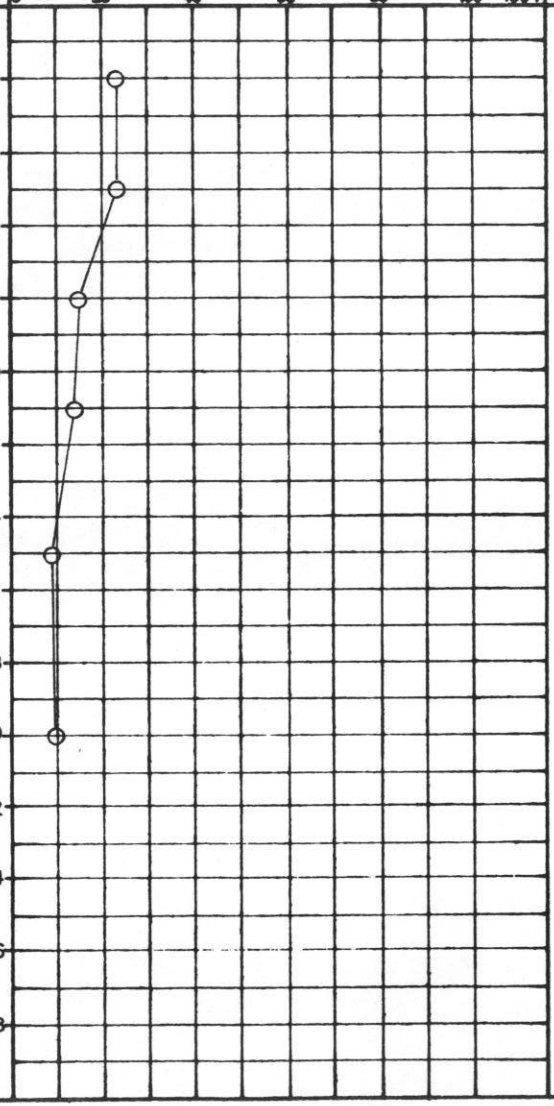
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 6/3/74	AIRPHOTO NO.	CHAINAGE. 4083+00	OFFSET.	TEST HOLE 24
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. GOOD	VEGETATION. BURNT OVER	ELEV.	MILE 801.5

▲ DRY DENSITY (lbs./Ft.³)
⊙ 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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'		Moderate						
2						CLAY		Ice					Moist	
4						-Sandy Silty Pebbles		Vc - Vr						
6					CI	Med. plastic							Moist	
8													Moist	
10						Shale fragments 10'	F							
12						SHALE -Soft		Low					Damp	
14								Ice						
16						Soft-med. hard		Content					Damp	
18														
20								Vx					Damp	
22						22'								
						BOTTOM OF HOLE - 22'								
24														
26														
28														



DS-14-5-74 b

BORROW PIT 123

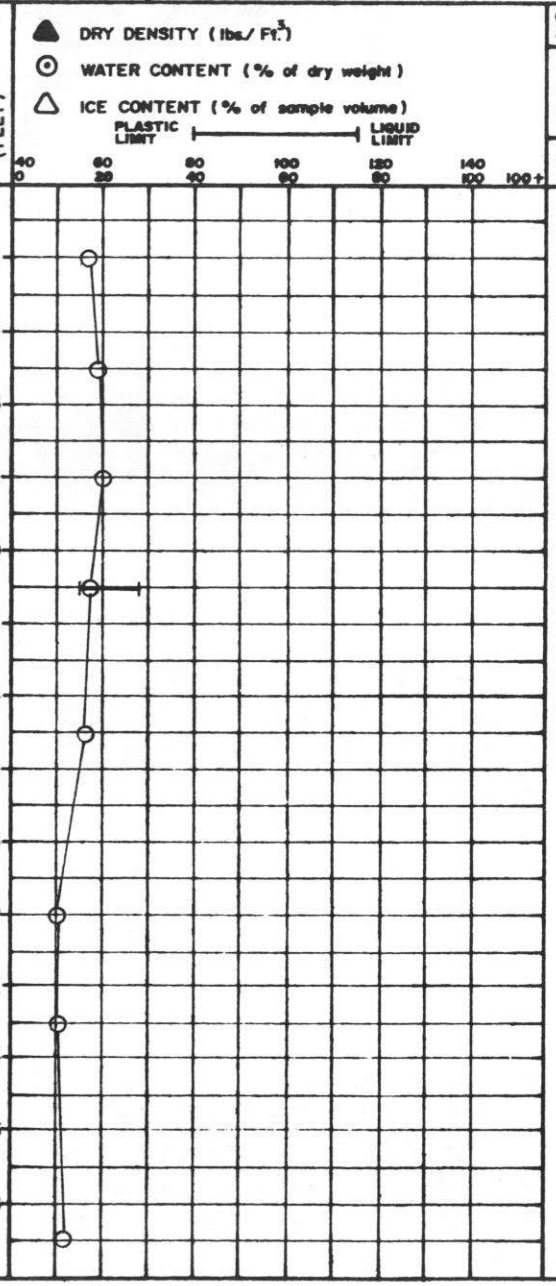
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 6/3/74	AIRPHOTO NO.	CHAINAGE. 4083+00	OFFSET.	TEST HOLE 25
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE MAX. 3"	ELEV.	MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'		High						
2					GP	GRAVEL -Sandy Silty Organic		Ice					Free Water	
4						—4'		Vs						
6						CLAY -Silty Sandy Pebbles-Shale fragments Boulders chips		Moderate					Sat.	
8													Moist	
10					CL	Low-med. plastic		Ice						
12						Pebbles	F						Moist	
14					CI			Content						
16								Vc - Vr					Moist	
18						—18'								
20						SHALE -Soft		Low Ice					Moist	
22														
24								Vx					Moist	
26														
28														
						30'							Moist	



BOTTOM OF HOLE - 30'

DS-14-5-74 b

BORROW PIT 123

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 6/3/74	AIRPHOTO NO.	CHAINAGE. 4083+00
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE MAX. 4"

OFFSET. ELEV.

