

HIGHWAY CONSTRUCTION

km 1949.6 to km 1966  
ALASKA HIGHWAY, Y.T.

VOLUME 1  
CENTRELINE TESTING

This Data Package prepared for project viewing:

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GR-01-160

GEOTECHNICAL INVESTIGATION  
HIGHWAY CONSTRUCTION  
km 1949.6 to km 1966, ALASKA HIGHWAY, Y.T.  
CENTRELINE, GRANULAR & BORROW TESTING

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Investigation notes, classification methods and legends

VOLUME 1

CENTRELINE TESTING

Subsurface exploration and testing report sheets are provided. The reports for the centreline and backslope holes are arranged according to project location, starting at km 1949+625 and increasing to km 1965+595.

**1990 testing**

TEST HOLES 87 to 138	shown with prefix 107- and 109-
TEST HOLES 180 to 185	shown with prefix 110-
TEST HOLES 190 to 202	shown with prefix 111-
TEST HOLES 284 to 215	shown with prefix 111-
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TEST HOLES 244 to 247	shown with prefix 112-
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VOLUME 2

GRANULAR TESTING

Subsurface exploration and testing report sheets are provided along with check test results from 1992 pit run production.

**1992 testing**

TEST HOLES 40 to 42, 47 to 49, 52 to 54 & 57 to 58.	shown with prefix 170-
TEST HOLES 59 to 70	shown with prefix 164-

BORROW TESTING

Subsurface exploration and testing report sheets are provided.

**1990 testing**

1950+000 TEST HOLES 186 to 189	shown with prefix 110- and 111-
1952+750 TEST HOLES 203 to 207	shown with prefix 111-
1953+960 TEST HOLES 216 to 217	shown with prefix 111-
1955+425 TEST HOLES 222 to 224	shown with prefix 111-
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1959+000 TEST HOLES 272 to 273	shown with prefix 114-
1961+000 TEST HOLES 290 to 293	shown with prefix 115-
1963+600 TEST HOLES 309 to 312	shown with prefix 116-

GEOTECHNICAL INVESTIGATION  
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## **INTRODUCTION**

GEOTECHNICAL INVESTIGATION  
HIGHWAY CONSTRUCTION  
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CENTRELINE, GRANULAR & BORROW TESTING

GEOTECHNICAL INVESTIGATION DATA

This geotechnical investigation data is provided to assist in the interpretation of soil conditions encountered within this project area. The data presented was prepared solely for Departmental designing and estimating purposes.

The description of material/soil description shown on the subsurface exploration and test reports is a textural description based on identification of retrieved material by the field drilling technician at the time of investigation. This description may be modified following laboratory testing and classification of selected samples. The system used is based on the ASTM standards for identification and classification of soils. Permafrost classifications and groundwater levels are indicated as detected at time of drilling, unless otherwise noted. Changes in moisture or frost conditions should be anticipated depending on the season, time lapse or amount of development work done since the date of investigation.

The sample identification and laboratory testing data is provided to give detailed physical properties of selected retrieved samples within the subsurface profile. These tests may be conducted on disturbed samples and may exhibit properties different from the native materials. The sample classification may also vary from the soil description due to variations within the sampled strata or because of changes resulting from the sampling method or excavation equipment used.

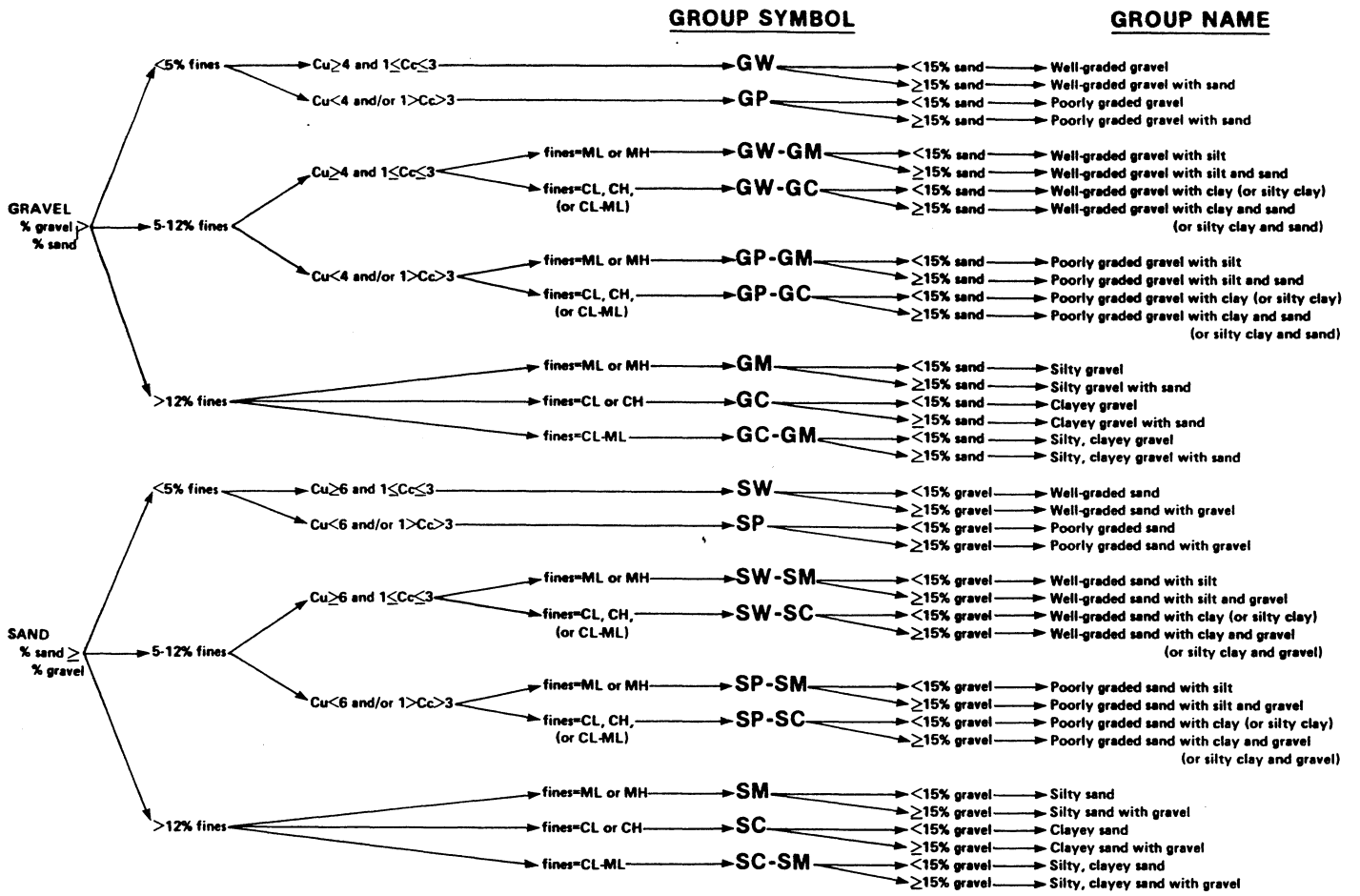
These descriptions are not intended to be conclusive as to the nature of any material encountered, or to conditions between or around the test borings/pits.

It is recommended that a site inspection, combined with consideration of the regional geology and climatic conditions be conducted. An evaluation of the investigation methods and development work done since the time of investigation should be done prior to interpreting the subsurface conditions for construction purposes.

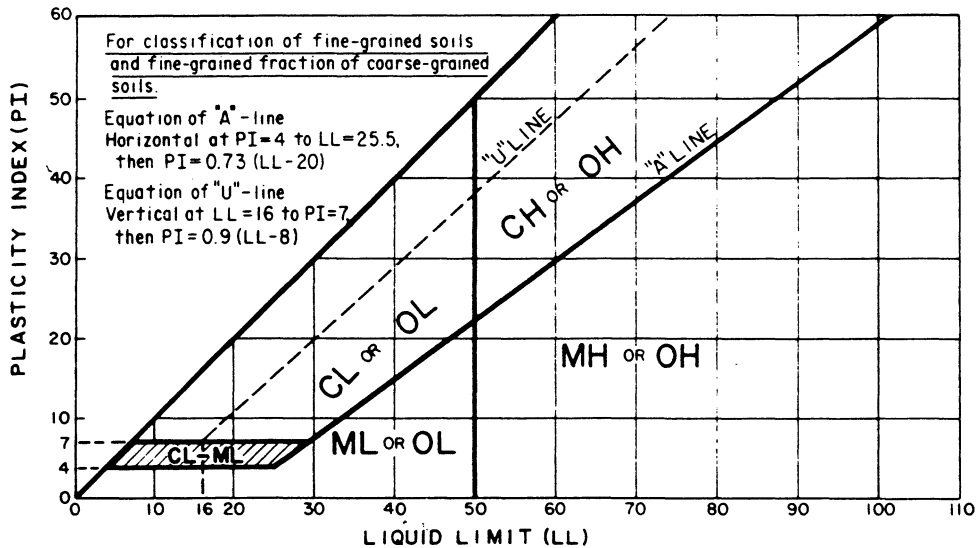
CRITERIA FOR ASSIGNING GROUP SYMBOLS AND GROUP NAMES USING LABORATORY TESTS <sup>a</sup>				SOIL CLASSIFICATION	
				GROUP SYMBOL	GROUP NAME <sup>b</sup>
COARSE-GRAINED SOILS more than 50% retained on No. 200 sieve	GRAVELS More than 50% of coarse fraction retained on No. 4 sieve	CLEAN GRAVELS Less than 5% fines <sup>c</sup>	$C_u \geq 4$ and $1 \leq C_c \leq 3$ <sup>e</sup>	GW	Well-graded gravel <sup>f</sup>
			$C_u < 4$ and/or $1 > C_c > 3$ <sup>e</sup>	GP	Poorly graded gravel <sup>f</sup>
		GRAVELS WITH FINES More than 12% fines <sup>c</sup>	Fines classify as ML or MH	GM	Silty gravel <sup>f,g,h</sup>
	Fines classify as CL or CH		GC	Clayey gravel <sup>f,g,h</sup>	
	SANDS 50% or more of coarse fraction passes No. 4 sieve	CLEAN SANDS Less than 5% fines <sup>d</sup>	$C_u \geq 6$ and $1 \leq C_c \leq 3$ <sup>e</sup>	SW	Well-graded sand <sup>i</sup>
			$C_u < 6$ and/or $1 > C_c > 3$ <sup>e</sup>	SP	Poorly graded sand <sup>i</sup>
SANDS WITH FINES More than 12% fines <sup>d</sup>		Fines classify as ML or MH	SM	Silty sand <sup>g,h,i</sup>	
	Fines classify as CL or CH	SC	Clayey sand <sup>g,h,i</sup>		
FINE-GRAINED SOILS 50% or more passed the No. 200 sieve	SILTS AND CLAYS Liquid limit less than 50%	inorganic	PI > 7 and plots on or above "A" line <sup>j</sup>	CL	Lean clay <sup>k,l,m</sup>
			PI < 4 or plots below "A" line <sup>j</sup>	ML	Silt <sup>k,l,m</sup>
		organic	$\frac{\text{Liquid limit - oven dried}}{\text{Liquid limit - not dried}} < 0.75$	OL	Organic clay <sup>k, l, m, n</sup> Organic silt <sup>k, l, m, o</sup>
	SILTS AND CLAYS Liquid limit 50% or more	inorganic	PI plots on or above "A" line	CH	Fat clay <sup>k,l,m</sup>
			PI plots below "A" line	MH	Elastic silt <sup>k,l,m</sup>
		organic	$\frac{\text{Liquid limit - oven dried}}{\text{Liquid limit - not dried}} < 0.75$	OH	Organic clay <sup>k, l, m, p</sup> Organic silt <sup>k, l, m, q</sup>
Highly organic soils		Primarily organic matter, dark in color, and organic odor		PT	Peat

- Based on the material passing the 3-in (75-mm) sieve.
- If field sample contained cobbles and/or boulders, add "with cobbles and/or boulders" to group name.
- Gravels with 5 to 12% fines require dual symbols  
GM-GM well graded gravel with silt  
GM-GC well graded gravel with clay  
GP-GM poorly graded gravel with silt  
GP-GC poorly graded gravel with clay
- Sands with 5 to 12% fines require dual symbols  
SM-SM well graded sand with silt  
SM-SC well graded sand with clay  
SP-SM poorly graded sand with silt  
SP-SC poorly graded sand with clay
- $C_u = D_{60}/D_{10}$        $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$
- If soil contains > 15% sand, add "with sand" to group name.
- If fines classify as CL-ML, use dual symbol GC-GM, SC-SM.
- If fines are organic, add "with organic fines" to group name.
- If soil contains > 15% gravel, add "with gravel" to group name.
- If Atterberg limits plot in hatched area, soil is a CL-ML, silty clay.
- If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel" whichever is predominant.
- If soil contains > 30% plus No. 200, predominantly sand, add "sandy" to group name.
- If soil contains > 30% plus No. 200, predominantly gravel, add "gravelly" to group name.
- PI > 4 and plots on or above "A" line.
- PI < 4 or plots below "A" line.
- PI plots on or above "A" line.
- PI plots below "A" line.

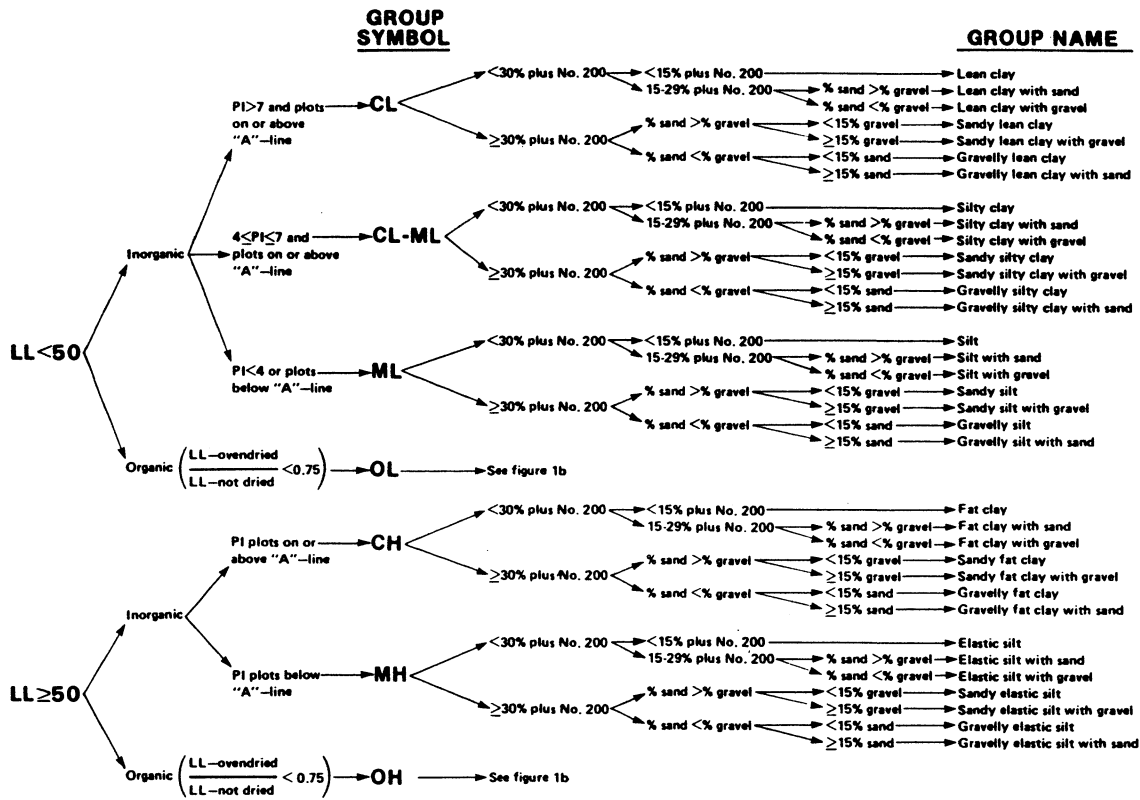
*Soil classification chart*



Flow chart for classifying coarse-grained soil.



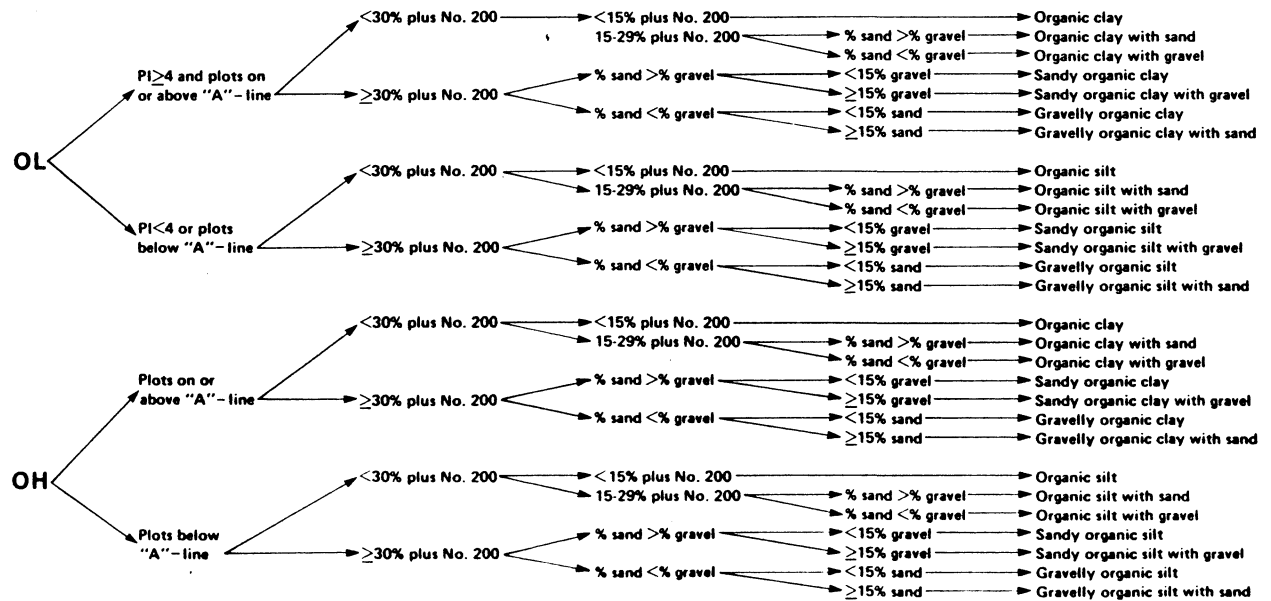
Plasticity chart.



*Flow chart for classifying fine-grained soil.*

**GROUP SYMBOL**

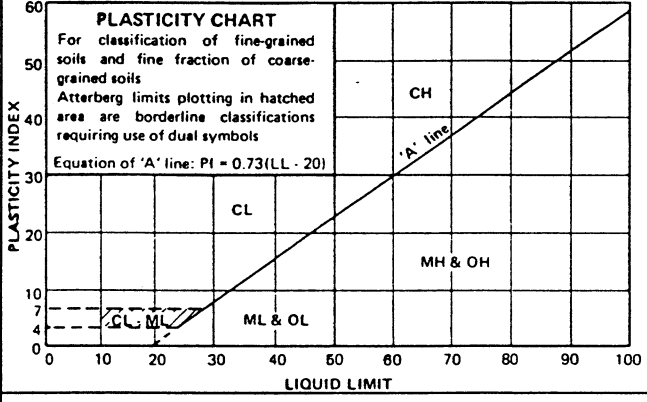
**GROUP NAME**



*Flow chart for classifying organic soil.*

# UNIFIED SOIL CLASSIFICATION†

MAJOR DIVISIONS		GROUP SYMBOLS	TYPICAL NAMES	CLASSIFICATION CRITERIA		
<b>COARSE-GRAINED SOILS</b> <small>More than 50% retained on No. 200 sieve*</small>	<b>GRAVELS</b> <small>50% or more of coarse fraction retained on No. 4 sieve</small>	CLEAN GRAVELS	GW	Well-graded gravels and gravel-sand mixtures, little or no fines	$C_u = D_{60}/D_{10}$ Greater than 4 $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between 1 and 3 Not meeting both criteria for GW Atterberg limits plot below 'A' line and plasticity index less than 4 Atterberg limits plot above 'A' line and plasticity index greater than 7	
		GRAVELS WITH FINES	GP	Poorly-graded gravels and gravel-sand mixtures, little or no fines		
		GRAVELS WITH FINES	GM	Silty gravels, gravel-sand-silt mixtures		
		GRAVELS WITH FINES	GC	Clayey gravels, gravel-sand clay mixtures		
	<b>SANDS</b> <small>More than 50% of coarse fraction passes No. 4 sieve</small>	CLEAN SANDS	SW	Well-graded sands and gravelly sands, little or no fines	<small>Classification on basis of percentage of fines GW, GP, SW, SP Less than 5% pass No. 200 sieve More than 12% pass No. 200 sieve 5% to 12% pass No. 200 sieve</small> Borderline classification requiring use of dual symbols $C_u = D_{60}/D_{10}$ Greater than 6 $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between 1 and 3 Not meeting both criteria for SW Atterberg limits plot below 'A' line and plasticity index less than 4 Atterberg limits plot above 'A' line and plasticity index greater than 7	
			SP	Poorly-graded sands and gravelly sands, little or no fines		
		SANDS WITH FINES	SM	Silty sands, sand-silt mixtures		
			SC	Clayey sands, sand-clay mixtures		
			SILTS AND CLAYS	ML		Inorganic silts, very fine sands, rock flour, silty or clayey fine sands
				CL		Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
SILTS AND CLAYS	OL	Organic silts and organic silty clays of low plasticity				
	MH	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts				
	CH	Inorganic clay of high plasticity, fat clays				
	OH	Organic clays of medium to high plasticity				
HIGHLY ORGANIC SOILS		PT	Peat, muck and other highly organic soils	<small>*Based on the material passing the 3 in. (75 mm) sieve                      †ASTM Designation D 2487, for identification procedure see D 2488</small>		



## GROUND ICE DESCRIPTION

### ICE NOT VISIBLE

GROUP SYMBOLS	SYMBOLS	SUBGROUP DESCRIPTION	
N	Nf	Poorly-bonded or friable	
	Nbn	No excess ice, well-bonded	
	Nbe	Excess ice, well-bonded	

### VISIBLE ICE LESS THAN 50% BY VOLUME

GROUP SYMBOLS	SYMBOLS	SUBGROUP DESCRIPTION	
V	Vx	Individual ice crystals or inclusions	
	Vc	Ice coatings on particles	
	Vr	Random or irregularly oriented ice formations	
	Vs	Stratified or distinctly oriented ice formations	

### VISIBLE ICE GREATER THAN 50% BY VOLUME

ICE	ICE + Soil Type	Ice with soil inclusions	
	ICE	Ice without soil inclusions (greater than 25 mm (1 in.) thick)	

- NOTE:**
- Dual symbols are used to indicate borderline or mixed ice classifications
  - Visual estimates of ice contents indicated on borehole logs  $\pm 5\%$
  - This system of ground ice description has been modified from NRC Technical Memo 79, Guide to the Field Description of Permafrost for Engineering Purposes

**LEGEND**  
 Soil Ice

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## **CENTRELINE TESTING**

SUBSURFACE EXPLORATION AND TEST REPORT ALASKA HIGHWAY PRE-ENGINEERING BOREHOLE No. 108-87

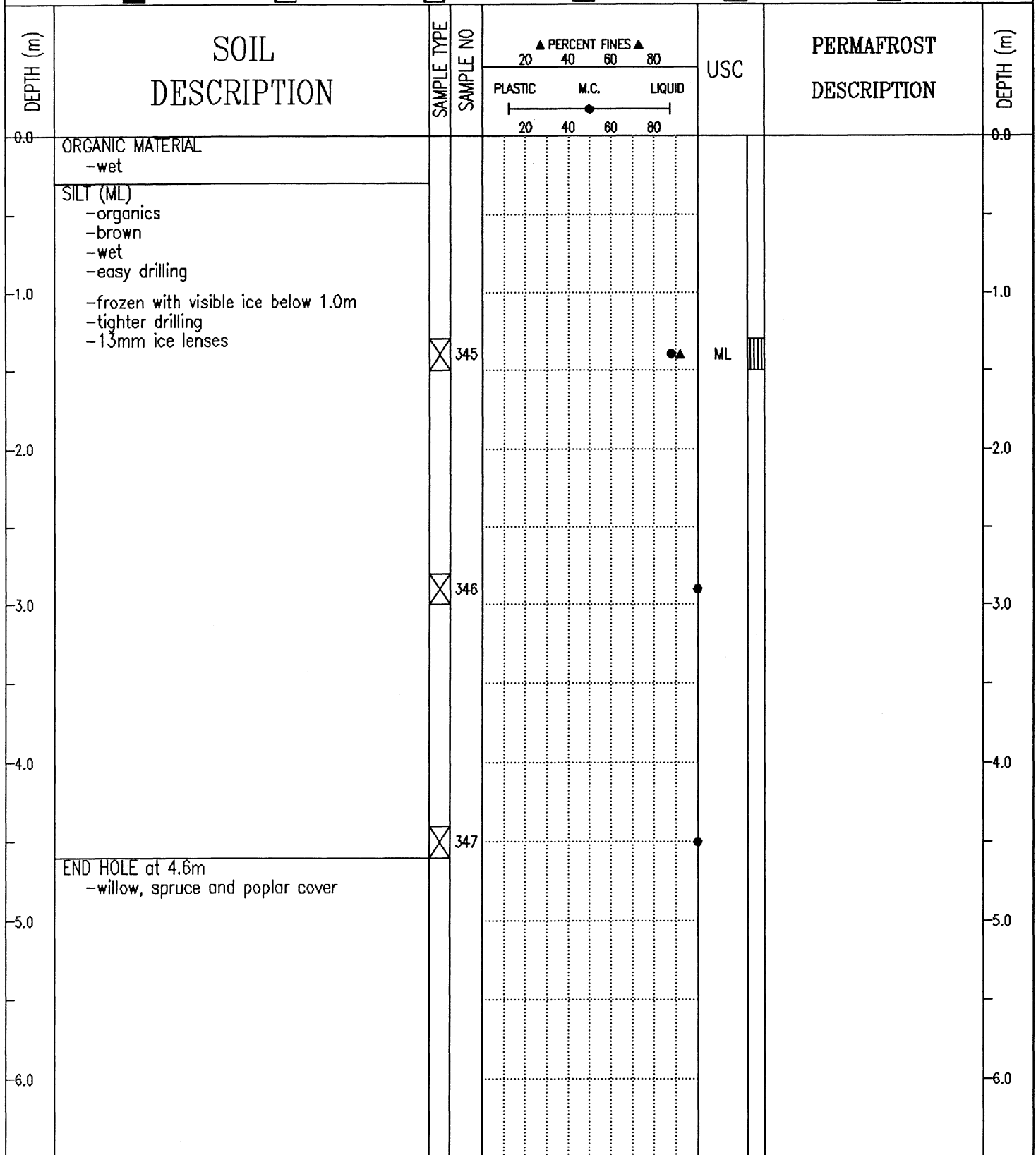
SHAKWAK PROJECT A/H KM 1931.9-1965.5 Project No: SEGMENT 18

DRILL: B61 150mm Dia. SOLID STEM AUGER LOCATION: STA 1949+625 o/s 1m Rt. ELEVATION 0.000 (m)

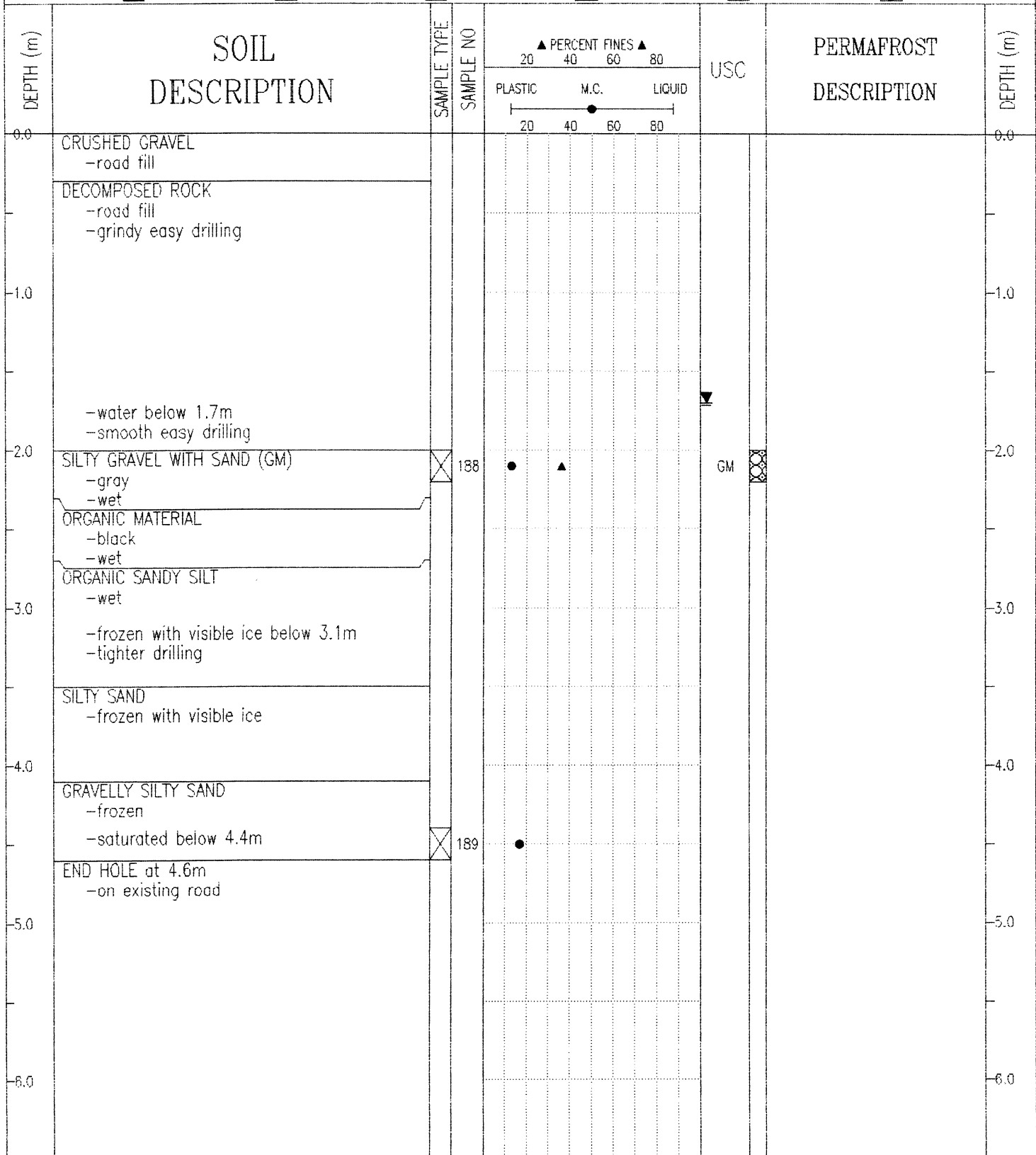
SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	CRUSHED GRAVEL -road fill							0.0	
	DECOMPOSED ROCK -road fill -easy grindy drilling								
-1.0								-1.0	
	SANDY SILT -gray -wet								
-2.0								-2.0	
	ORGANIC MATERIAL -wet								
-3.0	SILT WITH SAND (ML) -gray -frozen with visible ice	<input checked="" type="checkbox"/>	187		●	▲	ML	-3.0	
	END HOLE at 3.2m -refusal -on existing road								
-4.0								-4.0	
-5.0								-5.0	
-6.0								-6.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 110-180
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1949+625 o/s 15m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 108-88
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1949+850 o/s 3m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 110-181
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1949+850 o/s 15m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
0.0 - 1.0	SANDY SILT (ML) -organics -wet -frozen with visible ice below 0.6m -tight drilling							0.0 - 1.0	
1.0 - 2.0								1.0 - 2.0	
2.0 - 3.0	SILTY SAND -frozen -easy drilling  -visible ice below 2.7m							2.0 - 3.0	
3.0 - 4.0								3.0 - 4.0	
4.0 - 4.6	ICE WITH SOIL							4.0 - 4.6	
4.6 - 5.0	SILTY SAND -frozen							4.6 - 5.0	
5.0 - 6.0	END HOLE at 4.6m -spruce cover							5.0 - 6.0	

SUBSURFACE EXPLORATION AND TEST REPORT ALASKA HIGHWAY PRE-ENGINEERING BOREHOLE No. 108-89

SHAKWAK PROJECT A/H KM 1931.9-1965.5 Project No: SEGMENT 18

DRILL: B61 150mm Dia. SOLID STEM AUGER LOCATION: STA 1949+960 o/s 18m Lt. ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	DECOMPOSED ROCK -in rock pit								0.0
	END HOLE at 0.4m -refusal								
-1.0									-1.0
-2.0									-2.0
-3.0									-3.0
-4.0									-4.0
-5.0									-5.0
-6.0									-6.0

Public Works Canada  
Whitehorse, Yukon Territory.

COMPLETION DEPTH 0.4 m COMPLETE 90/10/06  
 LOGGED BY JM DWG NO. Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT ALASKA HIGHWAY PRE-ENGINEERING BOREHOLE No. 108-90

SHAKWAK PROJECT A/H KM 1931.9-1965.5 Project No: SEGMENT 18

DRILL: B61 150mm Dia. SOLID STEM AUGER LOCATION: STA 1950+060 o/s 10m Rt. ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	SILTY GRAVEL WITH SAND (GM) -brown -damp								0.0
1.8	DECOMPOSED ROCK -harder grindy drilling	<input checked="" type="checkbox"/>	190	●	▲		GM		1.8
1.8	END HOLE at 1.8m -refusal								1.8
2.0									2.0
3.0									3.0
4.0									4.0
5.0									5.0
6.0									6.0

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 108-91
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1950+165 o/s 2m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	CRUSHED GRAVEL -road fill							0.0	
	GRAVEL -pitrun road fill								
-1.0	GRAVELLY SILT -gray -damp							-1.0	
	-water below 1.7m								
-2.0								-2.0	
	SILTY GRAVEL -brown -saturated								
-3.0								-3.0	
	ORGANIC MATERIAL								
-4.0	SILTY GRAVEL WITH SAND (GM) -gray -wet -some organics -smooth easy drilling							-4.0	
		<input checked="" type="checkbox"/>	191				GM		
-5.0								-5.0	
-6.0								-6.0	

Public Works Canada  
Whitehorse, Yukon Territory.

COMPLETION DEPTH 7.6 m	COMPLETE 90/10/06
LOGGED BY JM	DWG NO.
	Page 1 of 2

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 108-91
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1950+165 o/s 2m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
6.5	SAND -black -saturated -easy smooth drilling								7.0
7.5	END HOLE at 7.6m -on existing road								8.0
8.5									9.0
9.5									10.0
10.5									11.0
11.5									12.0
12.5									

Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 7.6 m	COMPLETE 90/10/06
	LOGGED BY JM	DWG NO.

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 110-182
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1950+175 o/s 15m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
0.0 - 1.0	SANDY SILT (ML) -organics -brown -frozen below 0.6m								
1.0 - 2.0	-visible ice below 1.2m -tight drilling	<input checked="" type="checkbox"/>	351		▲	●	ML		
2.0 - 3.0	-wet below 2.0m -easy drilling								
3.0 - 4.0		<input checked="" type="checkbox"/>	352		●				
4.0 - 4.6	GRAVELLY SAND -saturated								
4.6 - 5.0	END HOLE at 4.6m -willow and spruce cover	<input checked="" type="checkbox"/>	353		●				
5.0 - 6.0									

SUBSURFACE EXPLORATION AND TEST REPORT ALASKA HIGHWAY PRE-ENGINEERING BOREHOLE No. 108-92

SHAKWAK PROJECT A/H KM 1931.9-1965.5 Project No: SEGMENT 19

DRILL: B61 150mm Dia. SOLID STEM AUGER LOCATION: STA 1950+350 o/s 1m Lt. ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	CRUSHED GRAVEL -road fill							0.0	
0.0 - 1.1	DECOMPOSED ROCK -ROAD FILL -damp -easy drilling  -moist below 1.1m							1.0	
1.1 - 2.0	ORGANIC MATERIAL -wet							2.0	
2.0 - 2.4	SILT WITH SAND (ML) -gray -moist to wet  -saturated below 2.4m							3.0	
2.4 - 2.7	-frozen with visible ice below 2.7m -tighter drilling	<input checked="" type="checkbox"/>	192	●		▲	ML	3.0	
2.7 - 4.6	SILTY SAND -gray -frozen							4.0	
4.6 - 4.6	END HOLE at 4.6m -on existing road	<input checked="" type="checkbox"/>	193					5.0	
4.6 - 6.0								6.0	

Public Works Canada  
Whitehorse, Yukon Territory.

COMPLETION DEPTH 4.6 m

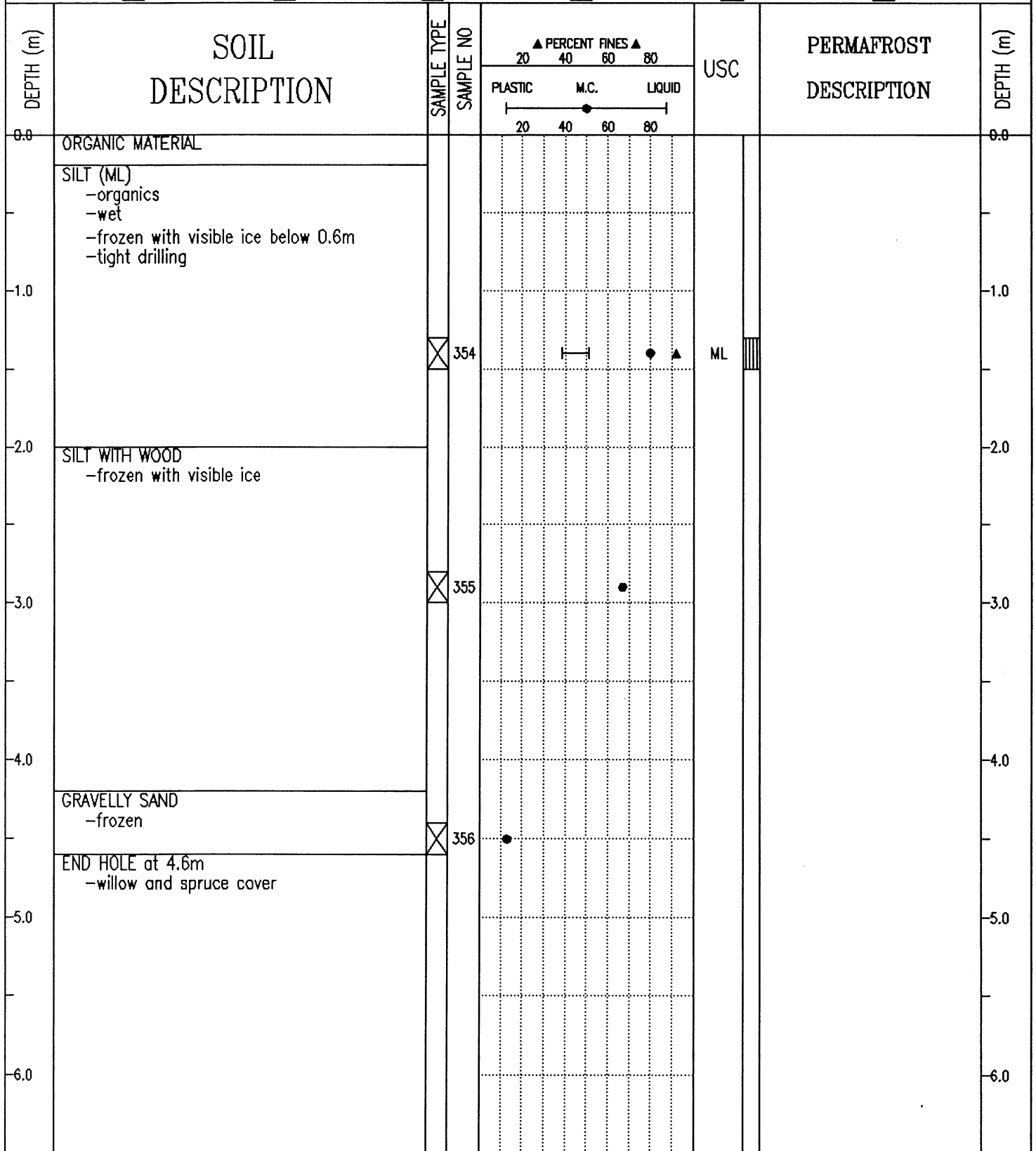
COMPLETE 90/10/06

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DWG NO.

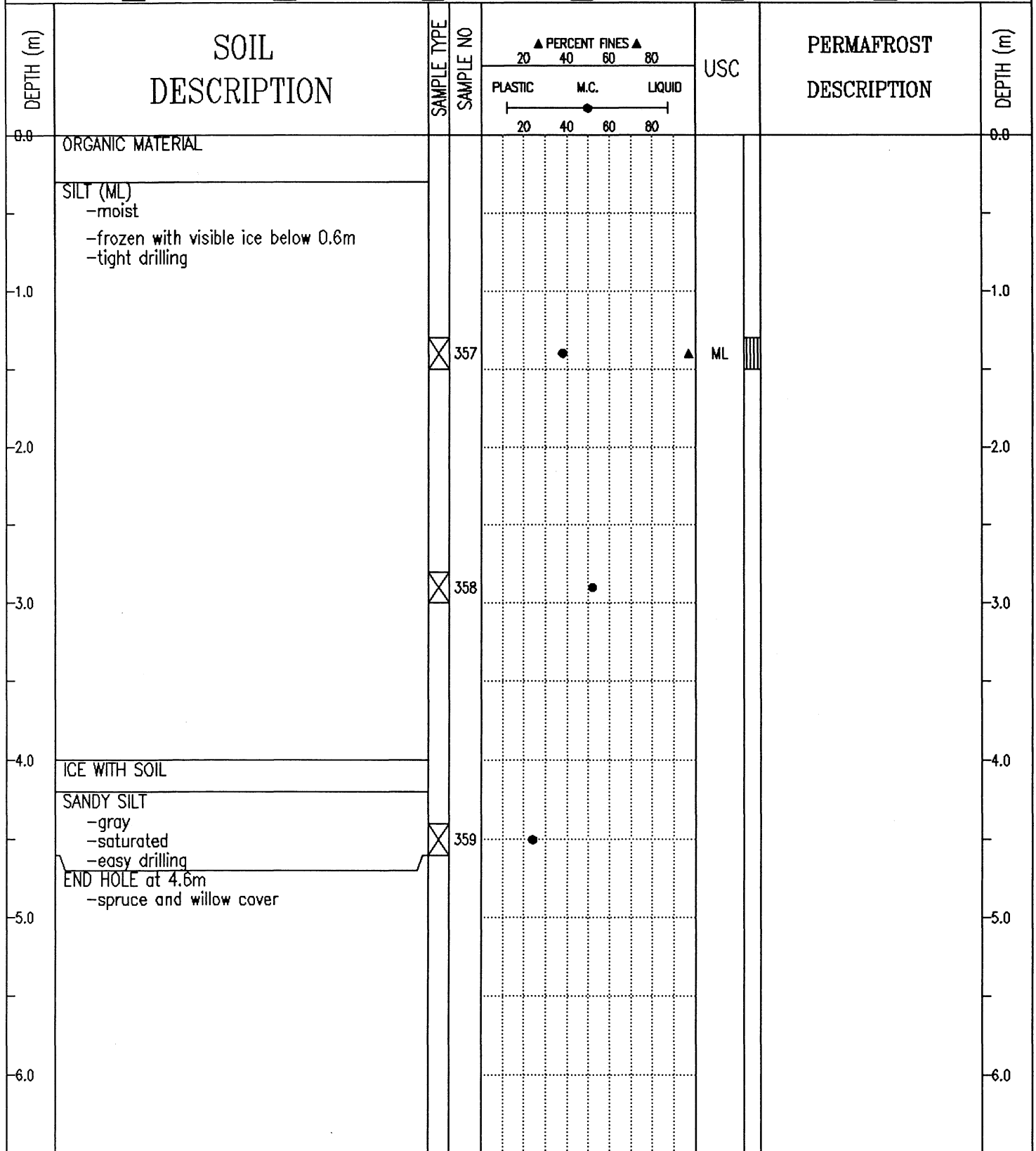
Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 110-183
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1950+350 o/s 14m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

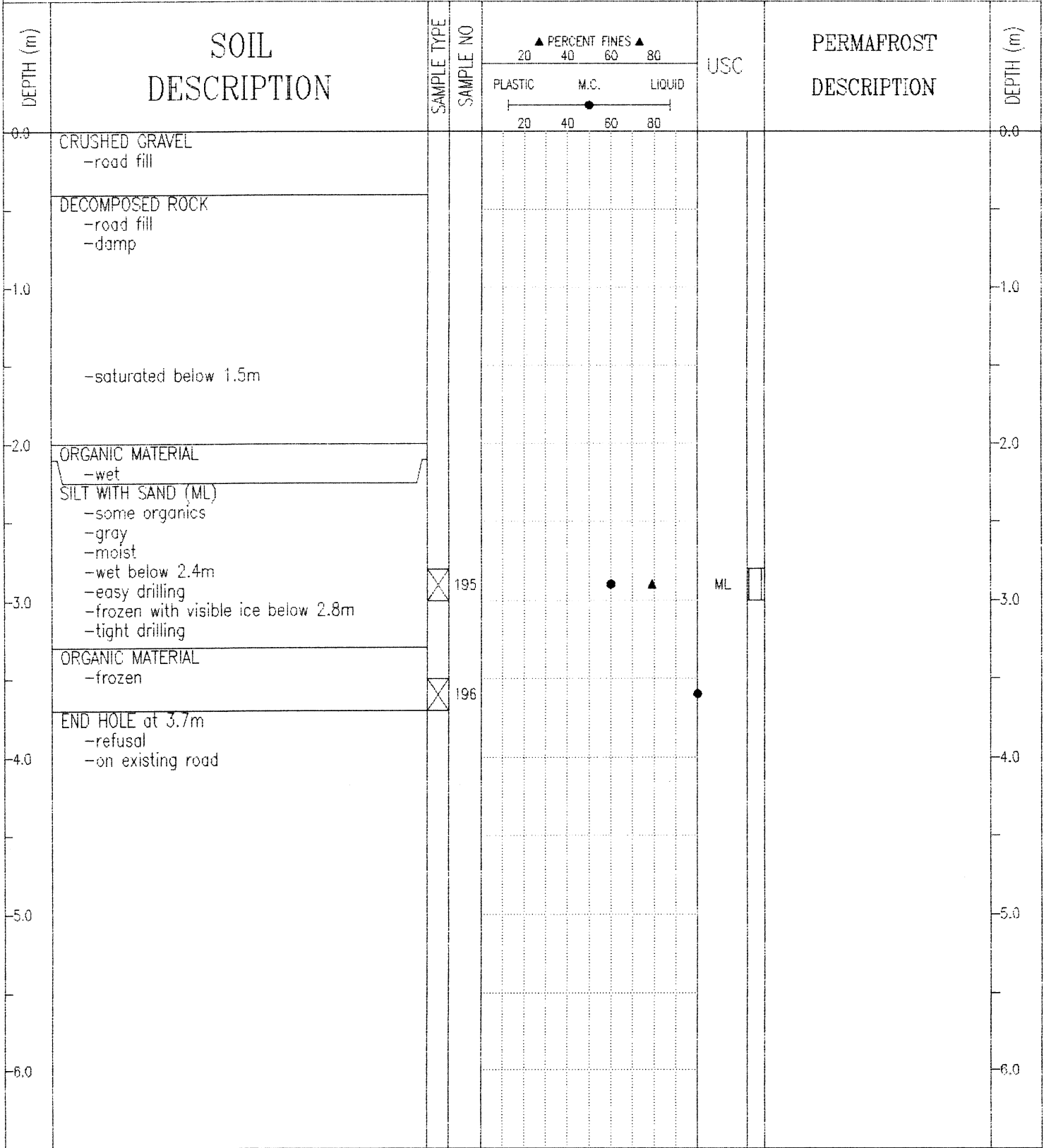


SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		BOREHOLE No. 108-93					
SHAKWAK PROJECT		A/H KM 1931.9-1965.5		Project No: SEGMENT 18					
DRILL: B61 150mm Dia. SOLID STEM AUGER		LOCATION: STA 1950+550 o/s 3m Rt.		ELEVATION 0.000 (m)					
SAMPLE TYPE		RETURN		S.P.T.					
AUGER		BULK		TUBE					
CORE									
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	CRUSHED GRAVEL -road fill							0.0	
	DECOMPOSED ROCK -road fill -damp								
-1.0	-moist below 1.0m							-1.0	
	ORGANIC MATERIAL -wet								
-2.0	SILT (ML) -gray -wet -smooth easy drilling -saturated below 1.7m -frozen with visible ice below 2.2m -tighter drilling	X	194	●		▲	ML	-2.0	
	SILTY SAND -gray -frozen								
-3.0	END HOLE at 3.0m -on existing road							-3.0	
-4.0								-4.0	
-5.0								-5.0	
-6.0								-6.0	
Public Works Canada Whitehorse, Yukon Territory.				COMPLETION DEPTH 3.0 m		COMPLETE 90/10/06			
				LOGGED BY JM		DWG NO.		Page 1 of 1	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 110-184
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1950+560 o/s 8m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



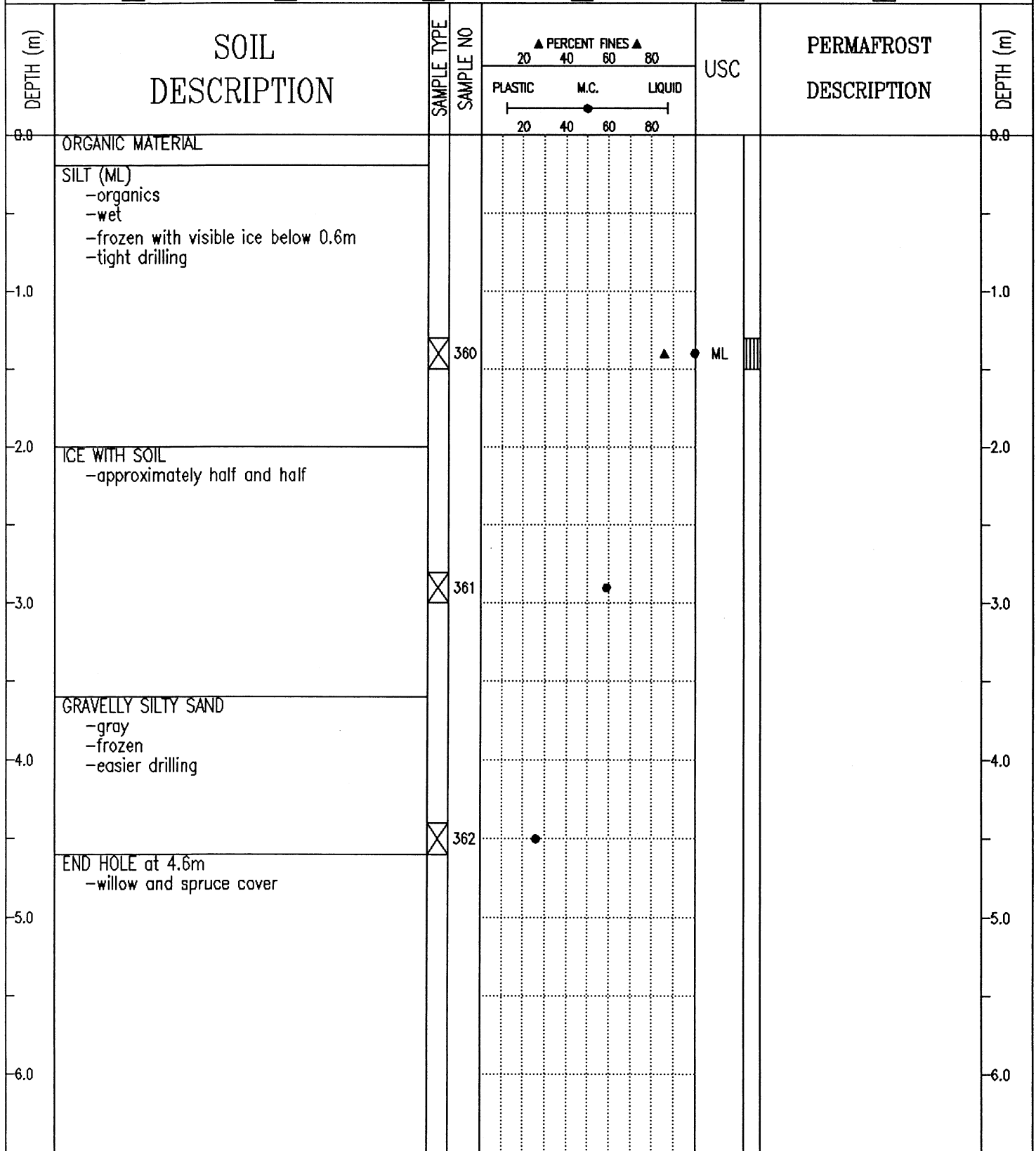
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 108-94A
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 1B
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1950+685 o/s 4m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



Public Works Canada  
Whitehorse, Yukon Territory.

COMPLETION DEPTH 3.7 m	COMPLETE 90/10/06
LOGGED BY JM	DWG NO.
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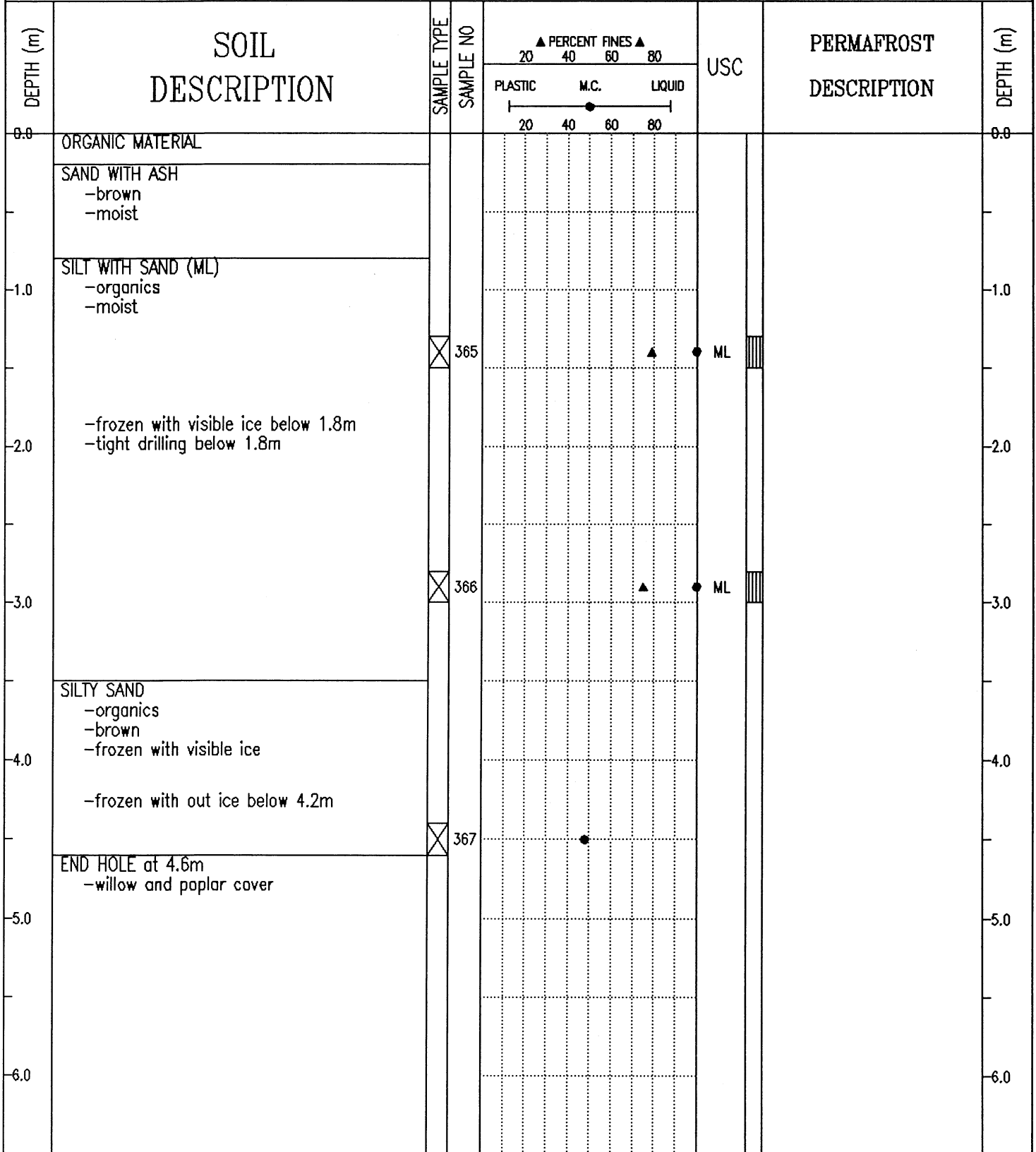
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 110-185
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1950+700 o/s 8m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		BOREHOLE No. 108-94B				
SHAKWAK PROJECT		A/H KM 1931.9-1965.5		Project No: SEGMENT 18				
DRILL: B61 150mm Dia. SOLID STEM AUGER		LOCATION: STA 1950+860 o/s 8m Rt.		ELEVATION 0.000 (m)				
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲		USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.			
0.0	WELL-GRADED GRAVEL WITH SILT AND SAND (GW-GM) -damp -weathered bedrock -easy drilling			20	40	60	80	0.0
1.0								1.0
2.0			197					2.0
3.0	-put on finger bit at 2.5m -easy drilling							3.0
3.2	END HOLE at 3.2m -refusal -on side of existing road		196					3.2
4.0								4.0
5.0								5.0
6.0								6.0
Public Works Canada Whitehorse, Yukon Territory.				COMPLETION DEPTH 3.2 m		COMPLETE 90/10/06		
				LOGGED BY JM		DWG NO.		Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-190
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1950+885 o/s 6m Lt.	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE



Public Works Canada  
Whitehorse, Yukon Territory.

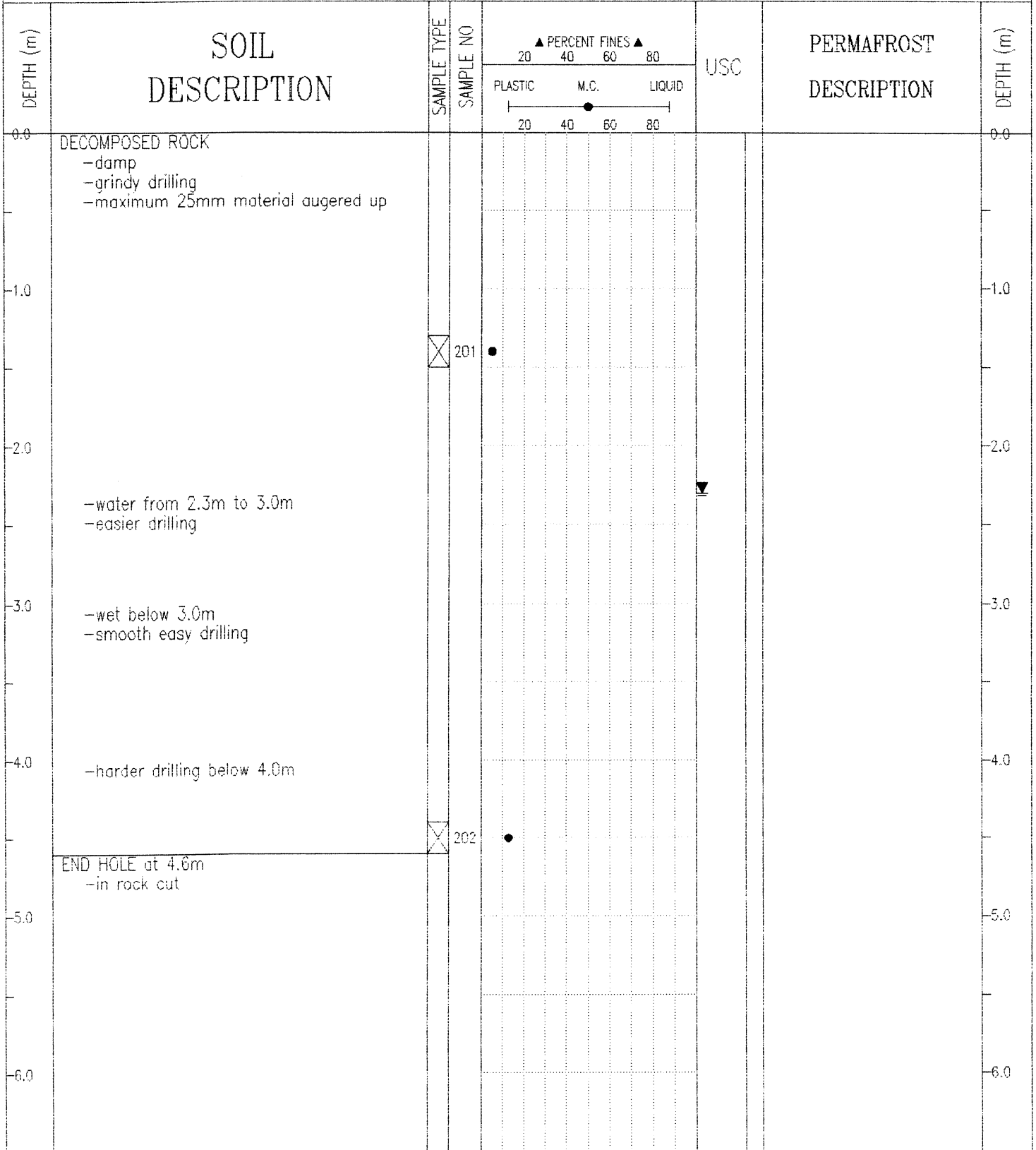
COMPLETION DEPTH 4.6 m	COMPLETE 90/10/17
LOGGED BY JM	DWG NO.
	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 108-95
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1950+950 o/s 25m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	DECOMPOSED ROCK -dry -hard drilling							0.0	
-1.0	-easier drilling below 1.0m							-1.0	
-2.0	-layered -maximum 25mm material augered up	<input checked="" type="checkbox"/>	199					-2.0	
-3.0	-moist to wet below 3.0m -water seeping in below 3.0m							-3.0	
-4.0								-4.0	
-5.0	END HOLE at 4.6m -in rock cut	<input checked="" type="checkbox"/>	200					-5.0	
-6.0								-6.0	

Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 4.6 m	COMPLETE 90/10/06
	LOGGED BY JM	DWG NO.

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 108-96
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1951+050 o/s 40m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-191
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1951+075 o/s 4m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
0.0 - 1.0	SILT WITH SAND (ML) -brown -easy drilling -frozen with visible ice below 0.6m -tight drilling								
1.0 - 2.0									
2.0 - 3.0		<input checked="" type="checkbox"/>	368				ML		
3.0 - 4.0									
4.0 - 5.0	SILTY SAND -organics -gray -frozen								
5.0 - 6.0	END HOLE at 4.6m -spruce cover	<input checked="" type="checkbox"/>	370						

Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 4.6 m	COMPLETE 90/10/17
	LOGGED BY JM	DWG NO.