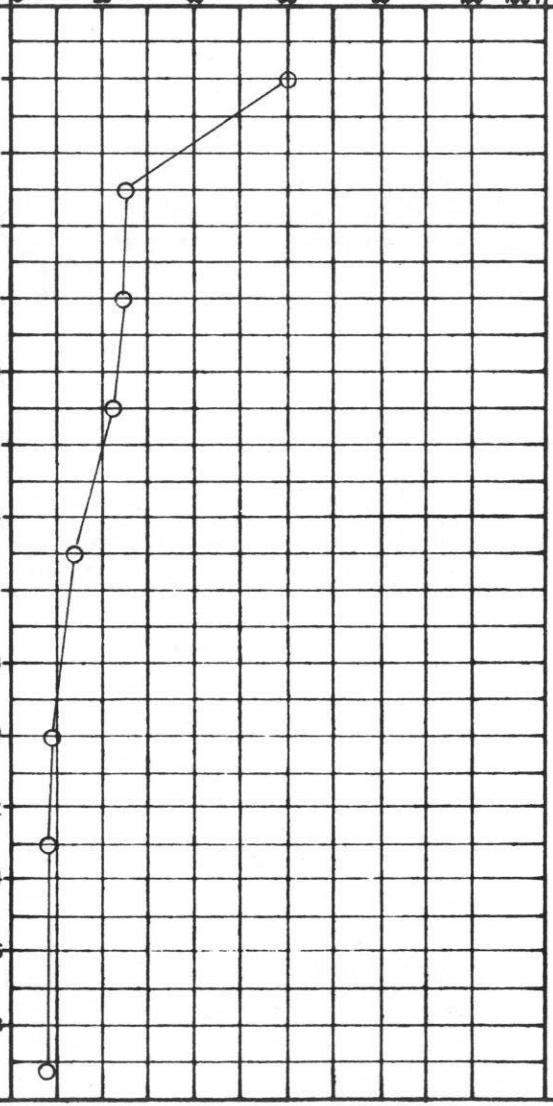
TEST HOLE 26

MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.3'		High Ice					Sat.	
2														
4					CL	CLAY -Sandy Organic to 4' Silty Low-med. plastic Pebbles		Moderate Ice					Sat.	
6														
8							F						Sat.	
10					CI			Vc - Vr					Wet	
12														
14								Low Ice Content Vx					Moist	
						15' SHALE -Soft								
16														
18														
20						Soft-med. hard							Moist	
22													Moist	
24														
26														
28													Moist	
						30'								

DRY DENSITY (lbs./Ft.³) ▲
WATER CONTENT (% of dry weight) ⊙
ICE CONTENT (% of sample volume) △

PLASTIC LIMIT ├──┤ LIQUID LIMIT



BOTTOM OF HOLE - 30'

DS-14-5-74 b

BORROW PIT 123

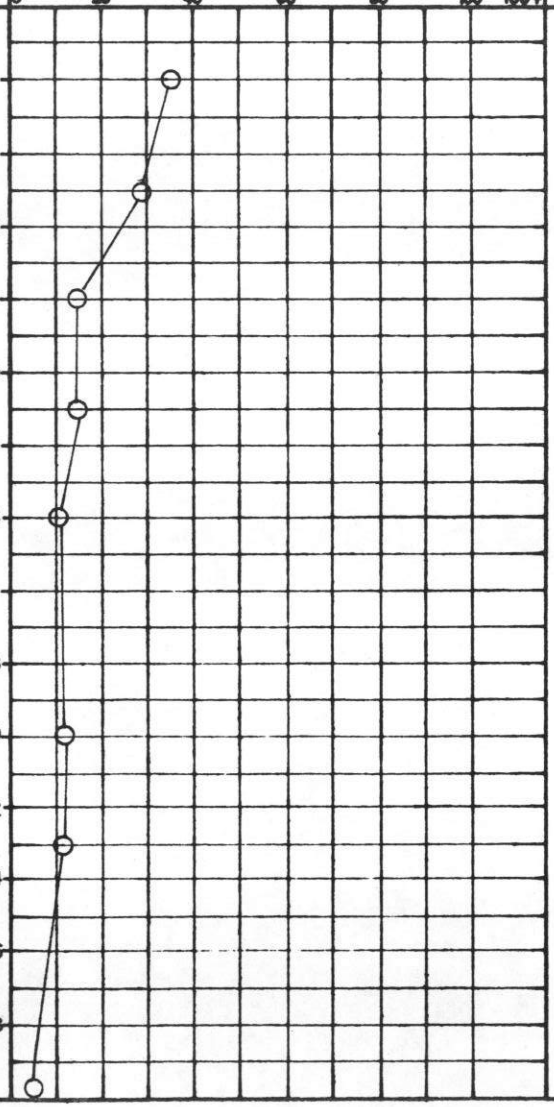
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. B.CONSTANT	DATE DRILLED. 6/3/74	AIRPHOTO NO.	CHAINAGE. 4083 + 00	OFFSET.	TEST HOLE 27
TECH. McINTOSH	RIG. Mayhew #2	SURFACE DRAINAGE. Good	VEGETATION. Spruce Max. 4"	ELEV.	MILE

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.1'		HIGH						
2						ORG. MAT. TO 4'		ICE					MOIST	
4						CLAY - SILTY SANDY PEBBLES		Vs					SAT.	
6														
8							F	LOW					MOIST	
10								ICE					MOIST	
12														
14						14'		CONTENT					MOIST	
16						SHALE - SOFT		Vx						
18														
20													MOIST	
22													MOIST	
24														
26														
28													MOIST	



BOTTOM OF HOLE - 30'

DS-14-5-74 b

BORROW PIT 124

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE.
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.

OFFSET. ELEV.

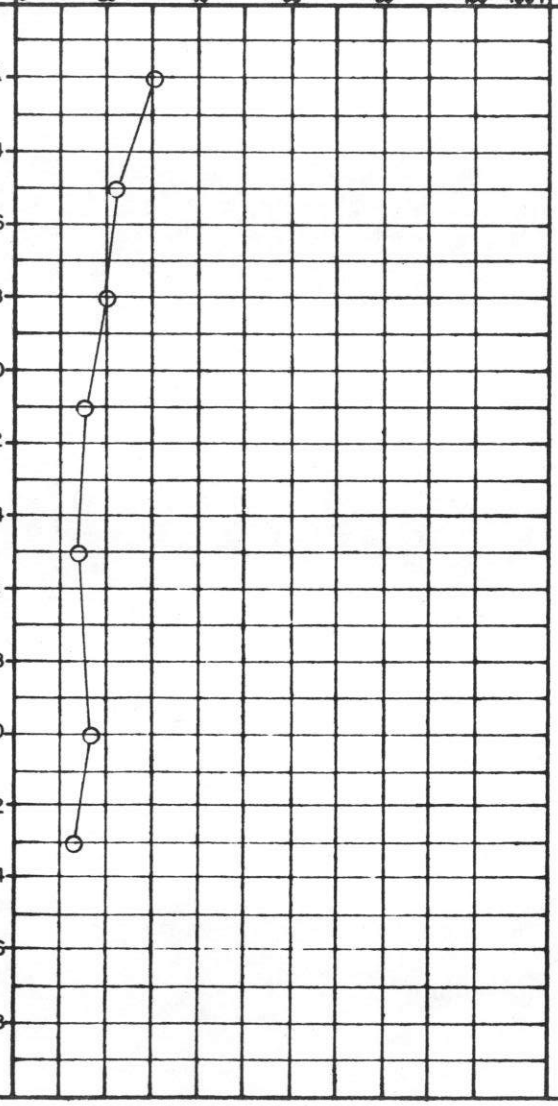
TEST HOLE: 1

MILE: 801.5

▲ DRY DENSITY (lbs./Ft.³)
⊙ 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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'								
2					CL	CLAY -Silty Organic to 4' Sandy Pebbles Low-med. plastic		Moderate Ice					Moist	
4														
6													Sat.	
8								Vc - Vr					Moist	
10						Gravelly	F							
12					CI			Low Ice					Moist	
14														
16													Moist	
18								Vx						
20						Pebbles							Moist	
22														
24						Gravelly 25'							Moist	
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 124

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE.
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.

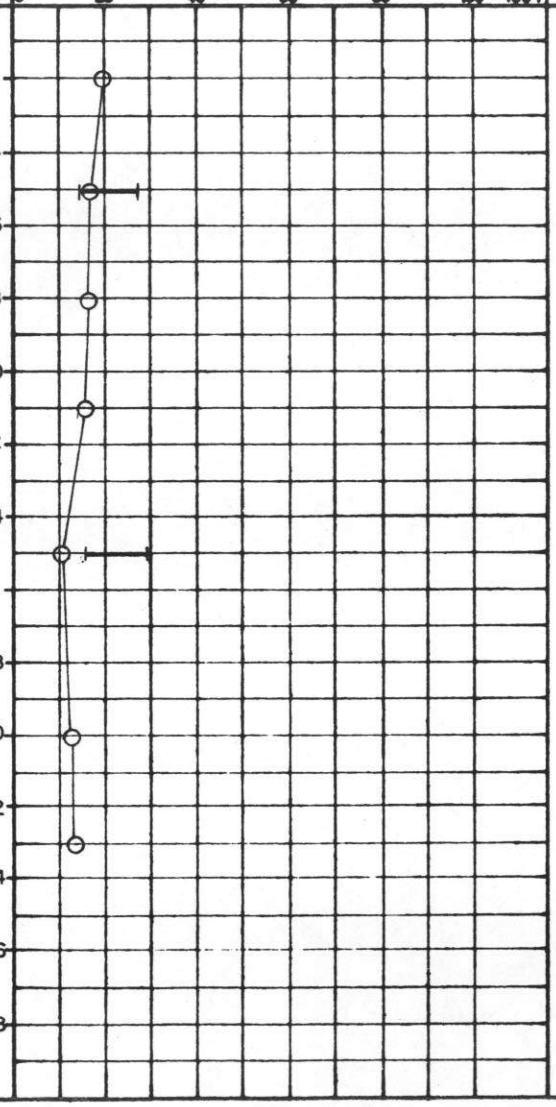
OFFSET. ELEV.