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 108-97
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SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
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DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1951+150 o/s 40m Rt.	ELEVATION 0.000 (m)
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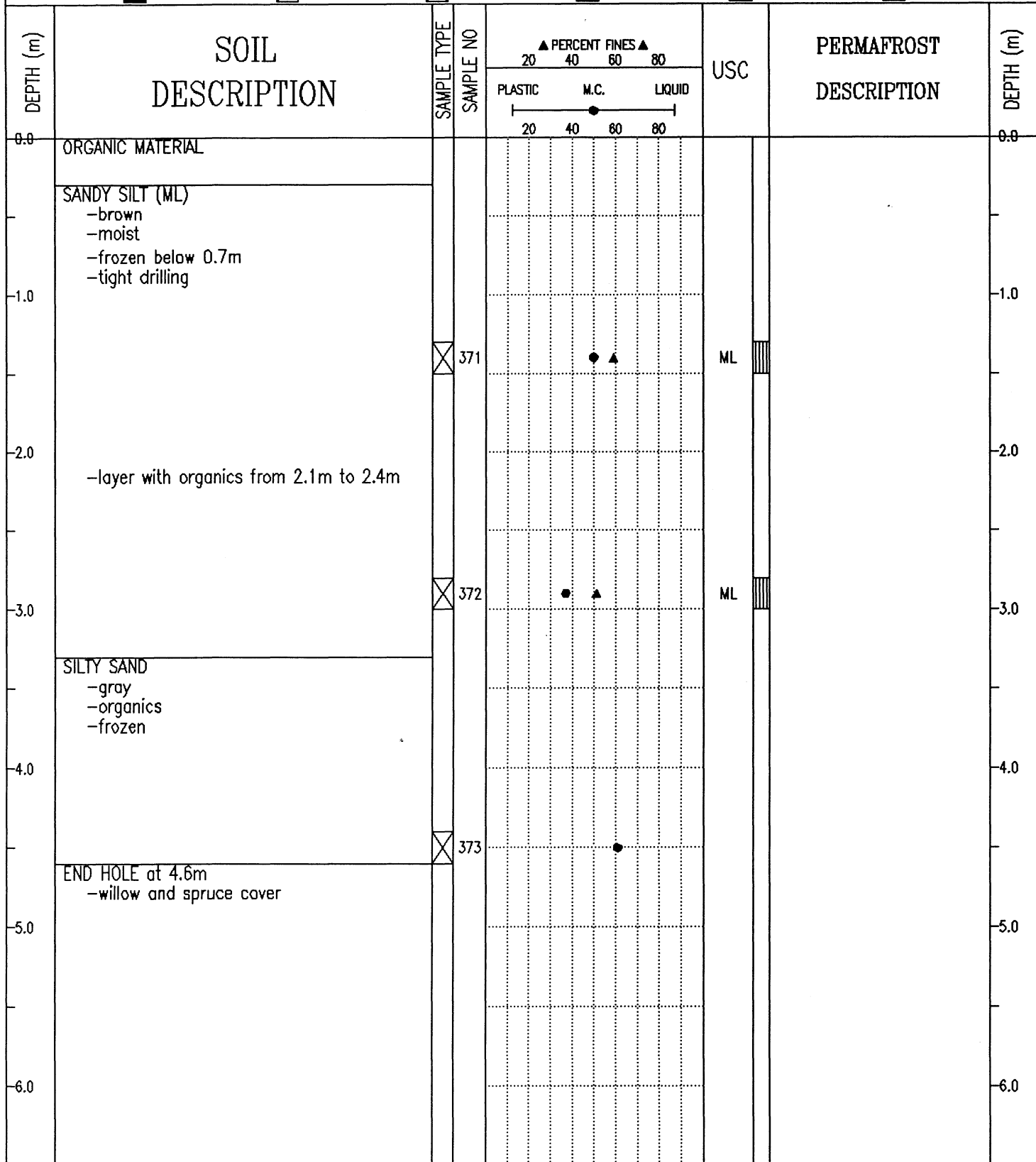
SAMPLE TYPE	<input type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE
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DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	SILTY SAND WITH GRAVEL (SM) -damp -hard grindy drilling							0.0	
1.0								1.0	
2.0	-wet below 1.7m -smooth easy drilling		203	●	▲		SM	2.0	
3.0	-frozen with visible ice below 3.1m  -saturated below 3.5m		204	●				3.0	
4.0	-moist below 4.0m -tighter drilling		205	●				4.0	
4.6	END HOLE at 4.6m -in rock cut							4.6	
5.0								5.0	
6.0								6.0	

**Public Works Canada**  
**Whitehorse, Yukon Territory.**

COMPLETION DEPTH 4.6 m	COMPLETE 90/10/06
LOGGED BY JM	DWG NO.
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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-192
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1951+250 o/s 4m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		BOREHOLE No. 109-98				
SHAKWAK PROJECT		A/H KM 1931.9-1965.5		Project No: SEGMENT 18				
DRILL: B61 150mm Dia. SOLID STEM AUGER		LOCATION: STA 1951+250 o/s 25m Rt.		ELEVATION 0.000 (m)				
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T.		<input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK		<input type="checkbox"/> TUBE <input type="checkbox"/> CORE				
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲		USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.			
0.0	DECOMPOSED ROCK -dry			20	40	60	80	0.0
1.0								1.0
2.0	END HOLE at 1.8m -refusal -in rock cut		206 ●					2.0
3.0								3.0
4.0								4.0
5.0								5.0
6.0								6.0
Public Works Canada Whitehorse, Yukon Territory.				COMPLETION DEPTH 1.8 m		COMPLETE 90/10/06		
				LOGGED BY JM		DWG NO.		Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-193
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1951+455 o/s 4m Lt.	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL -wet  -frozen below 0.4m -tight drilling  -visible ice below 0.8m								0.0
1.0	SILTY GRAVEL WITH SAND (GM) -brown -visible ice -some grindy drilling	<input checked="" type="checkbox"/>	374				GM		1.0
2.0	-hard grindy drilling 2.2m to 2.4m								2.0
3.0		<input checked="" type="checkbox"/>	375						3.0
4.0	END HOLE at 3.4m -refusal -spruce cover								4.0
5.0									5.0
6.0									6.0

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-194
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1951+550 o/s 5m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
0.0 - 1.0	SILTY GRAVEL WITH SAND (GM) - organics - frozen with visible ice below 0.5m - grindy drilling	<input checked="" type="checkbox"/>	376	●	▲		GM	1.0	
1.0 - 2.0	SILTY SAND WITH GRAVEL (SM) - frozen - organics - hard grindy drilling	<input checked="" type="checkbox"/>	377	●	▲		SM	2.0	
2.0 - 3.0								3.0	
3.0 - 4.0	SANDY SILT (ML) - frozen - organics	<input checked="" type="checkbox"/>	378	●	▲		ML	4.0	
4.0 - 5.0								5.0	
5.0 - 6.0	SILTY GRAVEL WITH SAND (GM) - organics - frozen - grindy tight drilling	<input checked="" type="checkbox"/>	379	●	▲		GM	6.0	
6.0 - 7.0	SILTY SAND WITH GRAVEL (SM) - moist - easier drilling	<input checked="" type="checkbox"/>	380	●	▲		SM	7.0	
7.0 - 8.0	- wet below 7.6m							8.0	
8.0 - 10.0	END HOLE at 8.1m - refusal - spruce cover							9.0	
								10.0	

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-99
SHAKWAK PROJECT		A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER		LOCATION: STA 1951+685 o/s 3m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
			<input type="checkbox"/> BULK
			<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	DECOMPOSED ROCK -easy drilling								0.0
-1.0	-dry below 0.7m -grindy, hard drilling below 0.7m								-1.0
-2.0	-damp below 2.1m -smooth tight drilling below 2.1m								-2.0
-3.0									-3.0
-4.0									-4.0
-5.0	END HOLE at 4.6m -in rock cut								-5.0
-6.0									-6.0

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-198
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1951+720 o/s 40m Rt.	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL GRAVELLY SAND	<input checked="" type="checkbox"/>	388					0.0	
0.0 - 0.3	END HOLE at 0.3m -refusal -may have been a borrow area in past -spruce, willows and birch cover								
-1.0								-1.0	
-2.0								-2.0	
-3.0								-3.0	
-4.0								-4.0	
-5.0								-5.0	
-6.0								-6.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-195
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1951+800 o/s 4m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL -black							0.0	
	SILTY GRAVEL WITH SAND (GM) -dark brown -moist to wet -easy grindy drilling								
-1.0								-1.0	
		<input checked="" type="checkbox"/>	381	●	▲		GM		
-2.0	-frozen below 1.6m -hard grindy drilling below 1.8m							-2.0	
-3.0	END HOLE at 2.4m -first refusal at 2.2m -some water at bottom of hole -poplar and spruce cover							-3.0	
-4.0								-4.0	
-5.0								-5.0	
-6.0								-6.0	

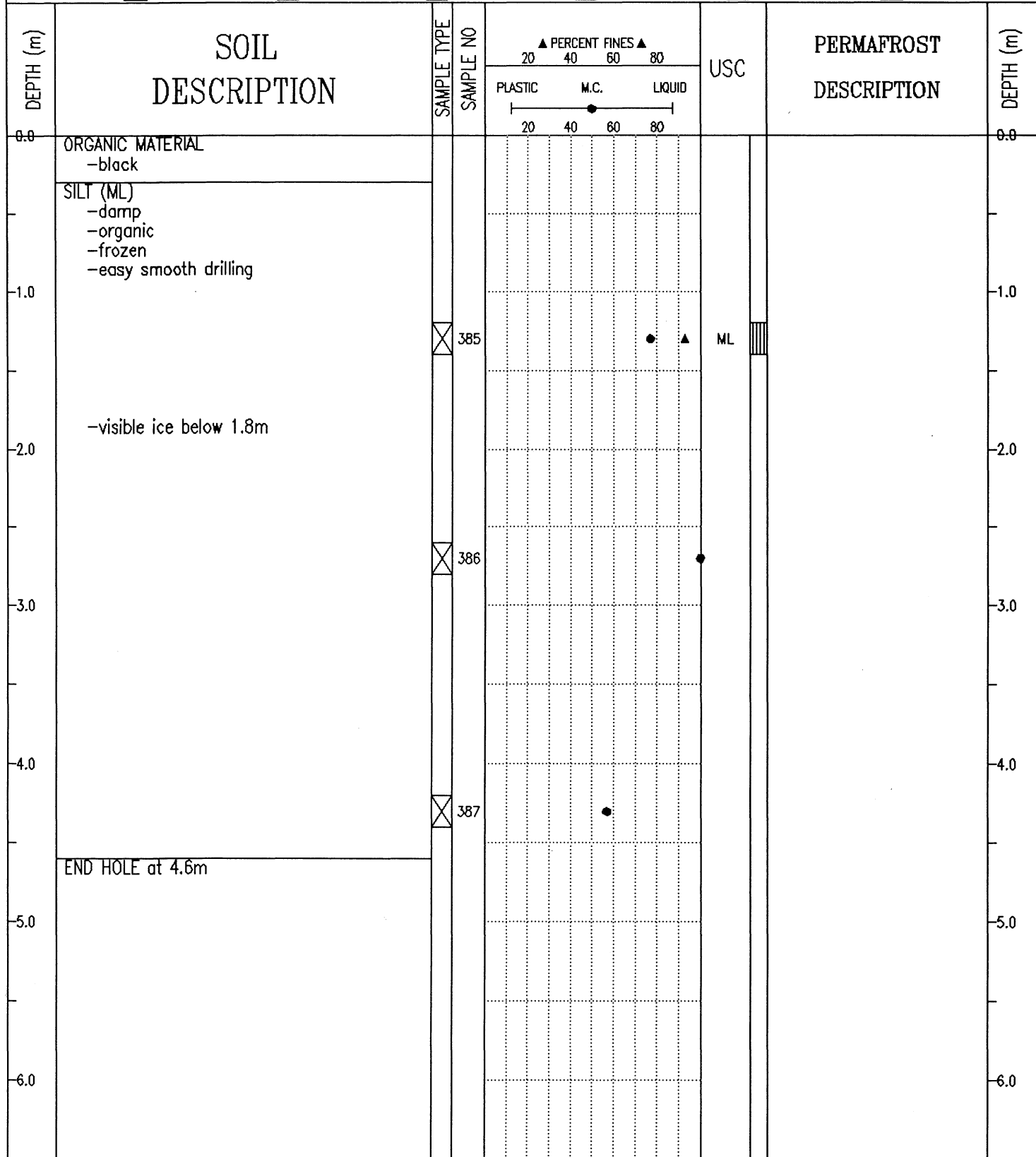
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-100
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1951+825 o/s 40m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
				20 40 60 80					
0.0	DECOMPOSED ROCK							0.0	
	-hard grindy drilling below 0.5m								
-1.0	END HOLE at 0.8m -two refusals at 0.8m							-1.0	
-2.0								-2.0	
-3.0								-3.0	
-4.0								-4.0	
-5.0								-5.0	
-6.0								-6.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-196
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1951+950 o/s 4m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL -black -frozen below 0.2m -some silt							0.0	
-1.0	-visible ice below 1.0m	<input checked="" type="checkbox"/>	382					-1.0	
	GRAVELLY SANDY SILT -frozen								
	ORGANIC MATERIAL -frozen -some silt -tight smooth drilling								
-2.0								-2.0	
	SILTY SAND WITH GRAVEL (SM) -visible ice -some organics -some grindy drilling								
-3.0		<input checked="" type="checkbox"/>	383				SM	-3.0	
	-frozen but no ice below 3.4m								
-4.0		<input checked="" type="checkbox"/>	384					-4.0	
	END HOLE at 4.6m -first refusal at 1.5m								
-5.0								-5.0	
-6.0								-6.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-197
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1952+100 o/s 3m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

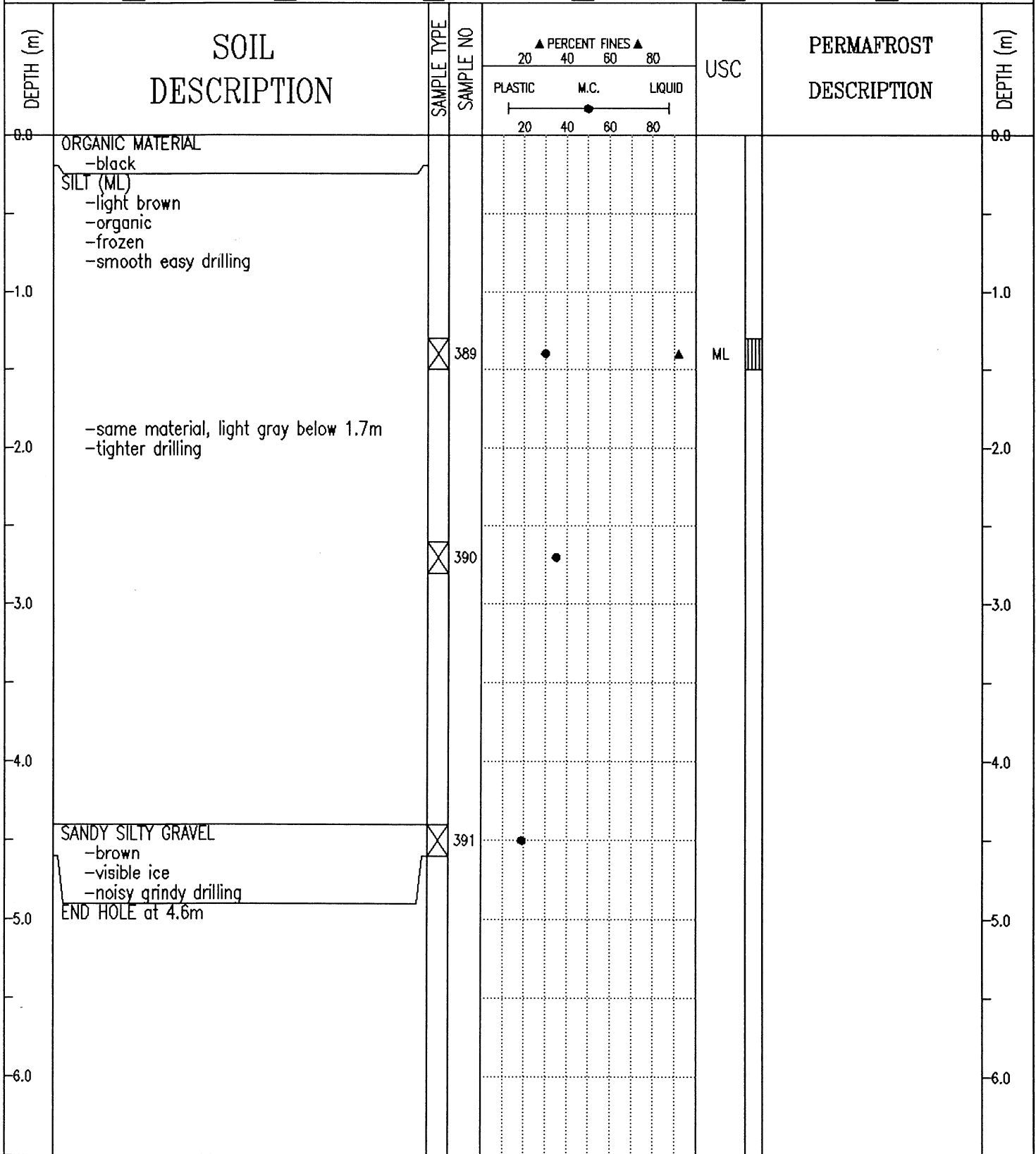


SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-101
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1952+225 o/s 1m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	CRUSHED GRAVEL -road fill							0.0	
	DECOMPOSED ROCK -road fill								
1.0	ORGANIC MATERIAL -wet							1.0	
	SILTY SAND WITH GRAVEL (SM) -brown -wet -some organics -saturated below 1.8m	<input checked="" type="checkbox"/>	209		45	65	SM		
2.0								2.0	
	SILT (ML) -gray -frozen -tighter drilling	<input checked="" type="checkbox"/>	210	15	25	75	ML		
3.0								3.0	
4.0								4.0	
	END HOLE at 4.6m -on existing road	<input checked="" type="checkbox"/>	211	15	25	75			
5.0								5.0	
6.0								6.0	

Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 4.6 m	COMPLETE 90/10/06
	LOGGED BY JM	DWG NO.

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-199
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1952+225 o/s 11m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT ALASKA HIGHWAY PRE-ENGINEERING BOREHOLE No. 109-102

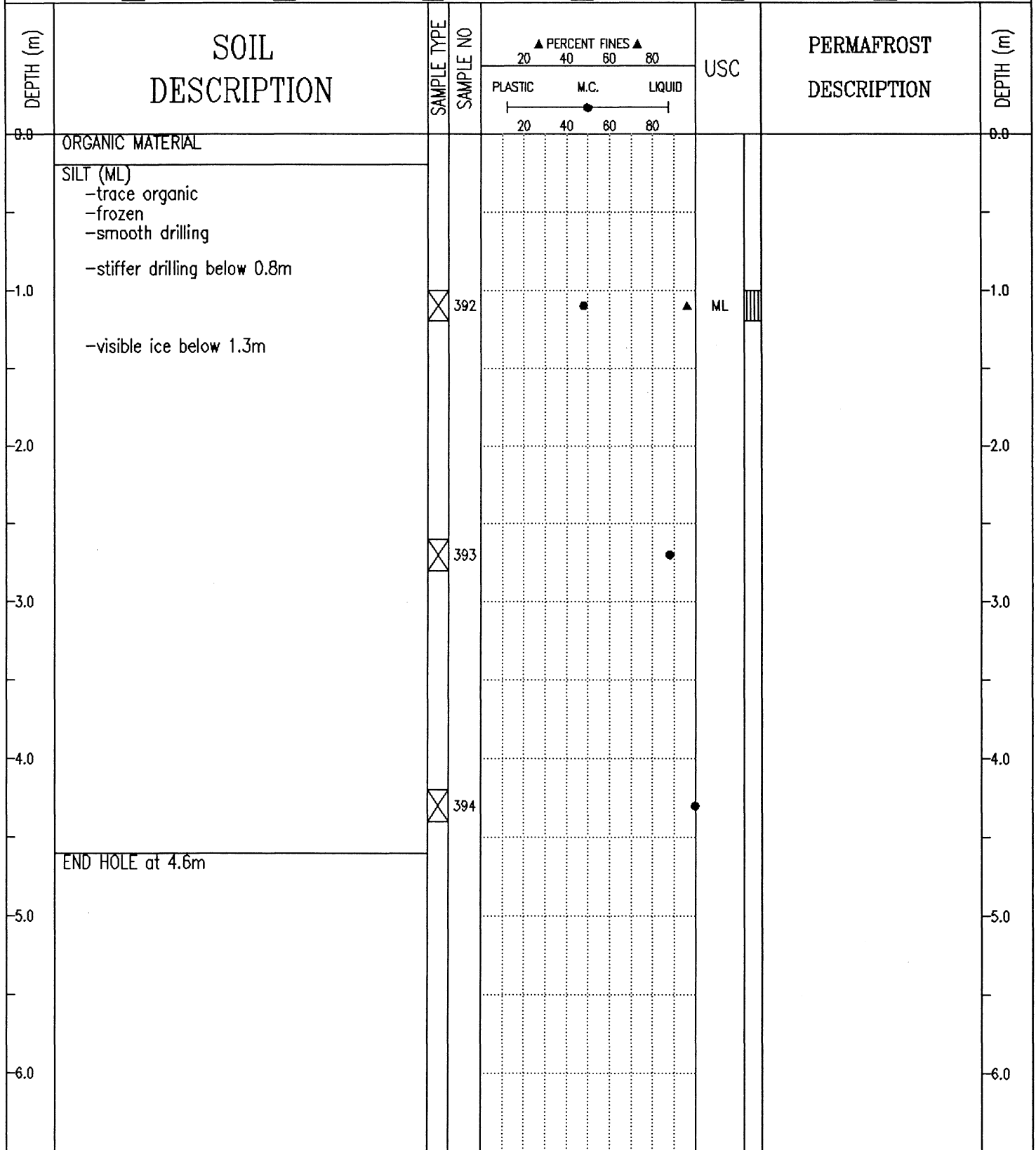
SHAKWAK PROJECT A/H KM 1931.9-1965.5 Project No: SEGMENT 18

DRILL: B61 150mm Dia. SOLID STEM AUGER LOCATION: STA 1952+400 ELEVATION 0.000 (m)

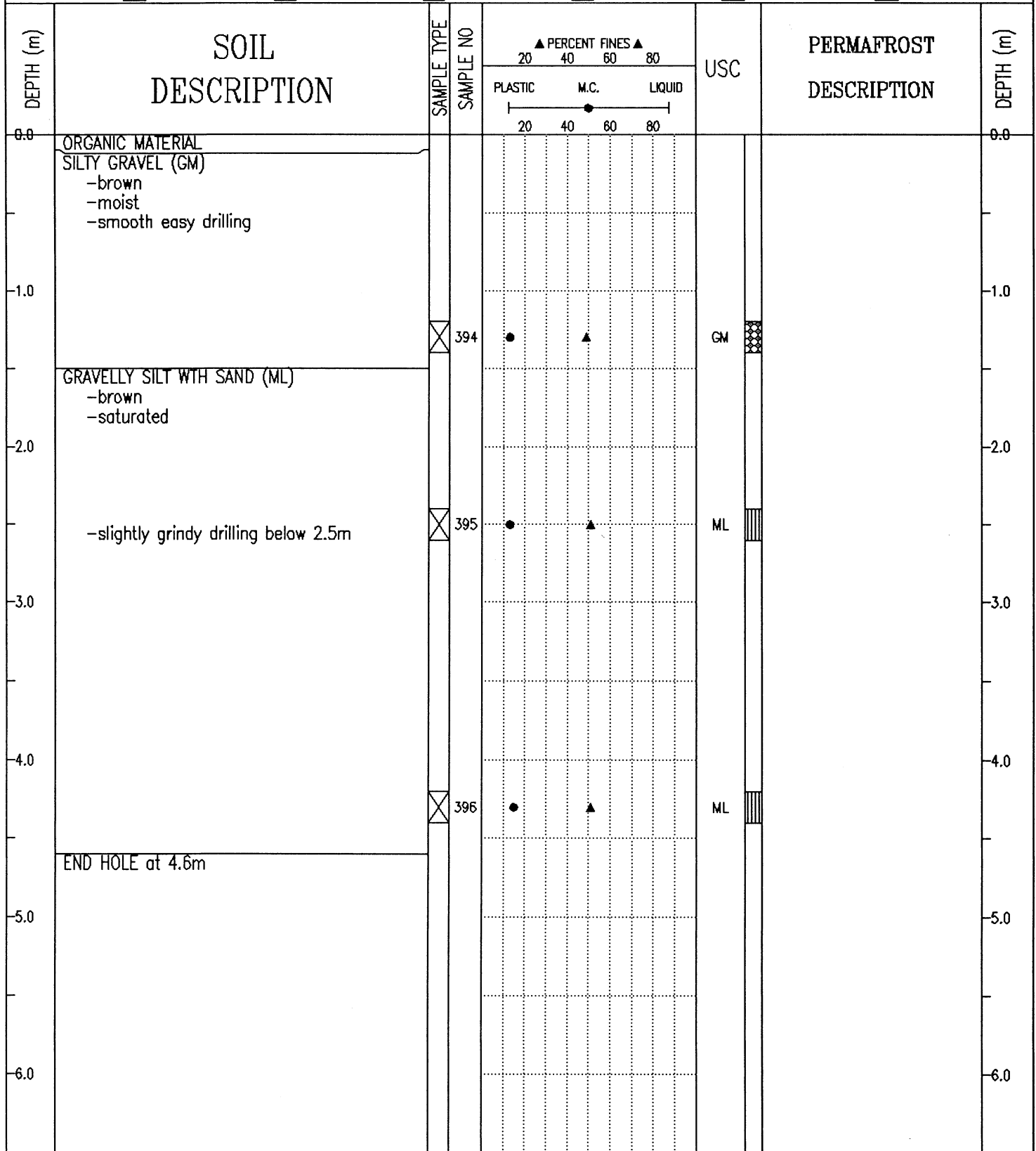
SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	CRUSHED GRAVEL -road fill								0.0
	DECOMPOSED ROCK -road fill -grindy easy drilling								
-1.0									-1.0
	ORGANIC MATERIAL								
-2.0									-2.0
	SILT TO SILT WITH SAND (ML) -gray -wet -some organics -saturated below 2.4m -frozen below 2.7m -tight drilling below 2.7m		212				ML		-3.0
-3.0									
	-visible ice below 3.5m								
-4.0									-4.0
			213				ML		-5.0
-5.0	END HOLE at 4.6m -in existing road								-6.0
-6.0									-6.0

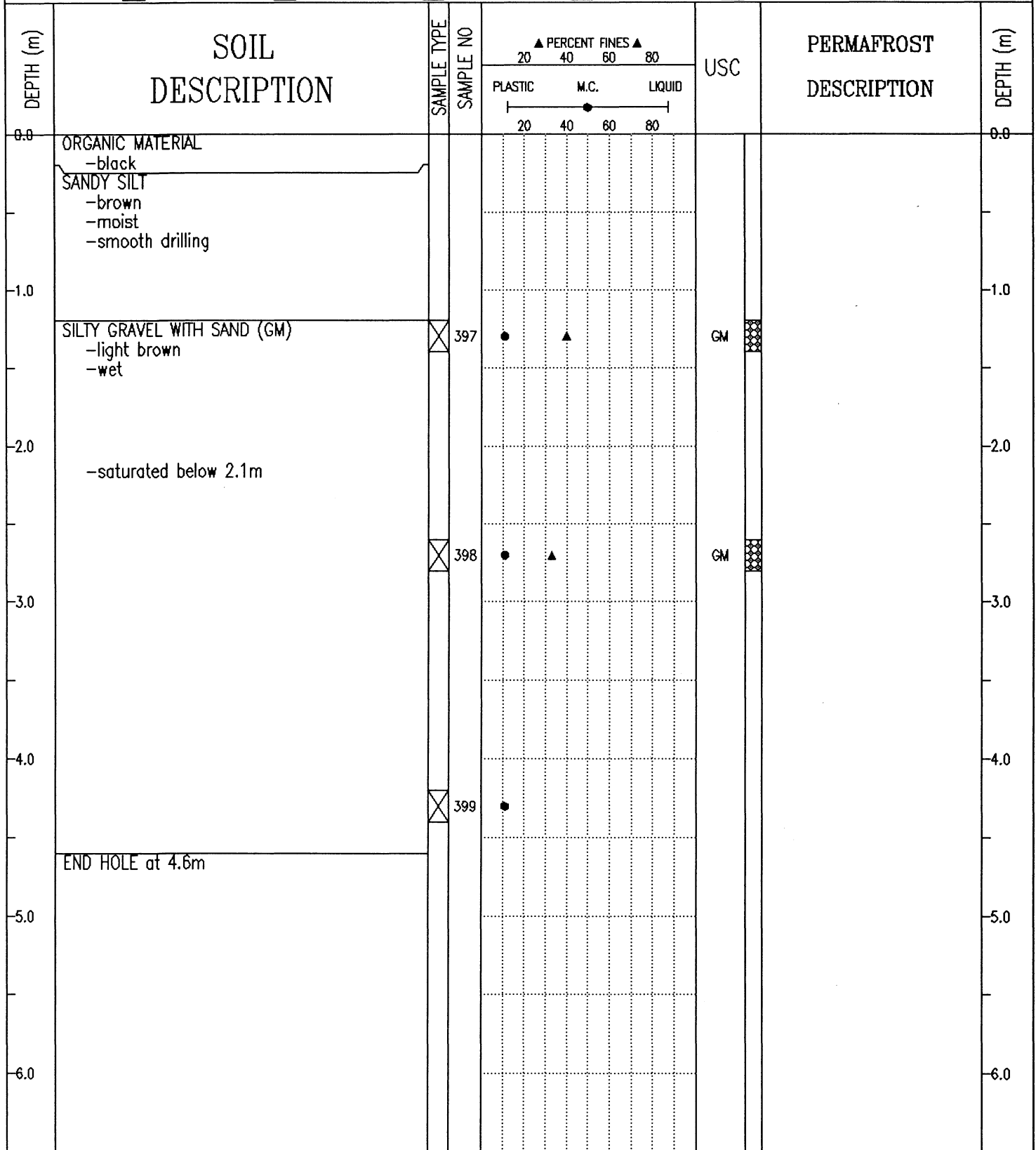
SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-200
SHAKWAK PROJECT		A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER		LOCATION: 1952+400 o/s 10m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE			



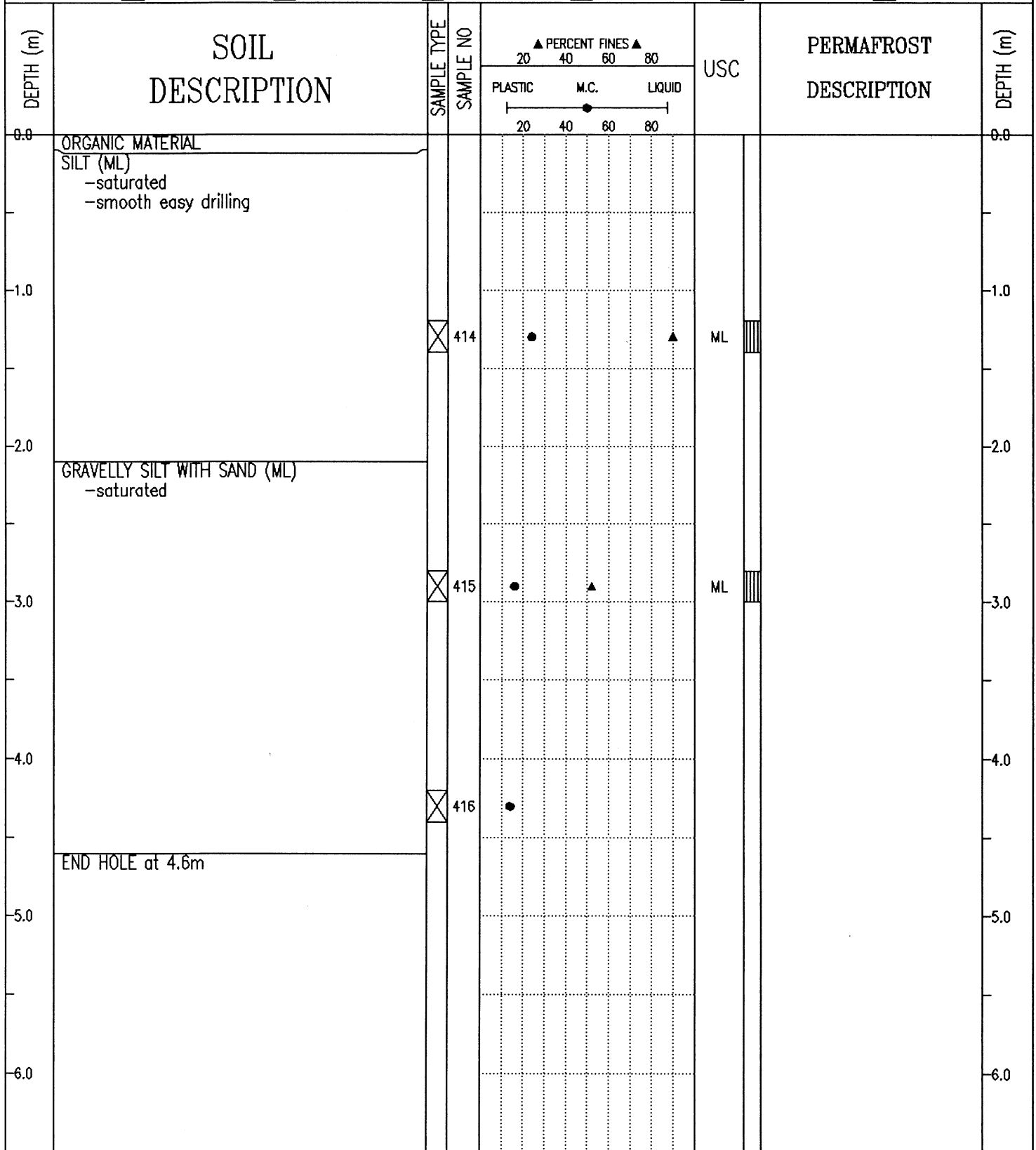
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-201
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1952+525 o/s 7m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-202
SHAKWAK PROJECT		A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER		LOCATION: 1952+650 o/s 8m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
			<input checked="" type="checkbox"/> BULK
			<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-208
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1952+800 o/s 2m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-209
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1952+900 o/s 2m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	SILT -organic -dry -smooth drilling								0.0
1.0	SILTY GRAVEL WITH SAND (GM) -light brown -dry -grindy drilling								1.0
		<input checked="" type="checkbox"/>	417	●	▲		GM		
2.0	SILTY GRAVEL (GM) -dry								2.0
3.0	SILTY GRAVEL WITH SAND (GM)								3.0
		<input checked="" type="checkbox"/>	418	●	▲		GM		
4.0	-hard grindy drilling below 4.0m								4.0
	END HOLE at 4.2m	<input checked="" type="checkbox"/>	419	●	▲		GM		4.0
5.0									5.0
6.0									6.0

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-210
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1952+955 o/s 35 m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	DECOMPOSED ROCK							0.0	
1.1	END HOLE at 1.1m -refusal							1.1	
2.0								2.0	
3.0								3.0	
4.0								4.0	
5.0								5.0	
6.0								6.0	

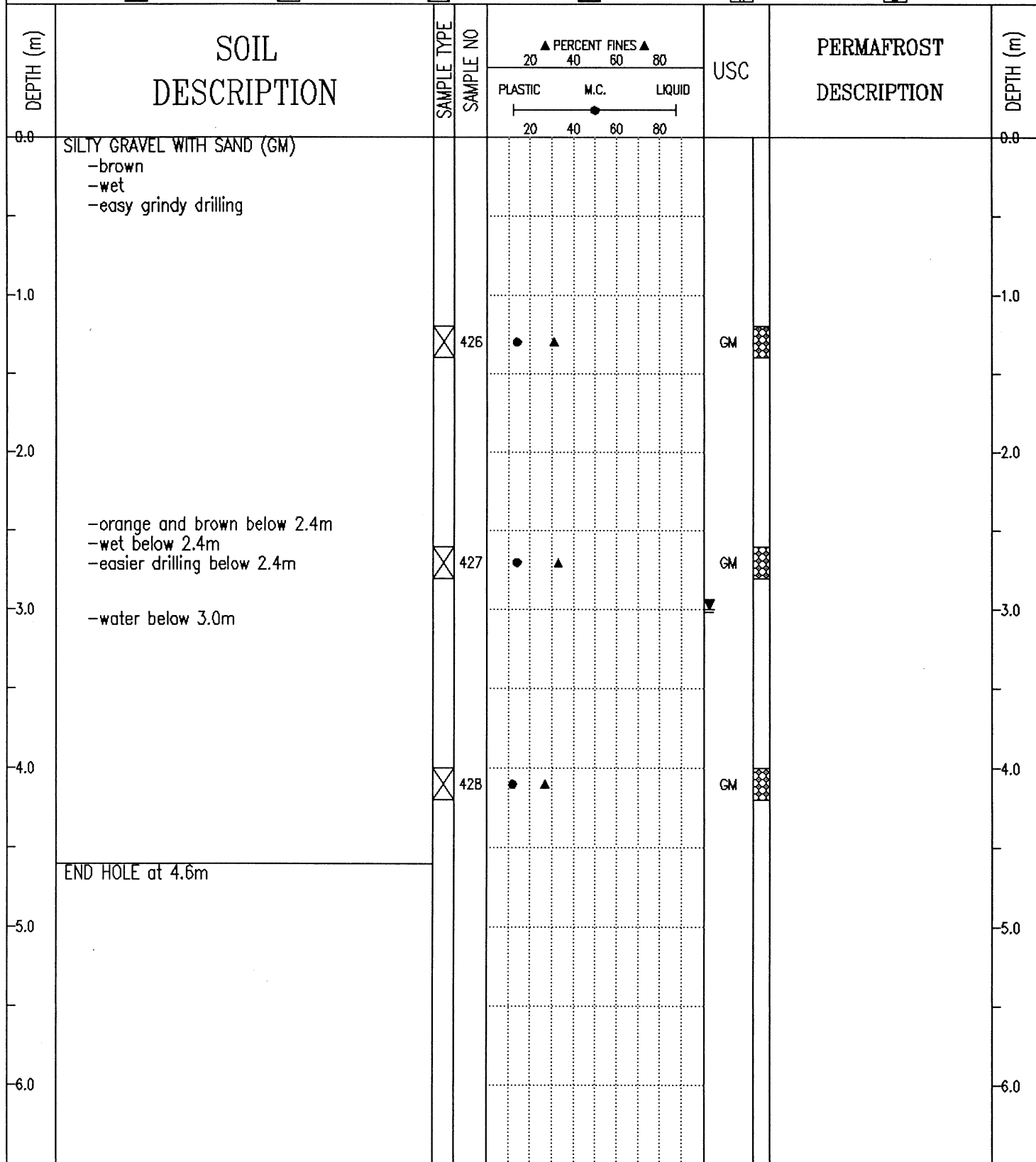
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-211
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1953+025 o/s 2m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
	SILT (ML) -brown -wet -organics								
-1.0								-1.0	
		<input checked="" type="checkbox"/>	420	●		▲	ML		
-2.0								-2.0	
	-frozen below 2.4m								
-3.0		<input checked="" type="checkbox"/>	421		●			-3.0	
-4.0								-4.0	
	-some gravels below 3.7m								
-4.0		<input checked="" type="checkbox"/>	422	●				-4.0	
	-visible ice below 4.0m								
-5.0	END HOLE at 4.6m							-5.0	
-6.0								-6.0	

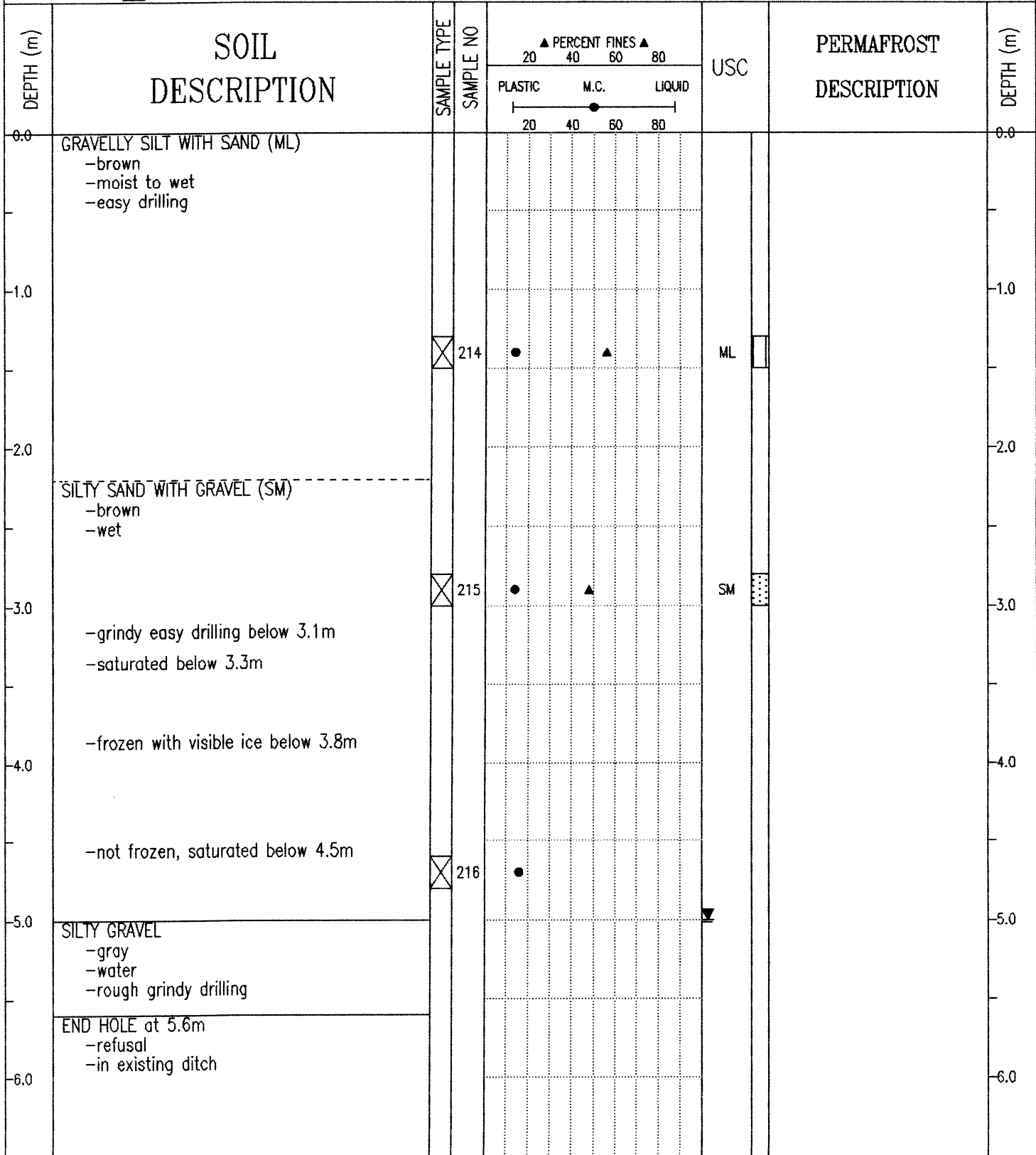
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-212
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1953+162	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL -wet							0.0	
0.0 - 1.0	SILT (ML) -organics -smooth tight drilling -frozen below 0.6m								
1.0		<input checked="" type="checkbox"/>	423			●▲	ML	1.0	
2.0 - 3.0	SANDY SILT -light brown -visible ice								
3.0		<input checked="" type="checkbox"/>	424			●		3.0	
3.0 - 4.0	SANDY SILT -gray -visible ice								
4.0		<input checked="" type="checkbox"/>	425			●		4.0	
4.0 - 4.6	END HOLE at 4.6m								
5.0 - 6.0									

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-213
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1953+270 o/s 3m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-103
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1953+450 o/s 50m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

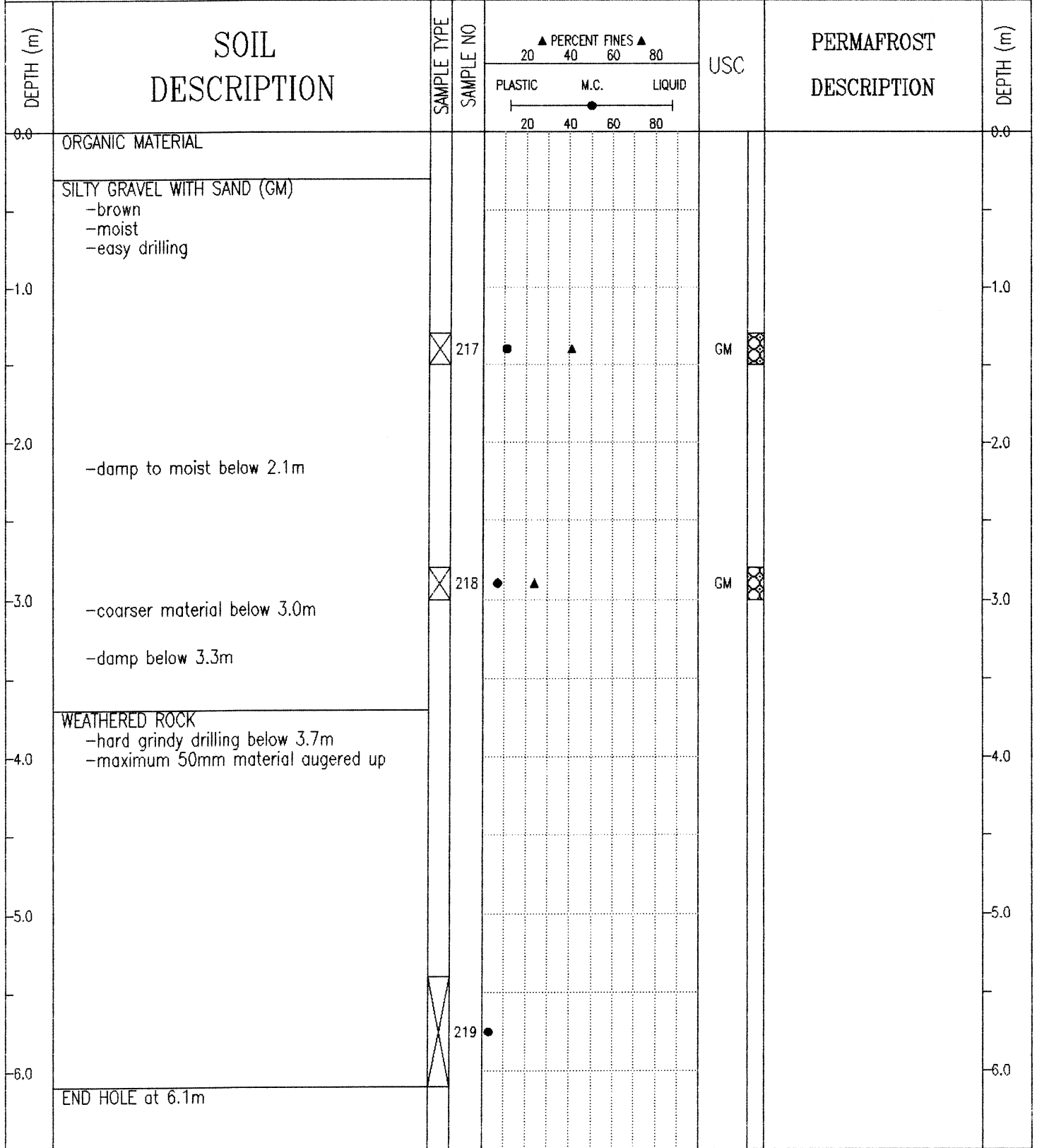


Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 5.6 m	COMPLETE 90/10/06
	LOGGED BY JM	DWG NO.

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-214
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT. 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1953+455	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	SANDY SILT -moist -trace of gravel -smooth drilling							0.0	
1.0	SILTY GRAVEL WITH SAND (GM) -brown -moist -grindy drilling -hard grindy drilling below 1.8m	<input checked="" type="checkbox"/>	429	●	▲		GM	1.0	
3.0	-more +4 below 2.8m	<input checked="" type="checkbox"/>	430	●	▲		GM	3.0	
4.0	SILTY SAND WITH GRAVEL (SM) -light brown -dry -decomposed rock -easier drilling	<input checked="" type="checkbox"/>	431	●	▲		SM	4.0	
9.0	-grindy drilling below 8.1m -easy drilling below 8.4m	<input checked="" type="checkbox"/>	432	●				9.0	
9.1	END HOLE at 9.1m								

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-104
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1953+525 o/s 35m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

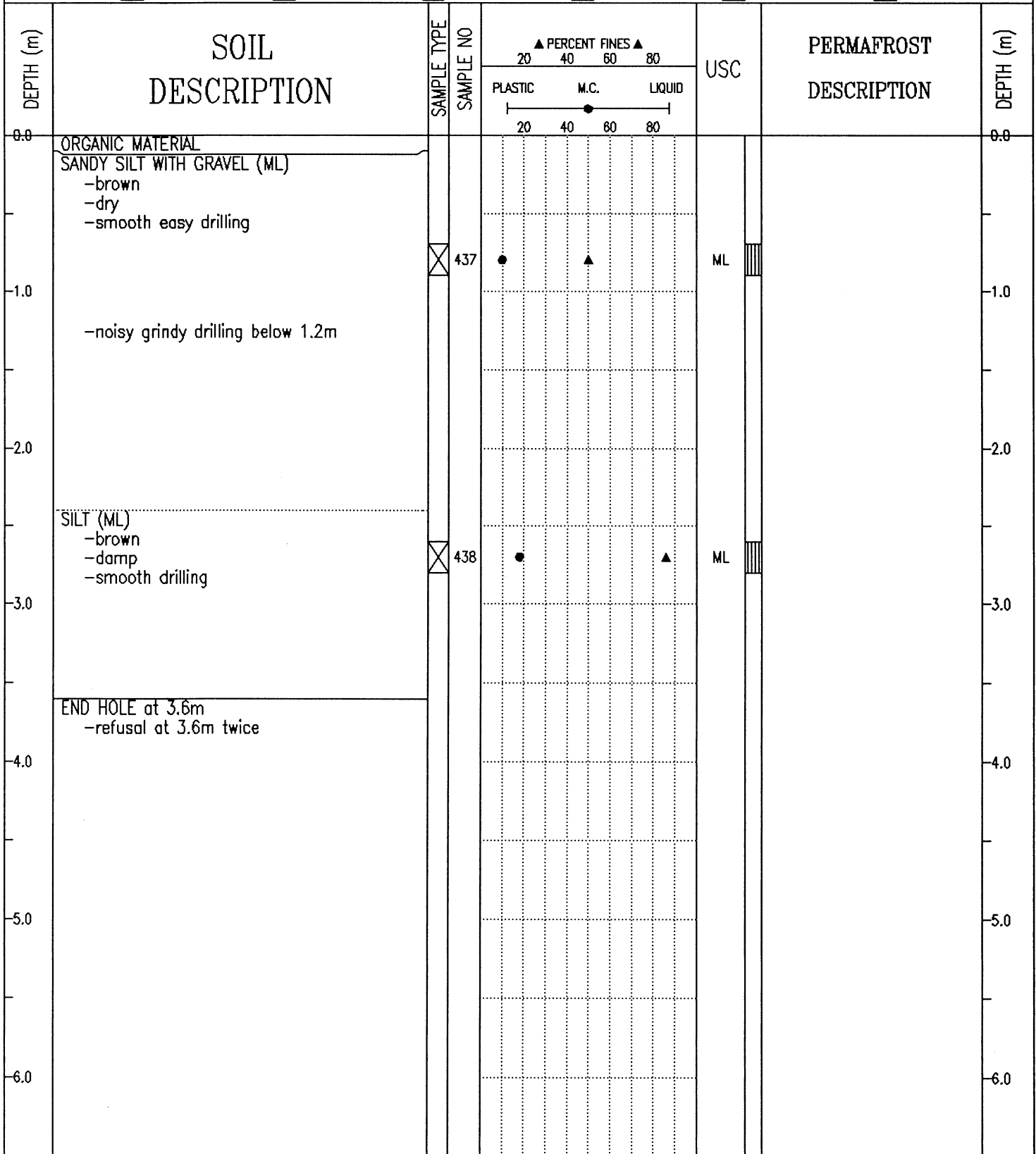


Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 6.1 m	COMPLETE 90/10/06
	LOGGED BY JM	DWG NO.

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-215
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1953+915 o/s 5m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	DECOMPOSED ROCK -hard grindy drilling								0.0
0.6	END HOLE at 0.6m -refusal								0.6
1.0									1.0
2.0									2.0
3.0									3.0
4.0									4.0
5.0									5.0
6.0									6.0

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-218
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1953+975 o/s 1m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		BOREHOLE No. 109-105					
SHAKWAK PROJECT		A/H KM 1931.9-1965.5		Project No: SEGMENT 18					
DRILL: B61 150mm Dia. SOLID STEM AUGER		LOCATION: STA 1954+175		ELEVATION 0.000 (m)					
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE									
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
				20 40 60 80	20 40 60 80	20 40 60 80			
0.0	CRUSHED GRAVEL -road fill								0.0
	DECOMPOSED ROCK -road fill								
-1.0									-1.0
-2.0	ORGANIC MATERIAL								-2.0
-3.0	SILT WITH SAND (ML) -brown -moist -organic -saturated below 2.5m  -frozen below 3.0m -tighter drilling below 3.0m	<input checked="" type="checkbox"/>	220		●	▲	ML		-3.0
-4.0	GRAVELLY SANDY SILT -brown -frozen -visible ice below 4.1m								-4.0
-5.0	END HOLE at 4.6m -on existing road	<input checked="" type="checkbox"/>	221		●				-5.0
-6.0									-6.0

Public Works Canada  
Whitehorse, Yukon Territory.

COMPLETION DEPTH 4.6 m

COMPLETE 90/10/06

LOGGED BY JM

DWG NO.

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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-219
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1954+175 o/s 7m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	SILT (ML) -dark brown -wet -smooth easy drilling								0.0
1.0		<input checked="" type="checkbox"/>	439				ML		1.0
3.0	-saturated below 2.6m -trace organics below 2.6m	<input checked="" type="checkbox"/>	440						3.0
4.0	-frozen below 3.8m	<input checked="" type="checkbox"/>	441						4.0
4.6	END HOLE at 4.6m								4.6

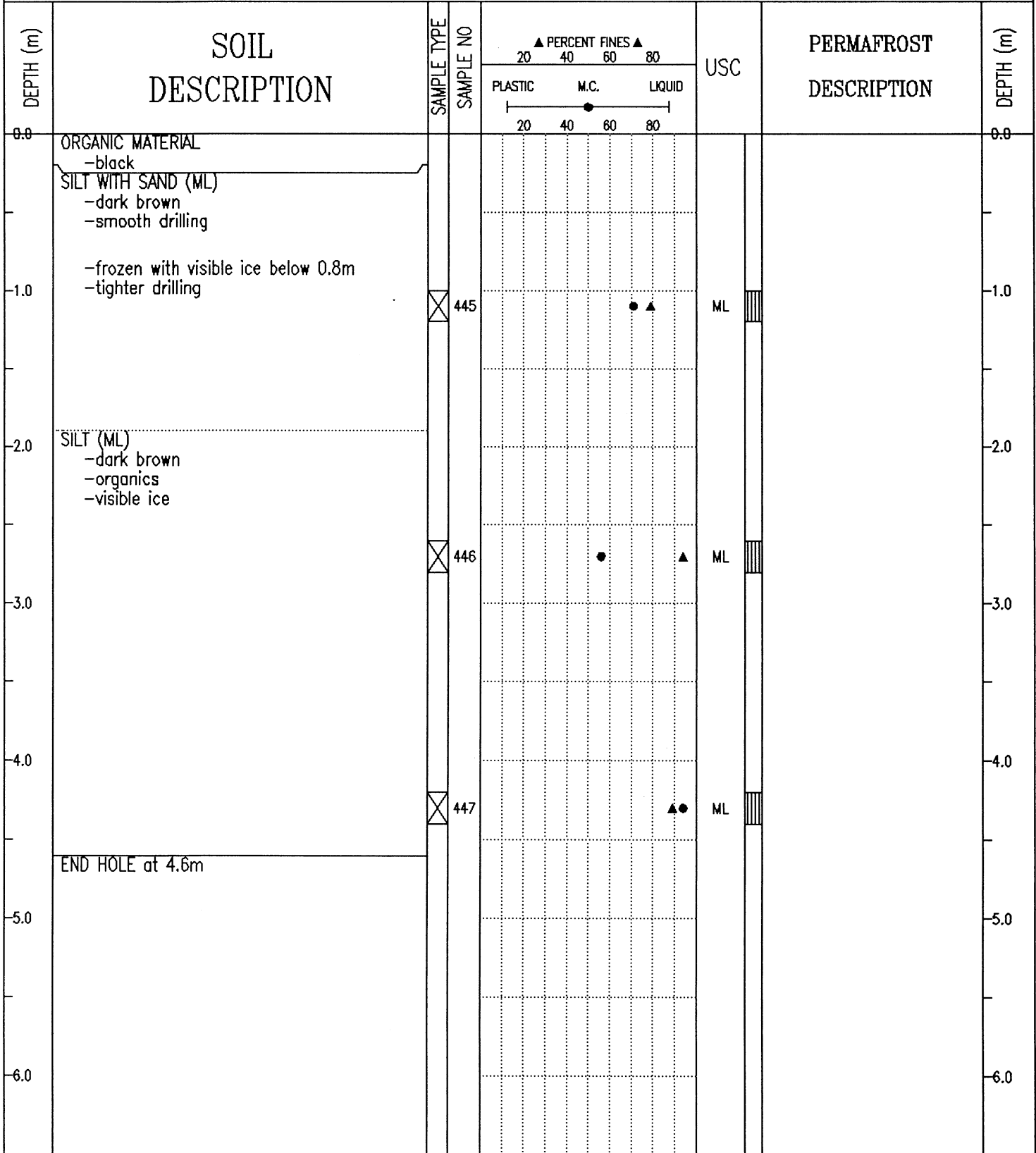
SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		BOREHOLE No. 109-106				
SHAKWAK PROJECT		A/H KM 1931.9-1965.5		Project No: SEGMENT 18				
DRILL: B61 150mm Dia. SOLID STEM AUGER		LOCATION: STA 1954+350 o/s 1m Rt.		ELEVATION 0.000 (m)				
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲		USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.			
				20	40	60	80	
0.0	CRUSHED GRAVEL -road fill							0.0
	DECOMPOSED ROCK -road fill -grindy easy drilling							
-1.0								-1.0
	ORGANIC MATERIAL -moist to wet -smooth easy drilling							
-2.0	SILT (ML) -wet -some organics -saturated below 1.9m							-2.0
	-frozen below 2.5m -tight drilling below 2.5m							
-3.0		<input checked="" type="checkbox"/>	222				ML	-3.0
	SILTY SAND -some gravels -frozen with visible ice							
-4.0								-4.0
		<input checked="" type="checkbox"/>	223					
-5.0	END HOLE at 4.6m -on existing road							-5.0
-6.0								-6.0
Public Works Canada Whitehorse, Yukon Territory.				COMPLETION DEPTH 4.6 m		COMPLETE 90/10/07		
				LOGGED BY JM		DWG NO.		Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-220
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1954+350 o/s 8m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL -some silt below 0.2m -smooth easy drilling								0.0
1.0									1.0
2.0	SILT (ML) -dark brown -frozen with visible ice -organics	<input checked="" type="checkbox"/>	442	H	●	▲	ML		2.0
3.0		<input checked="" type="checkbox"/>	443		●	▲	ML		3.0
4.0	-grindy drilling below 3.9m	<input checked="" type="checkbox"/>	444		●				4.0
5.0	END HOLE at 4.6m								5.0
6.0									6.0

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		BOREHOLE No. 109-107				
SHAKWAK PROJECT		A/H KM 1931.9-1965.5		Project No: SEGMENT 18				
DRILL: B61 150mm Dia. SOLID STEM AUGER		LOCATION: STA 1954+525		ELEVATION 0.000 (m)				
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲		USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.			
0.0	CRUSHED GRAVEL -road fill			20	40	60	80	0.0
	DECOMPOSED ROCK -road fill -damp							
1.0								1.0
	ORGANIC MATERIAL -wet -smooth easy drilling							
2.0								2.0
	SILT WITH SAND (ML) -brown -wet -some organics -saturated below 2.3m -frozen with visible ice below 2.6m -tight drilling below 2.6m	<input checked="" type="checkbox"/>	224					
3.0								3.0
	SILTY SAND WITH GRAVEL -some organics -frozen with visible ice							
4.0								4.0
	END HOLE at 4.6m -on existing road	<input checked="" type="checkbox"/>	225					
5.0								5.0
6.0								6.0
Public Works Canada Whitehorse, Yukon Territory.				COMPLETION DEPTH 4.6 m		COMPLETE 90/10/07		
				LOGGED BY JM		DWG NO.		Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-221
SHAKWAK PROJECT	A/H KM 1931.9-1985.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1954+525 o/s 15m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-108
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1954+725 o/s 3m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	DECOMPOSED ROCK -brown -damp -easy grindy drilling								0.0
1.0									1.0
2.0	-smooth stiff drilling below 1.7m -maximum 25mm material augered up								2.0
3.0	-tighter drilling below 2.5m								3.0
4.0	WEATHERED ROCK -dry -grindy hard drilling below 3.5m								4.0
5.0	END HOLE at 4.6m -in ditch								5.0
6.0									6.0

Public Works Canada  
Whitehorse, Yukon Territory.

COMPLETION DEPTH 4.6 m	COMPLETE 90/10/07
LOGGED BY JM	DWG NO.
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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		BOREHOLE No. 109-109				
SHAKWAK PROJECT		A/H KM 1931.9-1965.5		Project No: SEGMENT 18				
DRILL: B61 150mm Dia. SOLID STEM AUGER		LOCATION: STA 1954+850 o/s 25m Lt.		ELEVATION 0.000 (m)				
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80		USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.			
0.0	SILTY SAND WITH GRAVEL (SM) -brown -damp -easy drilling							0.0
1.0								1.0
2.0								2.0
2.8		<input checked="" type="checkbox"/>	228	● ▲		SM		2.8
3.0	DECOMPOSED ROCK -damp -grindy drilling							3.0
3.2		<input checked="" type="checkbox"/>	229	●				3.2
3.2	END HOLE at 3.2m -refusal -in ditch							3.2
4.0								4.0
5.0								5.0
6.0								6.0
Public Works Canada Whitehorse, Yukon Territory.				COMPLETION DEPTH 3.2 m		COMPLETE 90/10/07		
				LOGGED BY JM		DWG NO.		Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-110
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1954+975 o/s 2m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	DECOMPOSED ROCK								0.0
-0.6	-dry below 0.6m -hard drilling below 0.6m								-0.6
-1.2	-damp below 1.2m -easy drilling below 1.2m		230						-1.2
-1.8	-dry below 1.8m -hard grindy drilling below 1.8m								-1.8
-3.0	-easier drilling below 3.0m								-3.0
-3.8	-harder drilling below 3.8m								-3.8
-5.0									-5.0
-5.8			231						-5.8
-6.1	END HOLE at 6.1m -in ditch								-6.1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-111
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1955+075 o/s 40m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	SANDY SILT -damp								0.0
1.0	DECOMPOSED ROCK -dry -grindy drilling								1.0
2.0	-hard grindy drilling with soft layers below 1.4m	<input checked="" type="checkbox"/>	232						2.0
3.0									3.0
4.0									4.0
5.0	-hard grindy drilling below 5.0m								5.0
6.0									6.0
7.0									7.0
8.0									8.0
9.0	END HOLE at 9.1m -existing rock cut	<input checked="" type="checkbox"/>	233						9.0
10.0									10.0

Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 9.1 m	COMPLETE 90/10/07
	LOGGED BY JM	DWG NO.

SUBSURFACE EXPLORATION AND TEST REPORT ALASKA HIGHWAY PRE-ENGINEERING BOREHOLE No. 109-112

SHAKWAK PROJECT A/H KM 1931.9-1965.5 Project No: SEGMENT 18

DRILL: B61 150mm Dia. SOLID STEM AUGER LOCATION: STA 1955+225 o/s 30m Rt. ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	GRAVELLY SILTY SAND -damp							0.0	
1.0	SILTY SAND (SM) -brown -damp -grindy drilling							1.0	
2.0	DECOMPOSED ROCK -dry -harder grindy drilling		234	●	▲		SM	2.0	
3.0								3.0	
4.0								4.0	
5.0	END HOLE at 4.6m -existing rock cut							5.0	
6.0								6.0	

Public Works Canada  
Whitehorse, Yukon Territory.

COMPLETION DEPTH 4.6 m

COMPLETE 90/10/07

LOGGED BY JM

DWG NO.

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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-225
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1955+282 o/s 1m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

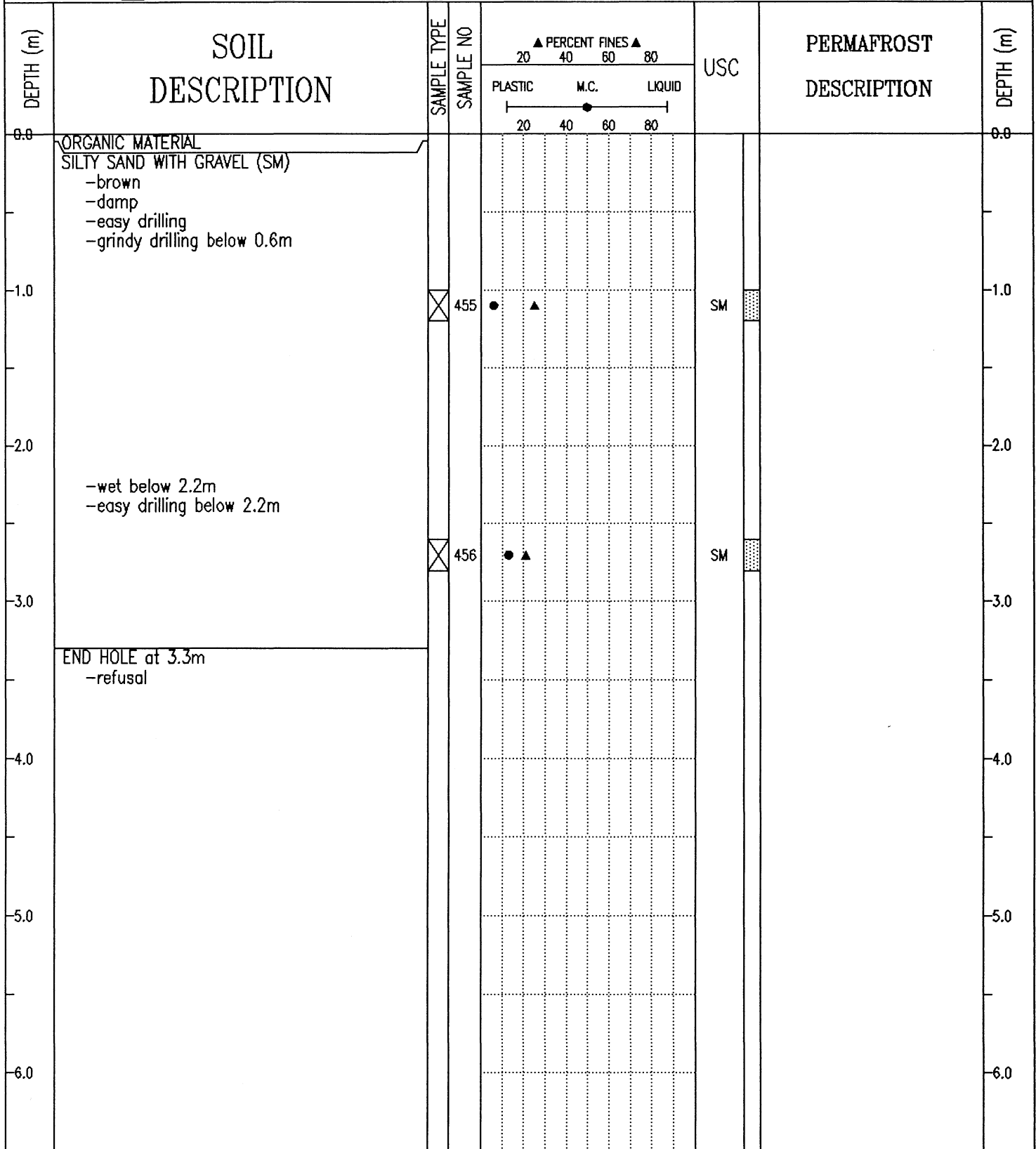
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL DECOMPOSED ROCK			20	40	60	80	0.0	
1.0								1.0	
	ROCK		454 ●						
2.0	END HOLE at 2.0m -refusal							2.0	
3.0								3.0	
4.0								4.0	
5.0								5.0	
6.0								6.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-113
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1955+300 o/s 35m Rt.	ELEVATION 0.000 (m)
<input type="checkbox"/> SAND	<input checked="" type="checkbox"/> CLAY	<input type="checkbox"/> GRAVEL
<input type="checkbox"/> DETRITUS	<input checked="" type="checkbox"/> G.D.T.	<input checked="" type="checkbox"/> UNIDEP
<input type="checkbox"/> DUALR	<input type="checkbox"/> TUBES	<input type="checkbox"/> PDAE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	SILTY GRAVEL WITH SAND (GM) -brown -damp -grindy drilling								0.0
1.0									1.0
2.0									2.0
3.0	DECOMPOSED ROCK -dry -hard grindy drilling -some softer layers								3.0
4.0									4.0
5.0									5.0
6.0									6.0
7.0									7.0
8.0	-very hard drilling below 8.0m								8.0
9.0	END HOLE at 9.1m								9.0
10.0									10.0

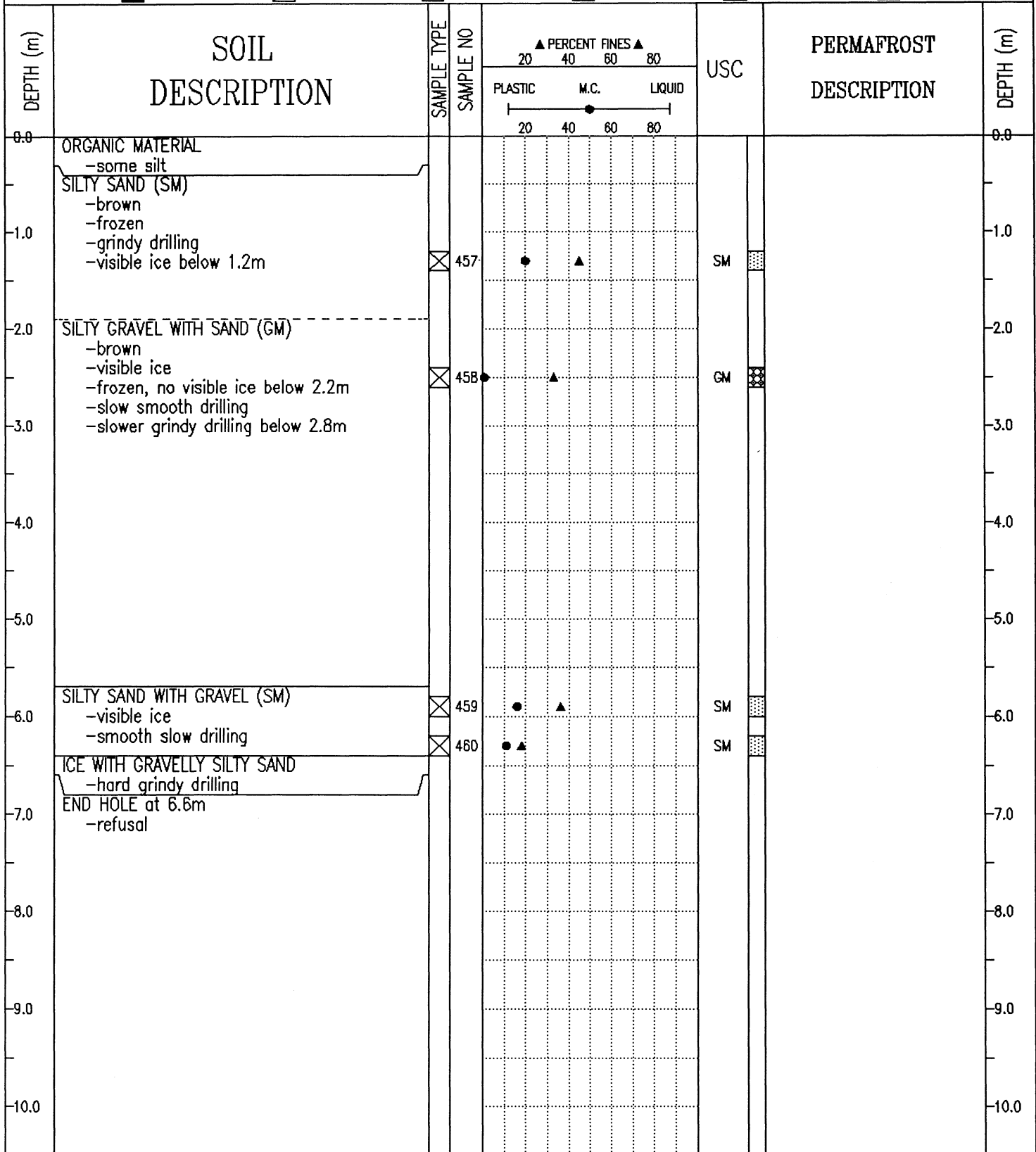
Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 9.1 m	COMPLETE 90/10/07
	LOGGED BY JM	DWG NO.