TEST HOLE 2

MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT
					Pt	PEAT 1'							
2						CLAY -Organic mat. to 4' Sandy Silty Pebbles Low-med. plastic		Low					Moist
4													
6								Ice					Moist
8								Content					Moist
10					CI		F						Moist
12													
14								Vx					
16													Damp
18													
20													Damp
22													
24						Soft Shale frags. 23'-25'							Damp
						25'							
26						BOTTOM OF HOLE - 25'							
28													



DS-14-5-74 b

BORROW PIT 124

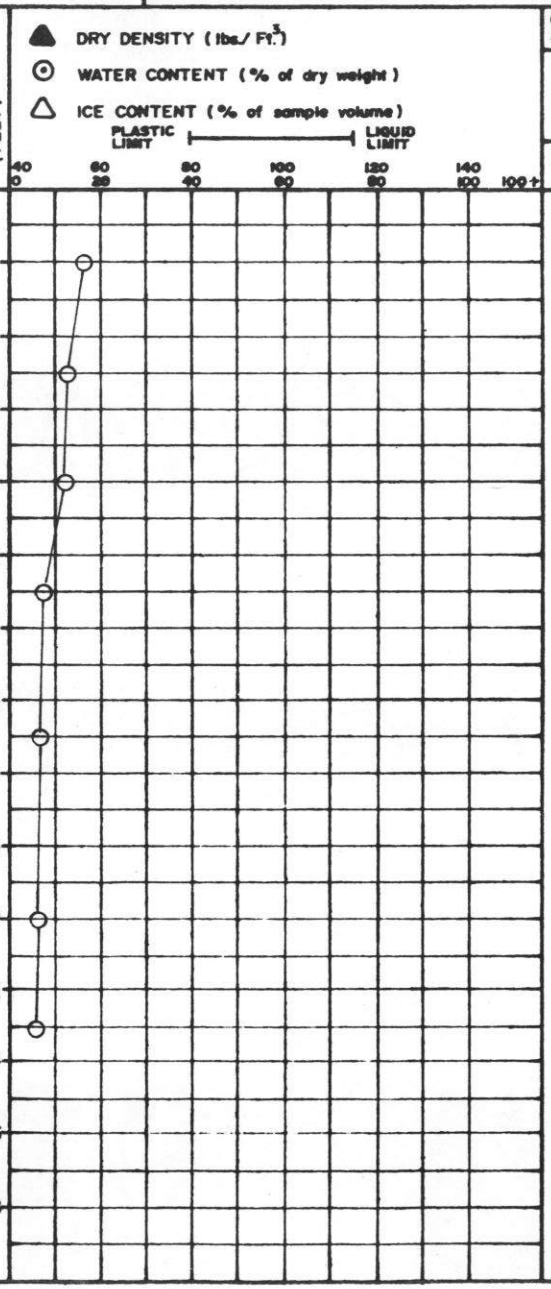
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 3
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.	ELEV.	MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT —1'		Low						
2						CLAY -Silty Sandy Pebbles		Ice					Moist	
4					CI	Soft Shale frags. 5'-8'		Content					Moist	
6														
8						—8'		Vx					Wet	
						SHALE -Soft	F							
10								Frozen					Moist	
12														
14						SHALE-SILTSTONE-SANDSTONE -Soft-hard		Nbn					Damp	
16														
18														
20													Damp	
22													Humid	
24														
						—25'								
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 124

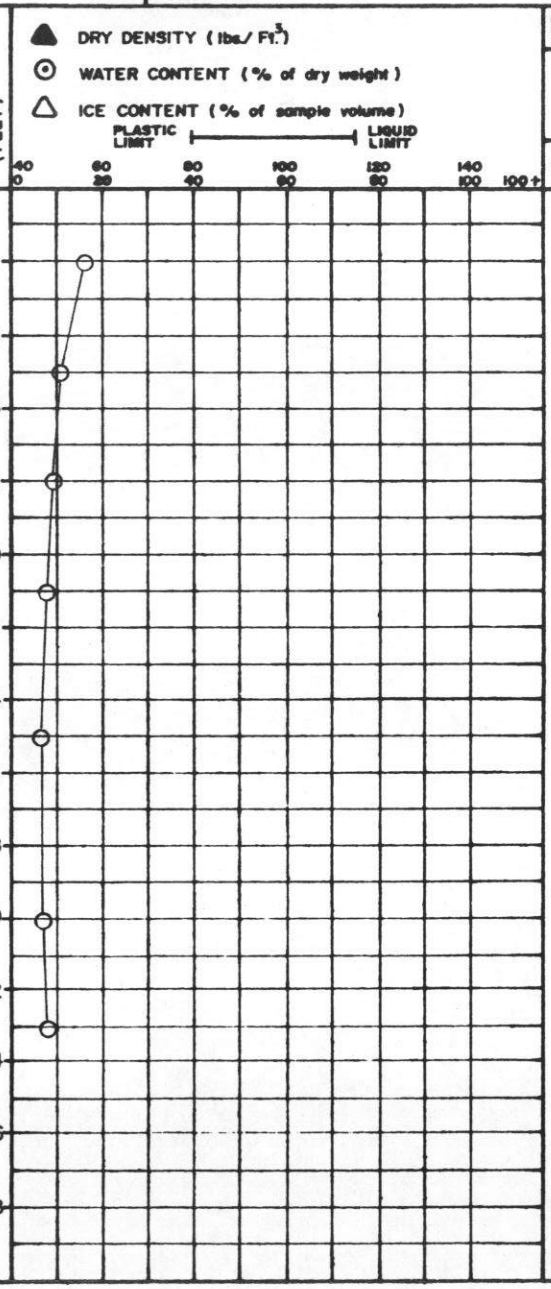
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 4		
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.
ELEV.	MILE 801.5		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 1'		Low						
2						CLAY -Sandy Silty Pebbles		Ice					Moist	
4					CL	Low plastic		Content					Damp	
6						Gravelly								
8						— 8'		Vx					Damp	
10						SHALE -Soft to med. hard	F	Frozen					Humid	
12								Nbn						
14													Humid	
16														
18														
20													Humid	
22													Humid	
24														
						— 25'								
26						BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 124

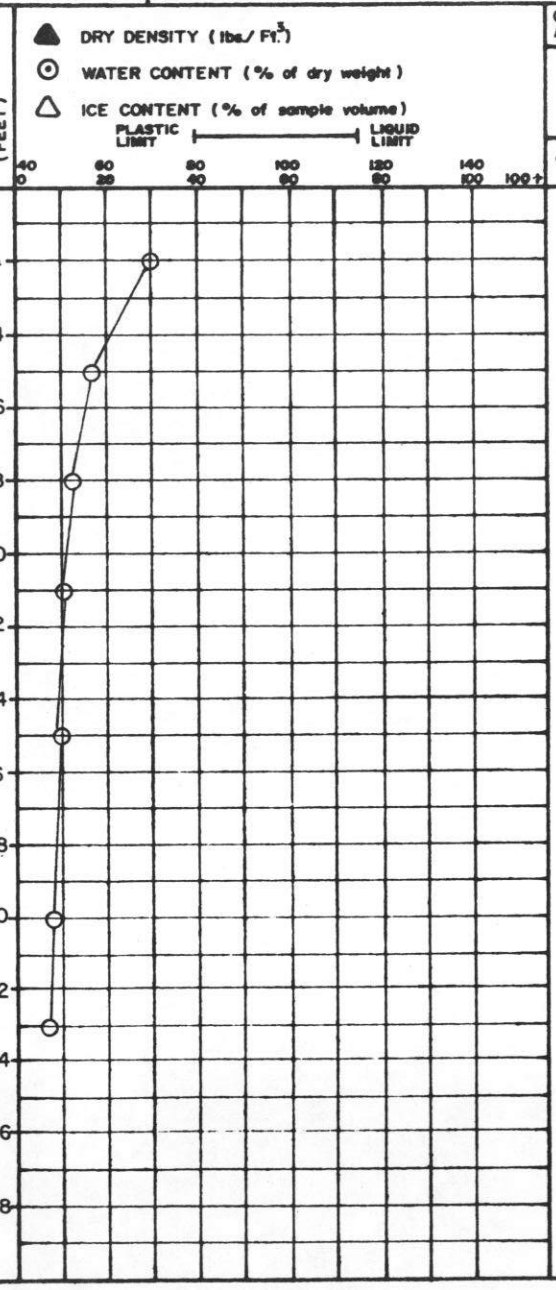
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 1/3/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 5		
TECH. JOHNSON	RIG. MAYHEW - #2	SURFACE DRAINAGE.	VEGETATION.
ELEV.	MILE 801.5		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		Moderate						
2					CL	CLAY -Sandy Silty Organic to 4' Low-med. plastic		To					Moist	
4					CI			Low Ice					Moist	
6								Content						
8						8'		Vc-Vr-Vx					Moist	
10						SHALE -Soft	F	Frozen					Moist	
12														
14								Nbn					Damp	
16						Soft-med. hard								
18														
20													Humid	
22													Humid	
24														
26						25' BOTTOM OF HOLE - 25'								
28														



DS-14-5-74 b

BORROW PIT 124

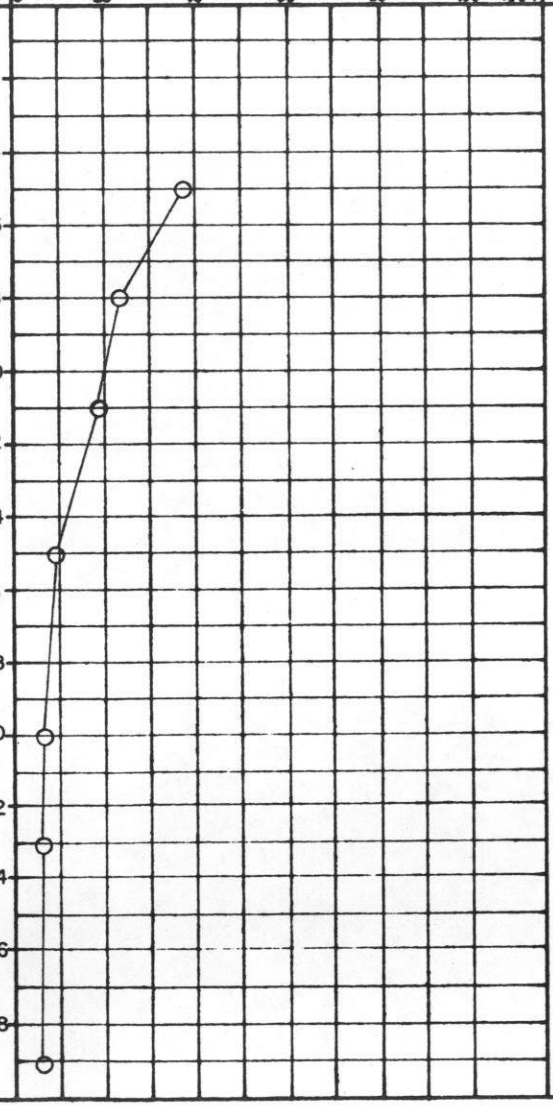
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 2/3/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 6
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. GOOD	VEGETATION. SPRUCE MAX. 3"	ELEV.	MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT		Vs High Ice					Free Water	
4'						CLAY -Silty Med-high plastic							Wet	
					CI	Pebbles		Moderate To Low Ice Content					Wet	
					CH	Sandy silty Pebbles	F						Moist	
15'						SHALE -Soft		Vc-Vr-Vs					Damp	
						Soft-med. hard		Frozen Nbn					Damp	
						Med. hard							Humid	
30'						Med. hard - hard							Humid	