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-226
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1955+375 o/s 7m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

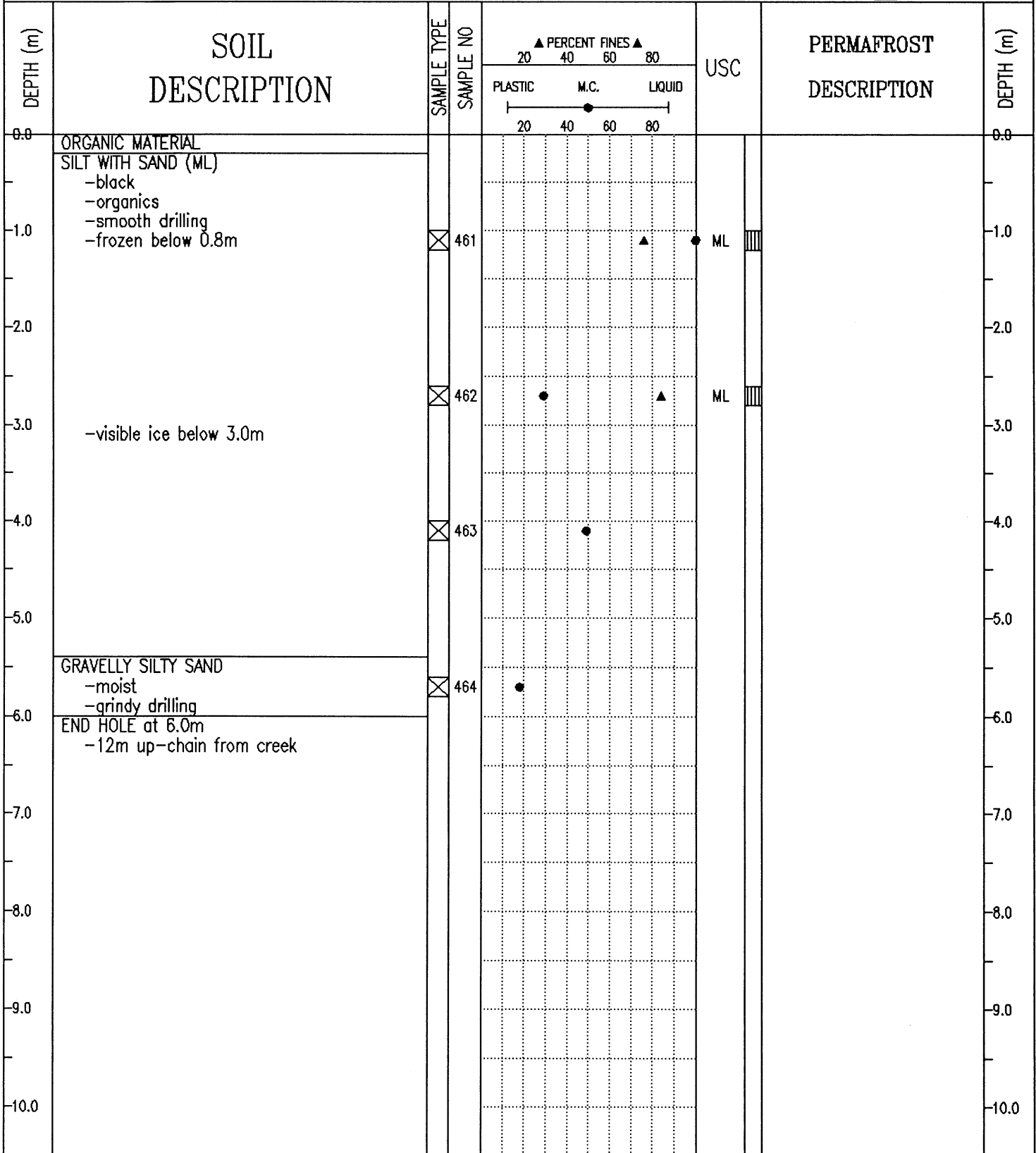


SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		BOREHOLE No. 109-114				
SHAKWAK PROJECT		A/H KM 1931.9-1965.5		Project No: SEGMENT 18				
DRILL: B61 150mm Dia. SOLID STEM AUGER		LOCATION: STA 1955+440 o/s 25m Rt.		ELEVATION 0.000 (m)				
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80		USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.			
0.0	SILTY GRAVEL WITH SAND (GM) -brown -moist -grindy drilling	<input checked="" type="checkbox"/>	237	● ▲		GM		0.0
-1.0								-1.0
-2.0	-easy drilling below 2.2m, some cobbles							-2.0
-3.0								-3.0
-4.0								-4.0
-5.0	-wet below 4.3m							-5.0
-6.0	POORLY GRADED GRAVEL WITH SILT AND SAND (GP-GM) -rougner easy drilling	<input checked="" type="checkbox"/>	238	● ▲		GP-GM		-6.0
-7.0	-water below 7.0m							-7.0
-8.0								-8.0
-9.0	DECOMPOSED ROCK -dry -harder drilling							-9.0
-10.0	END HOLE at 9.1m							-10.0
Public Works Canada Whitehorse, Yukon Territory.				COMPLETION DEPTH 9.1 m		COMPLETE 90/10/07		
				LOGGED BY JM		DWG NO.		Page 1 of 1

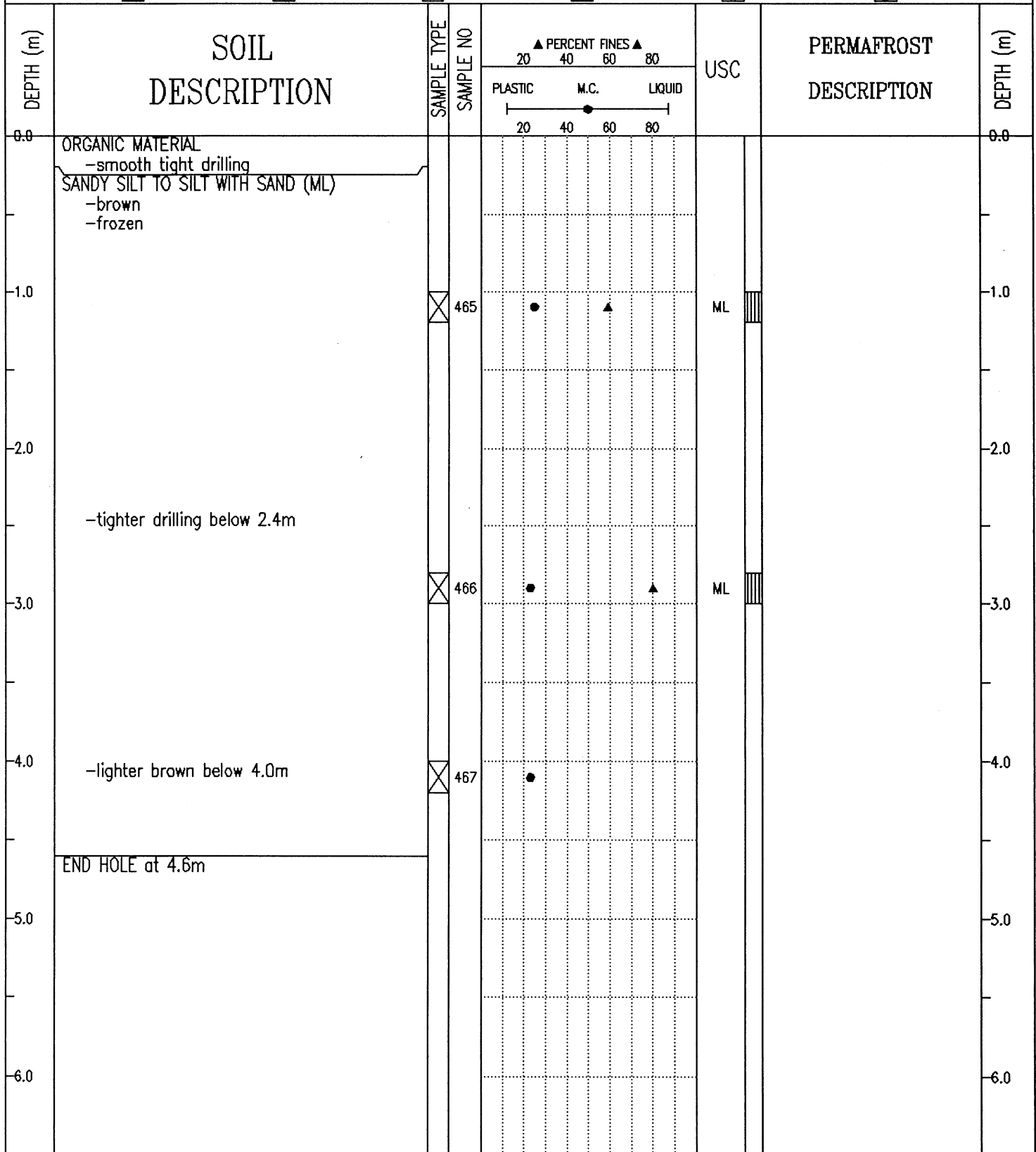
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-227
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1955+475 o/s 3m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-228
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1955+650 o/s 2m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

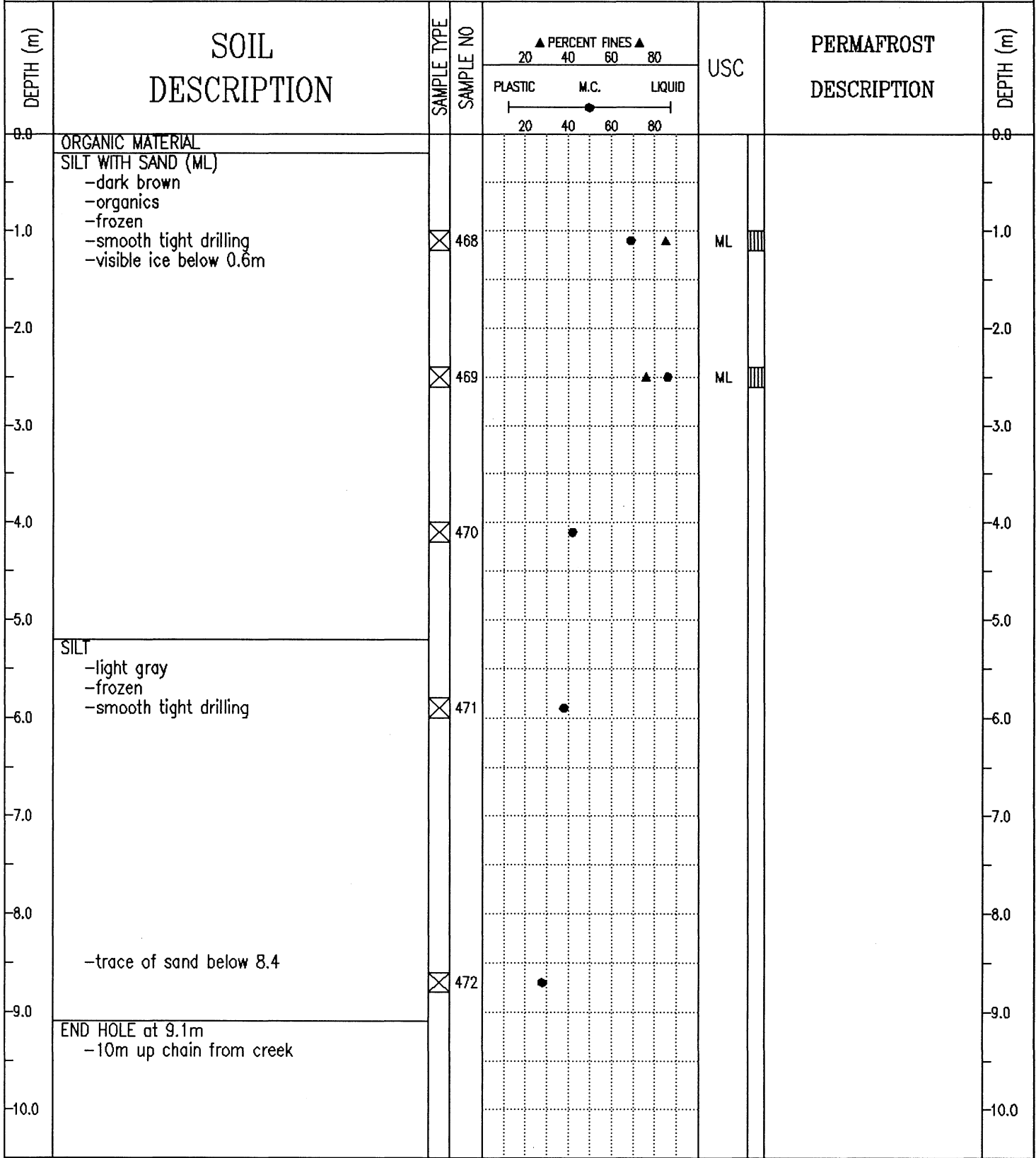


SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 111-229
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1955+800 o/s 3m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

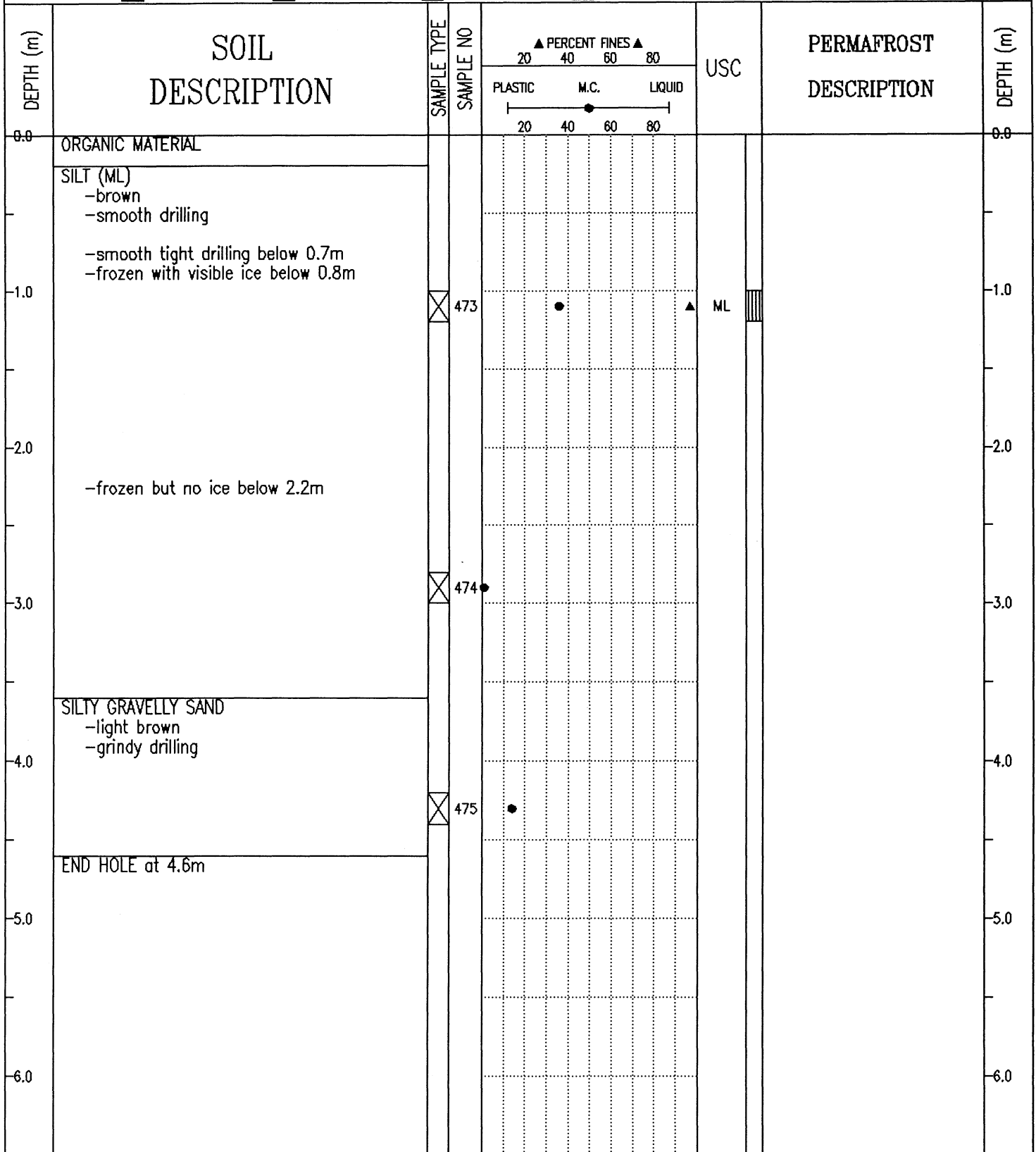


SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 112-230
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1955+918	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 112-231
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1956+075 o/s 2m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-115
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1956+100 o/s 40m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	DECOMPOSED ROCK -damp -hard drilling  -dry below 0.6m								0.0
1.0									1.0
2.0									2.0
3.0	-very hard drilling below 2.8m		239						3.0
4.0	END HOLE at 3.3m -refusal								4.0
5.0									5.0
6.0									6.0

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		BOREHOLE No. 109-116				
SHAKWAK PROJECT		A/H KM 1931.9-1965.5		Project No: SEGMENT 18				
DRILL: B61 150mm Dia. SOLID STEM AUGER		LOCATION: STA 1956+175 o/s 18m Rt.		ELEVATION 0.000 (m)				
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲		USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.			
0.0	DECOMPOSED ROCK -damp  -dry -hard drilling below .4m			20	40	60	80	0.0
-1.0								-1.0
-2.0	END HOLE at 1.6m -refusal							-2.0
-3.0								-3.0
-4.0								-4.0
-5.0								-5.0
-6.0								-6.0
Public Works Canada Whitehorse, Yukon Territory.				COMPLETION DEPTH 1.6 m		COMPLETE 90/10/07		
				LOGGED BY JM		DWG NO.		Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		BOREHOLE No. 109-117				
SHAKWAK PROJECT		A/H KM 1931.9-1965.5		Project No: SEGMENT 18				
DRILL: B61 150mm Dia. SOLID STEM AUGER		LOCATION: STA 1956+515 o/s 8m Rt.		ELEVATION 0.000 (m)				
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲		USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.			
0.0	SANDY SILT WITH GRAVEL (ML) -brown -wet -smooth easy drilling			20	40	60	80	0.0
1.0								1.0
2.0	ORGANIC MATERIAL -wet							2.0
3.0	SILTY GRAVEL WITH SAND (GM) -brown -water							3.0
4.0	SILTY SAND WITH GRAVEL (SM) -brown -frozen -hard drilling							4.0
5.0	END HOLE at 4.6m -in ditch							5.0
6.0								6.0
Public Works Canada Whitehorse, Yukon Territory.				COMPLETION DEPTH 4.6 m		COMPLETE 90/10/07		
				LOGGED BY JM		DWG NO.		Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT ALASKA HIGHWAY PRE-ENGINEERING BOREHOLE No. 109-118

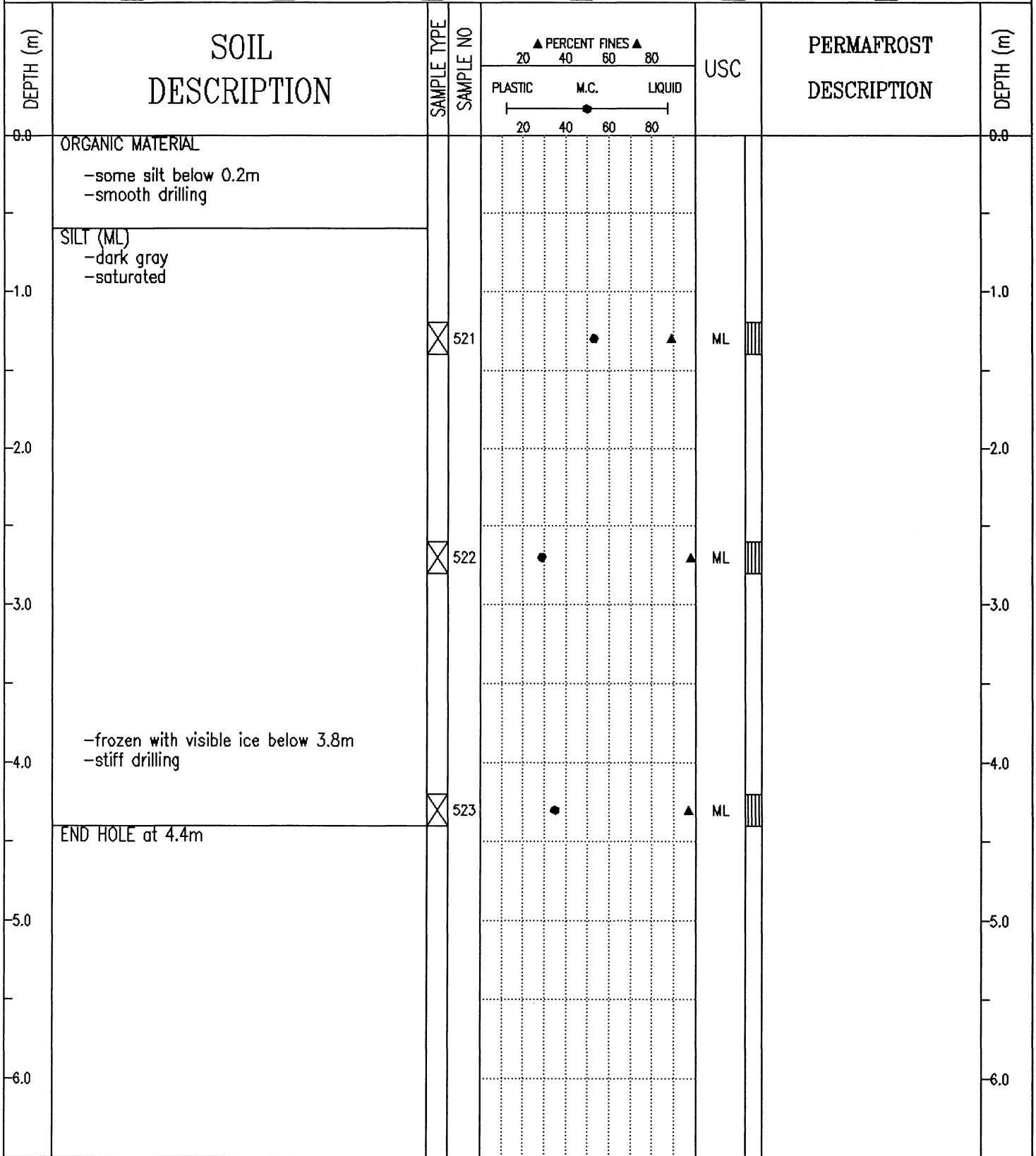
SHAKWAK PROJECT A/H KM 1931.9-1965.5 Project No: SEGMENT 18

DRILL: B61 150mm Dia. SOLID STEM AUGER LOCATION: STA 1956+608 o/s 2m Lt. ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	CRUSHED GRAVEL -road fill								0.0
	DECOMPOSED ROCK -road fill								
1.0	WEATHERED SHALE -gray -moist -water below 1.0m -smooth easy drilling		243				SM		1.0
2.0									2.0
3.0	SHALE -gray -damp -harder drilling		244						3.0
4.0	END HOLE at 3.7m -refusal								4.0
5.0									5.0
6.0									6.0

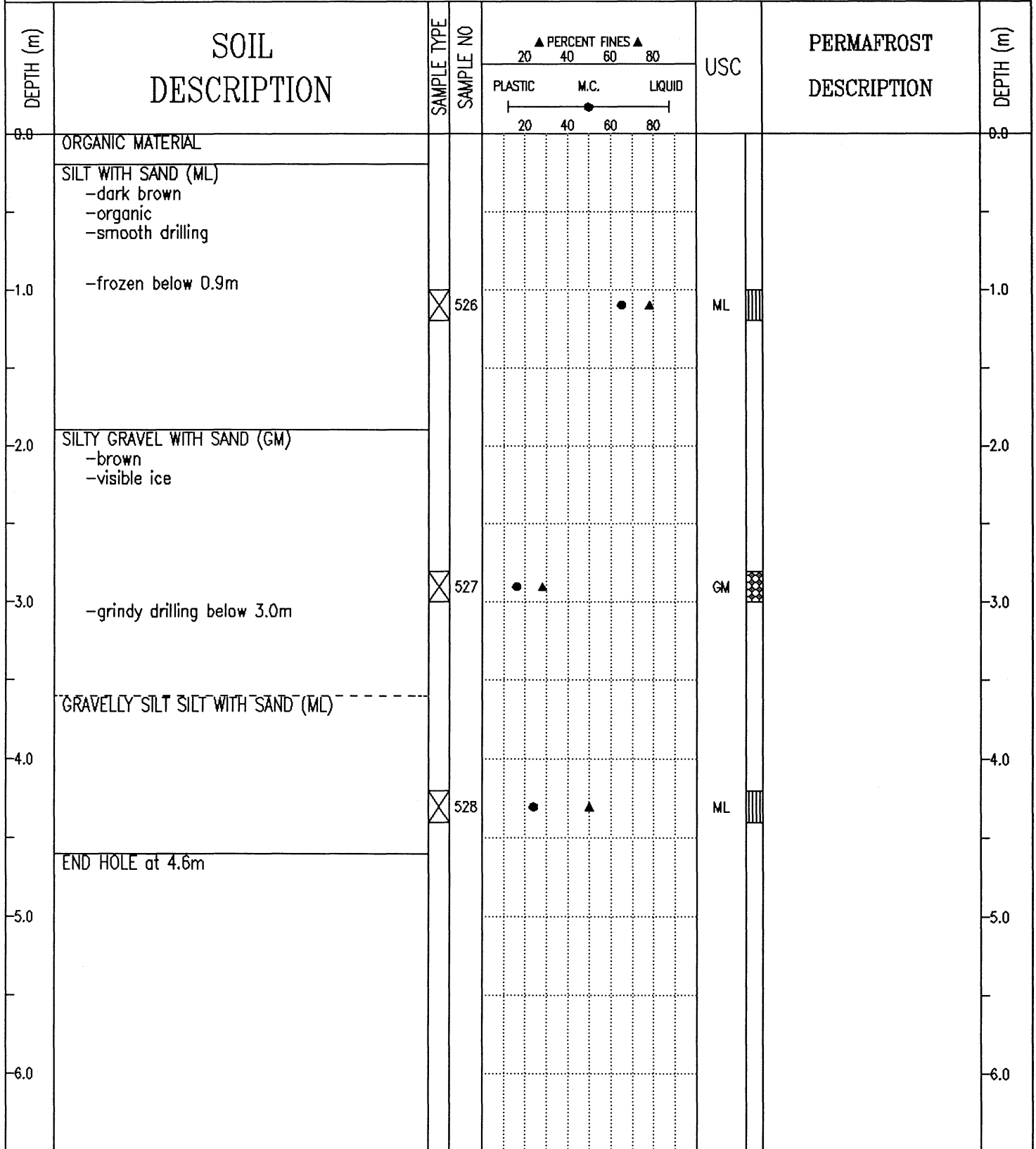
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SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1956+725 o/s 7m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



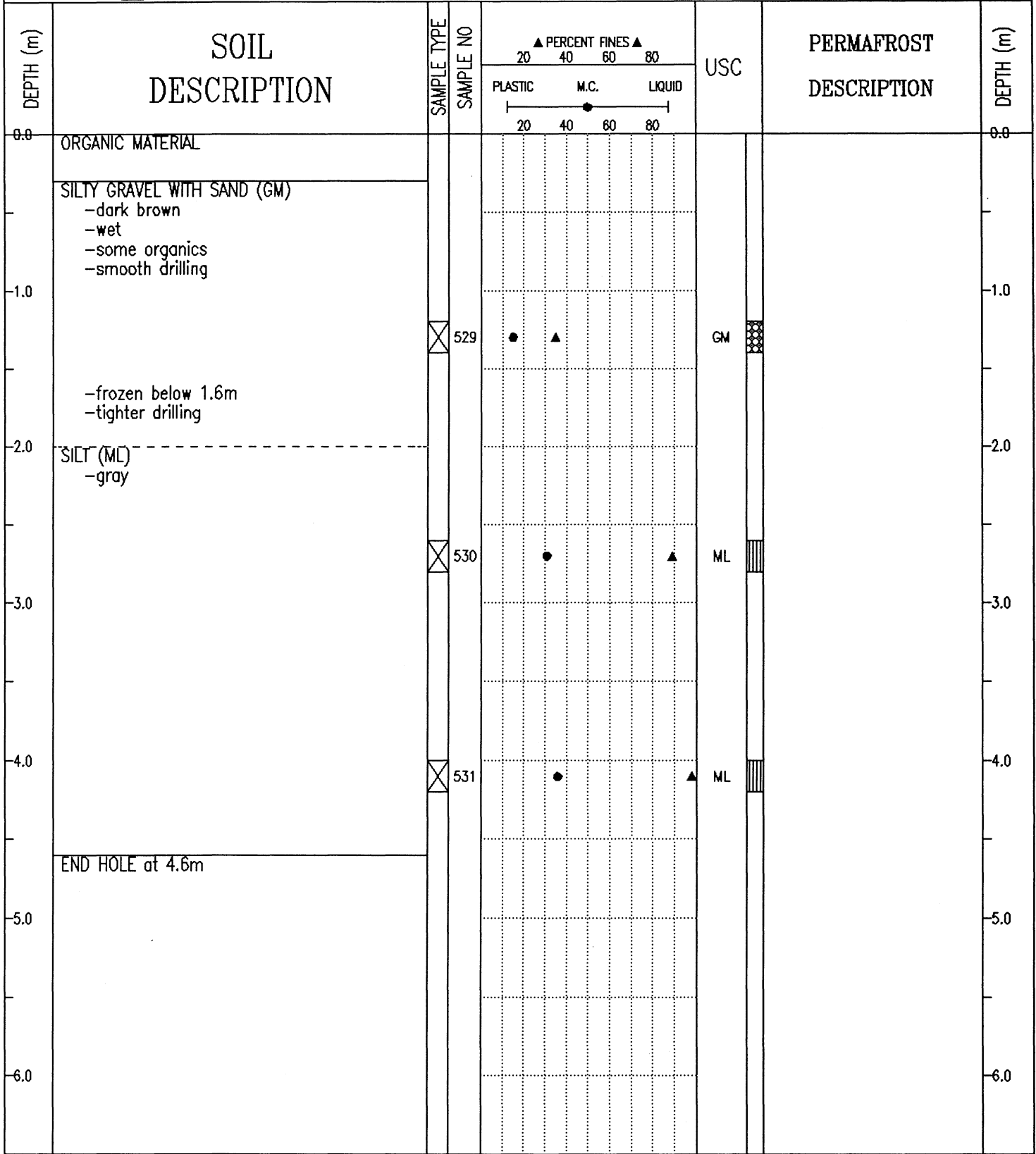
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 112-245
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1956+610 o/s 30m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
	SILT -very organic -saturated								
-1.0	SILTY GRAVEL WITH SAND (GM) -brown -frozen with visible ice below 0.9m	<input checked="" type="checkbox"/>	524	●	▲		GM	-1.0	
-2.0	-refusal at 1.8m twice							-2.0	
-3.0	SILTY SAND (SM) -light brown -saturated -grindy drilling	<input checked="" type="checkbox"/>	525	●	▲		SM	-3.0	
-3.0	END HOLE at 2.9m -refusal							-3.0	
-4.0								-4.0	
-5.0								-5.0	
-6.0								-6.0	

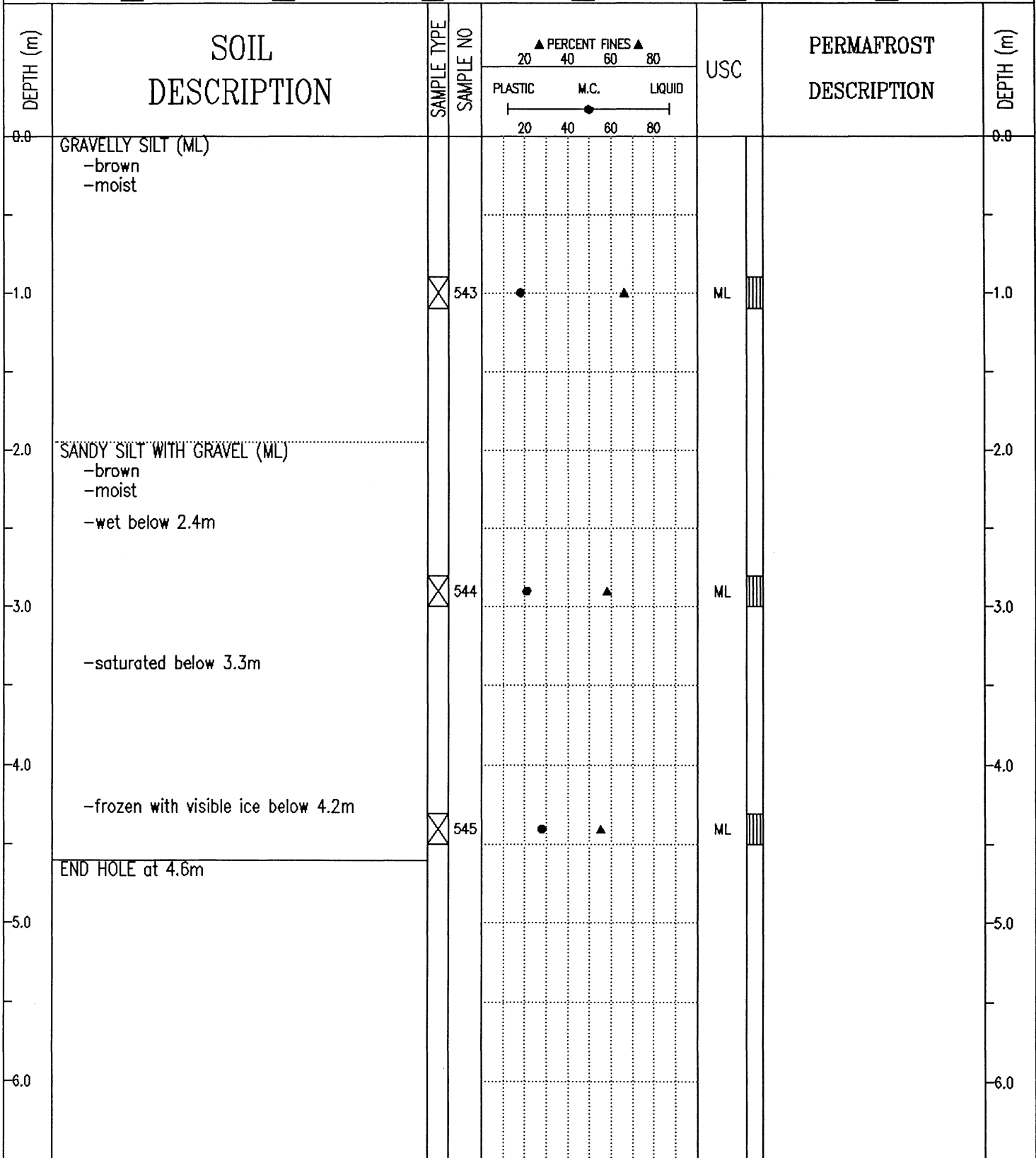
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 112-246
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1956+470 o/s 8m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



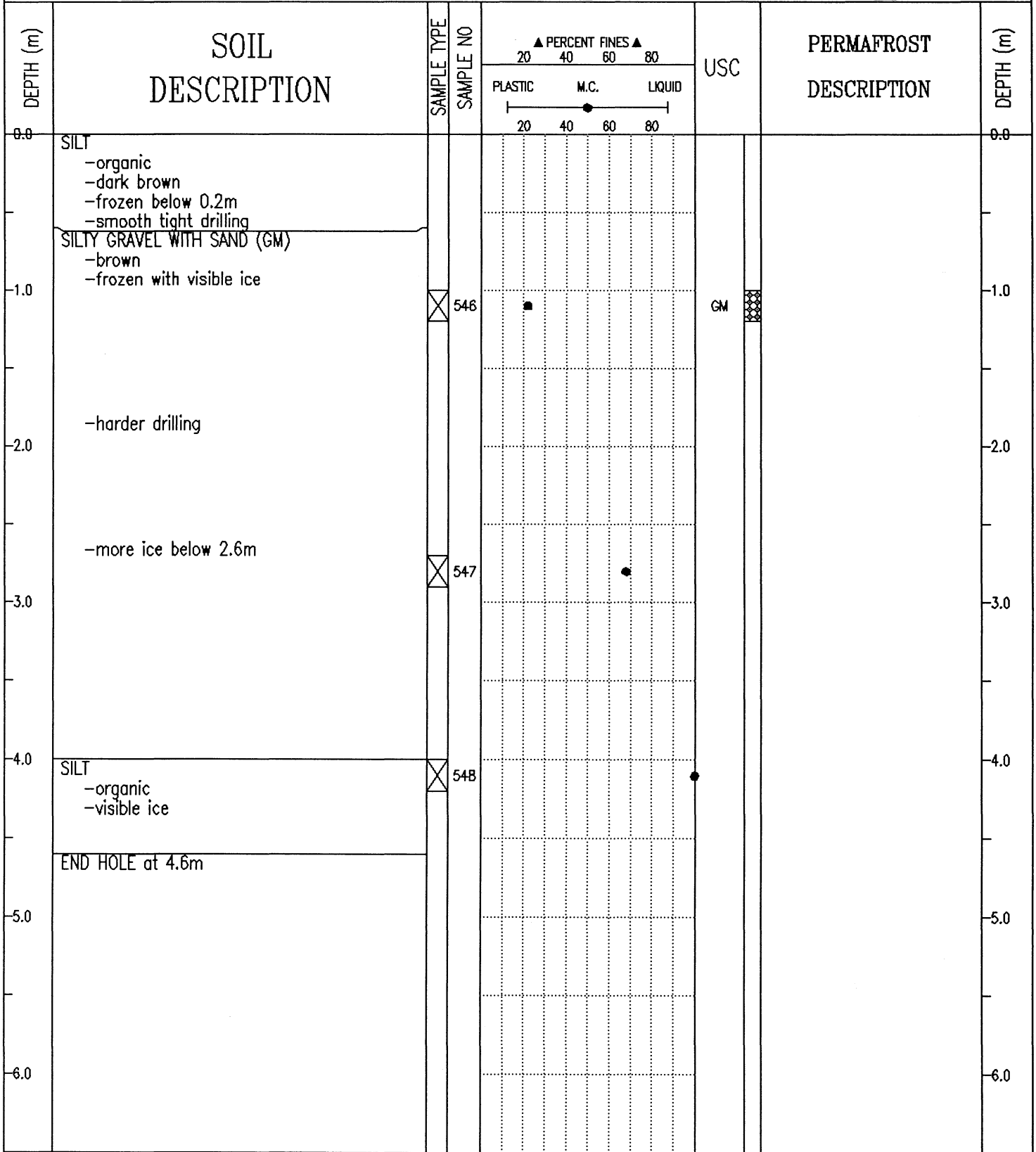
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 112-247
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1956+325 o/s 13m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 113-253
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1956+855 o/s 1m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 113-254
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1957+050 o/s 4m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

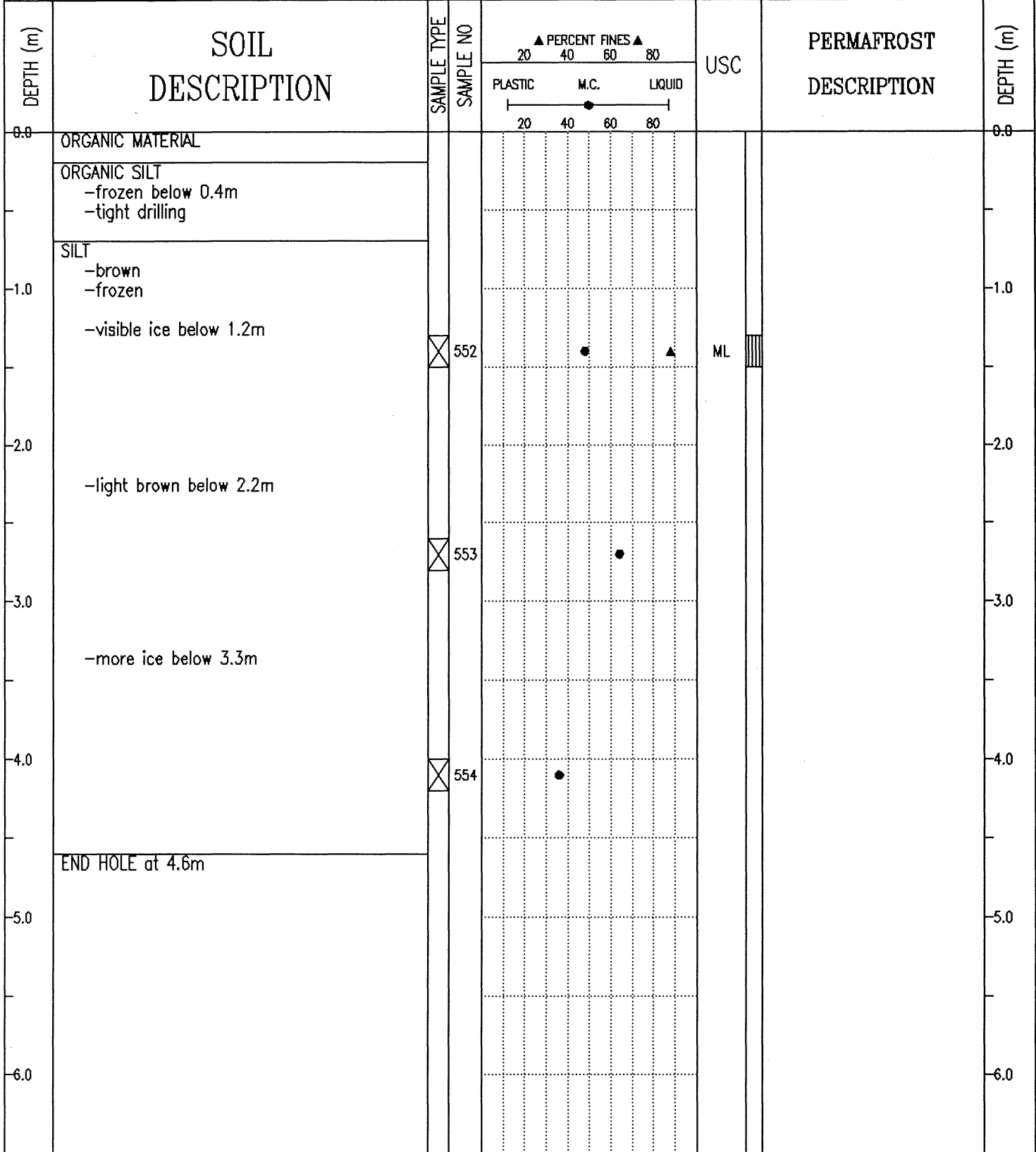


SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 113-255
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1957+250 o/s 3m Lt.	ELEVATION 0.000 (m)

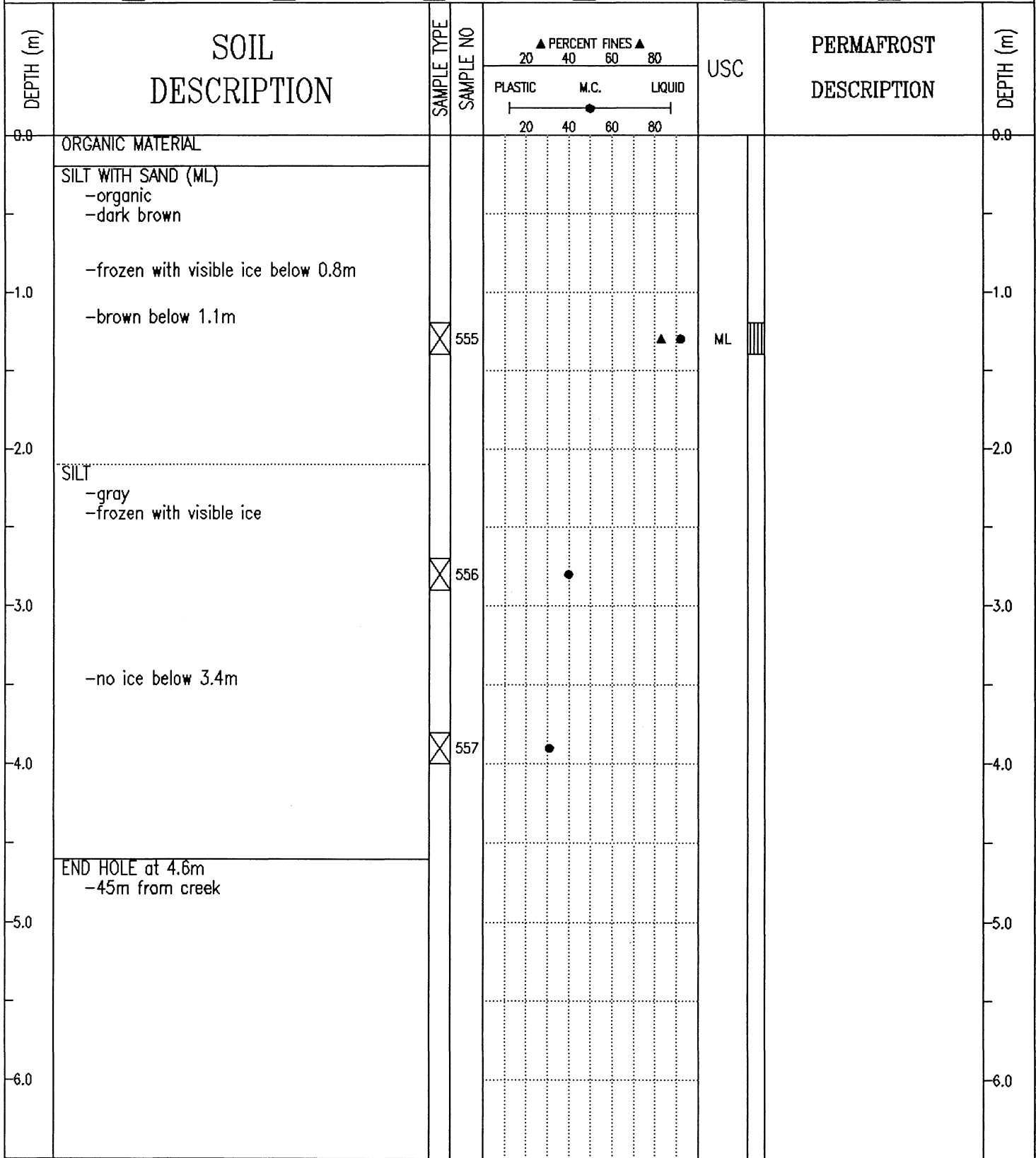
SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC SANDY SILT -dark brown -wet -smooth tight drilling								0.0
1.0	SANDY SILT WITH GRAVEL (ML) -brown -frozen with visible ice								1.0
2.0	-some grindy drilling at 2.0m								2.0
3.0									3.0
4.0	SILT -brown -visible ice								4.0
5.0	END HOLE at 4.6m								5.0
6.0									6.0

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 113-256
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1957+446 o/s 3m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

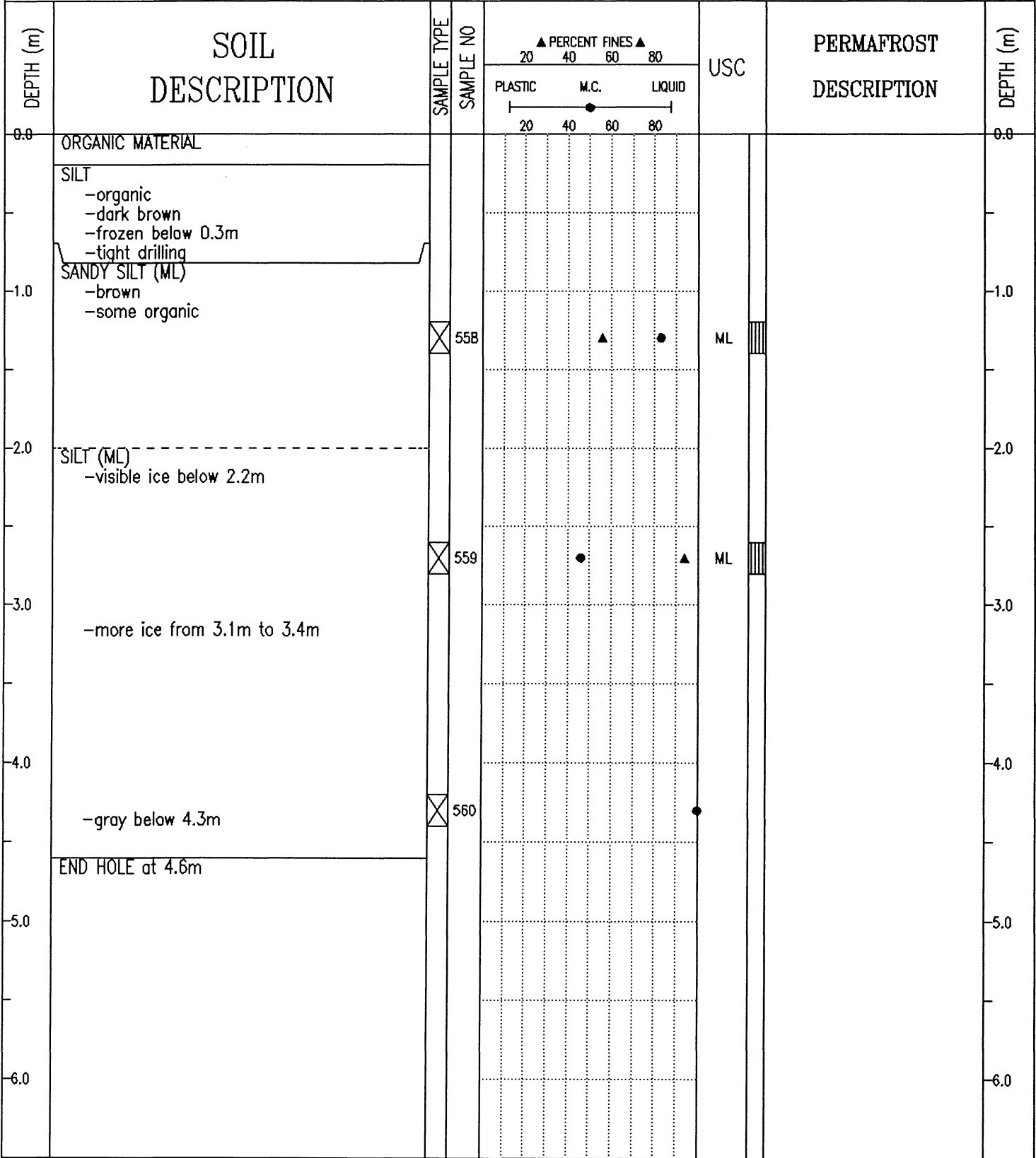


SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 113-257
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1957+650 o/s 4m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

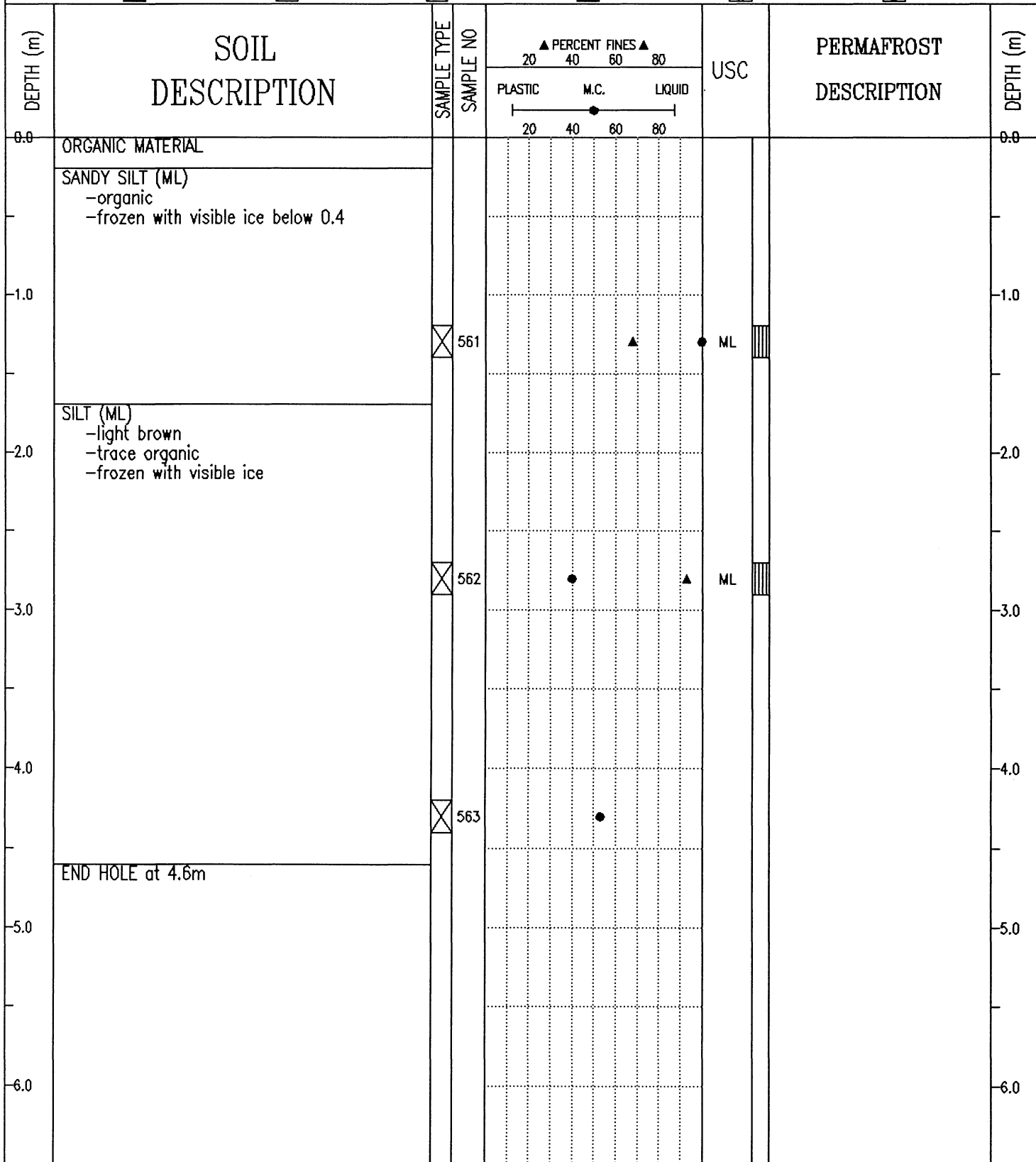


SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 113-258
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1957+850 o/s 3m Lt.	ELEVATION 0.000 (m)

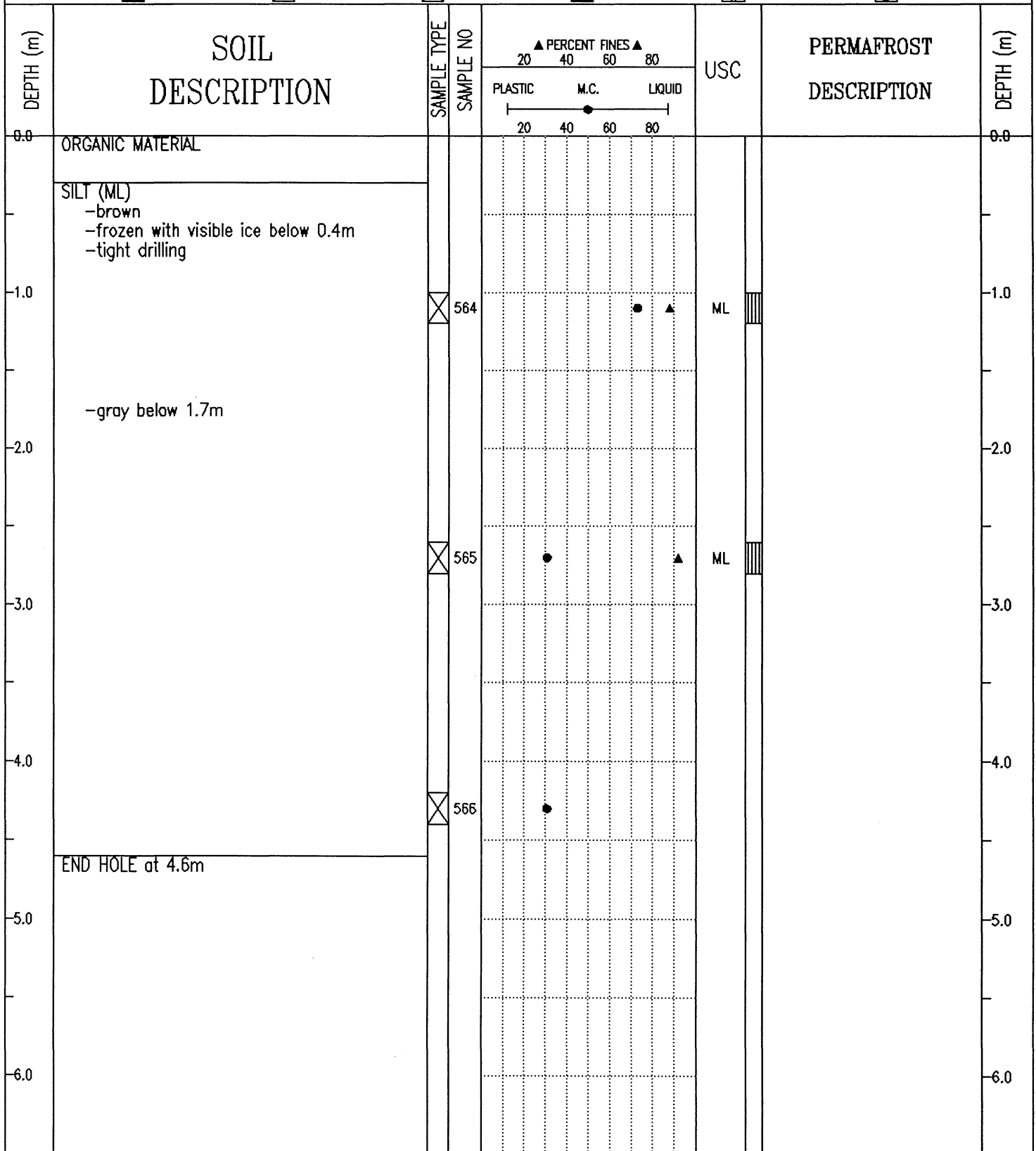
SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE



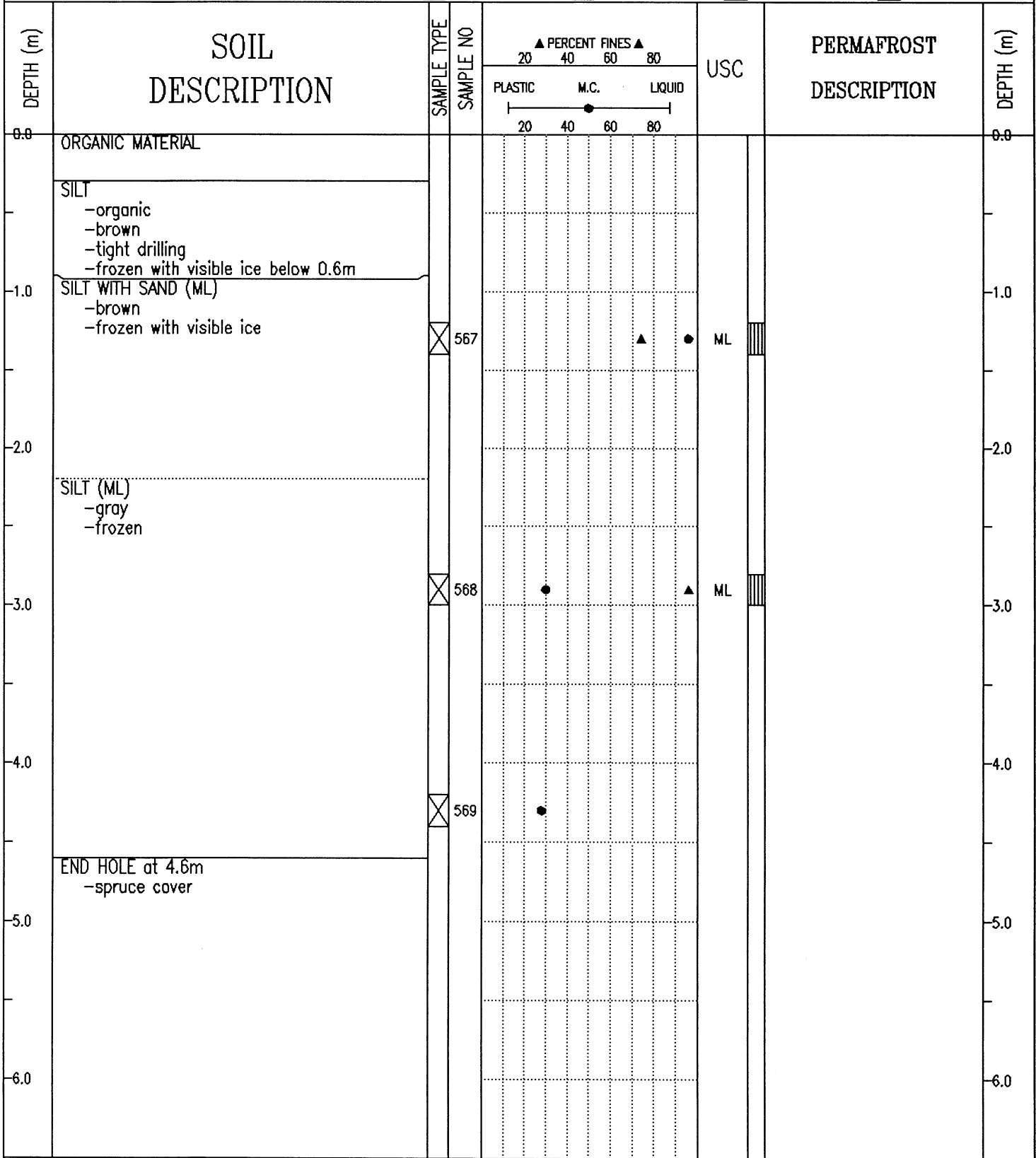
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 113-259
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1958+075 o/s 3m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



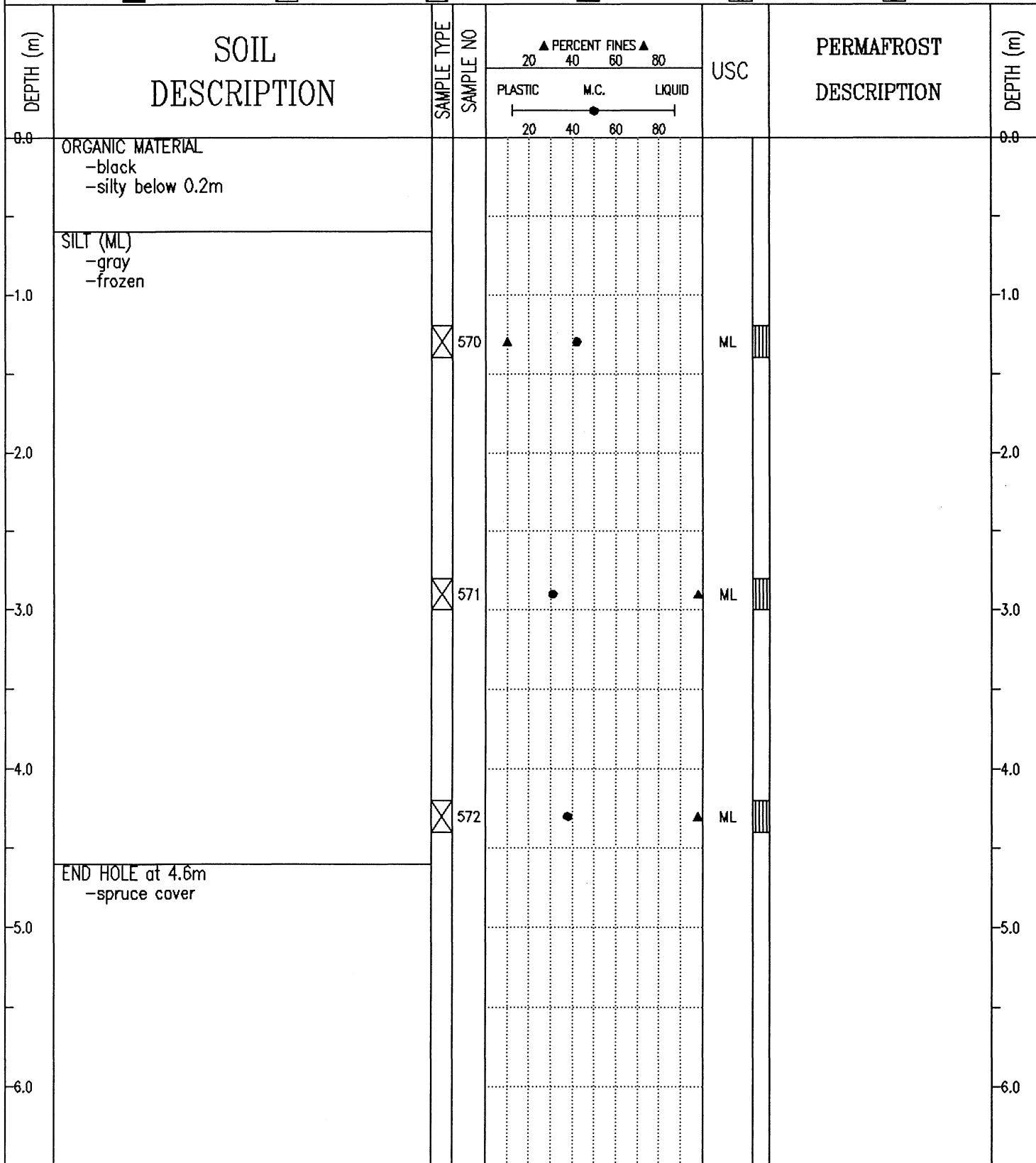
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 113-260
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1958+250 o/s 2m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



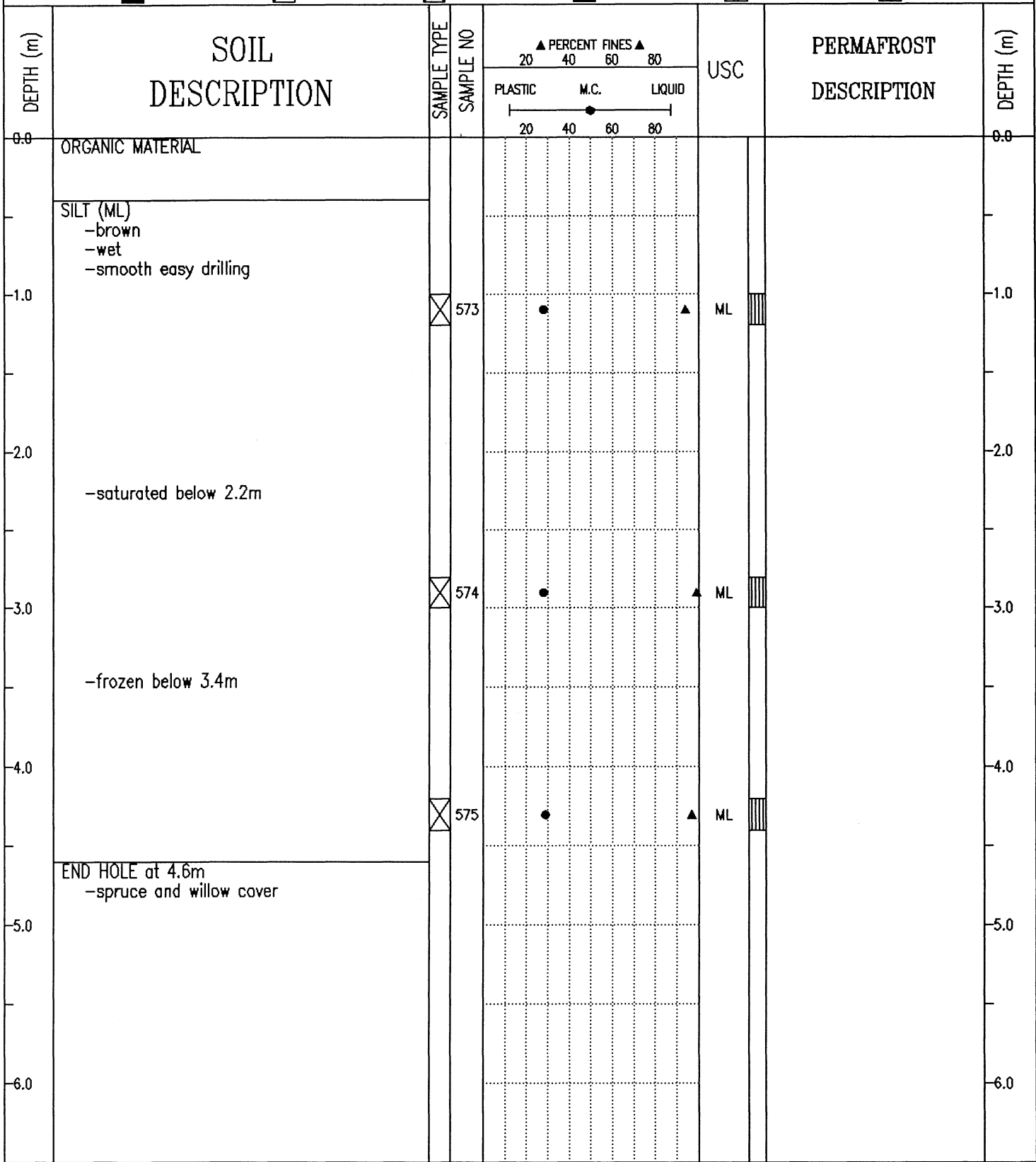
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 113-261
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1958+450 o/s 3m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



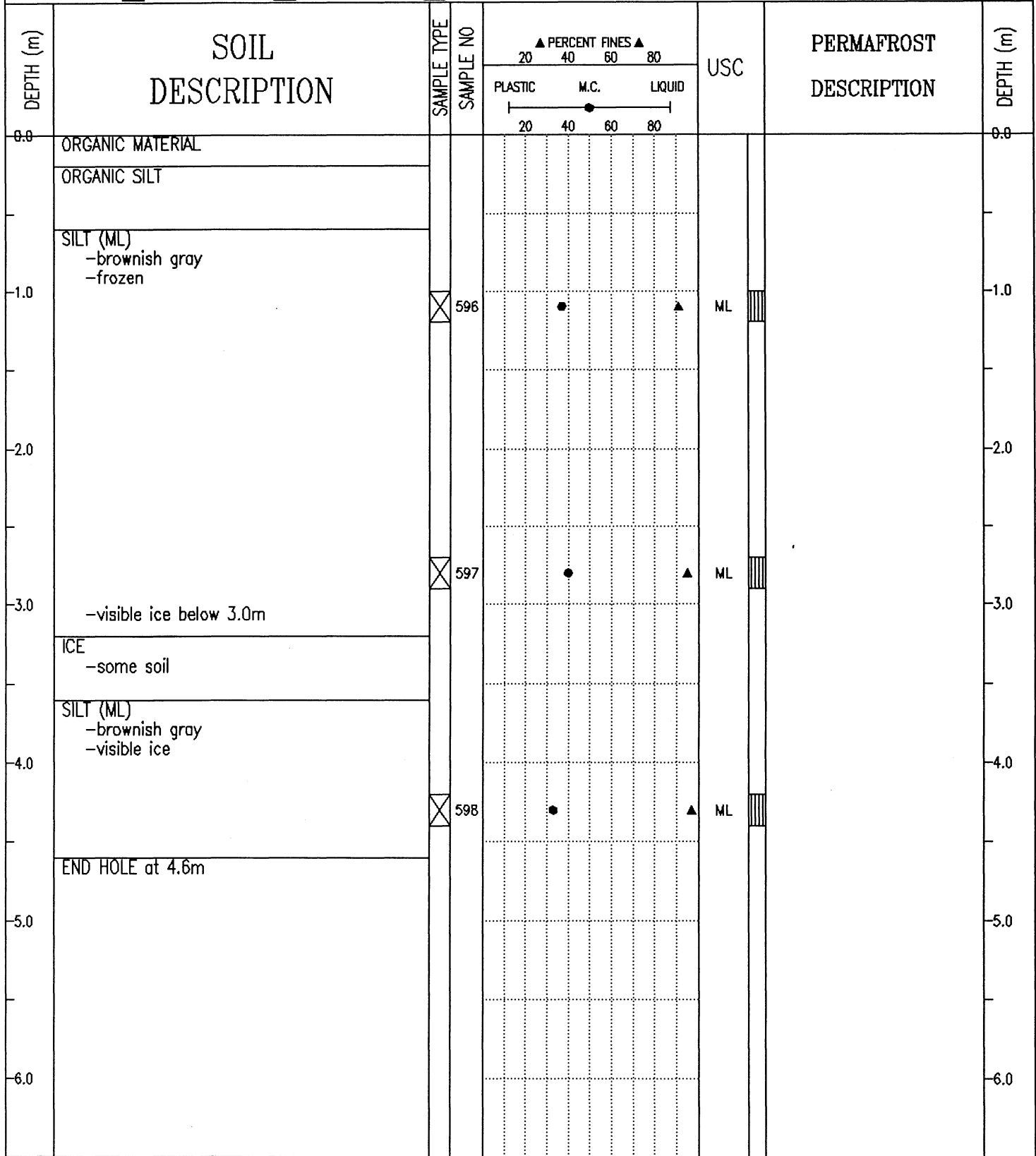
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 113-262
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1958+650 o/s 3m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
		<input type="checkbox"/> BULK
		<input type="checkbox"/> TUBE
		<input type="checkbox"/> CORE



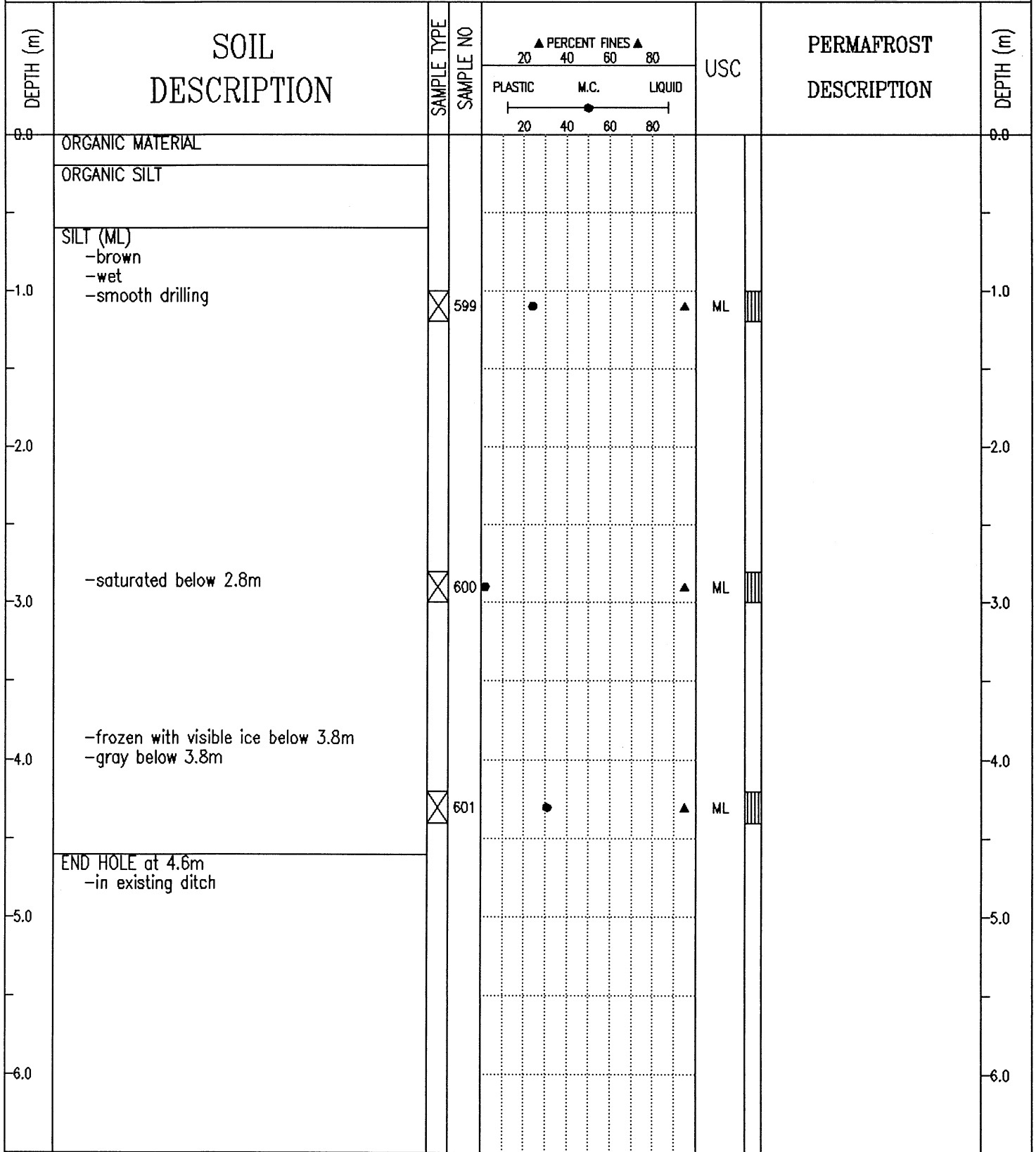
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 113-263
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1958+850 o/s 2m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



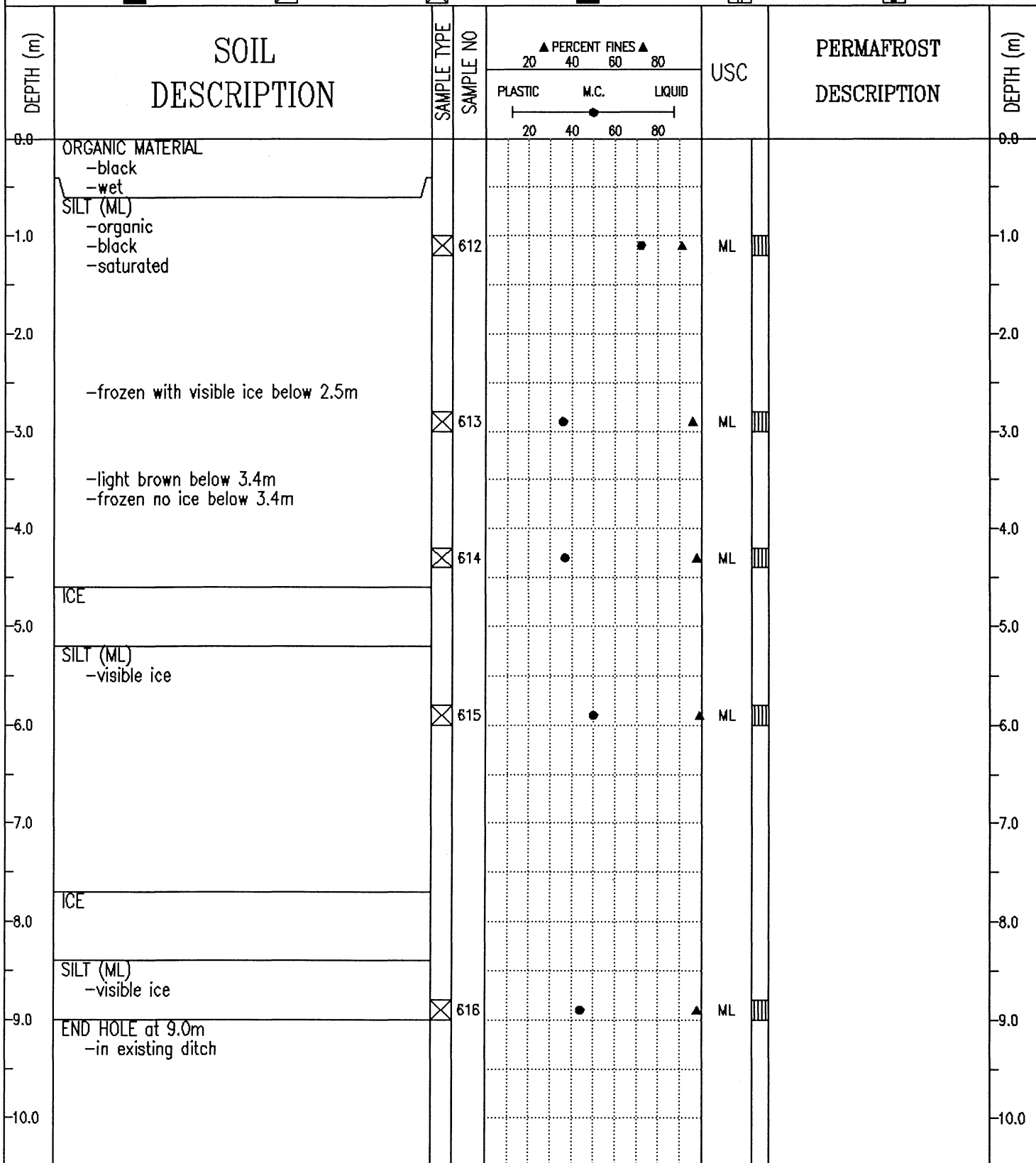
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 114-270
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1958+975 o/s 12m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 114-271
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1959+125 o/s 4m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

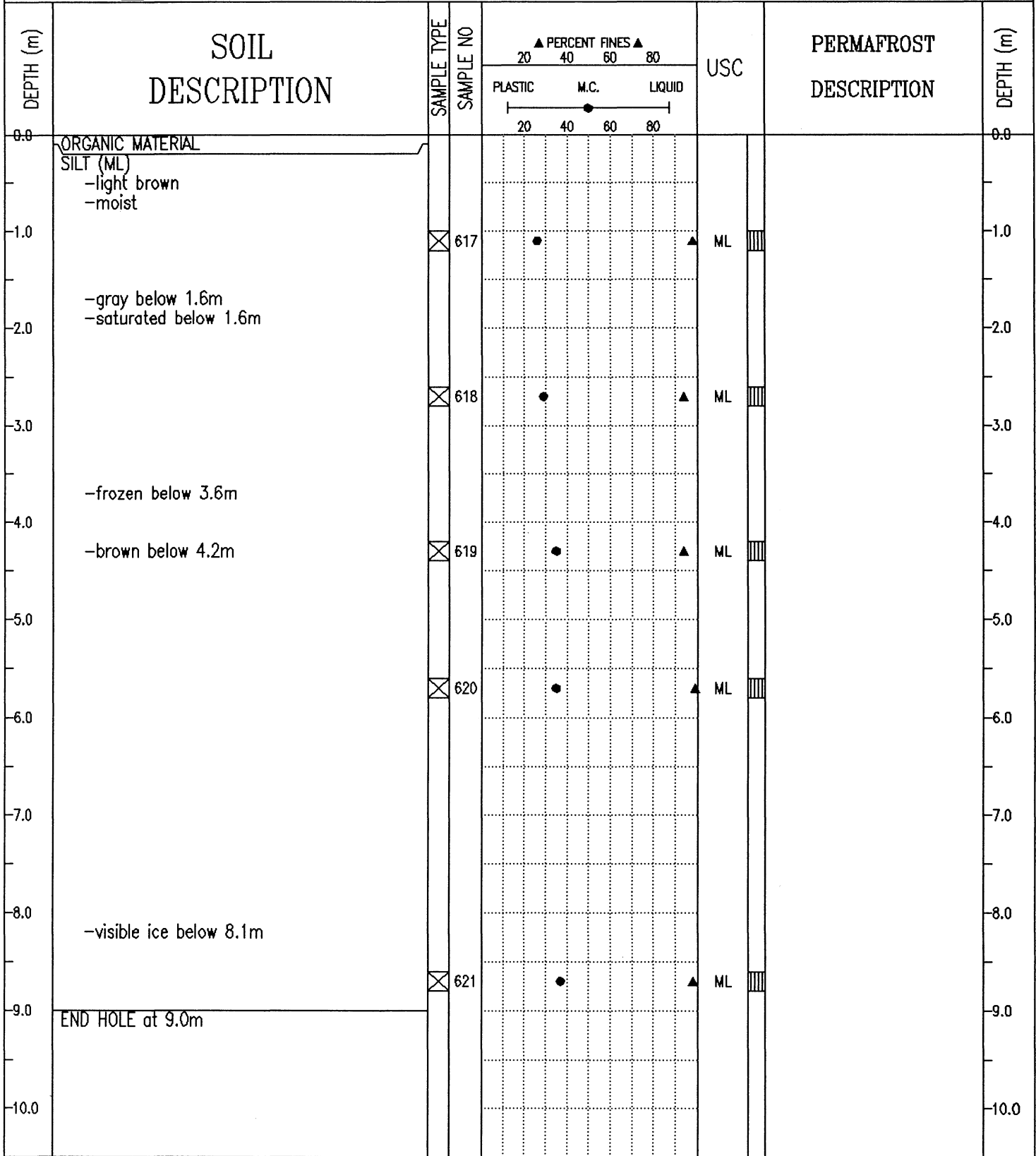


SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 114-274
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1958+905 o/s 15m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 114-275
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1959+050 o/s 12m Lt.	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

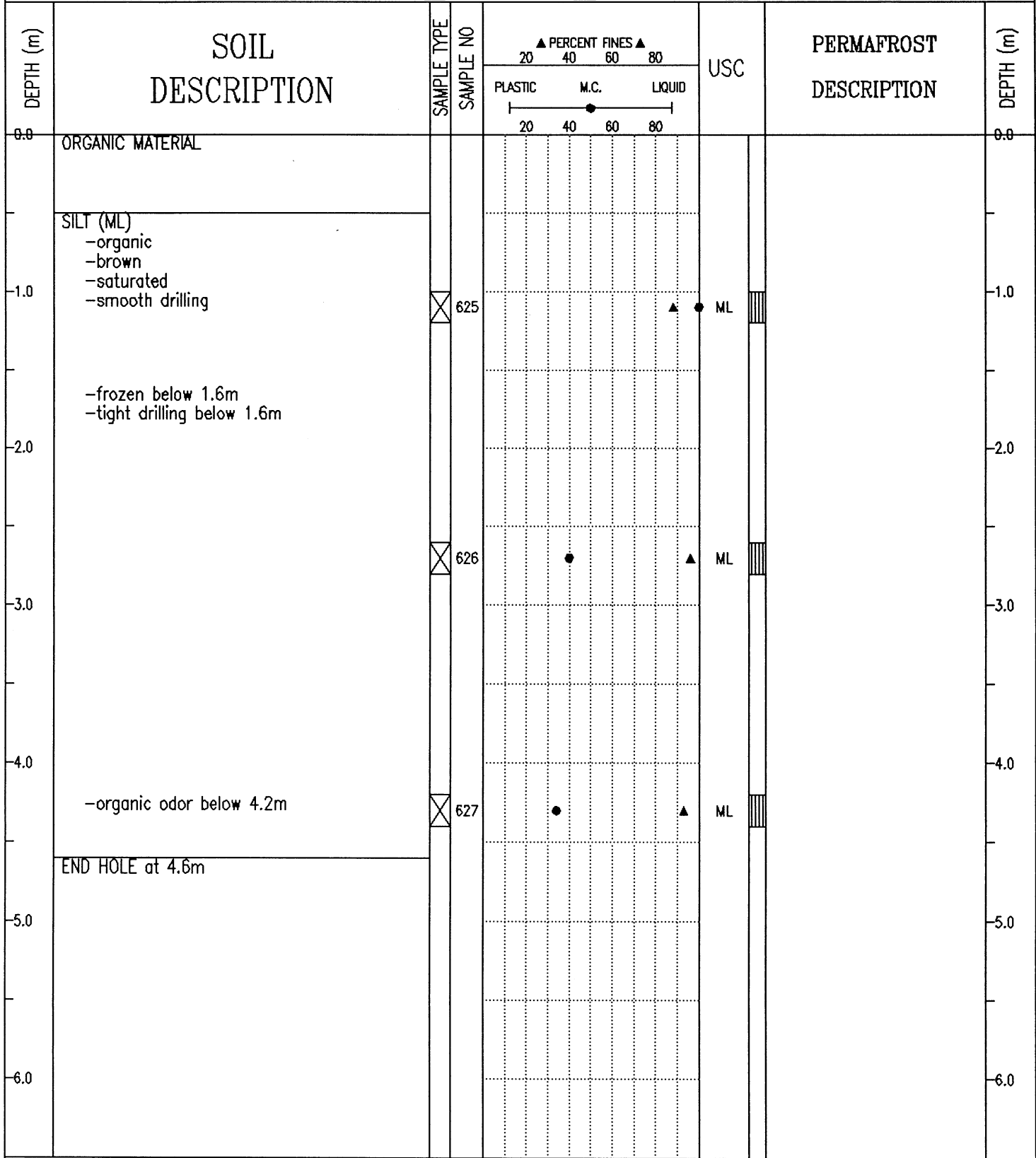


SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 114-276
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1959+200 o/s 6m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL								0.0
	SILT (ML) -light brown -wet -smooth drilling								
-1.0	-saturated below 1.0m	<input checked="" type="checkbox"/>	622				ML		-1.0
-2.0	-frozen below 2.1m								-2.0
-3.0	ICE	<input checked="" type="checkbox"/>	623				ML		-3.0
	SILT WITH SAND (ML) -brown -frozen -organic odor								
-4.0		<input checked="" type="checkbox"/>	624				ML		-4.0
-5.0	-grindy drilling								-5.0
-6.0	END HOLE at 5.5m -refusal twice -in existing ditch								-6.0

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 114-277
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1959+450 o/s 10m Rt.	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE



Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 4.6 m	COMPLETE 90/10/24
	LOGGED BY JG	DWG NO.