BOTTOM OF HOLE - 30'

DS-14-5-74 b

BORROW PIT 124

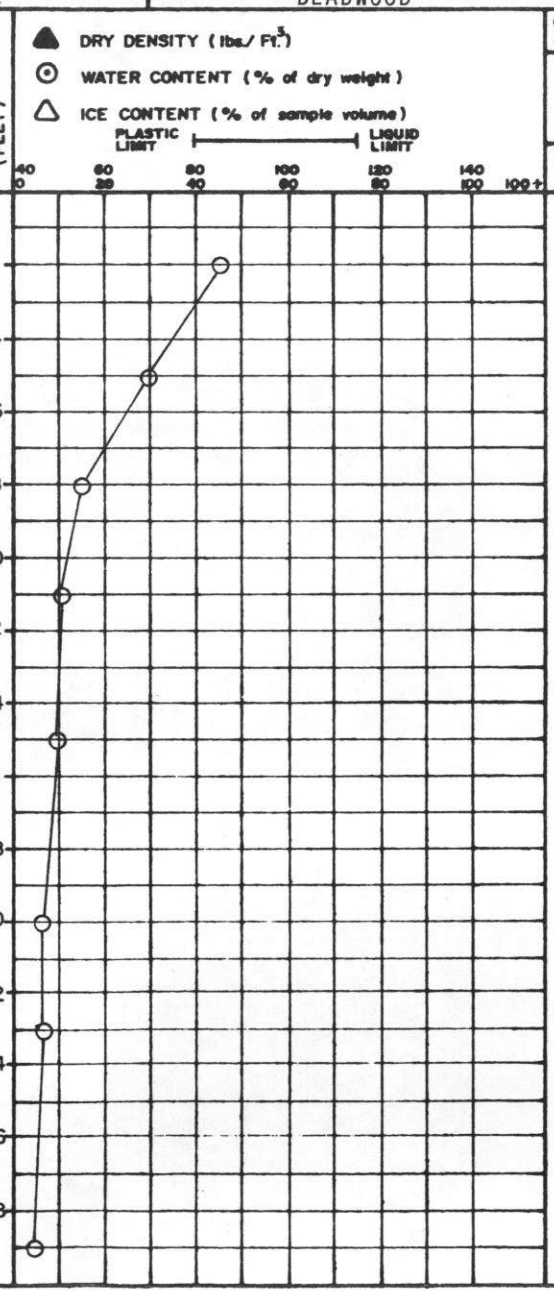
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 2/3/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 7		
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. DEADWOOD
ELEV.	MILE 801.5		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT — 1'		High						
2					OL ML	SILT -Organic Clayey		Ice					Wet	
								Vs						
4						— 4'								
6					CI	CLAY -Sandy Silty Med. plastic		Low Ice					Wet	
8						Soft Shale frags. 8'-10'		Content					Moist	
								Vx						
10						— 10'	F							
12						SHALE -Soft							Moist	
14														
16						Soft-med. hard		Frozen					Humid	
18														
								Nbn						
20													Humid	
22														
24													Humid	
26														
28														
						30'							Humid	



BOTTOM OF HOLE - 30'

DS-14-5-74 b

BORROW PIT 124

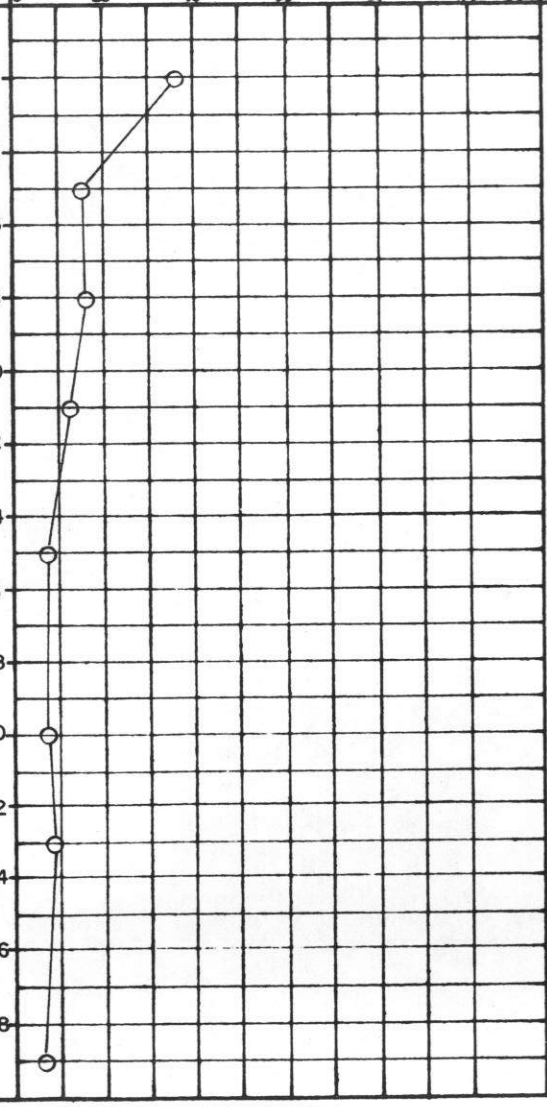
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 2/3/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 8
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. DEADWOOD	ELEV.	MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1'		High						
2					ML	SILT-Organic Clayey		Ice					Moist	
					CL	CLAY-Silty		Vs						
4						4'								
6					CL	CLAY -Sandy Silty Pebbles Low-med. plastic	F	Low Ice Content					Moist	
8													Moist	
10													Moist	
12					CI	Gravelly		Vx						
14						13.5'								
16						SHALE -Soft-med. hard Sandstone-Siltstone		Frozen					Humid	
18								Nbn						
20													Humid	
22													Damp	
24						SHALE -Soft-med. hard								
26														
28						Soft-hard 30'							Humid	



BOTTOM OF HOLE - 30'

DS-14-5-74 b

BORROW PIT 124

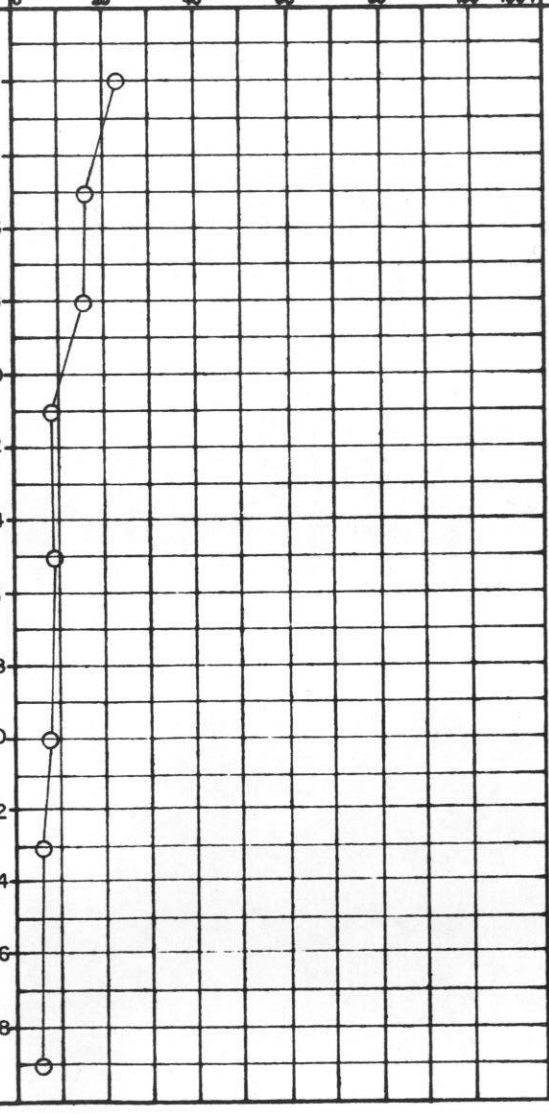
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 2/3/74	AIRPHOTO NO.	CHAINAGE.
OFFSET.	TEST HOLE 9		
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. DEADWOOD
ELEV.	MILE 801.5		

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT .8'		Moderate						
2						CLAY -Sandy Silty		To					Moist	
4					CL	Low-med. plastic Gravelly		Low						
								Ice					Moist	
6					CI			Content						
8						Pebbles & Shale Fragments	F	Vc - Vr					Moist	
								Vx						
10						10.5'								
													Damp	
12						SHALE & SILTSTONE -Soft to hard								
14								Frozen						
													Damp	
16						Soft-med. hard								
								Nbn						
18														
20													Humid	
22														
						Soft-hard							Humid	
24														
26														
28														
													Humid	
						30'								



BOTTOM OF HOLE - 30'