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		BOREHOLE No. 109-119				
SHAKWAK PROJECT		A/H KM 1931.9-1965.5		Project No: SEGMENT 18				
DRILL: B61 150mm Dia. SOLID STEM AUGER		LOCATION: STA 1959+565 o/s 1m Lt.		ELEVATION 0.000 (m)				
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲		USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.			
0.0	CRUSHED GRAVEL -road fill			20	40	60	80	0.0
0.0 - 1.0	DECOMPOSED ROCK -road fill -moist -grindy drilling							0.0 - 1.0
1.0 - 2.0	-wet below 1.5m -easy drilling							1.0 - 2.0
2.0 - 3.0	ORGANIC MATERIAL -wet  -0.2m layer of ice from 2.6m to 2.8m -tight drilling below 2.6m							2.0 - 3.0
3.0	ORGANIC MATERIAL -frozen with visible ice	<input checked="" type="checkbox"/>	245					3.0
3.0 - 4.0	SANDY SILT -some organics -frozen with visible ice							3.0 - 4.0
4.0 - 5.0	ICE							4.0 - 5.0
5.0 - 6.0	END HOLE at 5.6m -refusal -on existing road							5.0 - 6.0
Public Works Canada Whitehorse, Yukon Territory.				COMPLETION DEPTH 5.6 m		COMPLETE 90/10/07		
				LOGGED BY JM		DWG NO.		Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 114-278
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1959+565 o/s 10m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL -black -wet -smooth drilling  -frozen below 0.6m -tight drilling -wood chunks								0.0
1.0									1.0
2.0									2.0
3.0	-visible ice below 2.3m  -dark brown below 2.8m		628						3.0
4.0	SANDY SILT -brown -approximatly 30% ice		629						4.0
5.0	END HOLE at 4.6m		630						5.0
6.0									6.0

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		BOREHOLE No. 109-120				
SHAKWAK PROJECT		A/H KM 1931.9-1965.5		Project No: SEGMENT 18				
DRILL: B61 150mm Dia. SOLID STEM AUGER		LOCATION: STA 1959+770 o/s 2m Lt.		ELEVATION 0.000 (m)				
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲		PERMAFROST DESCRIPTION	DEPTH (m)	
				PLASTIC	M.C.			LIQUID
0.0	CRUSHED GRAVEL -road fill			20	40	60	80	0.0
	DECOMPOSED ROCK -road fill -moist							
1.0	SANDY SILT -gray -saturated							1.0
	ORGANIC MATERIAL -wet -easy drilling							
2.0	SILT (ML) -gray -some organics -frozen -tight drilling -visible ice below 2.4m							2.0
3.0	ORGANIC MATERIAL -some sandy silt -frozen -first refusal at 3.2m	<input checked="" type="checkbox"/>	246					3.0
	END HOLE at 3.4m -second refusal at 3.4m -on existing road							
4.0								4.0
5.0								5.0
6.0								6.0

Public Works Canada  
Whitehorse, Yukon Territory.

COMPLETION DEPTH 3.4 m

COMPLETE 90/10/07

LOGGED BY JM

DWG NO.

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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 114-279
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1959+770 o/s 12m Rt.	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL -black -some silt -frozen -smooth drilling								0.0
	ICE -jumpy drilling								
1.0									1.0
2.0									2.0
3.0									3.0
4.0									4.0
5.0	sandy silt -brown -visible ice  -frozen without ice below 5.2m								5.0
6.0	END HOLE at 6.0m	<input checked="" type="checkbox"/>	631						6.0

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		BOREHOLE No. 109-121				
SHAKWAK PROJECT		A/H KM 1931.9-1965.5		Project No: SEGMENT 18				
DRILL: B61 150mm Dia. SOLID STEM AUGER		LOCATION: STA 1959+975 o/s 1m Lt.		ELEVATION 0.000 (m)				
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲		USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.			
0.0	CRUSHED GRAVEL -road fill							0.0
	SILTY SAND -gray -moist to wet -road fill							
1.0		<input checked="" type="checkbox"/>	247					1.0
	ORGANIC MATERIAL -wet							
	SANDY SILT -wet -some organics -frozen, tighter drilling below 1.9m							
2.0								2.0
	ORGANIC MATERIAL -some silt -frozen with visible ice							
3.0		<input checked="" type="checkbox"/>	248					3.0
	-frozen, no visible ice below 3.0m							
	END HOLE at 3.4m -refusal -on existing road							
4.0								4.0
5.0								5.0
6.0								6.0
Public Works Canada Whitehorse, Yukon Territory.				COMPLETION DEPTH 3.4 m		COMPLETE 90/10/08		
				LOGGED BY JM		DWG NO.		Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 114-280
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1959+975 o/s 12m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL -dark brown -trace of silt								0.0
1.0	SILT (ML) -brown -frozen	<input checked="" type="checkbox"/>	632				ML		1.0
3.0	SILT WITH SAND (ML) -brown -visible ice	<input checked="" type="checkbox"/>	633				ML		3.0
4.6	END HOLE at 4.6m	<input checked="" type="checkbox"/>	634						4.6

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-122
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1960+175	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

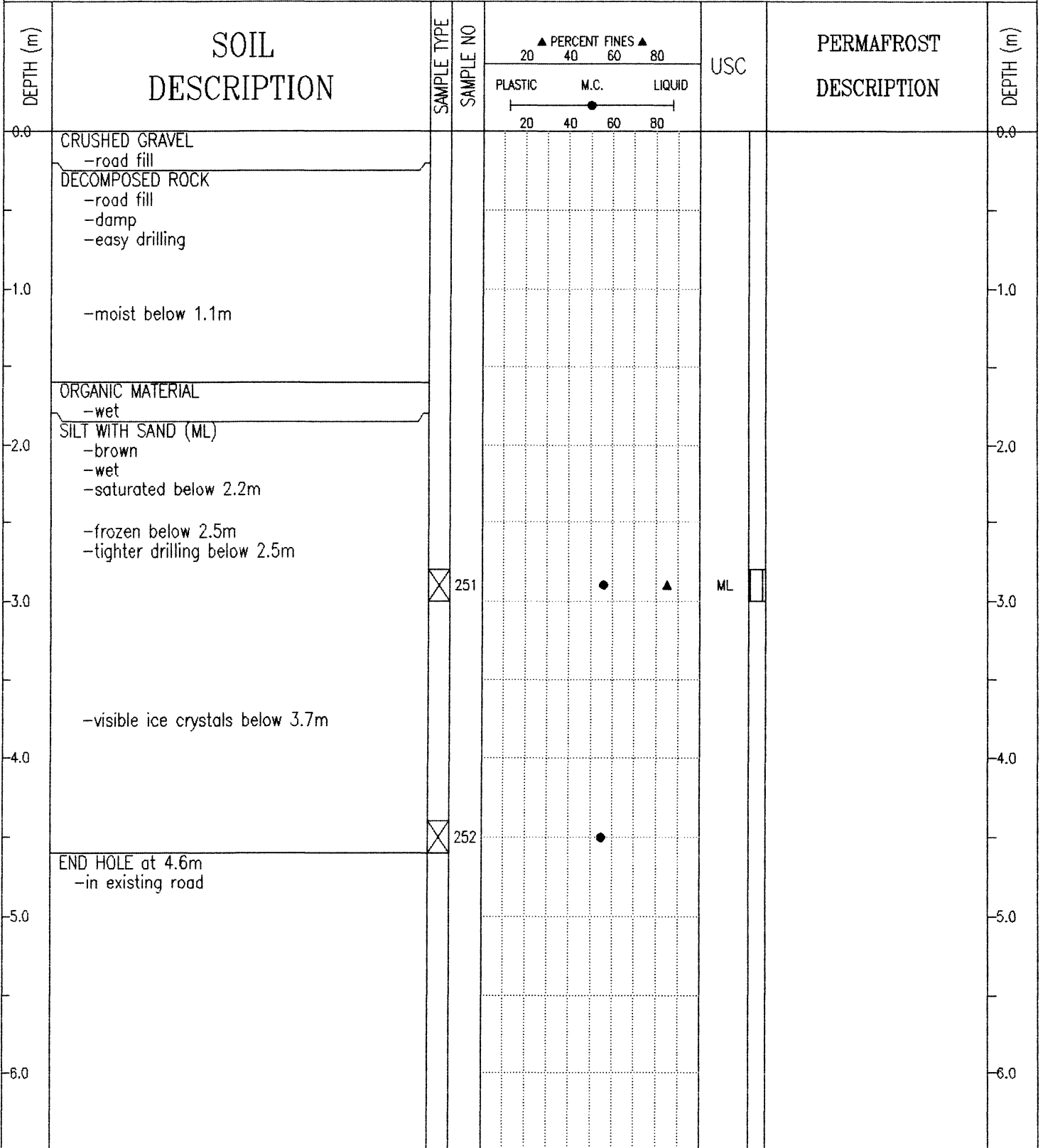
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	CRUSHED GRAVEL -road fill								0.0
	DECOMPOSED ROCK -road fill								
-1.0	ORGANIC MATERIAL								-1.0
	SANDY SILT -wet -organics -easy smooth drilling								
-2.0	-frozen below 2.0m -tight drilling below 2.0m								-2.0
	SILT -visible ice crystals -organic								
-3.0	SILT (ML) -frozen -organics	<input checked="" type="checkbox"/>	249				ML		-3.0
	-no organics below 3.3m								
-4.0	-visible ice crystals below 3.9m								-4.0
		<input checked="" type="checkbox"/>	250						
-5.0	END HOLE at 4.6m -in existing road								-5.0
-6.0									-6.0

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 114-281
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1960+175 o/s 8m Rt.	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
	SILT (ML) -brown -wet								
1.0		<input checked="" type="checkbox"/>	635		55	75	ML	1.0	
2.0	-frozen below 1.8m							2.0	
3.0		<input checked="" type="checkbox"/>	636		65	85	ML	3.0	
4.0	-light brown below 3.4m							4.0	
5.0		<input checked="" type="checkbox"/>	637	45	55	75	ML	5.0	
6.0	END HOLE at 4.6m -in existing ditch							6.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-123
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1960+380 o/s 3m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 4.6 m	COMPLETE 90/10/08
	LOGGED BY JM	DWG NO.

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 114-282
SHAKWAK PROJECT	A/H KM 1931.9-1985.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1960+380 o/s 15m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC SILT							0.0	
	SILT (ML) -brown -smooth drilling -frozen below 0.6m -tight drilling below 0.6m								
1.0	-visible ice below 1.0m	<input checked="" type="checkbox"/>	638				ML	1.0	
2.0								2.0	
3.0		<input checked="" type="checkbox"/>	639					3.0	
4.0								4.0	
4.6	-light brown below 4.2m	<input checked="" type="checkbox"/>	640					4.6	
5.0	END HOLE at 4.6m -in existing ditch							5.0	
6.0								6.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 114-283
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1960+550 o/s 12m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

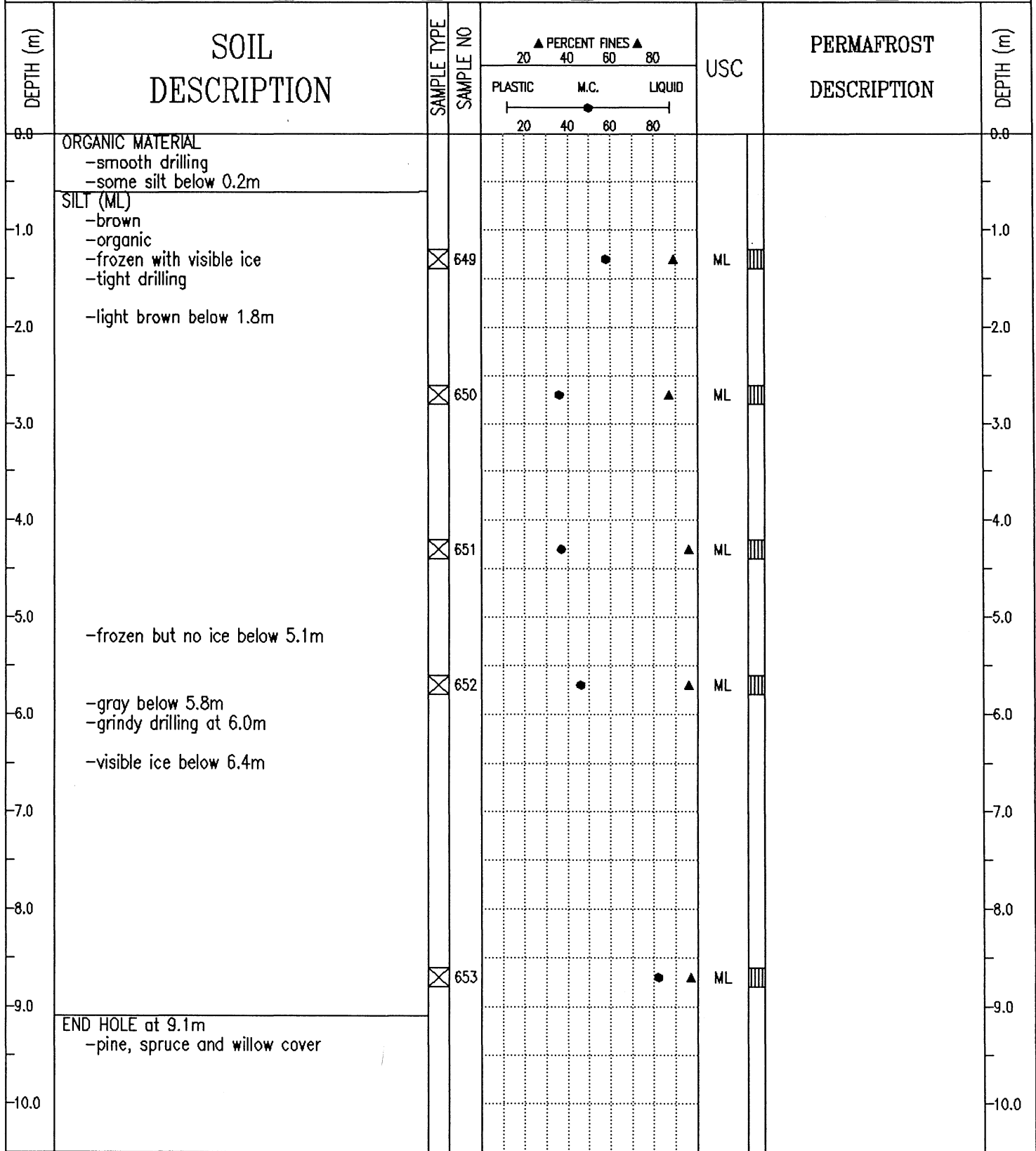
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
	SILT (ML) -brown -wet								
-1.0	-gray and frozen below 1.2m	<input checked="" type="checkbox"/>	641				ML	-1.0	
-2.0	-visible ice below 2.2m							-2.0	
-3.0		<input checked="" type="checkbox"/>	642				ML	-3.0	
-4.0	ORGANIC SILT -gray -frozen with visible ice							-4.0	
		<input checked="" type="checkbox"/>	643						
-5.0	END HOLE at 4.6m							-5.0	
-6.0								-6.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 114-284
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1960+700 o/s 4m Rt.	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

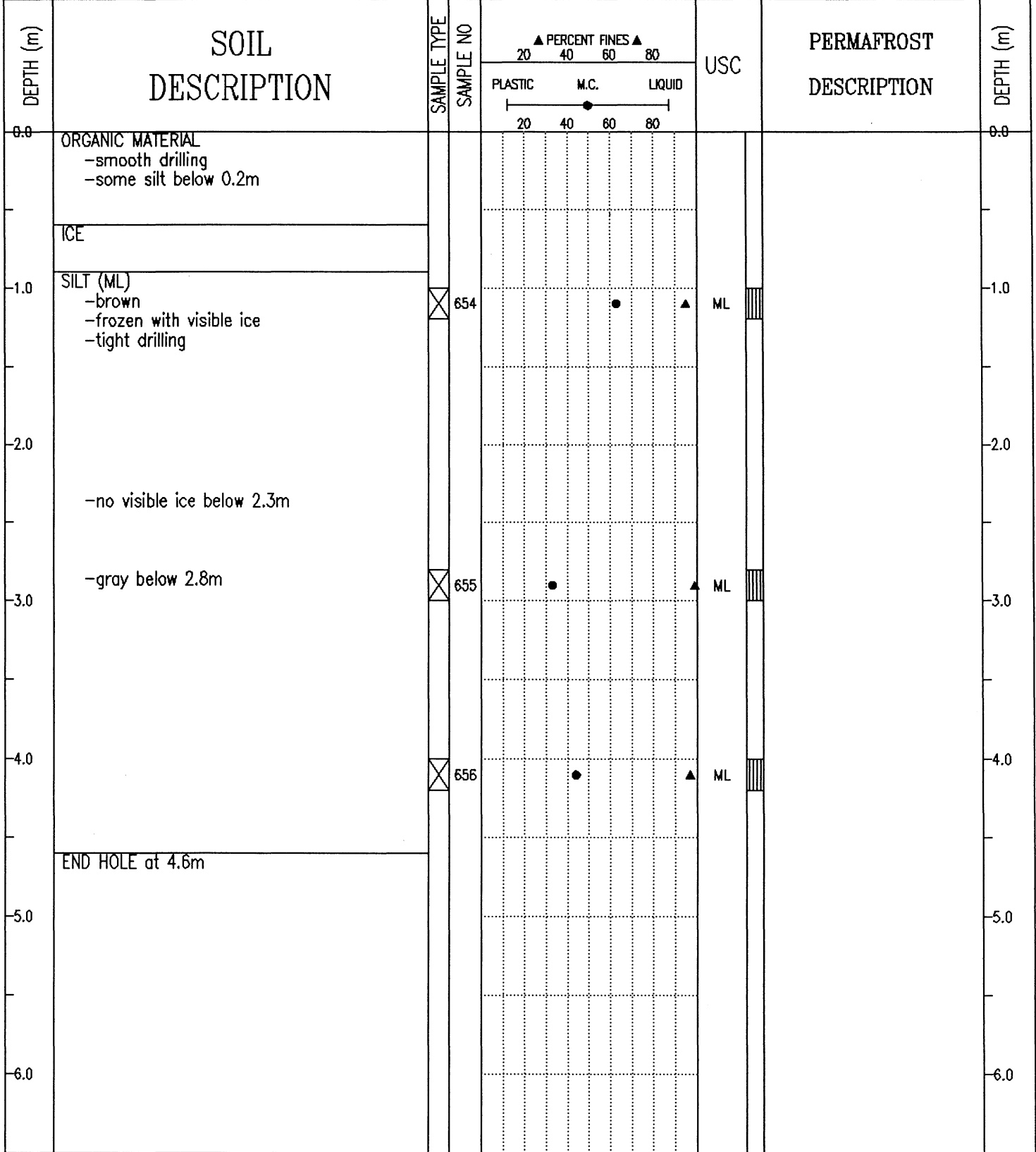
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL -smooth drilling							0.0	
0.0 - 1.0	ORGANIC SILT -black -frozen below 0.4m -tight drilling								
1.0 - 2.0	SILT (ML) -brown -trace organic -visible ice below 1.9m	<input checked="" type="checkbox"/>	644				ML		
2.0 - 3.0	SILT (ML) -gray -visible ice -tight drilling	<input checked="" type="checkbox"/>	645				ML		
3.0 - 4.0		<input checked="" type="checkbox"/>	646				ML		
4.0 - 5.0									
5.0 - 6.0	SILT WITH SAND (ML) -gray -visible ice -tight drilling	<input checked="" type="checkbox"/>	647				ML		
6.0 - 7.0									
7.0 - 8.0	SILT (ML) -gray -frozen no ice -tight drilling								
8.0 - 9.0		<input checked="" type="checkbox"/>	648				ML		
9.0 - 10.0	END HOLE at 9.1m -pine and willow cover								

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 115-285
SHAKWAK PROJECT		A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER		LOCATION: 1960+825 o/s 3m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T.		<input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK	<input type="checkbox"/> TUBE <input type="checkbox"/> CORE



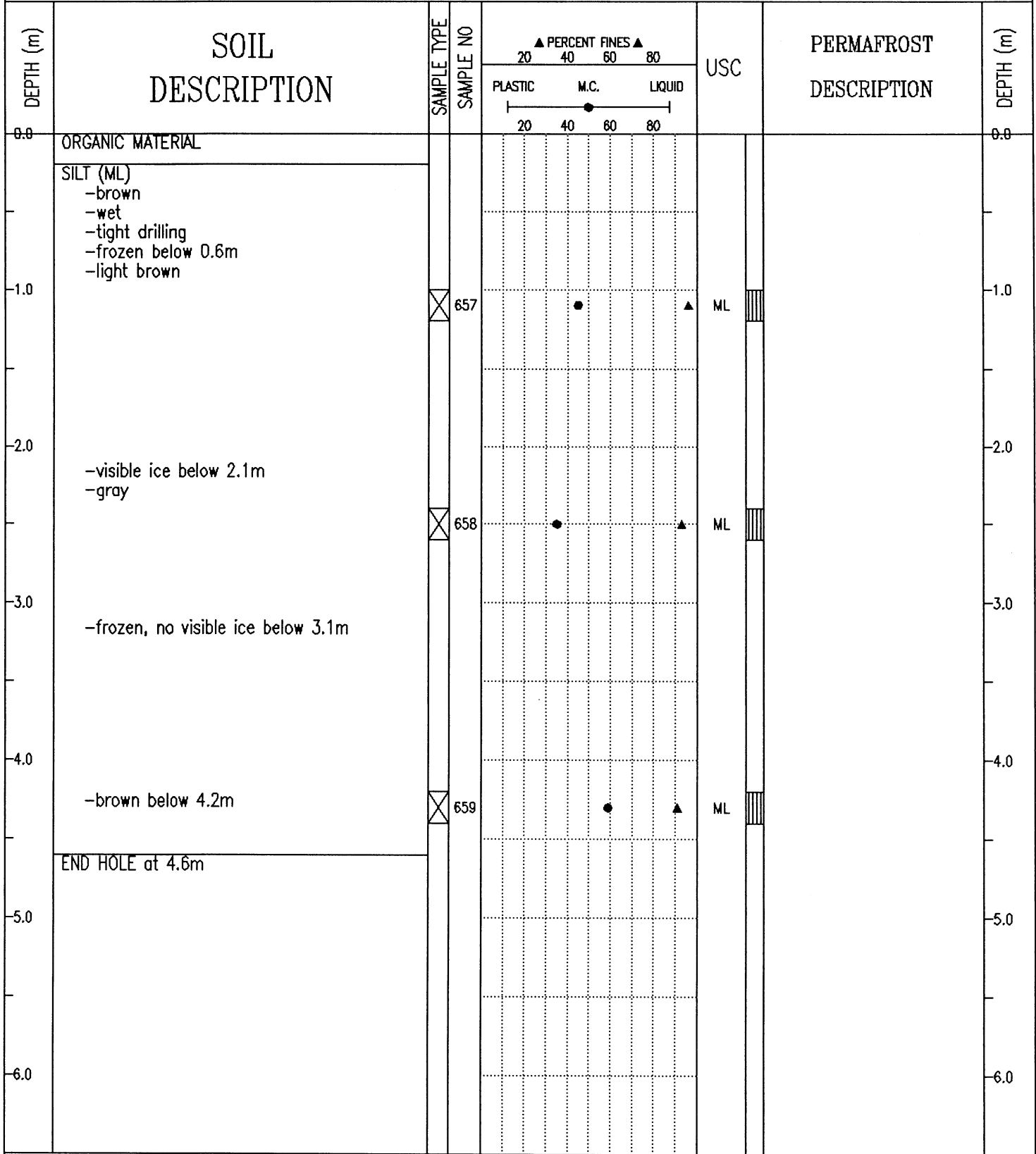
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 115-286
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1960+975 o/s 2m Lt.	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 115-287
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1961+125 o/s 3m Lt.	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE



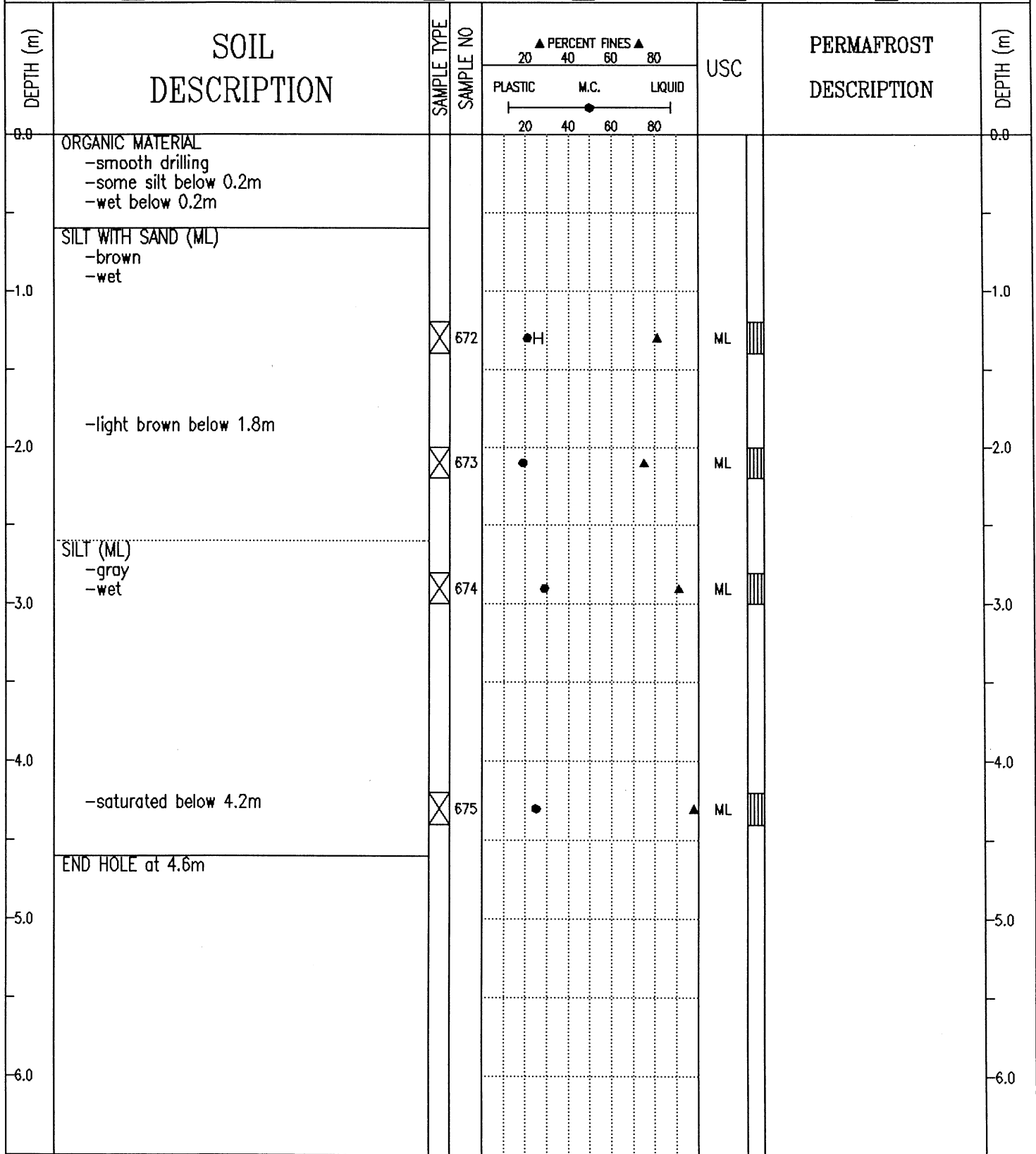
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 115-288
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1961+275 o/s 3m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
	<input checked="" type="checkbox"/> BULK	<input type="checkbox"/> TUBE
		<input type="checkbox"/> CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL -smooth drilling								0.0
	ORGANIC SILT -dark brown -frozen								
-1.0	SILT (ML) -visible ice below 0.9m -tight drilling below 0.9m	<input checked="" type="checkbox"/>	660		●	▲	ML		-1.0
-2.0	SILTY SAND WITH GRAVEL (SM) -brown -damp -grindy drilling -maximum 25mm material augered up	<input checked="" type="checkbox"/>	661	●	▲		SM		-2.0
-3.0									-3.0
-4.0	SILT (ML) -brown -frozen with visible ice -smooth tight drilling	<input checked="" type="checkbox"/>	662		●	▲	ML		-4.0
-5.0	END HOLE at 4.6m								-5.0
-6.0									-6.0

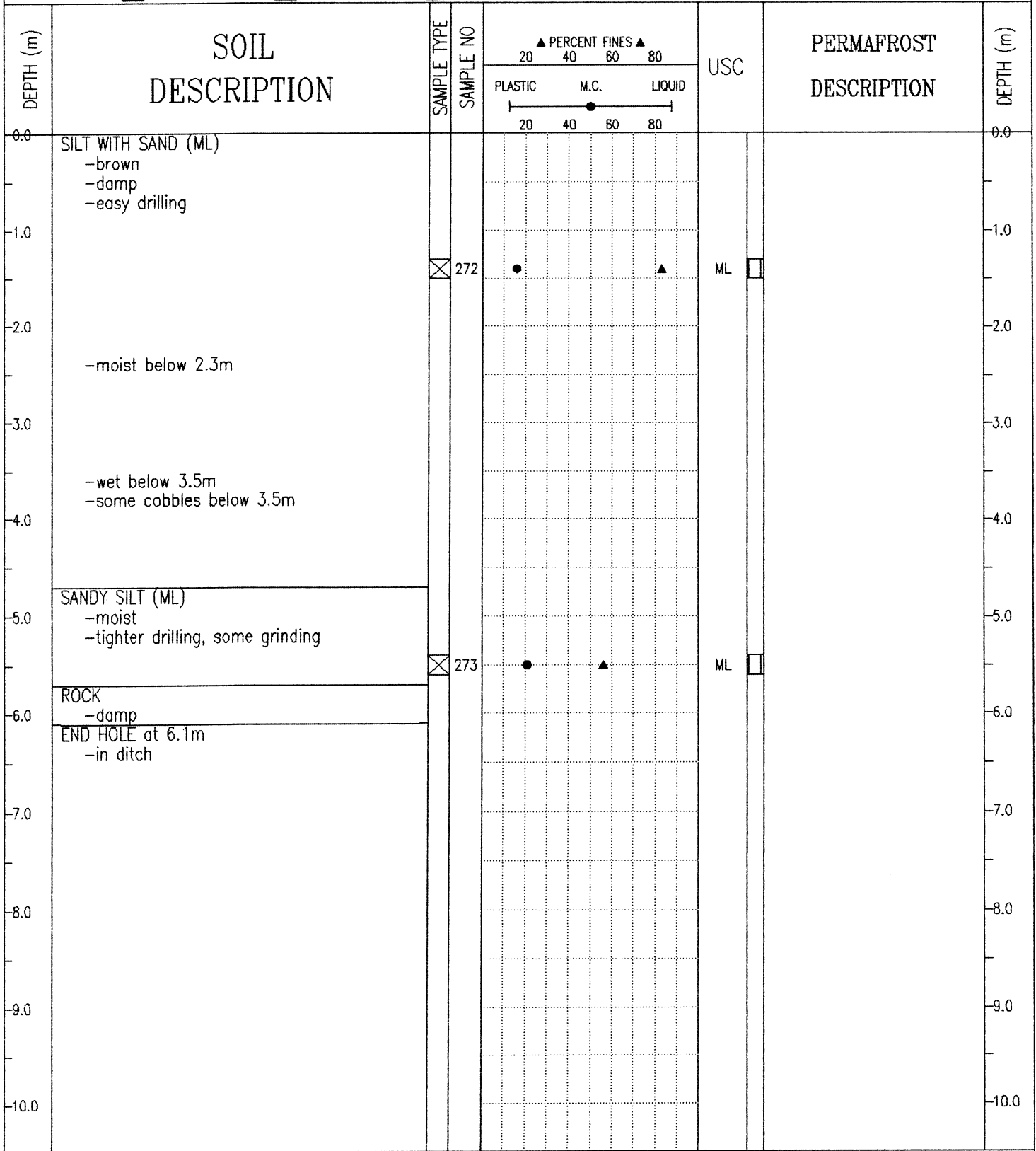
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 115-289
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1961+425 o/s 2m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
	ORGANIC SILT -saturated								
-1.0	SILT (ML) -light brown -frozen	<input checked="" type="checkbox"/>	663		●	▲	ML	-1.0	
	-visible ice below 1.8m								
-2.0								-2.0	
	-some organic below 2.6m	<input checked="" type="checkbox"/>	664		●	▲	ML		
-3.0	ICE							-3.0	
	SILT -brown								
-4.0		<input checked="" type="checkbox"/>	665		●			-4.0	
-5.0	END HOLE at 4.6m -on existing highway							-5.0	
-6.0								-6.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 115-294
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1961+575	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

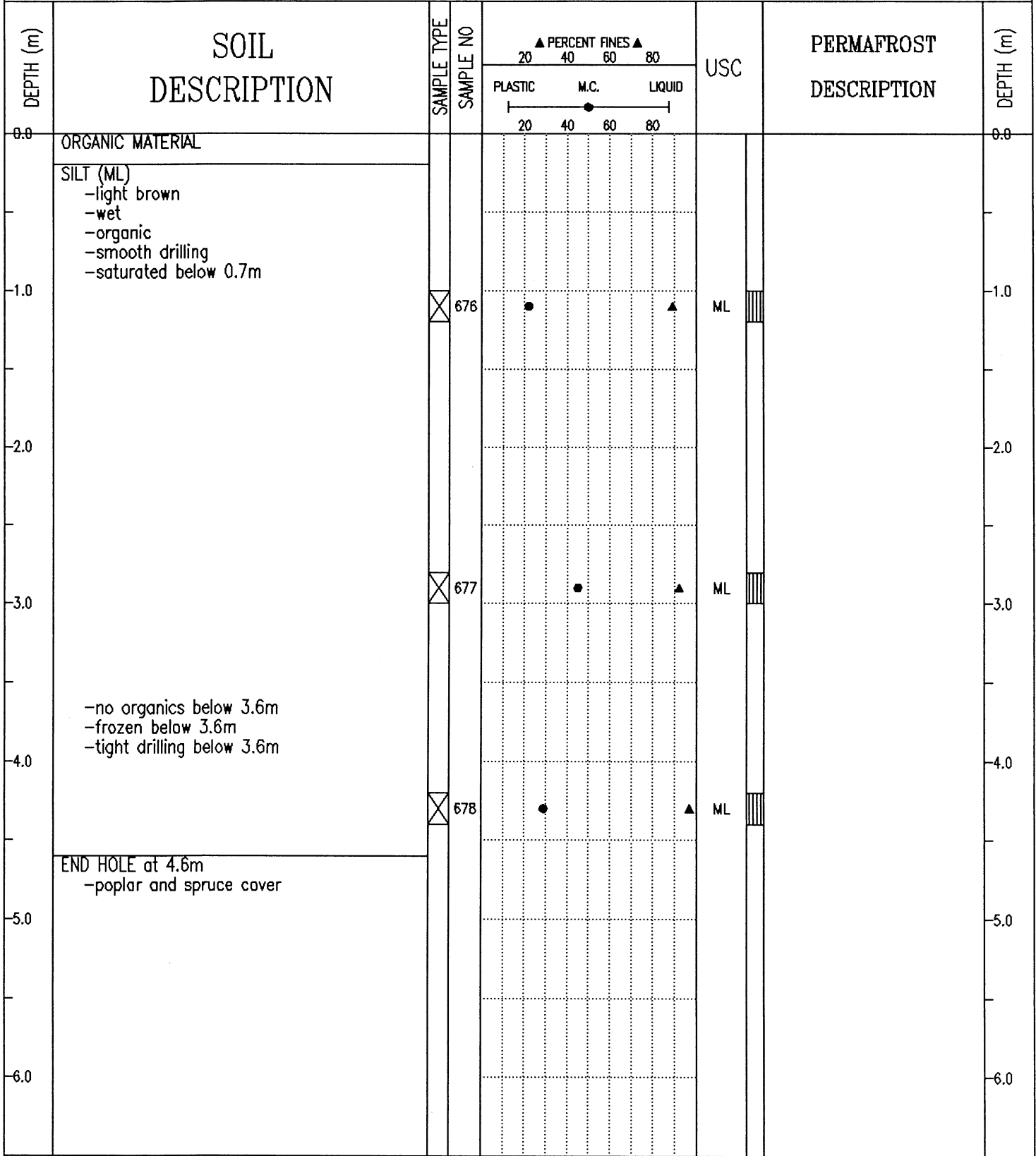


SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-137
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1961+600 o/s 50m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 115-295
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1961+725	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

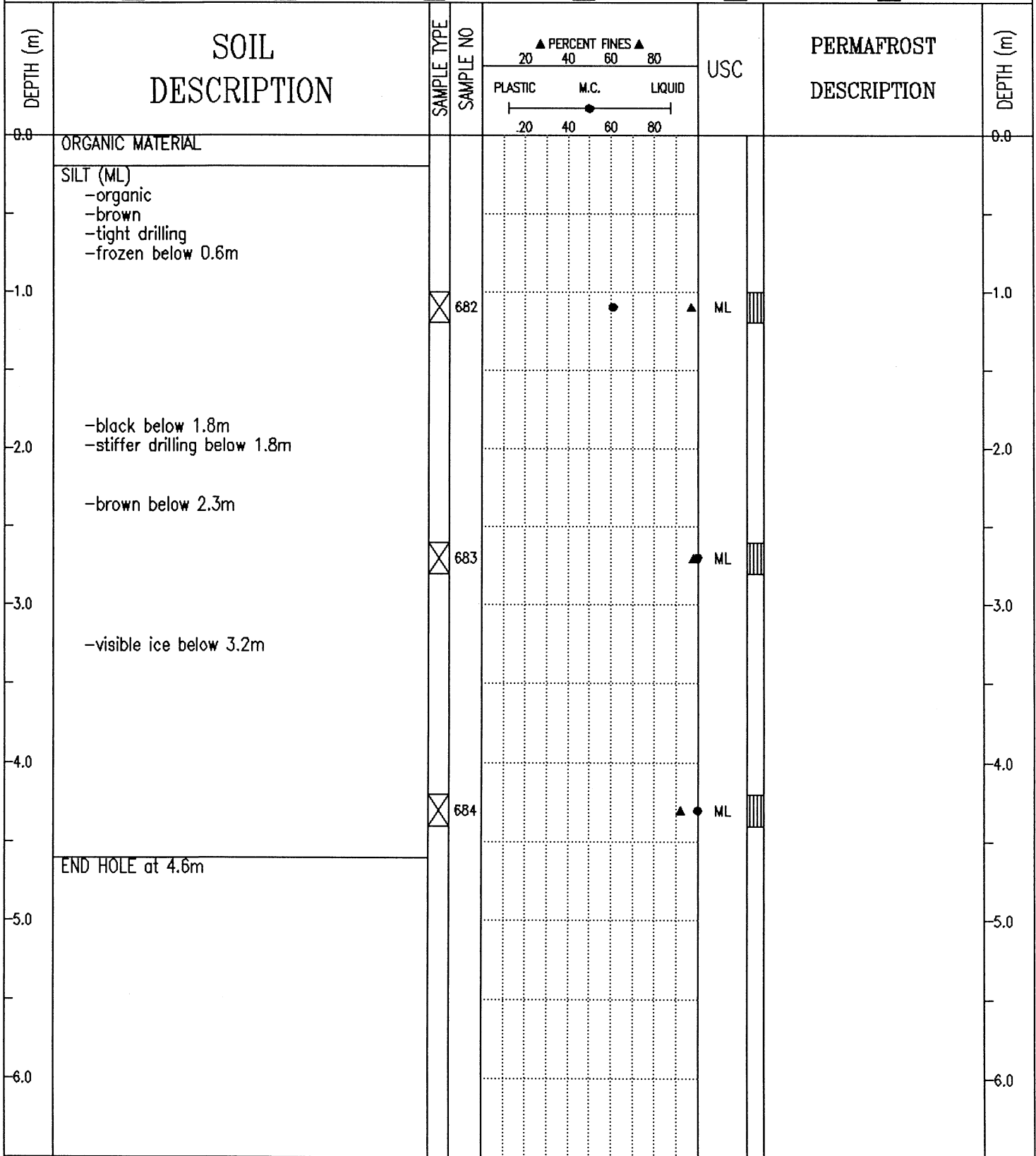


SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 115-296
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1961+800 o/s 3m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

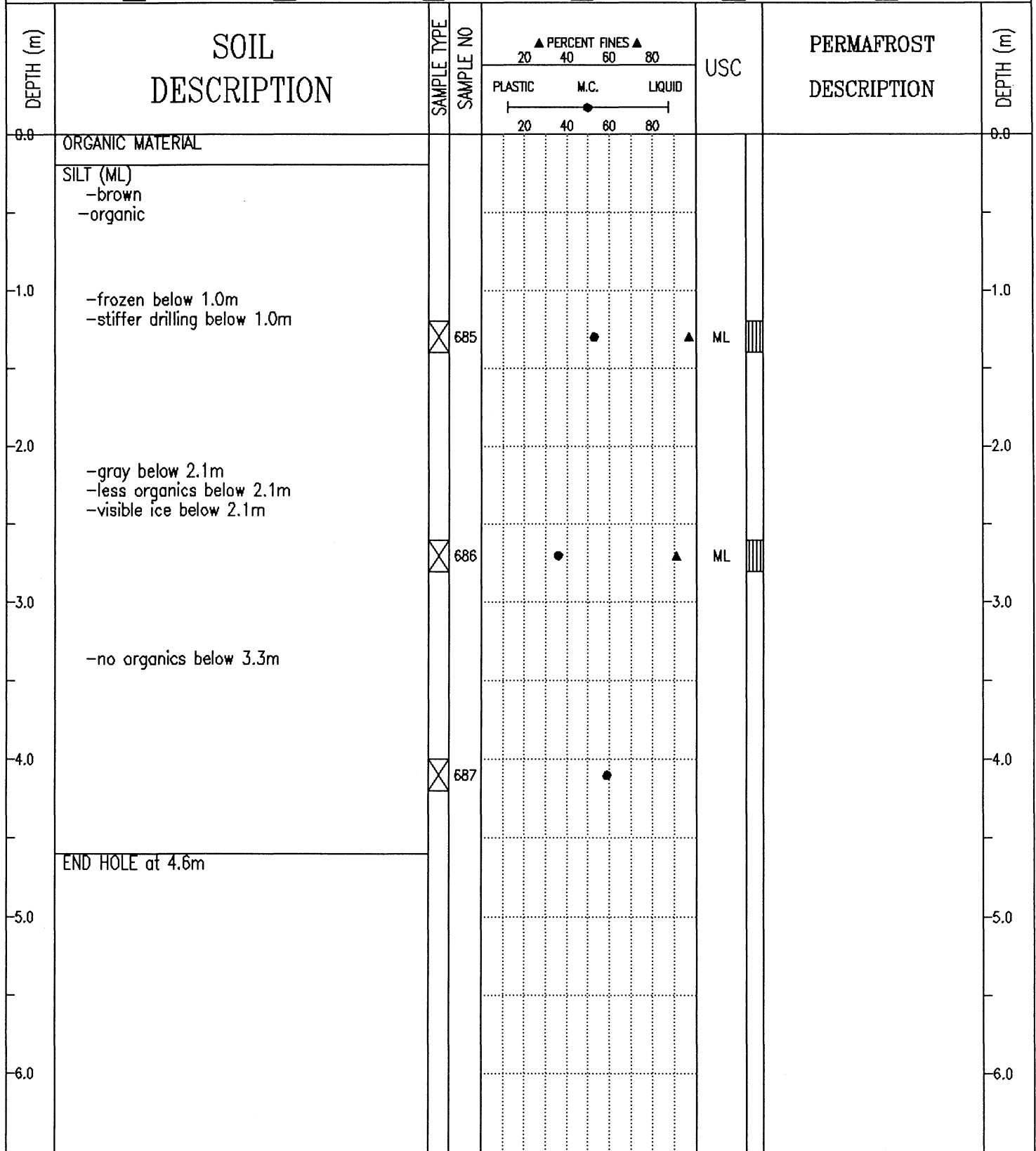
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL								0.0
	SILT (ML) -organic -saturated -smooth drilling								
-1.0		<input checked="" type="checkbox"/>	679				ML		-1.0
-2.0	-frozen with visible ice below 2.1m -tight drilling below 2.1m								-2.0
-3.0		<input checked="" type="checkbox"/>	680				ML		-3.0
-4.0									-4.0
-5.0	END HOLE at 4.6m -poplar, spruce and birch cover	<input checked="" type="checkbox"/>	681						-5.0
-6.0									-6.0

Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 4.6 m	COMPLETE 90/10/25	
	LOGGED BY JG	DWG NO.	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 115-297
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1961+825 o/s 25m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



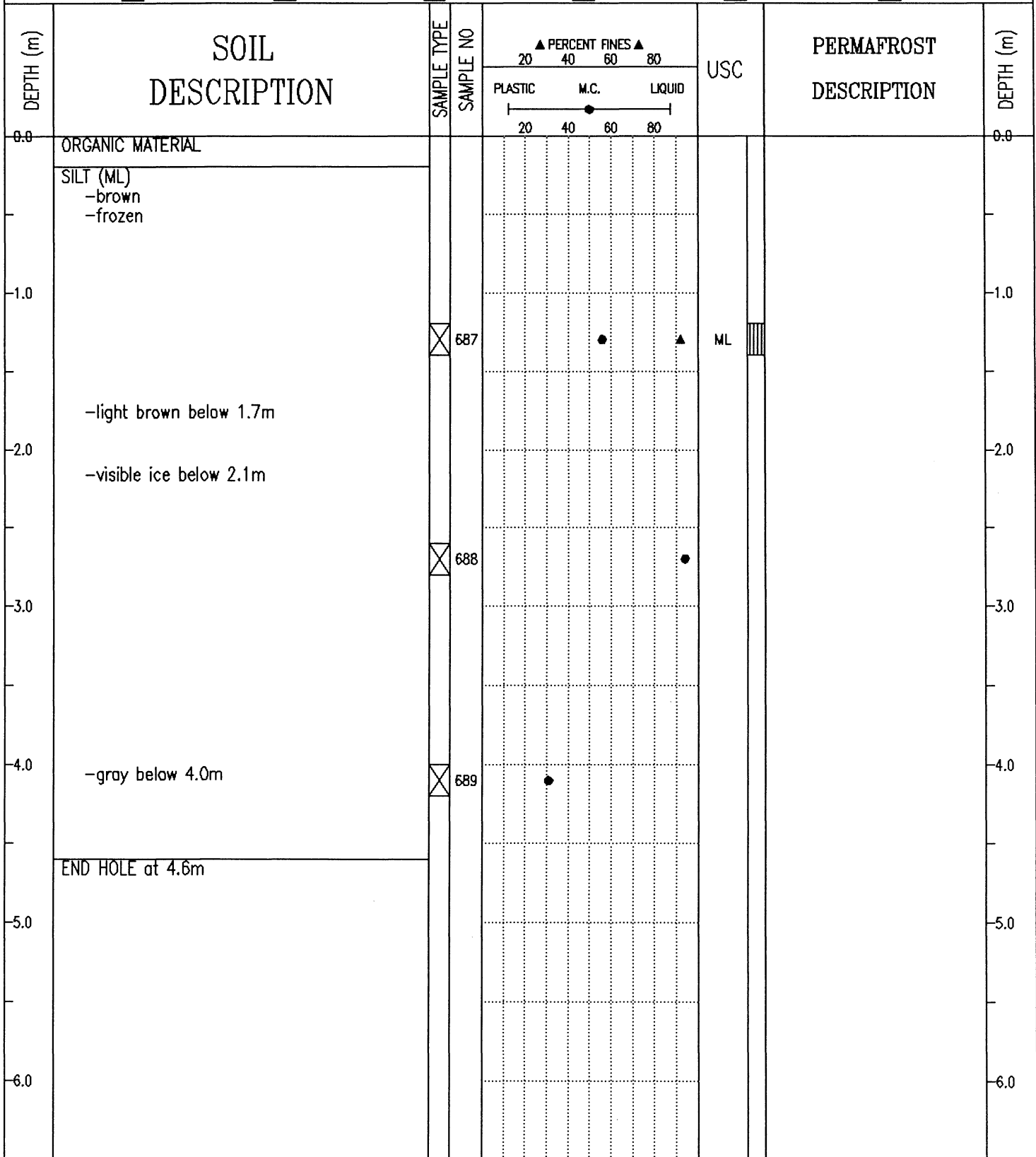
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 115-298
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1961+985 o/s 17m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-136
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1962+000 o/s 7m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	DECOMPOSED SHALE -road fill								0.0
1.0									1.0
1.5	ORGANIC MATERIAL SANDY SILT -brown -wet -saturated below 1.8m -water below 2.0m								2.0
2.0									2.0
3.0	SILT (ML) -gray -frozen -tight drilling								3.0
4.0			271				ML		4.0
4.6	END HOLE at 4.6m -in existing road								5.0
5.0									5.0
6.0									6.0

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 115-299
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1962+135 o/s 17m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 4.6 m	COMPLETE 90/10/29
	LOGGED BY JG	DWG NO.

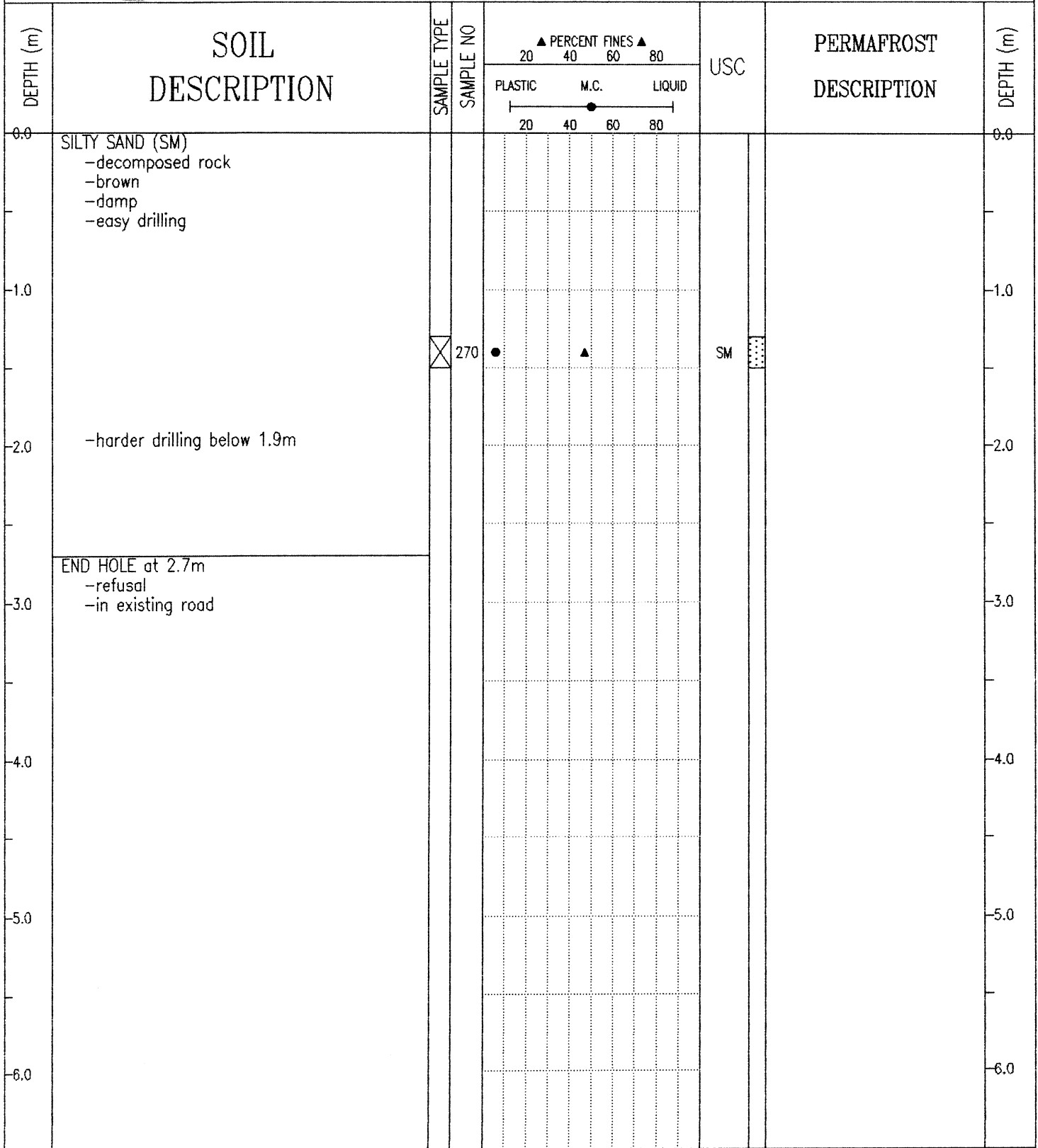
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-138
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1962+300 o/s 7m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	DECOMPOSED ROCK -damp								0.0
1.0	ROCK -dry -hard drilling								1.0
2.0									2.0
3.0									3.0
4.0									4.0
5.0									5.0
6.0									6.0
7.0									7.0
8.0									8.0
9.0	END HOLE at 9.1m -in ditch								9.0
10.0									10.0

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 115-300
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1962+300 o/s 57m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
	GRAVELLY SANDY SILT -light brown -grindy drilling -probably weathered rock								
-1.0		<input checked="" type="checkbox"/>	690					-1.0	
-2.0								-2.0	
-3.0								-3.0	
-4.0		<input checked="" type="checkbox"/>	691					-4.0	
-5.0	-coarser drilling below 5.1m							-5.0	
-6.0	END HOLE at 5.8m -refusal -poplar and spruce cover							-6.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-135
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1962+465 o/s 5m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 2.7 m	COMPLETE 90/10/08	
	LOGGED BY JM	DWG NO.	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 115-301
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1962+470 o/s 42m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL SILTY SAND WITH GRAVEL (SM) -light brown -grindy drilling -maximum 50mm material augered up -may be weathered rock								0.0
1.0			692	●	▲		SM		1.0
2.0									2.0
3.0	ROCK -harder drilling		693	●					3.0
4.0	END HOLE at 3.4m -refusal								4.0
5.0									5.0
6.0									6.0

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 115-302
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1962+640 o/s 65m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL SILTY GRAVEL WITH SAND (GM) -light brown -grindy drilling -may be weathered rock							0.0	
1.0								1.0	
1.8		<input checked="" type="checkbox"/>	694	●	▲		GM		
2.0	ROCK -hard grindy drilling							2.0	
2.1	END HOLE at 2.1m -refusal							2.1	
3.0								3.0	
4.0								4.0	
5.0								5.0	
6.0								6.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 115-303
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1962+700 o/s 56m Rt.	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ROCK							0.0	
0.5	END HOLE at 0.5m -refusal -in old borrow area							0.5	
1.0								1.0	
2.0								2.0	
3.0								3.0	
4.0								4.0	
5.0								5.0	
6.0								6.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-134
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1962+735 o/s 4m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	DECOMPOSED ROCK -edge of road fill								0.0
0.0 - 1.0	ROCK -dry -very hard drilling								0.0 - 1.0
1.0 - 2.1		<input checked="" type="checkbox"/>	269						1.0 - 2.1
2.1 - 6.0	END HOLE at 2.1m -refusal								2.0 - 6.0

Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 2.1 m	COMPLETE 90/10/08
	LOGGED BY JM	DWG NO.

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 115-304
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1962+775 o/s 45m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ROCK							0.0	
1.0								1.0	
2.0								2.0	
3.0								3.0	
3.6		<input checked="" type="checkbox"/>	695					3.6	
4.0								4.0	
4.0	END HOLE at 3.6m -refusal	<input checked="" type="checkbox"/>	696					4.0	
5.0								5.0	
6.0								6.0	

Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 3.6 m	COMPLETE 90/10/29	
	LOGGED BY JG	DWG NO.	Page 1 of 1

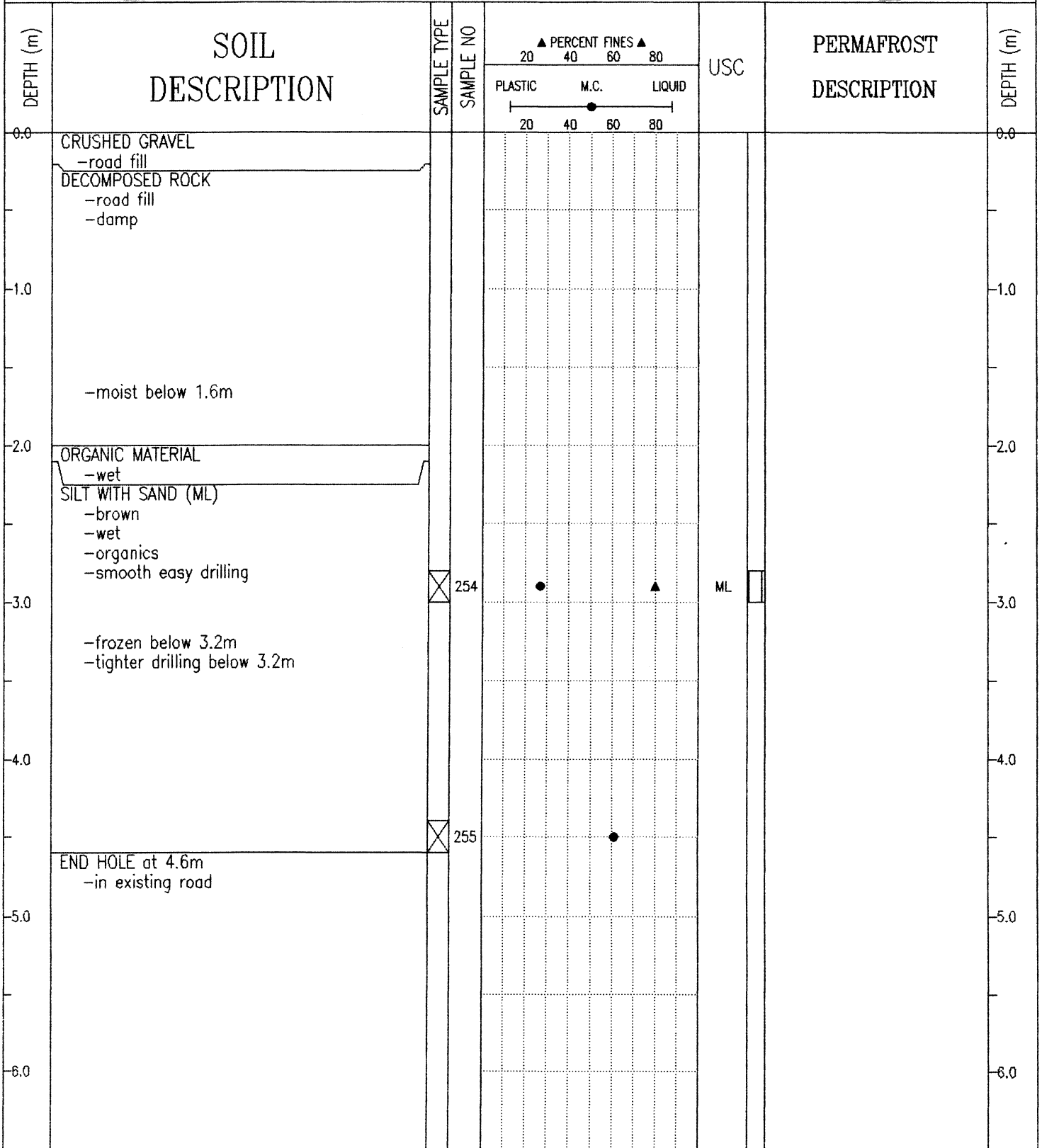
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-124
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1962+940 o/s 4m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	CRUSHED GRAVEL -road fill								0.0
	DECOMPOSED ROCK -road fill -damp								
-1.0									-1.0
	-moist below 1.5m								
-2.0									-2.0
	-water at 2.4m -smooth easy drilling								
-3.0	ORGANIC MATERIAL -wet								-3.0
	SANDY SILT -organics -tighter drilling								
-4.0	-saturated below 3.6m -frozen below 3.8m -visible ice crystals 4.0m to 4.2m -frozen below 4.2m								-4.0
			253						
-5.0	END HOLE at 4.6m -in existing road								-5.0
-6.0									-6.0

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 115-305
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1962+940 o/s 15m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

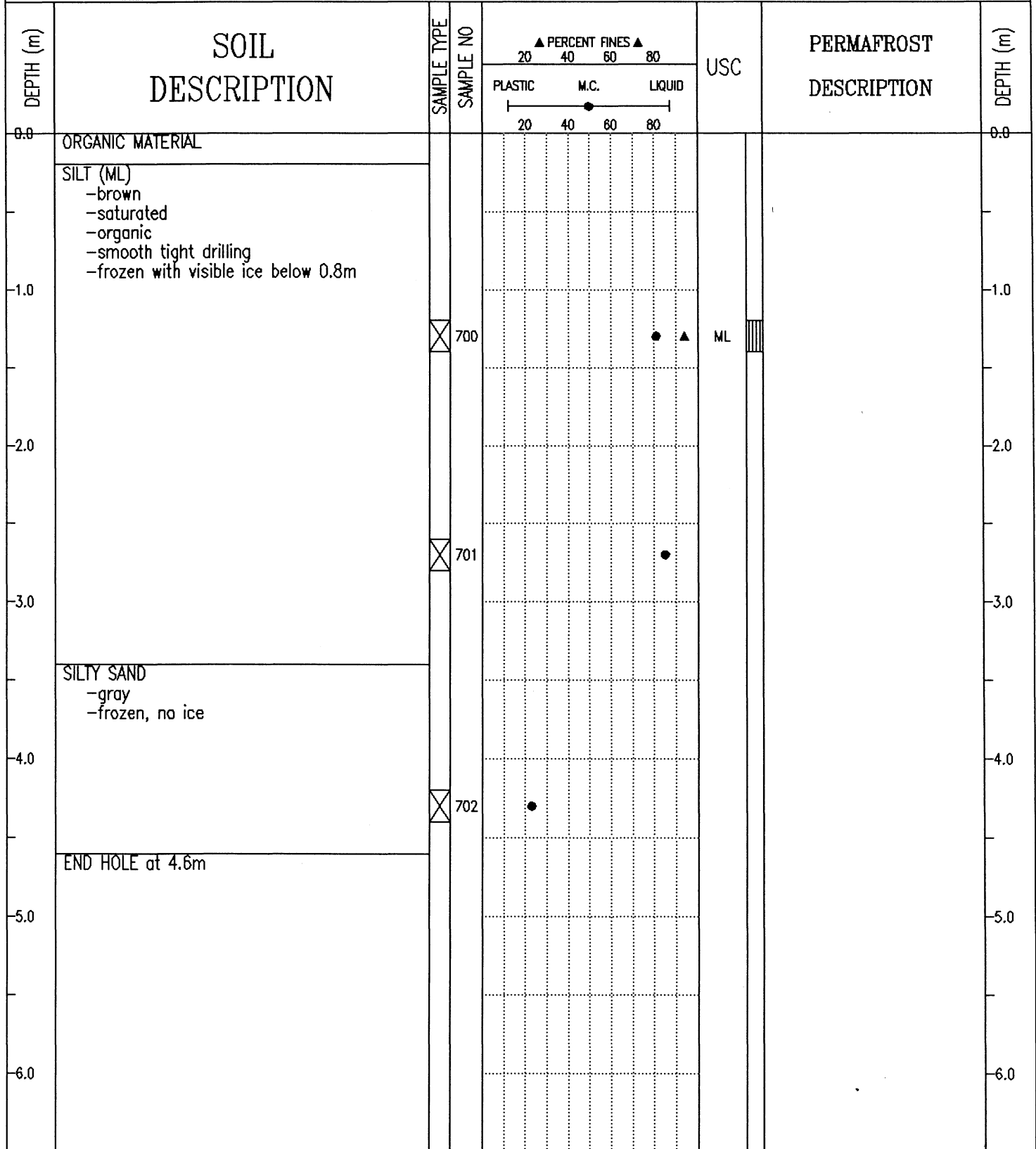
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
	SILT (ML) -brown -frozen -smooth tight drilling -visible ice below 0.8m								
1.0								1.0	
		<input checked="" type="checkbox"/>	697		55	75	ML		
2.0								2.0	
	-frozen, no ice below 2.2m								
3.0		<input checked="" type="checkbox"/>	698		65	85		3.0	
4.0	SILTY SAND -light brown -visible ice							4.0	
		<input checked="" type="checkbox"/>	699		65	85			
5.0	END HOLE at 4.6m							5.0	
6.0								6.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-125
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 1B
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1963+112 o/s 5m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 4.6 m	COMPLETE 90/10/08
	LOGGED BY JM	DWG NO.

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 115-306
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: 1963+112 o/s 15m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-126
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1963+325 o/s 6m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

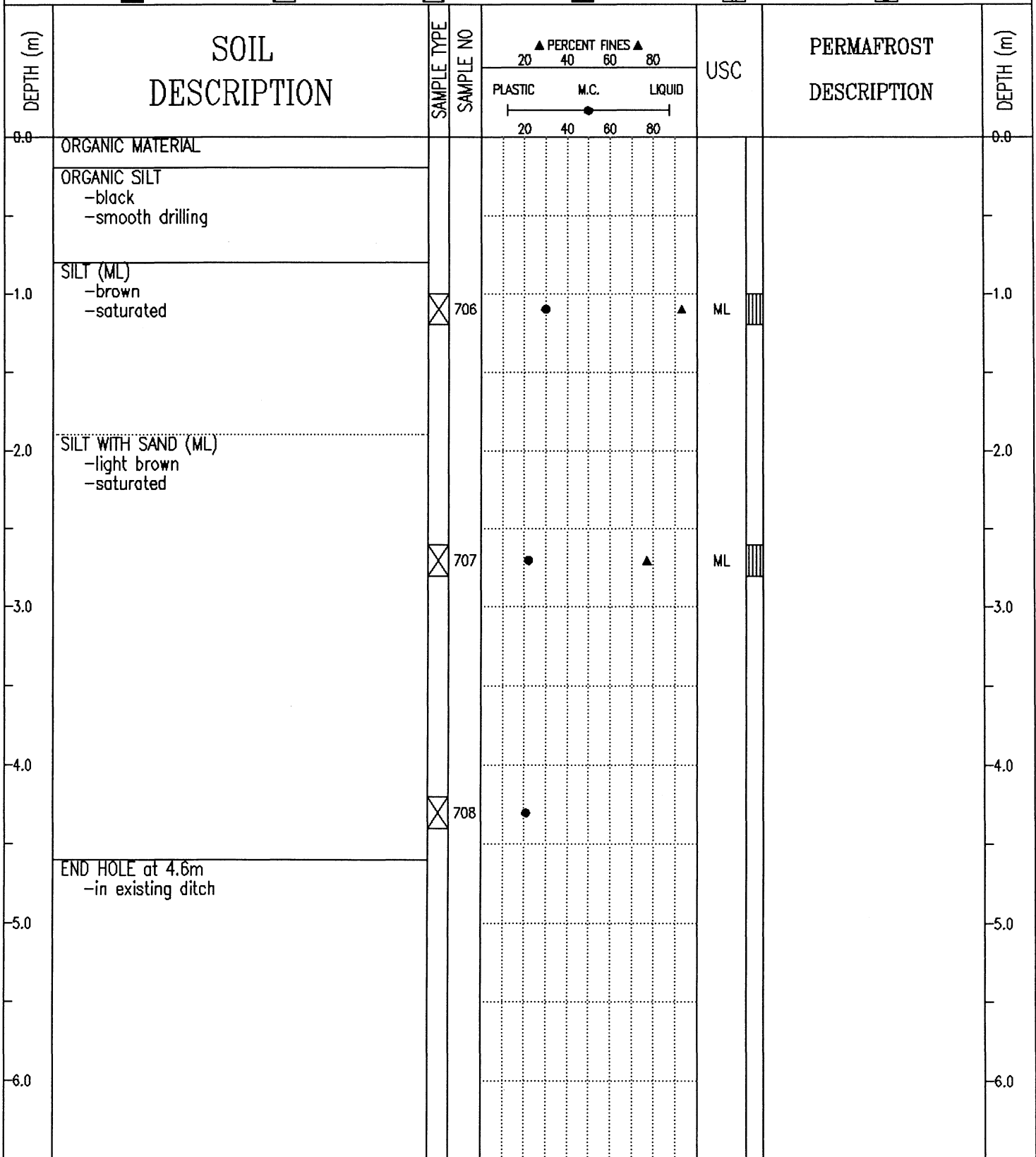
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	CRUSHED GRAVEL -road fill							0.0	
	DECOMPOSED ROCK -road fill -damp								
-1.0								-1.0	
	-moist below 1.6m								
-2.0	GRAVELLY SILT -gray -moist -road fill							-2.0	
	ORGANIC MATERIAL								
-3.0	SANDY SILT -wet -organics -saturated below 3.2m							-3.0	
	-frozen below 3.5m -tight drilling below 3.5m								
-4.0	SILT WITH SAND (ML) -gray -frozen							-4.0	
		<input checked="" type="checkbox"/>	256	●		▲	ML		
-5.0	END HOLE at 4.6m -in existing road							-5.0	
-6.0								-6.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY RECONSTRUCTION	BOREHOLE No. 116-307
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: 1963+325 o/s 15m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL -black -wet								0.0
0.0 - 1.0	SILT (ML) -brown -frozen with visible ice -tight drilling								0.0 - 1.0
1.0 - 2.0		<input checked="" type="checkbox"/>	703		55	75	ML		1.0 - 2.0
2.0 - 3.0	SILT WITH SAND (ML) -gray -frozen, no ice								2.0 - 3.0
3.0 - 4.0		<input checked="" type="checkbox"/>	704	25	55	75	ML		3.0 - 4.0
4.0 - 5.0		<input checked="" type="checkbox"/>	705	25	55	75			4.0 - 5.0
5.0 - 6.0	END HOLE at 4.6m								5.0 - 6.0

Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 4.6 m	COMPLETE 90/10/29
	LOGGED BY JG	DWG NO.

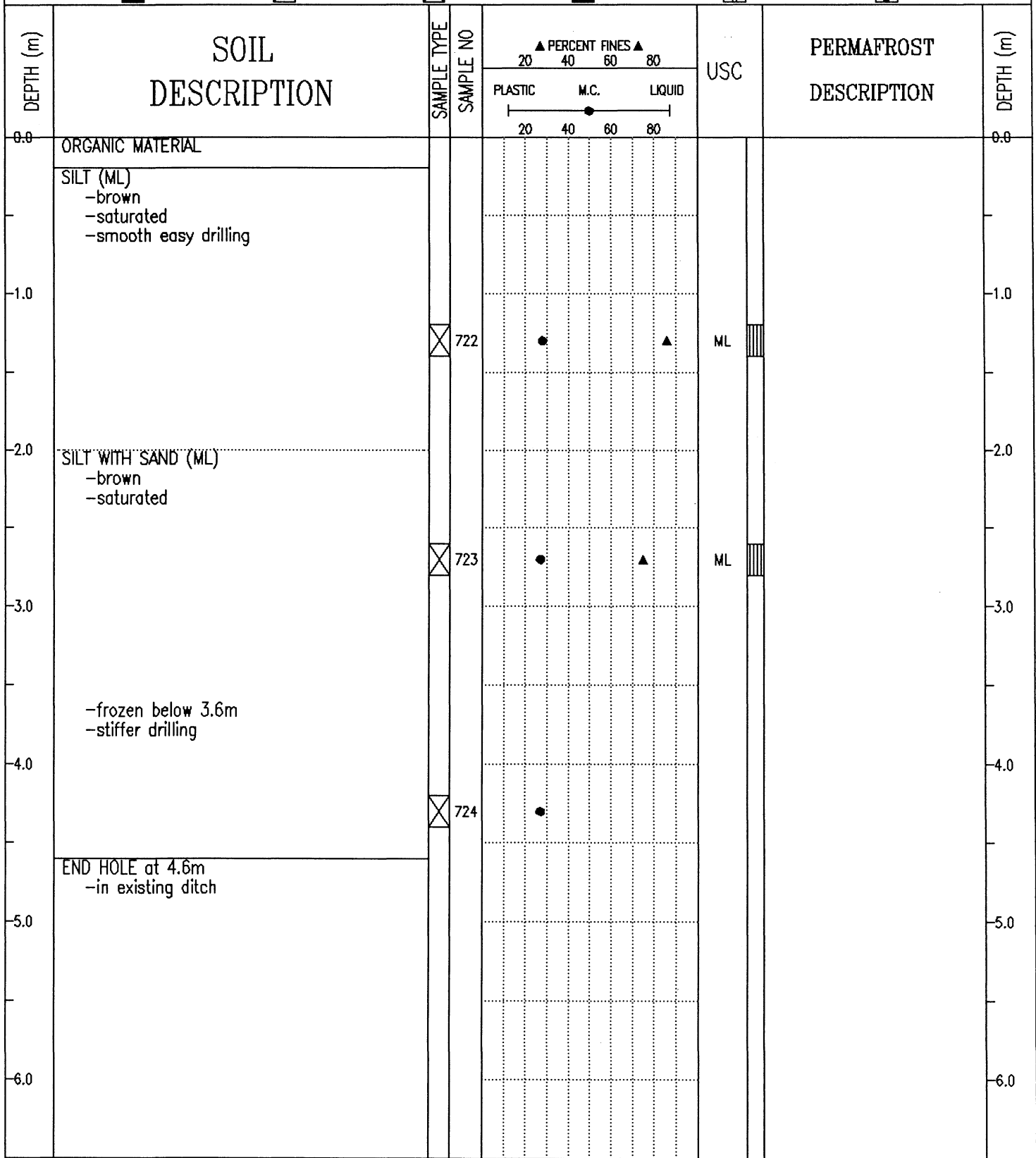
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY RECONSTRUCTION	BOREHOLE No. 116-308
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: 1963+490 o/s 12m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



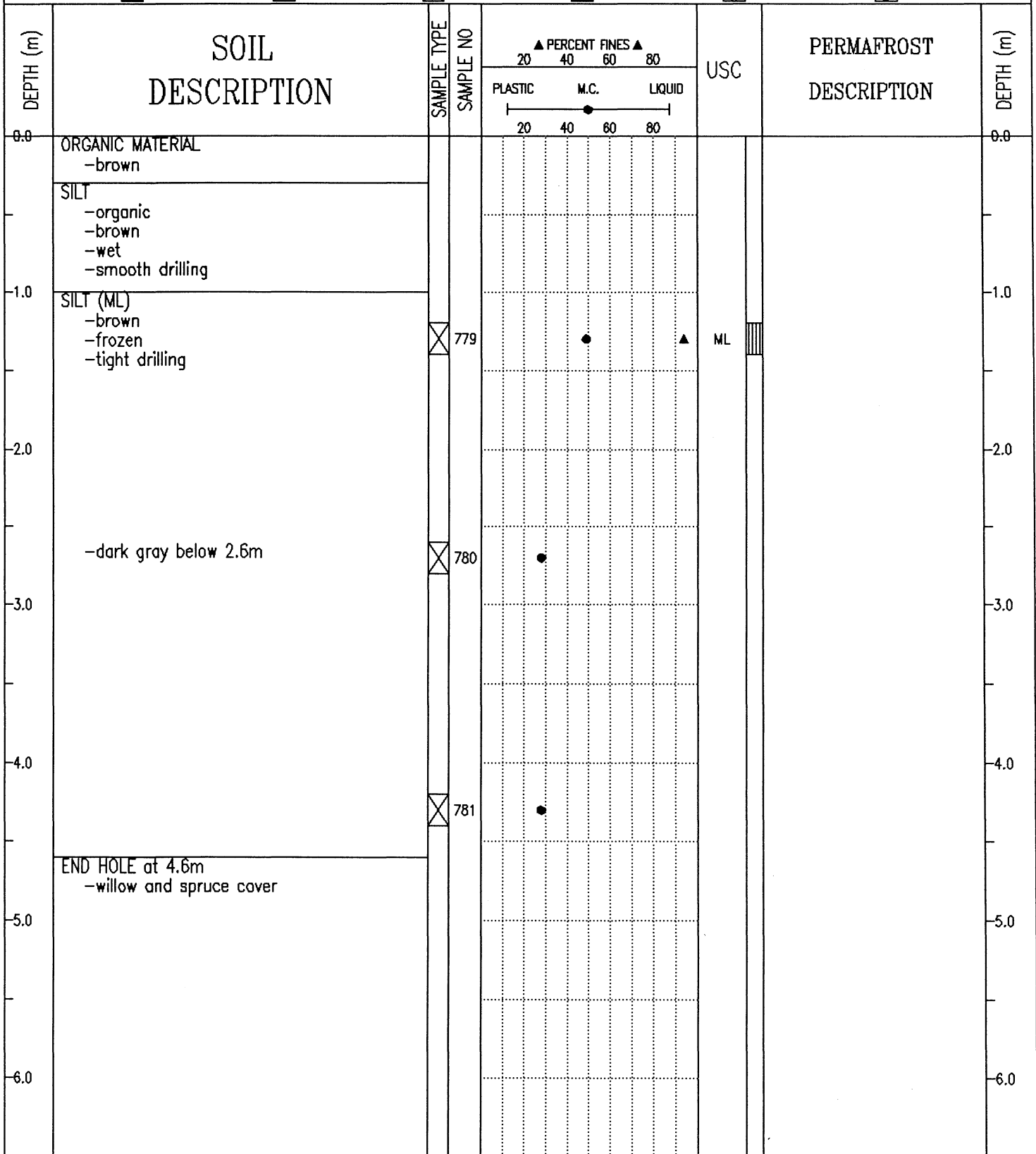
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY RECONSTRUCTION	BOREHOLE No. 116-313
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: 1963+625 o/s 25m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	DECOMPOSED ROCK -slightly grindy drilling							0.0	
-1.0		<input checked="" type="checkbox"/>	720					-1.0	
-2.0								-2.0	
-3.0		<input checked="" type="checkbox"/>	721					-3.0	
-4.0								-4.0	
-5.0								-5.0	
-6.0	END HOLE at 6.0m -in existing borrow pit	<input checked="" type="checkbox"/>	722					-6.0	
-7.0								-7.0	
-8.0								-8.0	
-9.0								-9.0	
-10.0								-10.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY RECONSTRUCTION	BOREHOLE No. 116-314
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: 1963+840 o/s 7m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY RECONSTRUCTION	BOREHOLE No. 117-333
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: 1963+840 o/s 21m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-127
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1963+845	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	CRUSHED GRAVEL -road fill								0.0
	DECOMPOSED ROCK -road fill								
-1.0									-1.0
	ORGANIC MATERIAL								
	SILT WITH SAND (ML) -gray -wet -organics -smooth easy drilling -saturated below 2.2m								
-2.0									-2.0
	-frozen below 2.6m -tighter drilling below 2.6m								
-3.0		<input checked="" type="checkbox"/>	257	●		▲	ML		-3.0
	SILTY SAND -gray -frozen								
-4.0									-4.0
		<input checked="" type="checkbox"/>	258	●					
-5.0	END HOLE at 4.6m -in existing road								-5.0
-6.0									-6.0

Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 4.6 m	COMPLETE 90/10/08	
	LOGGED BY JM	DWG NO.	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY RECONSTRUCTION	BOREHOLE No. 117-332
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: 1964+000 o/s 20m Rt.	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

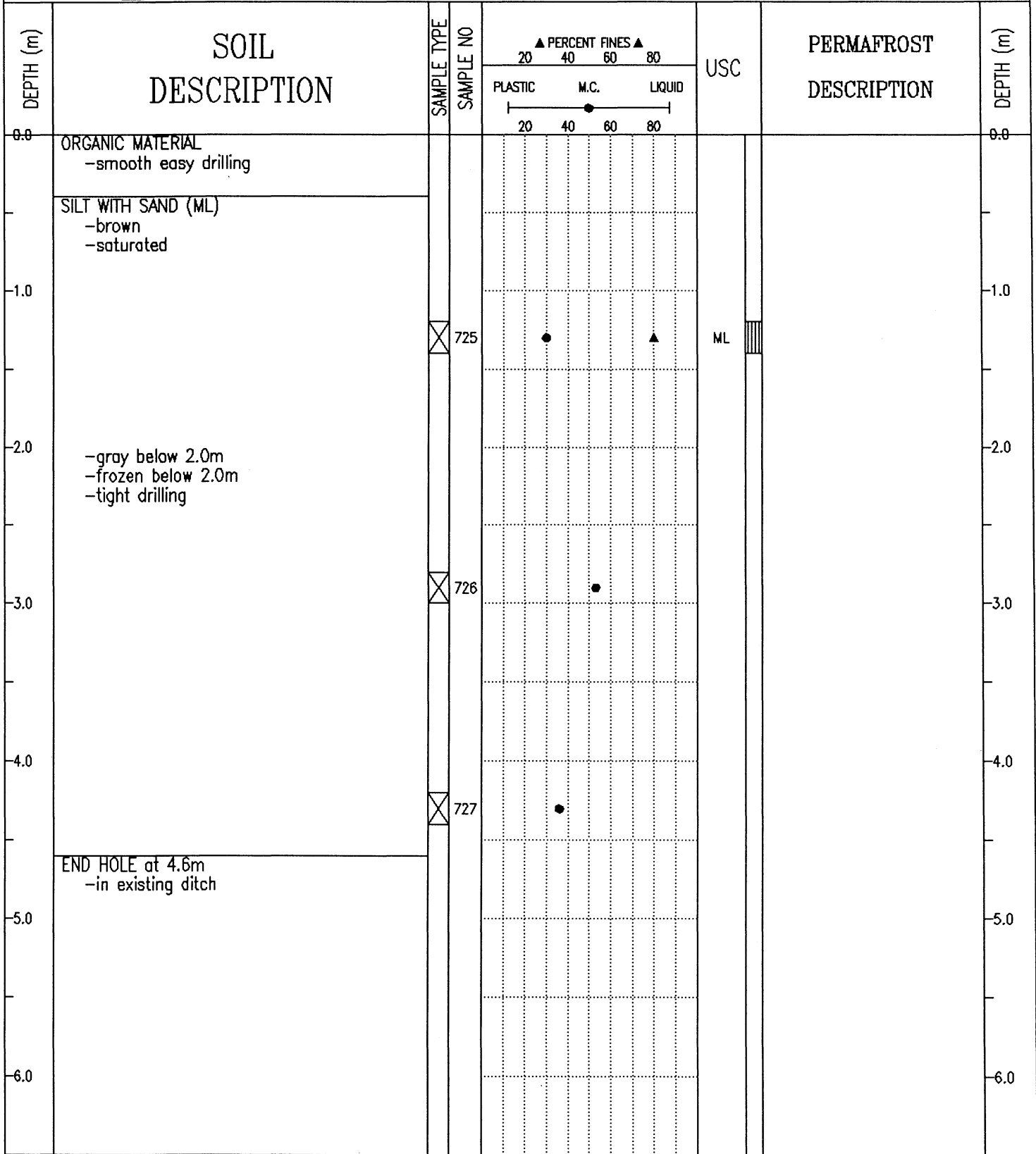
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL -black							0.0	
	SILT -organic -wet								
1.0	SILT WITH SAND (ML) -brown -saturated							1.0	
		<input checked="" type="checkbox"/>	776	●	●	▲	ML		
		<input checked="" type="checkbox"/>	777	●					
		<input checked="" type="checkbox"/>	778	●					
4.6	END HOLE at 4.6m -willow cover								
5.0								5.0	
6.0								6.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-128
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1964+137	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

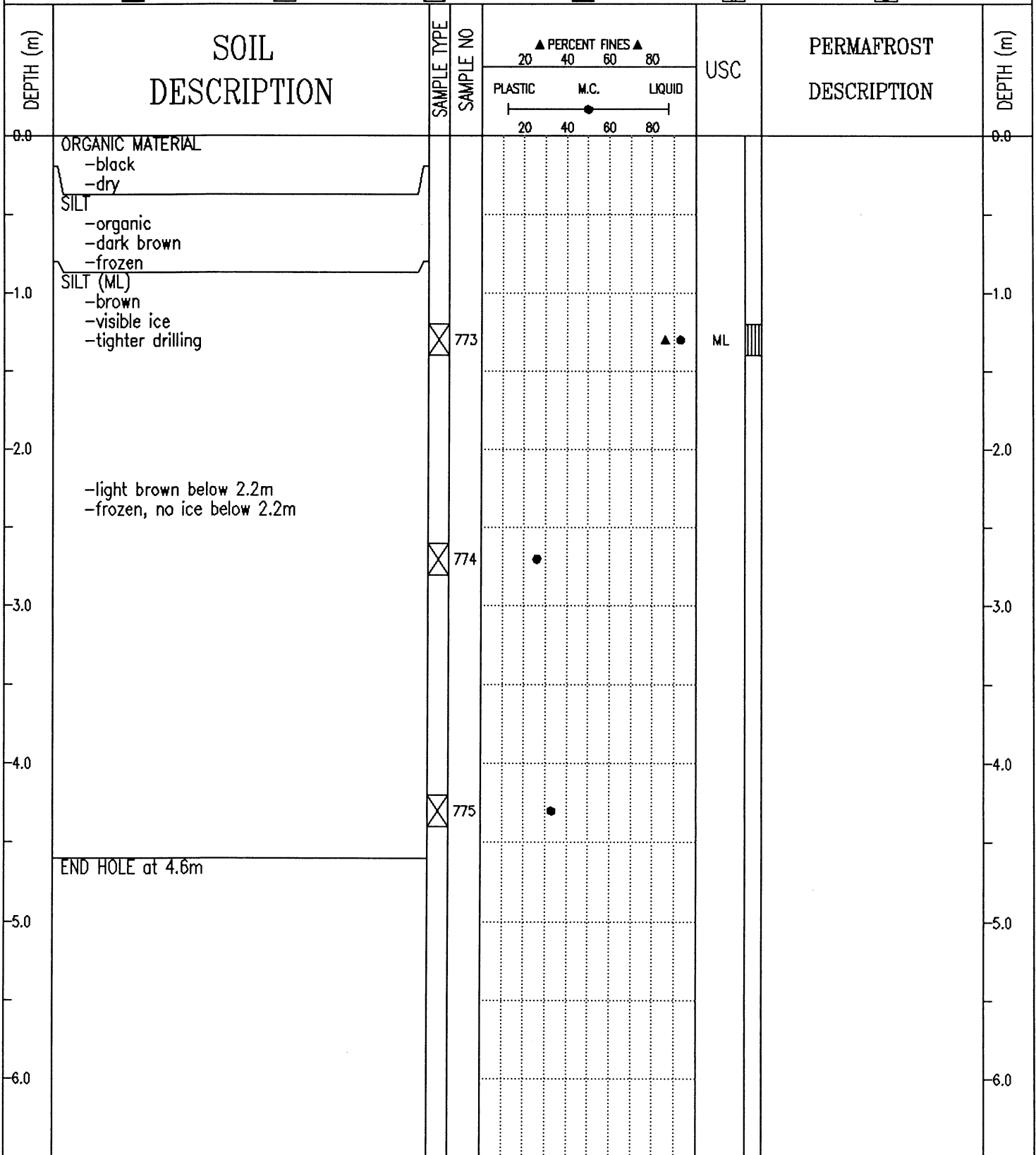
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	CRUSHED GRAVEL -road fill								0.0
	DECOMPOSED ROCK -road fill -damp								
	-moist below 0.8m								
-1.0	GRAVELLY SILT -wet								-1.0
	ORGANIC MATERIAL								
-2.0	SILT WITH SAND (ML) -saturated -organics -easy drilling								-2.0
	-frozen below 2.3m								
	-visible ice crystals below 2.6m -tight drilling	<input checked="" type="checkbox"/>	259		55	75	ML		-3.0
-3.0	ICE WITH SOME SOIL								-3.0
	ICE								
-4.0	ICE WITH SOME SOIL								-4.0
	ORGANIC MATERIAL -visible ice crystals								
-5.0	END HOLE at 4.6m -in existing road								-5.0
-6.0									-6.0

Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 4.6 m	COMPLETE 90/10/08
	LOGGED BY JM	DWG NO.

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY RECONSTRUCTION	BOREHOLE No. 116-315
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: 1964+135 o/s 7m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY RECONSTRUCTION	BOREHOLE No. 117-331
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: 1964+135 o/s 20m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



Public Works Canada  
Whitehorse, Yukon Territory.

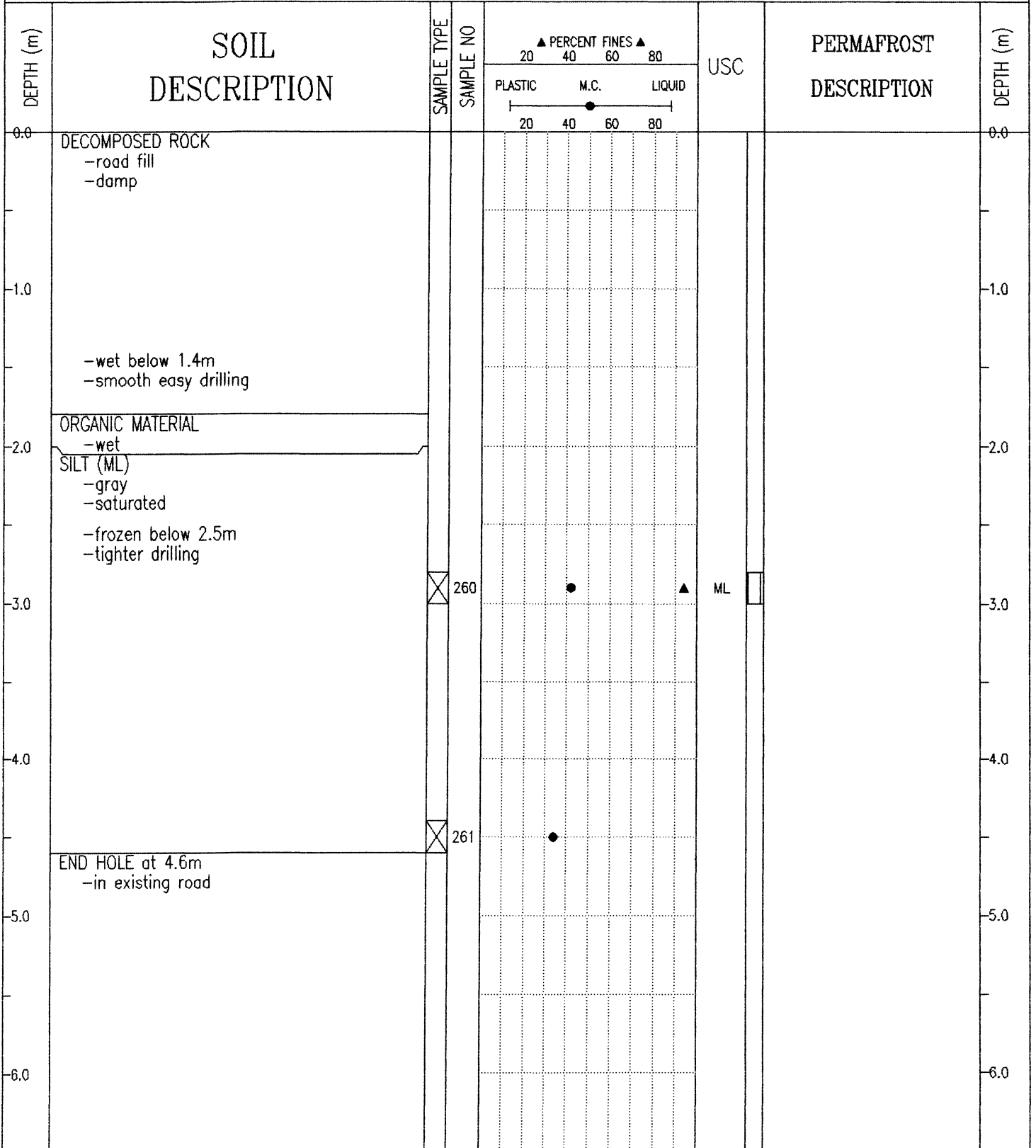
COMPLETION DEPTH 4.6 m	COMPLETE 90/10/30
LOGGED BY JG	DWG NO.
	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY RECONSTRUCTION	BOREHOLE No. 117-330
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: 1964+300 o/s 37m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

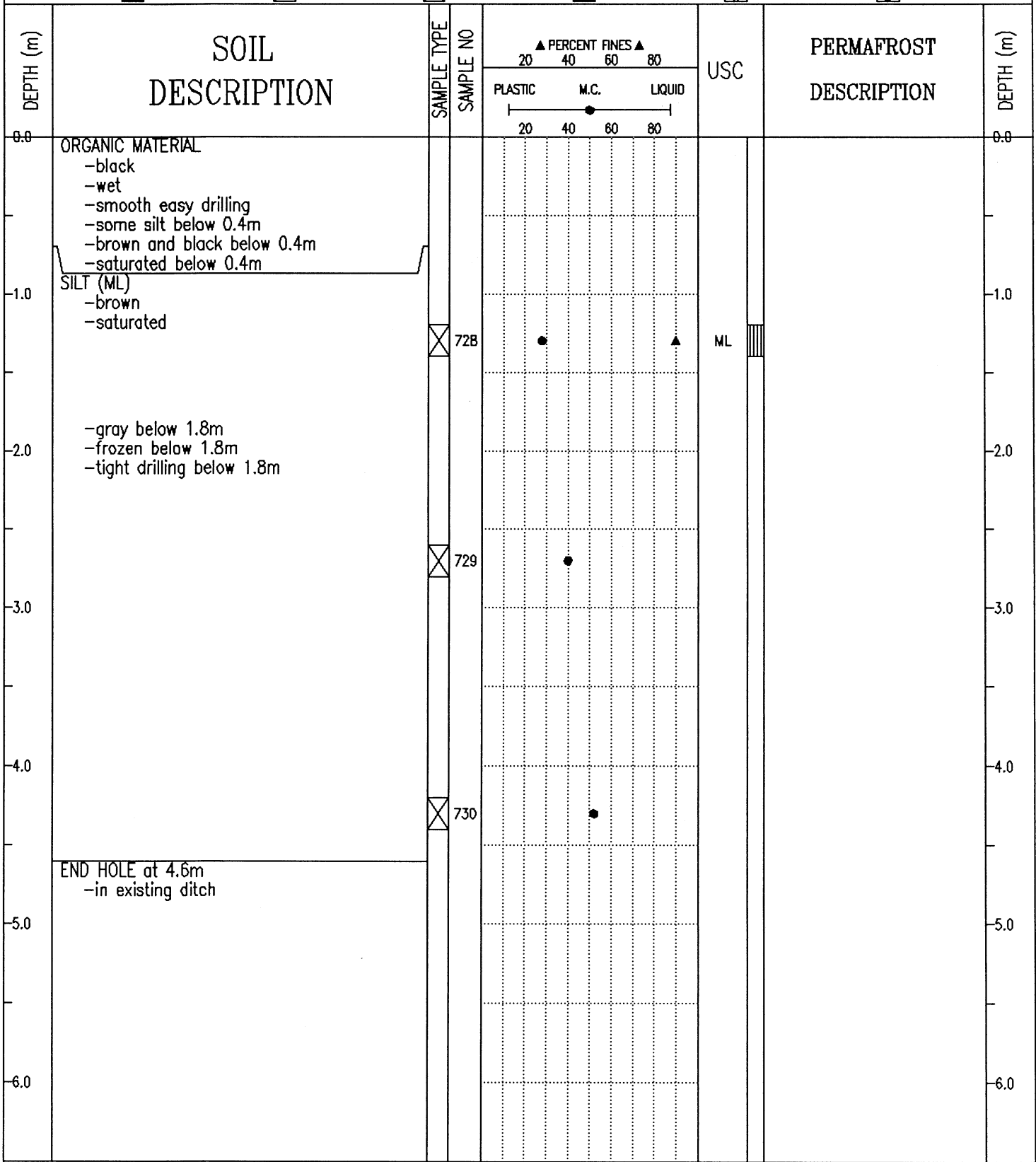
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL -black -frozen with visible ice -tight drilling								0.0
1.0	ICE -auger vibrating								1.0
2.0	SILT -50% ice								2.0
3.0	SILT WITH SAND (ML) -brown -visible ice -tight drilling	<input checked="" type="checkbox"/>	771		●	▲	ML		3.0
4.0	-organic below 4.2m	<input checked="" type="checkbox"/>	772			●			4.0
5.0	END HOLE at 4.6m -spruce and willow cover								5.0
6.0									6.0

Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 4.6 m	COMPLETE 9D/10/30
	LOGGED BY JG	DWG NO.

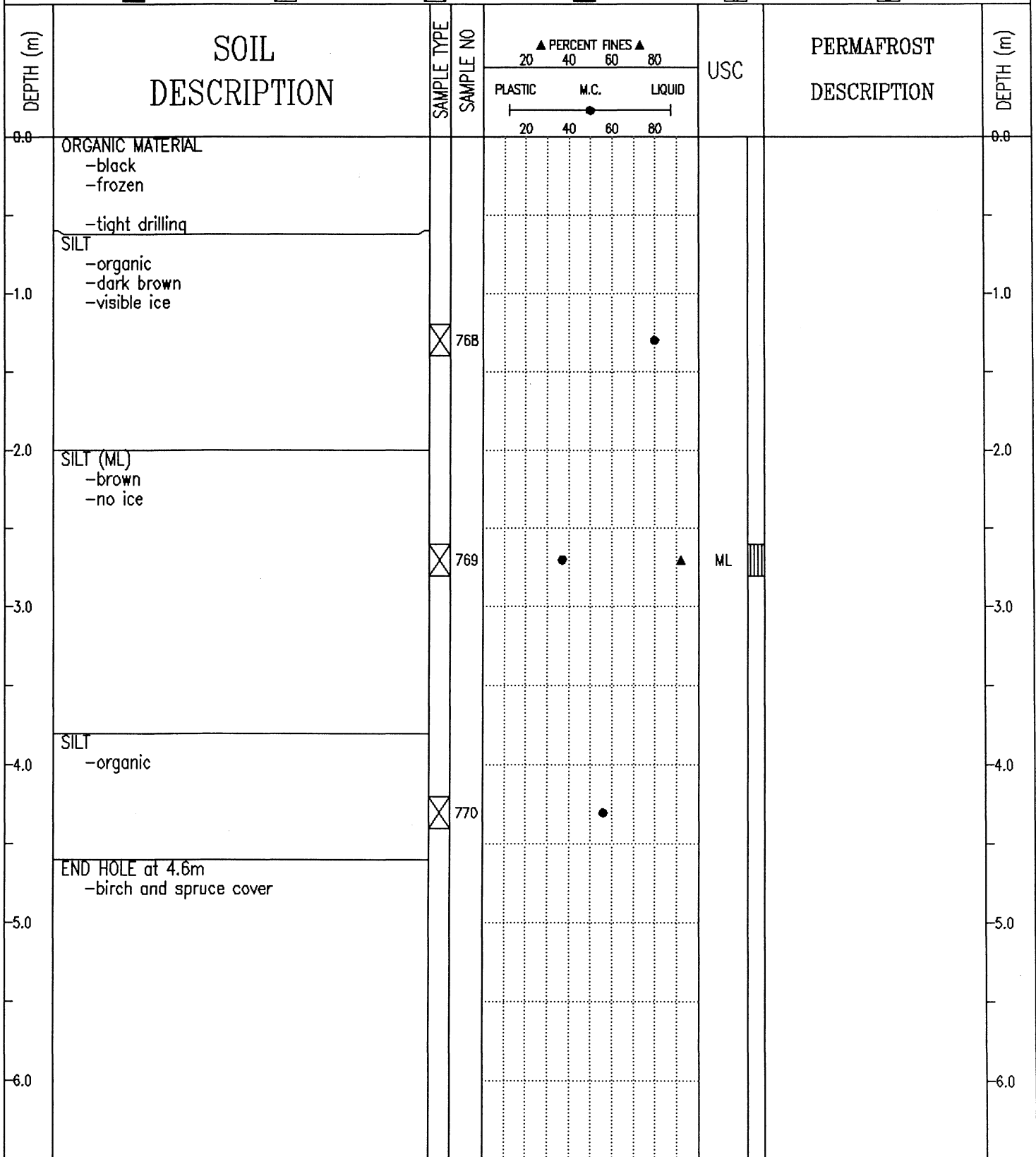
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-129
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1964+450	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY RECONSTRUCTION	BOREHOLE No. 116-316
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: 1964+458 o/s 7m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY RECONSTRUCTION	BOREHOLE No. 117-329
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: 1964+458 o/s 31m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

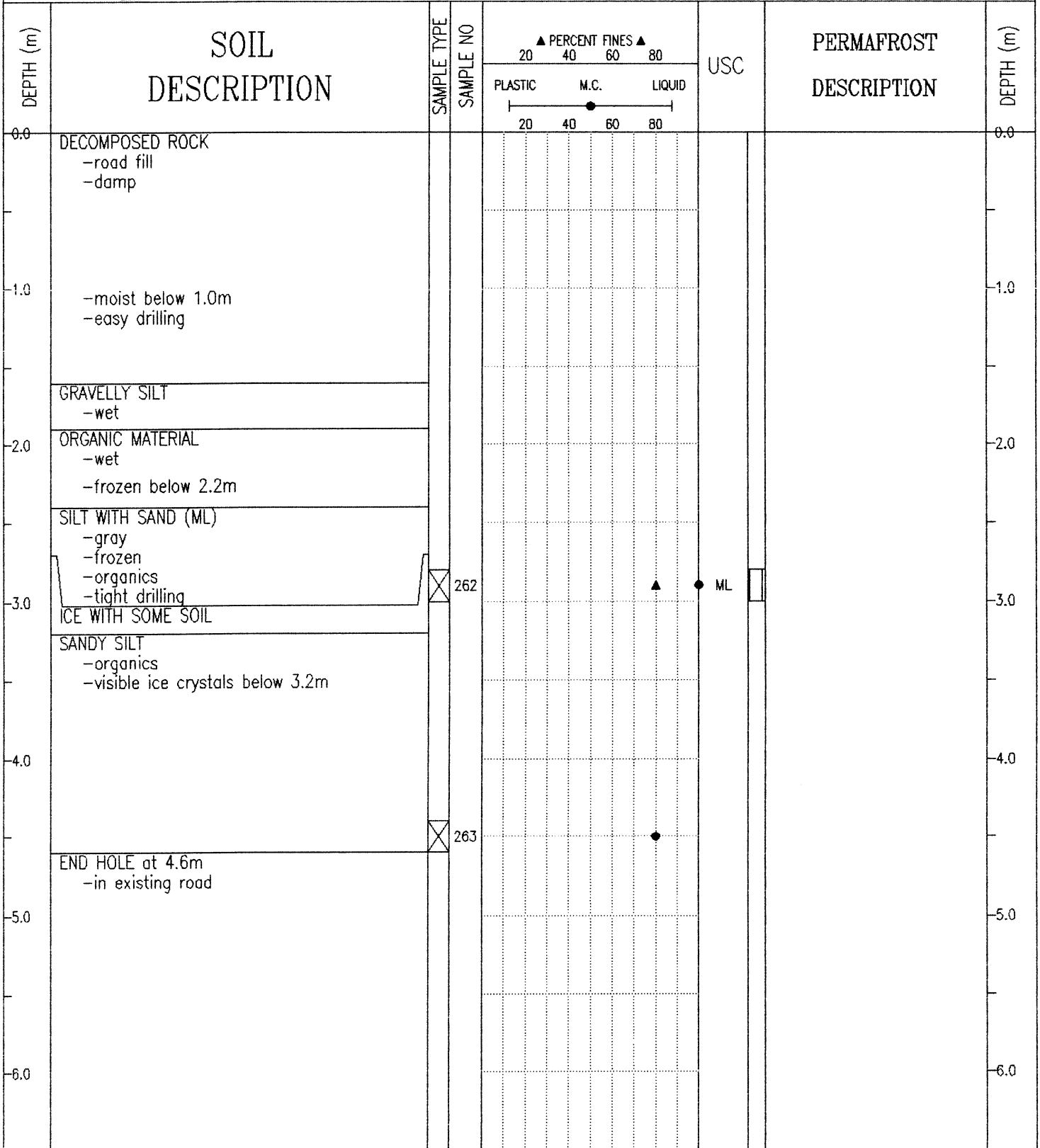


SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY RECONSTRUCTION	BOREHOLE No. 116-328
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: 1964+625 o/s 30m Rt.	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL -brown -dry -dark brown below 0.3m -frozen with visible ice below 0.3m -tight drilling							0.0	
1.0	SILT (ML) -gray -frozen, no ice	<input checked="" type="checkbox"/>	765		●	▲	ML	1.0	
2.0								2.0	
3.0	-visible ice below 2.4m	<input checked="" type="checkbox"/>	766		●			3.0	
4.0								4.0	
5.0	END HOLE at 4.6m -spruce and willow cover	<input checked="" type="checkbox"/>	767		●			5.0	
6.0								6.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-130
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1964+775 o/s 1m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

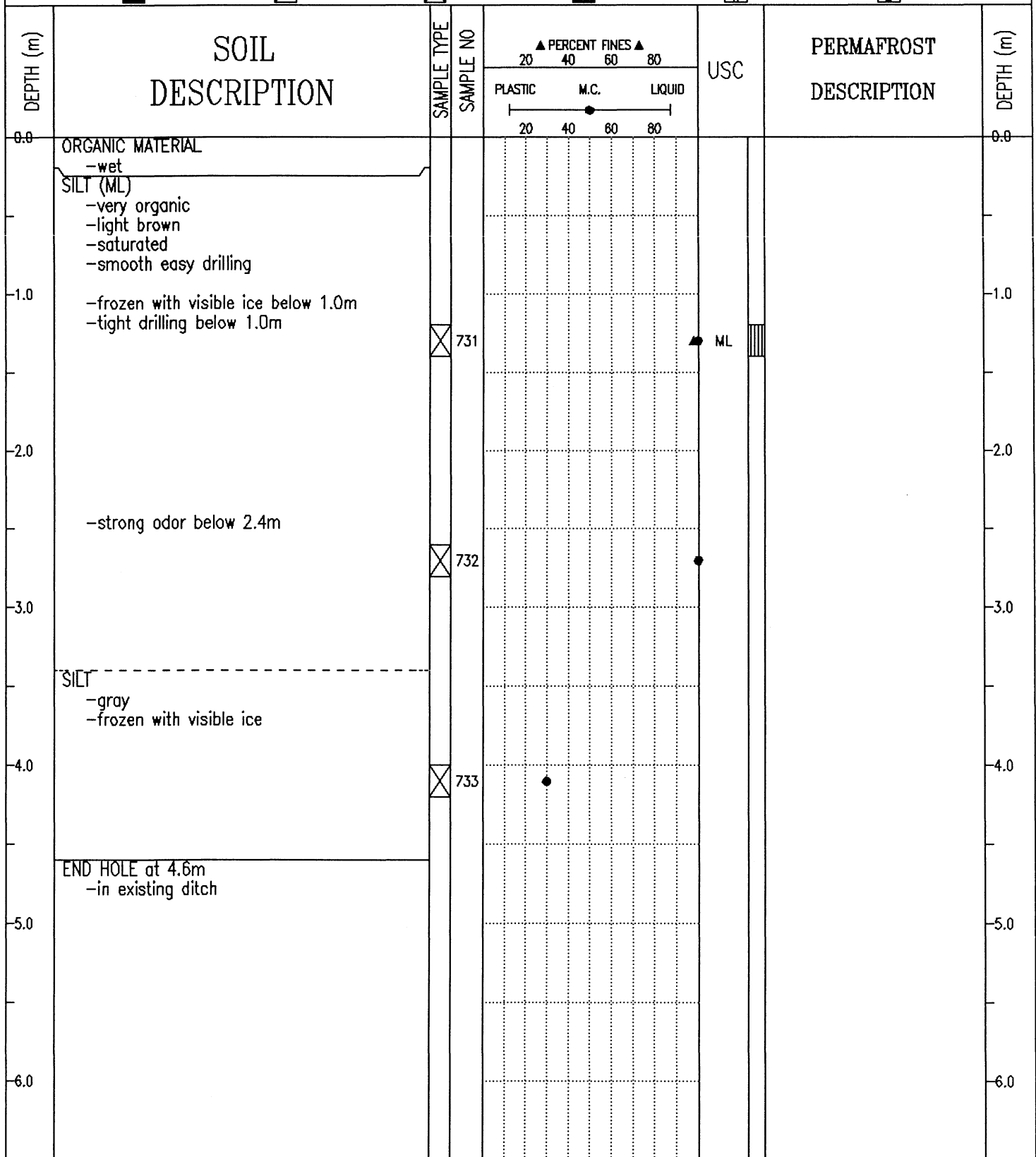


SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY RECONSTRUCTION	BOREHOLE No. 116-327
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: 1964+775 o/s 22m Rt.	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL -black -wet -smooth drilling							0.0	
1.0	SILTY ORGANIC MATERIAL -dark brown -frozen with visible ice -tight drilling		762					1.0	
2.0								2.0	
3.0	SILT (ML) -gray -visible ice		763			▲	ML	3.0	
4.0								4.0	
5.0	END HOLE at 4.6m -spruce and birch cover		764			●		5.0	
6.0								6.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY RECONSTRUCTION	BOREHOLE No. 116-317
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: 1964+780 o/s 8m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 4.6 m	COMPLETE 9D/10/30
	LOGGED BY JG	DWG NO.

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY RECONSTRUCTION	BOREHOLE No. 116-326
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: 1964+925 o/s 20m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL -black -wet							0.0	
0.0 - 1.0	SILT (ML) -gray -frozen								
1.0 - 2.0		<input checked="" type="checkbox"/>	759				ML		
2.0 - 3.0	-light brown below 2.0m								
3.0 - 4.0		<input checked="" type="checkbox"/>	760						
4.0 - 5.0	SILTY SAND -light brown -frozen								
5.0 - 6.0	END HOLE at 4.6m	<input checked="" type="checkbox"/>	761						

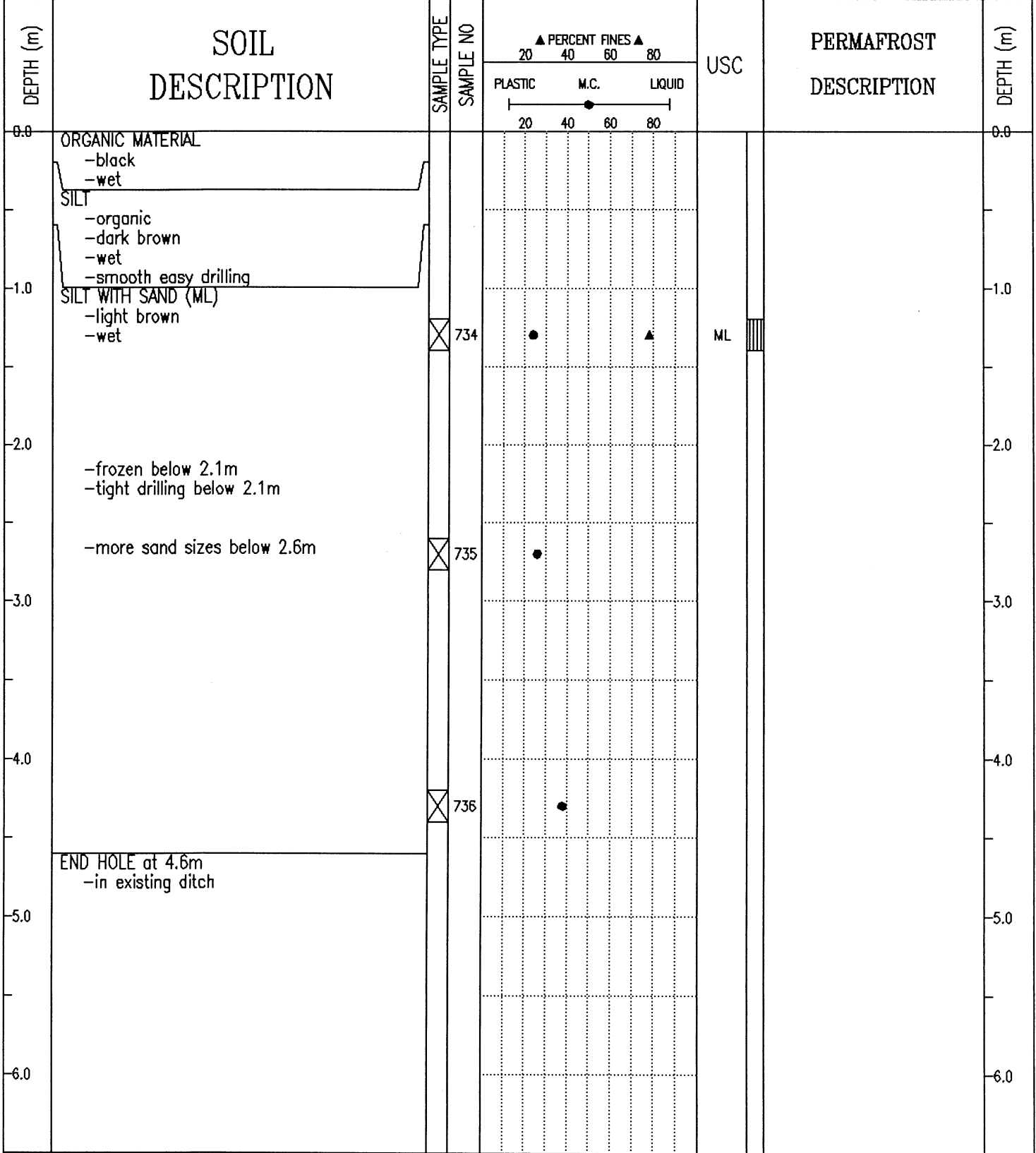
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-131
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1965+058 o/s 2m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	DECOMPOSED ROCK -road fill -damp								0.0
1.0	-moist below 1.0m								1.0
2.0	ORGANIC MATERIAL								2.0
3.0	SILT WITH SAND (ML) -gray -wet -organics -saturated below 2.5m  -frozen below 2.8m -tighter drilling  -no organics below 3.5m	<input checked="" type="checkbox"/>	264	●		▲	ML		3.0
4.0		<input checked="" type="checkbox"/>	265	●					4.0
5.0	END HOLE at 4.6m -in existing road								5.0
6.0									6.0

Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 4.6 m	COMPLETE 90/10/08
	LOGGED BY JM	DWG NO.

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY RECONSTRUCTION	BOREHOLE No. 116-318
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: 1965+058 o/s 9m Rt.	ELEVATION 0.000 (m)

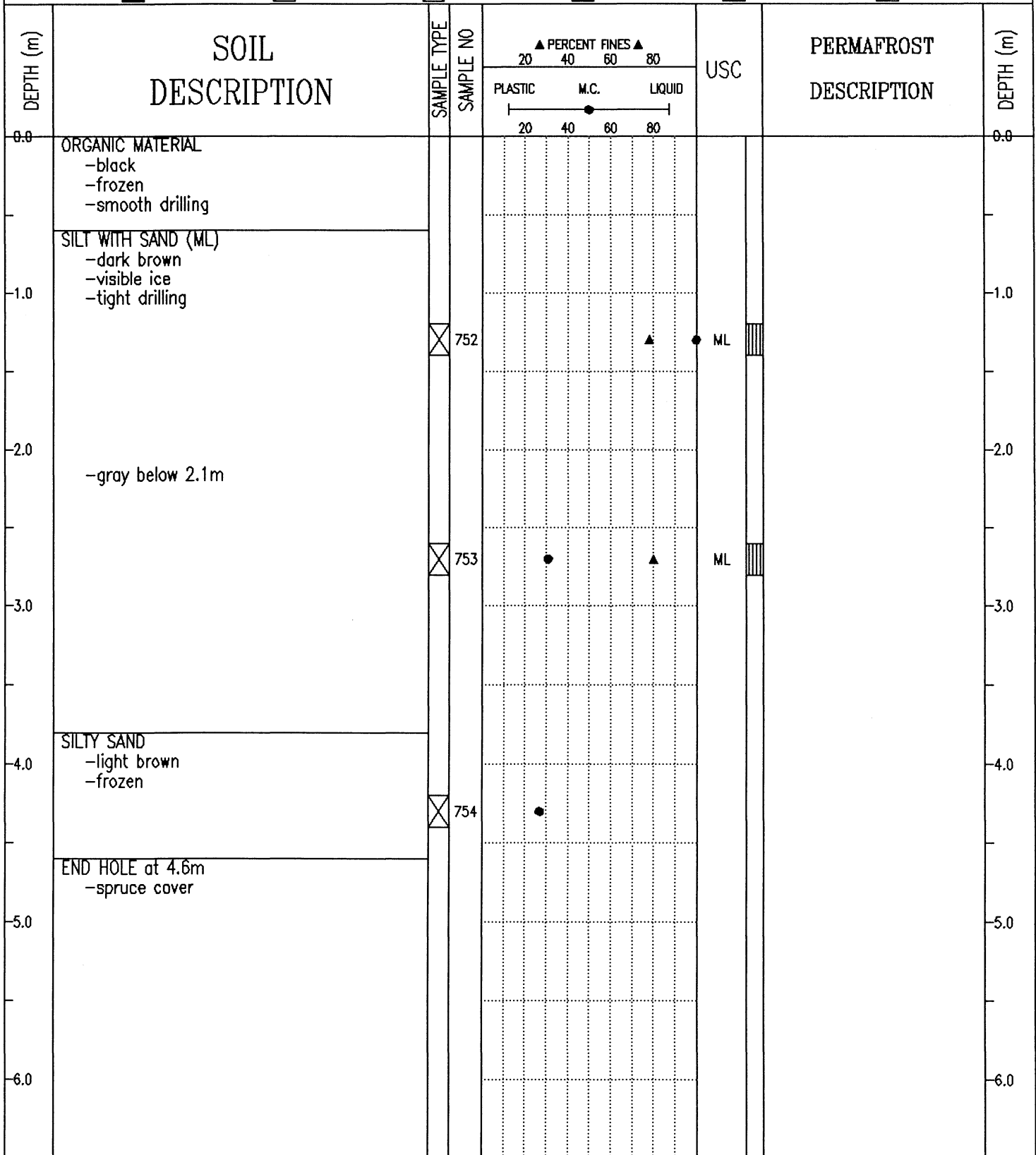
SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY RECONSTRUCTION	BOREHOLE No. 116-325
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: 1965+058 o/s 17m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL -black -frozen with visible ice							0.0	
0.5	SILT (ML) -brown -frozen, no ice							0.5	
1.0		<input checked="" type="checkbox"/>	755				ML	1.0	
2.0								2.0	
3.0		<input checked="" type="checkbox"/>	756					3.0	
4.0	SAND -some silt -light brown -frozen	<input checked="" type="checkbox"/>	757					4.0	
4.5	SILT -dark gray -frozen	<input checked="" type="checkbox"/>	758					4.5	
4.6	END HOLE at 4.6m -spruce cover							4.6	
5.0								5.0	
6.0								6.0	

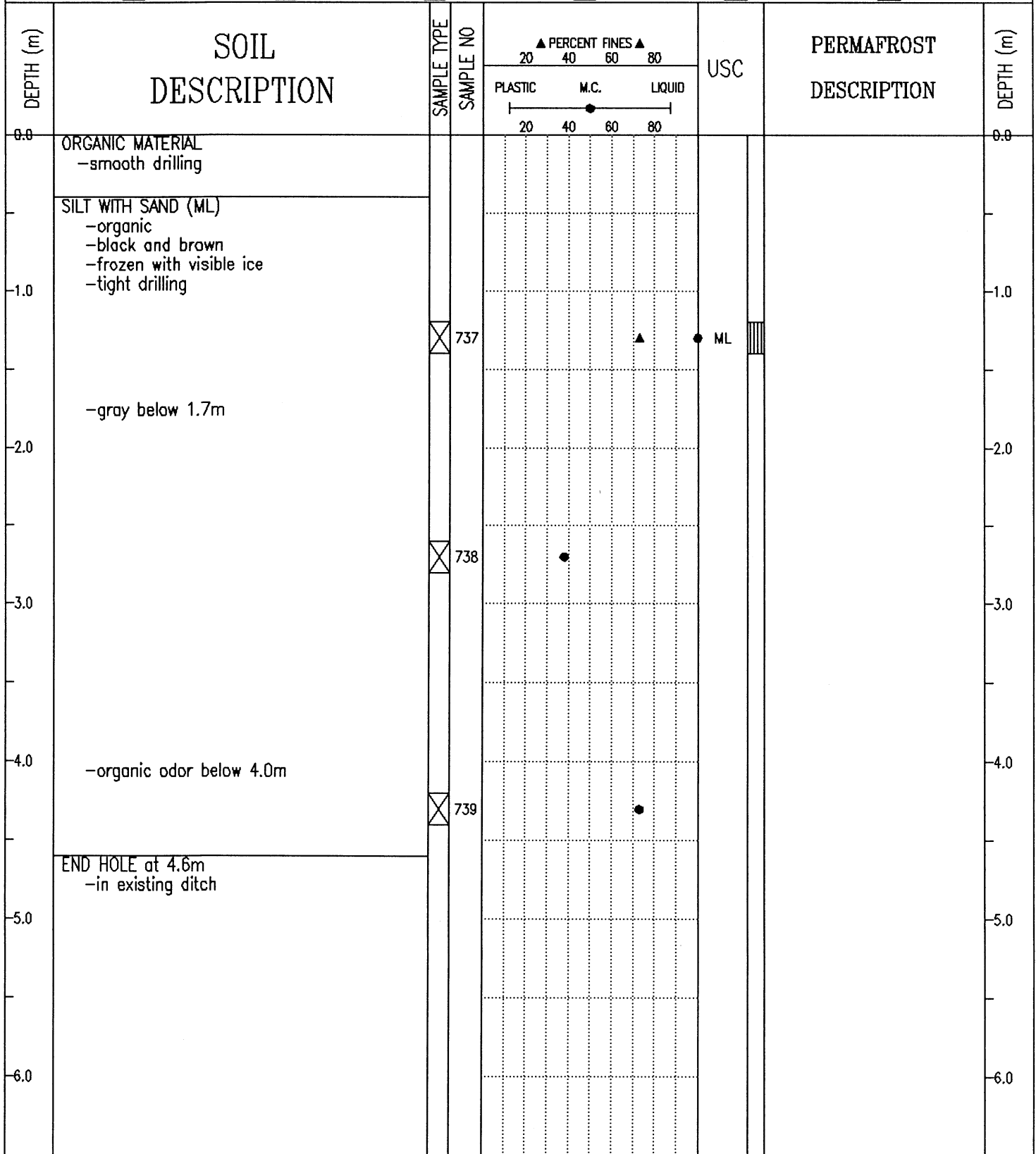
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY RECONSTRUCTION	BOREHOLE No. 116-324
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: 1965+200 o/s 34m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



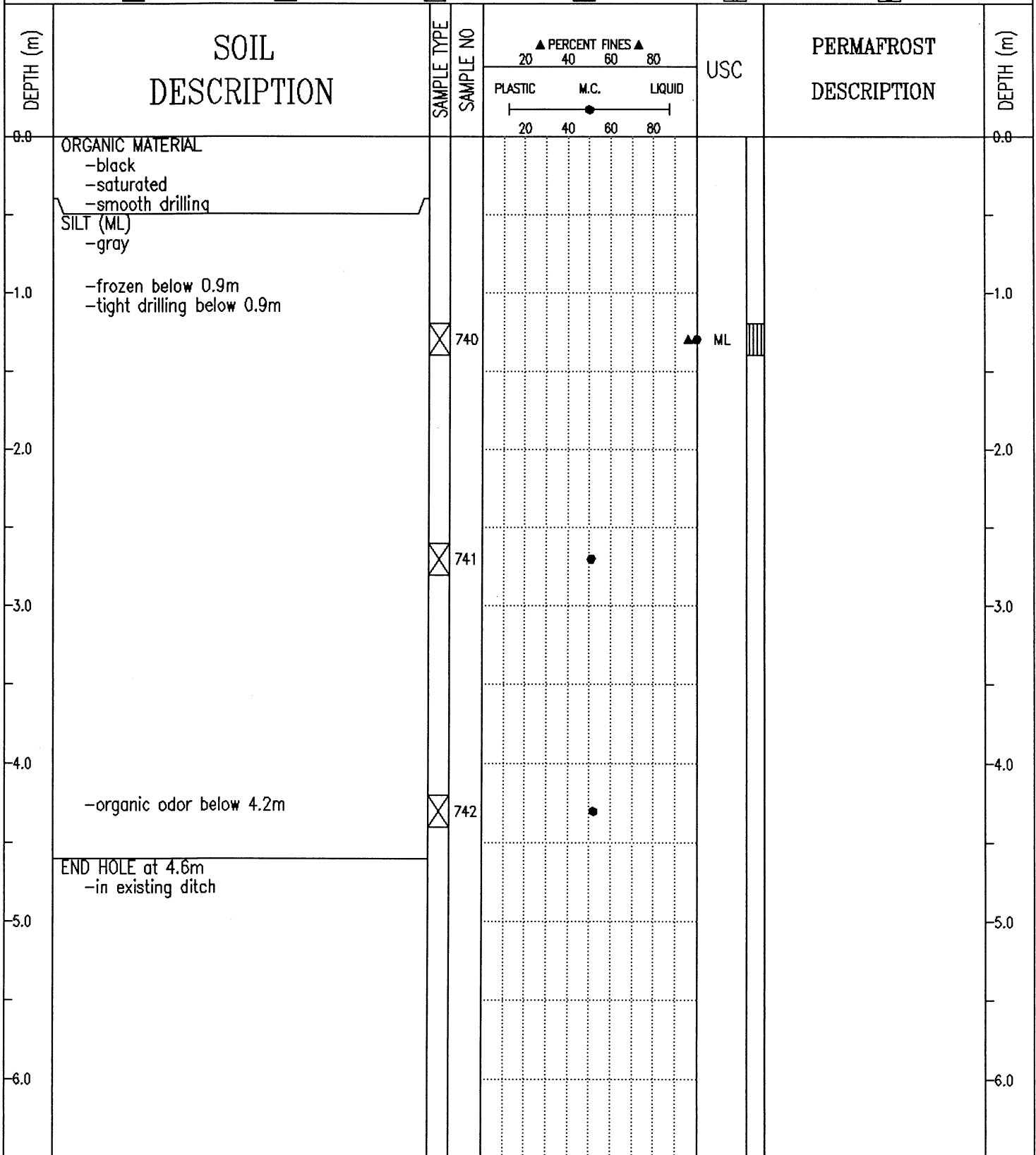
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 109-132
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: STA 1965+350 o/s 15m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	DECOMPOSED ROCK -road fill -damp -easy drilling								0.0
-1.0	-moist below 1.0m  -wet below 1.4m								-1.0
-2.0	ORGANIC MATERIAL -wet -frozen with visible ice crystals below 2.0m -tighter drilling below 2.0m								-2.0
-3.0	SILT -organics -visible ice crystals								-3.0
-4.0	ICE								-4.0
-5.0	ORGANIC MATERIAL -visible ice crystals								-5.0
-6.0	SANDY SILT -brown -organics -visible ice crystals								-6.0
-5.0	END HOLE at 4.6m -in existing road	<input checked="" type="checkbox"/>	266						-5.0

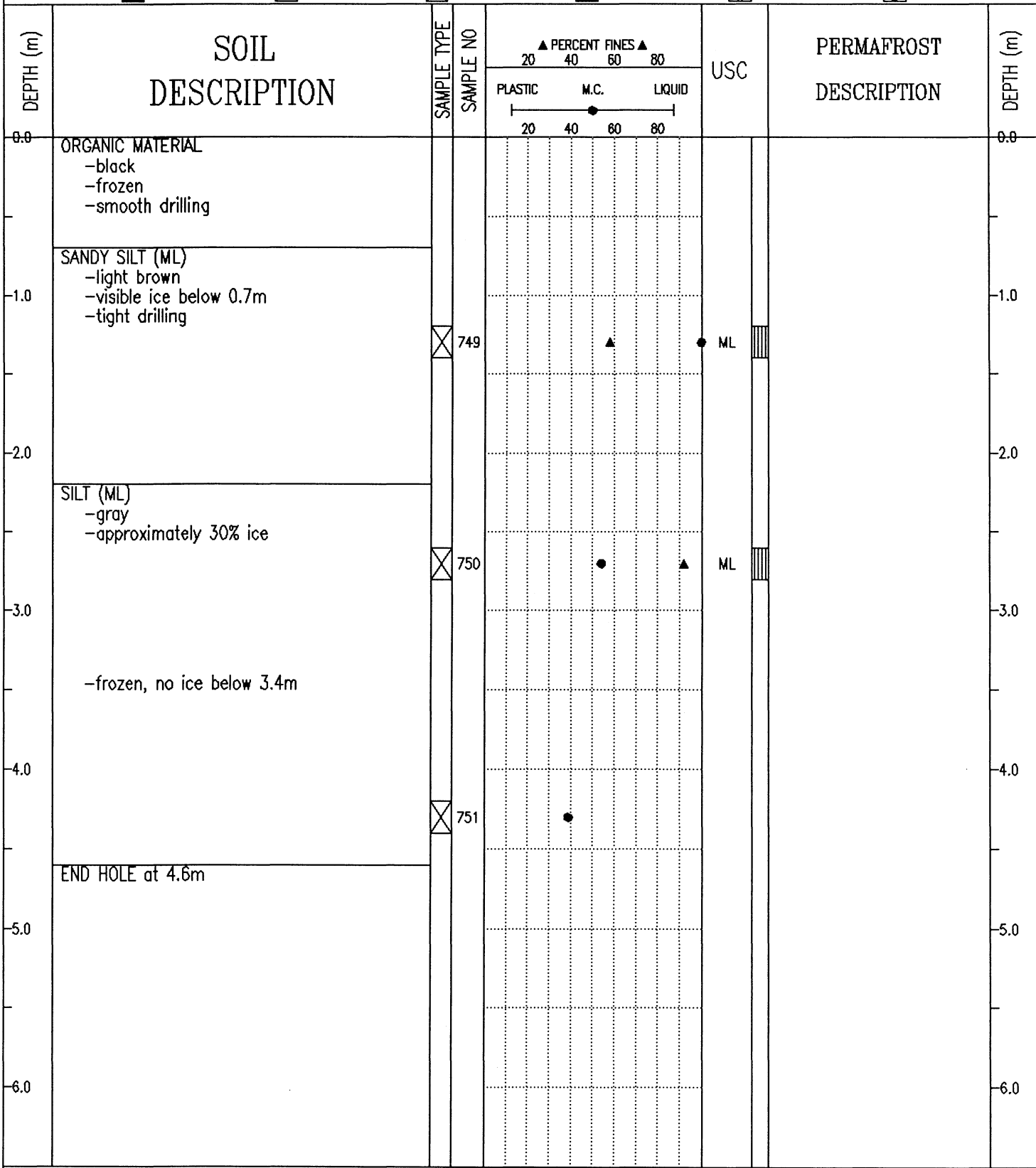
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY RECONSTRUCTION	BOREHOLE No. 116-319
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: 1965+350 o/s 22m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



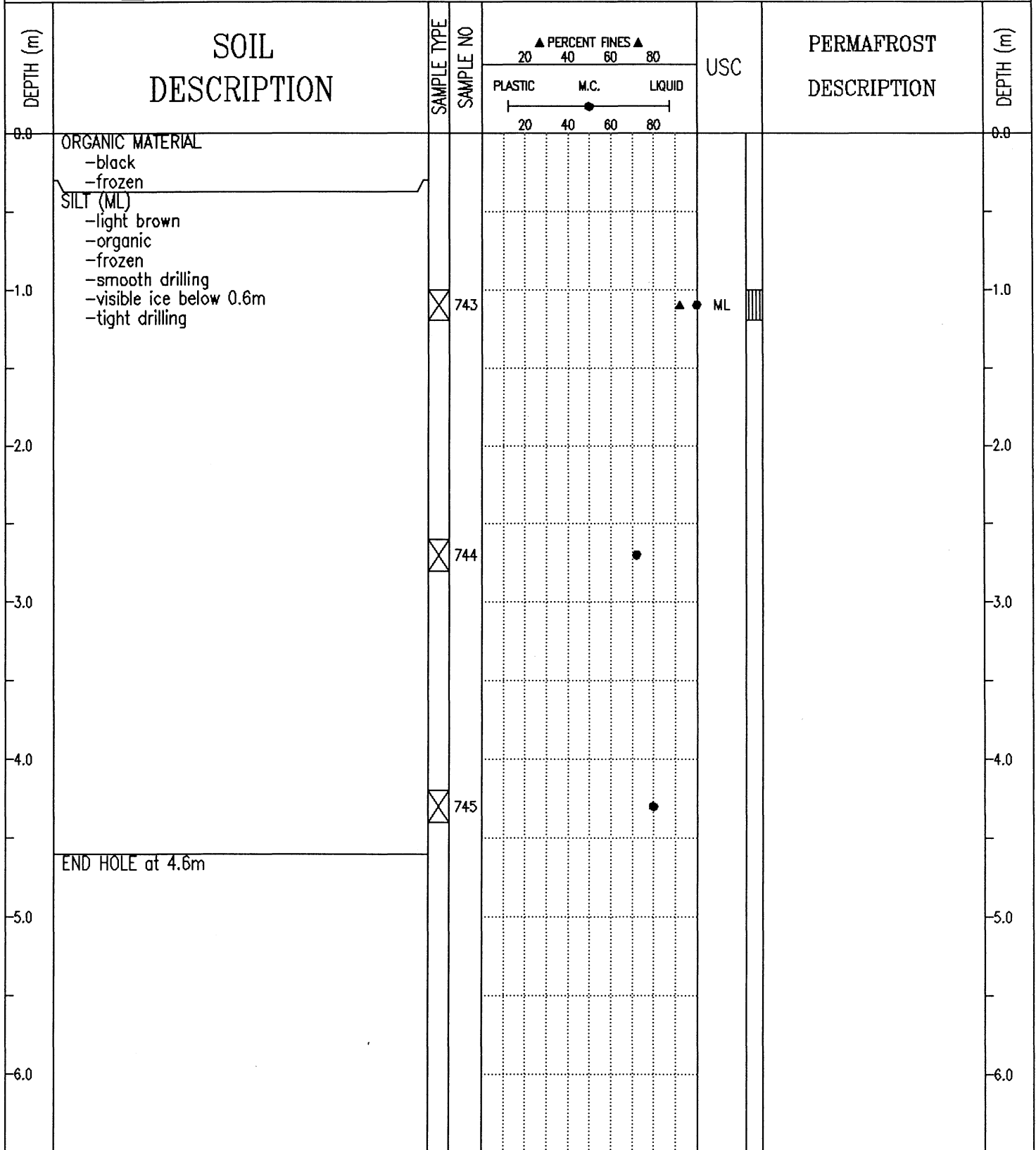
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY RECONSTRUCTION	BOREHOLE No. 116-320
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: 1965+350 o/s 4m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



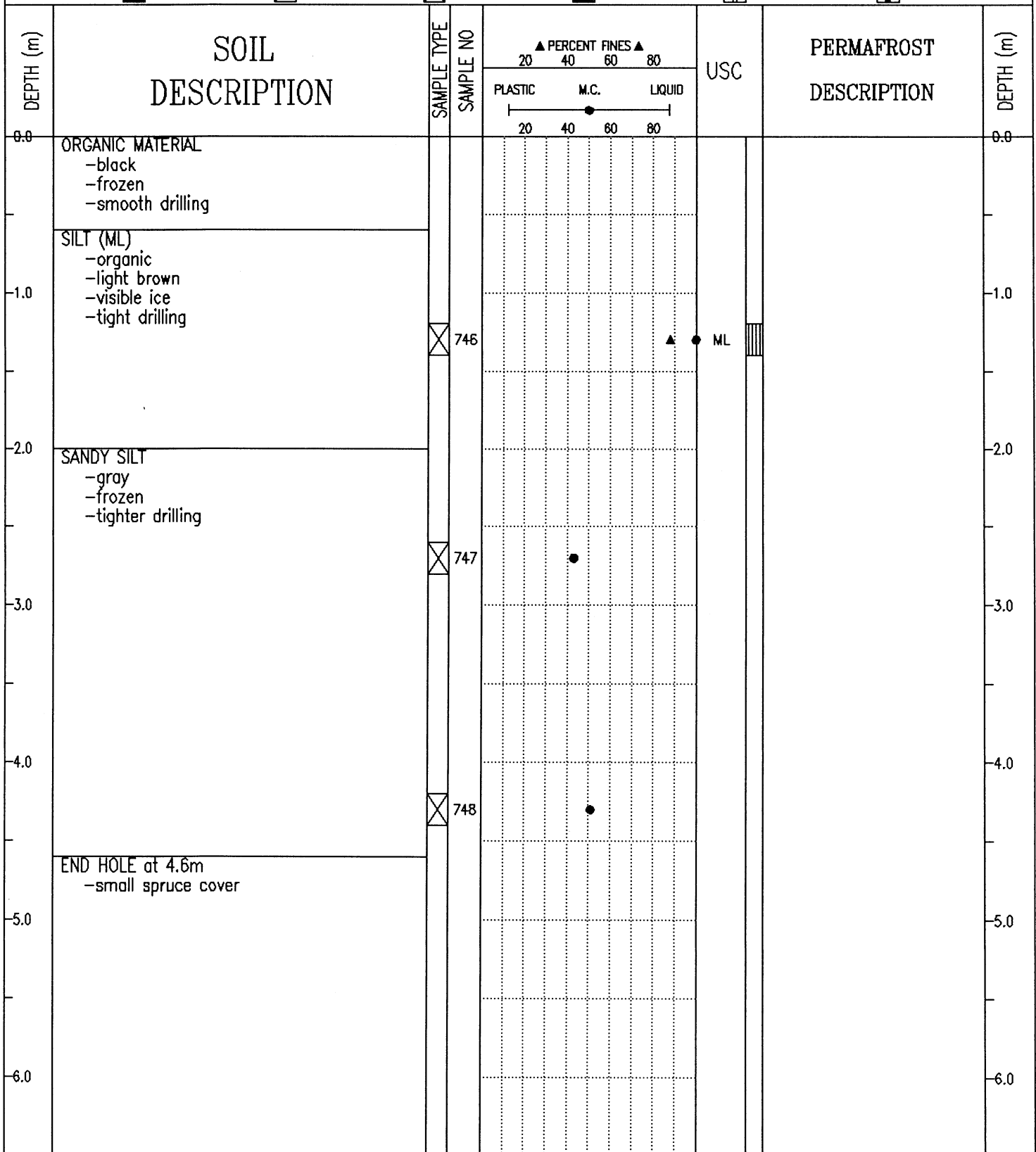
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY RECONSTRUCTION	BOREHOLE No. 116-323
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: 1965+350 o/s 18m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY RECONSTRUCTION	BOREHOLE No. 116-321
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: 1965+590 o/s 14m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY RECONSTRUCTION	BOREHOLE No. 116-322
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: 1965+590 o/s 45m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		BOREHOLE No. 109-133				
SHAKWAK PROJECT		A/H KM 1931.9-1965.5		Project No: SEGMENT 18				
DRILL: B61 150mm Dia. SOLID STEM AUGER		LOCATION: STA 1965+595 o/s 14m Rt.		ELEVATION 0.000 (m)				
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲		USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.			
0.0	DECOMPOSED ROCK -road fill -damp -easy drilling			20	40	60	80	0.0
-1.0	-moist below 0.9m							-1.0
-2.0	GRAVELLY SILT -wet							-2.0
-3.0	ORGANIC MATERIAL -wet ORGANIC SANDY SILT -frozen below 2.6m -tighter drilling -visible ice crystals below 2.8m	<input checked="" type="checkbox"/>	267					-3.0
-4.0	SANDY SILT -frozen  -visible ice crystals below 4.3m	<input checked="" type="checkbox"/>	268					-4.0
-5.0	END HOLE at 4.6m -in existing road							-5.0
-6.0								-6.0
Public Works Canada Whitehorse, Yukon Territory.				COMPLETION DEPTH 4.6 m		COMPLETE 90/10/08		
				LOGGED BY JM		DWG NO.		Page 1 of 1



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 112-232
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: See Plan	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	SANDY SILT -brown -smooth easy drilling							0.0	
1.0	POORLY GRADED GRAVEL WITH SILT AND SAND (GP-GM) -light brown -damp -grindy drilling	<input checked="" type="checkbox"/>	476	●▲			GP-GM	1.0	
2.0	SHALE -dark gray -dry -smooth grindy drilling	<input checked="" type="checkbox"/>	477	●				2.0	
3.0		<input checked="" type="checkbox"/>	478	●				3.0	
4.0		<input checked="" type="checkbox"/>	479	●				4.0	
5.0		<input checked="" type="checkbox"/>	480	●				5.0	
6.0								6.0	
7.0								7.0	
8.0	-gray below 7.7m -moist below 7.7m							8.0	
9.0	END HOLE at 9.1m -birch, spruce and pine cover	<input checked="" type="checkbox"/>						9.0	
10.0								10.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 112-233
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: See Plan	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	SILTY SAND -trace gravel -dark brown -damp -smooth drilling								0.0
1.0	POORLY GRADED GRAVEL WITH SILT AND SAND (GP-GM) -dry -grindy drilling	<input checked="" type="checkbox"/>	481	▲			GP-GM		1.0
2.0	SHALE -gray -damp -smooth grindy drilling	<input checked="" type="checkbox"/>	482	●					2.0
3.0									3.0
4.0									4.0
5.0									5.0
6.0	SANDSTONE -light brown -dry -harder drilling	<input checked="" type="checkbox"/>	484	●					6.0
7.0	SHALE -gray -dry								7.0
8.0									8.0
9.0	END HOLE at 9.1m	<input checked="" type="checkbox"/>	485	●					9.0
10.0									10.0

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 112-234
SHAKWAK PROJECT		A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER		LOCATION: See Plan	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T.		<input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK	<input type="checkbox"/> TUBE <input type="checkbox"/> CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	DECOMPOSED ROCK -slow smooth slightly grindy drilling								0.0
-1.0									-1.0
-2.0		<input checked="" type="checkbox"/>	486						-2.0
-3.0									-3.0
-4.0	END HOLE at 3.2m								-4.0
-5.0									-5.0
-6.0									-6.0

Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 3.2 m	COMPLETE 90/10/21
	LOGGED BY JG	DWG NO.