DS-14-5-74 b

BORROW PIT 124

DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

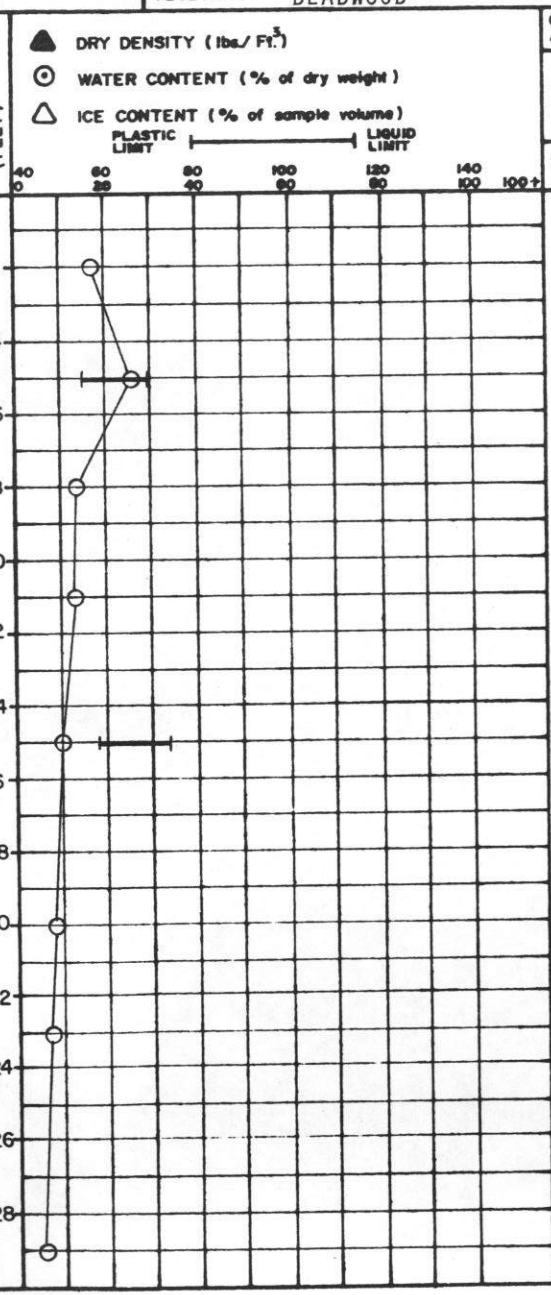
DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 2/3/74	AIRPHOTO NO.	CHAINAGE.
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. DEADWOOD

OFFSET. ELEV. TEST HOLE 10 MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.5'		Low						
2								To					Moist	
						CLAY -Sandy Silty Pebbles Low-med. plastic		Moderate						
4					CL			Ice					Wet	
6								Content						
					CI	Shale fragments		Vx						
8								Vc - Vr					Moist	
10						10'								
						SHALE -Soft SILTSTONE -Hard							Moist	
12														
14													Moist	
16						SHALE -Soft								
18								Frozen						
20						Soft-med. hard		Nbn					Damp	
22													Humid	
24														
26														
28						Soft - hard 30'							Humid	



BOTTOM OF HOLE - 30'

DS-14-5-74 b

BORROW PIT 124

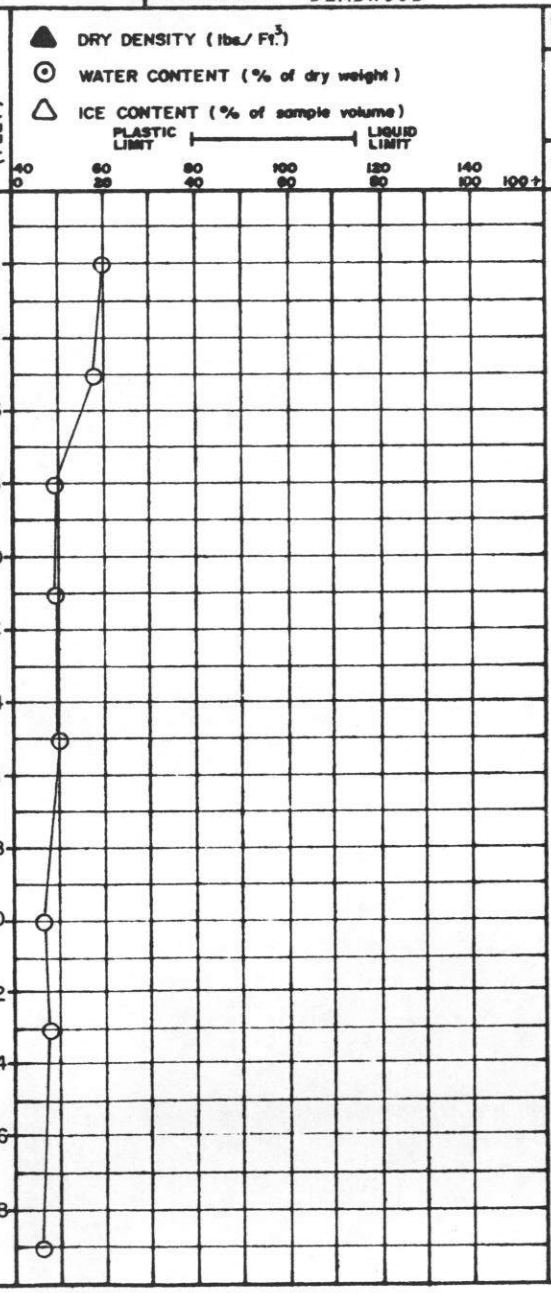
DEPARTMENT OF PUBLIC WORKS, CANADA
MACKENZIE HIGHWAY

DRILL HOLE REPORT

SITE: SECTION D

FIELD ENG. N. BURGESS	DATE DRILLED. 2/3/74	AIRPHOTO NO.	CHAINAGE.	OFFSET.	TEST HOLE 11
TECH. McINTOSH	RIG. MAYHEW - #2	SURFACE DRAINAGE. FAIR	VEGETATION. DEADWOOD	ELEV.	MILE 801.5

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 %	RELATIVE THAWED MOISTURE CONTENT	REMARKS
					Pt	PEAT 1.1'		Low						
2						CLAY		Ice					Moist	
4					CI	-Silty Pebbles Med. plastic		Vx						
								Content					Moist	
6						Gravelly	F							
						7'								
8						SHALE -Soft							Moist	
10													Damp	
12						Soft-med. hard								
14								Frozen						
16								Nbn					Damp	
18														
20													Damp	
22						Soft-hard								
24													Damp	
26														
28														
						30'							Humid	



BOTTOM OF HOLE - 30'

DS-14-5-74 b