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 112-235
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: See Plan	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
	SILTY SAND -brown -dry -smooth easy drilling								
	SILTY SAND WITH GRAVEL (SM) -light brown -dry -smooth easy drilling								
1.0								1.0	
	-more gravels below 2.1m -slightly grindy drilling below 2.1m								
2.0								2.0	
	SHALE -light brown -damp -grindy drilling								
3.0								3.0	
4.0								4.0	
	DECOMPOSED ROCK								
5.0								5.0	
	END HOLE at 5.4m								
6.0								6.0	

Public Works Canada  
Whitehorse, Yukon Territory.

COMPLETION DEPTH 5.4 m

COMPLETE 9D/10/21

LOGGED BY JG

DWG NO.

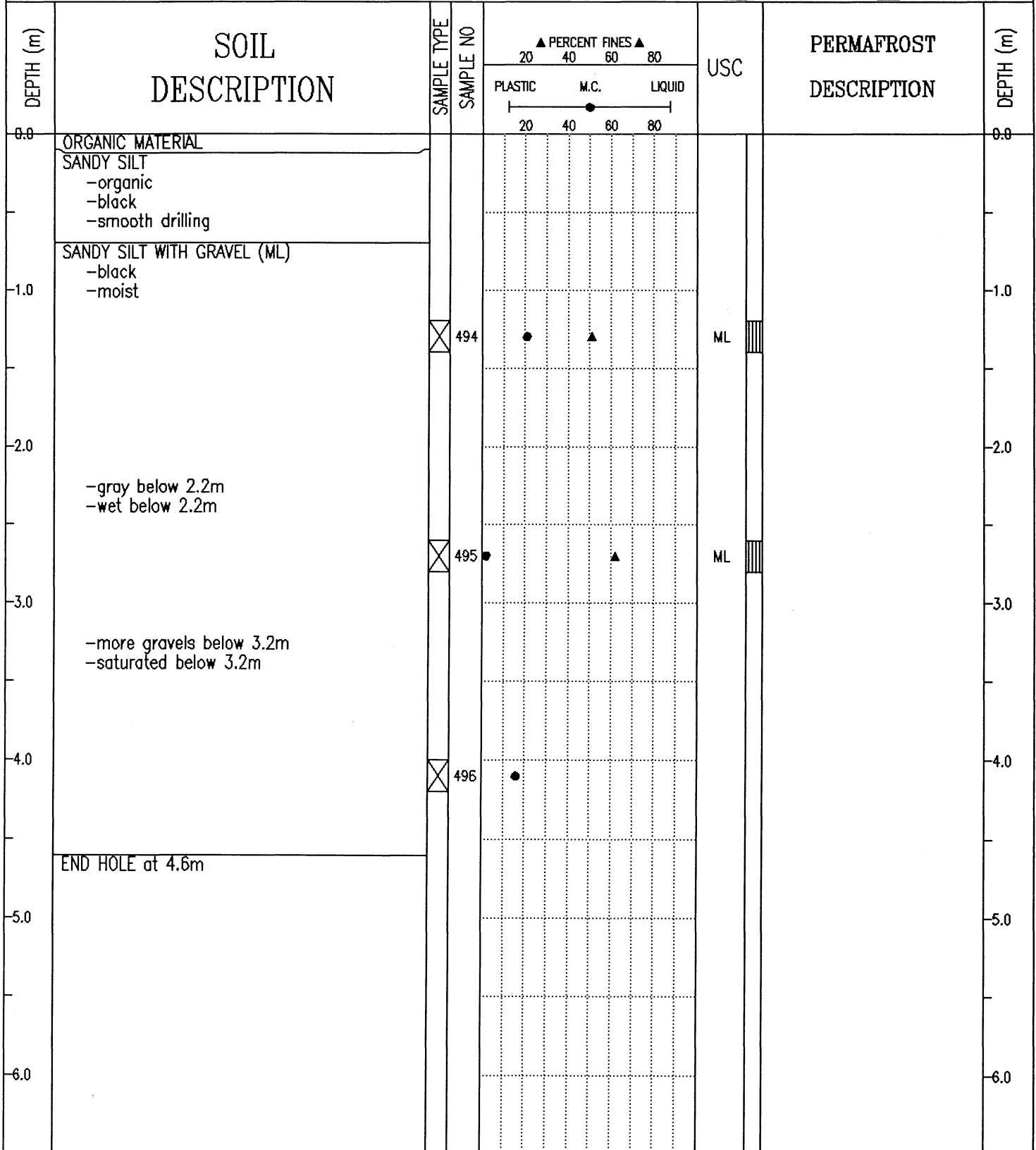
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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 112-236
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: See Plan	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
	SANDY SILT WITH GRAVEL (ML) -brown -moist -smooth drilling								
-1.0		<input checked="" type="checkbox"/>	491	● H	▲		ML	-1.0	
	ORGANIC MATERIAL -black -wet								
-2.0								-2.0	
	SILT WITH SAND (ML) -gray -frozen -grindy drilling								
-3.0		<input checked="" type="checkbox"/>	492	●	▲		ML	-3.0	
-4.0		<input checked="" type="checkbox"/>	493	●				-4.0	
	END HOLE at 4.6m								
-5.0								-5.0	
-6.0								-6.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 112-237
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: See Plan	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE



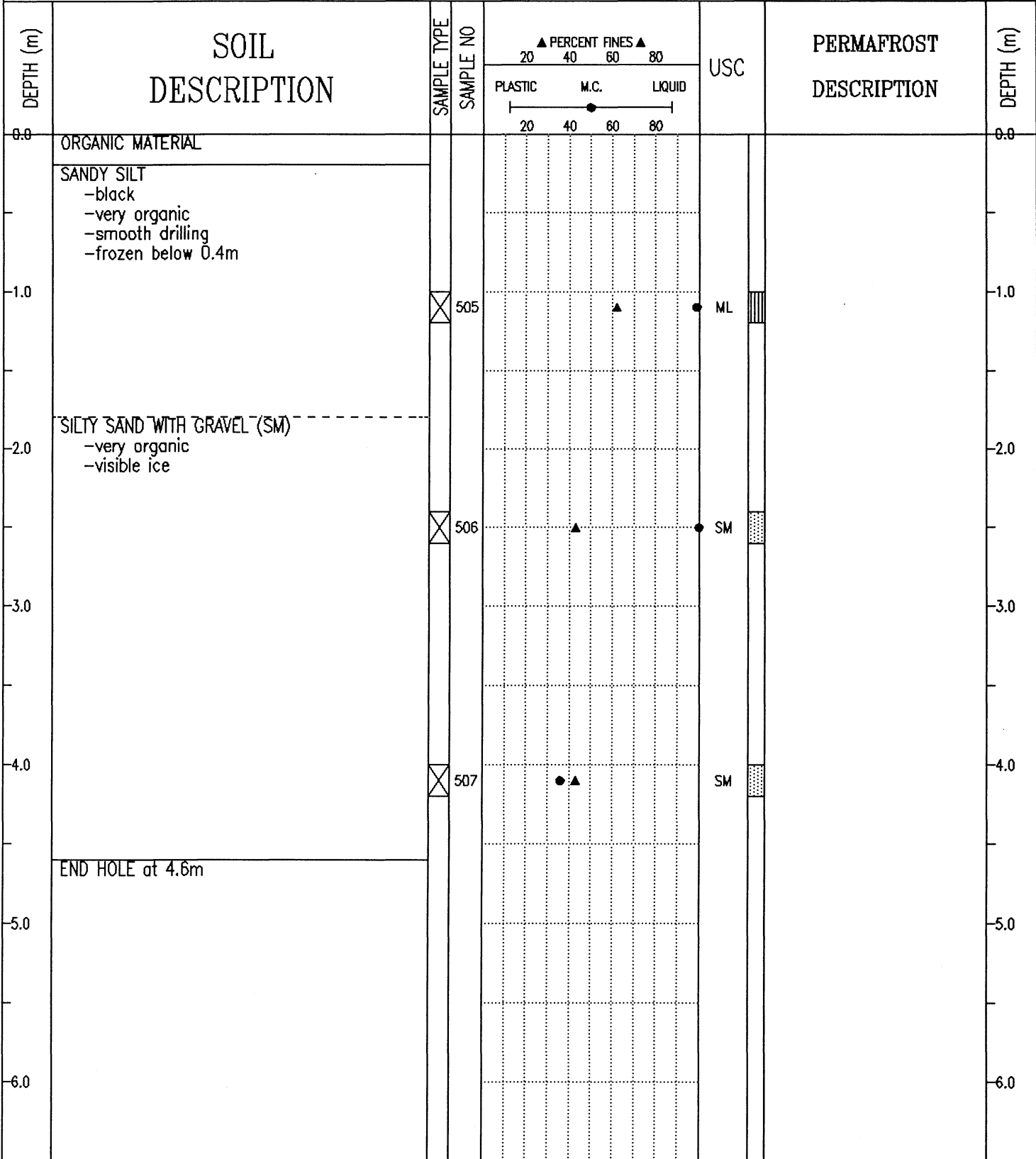
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 112-238
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: See Plan	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
	SILT -organic								
1.0	POORLY GRADED GRAVEL WITH SILT AND SAND (GP-GM) -brown -damp	<input checked="" type="checkbox"/>	497	▲			GP-GM	1.0	
2.0	SHALE							2.0	
3.0		<input checked="" type="checkbox"/>	498	●				3.0	
4.0	SANDSTONE -light brown -moist	<input checked="" type="checkbox"/>	499	●				4.0	
5.0	-grindy drilling below 4.8m -water below 5.0m							5.0	
6.0		<input checked="" type="checkbox"/>	500	●				6.0	
7.0	SHALE							7.0	
		<input checked="" type="checkbox"/>	501	●				7.0	
8.0	END HOLE at 7.7m -refusal							8.0	
9.0								9.0	
10.0								10.0	

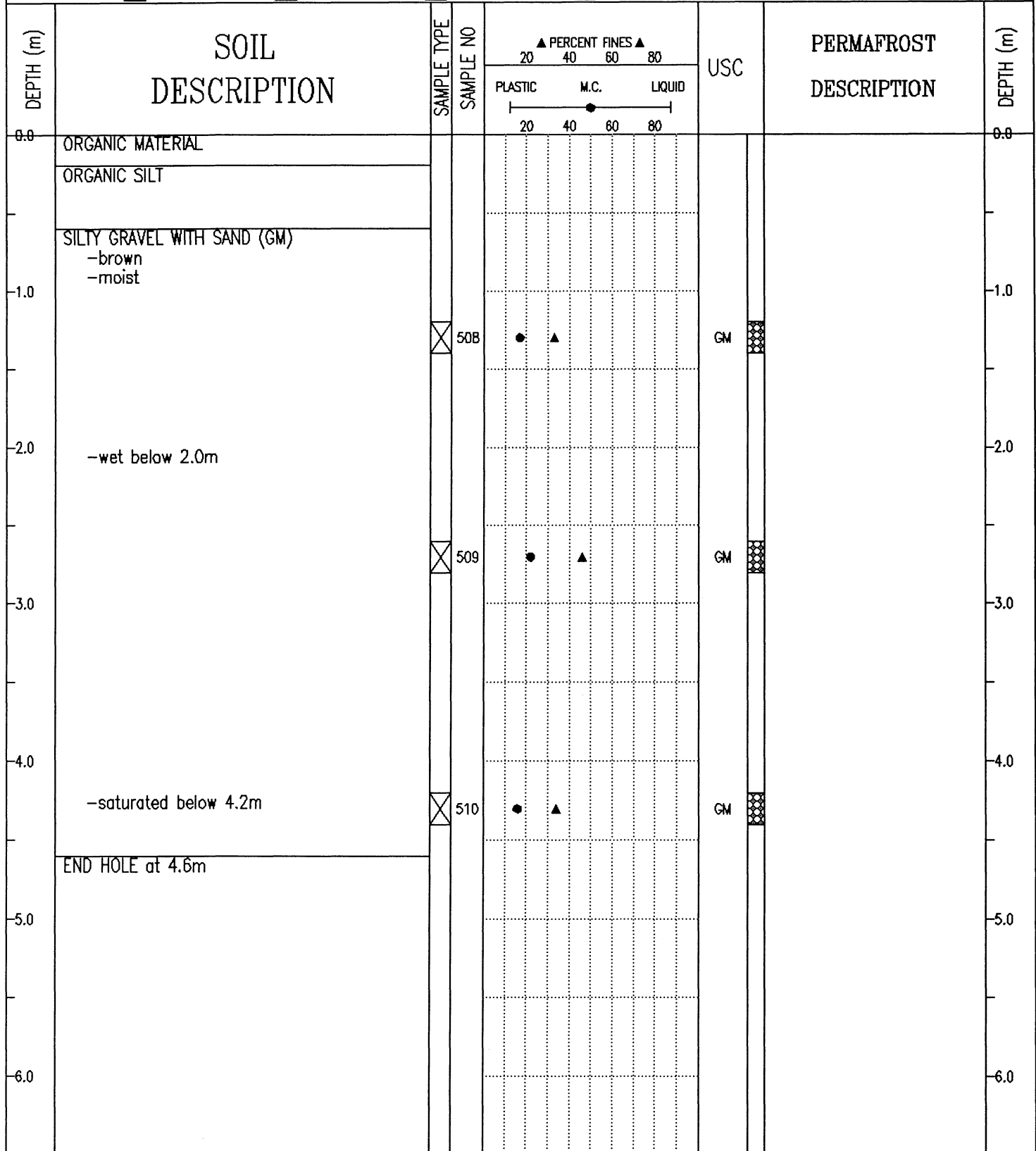
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 112-239
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: See Plan	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
	SILTY GRAVEL WITH SAND (GM) -dark brown -damp -smooth drilling								
-1.0								-1.0	
		<input checked="" type="checkbox"/>	502	●	▲		GM		
-2.0	SHALE							-2.0	
-3.0								-3.0	
	-slow grindy drilling below 3.4m								
-4.0								-4.0	
		<input checked="" type="checkbox"/>	503	●					
-5.0								-5.0	
	END HOLE at 4.6m								
-6.0								-6.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 112-240
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: See Plan	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



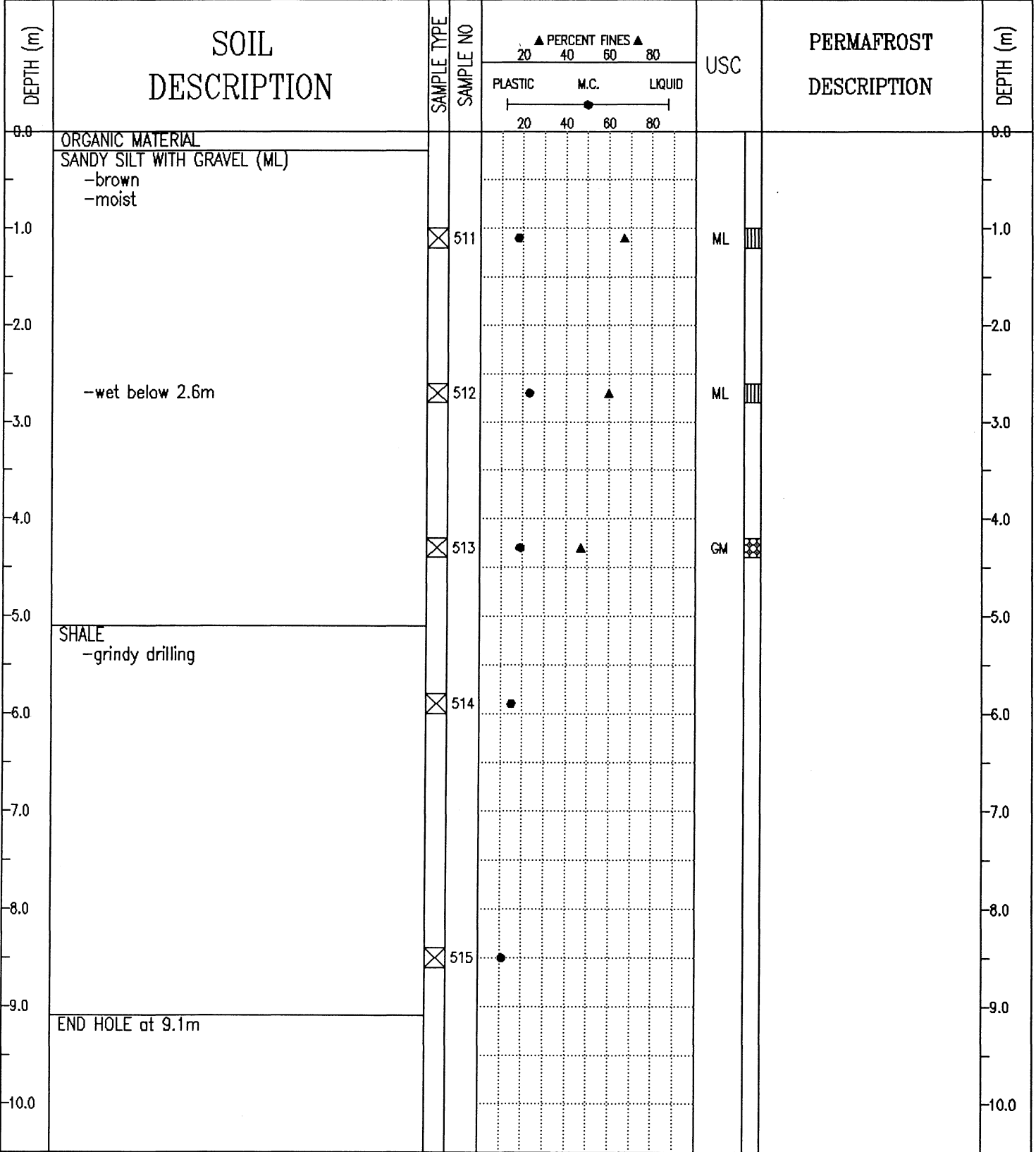
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 112-241
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: See Plan	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



Public Works Canada Whitehorse, Yukon Territory.	COMPLETION DEPTH 4.6 m	COMPLETE 90/10/21	
	LOGGED BY JG	DWG NO.	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 112-242
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: See Plan	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 112-243
SHAKWAK PROJECT	A/H KM 1931.9-1965.5	Project No: SEGMENT 18
DRILL: B61 150mm Dia. SOLID STEM AUGER	LOCATION: See Plan	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
	GRAVELLY SILT -smooth drilling								
1.0	SHALE -dark gray	<input checked="" type="checkbox"/>	516					1.0	
3.0	-lighter gray below 2.8m -harder drilling below 3.3m	<input checked="" type="checkbox"/>	517					3.0	
5.0	-grindy drilling below 4.8m	<input checked="" type="checkbox"/>	518					5.0	
6.0		<input checked="" type="checkbox"/>	519					6.0	
7.0	END HOLE at 6.9m -refusal	<input checked="" type="checkbox"/>	520					7.0	
8.0								8.0	
9.0								9.0	
10.0								10.0	

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 108-87  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-225  
 HOLE LOCATION: 1949+625 O/S 1M RT  
 LOGGED BY: JM DATE COMPLETED: 90.10.05

FIELD NO: 187  
 LAB NO: 2191  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	99
1.19	--
0.841	97
0.595	--
0.42	95
0.297	--
0.177	--
0.149	91
0.074	84

M.C. (%): 58

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 16  
 % FINES: 84

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

GR-01-160

```

=====
PROJECT NUMBER:   SEGMENT 18           HOLE NUMBER:    108-88
CLIENT:          SHAKWAK PROJECT
PROJECT NAME:    ALASKA HIGHWAY RECONSTRUCTION
PROJECT LOCATION: BEAVER CREEK
DRILL UNIT:      17-225
HOLE LOCATION:   1949+850 O/S 3M RT
LOGGED BY:       JM                     DATE COMPLETED: 90.10.05
=====

```

```

=====
FIELD NO: 188   FIELD NO: 189
LAB NO: 2192   LAB NO: 2193
DEPTH: 2.0-2.2 DEPTH: 4.4-4.6
TYPE: AUGER    TYPE: AUGER
=====

```

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--
76.2	--	76.2	--
50.8	--	50.8	--
38.1	100	38.1	--
25.4	88	25.4	--
19.0	81	19.0	--
12.7	76	12.7	--
9.5	74	9.5	--
4.76	67	4.76	--
2.38	--	2.38	--
2.00	60	2.00	--
1.19	--	1.19	--
0.841	53	0.841	--
0.595	--	0.595	--
0.42	48	0.42	--
0.297	--	0.297	--
0.177	--	0.177	--
0.149	42	0.149	--
0.074	36	0.074	--

```

M.C.(%): 13   M.C.(%): 17
=====

```

LIMITS		LIMITS	
LIQUID:	--	LIQUID:	--
PLASTIC:	--	PLASTIC:	--
P.I.:	TRACE	P.I.:	--

```

% GRAVEL: 33   % GRAVEL: --
% SAND: 31    % SAND: --
% FINES: 36   % FINES: --
=====

```

```

CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)
CLASSIFICATION:
=====

```

```

=====
PROJECT NUMBER:   SEGMENT 18           HOLE NUMBER:    108-90
CLIENT:          SHAKWAK PROJECT
PROJECT NAME:    ALASKA HIGHWAY RECONSTRUCTION
PROJECT LOCATION: BEAVER CREEK
DRILL UNIT:      17-225
HOLE LOCATION:   1950+060 O/S 10M RT
LOGGED BY:       JM                     DATE COMPLETED: 90.10.06
=====

```

```

FIELD NO: 190
LAB NO: 2194
DEPTH: 1.3-1.5
TYPE: AUGER

```

```

SIEVE | PERCENT
SIZE  | PASSING
-----|-----

```

101.6	--
76.2	--
50.8	--
38.1	100
25.4	84
19.0	80
12.7	74
9.5	68
4.76	58
2.38	--
2.00	49
1.19	--
0.841	42
0.595	--
0.42	38
0.297	--
0.177	--
0.149	33
0.074	29

M.C.(%): 6

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 42  
 % SAND: 29  
 % FINES: 29

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 108-91  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-225  
 HOLE LOCATION: 1950+165 O/S 2M RT  
 LOGGED BY: JM DATE COMPLETED: 90.10.06

FIELD NO: 191  
 LAB NO: 2195  
 DEPTH: 4.4-4.6  
 TYPE: AUGER  
 ORGANIC ODOR

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	82
25.4	77
19.0	74
12.7	73
9.5	71
4.76	68
2.38	--
2.00	63
1.19	--
0.841	58
0.595	--
0.42	53
0.297	--
0.177	--
0.149	45
0.074	38

M.C.(%): 39

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 32  
 % SAND: 30  
 % FINES: 38

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 108-92  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-225  
 HOLE LOCATION: 1950+350 O/S 1M LT  
 LOGGED BY: JM DATE COMPLETED: 90.10.06

FIELD NO: 192	FIELD NO: 193
LAB NO: 2196	LAB NO: 2197
DEPTH: 2.5-2.7	DEPTH: 4.4-4.6
TYPE: AUGER	TYPE: AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--
76.2	--	76.2	--
50.8	--	50.8	--
38.1	--	38.1	--
25.4	--	25.4	--
19.0	--	19.0	--
12.7	100	12.7	--
9.5	99	9.5	--
4.76	99	4.76	--
2.38	--	2.38	--
2.00	98	2.00	--
1.19	--	1.19	--
0.841	97	0.841	--
0.595	--	0.595	--
0.42	97	0.42	--
0.297	--	0.297	--
0.177	--	0.177	--
0.149	95	0.149	--
0.074	81	0.074	--

M.C. (%): 29 M.C. (%): 44

LIMITS		LIMITS	
LIQUID:	--	LIQUID:	--
PLASTIC:	--	PLASTIC:	--
P.I.:	N.P.	P.I.:	--

% GRAVEL:	1	% GRAVEL:	--
% SAND:	18	% SAND:	--
% FINES:	81	% FINES:	--

CLASSIFICATION: SILT WITH SAND (ML)  
 CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 108-93  
CLIENT: SHAKWAK PROJECT  
PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
PROJECT LOCATION: BEAVER CREEK  
DRILL UNIT: 17-225  
HOLE LOCATION: 1950+550 O/S 3M RT  
LOGGED BY: JM DATE COMPLETED: 90.10.06

FIELD NO: 194  
LAB NO: 2198  
DEPTH: 1.8-2.0  
TYPE: AUGER

SIEVE | PERCENT  
SIZE | PASSING

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	100
9.5	99
4.76	99
2.38	--
2.00	98
1.19	--
0.841	97
0.595	--
0.42	95
0.297	--
0.177	--
0.149	93
0.074	87

M.C. (%): 33

LIMITS

LIQUID: --  
PLASTIC: --  
P.I.: N.P.

% GRAVEL: 1  
% SAND: 11  
% FINES: 87

CLASSIFICATION:  
SILT (ML)

```

=====
PROJECT NUMBER:   SEGMENT 18           HOLE NUMBER:    108-94A
CLIENT:          SHAKWAK PROJECT
PROJECT NAME:    ALASKA HIGHWAY RECONSTRUCTION
PROJECT LOCATION: BEAVER CREEK
DRILL UNIT:      17-225
HOLE LOCATION:   1950+685 O/S 4M RT
LOGGED BY:       JM                     DATE COMPLETED: 90.10.06
=====

```

```

=====
FIELD NO: 195   FIELD NO: 196
LAB NO: 2199   LAB NO: 2200
DEPTH: 2.8-3.0 DEPTH: 3.5-3.7
TYPE: AUGER    TYPE: AUGER
=====

```

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--
76.2	--	76.2	--
50.8	--	50.8	--
38.1	--	38.1	--
25.4	--	25.4	--
19.0	--	19.0	--
12.7	--	12.7	--
9.5	100	9.5	--
4.76	99	4.76	--
2.38	--	2.38	--
2.00	97	2.00	--
1.19	--	1.19	--
0.841	94	0.841	--
0.595	--	0.595	--
0.42	90	0.42	--
0.297	--	0.297	--
0.177	--	0.177	--
0.149	84	0.149	--
0.074	79	0.074	--

```

M.C. (%): 60   M.C. (%): 271
=====

```

LIMITS		LIMITS	
LIQUID:	--	LIQUID:	--
PLASTIC:	--	PLASTIC:	--
P.I.:	N.P.	P.I.:	--

% GRAVEL:	1	% GRAVEL:	--
% SAND:	20	% SAND:	--
% FINES:	79	% FINES:	--

```

CLASSIFICATION:   CLASSIFICATION:
SILT WITH SAND
(ML)
=====

```

```

=====
PROJECT NUMBER:   SEGMENT 18           HOLE NUMBER:     108-94B
CLIENT:          SHAKWAK PROJECT
PROJECT NAME:    ALASKA HIGHWAY RECONSTRUCTION
PROJECT LOCATION: BEAVER CREEK
DRILL UNIT:      17-225
HOLE LOCATION:   1950+860 O/S 8M RT
LOGGED BY:       JM                     DATE COMPLETED:  90.10.06
=====

```

```

=====
FIELD NO:   197   FIELD NO:   198
LAB NO:    2201   LAB NO:    2202
DEPTH:     1.3-1.5 DEPTH:     2.8-3.0
TYPE:      AUGER  TYPE:      AUGER
=====

```

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--
76.2	--	76.2	--
50.8	--	50.8	--
38.1	100	38.1	--
25.4	85	25.4	--
19.0	73	19.0	--
12.7	66	12.7	--
9.5	61	9.5	--
4.76	50	4.76	--
2.38	--	2.38	--
2.00	39	2.00	--
1.19	--	1.19	--
0.841	27	0.841	--
0.595	--	0.595	--
0.42	21	0.42	--
0.297	--	0.297	--
0.177	--	0.177	--
0.149	15	0.149	--
0.074	12	0.074	--

```

M.C.(%):      6   M.C.(%):      9
=====

```

LIMITS		LIMITS	
LIQUID:	--	LIQUID:	--
PLASTIC:	--	PLASTIC:	--
P.I.:	N.P.	P.I.:	--

```

% GRAVEL:      50   % GRAVEL:      --
% SAND:        38   % SAND:        --
% FINES:       12   % FINES:       --
=====

```

```

CLASSIFICATION:  CLASSIFICATION:
WELL-GRADED
GRAVEL WITH SILT
& SAND (GW-GM)
=====

```

```

=====
PROJECT NUMBER:   SEGMENT 18           HOLE NUMBER:    108-95
CLIENT:          SHAKWAK PROJECT
PROJECT NAME:    ALASKA HIGHWAY RECONSTRUCTION
PROJECT LOCATION: BEAVER CREEK
DRILL UNIT:      17-225
HOLE LOCATION:   1950+950 O/S 25M RT
LOGGED BY:       JM                     DATE COMPLETED: 90.10.06
=====

```

```

=====
FIELD NO:   199   FIELD NO:   200
LAB NO:     2203  LAB NO:     2204
DEPTH:      1.3-1.5  DEPTH:    4.4-4.6
TYPE:       AUGER   TYPE:     AUGER
=====

```

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--
76.2	--	76.2	--
50.8	--	50.8	--
38.1	--	38.1	--
25.4	--	25.4	--
19.0	--	19.0	--
12.7	--	12.7	--
9.5	--	9.5	--
4.76	--	4.76	--
2.38	--	2.38	--
2.00	--	2.00	--
1.19	--	1.19	--
0.841	--	0.841	--
0.595	--	0.595	--
0.42	--	0.42	--
0.297	--	0.297	--
0.177	--	0.177	--
0.149	--	0.149	--
0.074	--	0.074	--

```

M.C.(%):      3   M.C.(%):      13
=====

```

LIMITS		LIMITS	
LIQUID:	--	LIQUID:	--
PLASTIC:	--	PLASTIC:	--
P.I.:	--	P.I.:	--

% GRAVEL:	--	% GRAVEL:	--
% SAND:	--	% SAND:	--
% FINES:	--	% FINES:	--

```

CLASSIFICATION:   CLASSIFICATION:
=====

```

```

=====
PROJECT NUMBER:   SEGMENT 18           HOLE NUMBER:     108-96
CLIENT:          SHAKWAK PROJECT
PROJECT NAME:    ALASKA HIGHWAY RECONSTRUCTION
PROJECT LOCATION: BEAVER CREEK
DRILL UNIT:     17-225
HOLE LOCATION:  1951+050 O/S 40M RT
LOGGED BY:      JM                     DATE COMPLETED: 90.10.06
=====

```

```

=====
FIELD NO:   201   FIELD NO:   202
LAB NO:    2205   LAB NO:    2206
DEPTH:    1.3-1.5 DEPTH:    4.4-4.6
TYPE:     AUGER   TYPE:     AUGER
=====

```

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--
76.2	--	76.2	--
50.8	--	50.8	--
38.1	--	38.1	--
25.4	--	25.4	--
19.0	--	19.0	--
12.7	--	12.7	--
9.5	--	9.5	--
4.76	--	4.76	--
2.38	--	2.38	--
2.00	--	2.00	--
1.19	--	1.19	--
0.841	--	0.841	--
0.595	--	0.595	--
0.42	--	0.42	--
0.297	--	0.297	--
0.177	--	0.177	--
0.149	--	0.149	--
0.074	--	0.074	--

```

M.C.(%):      5   M.C.(%):      13
=====

```

LIMITS		LIMITS	
LIQUID:	--	LIQUID:	--
PLASTIC:	--	PLASTIC:	--
P.I.:	--	P.I.:	--

% GRAVEL:	--	% GRAVEL:	--
% SAND:	--	% SAND:	--
% FINES:	--	% FINES:	--

```

CLASSIFICATION:   CLASSIFICATION:
=====

```

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 108-97  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-225  
 HOLE LOCATION: 1951+150 O/S 40M RT  
 LOGGED BY: JM DATE COMPLETED: 90.10.06

FIELD NO: 203  
 LAB NO: 2207  
 DEPTH: 1.3-1.5  
 TYPE: AUGER

FIELD NO: 204  
 LAB NO: 2208  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 205  
 LAB NO: 2209  
 DEPTH: 4.4-4.6  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	100
38.1	82
25.4	82
19.0	82
12.7	78
9.5	73
4.76	62
2.38	--
2.00	50
1.19	--
0.841	40
0.595	--
0.42	34
0.297	--
0.177	--
0.149	28
0.074	24

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 8

M.C. (%): 13

M.C. (%): 14

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 38  
 % SAND: 38  
 % FINES: 24

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-9E  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-225  
 HOLE LOCATION: 1951+250 O/S 25M RT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.06

FIELD NO: 206  
 LAB NO: 2210  
 DEPTH: 1.3-1.5  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.3	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 2

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-99  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-225  
 HOLE LOCATION: 1951+685 O/S 3M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.06

FIELD NO: 207	FIELD NO: 208
LAB NO: 2211	LAB NO: 2212
DEPTH: 1.3-1.5	DEPTH: 4.4-4.6
TYPE: AUGER	TYPE: AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--
76.2	--	76.2	--
50.8	--	50.8	--
38.1	--	38.1	--
25.4	--	25.4	--
19.0	--	19.0	--
12.7	--	12.7	--
9.5	--	9.5	--
4.76	--	4.76	--
2.38	--	2.38	--
2.00	--	2.00	--
1.19	--	1.19	--
0.841	--	0.841	--
0.595	--	0.595	--
0.42	--	0.42	--
0.297	--	0.297	--
0.177	--	0.177	--
0.149	--	0.149	--
0.074	--	0.074	--

M.C.(%): 5 M.C.(%): 10

LIMITS	LIMITS
LIQUID: --	LIQUID: --
PLASTIC: --	PLASTIC: --
P.I.: --	P.I.: --

% GRAVEL: --	% GRAVEL: --
% SAND: --	% SAND: --
% FINES: --	% FINES: --

CLASSIFICATION: CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-101  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-225  
 HOLE LOCATION: 1952+225 O/S 1M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.06

FIELD NO: 209  
 LAB NO: 2213  
 DEPTH: 1.3-1.5  
 TYPE: AUGER

FIELD NO: 210  
 LAB NO: 2214  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 211  
 LAB NO: 2215  
 DEPTH: 4.4-4.6  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	82
19.0	82
12.7	78
9.5	77
4.76	74
2.38	--
2.00	70
1.19	--
0.841	65
0.595	--
0.42	61
0.297	--
0.177	--
0.149	52
0.074	40

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	99
1.19	--
0.841	98
0.595	--
0.42	97
0.297	--
0.177	--
0.149	95
0.074	90

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 41

M.C. (%): 34

M.C. (%): 31

LIMITS

LIMITS

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 26  
 % SAND: 26  
 % FINES: 48

% GRAVEL: 0  
 % SAND: 10  
 % FINES: 90

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-102  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-225  
 HOLE LOCATION: 1952+400  
 LOGGED BY: JM DATE COMPLETED: 90.10.06

FIELD NO: 212	FIELD NO: 213
LAB NO: 2216	LAB NO: 2217
DEPTH: 2.8-3.0	DEPTH: 4.4-4.6
TYPE: AUGER	TYPE: AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--
76.2	--	76.2	--
50.8	--	50.8	--
38.1	--	38.1	--
25.4	--	25.4	--
19.0	--	19.0	--
12.7	--	12.7	100
9.5	100	9.5	99
4.76	100	4.76	99
2.38	--	2.38	--
2.00	99	2.00	98
1.19	--	1.19	--
0.841	99	0.841	95
0.595	--	0.595	--
0.42	97	0.42	93
0.297	--	0.297	--
0.177	--	0.177	--
0.149	95	0.149	90
0.074	91	0.074	85

M.C. (%): 44 M.C. (%): 78

LIMITS	LIMITS
LIQUID: --	LIQUID: --
PLASTIC: --	PLASTIC: --
P.I.: N.P.	P.I.: N.P.

% GRAVEL: 0	% GRAVEL: 1
% SAND: 9	% SAND: 13
% FINES: 91	% FINES: 85

CLASSIFICATION: SILT (ML) CLASSIFICATION: SILT WITH SAND (ML)

PROJECT NUMBER: 214  
 CLIENT: SHAKMAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-225  
 HOLE LOCATION: 1953+450 O/S 50M LT.  
 LOGGED BY: JM

SEGMENT 18  
 HOLE NUMBER: 109-105  
 DATE COMPLETED: 90.10.06

FIELD NO: 214  
 LAB NO: 2218  
 DEPTH: 1.5-1.5  
 TYPE: AUGER

FIELD NO: 215  
 LAB NO: 2219  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 216  
 LAB NO: 2220  
 DEPTH: 4.6-4.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	92
12.7	87
9.5	84
4.76	77
2.38	--
2.00	71
1.19	--
0.841	66
0.595	--
0.42	62
0.297	--
0.177	--
0.149	59
0.074	56

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	100
25.4	94
19.0	94
12.7	87
9.5	83
4.76	76
2.38	--
2.00	69
1.19	--
0.841	63
0.595	--
0.42	59
0.297	--
0.177	--
0.149	54
0.074	48

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C.(%): 14

M.C.(%): 14

M.C.(%): 16

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 23  
 % SAND: 21  
 % FINES: 56

% GRAVEL: 24  
 % SAND: 28  
 % FINES: 48

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 GRAVELLY SILT  
 WITH SAND (ML)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:

```

=====
PROJECT NUMBER:   SEGMENT 18           HOLE NUMBER:    109-104
CLIENT:          SHAKWAK PROJECT
PROJECT NAME:    ALASKA HIGHWAY RECONSTRUCTION
PROJECT LOCATION: BEAVER CREEK
DRILL UNIT:      17-225
HOLE LOCATION:   1953+525 O/S 35M LT.
LOGGED BY:       JM                     DATE COMPLETED: 90.10.06
=====

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=====
FIELD NO: 217   FIELD NO: 218   FIELD NO: 219
LAB NO: 2221   LAB NO: 2222   LAB NO: 2223
DEPTH: 1.3-1.5 DEPTH: 2.8-3.0 DEPTH: 5.4-6.1
TYPE: AUGER    TYPE: AUGER    TYPE: AUGER
=====

```

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--	101.6	--
76.2	--	76.2	--	76.2	--
50.8	--	50.8	100	50.8	--
38.1	100	38.1	84	38.1	--
25.4	81	25.4	65	25.4	--
19.0	78	19.0	61	19.0	--
12.7	71	12.7	50	12.7	--
9.5	67	9.5	46	9.5	--
4.76	60	4.76	39	4.76	--
2.38	--	2.38	--	2.38	--
2.00	54	2.00	34	2.00	--
1.19	--	1.19	--	1.19	--
0.841	49	0.841	31	0.841	--
0.595	--	0.595	--	0.595	--
0.42	47	0.42	29	0.42	--
0.297	--	0.297	--	0.297	--
0.177	--	0.177	--	0.177	--
0.149	43	0.149	25	0.149	--
0.074	41	0.074	24	0.074	--

```

M.C. (%): 11   M.C. (%): 7   M.C. (%): 3
=====

```

LIMITS		LIMITS		LIMITS	
LIQUID:	--	LIQUID:	--	LIQUID:	--
PLASTIC:	--	PLASTIC:	--	PLASTIC:	--
P.I.:	TRACE	P.I.:	N.P.	P.I.:	--

```

% GRAVEL: 40   % GRAVEL: 61   % GRAVEL: --
% SAND: 20    % SAND: 15    % SAND: --
% FINES: 41   % FINES: 24   % FINES: --
=====

```

```

CLASSIFICATION: CLASSIFICATION: CLASSIFICATION:
SILTY GRAVEL    SILTY GRAVEL    SILTY GRAVEL
WITH SAND (GM)  WITH SAND (GM)  WITH SAND (GM)
=====

```

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-105  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-225  
 HOLE LOCATION: 1954+175  
 LOGGED BY: JM DATE COMPLETED: 90.10.06

FIELD NO: 220	FIELD NO: 221
LAB NO: 2224	LAB NO: 2225
DEPTH: 2.8-3.0	DEPTH: 4.4-4.6
TYPE: AUGER	TYPE: AUGER

*ORGANIC*

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--
76.2	--	76.2	--
50.8	--	50.8	--
38.1	--	38.1	--
25.4	100	25.4	--
19.0	96	19.0	--
12.7	94	12.7	--
9.5	93	9.5	--
4.76	91	4.76	--
2.38	--	2.38	--
2.00	90	2.00	--
1.19	--	1.19	--
0.841	88	0.841	--
0.595	--	0.595	--
0.42	86	0.42	--
0.297	--	0.297	--
0.177	--	0.177	--
0.149	82	0.149	--
0.074	77	0.074	--

M.C. (%): 36 M.C. (%): 32

LIMITS	LIMITS
LIQUID: --	LIQUID: --
PLASTIC: --	PLASTIC: --
P.I.: N.P.	P.I.: --

% GRAVEL: 9	% GRAVEL: --
% SAND: 14	% SAND: --
% FINES: 77	% FINES: --

CLASSIFICATION: SILT WITH SAND (ML)  
 CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-106  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-225  
 HOLE LOCATION: 1954+350 O/S 1M RT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.07

FIELD NO: 222	FIELD NO: 223
LAB NO: 2226	LAB NO: 2227
DEPTH: 2.8-3.0	DEPTH: 4.4-4.6
TYPE: AUGER	TYPE: AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--
76.2	--	76.2	--
50.8	--	50.8	--
38.1	--	38.1	--
25.4	--	25.4	--
19.0	--	19.0	--
12.7	--	12.7	--
9.5	100	9.5	--
4.76	100	4.76	--
2.38	--	2.38	--
2.00	99	2.00	--
1.19	--	1.19	--
0.841	99	0.841	--
0.595	--	0.595	--
0.42	98	0.42	--
0.297	--	0.297	--
0.177	--	0.177	--
0.149	95	0.149	--
0.074	91	0.074	--

M.C. (%): 128 M.C. (%): 66

LIMITS	LIMITS
LIQUID: --	LIQUID: --
PLASTIC: --	PLASTIC: --
P.I.: N.P.	P.I.: --

% GRAVEL: 0	% GRAVEL: --
% SAND: 9	% SAND: --
% FINES: 91	% FINES: --

CLASSIFICATION: SILT (ML) CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-107  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-225  
 HOLE LOCATION: 1954+525  
 LOGGED BY: JM DATE COMPLETED: 90.10.07

FIELD NO: 224	FIELD NO: 225
LAB NO: 2228	LAB NO: 2229
DEPTH: 2.8-3.0	DEPTH: 4.4-4.6
TYPE: AUGER	TYPE: AUGER
ORGANIC	

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--
76.2	--	76.2	--
50.8	--	50.8	--
38.1	--	38.1	--
25.4	--	25.4	--
19.0	--	19.0	--
12.7	--	12.7	--
9.5	100	9.5	--
4.76	99	4.76	--
2.38	--	2.38	--
2.00	99	2.00	--
1.19	--	1.19	--
0.841	97	0.841	--
0.595	--	0.595	--
0.42	94	0.42	--
0.297	--	0.297	--
0.177	--	0.177	--
0.149	87	0.149	--
0.074	83	0.074	--

M.C.(%): 109 M.C.(%): 202

LIMITS	LIMITS
LIQUID: --	LIQUID: --
PLASTIC: --	PLASTIC: --
P.I.: N.P.	P.I.: --

% GRAVEL: 1	% GRAVEL: --
% SAND: 16	% SAND: --
% FINES: 83	% FINES: --

CLASSIFICATION: SILT WITH SAND (ML)  
 CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-108  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-225  
 HOLE LOCATION: 1954+725 O/S 3M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.07

FIELD NO: 226  
 LAB NO: 2230  
 DEPTH: 1.3-1.5  
 TYPE: AUGER

FIELD NO: 227  
 LAB NO: 2231  
 DEPTH: 4.4-4.6  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	87
19.0	84
12.7	70
9.5	62
4.76	52
2.38	--
2.00	42
1.19	--
0.841	35
0.595	--
0.42	30
0.297	--
0.177	--
0.149	22
0.074	19

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 6

M.C. (%): 3

LIMITS

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 48  
 % SAND: 33  
 % FINES: 19

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-109  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-225  
 HOLE LOCATION: 1954+850 O/S 25M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.07

FIELD NO: 228	FIELD NO: 229
LAB NO: 2232	LAB NO: 2233
DEPTH: 1.3-1.5	DEPTH: 3.0-3.2
TYPE: AUGER	TYPE: AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--
76.2	--	76.2	--
50.8	--	50.8	--
38.1	100	38.1	--
25.4	95	25.4	--
19.0	91	19.0	--
12.7	85	12.7	--
9.5	79	9.5	--
4.76	64	4.76	--
2.38	--	2.38	--
2.00	49	2.00	--
1.19	--	1.19	--
0.841	33	0.841	--
0.595	--	0.595	--
0.42	31	0.42	--
0.297	--	0.297	--
0.177	--	0.177	--
0.149	22	0.149	--
0.074	18	0.074	--

M.C. (%): 6 M.C. (%): 4

LIMITS	LIMITS
LIQUID: --	LIQUID: --
PLASTIC: --	PLASTIC: --
P.I.: TRACE	P.I.: --

% GRAVEL: 36	% GRAVEL: --
% SAND: 46	% SAND: --
% FINES: 18	% FINES: --

CLASSIFICATION: CLASSIFICATION:  
 SILTY SAND WITH GRAVEL (SM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-110  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-225  
 HOLE LOCATION: 1954+975 O/S 2M RT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.07

FIELD NO: 230	FIELD NO: 231
LAB NO: 2234	LAB NO: 2235
DEPTH: 1.3-1.5	DEPTH: 3.2-5.9
TYPE: AUGER	TYPE: AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--
76.2	--	76.2	--
50.8	--	50.8	--
38.1	--	38.1	--
25.4	--	25.4	--
19.0	--	19.0	--
12.7	--	12.7	--
9.5	--	9.5	--
4.76	--	4.76	--
2.38	--	2.38	--
2.00	--	2.00	--
1.19	--	1.19	--
0.841	--	0.841	--
0.595	--	0.595	--
0.42	--	0.42	--
0.297	--	0.297	--
0.177	--	0.177	--
0.149	--	0.149	--
0.074	--	0.074	--

M.C. (%): 14 M.C. (%): 4

LIMITS		LIMITS	
LIQUID:	--	LIQUID:	--
PLASTIC:	--	PLASTIC:	--
P.I.:	--	P.I.:	--

% GRAVEL:	--	% GRAVEL:	--
% SAND:	--	% SAND:	--
% FINES:	--	% FINES:	--

CLASSIFICATION: CLASSIFICATION:

PROJECT NUMBER: SEGMENT 1E HOLE NUMBER: 109-111  
 CLIENT: CHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-225  
 HOLE LOCATION: 1955+075 0/S 40M RT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.07

FIELD NO: 232	FIELD NO: 233
LAB NO: 2236	LAB NO: 2237
DEPTH: 1.3-1.5	DEPTH: 8.3-8.7
TYPE: AUGER	TYPE: AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--
76.2	--	76.2	--
50.8	--	50.8	--
38.1	--	38.1	--
25.4	--	25.4	--
19.0	--	19.0	--
12.7	--	12.7	--
9.5	--	9.5	--
4.76	--	4.76	--
2.38	--	2.38	--
2.00	--	2.00	--
1.19	--	1.19	--
0.841	--	0.841	--
0.595	--	0.595	--
0.42	--	0.42	--
0.297	--	0.297	--
0.177	--	0.177	--
0.149	--	0.149	--
0.074	--	0.074	--

M.C. (%): 4 M.C. (%): 4

LIMITS	LIMITS
LIQUID: --	LIQUID: --
PLASTIC: --	PLASTIC: --
P.I.: --	P.I.: --
% GRAVEL: --	% GRAVEL: --
% SAND: --	% SAND: --
% FINES: --	% FINES: --

CLASSIFICATION: CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-112  
CLIENT: SHAKWAK PROJECT  
PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
PROJECT LOCATION: BEAVER CREEK  
DRILL UNIT: 17-225  
HOLE LOCATION: 1955+225 O/C 30M RT.  
LOGGED BY: JM DATE COMPLETED: 90.10.07

FIELD NO: 234  
LAB NO: 2238  
DEPTH: 1.3-1.5  
TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	96
9.5	93
4.76	87
2.38	--
2.00	67
1.19	--
0.841	47
0.595	--
0.42	37
0.297	--
0.177	--
0.149	26
0.074	21

M.C. (%): 7

LIMITS

LIQUID: --  
PLASTIC: --  
P.I.: TRACE

% GRAVEL: 13  
% SAND: 65  
% FINES: 21

CLASSIFICATION:  
SILTY SAND (SM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-113  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-225  
 HOLE LOCATION: 1955+300 O/G 35M RT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.07

FIELD NO: 235	FIELD NO: 236
LAB NO: 2239	LAB NO: 2240
DEPTH: 1.3-1.5	DEPTH: 8.2-8.8
TYPE: AUGER	TYPE: AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--
76.2	--	76.2	--
50.8	--	50.8	--
38.1	100	38.1	--
25.4	89	25.4	--
19.0	74	19.0	--
12.7	60	12.7	--
9.5	56	9.5	--
4.76	46	4.76	--
2.38	--	2.38	--
2.00	37	2.00	--
1.19	--	1.19	--
0.841	31	0.841	--
0.595	--	0.595	--
0.42	27	0.42	--
0.297	--	0.297	--
0.177	--	0.177	--
0.149	23	0.149	--
0.074	16	0.074	--

M.C. (%): 6 M.C. (%): 7

LIMITS	LIMITS
LIQUID: --	LIQUID: --
PLASTIC: --	PLASTIC: --
P.I.: N.P.	P.I.: --

% GRAVEL: 54	% GRAVEL: --
% SAND: 30	% SAND: --
% FINES: 16	% FINES: --

CLASSIFICATION: CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-114  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-225  
 HOLE LOCATION: 1955+440 O/S 25M RT  
 LOGGED BY: JM DATE COMPLETED: 90.10.07

FIELD NO: 237	FIELD NO: 238
LAB NO: 2241	LAB NO: 2242
DEPTH: 1.3-1.5	DEPTH: 5.8-6.4
TYPE: AUGER	TYPE: AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--
76.2	--	76.2	100
50.8	--	50.8	82
38.1	100	38.1	68
25.4	88	25.4	66
19.0	81	19.0	63
12.7	77	12.7	52
9.5	70	9.5	44
4.76	57	4.76	33
2.38	--	2.38	--
2.00	47	2.00	26
1.19	--	1.19	--
0.841	41	0.841	22
0.595	--	0.595	--
0.42	36	0.42	19
0.297	--	0.297	--
0.177	--	0.177	--
0.149	26	0.149	15
0.074	20	0.074	11

M.C.(%): 5 M.C.(%): 4

LIMITS		LIMITS	
LIQUID:	--	LIQUID:	--
PLASTIC:	--	PLASTIC:	--
P.I.:	N.P.	P.I.:	N.P.

% GRAVEL:	43	% GRAVEL:	67
% SAND:	38	% SAND:	22
% FINES:	20	% FINES:	11

CLASSIFICATION:	CLASSIFICATION:
SILTY GRAVEL	POORLY GRADED
WITH SAND (GM)	GRAVEL WITH SILT & SAND (GP-GM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-117  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-225  
 HOLE LOCATION: 1956+515 O/S 8M RT  
 LOGGED BY: JM DATE COMPLETED: 90.10.07

FIELD NO: 240  
 LAB NO: 2244  
 DEPTH: 1.3-1.5  
 TYPE: AUGER

FIELD NO: 241  
 LAB NO: 2245  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 242  
 LAB NO: 2246  
 DEPTH: 4.4-4.6  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	97
19.0	94
12.7	91
9.5	89
4.76	81
2.38	--
2.00	73
1.19	--
0.841	67
0.595	--
0.42	63
0.297	--
0.177	--
0.149	58
0.074	55

101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	96
12.7	88
9.5	82
4.76	72
2.38	--
2.00	64
1.19	--
0.841	57
0.595	--
0.42	53
0.297	--
0.177	--
0.149	48
0.074	45

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	96
9.5	91
4.76	81
2.38	--
2.00	69
1.19	--
0.841	59
0.595	--
0.42	53
0.297	--
0.177	--
0.149	43
0.074	38

M.C. (%): 21

M.C. (%): 22

M.C. (%): 19

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 19  
 % SAND: 26  
 % FINES: 55

% GRAVEL: 28  
 % SAND: 27  
 % FINES: 45

% GRAVEL: 19  
 % SAND: 43  
 % FINES: 38

CLASSIFICATION:  
 SANDY SILT WITH  
 GRAVEL (ML)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-118  
CLIENT: SHAKWAK PROJECT  
PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
PROJECT LOCATION: BEAVER CREEK  
DRILL UNIT: 17-225  
HOLE LOCATION: 1956+608 O/S 2M LT  
LOGGED BY: JM DATE COMPLETED: 90.10.07

FIELD NO: 243  
LAB NO: 2247  
DEPTH: 1.3-1.5  
TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	94
12.7	91
9.5	88
4.76	78
2.38	--
2.00	64
1.19	--
0.841	52
0.595	--
0.42	45
0.297	--
0.177	--
0.149	35
0.074	30

M.C.(%): 11

LIMITS

LIQUID: --  
PLASTIC: --  
P.I.: N.P.

% GRAVEL: 22  
% SAND: 48  
% FINES: 30

CLASSIFICATION:  
SILTY SAND WITH  
GRAVEL (SM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-120  
CLIENT: SHAKWAK PROJECT  
PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
PROJECT LOCATION: BEAVER CREEK  
DRILL UNIT: 17-225  
HOLE LOCATION: 1959+770 O/S 2M LT  
LOGGED BY: JM DATE COMPLETED: 90.10.07

FIELD NO: 246  
LAB NO: 2250  
DEPTH: 2.8-3.0  
TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	99
1.19	--
0.841	99
0.595	--
0.42	97
0.297	--
0.177	--
0.149	94
0.074	90

M.C. (%): 188

LIMITS

LIQUID: --  
PLASTIC: --  
P.I.: TRACE

% GRAVEL: 0  
% SAND: 10  
% FINES: 90

CLASSIFICATION:  
SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-122  
CLIENT: SHAKWAK PROJECT  
PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
PROJECT LOCATION: BEAVER CREEK  
DRILL UNIT: 17-225  
HOLE LOCATION: 1960+175  
LOGGED BY: JM DATE COMPLETED: 90.10.08

FIELD NO: 249  
LAB NO: 2253  
DEPTH: 2.8-3.0  
TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	98
0.297	--
0.177	--
0.149	94
0.074	87

M.C. (%): 70

LIMITS

LIQUID: --  
PLASTIC: --  
P.I.: TRACE

% GRAVEL: 0  
% SAND: 13  
% FINES: 87

CLASSIFICATION:  
SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-123  
CLIENT: SHAKWAK PROJECT  
PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
PROJECT LOCATION: BEAVER CREEK  
DRILL UNIT: 17-225  
HOLE LOCATION: 1960+380 O/S 3M RT  
LOGGED BY: JM DATE COMPLETED: 90.10.08

FIELD NO: 251  
LAB NO: 2255  
DEPTH: 2.8-3.0  
TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	99
2.38	--
2.00	99
1.19	--
0.841	97
0.595	--
0.42	95
0.297	--
0.177	--
0.149	92
0.074	85

M.C.(%): 56

LIMITS

LIQUID: --  
PLASTIC: --  
P.I.: TRACE

% GRAVEL: 1  
% SAND: 14  
% FINES: 85

CLASSIFICATION:  
SILT WITH SAND  
(ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-125  
CLIENT: SHAKWAK PROJECT  
PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
PROJECT LOCATION: BEAVER CREEK  
DRILL UNIT: 17-225  
HOLE LOCATION: 1963+112 O/S 5M RT  
LOGGED BY: JM DATE COMPLETED: 90.10.08

FIELD NO: 254  
LAB NO: 2258  
DEPTH: 2.8-3.0  
TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	99
9.5	99
4.76	96
2.38	--
2.00	94
1.19	--
0.841	91
0.595	--
0.42	89
0.297	--
0.177	--
0.149	85
0.074	80

M.C. (%): 27

LIMITS

LIQUID: --  
PLASTIC: --  
P.I.: TRACE

% GRAVEL: 4  
% SAND: 16  
% FINES: 80

CLASSIFICATION:  
SILT WITH SAND  
(ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-126  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-225  
 HOLE LOCATION: 1963+325 O/S 6M RT  
 LOGGED BY: JM DATE COMPLETED: 90.10.08

FIELD NO: 256  
 LAB NO: 2260  
 DEPTH: 4.4-4.6  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	99
0.074	77

M.C. (%): 30

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 0  
 % SAND: 23  
 % FINES: 77

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-127  
CLIENT: SHAKWAK PROJECT  
PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
PROJECT LOCATION: BEAVER CREEK  
DRILL UNIT: 17-225  
HOLE LOCATION: 1963+845  
LOGGED BY: JM DATE COMPLETED: 90.10.08

FIELD NO: 257  
LAB NO: 2261  
DEPTH: 2.8-3.0  
TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	97
0.074	82

M.C.(%): 31

LIMITS

LIQUID: --  
PLASTIC: --  
P.I.: TRACE

% GRAVEL: 0  
% SAND: 18  
% FINES: 82

CLASSIFICATION:  
SILT WITH SAND  
(ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-128  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-225  
 HOLE LOCATION: 1964+137  
 LOGGED BY: JM DATE COMPLETED: 90.10.08

FIELD NO: 259  
 LAB NO: 2263  
 DEPTH: 2.8-3.0  
 TYPE: AUGER  
 ORGANIC

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	99
1.19	--
0.841	99
0.595	--
0.42	98
0.297	--
0.177	--
0.149	96
0.074	80

M.C.(%): 68

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 0  
 % SAND: 19  
 % FINES: 80

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-129  
CLIENT: SHAKWAK PROJECT  
PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
PROJECT LOCATION: BEAVER CREEK  
DRILL UNIT: 17-225  
HOLE LOCATION: 1964+450  
LOGGED BY: JM DATE COMPLETED: 90.10.08

FIELD NO: 260  
LAB NO: 2264  
DEPTH: 2.8-3.0  
TYPE: AUGER  
ORGANIC

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	94

M.C.(%): 42

LIMITS

LIQUID: --  
PLASTIC: --  
P.I.: TRACE

% GRAVEL: 0  
% SAND: 6  
% FINES: 94

CLASSIFICATION:  
SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-130  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-225  
 HOLE LOCATION: 1964+775 O/S 1M RT  
 LOGGED BY: JM DATE COMPLETED: 90.10.08

FIELD NO: 262  
 LAB NO: 2266  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	97
1.19	--
0.841	93
0.595	--
0.42	89
0.297	--
0.177	--
0.149	83
0.074	80

M.C.(%): 120

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 0  
 % SAND: 20  
 % FINES: 80

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-131  
CLIENT: SHAKWAK PROJECT  
PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
PROJECT LOCATION: BEAVER CREEK  
DRILL UNIT: 17-225  
HOLE LOCATION: 1965+058 O/S 2M RT  
LOGGED BY: JM DATE COMPLETED: 90.10.08

FIELD NO: 264  
LAB NO: 2268  
DEPTH: 2.6-2.8  
TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	99
9.5	99
4.76	98
2.38	--
2.00	97
1.19	--
0.841	96
0.595	--
0.42	96
0.297	--
0.177	--
0.149	94
0.074	78

M.C.(%): 22

LIMITS

LIQUID: --  
PLASTIC: --  
P.I.: TRACE

% GRAVEL: 2  
% SAND: 20  
% FINES: 78

CLASSIFICATION:  
SILT WITH SAND  
(ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-133  
CLIENT: SHAKWAK PROJECT  
PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
PROJECT LOCATION: BEAVER CREEK  
DRILL UNIT: 17-225  
HOLE LOCATION: 1965+595 O/S 14M RT  
LOGGED BY: JM DATE COMPLETED: 90.10.08

FIELD NO: 267  
LAB NO: 2271  
DEPTH: 2.6-2.8  
TYPE: ERR

SIEVE SIZE | PERCENT PASSING

101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	91
12.7	64
9.5	44
4.76	44
2.38	--
2.00	43
1.19	--
0.841	40
0.595	--
0.42	36
0.297	--
0.177	--
0.149	32
0.074	25

M.C.(%): 112

LIMITS

LIQUID: --  
PLASTIC: --  
P.I.: TRACE

% GRAVEL: 56  
% SAND: 19  
% FINES: 25

CLASSIFICATION:  
SILTY GRAVEL  
WITH SAND (GM)

*sample contaminated with road fill*

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-135  
CLIENT: SHAKWAK PROJECT  
PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
PROJECT LOCATION: BEAVER CREEK  
DRILL UNIT: 17-225  
HOLE LOCATION: 1962+465 O/S 5M RT  
LOGGED BY: JM DATE COMPLETED: 90.10.08

FIELD NO: 270  
LAB NO: 2274  
DEPTH: 1.3-1.5  
TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	86
2.38	--
2.00	74
1.19	--
0.841	65
0.595	--
0.42	60
0.297	--
0.177	--
0.149	52
0.074	47

M.C.(%): 6

LIMITS

LIQUID: --  
PLASTIC: --  
P.I.: TRACE

% GRAVEL: 14  
% SAND: 38  
% FINES: 47

CLASSIFICATION:  
SILTY SAND (SM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-136  
CLIENT: SHAKWAK PROJECT  
PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
PROJECT LOCATION: BEAVER CREEK  
DRILL UNIT: 17-225  
HOLE LOCATION: 1962+000 O/S 7M RT  
LOGGED BY: JM DATE COMPLETED: 90.10.08

FIELD NO: 271  
LAB NO: 2275  
DEPTH: 3.8-4.0  
TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	99
2.38	--
2.00	98
1.19	--
0.841	98
0.595	--
0.42	97
0.297	--
0.177	--
0.149	95
0.074	89

M.C.(%): 49

LIMITS

LIQUID: --  
PLASTIC: --  
P.I.: TRACE

% GRAVEL: 1  
% SAND: 10  
% FINES: 89

CLASSIFICATION:  
SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 109-137  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-225  
 HOLE LOCATION: 1961+600 O/S 50M RT  
 LOGGED BY: JM DATE COMPLETED: 90.10.08

FIELD NO: 272	FIELD NO: 273
LAB NO: 2276	LAB NO: 2277
DEPTH: 1.3-1.5	DEPTH: 5.4-5.6
TYPE: AUGER	TYPE: AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--
76.2	--	76.2	--
50.8	--	50.8	--
38.1	--	38.1	--
25.4	--	25.4	100
19.0	100	19.0	97
12.7	99	12.7	97
9.5	99	9.5	95
4.76	96	4.76	90
2.38	--	2.38	--
2.00	93	2.00	83
1.19	--	1.19	--
0.841	91	0.841	78
0.595	--	0.595	--
0.42	89	0.42	72
0.297	--	0.297	--
0.177	--	0.177	--
0.149	86	0.149	61
0.074	83	0.074	56

M.C.(%): 16 M.C.(%): 21

LIMITS		LIMITS	
LIQUID:	--	LIQUID:	--
PLASTIC:	--	PLASTIC:	--
P.I.:	TRACE	P.I.:	TRACE

% GRAVEL:	4	% GRAVEL:	10
% SAND:	14	% SAND:	34
% FINES:	83	% FINES:	56

CLASSIFICATION: SILT WITH SAND (ML)  
 CLASSIFICATION: SANDY SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 110-180  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: A/H KM 1931.9-1965.5  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1949+625 O/S 15M RT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.16

FIELD NO: 345	FIELD NO: 346	FIELD NO: 347
LAB NO: 2429	LAB NO: 2430	LAB NO: 2431
DEPTH: 1.3-1.5	DEPTH: 2.8-3.0	DEPTH: 4.4-4.6
TYPE: AUGER	TYPE: AUGER	TYPE: AUGER
ORGANICS		

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--	101.6	--
76.2	--	76.2	--	76.2	--
50.8	--	50.8	--	50.8	--
38.1	--	38.1	--	38.1	--
25.4	--	25.4	--	25.4	--
19.0	--	19.0	--	19.0	--
12.7	--	12.7	--	12.7	--
9.5	100	9.5	--	9.5	--
4.76	99	4.76	--	4.76	--
2.38	--	2.38	--	2.38	--
2.00	99	2.00	--	2.00	--
1.19	--	1.19	--	1.19	--
0.841	99	0.841	--	0.841	--
0.595	--	0.595	--	0.595	--
0.42	98	0.42	--	0.42	--
0.297	--	0.297	--	0.297	--
0.177	--	0.177	--	0.177	--
0.149	94	0.149	--	0.149	--
0.074	92	0.074	--	0.074	--

M.C. (%): 38 M.C. (%): 130 M.C. (%): 158

LIMITS	LIMITS	LIMITS
LIQUID: --	LIQUID: --	LIQUID: --
PLASTIC: --	PLASTIC: --	PLASTIC: --
P.I.: N.P.	P.I.: --	P.I.: --

% GRAVEL: 1	% GRAVEL: --	% GRAVEL: --
% SAND: 8	% SAND: --	% SAND: --
% FINES: 92	% FINES: --	% FINES: --

CLASSIFICATION: SILT (ML) CLASSIFICATION: CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 110-181  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: A/H KM 1931.9-1965.5  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1949+850 O/S 15M RT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.16

FIELD NO: 348	FIELD NO: 349	FIELD NO: 350
LAB NO: 2432	LAB NO: 2433	LAB NO: 2434
DEPTH: 1.3-1.5	DEPTH: 2.8-3.0	DEPTH: 4.4-4.6
TYPE: AUGER	TYPE: AUGER	TYPE: AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--	101.6	--
76.2	--	76.2	--	76.2	--
50.8	--	50.8	--	50.8	--
38.1	--	38.1	--	38.1	--
25.4	--	25.4	--	25.4	--
19.0	--	19.0	--	19.0	--
12.7	--	12.7	--	12.7	--
9.5	100	9.5	--	9.5	--
4.76	100	4.76	--	4.76	--
2.38	--	2.38	--	2.38	--
2.00	98	2.00	--	2.00	--
1.19	--	1.19	--	1.19	--
0.841	95	0.841	--	0.841	--
0.595	--	0.595	--	0.595	--
0.42	91	0.42	--	0.42	--
0.297	--	0.297	--	0.297	--
0.177	--	0.177	--	0.177	--
0.149	76	0.149	--	0.149	--
0.074	54	0.074	--	0.074	--

M.C. (%): 273 M.C. (%): 39 M.C. (%): 42

LIMITS		LIMITS		LIMITS	
LIQUID:	--	LIQUID:	--	LIQUID:	--
PLASTIC:	--	PLASTIC:	--	PLASTIC:	--
P.I.:	N.P.	P.I.:	--	P.I.:	--

% GRAVEL:	0	% GRAVEL:	--	% GRAVEL:	--
% SAND:	45	% SAND:	--	% SAND:	--
% FINES:	54	% FINES:	--	% FINES:	--

CLASSIFICATION: SANDY SILT (ML) CLASSIFICATION: CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 110-182  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: A/H KM 1931.9-1965.5  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1950+175 O/S 15M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.16

FIELD NO: 351	FIELD NO: 352	FIELD NO: 353
LAB NO: 2435	LAB NO: 2436	LAB NO: 2437
DEPTH: 1.3-1.5	DEPTH: 2.8-3.0	DEPTH: 4.4-4.6
TYPE: AUGER	TYPE: AUGER	TYPE: AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--	101.6	--
76.2	--	76.2	--	76.2	--
50.8	--	50.8	--	50.8	--
38.1	--	38.1	--	38.1	--
25.4	--	25.4	--	25.4	--
19.0	--	19.0	--	19.0	--
12.7	--	12.7	--	12.7	--
9.5	100	9.5	--	9.5	--
4.76	100	4.76	--	4.76	--
2.38	--	2.38	--	2.38	--
2.00	100	2.00	--	2.00	--
1.19	--	1.19	--	1.19	--
0.841	99	0.841	--	0.841	--
0.595	--	0.595	--	0.595	--
0.42	97	0.42	--	0.42	--
0.297	--	0.297	--	0.297	--
0.177	--	0.177	--	0.177	--
0.149	79	0.149	--	0.149	--
0.074	53	0.074	--	0.074	--

M.C. (%): 113 M.C. (%): 55 M.C. (%): 16

LIMITS	LIMITS	LIMITS
LIQUID: --	LIQUID: --	LIQUID: --
PLASTIC: --	PLASTIC: --	PLASTIC: --
P.I.: N.P.	P.I.: --	P.I.: --

% GRAVEL: 0	% GRAVEL: --	% GRAVEL: --
% SAND: 46	% SAND: --	% SAND: --
% FINES: 53	% FINES: --	% FINES: --

CLASSIFICATION: SANDY SILT (ML) CLASSIFICATION: CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 110-183  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: A/H KM 1931.9-1965.5  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1950+350 O/S 14M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.16

FIELD NO: 354	FIELD NO: 355	FIELD NO: 356
LAB NO: 2438	LAB NO: 2439	LAB NO: 2440
DEPTH: 1.3-1.5	DEPTH: 2.8-3.0	DEPTH: 4.4-4.6
TYPE: AUGER	TYPE: AUGER	TYPE: AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--	101.6	--
76.2	--	76.2	--	76.2	--
50.8	--	50.8	--	50.8	--
38.1	--	38.1	--	38.1	--
25.4	--	25.4	--	25.4	--
19.0	--	19.0	--	19.0	--
12.7	--	12.7	--	12.7	--
9.5	100	9.5	--	9.5	--
4.76	100	4.76	--	4.76	--
2.38	--	2.38	--	2.38	--
2.00	100	2.00	--	2.00	--
1.19	--	1.19	--	1.19	--
0.841	100	0.841	--	0.841	--
0.595	--	0.595	--	0.595	--
0.42	99	0.42	--	0.42	--
0.297	--	0.297	--	0.297	--
0.177	--	0.177	--	0.177	--
0.149	96	0.149	--	0.149	--
0.074	92	0.074	--	0.074	--

M.C.(%): 80 M.C.(%): 67 M.C.(%): 13

LIMITS		LIMITS		LIMITS	
LIQUID:	51.0	LIQUID:	--	LIQUID:	--
PLASTIC:	38.4	PLASTIC:	--	PLASTIC:	--
P.I.:	12.6	P.I.:	--	P.I.:	--

% GRAVEL: 0 % GRAVEL: -- % GRAVEL: --  
 % SAND: 7 % SAND: -- % SAND: --  
 % FINES: 92 % FINES: -- % FINES: --

CLASSIFICATION: SILT (ML)  
 CLASSIFICATION:  
 CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 110-184  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: A/H KM 1931.9-1965.5  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1950+560 O/S 8M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.16

FIELD NO: 357	FIELD NO: 358	FIELD NO: 359
LAB NO: 2441	LAB NO: 2442	LAB NO: 2443
DEPTH: 1.3-1.5	DEPTH: 2.8-3.0	DEPTH: 4.4-4.6
TYPE: AUGER	TYPE: AUGER	TYPE: AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--	101.6	--
76.2	--	76.2	--	76.2	--
50.8	--	50.8	--	50.8	--
38.1	--	38.1	--	38.1	--
25.4	--	25.4	--	25.4	--
19.0	--	19.0	--	19.0	--
12.7	--	12.7	--	12.7	--
9.5	--	9.5	--	9.5	--
4.76	100	4.76	--	4.76	--
2.38	--	2.38	--	2.38	--
2.00	100	2.00	--	2.00	--
1.19	--	1.19	--	1.19	--
0.841	100	0.841	--	0.841	--
0.595	--	0.595	--	0.595	--
0.42	100	0.42	--	0.42	--
0.297	--	0.297	--	0.297	--
0.177	--	0.177	--	0.177	--
0.149	99	0.149	--	0.149	--
0.074	97	0.074	--	0.074	--

M.C.(%): 38 M.C.(%): 52 M.C.(%): 24

LIMITS		LIMITS		LIMITS	
LIQUID:	--	LIQUID:	--	LIQUID:	--
PLASTIC:	--	PLASTIC:	--	PLASTIC:	--
P.I.:	N.P.	P.I.:	--	P.I.:	--

% GRAVEL:	0	% GRAVEL:	--	% GRAVEL:	--
% SAND:	3	% SAND:	--	% SAND:	--
% FINES:	97	% FINES:	--	% FINES:	--

CLASSIFICATION: SILT (ML) CLASSIFICATION: CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 110-185  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: A/H KM 1931.9-1965.5  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1950+700 O/S 8M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.16

FIELD NO: 360	FIELD NO: 361	FIELD NO: 362
LAB NO: 2444	LAB NO: 2445	LAB NO: 2446
DEPTH: 1.3-1.5	DEPTH: 2.8-3.0	DEPTH: 4.4-4.6
TYPE: AUGER	TYPE: AUGER	TYPE: AUGER
ORGANICS		

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--	101.6	--
76.2	--	76.2	--	76.2	--
50.8	--	50.8	--	50.8	--
38.1	--	38.1	--	38.1	--
25.4	--	25.4	--	25.4	--
19.0	--	19.0	--	19.0	--
12.7	--	12.7	--	12.7	--
9.5	--	9.5	--	9.5	--
4.76	--	4.76	--	4.76	--
2.38	--	2.38	--	2.38	--
2.00	--	2.00	--	2.00	--
1.19	--	1.19	--	1.19	--
0.841	--	0.841	--	0.841	--
0.595	--	0.595	--	0.595	--
0.42	100	0.42	--	0.42	--
0.297	--	0.297	--	0.297	--
0.177	--	0.177	--	0.177	--
0.149	93	0.149	--	0.149	--
0.074	86	0.074	--	0.074	--

M.C. (%): 115 M.C. (%): 59 M.C. (%): 26

LIMITS	LIMITS	LIMITS
LIQUID: --	LIQUID: --	LIQUID: --
PLASTIC: --	PLASTIC: --	PLASTIC: --
P.I.: N.P.	P.I.: --	P.I.: --

% GRAVEL: 0	% GRAVEL: --	% GRAVEL: --
% SAND: 14	% SAND: --	% SAND: --
% FINES: 86	% FINES: --	% FINES: --

CLASSIFICATION: SILT (ML) CLASSIFICATION: CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-189  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JM DATE COMPLETED: 90.10.17

FIELD NO: 363  
 LAB NO: 2447  
 DEPTH: 1.3-1.5  
 TYPE: AUGER

FIELD NO: 364  
 LAB NO: 2448  
 DEPTH: 4.4-4.6  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	99
0.074	97

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	100
25.4	95
19.0	88
12.7	80
9.5	71
4.76	61
2.38	--
2.00	54
1.19	--
0.841	50
0.595	--
0.42	47
0.297	--
0.177	--
0.149	46
0.074	44

M.C. (%): 14

M.C. (%): 7

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 3  
 % FINES: 97

% GRAVEL: 39  
 % SAND: 17  
 % FINES: 44

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-190  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1950+885 O/S 6M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.17

FIELD NO: 365  
 LAB NO: 2449  
 DEPTH: 1.3-1.5  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 366  
 LAB NO: 2450  
 DEPTH: 2.8-3.0  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 367  
 LAB NO: 2451  
 DEPTH: 4.4-4.6  
 TYPE: AUGER  
 ORGANIC

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	100
9.5	99
4.76	98
2.38	--
2.00	96
1.19	--
0.841	93
0.595	--
0.42	89
0.297	--
0.177	--
0.149	83
0.074	79

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	95
2.38	--
2.00	87
1.19	--
0.841	83
0.595	--
0.42	81
0.297	--
0.177	--
0.149	78
0.074	75

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 154

M.C. (%): 173

M.C. (%): 48

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 2  
 % SAND: 19  
 % FINES: 79

% GRAVEL: 5  
 % SAND: 20  
 % FINES: 75

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-191  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1951+075 O/S 4M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.17

FIELD NO: 368  
 LAB NO: 2452  
 DEPTH: 1.3-1.5  
 TYPE: AUGER

FIELD NO: 369  
 LAB NO: 2453  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 370  
 LAB NO: 2454  
 DEPTH: 4.4-4.6  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	94
0.074	82

M.C. (%): 50

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 18  
 % FINES: 82

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 57

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 42

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-192  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1951+250 O/S 4M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.17

FIELD NO: 371  
 LAB NO: 2455  
 DEPTH: 1.3-1.5  
 TYPE: AUGER

FIELD NO: 372  
 LAB NO: 2456  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 373  
 LAB NO: 2457  
 DEPTH: 4.4-4.6  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	93
0.074	59

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	78
0.074	51

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 50

M.C. (%): 37

M.C. (%): 61

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 41  
 % FINES: 59

% GRAVEL: 0  
 % SAND: 49  
 % FINES: 51

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SANDY SILT (ML)

CLASSIFICATION:  
 SANDY SILT (ML)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-193  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1951+455 O/S 4M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.17

FIELD NO: 374  
 LAB NO: 2458  
 DEPTH: 1.3-1.5  
 TYPE: AUGER

FIELD NO: 375  
 LAB NO: 2459  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	84
19.0	84
12.7	70
9.5	72
4.76	60
2.38	--
2.00	50
1.19	--
0.841	45
0.595	--
0.42	41
0.297	--
0.177	--
0.149	38
0.074	35

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 32

M.C. (%): 28

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 40  
 % SAND: 26  
 % FINES: 35

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-194  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1951+550 O/S 5M RT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.17

FIELD NO: 376  
 LAB NO: 2460  
 DEPTH: 1.3-1.5  
 TYPE: AUGER

FIELD NO: 377  
 LAB NO: 2461  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 378  
 LAB NO: 2462  
 DEPTH: 4.4-4.6  
 TYPE: AUGER

FIELD NO: 379  
 LAB NO: 2463  
 DEPTH: 5.9-6.1  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	89
19.0	89
12.7	86
9.5	78
4.76	70
2.38	--
2.00	61
1.19	--
0.841	55
0.595	--
0.42	51
0.297	--
0.177	--
0.149	46
0.074	42

M.C. (%): 26

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 30  
 % SAND: 28  
 % FINES: 42

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	95
12.7	92
9.5	88
4.76	81
2.38	--
2.00	72
1.19	--
0.841	64
0.595	--
0.42	59
0.297	--
0.177	--
0.149	53
0.074	48

M.C. (%): 24

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 19  
 % SAND: 33  
 % FINES: 48

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	97
9.5	95
4.76	91
2.38	--
2.00	85
1.19	--
0.841	79
0.595	--
0.42	75
0.297	--
0.177	--
0.149	70
0.074	67

M.C. (%): 29

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 9  
 % SAND: 23  
 % FINES: 67

CLASSIFICATION:  
 SANDY SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	93
12.7	83
9.5	75
4.76	65
2.38	--
2.00	55
1.19	--
0.841	48
0.595	--
0.42	43
0.297	--
0.177	--
0.149	37
0.074	33

M.C. (%): 14

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 35  
 % SAND: 32  
 % FINES: 33

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-194  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1951+550 O/S 5M RT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.17

FIELD NO: 380  
 LAB NO: 2464  
 DEPTH: 7.4-7.6  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	97
9.5	90
4.76	81
2.38	--
2.00	71
1.19	--
0.841	63
0.595	--
0.42	57
0.297	--
0.177	--
0.149	48
0.074	43

M.C. (%): 20

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 19  
 % SAND: 38  
 % FINES: 43

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-195  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1951+800 O/S 4M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.18

FIELD NO: 381  
 LAB NO: 2465  
 DEPTH: 1.3-1.5  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	82
12.7	76
9.5	73
4.76	63
2.38	--
2.00	56
1.19	--
0.841	52
0.595	--
0.42	49
0.297	--
0.177	--
0.149	46
0.074	42

M.C. (%): 27

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 37  
 % SAND: 21  
 % FINES: 42

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-196  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1951+950 O/S 4M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.18

FIELD NO: 382  
 LAB NO: 2466  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 383  
 LAB NO: 2467  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 384  
 LAB NO: 2468  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 147

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	97
12.7	83
9.5	77
4.76	61
2.38	--
2.00	44
1.19	--
0.841	33
0.595	--
0.42	26
0.297	--
0.177	--
0.149	19
0.074	16

M.C. (%): 15

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 39  
 % SAND: 45  
 % FINES: 16

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 50

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-197  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1952+100 O/S 3M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.18

FIELD NO: 385  
 LAB NO: 2469  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 386  
 LAB NO: 2470  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 387  
 LAB NO: 2471  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	98
0.297	--
0.177	--
0.149	95
0.074	93

M.C. (%): 77

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 0  
 % SAND: 7  
 % FINES: 93

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 100

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 57

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-198  
CLIENT: SHAKWAK PROJECT  
PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
PROJECT LOCATION: BEAVER CREEK  
DRILL UNIT: 17-174  
HOLE LOCATION: 1951+720 O/S 40M RT.  
LOGGED BY: JM DATE COMPLETED: 90.10.18

FIELD NO: 388  
LAB NO: 2472  
DEPTH: 0.1-0.3  
TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 2

LIMITS

LIQUID: --  
PLASTIC: --  
P.I.: --

% GRAVEL: --  
% SAND: --  
% FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-199  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1952+225 O/S 11M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.18

FIELD NO: 389  
 LAB NO: 2473  
 DEPTH: 1.3-1.5  
 TYPE: AUGER

FIELD NO: 390  
 LAB NO: 2474  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 391  
 LAB NO: 2475  
 DEPTH: 4.4-4.6  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	97
0.074	92

M.C. (%): 30

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 8  
 % FINES: 92

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 35

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 19

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-200  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1952+400 O/S 10M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.18

FIELD NO: 392  
 LAB NO: 2476  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 393  
 LAB NO: 2477  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 394  
 LAB NO: 2478  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	96

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 48

M.C. (%): 88

M.C. (%): 162

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 4  
 % FINES: 96

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-201  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1952+525 O/S 7M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.18

FIELD NO: 394  
 LAB NO: 2479  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 395  
 LAB NO: 2480  
 DEPTH: 2.4-2.6  
 TYPE: AUGER

FIELD NO: 396  
 LAB NO: 2481  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	80
25.4	72
19.0	67
12.7	65
9.5	63
4.76	59
2.38	--
2.00	57
1.19	--
0.841	55
0.595	--
0.42	54
0.297	--
0.177	--
0.149	52
0.074	49

M.C. (%): 13

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 41  
 % SAND: 10  
 % FINES: 49

CLASSIFICATION:  
 SILTY GRAVEL (GM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	99
12.7	87
9.5	82
4.76	74
2.38	--
2.00	68
1.19	--
0.841	65
0.595	--
0.42	62
0.297	--
0.177	--
0.149	55
0.074	51

M.C. (%): 13

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 26  
 % SAND: 24  
 % FINES: 51

CLASSIFICATION:  
 GRAVELLY SILT  
 WITH SAND (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	96
19.0	89
12.7	79
9.5	73
4.76	67
2.38	--
2.00	64
1.19	--
0.841	61
0.595	--
0.42	59
0.297	--
0.177	--
0.149	55
0.074	51

M.C. (%): 15

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 33  
 % SAND: 16  
 % FINES: 51

CLASSIFICATION:  
 GRAVELLY SILT  
 WITH SAND (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-202  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1952+650 O/S 8M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.18

FIELD NO: 397  
 LAB NO: 2482  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 398  
 LAB NO: 2483  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 399  
 LAB NO: 2484  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	94
12.7	80
9.5	74
4.76	65
2.38	--
2.00	58
1.19	--
0.841	54
0.595	--
0.42	50
0.297	--
0.177	--
0.149	43
0.074	40

101.6	--
76.2	--
50.8	--
38.1	100
25.4	92
19.0	86
12.7	75
9.5	68
4.76	59
2.38	--
2.00	53
1.19	--
0.841	49
0.595	--
0.42	45
0.297	--
0.177	--
0.149	39
0.074	33

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 11

M.C. (%): 11

M.C. (%): 11

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 35  
 % SAND: 25  
 % FINES: 40

% GRAVEL: 41  
 % SAND: 26  
 % FINES: 33

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-203  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JM DATE COMPLETED: 90.10.18

FIELD NO: 400  
 LAB NO: 2485  
 DEPTH: 0.8-1.0  
 TYPE: AUGER

FIELD NO: 401  
 LAB NO: 2486  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 402  
 LAB NO: 2487  
 DEPTH: 4.3-4.5  
 TYPE: AUGER

FIELD NO: 403  
 LAB NO: 2488  
 DEPTH: 5.8-6.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	77
19.0	68
12.7	57
9.5	51
4.76	45
2.38	--
2.00	40
1.19	--
0.841	35
0.595	--
0.42	32
0.297	--
0.177	--
0.149	30
0.074	28

M.C. (%): 5

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 55  
 % SAND: 18  
 % FINES: 28

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	95
19.0	84
12.7	78
9.5	73
4.76	65
2.38	--
2.00	58
1.19	--
0.841	54
0.595	--
0.42	50
0.297	--
0.177	--
0.149	41
0.074	37

M.C. (%): 8

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 35  
 % SAND: 28  
 % FINES: 37

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	94
19.0	92
12.7	84
9.5	79
4.76	68
2.38	--
2.00	60
1.19	--
0.841	55
0.595	--
0.42	50
0.297	--
0.177	--
0.149	42
0.074	36

M.C. (%): 9

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 32  
 % SAND: 32  
 % FINES: 36

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	96
19.0	89
12.7	84
9.5	73
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 10

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 100  
 % FINES: 0

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-204  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JM DATE COMPLETED: 90.10.18

FIELD NO: 404  
 LAB NO: 2489  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 405  
 LAB NO: 2490  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 406  
 LAB NO: 2491  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

FIELD NO: 407  
 LAB NO: 2492  
 DEPTH: 8.6-8.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	93
12.7	78
9.5	72
4.76	54
2.38	--
2.00	41
1.19	--
0.841	32
0.595	--
0.42	26
0.297	--
0.177	--
0.149	22
0.074	19

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	100
25.4	91
19.0	82
12.7	73
9.5	69
4.76	61
2.38	--
2.00	54
1.19	--
0.841	48
0.595	--
0.42	43
0.297	--
0.177	--
0.149	37
0.074	32

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	98
12.7	90
9.5	86
4.76	75
2.38	--
2.00	66
1.19	--
0.841	60
0.595	--
0.42	55
0.297	--
0.177	--
0.149	45
0.074	40

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	96
9.5	90
4.76	79
2.38	--
2.00	71
1.19	--
0.841	66
0.595	--
0.42	61
0.297	--
0.177	--
0.149	53
0.074	47

M.C. (%): 4

M.C. (%): 8

M.C. (%): 10

M.C. (%): 12

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 46  
 % SAND: 35  
 % FINES: 19

% GRAVEL: 39  
 % SAND: 29  
 % FINES: 32

% GRAVEL: 25  
 % SAND: 35  
 % FINES: 40

% GRAVEL: 21  
 % SAND: 32  
 % FINES: 47

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-205  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JM DATE COMPLETED: 90.10.18

FIELD NO: 408  
 LAB NO: 2493  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 409  
 LAB NO: 2494  
 DEPTH: 1.8-2.0  
 TYPE: AUGER

FIELD NO: 410  
 LAB NO: 2495  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

FIELD NO: 411  
 LAB NO: 2496  
 DEPTH: 5.6-5.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	68
12.7	62
9.5	57
4.76	45
2.38	--
2.00	38
1.19	--
0.841	33
0.595	--
0.42	30
0.297	--
0.177	--
0.149	22
0.074	19

M.C. (%): 4

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 55  
 % SAND: 27  
 % FINES: 19

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	100
9.5	99
4.76	99
2.38	--
2.00	98
1.19	--
0.841	98
0.595	--
0.42	96
0.297	--
0.177	--
0.149	79
0.074	54

M.C. (%): 10

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 1  
 % SAND: 45  
 % FINES: 54

CLASSIFICATION:  
 SANDY SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	96
19.0	92
12.7	89
9.5	86
4.76	82
2.38	--
2.00	80
1.19	--
0.841	79
0.595	--
0.42	78
0.297	--
0.177	--
0.149	72
0.074	59

M.C. (%): 10

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 18  
 % SAND: 23  
 % FINES: 59

CLASSIFICATION:  
 SANDY SILT WITH  
 GRAVEL (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	86

M.C. (%): 18

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 14  
 % FINES: 86

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-205  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JM DATE COMPLETED: 90.10.18

FIELD NO: 412  
 LAB NO: 2497  
 DEPTH: 8.8-9.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	96
19.0	88
12.7	78
9.5	74
4.76	67
2.38	--
2.00	61
1.19	--
0.841	57
0.595	--
0.42	54
0.297	--
0.177	--
0.149	46
0.074	40

M.C. (%): 15

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 33  
 % SAND: 27  
 % FINES: 40

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-207  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASK HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JM DATE COMPLETED: 90.10.18

FIELD NO: 413  
 LAB NO: 2498  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	89
12.7	77
9.5	70
4.76	56
2.38	--
2.00	48
1.19	--
0.841	42
0.595	--
0.42	38
0.297	--
0.177	--
0.149	33
0.074	27

M.C. (%): 10

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 44  
 % SAND: 28  
 % FINES: 27

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-208  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASK HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1952+800 O/S 2M RT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.19

FIELD NO: 414  
 LAB NO: 2499  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 415  
 LAB NO: 2500  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 416  
 LAB NO: 2501  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	100
9.5	99
4.76	99
2.38	--
2.00	98
1.19	--
0.841	98
0.595	--
0.42	97
0.297	--
0.177	--
0.149	95
0.074	90

M.C. (%): 24

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 1  
 % SAND: 8  
 % FINES: 90

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	88
12.7	80
9.5	75
4.76	69
2.38	--
2.00	64
1.19	--
0.841	61
0.595	--
0.42	58
0.297	--
0.177	--
0.149	55
0.074	52

M.C. (%): 16

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 31  
 % SAND: 17  
 % FINES: 52

CLASSIFICATION:  
 GRAVELLY SILT  
 WITH SAND (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 14

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-209  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASK HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1952+900 O/S 2M RT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.19

FIELD NO: 417  
 LAB NO: 2502  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 418  
 LAB NO: 2503  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 419  
 LAB NO: 2504  
 DEPTH: 3.8-4.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	88
19.0	77
12.7	73
9.5	69
4.76	62
2.38	--
2.00	55
1.19	--
0.841	50
0.595	--
0.42	47
0.297	--
0.177	--
0.149	40
0.074	36

M.C. (%) : 5

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 38  
 % SAND: 26  
 % FINES: 36

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	65
25.4	49
19.0	46
12.7	43
9.5	42
4.76	39
2.38	--
2.00	37
1.19	--
0.841	35
0.595	--
0.42	33
0.297	--
0.177	--
0.149	30
0.074	27

M.C. (%) : 4

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 61  
 % SAND: 12  
 % FINES: 27

CLASSIFICATION:  
 SILTY GRAVEL (GM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	90
12.7	75
9.5	63
4.76	45
2.38	--
2.00	30
1.19	--
0.841	24
0.595	--
0.42	21
0.297	--
0.177	--
0.149	16
0.074	14

M.C. (%) : 3

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 55  
 % SAND: 31  
 % FINES: 14

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-211  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASK HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1953+025 O/S 2M RT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.19

FIELD NO: 420  
 LAB NO: 2505  
 DEPTH: 1.3-1.5  
 TYPE: AUGER

FIELD NO: 421  
 LAB NO: 2506  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 422  
 LAB NO: 2507  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	97
0.074	94

M.C. (%): 38

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 6  
 % FINES: 94

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 69

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 45

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-212  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1953+162  
 LOGGED BY: JM DATE COMPLETED: 90.10.19

FIELD NO: 423  
 LAB NO: 2508  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 424  
 LAB NO: 2509  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 425  
 LAB NO: 2510  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	99
1.19	--
0.841	95
0.595	--
0.42	92
0.297	--
0.177	--
0.149	90
0.074	87

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 82

M.C. (%): 43

M.C. (%): 45

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 13  
 % FINES: 87

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-213  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASK HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1953+270 O/S 3M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.19

FIELD NO: 426  
 LAB NO: 2511  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 427  
 LAB NO: 2512  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 428  
 LAB NO: 2513  
 DEPTH: 4.0-4.2  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	81
19.0	72
12.7	64
9.5	58
4.76	50
2.38	--
2.00	44
1.19	--
0.841	40
0.595	--
0.42	37
0.297	--
0.177	--
0.149	34
0.074	31

M.C. (%): 14

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 50  
 % SAND: 19  
 % FINES: 31

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	80
19.0	76
12.7	71
9.5	68
4.76	64
2.38	--
2.00	58
1.19	--
0.841	52
0.595	--
0.42	46
0.297	--
0.177	--
0.149	37
0.074	33

M.C. (%): 14

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 36  
 % SAND: 31  
 % FINES: 33

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	82
19.0	77
12.7	71
9.5	65
4.76	54
2.38	--
2.00	46
1.19	--
0.841	40
0.595	--
0.42	36
0.297	--
0.177	--
0.149	31
0.074	27

M.C. (%): 12

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 46  
 % SAND: 27  
 % FINES: 27

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-214  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASK HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1953+455  
 LOGGED BY: JM DATE COMPLETED: 90.10.19

FIELD NO: 429  
 LAB NO: 2514  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 430  
 LAB NO: 2515  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 431  
 LAB NO: 2516  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

FIELD NO: 432  
 LAB NO: 2517  
 DEPTH: 8.8-9.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	81
19.0	75
12.7	70
9.5	66
4.76	59
2.38	--
2.00	53
1.19	--
0.841	48
0.595	--
0.42	44
0.297	--
0.177	--
0.149	39
0.074	35

101.6	--
76.2	100
50.8	74
38.1	74
25.4	69
19.0	62
12.7	54
9.5	50
4.76	40
2.38	--
2.00	33
1.19	--
0.841	29
0.595	--
0.42	26
0.297	--
0.177	--
0.149	23
0.074	21

101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	99
12.7	96
9.5	93
4.76	81
2.38	--
2.00	59
1.19	--
0.841	40
0.595	--
0.42	30
0.297	--
0.177	--
0.149	20
0.074	16

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 10

M.C. (%): 6

M.C. (%): 4

M.C. (%): 5

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 41  
 % SAND: 24  
 % FINES: 35

% GRAVEL: 60  
 % SAND: 19  
 % FINES: 21

% GRAVEL: 19  
 % SAND: 65  
 % FINES: 16

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-216  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RELOCATION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JM DATE COMPLETED: 90.10.19

FIELD NO: 433  
 LAB NO: 2518  
 DEPTH: 1.3-1.5  
 TYPE: AUGER

FIELD NO: 434  
 LAB NO: 2519  
 DEPTH: 2.7-2.9  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	73
19.0	66
12.7	50
9.5	42
4.76	32
2.38	--
2.00	26
1.19	--
0.841	21
0.595	--
0.42	17
0.297	--
0.177	--
0.149	13
0.074	11

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 3

M.C. (%): 3

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 68  
 % SAND: 22  
 % FINES: 11

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 POORLY GRADED  
 GRAVEL WITH SILT  
 & SAND (GP-GM)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-217  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RELOCATION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JM DATE COMPLETED: 90.10.19

FIELD NO: 435  
 LAB NO: 2520  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 436  
 LAB NO: 2521  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	96
19.0	94
12.7	78
9.5	69
4.76	59
2.38	--
2.00	50
1.19	--
0.841	44
0.595	--
0.42	40
0.297	--
0.177	--
0.149	32
0.074	28

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 7

M.C. (%): 5

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 41  
 % SAND: 31  
 % FINES: 28

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-218  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RELOCATION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1953+975 O/S 1M RT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.19

FIELD NO: 437  
 LAB NO: 2522  
 DEPTH: 0.7-0.9  
 TYPE: AUGER

FIELD NO: 438  
 LAB NO: 2523  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	97
12.7	94
9.5	89
4.76	81
2.38	--
2.00	73
1.19	--
0.841	65
0.595	--
0.42	60
0.297	--
0.177	--
0.149	55
0.074	50

M.C. (%): 10

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 19  
 % SAND: 31  
 % FINES: 50

CLASSIFICATION:  
 SANDY SILT WITH  
 GRAVEL (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	100
9.5	99
4.76	98
2.38	--
2.00	97
1.19	--
0.841	95
0.595	--
0.42	92
0.297	--
0.177	--
0.149	88
0.074	86

M.C. (%): 18

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 2  
 % SAND: 13  
 % FINES: 86

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-219  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RELOCATION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1954+175 O/S 7M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.19

FIELD NO: 439  
 LAB NO: 2524  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 440  
 LAB NO: 2525  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 441  
 LAB NO: 2526  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	100
9.5	99
4.76	99
2.38	--
2.00	99
1.19	--
0.841	98
0.595	--
0.42	97
0.297	--
0.177	--
0.149	96
0.074	93

M.C. (%) : 37

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 1  
 % SAND: 6  
 % FINES: 93

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%) : 28

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%) : 29

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-220  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RELOCATION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1954+350 O/S 8M RT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.19

FIELD NO: 442  
 LAB NO: 2527  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 443  
 LAB NO: 2528  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

*ORGANIC*

FIELD NO: 444  
 LAB NO: 2529  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	99
1.19	--
0.841	98
0.595	--
0.42	97
0.297	--
0.177	--
0.149	95
0.074	94

M.C. (%): 57

LIMITS  
 LIQUID: 35.2  
 PLASTIC: 31.3  
 P.I.: 3.9

% GRAVEL: 0  
 % SAND: 6  
 % FINES: 94

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	99
1.19	--
0.841	99
0.595	--
0.42	98
0.297	--
0.177	--
0.149	91
0.074	91

M.C. (%): 52

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 0  
 % SAND: 9  
 % FINES: 91

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 59

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-221  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RELOCATION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1954+525 O/S 15M RT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.19

FIELD NO: 445  
 LAB NO: 2530  
 DEPTH: 1.0-1.2  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 446  
 LAB NO: 2531  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 447  
 LAB NO: 2532  
 DEPTH: 4.2-4.4  
 TYPE: AUGER  
 ORGANIC

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	94
19.0	94
12.7	94
9.5	94
4.76	92
2.38	--
2.00	92
1.19	--
0.841	90
0.595	--
0.42	87
0.297	--
0.177	--
0.149	82
0.074	79

M.C. (%): 71

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 8  
 % SAND: 14  
 % FINES: 79

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	97
0.074	94

M.C. (%): 56

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 6  
 % FINES: 94

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	99
2.38	--
2.00	99
1.19	--
0.841	98
0.595	--
0.42	97
0.297	--
0.177	--
0.149	93
0.074	89

M.C. (%): 94

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 1  
 % SAND: 10  
 % FINES: 89

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-222  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RELOCATION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JM DATE COMPLETED: 90.10.19

FIELD NO: 448  
 LAB NO: 2533  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 449  
 LAB NO: 2534  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 450  
 LAB NO: 2535  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	90
19.0	83
12.7	73
9.5	63
4.76	48
2.38	--
2.00	37
1.19	--
0.841	30
0.595	--
0.42	24
0.297	--
0.177	--
0.149	18
0.074	13

M.C. (%): 3

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 52  
 % SAND: 36  
 % FINES: 13

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	91
25.4	56
19.0	49
12.7	46
9.5	43
4.76	38
2.38	--
2.00	33
1.19	--
0.841	29
0.595	--
0.42	26
0.297	--
0.177	--
0.149	21
0.074	18

M.C. (%): 4

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 62  
 % SAND: 20  
 % FINES: 18

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	77
25.4	66
19.0	57
12.7	49
9.5	43
4.76	37
2.38	--
2.00	31
1.19	--
0.841	26
0.595	--
0.42	23
0.297	--
0.177	--
0.149	18
0.074	14

M.C. (%): 5

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 63  
 % SAND: 23  
 % FINES: 14

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-223  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RELOCATION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JM DATE COMPLETED: 90.10.20

FIELD NO: 451  
 LAB NO: 2536  
 DEPTH: 1.6-1.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	82
25.4	75
19.0	69
12.7	60
9.5	51
4.76	37
2.38	--
2.00	28
1.19	--
0.841	23
0.595	--
0.42	20
0.297	--
0.177	--
0.149	14
0.074	11

M.C. (%): 4

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 63  
 % SAND: 26  
 % FINES: 11

CLASSIFICATION:  
 POORLY GRADED  
 GRAVEL WITH SILT  
 & SAND (GP-GM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-224  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RELOCATION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JM DATE COMPLETED: 90.10.20

FIELD NO: 452  
 LAB NO: 2537  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 453  
 LAB NO: 2538  
 DEPTH: 3.0-3.2  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	91
38.1	91
25.4	69
19.0	63
12.7	55
9.5	48
4.76	38
2.38	--
2.00	31
1.19	--
0.841	26
0.595	--
0.42	22
0.297	--
0.177	--
0.149	17
0.074	12

101.6	--
76.2	100
50.8	70
38.1	70
25.4	70
19.0	66
12.7	59
9.5	57
4.76	48
2.38	--
2.00	40
1.19	--
0.841	35
0.595	--
0.42	30
0.297	--
0.177	--
0.149	21
0.074	16

M.C. (%): 4

M.C. (%): 5

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 62  
 % SAND: 26  
 % FINES: 12

% GRAVEL: 52  
 % SAND: 32  
 % FINES: 16

CLASSIFICATION:  
 POORLY GRADED  
 GRAVEL WITH SILT  
 & SAND (GP-GM)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-225  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RELOCATION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1955+282 O/S 1M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.20

FIELD NO: 454  
 LAB NO: 2539  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 3

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-226  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RELOCATION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1955+375 O/S 7M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.20

FIELD NO: 455  
 LAB NO: 2540  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 456  
 LAB NO: 2541  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	87
9.5	80
4.76	66
2.38	--
2.00	53
1.19	--
0.841	44
0.595	--
0.42	38
0.297	--
0.177	--
0.149	31
0.074	25

M.C. (%) : 6

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 34  
 % SAND: 41  
 % FINES: 25

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	97
9.5	92
4.76	80
2.38	--
2.00	60
1.19	--
0.841	44
0.595	--
0.42	35
0.297	--
0.177	--
0.149	25
0.074	21

M.C. (%) : 13

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 20  
 % SAND: 59  
 % FINES: 21

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-227  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RELOCATION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1955+475 O/S 3M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.20

FIELD NO: 457  
 LAB NO: 2542  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 458  
 LAB NO: 2543  
 DEPTH: 2.4-2.6  
 TYPE: AUGER

FIELD NO: 459  
 LAB NO: 2544  
 DEPTH: 5.8-6.0  
 TYPE: AUGER

FIELD NO: 460  
 LAB NO: 2545  
 DEPTH: 6.2-6.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	100
9.5	98
4.76	89
2.38	--
2.00	75
1.19	--
0.841	66
0.595	--
0.42	59
0.297	--
0.177	--
0.149	50
0.074	45

101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	94
12.7	83
9.5	75
4.76	65
2.38	--
2.00	57
1.19	--
0.841	51
0.595	--
0.42	47
0.297	--
0.177	--
0.149	40
0.074	33

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	80
2.38	--
2.00	67
1.19	--
0.841	59
0.595	--
0.42	53
0.297	--
0.177	--
0.149	42
0.074	36

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	87
9.5	81
4.76	67
2.38	--
2.00	51
1.19	--
0.841	40
0.595	--
0.42	32
0.297	--
0.177	--
0.149	25
0.074	18

M.C. (%) : 20

M.C. (%) : 12

M.C. (%) : 16

M.C. (%) : 11

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 11  
 % SAND: 45  
 % FINES: 45

% GRAVEL: 35  
 % SAND: 32  
 % FINES: 33

% GRAVEL: 20  
 % SAND: 44  
 % FINES: 36

% GRAVEL: 33  
 % SAND: 49  
 % FINES: 18

CLASSIFICATION:  
 SILTY SAND (SM)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-228  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RELOCATION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1955+650 O/S 2M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.20

FIELD NO: 461  
 LAB NO: 2546  
 DEPTH: 1.0-1.2  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 462  
 LAB NO: 2547  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 463  
 LAB NO: 2548  
 DEPTH: 4.0-4.2  
 TYPE: AUGER

FIELD NO: 464  
 LAB NO: 2549  
 DEPTH: 5.6-5.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	99
2.38	--
2.00	98
1.19	--
0.841	95
0.595	--
0.42	93
0.297	--
0.177	--
0.149	83
0.074	76

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	98
0.297	--
0.177	--
0.149	93
0.074	84

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 141

M.C. (%): 29

M.C. (%): 49

M.C. (%): 18

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 1  
 % SAND: 23  
 % FINES: 76

% GRAVEL: 0  
 % SAND: 16  
 % FINES: 84

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 111-229  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RELOCATION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1955+800 O/S 3M LT.  
 LOGGED BY: JM DATE COMPLETED: 90.10.20

FIELD NO: 465  
 LAB NO: 2550  
 DEPTH: 1.0-1.2  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 466  
 LAB NO: 2551  
 DEPTH: 2.8-3.0  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 467  
 LAB NO: 2552  
 DEPTH: 4.0-4.2  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	97
0.595	--
0.42	92
0.297	--
0.177	--
0.149	70
0.074	59

M.C. (%): 25

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 41  
 % FINES: 59

CLASSIFICATION:  
 SANDY SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	90
0.074	80

M.C. (%): 23

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 20  
 % FINES: 80

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 23

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 112-230  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1955+918  
 LOGGED BY: JG DATE COMPLETED: 90.10.20

FIELD NO: 468  
 LAB NO: 2553  
 DEPTH: 1.0-1.2  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 469  
 LAB NO: 2554  
 DEPTH: 2.4-2.6  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 470  
 LAB NO: 2555  
 DEPTH: 4.0-4.2  
 TYPE: AUGER

FIELD NO: 471  
 LAB NO: 2556  
 DEPTH: 5.8-6.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	99
1.19	--
0.841	98
0.595	--
0.42	95
0.297	--
0.177	--
0.149	90
0.074	85

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	99
1.19	--
0.841	97
0.595	--
0.42	93
0.297	--
0.177	--
0.149	87
0.074	76

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%) : 69

M.C. (%) : 86

M.C. (%) : 42

M.C. (%) : 38

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 15  
 % FINES: 85

% GRAVEL: 0  
 % SAND: 24  
 % FINES: 76

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 112-230  
CLIENT: SHAKWAK PROJECT  
PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
PROJECT LOCATION: BEAVER CREEK  
DRILL UNIT: 17-174  
HOLE LOCATION: 1955+918  
LOGGED BY: JG DATE COMPLETED: 90.10.20

FIELD NO: 472  
LAB NO: 2557  
DEPTH: 8.6-8.8  
TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
---------------	--------------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 28

LIMITS

LIQUID: --  
PLASTIC: --  
P.I.: --

% GRAVEL: --  
% SAND: --  
% FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 112-231  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1956+075 O/S 2M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.20

FIELD NO: 473  
 LAB NO: 2558  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 474  
 LAB NO: 2559  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 475  
 LAB NO: 2560  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	97

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 36

M.C. (%): 36

M.C. (%): 14

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 3  
 % FINES: 97

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER:	SEGMENT 18	HOLE NUMBER:	112-232
CLIENT:	SHAKWAK PROJECT		
PROJECT NAME:	ALASKA HIGHWAY RECONSTRUCTION		
PROJECT LOCATION:	BEAVER CREEK		
DRILL UNIT:	17-174		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JG	DATE COMPLETED:	90.10.20

FIELD NO: 476  
LAB NO: 2561  
DEPTH: 1.2-1.4  
TYPE: AUGER

FIELD NO: 477  
LAB NO: 2562  
DEPTH: 2.6-2.8  
TYPE: AUGER

FIELD NO: 478  
LAB NO: 2563  
DEPTH: 4.0-4.2  
TYPE: AUGER

FIELD NO: 479  
LAB NO: 2564  
DEPTH: 5.6-5.8  
TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	97
19.0	79
12.7	71
9.5	65
4.76	53
2.38	--
2.00	39
1.19	--
0.841	27
0.595	--
0.42	20
0.297	--
0.177	--
0.149	15
0.074	12

M.C. (%): 5

LIMITS  
LIQUID: --  
PLASTIC: --  
P.I.: N.P.

% GRAVEL: 47  
% SAND: 40  
% FINES: 12

CLASSIFICATION:  
POORLY GRADED  
GRAVEL WITH SILT  
& SAND (GP-GM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 4

LIMITS  
LIQUID: --  
PLASTIC: --  
P.I.: --

% GRAVEL: --  
% SAND: --  
% FINES: --

CLASSIFICATION:

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 5

LIMITS  
LIQUID: --  
PLASTIC: --  
P.I.: --

% GRAVEL: --  
% SAND: --  
% FINES: --

CLASSIFICATION:

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 5

LIMITS  
LIQUID: --  
PLASTIC: --  
P.I.: --

% GRAVEL: --  
% SAND: --  
% FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 112-232  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.20

FIELD NO: 480  
 LAB NO: 2565  
 DEPTH: 8.8-9.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 10

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 112-233  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.20

FIELD NO: 481  
 LAB NO: 2566  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 482  
 LAB NO: 2567  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 483  
 LAB NO: 2568  
 DEPTH: 4.4-4.6  
 TYPE: AUGER

FIELD NO: 484  
 LAB NO: 2569  
 DEPTH: 5.8-6.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	94
12.7	80
9.5	69
4.76	49
2.38	--
2.00	31
1.19	--
0.841	21
0.595	--
0.42	16
0.297	--
0.177	--
0.149	12
0.074	10

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%) : 6

M.C. (%) : 4

M.C. (%) : 5

M.C. (%) : 7

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 51  
 % SAND: 39  
 % FINES: 10

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 POORLY GRADED  
 GRAVEL WITH SILT  
 & SAND (GP-GM)

CLASSIFICATION:

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 112-233  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.20

FIELD NO: 485  
 LAB NO: 2570  
 DEPTH: 8.8-9.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 7

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 112-234  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.21

FIELD NO: 486  
 LAB NO: 2571  
 DEPTH: 1.6-1.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 5

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 112-235  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.21

FIELD NO: 487  
 LAB NO: 2572  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 488  
 LAB NO: 2573  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 489  
 LAB NO: 2574  
 DEPTH: 3.9-4.1  
 TYPE: AUGER

FIELD NO: 490  
 LAB NO: 2575  
 DEPTH: 5.0-5.2  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	97
9.5	92
4.76	70
2.38	--
2.00	47
1.19	--
0.841	32
0.595	--
0.42	25
0.297	--
0.177	--
0.149	18
0.074	15

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 4

M.C. (%): 4

M.C. (%): 11

M.C. (%): 8

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 30  
 % SAND: 55  
 % FINES: 15

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 112-236  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.21

FIELD NO: 491  
 LAB NO: 2576  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 492  
 LAB NO: 2577  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 493  
 LAB NO: 2578  
 DEPTH: 4.0-4.2  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	92
12.7	88
9.5	85
4.76	80
2.38	--
2.00	73
1.19	--
0.841	67
0.595	--
0.42	63
0.297	--
0.177	--
0.149	59
0.074	56

M.C. (%): 19

LIMITS

LIQUID: 26.8  
 PLASTIC: 24.6  
 P.I.: 2.2

% GRAVEL: 20  
 % SAND: 23  
 % FINES: 56

CLASSIFICATION:  
 SANDY SILT WITH  
 GRAVEL (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	100
9.5	99
4.76	96
2.38	--
2.00	92
1.19	--
0.841	87
0.595	--
0.42	84
0.297	--
0.177	--
0.149	81
0.074	77

M.C. (%): 22

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 4  
 % SAND: 20  
 % FINES: 77

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 17

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 112-237  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.21

FIELD NO: 494  
 LAB NO: 2579  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 495  
 LAB NO: 2580  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 496  
 LAB NO: 2581  
 DEPTH: 4.0-4.2  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	99
12.7	89
9.5	85
4.76	78
2.38	--
2.00	70
1.19	--
0.841	64
0.595	--
0.42	60
0.297	--
0.177	--
0.149	55
0.074	51

M.C. (%): 21

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 22  
 % SAND: 26  
 % FINES: 51

CLASSIFICATION:  
 SANDY SILT WITH  
 GRAVEL (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	94
12.7	91
9.5	88
4.76	83
2.38	--
2.00	77
1.19	--
0.841	72
0.595	--
0.42	69
0.297	--
0.177	--
0.149	65
0.074	62

M.C. (%): 25

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 17  
 % SAND: 21  
 % FINES: 62

CLASSIFICATION:  
 SANDY SILT WITH  
 GRAVEL (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 16

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 112-238  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.21

FIELD NO: 497  
 LAB NO: 2582  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 498  
 LAB NO: 2583  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 499  
 LAB NO: 2584  
 DEPTH: 4.0-4.2  
 TYPE: AUGER

FIELD NO: 500  
 LAB NO: 2585  
 DEPTH: 5.8-6.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	74
25.4	67
19.0	62
12.7	52
9.5	45
4.76	35
2.38	--
2.00	25
1.19	--
0.841	17
0.595	--
0.42	14
0.297	--
0.177	--
0.149	10
0.074	8

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 4

M.C. (%): 8

M.C. (%): 9

M.C. (%): 17

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 65  
 % SAND: 27  
 % FINES: 8

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 POORLY GRADED  
 GRAVEL WITH SILT  
 & SAND (GP-GM)

CLASSIFICATION:

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 112-238  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.21

FIELD NO: 501  
 LAB NO: 2586  
 DEPTH: 7.4-7.6  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 13

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 112-239  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.21

FIELD NO: 502  
 LAB NO: 2587  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 503  
 LAB NO: 2588  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 504  
 LAB NO: 2589  
 DEPTH: 4.0-4.2  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	96
19.0	90
12.7	83
9.5	79
4.76	70
2.38	--
2.00	61
1.19	--
0.841	55
0.595	--
0.42	51
0.297	--
0.177	--
0.149	45
0.074	41

M.C. (%): 14

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 30  
 % SAND: 29  
 % FINES: 41

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 6

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 5

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 112-240  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.21

FIELD NO: 505  
 LAB NO: 2590  
 DEPTH: 1.0-1.2  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 506  
 LAB NO: 2591  
 DEPTH: 2.4-2.6  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 507  
 LAB NO: 2592  
 DEPTH: 4.0-4.2  
 TYPE: AUGER  
 ORGANIC

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	99
9.5	99
4.76	98
2.38	--
2.00	94
1.19	--
0.841	89
0.595	--
0.42	83
0.297	--
0.177	--
0.149	71
0.074	62

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	94
9.5	91
4.76	85
2.38	--
2.00	80
1.19	--
0.841	73
0.595	--
0.42	65
0.297	--
0.177	--
0.149	52
0.074	43

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	97
9.5	95
4.76	82
2.38	--
2.00	72
1.19	--
0.841	63
0.595	--
0.42	57
0.297	--
0.177	--
0.149	48
0.074	43

M.C. (%): 99

M.C. (%): 133

M.C. (%): 36

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 2  
 % SAND: 36  
 % FINES: 62

% GRAVEL: 15  
 % SAND: 43  
 % FINES: 43

% GRAVEL: 18  
 % SAND: 40  
 % FINES: 43

CLASSIFICATION:  
 SANDY SILT (ML)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 112-241  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.21

FIELD NO: 508  
 LAB NO: 2593  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 509  
 LAB NO: 2594  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 510  
 LAB NO: 2595  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	93
19.0	88
12.7	78
9.5	73
4.76	62
2.38	--
2.00	52
1.19	--
0.841	46
0.595	--
0.42	42
0.297	--
0.177	--
0.149	36
0.074	33

M.C. (%): 17

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 38  
 % SAND: 29  
 % FINES: 33

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	88
38.1	88
25.4	88
19.0	84
12.7	81
9.5	78
4.76	72
2.38	--
2.00	66
1.19	--
0.841	61
0.595	--
0.42	57
0.297	--
0.177	--
0.149	53
0.074	46

M.C. (%): 22

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 28  
 % SAND: 26  
 % FINES: 46

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	85
25.4	85
19.0	84
12.7	76
9.5	72
4.76	62
2.38	--
2.00	54
1.19	--
0.841	48
0.595	--
0.42	44
0.297	--
0.177	--
0.149	38
0.074	34

M.C. (%): 16

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 38  
 % SAND: 28  
 % FINES: 34

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 112-242  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.21

FIELD NO: 511  
 LAB NO: 2596  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 512  
 LAB NO: 2597  
 DEPTH: 2.6-2.8  
 TYPE: AUGER  
 ORGANICS

FIELD NO: 513  
 LAB NO: 2598  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

FIELD NO: 514  
 LAB NO: 2599  
 DEPTH: 5.8-6.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	100
25.4	97
19.0	96
12.7	92
9.5	90
4.76	85
2.38	--
2.00	79
1.19	--
0.841	75
0.595	--
0.42	73
0.297	--
0.177	--
0.149	70
0.074	67

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	97
9.5	94
4.76	87
2.38	--
2.00	83
1.19	--
0.841	78
0.595	--
0.42	75
0.297	--
0.177	--
0.149	65
0.074	60

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	90
12.7	84
9.5	78
4.76	73
2.38	--
2.00	66
1.19	--
0.841	60
0.595	--
0.42	56
0.297	--
0.177	--
0.149	51
0.074	47

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 18

M.C. (%): 23

M.C. (%): 19

M.C. (%): 15

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 15  
 % SAND: 18  
 % FINES: 67

% GRAVEL: 13  
 % SAND: 27  
 % FINES: 60

% GRAVEL: 27  
 % SAND: 26  
 % FINES: 47

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SANDY SILT WITH  
 GRAVEL (ML)

CLASSIFICATION:  
 SANDY SILT (ML)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 112-242  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.21

FIELD NO: 515  
 LAB NO: 2600  
 DEPTH: 8.4-8.6  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 11

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 112-243  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.21

FIELD NO: 516  
 LAB NO: 2601  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 517  
 LAB NO: 2602  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 518  
 LAB NO: 2603  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

FIELD NO: 519  
 LAB NO: 2604  
 DEPTH: 5.8-6.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%) : 8

M.C. (%) : 11

M.C. (%) : 6

M.C. (%) : 8

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

CLASSIFICATION:

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 112-243  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.21

FIELD NO: 520  
 LAB NO: 2605  
 DEPTH: 6.6-6.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 6

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 112-244  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1956+725 O/S 7M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.21

FIELD NO: 521  
 LAB NO: 2606  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 522  
 LAB NO: 2607  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 523  
 LAB NO: 2608  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	99
1.19	--
0.841	97
0.595	--
0.42	96
0.297	--
0.177	--
0.149	93
0.074	89

M.C. (%): 53

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 11  
 % FINES: 89

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	99
0.074	98

M.C. (%): 29

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 2  
 % FINES: 98

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	99
0.074	97

M.C. (%): 35

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 3  
 % FINES: 97

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 112-245  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1956+610 O/S 30M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.21

FIELD NO: 524  
 LAB NO: 2609  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 525  
 LAB NO: 2610  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	100
38.1	82
25.4	74
19.0	73
12.7	67
9.5	62
4.76	55
2.38	--
2.00	49
1.19	--
0.841	42
0.595	--
0.42	38
0.297	--
0.177	--
0.149	34
0.074	29

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	98
9.5	97
4.76	92
2.38	--
2.00	78
1.19	--
0.841	60
0.595	--
0.42	47
0.297	--
0.177	--
0.149	33
0.074	27

M.C. (%) : 16

M.C. (%) : 18

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 45  
 % SAND: 26  
 % FINES: 29

% GRAVEL: 8  
 % SAND: 65  
 % FINES: 27

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:  
 SILTY SAND (SM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 112-246  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1956+470 O/S 8M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.22

FIELD NO: 526  
 LAB NO: 2611  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 527  
 LAB NO: 2612  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 528  
 LAB NO: 2613  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	98
1.19	--
0.841	97
0.595	--
0.42	95
0.297	--
0.177	--
0.149	86
0.074	78

M.C. (%): 65

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 22  
 % FINES: 78

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	93
12.7	79
9.5	73
4.76	56
2.38	--
2.00	45
1.19	--
0.841	38
0.595	--
0.42	35
0.297	--
0.177	--
0.149	31
0.074	28

M.C. (%): 16

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 44  
 % SAND: 28  
 % FINES: 28

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	87
9.5	83
4.76	73
2.38	--
2.00	65
1.19	--
0.841	60
0.595	--
0.42	56
0.297	--
0.177	--
0.149	54
0.074	50

M.C. (%): 24

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 27  
 % SAND: 22  
 % FINES: 50

CLASSIFICATION:  
 GRAVELLY SILT  
 WITH SAND (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 112-247  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1956+325 O/S 13M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.22

FIELD NO: 529  
 LAB NO: 2614  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 530  
 LAB NO: 2615  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 531  
 LAB NO: 2616  
 DEPTH: 4.0-4.2  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	100
50.8	73
38.1	73
25.4	67
19.0	66
12.7	61
9.5	59
4.76	54
2.38	--
2.00	49
1.19	--
0.841	44
0.595	--
0.42	41
0.297	--
0.177	--
0.149	37
0.074	35

M.C. (%): 15

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 46  
 % SAND: 20  
 % FINES: 35

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	98
1.19	--
0.841	96
0.595	--
0.42	94
0.297	--
0.177	--
0.149	92
0.074	89

M.C. (%): 31

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 10  
 % FINES: 89

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	98

M.C. (%): 36

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 2  
 % FINES: 98

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 113-248  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.22

FIELD NO: 532  
 LAB NO: 2617  
 DEPTH: 0.8-1.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 4

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 113-249  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.22

FIELD NO: 533  
 LAB NO: 2618  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 534  
 LAB NO: 2619  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 535  
 LAB NO: 2620  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

FIELD NO: 536  
 LAB NO: 2621  
 DEPTH: 5.8-6.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%) : 4

M.C. (%) : 2

M.C. (%) : 5

M.C. (%) : 5

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

CLASSIFICATION:

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 113-249  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.22

FIELD NO: 537  
 LAB NO: 2622  
 DEPTH: 8.8-9.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 6

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 113-250  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.22

FIELD NO: 538  
 LAB NO: 2623  
 DEPTH: 0.8-1.0  
 TYPE: AUGER

FIELD NO: 539  
 LAB NO: 2624  
 DEPTH: 2.1-2.3  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 13

M.C. (%): 3

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 113-251  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.22

FIELD NO: 540  
 LAB NO: 2625  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 541  
 LAB NO: 2626  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 542  
 LAB NO: 2627  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%) : 4

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%) : 5

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%) : 4

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 113-253  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1956+855 O/S 1M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.22

FIELD NO: 543  
 LAB NO: 2628  
 DEPTH: 0.9-1.1  
 TYPE: AUGER

FIELD NO: 544  
 LAB NO: 2629  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 545  
 LAB NO: 2630  
 DEPTH: 4.3-4.5  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	100
25.4	84
19.0	81
12.7	81
9.5	80
4.76	79
2.38	--
2.00	76
1.19	--
0.841	74
0.595	--
0.42	72
0.297	--
0.177	--
0.149	70
0.074	66

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	97
12.7	90
9.5	85
4.76	82
2.38	--
2.00	77
1.19	--
0.841	72
0.595	--
0.42	69
0.297	--
0.177	--
0.149	63
0.074	58

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	95
9.5	92
4.76	85
2.38	--
2.00	77
1.19	--
0.841	70
0.595	--
0.42	65
0.297	--
0.177	--
0.149	59
0.074	55

M.C. (%): 18

M.C. (%): 21

M.C. (%): 28

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 21  
 % SAND: 12  
 % FINES: 66

% GRAVEL: 18  
 % SAND: 23  
 % FINES: 58

% GRAVEL: 15  
 % SAND: 29  
 % FINES: 55

CLASSIFICATION:  
 GRAVELLY SILT  
 (ML)

CLASSIFICATION:  
 SANDY SILT WITH  
 GRAVEL (ML)

CLASSIFICATION:  
 SANDY SILT WITH  
 GRAVEL (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 113-254  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1957+050 O/S 4M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.22

FIELD NO: 546  
 LAB NO: 2631  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 547  
 LAB NO: 2632  
 DEPTH: 2.7-2.9  
 TYPE: AUGER

FIELD NO: 548  
 LAB NO: 2633  
 DEPTH: 4.0-4.2  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	100
25.4	91
19.0	87
12.7	74
9.5	64
4.76	48
2.38	--
2.00	38
1.19	--
0.841	32
0.595	--
0.42	29
0.297	--
0.177	--
0.149	25
0.074	22

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 22

M.C. (%): 68

M.C. (%): 134

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 52  
 % SAND: 26  
 % FINES: 22

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 113-255  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1957+250 O/S 3M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.22

FIELD NO: 549  
 LAB NO: 2634  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 550  
 LAB NO: 2635  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 551  
 LAB NO: 2636  
 DEPTH: 4.0-4.2  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	94
12.7	91
9.5	88
4.76	82
2.38	--
2.00	73
1.19	--
0.841	68
0.595	--
0.42	64
0.297	--
0.177	--
0.149	60
0.074	57

M.C. (%): 29

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 18  
 % SAND: 26  
 % FINES: 57

CLASSIFICATION:  
 SANDY SILT WITH  
 GRAVEL (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	96
9.5	91
4.76	83
2.38	--
2.00	74
1.19	--
0.841	67
0.595	--
0.42	64
0.297	--
0.177	--
0.149	60
0.074	55

M.C. (%): 26

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 17  
 % SAND: 28  
 % FINES: 55

CLASSIFICATION:  
 SANDY SILT WITH  
 GRAVEL (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 40

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 113-256  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1957+446 O/S 3M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.22

FIELD NO: 552  
 LAB NO: 2637  
 DEPTH: 1.3-1.5  
 TYPE: AUGER

FIELD NO: 553  
 LAB NO: 2638  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 554  
 LAB NO: 2639  
 DEPTH: 4.0-4.2  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	98
1.19	--
0.841	97
0.595	--
0.42	95
0.297	--
0.177	--
0.149	93
0.074	88

M.C. (%): 48

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 12  
 % FINES: 88

CLASSIFICATION:  
SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 64

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 36

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 113-257  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1957+650 O/S 4M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.22

FIELD NO: 555  
 LAB NO: 2640  
 DEPTH: 1.2-1.4  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 556  
 LAB NO: 2641  
 DEPTH: 2.7-2.9  
 TYPE: AUGER

FIELD NO: 557  
 LAB NO: 2642  
 DEPTH: 3.8-4.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	99
1.19	--
0.841	98
0.595	--
0.42	94
0.297	--
0.177	--
0.149	88
0.074	83

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 92

M.C. (%): 40

M.C. (%): 31

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 17  
 % FINES: 83

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 113-258  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1957+850 O/S 3M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.22

FIELD NO: 558  
 LAB NO: 2643  
 DEPTH: 1.2-1.4  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 559  
 LAB NO: 2644  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 560  
 LAB NO: 2645  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	99
1.19	--
0.841	97
0.595	--
0.42	96
0.297	--
0.177	--
0.149	71
0.074	56

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	97
0.074	94

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 83

M.C. (%): 46

M.C. (%): 105

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 44  
 % FINES: 56

% GRAVEL: 0  
 % SAND: 5  
 % FINES: 94

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SANDY SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 113-259  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1958+075 O/S 3M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.22

FIELD NO: 561  
 LAB NO: 2646  
 DEPTH: 1.2-1.4  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 562  
 LAB NO: 2647  
 DEPTH: 2.7-2.9  
 TYPE: AUGER

FIELD NO: 563  
 LAB NO: 2648  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	100
9.5	99
4.76	96
2.38	--
2.00	89
1.19	--
0.841	82
0.595	--
0.42	78
0.297	--
0.177	--
0.149	72
0.074	68

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	96
0.074	93

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 119

M.C. (%): 40

M.C. (%): 53

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 4  
 % SAND: 28  
 % FINES: 68

% GRAVEL: 0  
 % SAND: 7  
 % FINES: 93

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SANDY SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 113-260  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1958+250  
 LOGGED BY: JG DATE COMPLETED: O/S 2M LT.

FIELD NO: 564  
 LAB NO: 2649  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 565  
 LAB NO: 2650  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 566  
 LAB NO: 2651  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	97
0.297	--
0.177	--
0.149	94
0.074	88

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	92

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 73

M.C. (%): 31

M.C. (%): 31

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 12  
 % FINES: 88

% GRAVEL: 0  
 % SAND: 8  
 % FINES: 92

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 113-261  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1958+450 O/S 3M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.23

FIELD NO: 567  
 LAB NO: 2652  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 568  
 LAB NO: 2653  
 DEPTH: 2.8-3.0  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 569  
 LAB NO: 2654  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	93
0.595	--
0.42	86
0.297	--
0.177	--
0.149	78
0.074	74

M.C. (%): 96

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 26  
 % FINES: 74

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	96

M.C. (%): 30

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 4  
 % FINES: 96

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 28

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 113-262  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1958+650 O/S 3M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.23

FIELD NO: 570  
 LAB NO: 2655  
 DEPTH: 1.2-1.4  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 571  
 LAB NO: 2656  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 572  
 LAB NO: 2657  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	95
0.074	90

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	99
0.074	98

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	100
0.074	98

M.C. (%): 42

M.C. (%): 31

M.C. (%): 38

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 10  
 % FINES: 90

% GRAVEL: 0  
 % SAND: 2  
 % FINES: 98

% GRAVEL: 0  
 % SAND: 2  
 % FINES: 98

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 113-263  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1958+850 O/S 2M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.23

FIELD NO: 573  
 LAB NO: 2658  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 574  
 LAB NO: 2659  
 DEPTH: 2.8-3.0  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 575  
 LAB NO: 2660  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	97
0.074	94

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	99
0.074	99

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	100
0.074	97

M.C. (%): 28

M.C. (%): 28

M.C. (%): 29

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 6  
 % FINES: 94

% GRAVEL: 0  
 % SAND: 1  
 % FINES: 99

% GRAVEL: 0  
 % SAND: 3  
 % FINES: 97

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 113-264  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.23

FIELD NO: 576  
 LAB NO: 2661  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 577  
 LAB NO: 2662  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 578  
 LAB NO: 2663  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

FIELD NO: 579  
 LAB NO: 2664  
 DEPTH: 5.8-6.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	99
2.38	--
2.00	97
1.19	--
0.841	93
0.595	--
0.42	89
0.297	--
0.177	--
0.149	84
0.074	79

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	97

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	97

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	98
12.7	95
9.5	90
4.76	84
2.38	--
2.00	75
1.19	--
0.841	66
0.595	--
0.42	60
0.297	--
0.177	--
0.149	52
0.074	48

M.C. (%): 40

M.C. (%): 33

M.C. (%): 32

M.C. (%): 26

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 1  
 % SAND: 20  
 % FINES: 79

% GRAVEL: 0  
 % SAND: 3  
 % FINES: 97

% GRAVEL: 0  
 % SAND: 3  
 % FINES: 97

% GRAVEL: 16  
 % SAND: 36  
 % FINES: 48

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 113-265  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.23

FIELD NO: 580  
 LAB NO: 2665  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 581  
 LAB NO: 2666  
 DEPTH: 1.6-1.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 21

M.C. (%): 14

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 113-266  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.23

FIELD NO: 582  
 LAB NO: 2667  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 583  
 LAB NO: 2668  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 584  
 LAB NO: 2669  
 DEPTH: 4.0-4.2  
 TYPE: AUGER

FIELD NO: 585  
 LAB NO: 2670  
 DEPTH: 5.6-5.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	100
9.5	100
4.76	100
2.38	--
2.00	99
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	97

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	99
0.074	98

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	98
0.297	--
0.177	--
0.149	97
0.074	96

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	91
9.5	82
4.76	71
2.38	--
2.00	58
1.19	--
0.841	46
0.595	--
0.42	38
0.297	--
0.177	--
0.149	32
0.074	28

M.C. (%): 7

M.C. (%): 30

M.C. (%): 29

M.C. (%): 15

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 3  
 % FINES: 97

% GRAVEL: 0  
 % SAND: 2  
 % FINES: 98

% GRAVEL: 0  
 % SAND: 4  
 % FINES: 96

% GRAVEL: 29  
 % SAND: 43  
 % FINES: 28

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 113-267  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.23

FIELD NO: 586  
 LAB NO: 2671  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 587  
 LAB NO: 2672  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 588  
 LAB NO: 2673  
 DEPTH: 3.4-3.6  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	98
9.5	97
4.76	95
2.38	--
2.00	90
1.19	--
0.841	85
0.595	--
0.42	82
0.297	--
0.177	--
0.149	78
0.074	75

M.C. (%): 17

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 5  
 % SAND: 20  
 % FINES: 75

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	97
12.7	89
9.5	83
4.76	74
2.38	--
2.00	75
1.19	--
0.841	55
0.595	--
0.42	48
0.297	--
0.177	--
0.149	39
0.074	33

M.C. (%): 8

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 26  
 % SAND: 41  
 % FINES: 33

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 8

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 114-268  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.23

FIELD NO: 589  
 LAB NO: 2674  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 590  
 LAB NO: 2675  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 591  
 LAB NO: 2676  
 DEPTH: 4.0-4.2  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	99
9.5	99
4.76	99
2.38	--
2.00	98
1.19	--
0.841	98
0.595	--
0.42	97
0.297	--
0.177	--
0.149	96
0.074	94

M.C. (%): 19

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 1  
 % SAND: 5  
 % FINES: 94

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 14

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 11

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 114-269  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.23

FIELD NO: 592  
 LAB NO: 2677  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 593  
 LAB NO: 2678  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 594  
 LAB NO: 2679  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

FIELD NO: 595  
 LAB NO: 2680  
 DEPTH: 5.8-6.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	100
9.5	100
4.76	97
2.38	--
2.00	95
1.19	--
0.841	92
0.595	--
0.42	90
0.297	--
0.177	--
0.149	86
0.074	84

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	98
0.595	--
0.42	97
0.297	--
0.177	--
0.149	96
0.074	95

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	99
1.19	--
0.841	98
0.595	--
0.42	97
0.297	--
0.177	--
0.149	96
0.074	94

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	98
9.5	96
4.76	91
2.38	--
2.00	84
1.19	--
0.841	78
0.595	--
0.42	73
0.297	--
0.177	--
0.149	68
0.074	64

M.C. (%): 18

M.C. (%): 23

M.C. (%): 26

M.C. (%): 21

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 3  
 % SAND: 13  
 % FINES: 84

% GRAVEL: 0  
 % SAND: 5  
 % FINES: 95

% GRAVEL: 0  
 % SAND: 6  
 % FINES: 94

% GRAVEL: 9  
 % SAND: 27  
 % FINES: 64

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SANDY SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 114-270  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1958+975 O/S 12M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.23

FIELD NO: 596  
 LAB NO: 2681  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 597  
 LAB NO: 2682  
 DEPTH: 2.7-2.9  
 TYPE: AUGER

FIELD NO: 598  
 LAB NO: 2683  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	98
1.19	--
0.841	96
0.595	--
0.42	95
0.297	--
0.177	--
0.149	93
0.074	91

M.C. (%): 37

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: *N.P.*

% GRAVEL: 0  
 % SAND: 9  
 % FINES: 91

CLASSIFICATION:  
 SILT (mh)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	98
0.297	--
0.177	--
0.149	97
0.074	95

M.C. (%): 40

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 0  
 % SAND: 5  
 % FINES: 95

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	99
0.074	97

M.C. (%): 33

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 3  
 % FINES: 97

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 114-271  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1959+125 O/S 4M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.23

FIELD NO: 599  
 LAB NO: 2684  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 600  
 LAB NO: 2685  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 601  
 LAB NO: 2686  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	99
0.074	95

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	99
1.19	--
0.841	98
0.595	--
0.42	98
0.297	--
0.177	--
0.149	97
0.074	95

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	95

M.C. (%): 24

M.C. (%): 24

M.C. (%): 31

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 5  
 % FINES: 95

% GRAVEL: 0  
 % SAND: 5  
 % FINES: 95

% GRAVEL: 0  
 % SAND: 5  
 % FINES: 95

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 114-272  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.24

FIELD NO: 602  
 LAB NO: 2687  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 603  
 LAB NO: 2688  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 604  
 LAB NO: 2689  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

FIELD NO: 605  
 LAB NO: 2690  
 DEPTH: 5.6-5.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	99
1.19	--
0.841	98
0.595	--
0.42	97
0.297	--
0.177	--
0.149	96
0.074	94

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	99
1.19	--
0.841	98
0.595	--
0.42	96
0.297	--
0.177	--
0.149	95
0.074	94

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	99
2.38	--
2.00	96
1.19	--
0.841	93
0.595	--
0.42	91
0.297	--
0.177	--
0.149	87
0.074	86

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	94
12.7	91
9.5	88
4.76	84
2.38	--
2.00	79
1.19	--
0.841	74
0.595	--
0.42	70
0.297	--
0.177	--
0.149	67
0.074	65

M.C. (%): 25

M.C. (%): 30

M.C. (%): 22

M.C. (%): 22

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 0  
 % SAND: 5  
 % FINES: 94

% GRAVEL: 0  
 % SAND: 6  
 % FINES: 94

% GRAVEL: 1  
 % SAND: 13  
 % FINES: 86

% GRAVEL: 16  
 % SAND: 20  
 % FINES: 65

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SANDY SILT WITH  
 GRAVEL (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 114-272  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.24

FIELD NO: 606  
 LAB NO: 2691  
 DEPTH: 7.8-8.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	96
9.5	96
4.76	92
2.38	--
2.00	81
1.19	--
0.841	72
0.595	--
0.42	64
0.297	--
0.177	--
0.149	55
0.074	51

M.C. (%): 18

LIMITS

LIQUID: 22.7  
 PLASTIC: 19.8  
 P.I.: 2.9

% GRAVEL: 8  
 % SAND: 42  
 % FINES: 51

CLASSIFICATION:  
 SANDY SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 114-273  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.24

FIELD NO: 607  
 LAB NO: 2693  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 608  
 LAB NO: 2693  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 609  
 LAB NO: 2694  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

FIELD NO: 610  
 LAB NO: 2695  
 DEPTH: 5.8-6.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	99
0.074	98

M.C. (%): 25

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 2  
 % FINES: 98

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	99
0.074	98

M.C. (%): 31

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 2  
 % FINES: 98

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	99
0.074	98

M.C. (%): 36

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 2  
 % FINES: 98

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	100
25.4	95
19.0	89
12.7	79
9.5	77
4.76	70
2.38	--
2.00	62
1.19	--
0.841	56
0.595	--
0.42	52
0.297	--
0.177	--
0.149	47
0.074	45

M.C. (%): 17

LIMITS  
 LIQUID: 22.4  
 PLASTIC: 20.5  
 P.I.: 1.9

% GRAVEL: 30  
 % SAND: 25  
 % FINES: 45

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 114-273  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.24

FIELD NO: 611  
 LAB NO: 2696  
 DEPTH: 8.8-9.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	98
12.7	95
9.5	93
4.76	87
2.38	--
2.00	79
1.19	--
0.841	71
0.595	--
0.42	66
0.297	--
0.177	--
0.149	60
0.074	57

M.C. (%): 20

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 13  
 % SAND: 30  
 % FINES: 57

CLASSIFICATION:  
 SANDY SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 114-274  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1958+905 O/S 15M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.24

FIELD NO: 612  
 LAB NO: 2697  
 DEPTH: 1.0-1.2  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 613  
 LAB NO: 2698  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 614  
 LAB NO: 2699  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

FIELD NO: 615  
 LAB NO: 2700  
 DEPTH: 5.8-6.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	99
1.19	--
0.841	98
0.595	--
0.42	97
0.297	--
0.177	--
0.149	93
0.074	91

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	99
1.19	--
0.841	99
0.595	--
0.42	98
0.297	--
0.177	--
0.149	97
0.074	96

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	99
0.074	98

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	100
0.074	99

M.C. (%): 72

M.C. (%): 36

M.C. (%): 37

M.C. (%): 50

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 0  
 % SAND: 9  
 % FINES: 91

% GRAVEL: 0  
 % SAND: 4  
 % FINES: 96

% GRAVEL: 0  
 % SAND: 2  
 % FINES: 98

% GRAVEL: 0  
 % SAND: 1  
 % FINES: 99

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 114-274  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1958+905 O/S 15M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.24

FIELD NO: 616  
 LAB NO: 2701  
 DEPTH: 8.8-9.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	99
0.074	98

M.C. (%): 44

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 2  
 % FINES: 98

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 114-275  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1959+050 O/S 12M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.24

FIELD NO: 617	FIELD NO: 618	FIELD NO: 619	FIELD NO: 620
LAB NO: 2702	LAB NO: 2703	LAB NO: 2704	LAB NO: 2705
DEPTH: 1.0-1.2	DEPTH: 2.6-2.8	DEPTH: 4.2-4.4	DEPTH: 5.6-5.8
TYPE: AUGER	TYPE: AUGER	TYPE: AUGER	TYPE: AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
101.6	--	101.6	--	101.6	--	101.6	--
76.2	--	76.2	--	76.2	--	76.2	--
50.8	--	50.8	--	50.8	--	50.8	--
38.1	--	38.1	--	38.1	--	38.1	--
25.4	--	25.4	--	25.4	--	25.4	--
19.0	--	19.0	--	19.0	--	19.0	--
12.7	100	12.7	--	12.7	--	12.7	--
9.5	100	9.5	--	9.5	100	9.5	--
4.76	100	4.76	100	4.76	100	4.76	--
2.38	--	2.38	--	2.38	--	2.38	--
2.00	100	2.00	99	2.00	100	2.00	100
1.19	--	1.19	--	1.19	--	1.19	--
0.841	100	0.841	99	0.841	99	0.841	100
0.595	--	0.595	--	0.595	--	0.595	--
0.42	99	0.42	98	0.42	98	0.42	100
0.297	--	0.297	--	0.297	--	0.297	--
0.177	--	0.177	--	0.177	--	0.177	--
0.149	99	0.149	96	0.149	96	0.149	99
0.074	98	0.074	94	0.074	94	0.074	99

M.C. (%): 26 M.C. (%): 29 M.C. (%): 35 M.C. (%): 35

LIMITS		LIMITS		LIMITS		LIMITS	
LIQUID:	--	LIQUID:	--	LIQUID:	--	LIQUID:	--
PLASTIC:	--	PLASTIC:	--	PLASTIC:	--	PLASTIC:	--
P.I.:	N.P.	P.I.:	N.P.	P.I.:	TRACE	P.I.:	N.P.

% GRAVEL:	0	% GRAVEL:	0	% GRAVEL:	0	% GRAVEL:	0
% SAND:	2	% SAND:	6	% SAND:	6	% SAND:	1
% FINES:	98	% FINES:	94	% FINES:	94	% FINES:	99

CLASSIFICATION: SILT (ML) CLASSIFICATION: SILT (ML) CLASSIFICATION: SILT (ML) CLASSIFICATION: SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 114-275  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1959+050 O/S 12M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.24

FIELD NO: 621  
 LAB NO: 2706  
 DEPTH: 8.6-8.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	100
0.074	98

M.C. (%): 37

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 2  
 % FINES: 98

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 114-276  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1959+200 O/S 6M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.24

FIELD NO: 622  
 LAB NO: 2707  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 623  
 LAB NO: 2708  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 624  
 LAB NO: 2709  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	99
1.19	--
0.841	98
0.595	--
0.42	96
0.297	--
0.177	--
0.149	93
0.074	89

M.C. (%): 45

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 0  
 % SAND: 11  
 % FINES: 89

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	96

M.C. (%): 38

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 0  
 % SAND: 4  
 % FINES: 96

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	98
2.38	--
2.00	95
1.19	--
0.841	92
0.595	--
0.42	90
0.297	--
0.177	--
0.149	85
0.074	82

M.C. (%): 31

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 2  
 % SAND: 16  
 % FINES: 82

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 114-277  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1959+450 O/S 10M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.24

FIELD NO: 625  
 LAB NO: 2710  
 DEPTH: 1.0-1.2  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 626  
 LAB NO: 2711  
 DEPTH: 2.6-2.8  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 627  
 LAB NO: 2712  
 DEPTH: 4.2-4.4  
 TYPE: AUGER  
 ORGANIC

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	98
0.297	--
0.177	--
0.149	95
0.074	88

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	96

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	97
0.297	--
0.177	--
0.149	96
0.074	93

M.C. (%): 247

M.C. (%): 40

M.C. (%): 34

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 11  
 % FINES: 88

% GRAVEL: 0  
 % SAND: 4  
 % FINES: 96

% GRAVEL: 0  
 % SAND: 7  
 % FINES: 93

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 114-278  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1959+565 O/S 10M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.24

FIELD NO: 628  
 LAB NO: 2713  
 DEPTH: 1.2-1.4  
 TYPE: AUGER  
 ORGANICS

FIELD NO: 629  
 LAB NO: 2714  
 DEPTH: 2.8-3.0  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 630  
 LAB NO: 2715  
 DEPTH: 4.0-4.2  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	98
1.19	--
0.841	95
0.595	--
0.42	91
0.297	--
0.177	--
0.149	83
0.074	79

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 660

M.C. (%): 122

M.C. (%): 66

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: 0  
 % SAND: 21  
 % FINES: 79

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 114-279  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1959+770 O/S 12M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.24

FIELD NO: 631  
 LAB NO: 2716  
 DEPTH: 5.8-6.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 64

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 114-280  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1959+975 O/S 12M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.24

FIELD NO: 632  
 LAB NO: 2717  
 DEPTH: 1.0-1.2  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 633  
 LAB NO: 2718  
 DEPTH: 4.2-4.4  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 634  
 LAB NO: 2719  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	97

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	97
0.595	--
0.42	94
0.297	--
0.177	--
0.149	88
0.074	85

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 38

M.C. (%): 102

M.C. (%): 72

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 3  
 % FINES: 97

% GRAVEL: 0  
 % SAND: 15  
 % FINES: 85

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 114-281  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1960+175 O/S 8M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.24

FIELD NO: 635  
 LAB NO: 2720  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 636  
 LAB NO: 2721  
 DEPTH: 2.6-2.8  
 TYPE: AUGER  
 ORGANICS

FIELD NO: 637  
 LAB NO: 2722  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	97
0.297	--
0.177	--
0.149	94
0.074	86

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	98
0.595	--
0.42	95
0.297	--
0.177	--
0.149	91
0.074	86

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	99
0.074	89

M.C. (%): 51

M.C. (%): 83

M.C. (%): 29

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 14  
 % FINES: 86

% GRAVEL: 0  
 % SAND: 14  
 % FINES: 86

% GRAVEL: 0  
 % SAND: 11  
 % FINES: 89

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 114-282  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1960+380 O/S 15M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.24

FIELD NO: 638  
 LAB NO: 2723  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 639  
 LAB NO: 2724  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 640  
 LAB NO: 2725  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	100
0.074	99

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 56

M.C. (%): 59

M.C. (%): 57

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 1  
 % FINES: 99

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 114-283  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1960+550 O/S 12M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.24

FIELD NO: 641  
 LAB NO: 2726  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 642  
 LAB NO: 2727  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 643  
 LAB NO: 2728  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	97
0.297	--
0.177	--
0.149	95
0.074	89

M.C. (%): 45

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 11  
 % FINES: 89

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	97
0.074	93

M.C. (%): 38

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 7  
 % FINES: 93

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 108

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

**PROJECT NUMBER:** SEGMENT 18      **HOLE NUMBER:** 114-284  
**CLIENT:** SHAKWAK PROJECT  
**PROJECT NAME:** ALASKA HIGHWAY RECONSTRUCTION  
**PROJECT LOCATION:** BEAVER CREEK  
**DRILL UNIT:** 17-174  
**HOLE LOCATION:** 1960+700 O/S 4M RT.  
**LOGGED BY:** JG      **DATE COMPLETED:** 90.10.24

**FIELD NO:** 644  
**LAB NO:** 2729  
**DEPTH:** 1.2-1.4  
**TYPE:** AUGER  
 ORGANIC

**FIELD NO:** 645  
**LAB NO:** 2730  
**DEPTH:** 2.8-3.0  
**TYPE:** AUGER  
 ORGANIC

**FIELD NO:** 646  
**LAB NO:** 2731  
**DEPTH:** 4.2-4.4  
**TYPE:** AUGER

**FIELD NO:** 647  
**LAB NO:** 2732  
**DEPTH:** 5.6-5.8  
**TYPE:** AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	97
0.297	--
0.177	--
0.149	95
0.074	88

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	99
0.074	97

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	99
0.074	88

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	99
0.074	79

**M.C. (%):** 49

**M.C. (%):** 44

**M.C. (%):** 26

**M.C. (%):** 26

**LIMITS**  
**LIQUID:** --  
**PLASTIC:** --  
**P.I.:** N.P.

**LIMITS**  
**LIQUID:** --  
**PLASTIC:** --  
**P.I.:** N.P.

**LIMITS**  
**LIQUID:** --  
**PLASTIC:** --  
**P.I.:** N.P.

**LIMITS**  
**LIQUID:** --  
**PLASTIC:** --  
**P.I.:** N.P.

**% GRAVEL:** 0  
**% SAND:** 12  
**% FINES:** 88

**% GRAVEL:** 0  
**% SAND:** 3  
**% FINES:** 97

**% GRAVEL:** 0  
**% SAND:** 12  
**% FINES:** 88

**% GRAVEL:** 0  
**% SAND:** 21  
**% FINES:** 79

**CLASSIFICATION:**  
 SILT (ML)

**CLASSIFICATION:**  
 SILT (ML)

**CLASSIFICATION:**  
 SILT (ML)

**CLASSIFICATION:**  
 SILT WITH SAND (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 114-284  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1960+700 O/S 4M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.24

FIELD NO: 648  
 LAB NO: 2733  
 DEPTH: 8.6-8.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	93

M.C. (%): 26

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 7  
 % FINES: 93

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 115-285  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1960+825 O/S 3M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.25

FIELD NO: 649  
 LAB NO: 2734  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 650  
 LAB NO: 2735  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 651  
 LAB NO: 2736  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

FIELD NO: 652  
 LAB NO: 2737  
 DEPTH: 5.6-5.8  
 TYPE: AUGER  
 ORGANIC

SIEVE SIZE	PERCENT PASSING
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SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	95
0.074	89

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	87

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	99
1.19	--
0.841	99
0.595	--
0.42	98
0.297	--
0.177	--
0.149	98
0.074	96

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	96

M.C. (%): 58

M.C. (%): 36

M.C. (%): 37

M.C. (%): 46

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 11  
 % FINES: 89

% GRAVEL: 0  
 % SAND: 13  
 % FINES: 87

% GRAVEL: 0  
 % SAND: 3  
 % FINES: 96

% GRAVEL: 0  
 % SAND: 3  
 % FINES: 96

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 115-285  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1960+825 O/S 3M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.25

FIELD NO: 653  
 LAB NO: 2738  
 DEPTH: 8.6-8.8  
 TYPE: AUGER  
 ORGANIC

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	99
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	97

M.C. (%): 82

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 3  
 % FINES: 97

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 115-286  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1960+975 O/S 2M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.25

FIELD NO: 654  
 LAB NO: 2739  
 DEPTH: 1.0-1.2  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 655  
 LAB NO: 2740  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 656  
 LAB NO: 2741  
 DEPTH: 4.0-4.2  
 TYPE: AUGER  
 ORGANIC

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	95

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	99
0.074	99

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	99
0.074	97

M.C. (%): 63

M.C. (%): 33

M.C. (%): 44

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 5  
 % FINES: 95

% GRAVEL: 0  
 % SAND: 1  
 % FINES: 99

% GRAVEL: 0  
 % SAND: 3  
 % FINES: 97

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 115-287  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1961+125 O/S 3M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.25

FIELD NO: 657  
 LAB NO: 2766  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 658  
 LAB NO: 2742  
 DEPTH: 2.4-2.6  
 TYPE: AUGER

FIELD NO: 659  
 LAB NO: 2743  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
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SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	99
0.074	96

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	98
0.595	--
0.42	97
0.297	--
0.177	--
0.149	96
0.074	93

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	98
0.297	--
0.177	--
0.149	95
0.074	91

M.C. (%): 45

M.C. (%): 35

M.C. (%): 59

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 4  
 % FINES: 96

% GRAVEL: 0  
 % SAND: 7  
 % FINES: 93

% GRAVEL: 0  
 % SAND: 9  
 % FINES: 91

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 115-288  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1961+275 O/S 3M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.25

FIELD NO: 660  
 LAB NO: 2744  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 661  
 LAB NO: 2745  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 662  
 LAB NO: 2746  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	95

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	97
12.7	93
9.5	83
4.76	68
2.38	--
2.00	52
1.19	--
0.841	41
0.595	--
0.42	36
0.297	--
0.177	--
0.149	31
0.074	28

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	100
9.5	99
4.76	99
2.38	--
2.00	98
1.19	--
0.841	97
0.595	--
0.42	97
0.297	--
0.177	--
0.149	96
0.074	94

M.C. (%): 51

M.C. (%): 15

M.C. (%): 41

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 5  
 % FINES: 95

% GRAVEL: 32  
 % SAND: 40  
 % FINES: 28

% GRAVEL: 1  
 % SAND: 5  
 % FINES: 94

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 115-289  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1961+425 O/S 2M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.25

FIELD NO: 663  
 LAB NO: 2747  
 DEPTH: 1.2-1.4  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 664  
 LAB NO: 2748  
 DEPTH: 2.6-2.8  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 665  
 LAB NO: 2449  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	98
0.297	--
0.177	--
0.149	96
0.074	93

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	99
1.19	--
0.841	99
0.595	--
0.42	97
0.297	--
0.177	--
0.149	95
0.074	92

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 53

M.C. (%): 70

M.C. (%): 64

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 7  
 % FINES: 93

% GRAVEL: 0  
 % SAND: 7  
 % FINES: 92

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 115-290  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.25

FIELD NO: 666  
 LAB NO: 2750  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 667  
 LAB NO: 2751  
 DEPTH: 5.4-5.6  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%) : 3

M.C. (%) : 3

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 115-291  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.25

FIELD NO: 668  
 LAB NO: 2752  
 DEPTH: 0.9-1.1  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 4

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 115-292  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.25

FIELD NO: 669  
 LAB NO: 2753  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 670  
 LAB NO: 2754  
 DEPTH: 1.8-2.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 4

M.C. (%): 2

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 115-293  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.25

FIELD NO: 671  
 LAB NO: 2755  
 DEPTH: 0.6-0.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 4

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 115-294  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1961+575  
 LOGGED BY: JG DATE COMPLETED: 90.10.25

FIELD NO: 672  
 LAB NO: 2756  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 673  
 LAB NO: 2757  
 DEPTH: 2.0-2.2  
 TYPE: AUGER

FIELD NO: 674  
 LAB NO: 2758  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 675  
 LAB NO: 2759  
 DEPTH: 4.2-4.4  
 TYPE: AUGER  
 ORGANIC

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	97
2.38	--
2.00	92
1.19	--
0.841	88
0.595	--
0.42	86
0.297	--
0.177	--
0.149	84
0.074	81

M.C. (%): 21

LIMITS  
 LIQUID: 27.8  
 PLASTIC: 24.1  
 P.I.: 3.7

% GRAVEL: 3  
 % SAND: 16  
 % FINES: 81

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	98
12.7	98
9.5	96
4.76	93
2.38	--
2.00	89
1.19	--
0.841	85
0.595	--
0.42	83
0.297	--
0.177	--
0.149	80
0.074	75

M.C. (%): 19

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 7  
 % SAND: 18  
 % FINES: 75

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	99
1.19	--
0.841	97
0.595	--
0.42	96
0.297	--
0.177	--
0.149	94
0.074	91

M.C. (%): 29

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 0  
 % SAND: 9  
 % FINES: 91

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	100
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	99
0.074	98

M.C. (%): 25

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 2  
 % FINES: 98

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 115-295  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1961+725  
 LOGGED BY: JG DATE COMPLETED: 90.10.25

FIELD NO: 676  
 LAB NO: 2760  
 DEPTH: 1.0-1.2  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 677  
 LAB NO: 2761  
 DEPTH: 2.8-3.0  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 678  
 LAB NO: 2762  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	89

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	98
0.297	--
0.177	--
0.149	96
0.074	92

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	97

M.C. (%): 22

M.C. (%): 45

M.C. (%): 29

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

% GRAVEL: 0  
 % SAND: 11  
 % FINES: 89

% GRAVEL: 0  
 % SAND: 8  
 % FINES: 92

% GRAVEL: 0  
 % SAND: 3  
 % FINES: 97

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 115-296  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1961+800 O/S 3M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.25

FIELD NO: 679  
 LAB NO: 2763  
 DEPTH: 1.2-1.4  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 680  
 LAB NO: 2764  
 DEPTH: 2.8-3.0  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 681  
 LAB NO: 2765  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	98
0.297	--
0.177	--
0.149	96
0.074	93

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	95

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 42

M.C. (%): 51

M.C. (%): 43

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 7  
 % FINES: 93

% GRAVEL: 0  
 % SAND: 5  
 % FINES: 95

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 115-297  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1961+825 O/S 25M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.29

FIELD NO: 682  
 LAB NO: 2767  
 DEPTH: 1.0-1.2  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 683  
 LAB NO: 2768  
 DEPTH: 2.6-2.8  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 684  
 LAB NO: 2769  
 DEPTH: 4.2-4.4  
 TYPE: AUGER  
 ORGANIC

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	97

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	98

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	99
1.19	--
0.841	98
0.595	--
0.42	97
0.297	--
0.177	--
0.149	94
0.074	92

M.C. (%): 61

M.C. (%): 111

M.C. (%): 139

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 3  
 % FINES: 97

% GRAVEL: 0  
 % SAND: 2  
 % FINES: 98

% GRAVEL: 0  
 % SAND: 8  
 % FINES: 92

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 115-298  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1961+985 O/S 17M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.29

FIELD NO: 685  
 LAB NO: 2770  
 DEPTH: 1.2-1.4  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 686  
 LAB NO: 2771  
 DEPTH: 2.6-2.8  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 687  
 LAB NO: 2772  
 DEPTH: 4.0-4.2  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	97

M.C. (%): 53

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 3  
 % FINES: 97

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	93
0.074	91

M.C. (%): 36

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 9  
 % FINES: 91

CLASSIFICATION:  
 SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 59

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 115-299  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1962+135 O/S 17M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.29

FIELD NO: 687  
 LAB NO: 2773  
 DEPTH: 4.0-4.2  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 688  
 LAB NO: 2774  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 689  
 LAB NO: 2775  
 DEPTH: 4.0-4.2  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	99
1.19	--
0.841	99
0.595	--
0.42	98
0.297	--
0.177	--
0.149	96
0.074	92

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 56

M.C. (%): 94

M.C. (%): 31

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 7  
 % FINES: 92

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 115-300  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1962+300 0/5 57m RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.29

FIELD NO: 690  
 LAB NO: 2776  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 691  
 LAB NO: 2777  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 4

M.C. (%): 3

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 115-301  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1962+470 O/S 42M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.29

FIELD NO: 692  
 LAB NO: 2778  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 693  
 LAB NO: 2779  
 DEPTH: 3.0-3.2  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	100
19.0	92
12.7	84
9.5	77
4.76	62
2.38	--
2.00	50
1.19	--
0.841	42
0.595	--
0.42	37
0.297	--
0.177	--
0.149	30
0.074	25

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 6

M.C. (%): 8

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 38  
 % SAND: 38  
 % FINES: 25

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 115-302  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1962+640 O/S 65M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.29

FIELD NO: 694  
 LAB NO: 2780  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	100
25.4	81
19.0	64
12.7	55
9.5	47
4.76	36
2.38	--
2.00	29
1.19	--
0.841	23
0.595	--
0.42	19
0.297	--
0.177	--
0.149	16
0.074	13

M.C. (%): 5

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 64  
 % SAND: 24  
 % FINES: 13

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 115-304  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1962+775 O/S 45M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.29

FIELD NO: 695  
 LAB NO: 2782  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 696  
 LAB NO: 2783  
 DEPTH: 3.2-3.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 5

M.C. (%): 7

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 115-305  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1962+940 O/S 15M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.29

FIELD NO: 697  
 LAB NO: 2784  
 DEPTH: 1.2-1.4  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 698  
 LAB NO: 2785  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 699  
 LAB NO: 2786  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	99
0.074	97

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 52

M.C. (%): 79

M.C. (%): 76

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 3  
 % FINES: 97

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 115-306  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1963+112 O/S 15M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.29

FIELD NO: 700  
 LAB NO: 2787  
 DEPTH: 1.2-1.4  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 701  
 LAB NO: 2788  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 702  
 LAB NO: 2789  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	99
1.19	--
0.841	99
0.595	--
0.42	98
0.297	--
0.177	--
0.149	96
0.074	94

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 81

M.C. (%): 85

M.C. (%): 23

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 6  
 % FINES: 94

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 116-307  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1963+325 O/S 15M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.-10.29

FIELD NO: 703  
 LAB NO: 2790  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 704  
 LAB NO: 2791  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 705  
 LAB NO: 2792  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	92

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	96
0.074	80

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 56

M.C. (%): 28

M.C. (%): 26

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 8  
 % FINES: 92

% GRAVEL: 0  
 % SAND: 20  
 % FINES: 80

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 116-308  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1963+490 O/S 12M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.29

FIELD NO: 706  
 LAB NO: 2793  
 DEPTH: 1.0-1.2  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 707  
 LAB NO: 2794  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 708  
 LAB NO: 2795  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	93

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	99
0.074	77

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 30

M.C. (%): 22

M.C. (%): 21

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 7  
 % FINES: 93

% GRAVEL: 0  
 % SAND: 23  
 % FINES: 77

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 116-309  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.29

FIELD NO: 709  
 LAB NO: 2796  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 710  
 LAB NO: 2797  
 DEPTH: 2.7-2.9  
 TYPE: AUGER

FIELD NO: 711  
 LAB NO: 2798  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

FIELD NO: 712  
 LAB NO: 2799  
 DEPTH: 5.6-5.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	99
0.074	76

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	100
12.7	98
9.5	97
4.76	95
2.38	--
2.00	93
1.19	--
0.841	90
0.595	--
0.42	89
0.297	--
0.177	--
0.149	88
0.074	81

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	99
1.19	--
0.841	98
0.595	--
0.42	98
0.297	--
0.177	--
0.149	96
0.074	83

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	100
25.4	93
19.0	93
12.7	91
9.5	88
4.76	81
2.38	--
2.00	70
1.19	--
0.841	62
0.595	--
0.42	57
0.297	--
0.177	--
0.149	52
0.074	45

M.C. (%): 16

M.C. (%): 14

M.C. (%): 25

M.C. (%): 29

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: 26.1  
 PLASTIC: 23.2  
 P.I.: 2.9

% GRAVEL: 0  
 % SAND: 24  
 % FINES: 76

% GRAVEL: 5  
 % SAND: 15  
 % FINES: 81

% GRAVEL: 0  
 % SAND: 16  
 % FINES: 83

% GRAVEL: 19  
 % SAND: 36  
 % FINES: 45

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 116-309  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.29

FIELD NO: 7123  
 LAB NO: 2800  
 DEPTH: 8.6-8.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	---
76.2	---
50.8	---
38.1	---
25.4	---
19.0	---
12.7	---
9.5	---
4.76	---
2.38	---
2.00	---
1.19	---
0.841	---
0.595	---
0.42	---
0.297	---
0.177	---
0.149	---
0.074	---

M.C. (%): 18

LIMITS

LIQUID: ---  
 PLASTIC: ---  
 P.I.: ---

% GRAVEL: ---  
 % SAND: ---  
 % FINES: ---

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 116-310  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.29

FIELD NO: 714  
 LAB NO: 2801  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 715  
 LAB NO: 2802  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 4

M.C. (%): 6

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 116-311  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.29

FIELD NO: 716  
 LAB NO: 2803  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 717  
 LAB NO: 2804  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 718  
 LAB NO: 2805  
 DEPTH: 7.8-8.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 3

M.C. (%): 3

M.C. (%): 3

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 116-312  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: JG DATE COMPLETED: 90.10.29

FIELD NO: 719  
 LAB NO: 2806  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 7

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 116-313  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1963+625 O/S 25M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.29

FIELD NO: 720  
 LAB NO: 2807  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 721  
 LAB NO: 2808  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 722  
 LAB NO: 2809  
 DEPTH: 5.6-5.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%) : 4

M.C. (%) : 4

M.C. (%) : 4

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 116-314  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1963+840 O/S 7M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.29

FIELD NO: 722  
 LAB NO: 2810  
 DEPTH: 1.2-1.4  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 723  
 LAB NO: 2811  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 724  
 LAB NO: 2812  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	99
0.074	86

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	98
0.074	75

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 28

M.C. (%): 27

M.C. (%): 27

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS

LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 14  
 % FINES: 86

% GRAVEL: 0  
 % SAND: 25  
 % FINES: 75

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 116-315  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1964+135 O/S 7M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.29

FIELD NO: 725  
 LAB NO: 2813  
 DEPTH: 1.2-1.4  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 726  
 LAB NO: 2814  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 727  
 LAB NO: 2815  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	98
0.074	80

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 30

M.C. (%): 53

M.C. (%): 36

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 20  
 % FINES: 80

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 116-316  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1964+458 O/S 7M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.30

FIELD NO: 728  
 LAB NO: 2816  
 DEPTH: 1.2-1.4  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 729  
 LAB NO: 2817  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 730  
 LAB NO: 2818  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	99
0.074	90

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 28

M.C. (%): 40

M.C. (%): 52

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 10  
 % FINES: 90

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 116-317  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1964+780 O/S 8M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.30

FIELD NO: 731  
 LAB NO: 2819  
 DEPTH: 1.2-1.4  
 TYPE: AUGER  
 ORGANICS

FIELD NO: 732  
 LAB NO: 2820  
 DEPTH: 4.0-4.2  
 TYPE: AUGER

FIELD NO: 733  
 LAB NO: 2821  
 DEPTH: 4.0-4.2  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	99
0.074	98

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 145

M.C. (%): 228

M.C. (%): 30

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 2  
 % FINES: 98

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 116-318  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1965+058 O/S 9M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.30

FIELD NO: 734  
 LAB NO: 2822  
 DEPTH: 1.2-1.4  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 735  
 LAB NO: 2823  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 736  
 LAB NO: 2824  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	99
0.074	78

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 24

M.C. (%): 26

M.C. (%): 38

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 22  
 % FINES: 78

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 116-319  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1965+350 O/S 22M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.30

FIELD NO: 737  
 LAB NO: 2825  
 DEPTH: 1.2-1.4  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 738  
 LAB NO: 2826  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 739  
 LAB NO: 2827  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	91
1.19	--
0.841	84
0.595	--
0.42	80
0.297	--
0.177	--
0.149	76
0.074	73

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 279

M.C. (%): 38

M.C. (%): 73

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 27  
 % FINES: 73

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 116-320  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1965+350 O/S 4M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.30

FIELD NO: 740  
 LAB NO: 2828  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 741  
 LAB NO: 2829  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 742  
 LAB NO: 2830  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	96

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 107

M.C. (%): 51

M.C. (%): 52

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 4  
 % FINES: 96

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 116-321  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1965+590 O/S 14M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.30

FIELD NO: 743  
 LAB NO: 2831  
 DEPTH: 1.0-1.2  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 744  
 LAB NO: 2832  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 745  
 LAB NO: 2833  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	99
1.19	--
0.841	97
0.595	--
0.42	96
0.297	--
0.177	--
0.149	94
0.074	92

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 142

M.C. (%): 72

M.C. (%): 80

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 8  
 % FINES: 92

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 116-322  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1965+590 O/S 45M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.30

FIELD NO: 746  
 LAB NO: 2834  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 747  
 LAB NO: 2835  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 748  
 LAB NO: 2836  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	99
1.19	--
0.841	96
0.595	--
0.42	94
0.297	--
0.177	--
0.149	91
0.074	88

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 121

M.C. (%): 43

M.C. (%): 51

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 12  
 % FINES: 88

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 116-323  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1965+350 O/S 18M LT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.30

FIELD NO: 749  
 LAB NO: 2837  
 DEPTH: 1.2-1.4  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 750  
 LAB NO: 2838  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 751  
 LAB NO: 2839  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	96
1.19	--
0.841	88
0.595	--
0.42	79
0.297	--
0.177	--
0.149	64
0.074	58

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	100
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	98
0.297	--
0.177	--
0.149	96
0.074	92

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 586

M.C. (%): 54

M.C. (%): 39

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 42  
 % FINES: 58

% GRAVEL: 0  
 % SAND: 8  
 % FINES: 92

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SANDY SILT (ML)

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 116-324  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1965+200 O/S 34M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.30

FIELD NO: 752  
 LAB NO: 2840  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 753  
 LAB NO: 2841  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 754  
 LAB NO: 2842  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	98
1.19	--
0.841	91
0.595	--
0.42	87
0.297	--
0.177	--
0.149	81
0.074	78

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	99
1.19	--
0.841	98
0.595	--
0.42	97
0.297	--
0.177	--
0.149	95
0.074	80

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 262

M.C. (%): 31

M.C. (%): 27

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 22  
 % FINES: 78

% GRAVEL: 0  
 % SAND: 20  
 % FINES: 80

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 116-325  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1965+058 O/S 17M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.30

FIELD NO: 755  
 LAB NO: 2843  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 756  
 LAB NO: 2844  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 757  
 LAB NO: 2845  
 DEPTH: 3.4-3.6  
 TYPE: AUGER

FIELD NO: 758  
 LAB NO: 2846  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	99
0.074	90

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%) : 33

M.C. (%) : 27

M.C. (%) : 25

M.C. (%) : 81

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 10  
 % FINES: 90

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 116-326  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1964+925 O/S 20M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.30

FIELD NO: 759  
 LAB NO: 2847  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 760  
 LAB NO: 2848  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 761  
 LAB NO: 2849  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	98
0.297	--
0.177	--
0.149	97
0.074	87

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 35

M.C. (%): 26

M.C. (%): 32

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 13  
 % FINES: 87

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 116-327  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1964+775 O/S 22M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.30

FIELD NO: 762  
 LAB NO: 2850  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 763  
 LAB NO: 2851  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 764  
 LAB NO: 2852  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	99
0.074	96

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 468

M.C. (%): 52

M.C. (%): 35

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: 0  
 % SAND: 4  
 % FINES: 96

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

CLASSIFICATION:  
SILT (ML)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 116-328  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1964+625 O/S 30M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.30

FIELD NO: 765  
 LAB NO: 2853  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 766  
 LAB NO: 2854  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 767  
 LAB NO: 2855  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	98
0.074	88

M.C. (%): 47

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 12  
 % FINES: 88

CLASSIFICATION: SILT (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 66

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 35

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 117-329  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1964+458 O/S 31M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.30

FIELD NO: 768  
 LAB NO: 2856  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 769  
 LAB NO: 2857  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 770  
 LAB NO: 2858  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	100
0.297	--
0.177	--
0.149	99
0.074	92

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 80

M.C. (%): 37

M.C. (%): 56

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: 0  
 % SAND: 8  
 % FINES: 92

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 117-330  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1964+300 O/S 37M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.30

FIELD NO: 771  
 LAB NO: 2859  
 DEPTH: 2.6-2.8  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 772  
 LAB NO: 2860  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	98
0.297	--
0.177	--
0.149	95
0.074	81

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 47

M.C. (%): 76

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 19  
 % FINES: 81

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 117-331  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1964+135 O/S 20M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.30

FIELD NO: 773  
 LAB NO: 2861  
 DEPTH: 1.2-1.4  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 774  
 LAB NO: 2862  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 775  
 LAB NO: 2863  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	97
0.297	--
0.177	--
0.149	93
0.074	86

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 93

M.C. (%): 26

M.C. (%): 33

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 14  
 % FINES: 86

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 117-332  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1964+000 O/S 20M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.30

FIELD NO: 776  
 LAB NO: 2864  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 777  
 LAB NO: 2865  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 778  
 LAB NO: 2866  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	100
2.38	--
2.00	100
1.19	--
0.841	99
0.595	--
0.42	98
0.297	--
0.177	--
0.149	95
0.074	71

M.C. (%): 24

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: N.P.

% GRAVEL: 0  
 % SAND: 29  
 % FINES: 71

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 24

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

SIEVE SIZE	PERCENT PASSING
------------	-----------------

101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 30

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:

PROJECT NUMBER: SEGMENT 18 HOLE NUMBER: 117-333  
 CLIENT: SHAKWAK PROJECT  
 PROJECT NAME: ALASKA HIGHWAY RECONSTRUCTION  
 PROJECT LOCATION: BEAVER CREEK  
 DRILL UNIT: 17-174  
 HOLE LOCATION: 1963+840 O/S 21M RT.  
 LOGGED BY: JG DATE COMPLETED: 90.10.30

FIELD NO: 779  
 LAB NO: 2867  
 DEPTH: 1.2-1.4  
 TYPE: AUGER

FIELD NO: 780  
 LAB NO: 2868  
 DEPTH: 2.6-2.8  
 TYPE: AUGER

FIELD NO: 781  
 LAB NO: 2869  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	100
1.19	--
0.841	100
0.595	--
0.42	99
0.297	--
0.177	--
0.149	99
0.074	94

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

SIEVE SIZE	PERCENT PASSING
101.6	--
76.2	--
50.8	--
38.1	--
25.4	--
19.0	--
12.7	--
9.5	--
4.76	--
2.38	--
2.00	--
1.19	--
0.841	--
0.595	--
0.42	--
0.297	--
0.177	--
0.149	--
0.074	--

M.C. (%): 49

M.C. (%): 28

M.C. (%): 28

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: TRACE

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

LIMITS  
 LIQUID: --  
 PLASTIC: --  
 P.I.: --

% GRAVEL: 0  
 % SAND: 6  
 % FINES: 94

% GRAVEL: --  
 % SAND: --  
 % FINES: --

% GRAVEL: --  
 % SAND: --  
 % FINES: --

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:

CLASSIFICATION:

HIGHWAY CONSTRUCTION

km 1949.6 to km 1966  
ALASKA HIGHWAY, Y.T.

VOLUME 3  
CENTRELINE TESTING

This Data Package prepared for project viewing:

Addendum 1 Km 1956+150 to Km 1956+250 and Km 1958+650 to  
Km 1959+250 cuts.

June, 1993

**ORIGINAL - DO NOT REMOVE FROM FILE**

Transportation Engineering Branch  
Geotechnical Services  
201 Range Road  
Whitehorse, Yukon  
Y1A 3A4

GR-01-160

GEOTECHNICAL INVESTIGATION  
HIGHWAY CONSTRUCTION  
km 1949.6 to km 1966, ALASKA HIGHWAY, Y.T.  
CENTRELINE, GRANULAR & BORROW TESTING

CONTENTS

INTRODUCTION

Investigation notes, classification methods and legends

VOLUME 3

CENTRELINE TESTING

Subsurface exploration and testing report sheets are provided.  
The reports for the centreline and backslope holes are arranged  
according to project location, starting at km 1956+150 and  
increasing to km 1956+250, and starting at km 1958+650 and  
increasing to km 1959+250.

**1993 testing**

TEST HOLES 01 to 24            shown with prefix 222- and 223-

GEOTECHNICAL INVESTIGATION  
HIGHWAY CONSTRUCTION  
km 1949.6 to km 1966, ALASKA HIGHWAY, Y.T.  
CENTRELINE, GRANULAR & BORROW TESTING

GEOTECHNICAL INVESTIGATION DATA

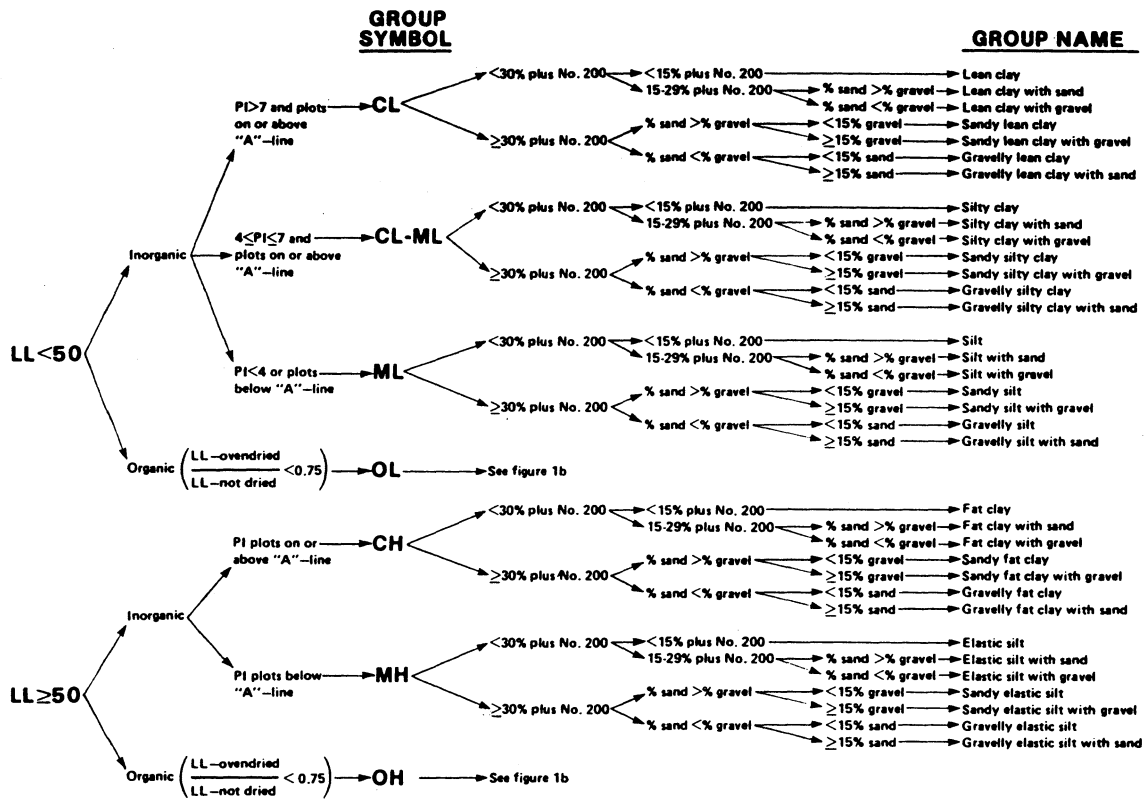
This geotechnical investigation data is provided to assist in the interpretation of soil conditions encountered within this project area. The data presented was prepared solely for Departmental designing and estimating purposes.

The description of material/soil description shown on the subsurface exploration and test reports is a textural description based on identification of retrieved material by the field drilling technician at the time of investigation. This description may be modified following laboratory testing and classification of selected samples. The system used is based on the ASTM standards for identification and classification of soils. Permafrost classifications and groundwater levels are indicated as detected at time of drilling, unless otherwise noted. Changes in moisture or frost conditions should be anticipated depending on the season, time lapse or amount of development work done since the date of investigation.

The sample identification and laboratory testing data is provided to give detailed physical properties of selected retrieved samples within the subsurface profile. These tests may be conducted on disturbed samples and may exhibit properties different from the native materials. The sample classification may also vary from the soil description due to variations within the sampled strata or because of changes resulting from the sampling method or excavation equipment used.

These descriptions are not intended to be conclusive as to the nature of any material encountered, or to conditions between or around the test borings/pits.

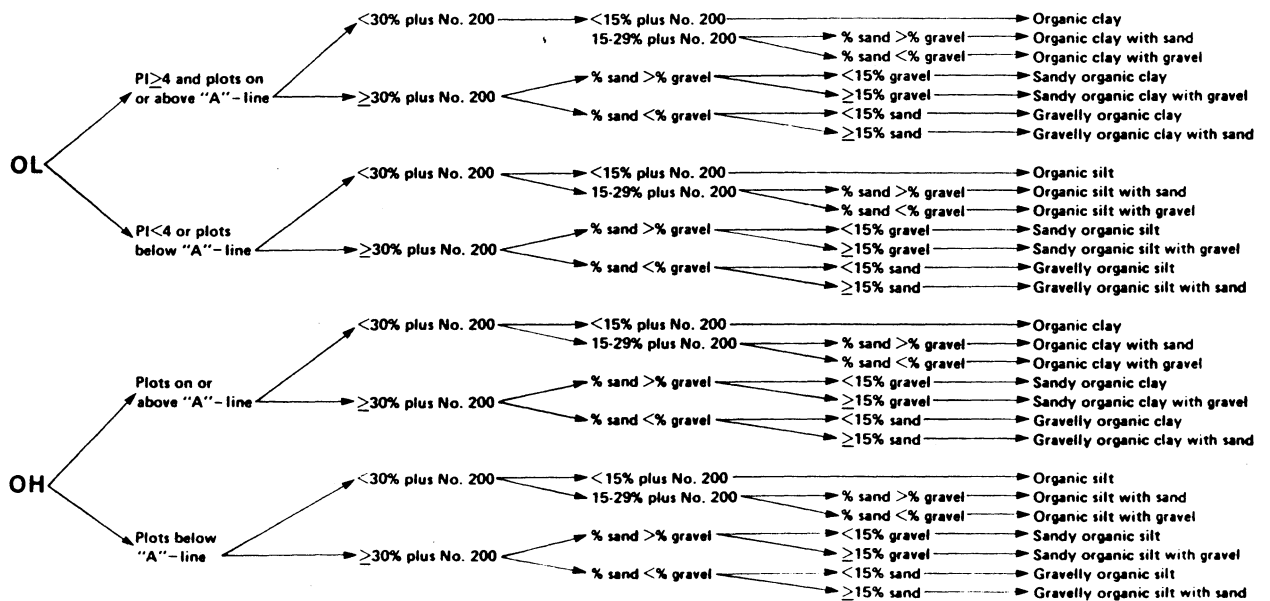
It is recommended that a site inspection, combined with consideration of the regional geology and climatic conditions be conducted. An evaluation of the investigation methods and development work done since the time of investigation should be done prior to interpreting the subsurface conditions for construction purposes.



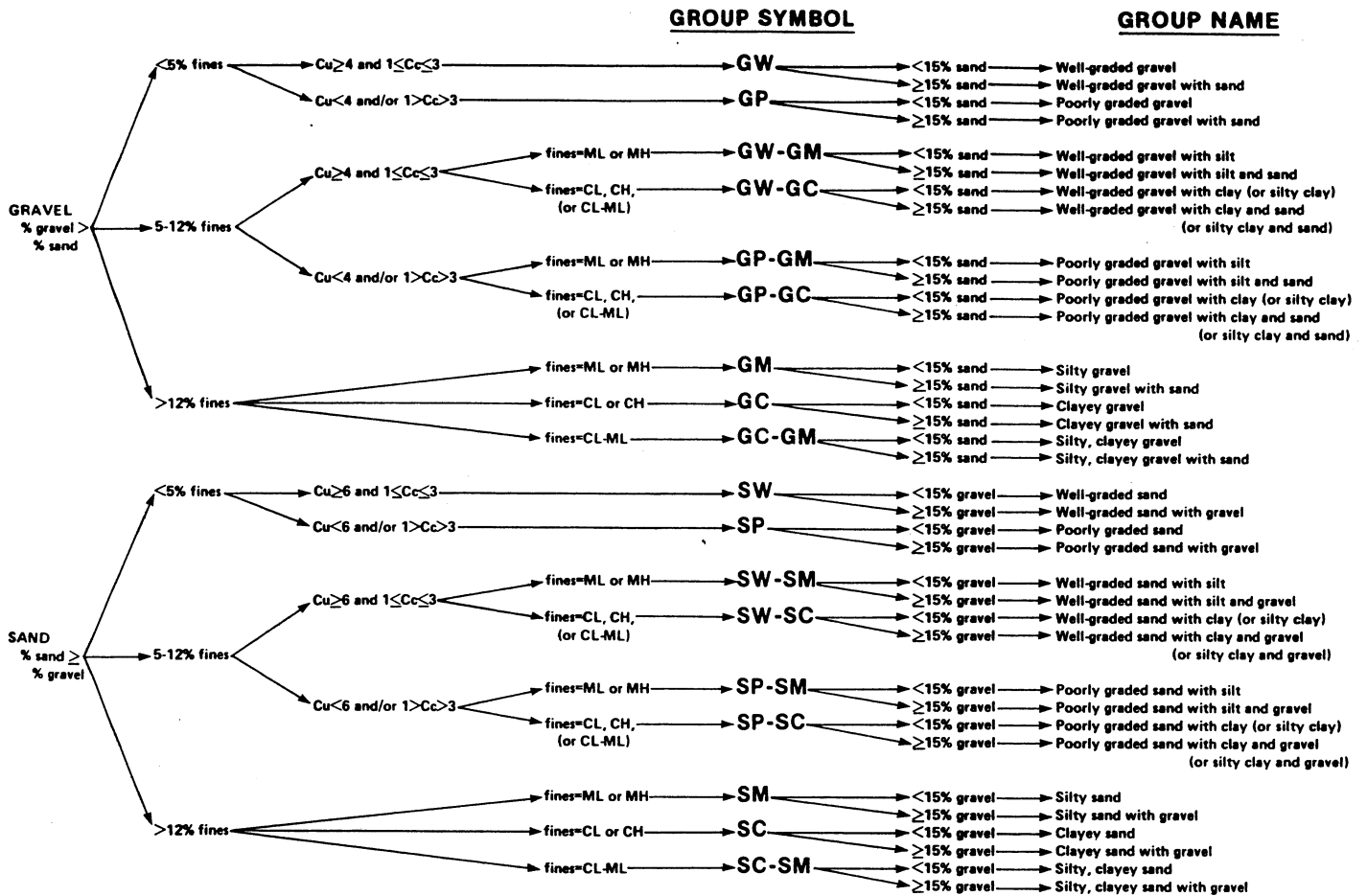
Flow chart for classifying fine-grained soil.

**GROUP SYMBOL**

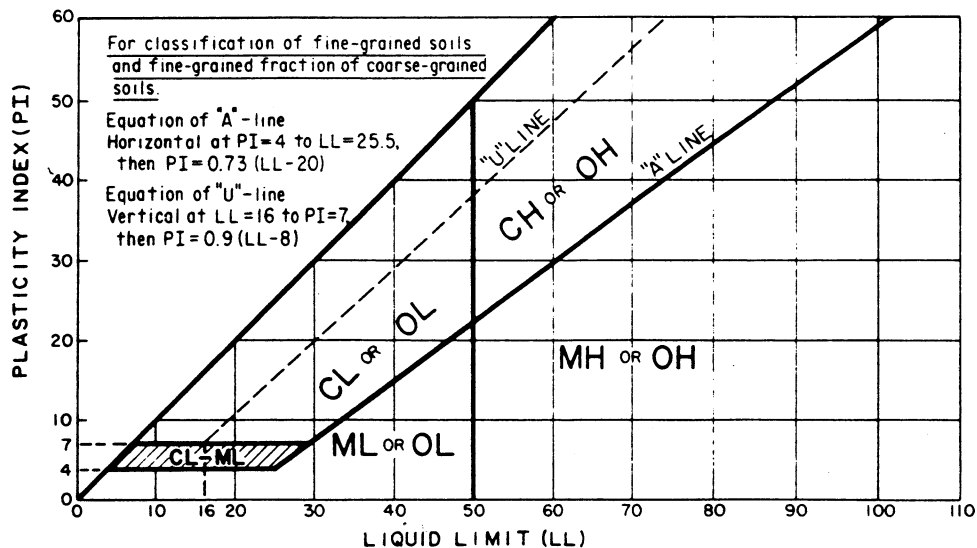
**GROUP NAME**



Flow chart for classifying organic soil.



Flow chart for classifying coarse-grained soil.



Plasticity chart.

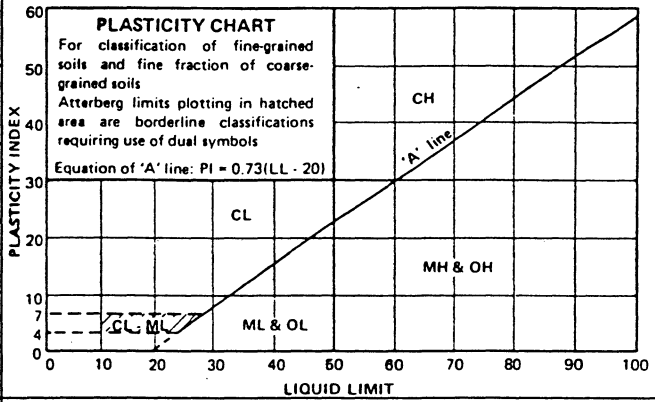
CRITERIA FOR ASSIGNING GROUP SYMBOLS AND GROUP NAMES USING LABORATORY TESTS <sup>a</sup>				SOIL CLASSIFICATION	
				GROUP SYMBOL	GROUP NAME <sup>b</sup>
COARSE-GRAINED SOILS more than 50% retained on No. 200 sieve	GRAVELS More than 50% of coarse fraction retained on No. 4 sieve	CLEAN GRAVELS Less than 5% fines <sup>c</sup>	$C_u \geq 4$ and $1 \leq C_c \leq 3$ <sup>e</sup>	GW	Well-graded gravel <sup>f</sup>
			$C_u < 4$ and/or $1 > C_c > 3$ <sup>e</sup>	GP	Poorly graded gravel <sup>f</sup>
		GRAVELS WITH FINES More than 12% fines <sup>c</sup>	Fines classify as ML or MH Fines classify as CL or CH	GM GC	Silty gravel <sup>f, g, h</sup> Clayey gravel <sup>f, g, h</sup>
	SANDS 50% or more of coarse fraction passes No. 4 sieve	CLEAN SANDS Less than 5% fines <sup>d</sup>	$C_u \geq 6$ and $1 \leq C_c \leq 3$ <sup>e</sup>	SW	Well-graded sand <sup>f</sup>
			$C_u < 6$ and/or $1 > C_c > 3$ <sup>e</sup>	SP	Poorly graded sand <sup>f</sup>
		SANDS WITH FINES More than 12% fines <sup>d</sup>	Fines classify as ML or MH Fines classify as CL or CH	SM SC	Silty sand <sup>g, h, i</sup> Clayey sand <sup>g, h, i</sup>
FINE-GRAINED SOILS 50% or more passed the No. 200 sieve	SILTS AND CLAYS Liquid limit less than 50%	inorganic	PI > 7 and plots on or above "A" line <sup>j</sup>	CL	Lean clay <sup>k, l, m</sup>
			PI < 4 or plots below "A" line <sup>j</sup>	ML	Silt <sup>k, l, m</sup>
		organic	Liquid limit - oven dried < 0.75 Liquid limit - not dried	OL	Organic clay <sup>k, l, m, n</sup> Organic silt <sup>k, l, m, o</sup>
	SILTS AND CLAYS Liquid limit 50% or more	inorganic	PI plots on or above "A" line	CH	Fat clay <sup>k, l, m</sup>
			PI plots below "A" line	MH	Elastic silt <sup>k, l, m</sup>
		organic	Liquid limit - oven dried < 0.75 Liquid limit - not dried	OH	Organic clay <sup>k, l, m, p</sup> Organic silt <sup>k, l, m, q</sup>
Highly organic soils	Primarily organic matter, dark in color, and organic odor		PT	Peat	

- Based on the material passing the 3-in (75-mm) sieve.
- If field sample contained cobbles and/or boulders, add "with cobbles and/or boulders" to group name.
- Gravels with 5 to 12% fines require dual symbols
  - GW-GM well graded gravel with silt
  - GW-GC well graded gravel with clay
  - GP-GM poorly graded gravel with silt
  - GP-GC poorly graded gravel with clay
- Sands with 5 to 12% fines require dual symbols
  - SW-SM well graded sand with silt
  - SW-SC well graded sand with clay
  - SP-SM poorly graded sand with silt
  - SP-SC poorly graded sand with clay
- $C_u = D_{60}/D_{10}$        $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$
- If soil contains  $\geq 15\%$  sand, add "with sand" to group name.
- If fines classify as CL-ML, use dual symbol GC-GM, SC-SM.
- If fines are organic, add "with organic fines" to group name.
- If soil contains  $> 15\%$  gravel, add "with gravel" to group name.
- If Atterberg limits plot in hatched area, soil is a CL-ML, silty clay.
- If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel" whichever is predominant.
- If soil contains  $> 30\%$  plus No. 200, predominantly sand, add "sandy" to group name.
- If soil contains  $\geq 30\%$  plus No. 200, predominantly gravel, add "gravelly" to group name.
- PI > 4 and plots on or above "A" line.
- PI < 4 or plots below "A" line.
- PI plots on or above "A" line.
- PI plots below "A" line.

*Soil classification chart*

# UNIFIED SOIL CLASSIFICATION†

MAJOR DIVISIONS		GROUP SYMBOLS	TYPICAL NAMES	CLASSIFICATION CRITERIA		
<b>COARSE-GRAINED SOILS</b> More than 50% retained on No. 200 sieve*	<b>GRAVELS</b> 50% or more of coarse fraction retained on No. 4 sieve	CLEAN GRAVELS	GW	Well-graded gravels and gravel-sand mixtures, little or no fines	$C_u = D_{60}/D_{10}$ Greater than 4 $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between 1 and 3 Not meeting both criteria for GW Atterberg limits plot below 'A' line or plasticity index less than 4 Atterberg limits plot above 'A' line and plasticity index greater than 7	
		GRAVELS WITH FINES	GP	Poorly-graded gravels and gravel-sand mixtures, little or no fines		
		GRAVELS WITH FINES	GM	Silty gravels, gravel-sand-silt mixtures		
		GRAVELS WITH FINES	GC	Clayey gravels, gravel-sand clay mixtures		
	<b>SANDS</b> More than 50% of coarse fraction passes No. 4 sieve	CLEAN SANDS	SW	Well-graded sands and gravelly sands, little or no fines	Classification on basis of percentage of fines GW, GP, SW, SP Less than 5% pass No. 200 sieve More than 12% pass No. 200 sieve 5% to 12% pass No. 200 sieve Borderline classification requiring use of dual symbols	
			SP	Poorly-graded sands and gravelly sands, little or no fines		
		SANDS WITH FINES	SM	Silty sands, sand-silt mixtures		$C_u = D_{60}/D_{10}$ Greater than 6 $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between 1 and 3 Not meeting both criteria for SW Atterberg limits plot below 'A' line or plasticity index less than 4 Atterberg limits plot above 'A' line and plasticity index greater than 7
			SC	Clayey sands, sand-clay mixtures		
			ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands		
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays		
<b>FINE-GRAINED SOILS</b> 50% or more passes No. 200 sieve*	SILTS AND CLAYS	OL	Organic silts and organic silty clays of low plasticity	<b>PLASTICITY CHART</b> For classification of fine-grained soils and fine fraction of coarse-grained soils Atterberg limits plotting in hatched area are borderline classifications requiring use of dual symbols Equation of 'A' line: $PI = 0.73(LL - 20)$		
		MH	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts			
		CH	Inorganic clay of high plasticity, fat clays			
	SILTS AND CLAYS	OH	Organic clays of medium to high plasticity		*Based on the material passing the 3 in. (75 mm) sieve †ASTM Designation D 2487, for identification procedure see D 2488	
		PT	Peat, muck and other highly organic soils			
		PT	Peat, muck and other highly organic soils			



## GROUND ICE DESCRIPTION

### ICE NOT VISIBLE

GROUP SYMBOLS	SYMBOLS	SUBGROUP DESCRIPTION	
N	Nf	Poorly-bonded or friable	
	Nbn	No excess ice, well-bonded	
	Nbe	Excess ice, well-bonded	

### VISIBLE ICE LESS THAN 50% BY VOLUME

GROUP SYMBOLS	SYMBOLS	SUBGROUP DESCRIPTION	
V	Vx	Individual ice crystals or inclusions	
	Vc	Ice coatings on particles	
	Vr	Random or irregularly oriented ice formations	
	Vs	Stratified or distinctly oriented ice formations	

### VISIBLE ICE GREATER THAN 50% BY VOLUME

ICE	ICE + Soil Type	SUBGROUP DESCRIPTION	
		Ice with soil inclusions	
		Ice without soil inclusions (greater than 25 mm (1 in.) thick)	

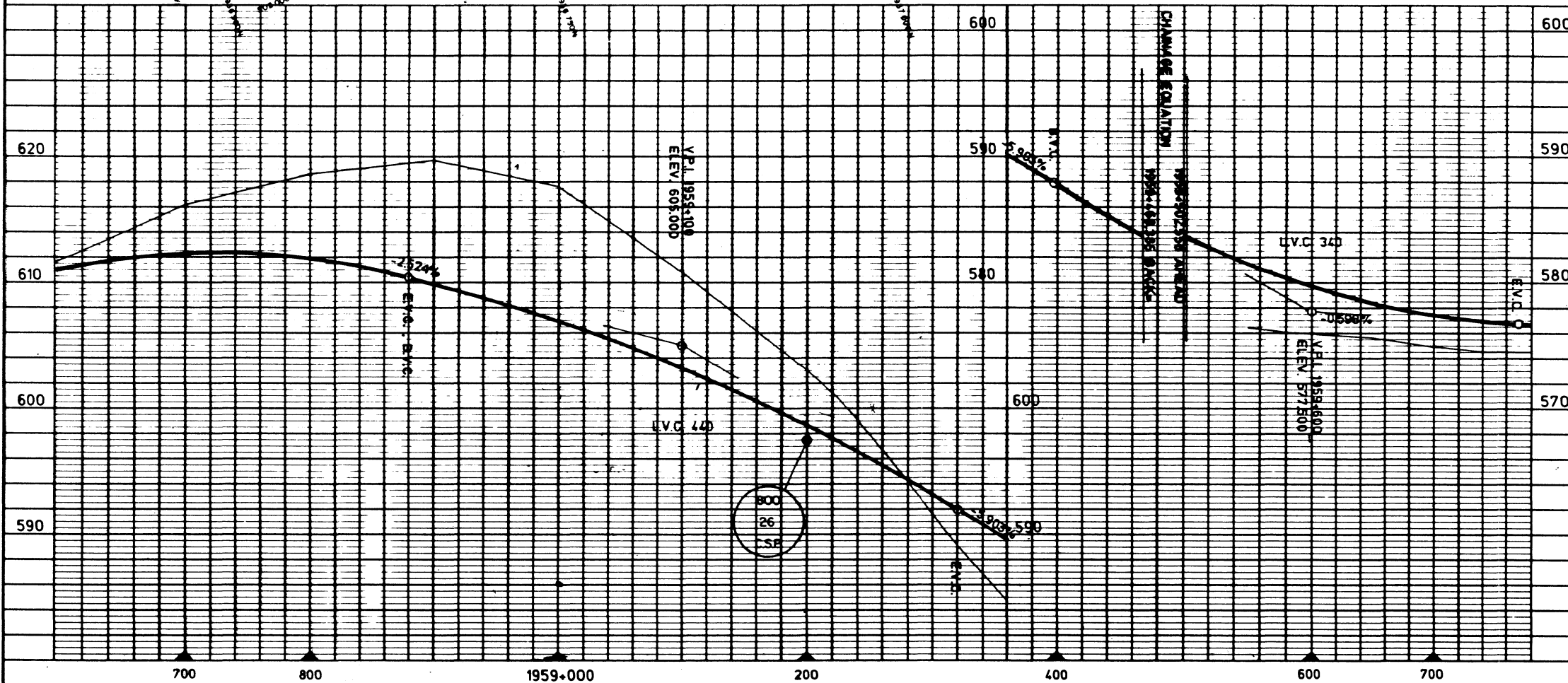
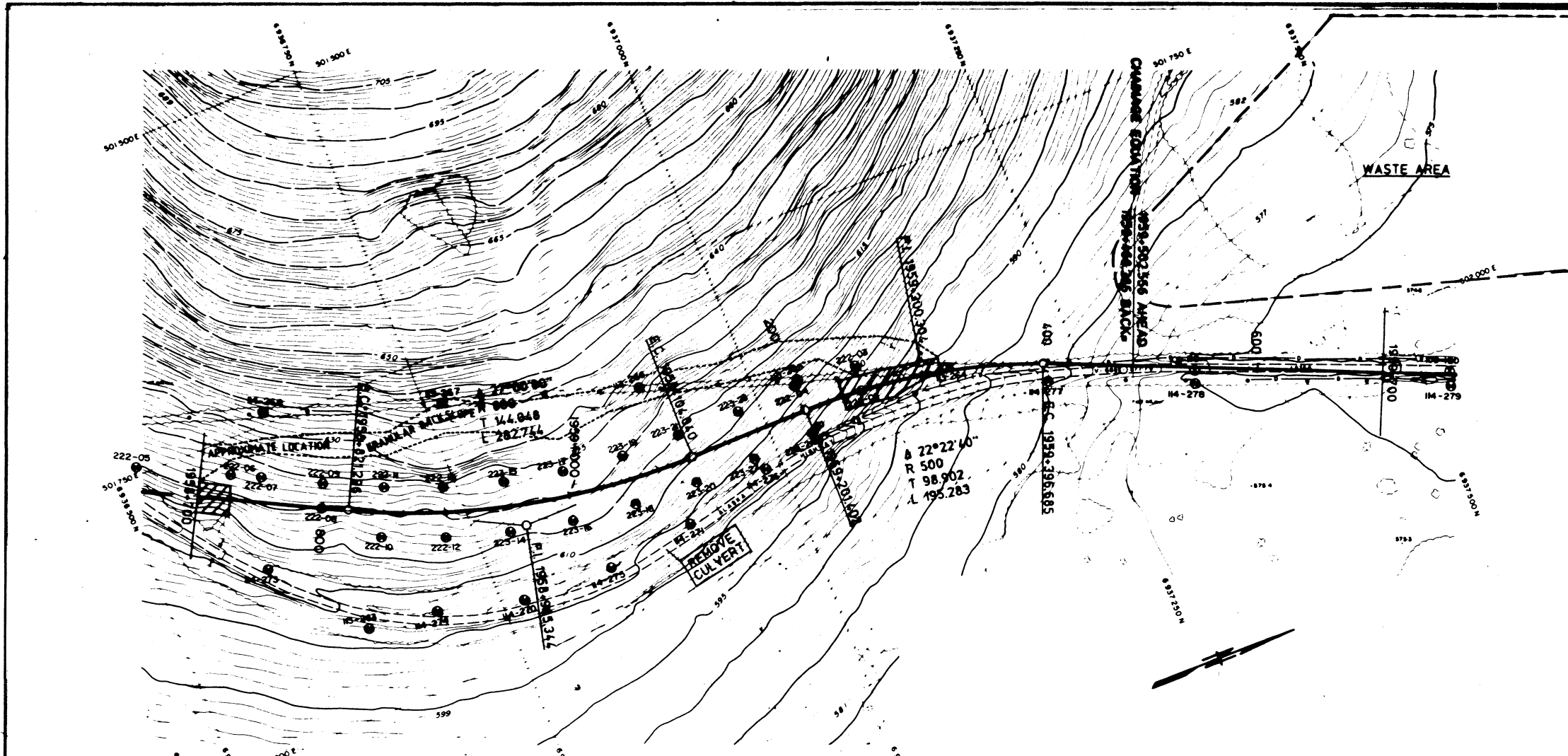
**NOTE:**

1. Dual symbols are used to indicate borderline or mixed ice classifications
2. Visual estimates of ice contents indicated on borehole logs ± 5%
3. This system of ground ice description has been modified from NRC Technical Memo 79, Guide to the Field Description of Permafrost for Engineering Purposes

**LEGEND**

Soil Ice

**SHAKWAK**



Compiled By: AÉRO PHOTO INC  
QUÉBEC CANADA  
JUNE-OCTOBER 1977

Horizontal Scale: 1:2000	Contour Interval: 1 METRE
Compilation Photos A2420B 23,22,21	Photo Scale 1:8000
Drawn by: TECH SERVICE	Designed by: D. FURLAYSON
Date: APRIL 93	Date: APRIL 93
Checked by: P. KNYSH P. ENG.	Date: <i>Paul Knysh 93-05-31</i>
Approved by: J.B. COXFORD P. ENG.	Date: <i>J. Blouin 93-06-01</i>
Surveyed by: <i>J. Blouin</i>	

Legend

Revisions  
ADDENDUM #1. 93-06-11

Horizontal Scale: 1:2000	Vertical Scale: 1:200
NTS. No. 115 K/0	Draw. No. 218 B-1
Sheet 11 of 20	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 222-01
SHAKWAK PROJECT	A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM	LOCATION: STA 1956+150 centerline	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL SILT -with decomposed rock -some large rocks >76mm	<input checked="" type="checkbox"/>	01					0.0	
2.0	END OF HOLE at 2.0m -refusal							2.0	
10.0								10.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 222-01A
SHAKWAK PROJECT	A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM	LOCATION: STA 1956+152 centerline	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
	SILT								
	-light brown								
	-damp								
	-some pea-gravel								
-1.0		<input checked="" type="checkbox"/>	02					-1.0	
	SILT								
	-light brown								
	-rock fragments								
-2.0		<input checked="" type="checkbox"/>	03					-2.0	
	SILT								
	-brown								
	-with angular rock								
	-decomposed bedrock with hard layers								
-3.0		<input checked="" type="checkbox"/>	04					-3.0	
	-harder drilling								
-4.0	END OF HOLE at 4.2m	<input checked="" type="checkbox"/>	05					-4.0	
-5.0								-5.0	
-6.0								-6.0	
-7.0								-7.0	
-8.0								-8.0	
-9.0								-9.0	
-10.0								-10.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 222-02
SHAKWAK PROJECT	A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM	LOCATION: STA 1956+250 centerline	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL -visible ice								0.0
0.5	SILT -frozen		06						0.5
1.0	-harder drilling								1.0
1.5	SILT -light grey -frozen -NO visible ice		07						1.5
2.0	-hard drilling -ice chunks								2.0
2.5	SILT with gravel -light brown -frozen		08						2.5
3.0	-hard drilling								3.0
3.5	-ice chunks								3.5
4.0	SILT with gravel -light brown -frozen		08						4.0
4.5	-hard drilling								4.5
5.0	-silt with rock fragments in ice								5.0
5.5	SILT with ice lenses -frozen		09						5.5
6.0	END OF HOLE at 6.0m -no bedrock encountered								6.0
7.0									7.0
8.0									8.0
9.0									9.0
10.0									10.0

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 222-03
SHAKWAK PROJECT	A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM	LOCATION: STA 1959+250 o/s 20m Lt.	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL -frozen							0.0	
0.0 - 1.0	SILT -dark brown -visible ice		10					1.0	
2.0 - 3.0	SILTY SAND WITH GRAVEL (SM) -brown -frozen -rock fragments		11	20	40	60	SM	2.0 - 3.0	
3.0 - 4.0	CLAYEY SAND (SC) -light brown -frozen		12	20	40	60	SC	3.0 - 4.0	
5.0 - 7.0	-very hard drilling -frozen -drill overheating -no more samples							5.0 - 7.0	
7.0 - 10.0	END OF HOLE at 7.0m -refusal							7.0 - 10.0	

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COMPLETION DEPTH 7.0 m

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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 222-04
SHAKWAK PROJECT	A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM	LOCATION: STA 1959+200 o/s 20m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
	Silty SAND -frozen -visible ice	<input checked="" type="checkbox"/>	13						
-1.0	Silty SAND with gravel -frozen	<input checked="" type="checkbox"/>	14					-1.0	
-3.0	Gravelly SILT -frozen	<input checked="" type="checkbox"/>	15					-3.0	
-4.0	Decomposed BEDROCK (Soft) -very hard drilling							-4.0	
-5.0	-very hard drilling	<input checked="" type="checkbox"/>	16					-5.0	
-6.0	END OF HOLE at 5.8m							-6.0	
-7.0								-7.0	
-8.0								-8.0	
-9.0								-9.0	
-10.0								-10.0	

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COMPLETION DEPTH 5.8 m

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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 222-05
SHAKWAK PROJECT	A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM	LOCATION: STA 1958+650 o/s 20m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
	<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
		<input type="checkbox"/> CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL								0.0
	SILT								
	-grey								
1.0	SILT								1.0
	-dark brown								
	-saturated								
2.0			17						2.0
	-easy drilling								
3.0			18						3.0
	-frozen below 3.5m								
4.0			19						4.0
	-no ice visible								
5.0									5.0
6.0									6.0
7.0	SANDY SILT (ML)		20				ML		7.0
	-light brown								
	-frozen								
8.0									8.0
9.0			21				ML		9.0
	END OF HOLE at 9.00m								
	-no refusal								
10.0									10.0

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COMPLETION DEPTH 9.0 m

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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 222-06
SHAKWAK PROJECT	A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM	LOCATION: STA 1958+725 o/s 20m Lt.	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
0.0 - 1.0	SILT with sand -light brown -frozen -NO visible ice							0.0 - 1.0	
1.0 - 2.0	SILT -grey -frozen	X	22					1.0 - 2.0	
2.0 - 3.0	-harder drilling	X	23					2.0 - 3.0	
3.0 - 4.0								3.0 - 4.0	
4.0 - 5.0	SILT with sand -dark grey -frozen -trace of organics	X	24					4.0 - 5.0	
5.0 - 6.0								5.0 - 6.0	
6.0 - 7.0	SILT -light brown -dry -some rock fragments	X	25					6.0 - 7.0	
7.0 - 7.7	SILT with rock fragments -light brown -dry	X	26					7.0 - 7.7	
7.7 - 8.0	END OF HOLE at 7.7m							7.7 - 8.0	
8.0 - 9.0								8.0 - 9.0	
9.0 - 10.0								9.0 - 10.0	

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COMPLETION DEPTH 7.7 m

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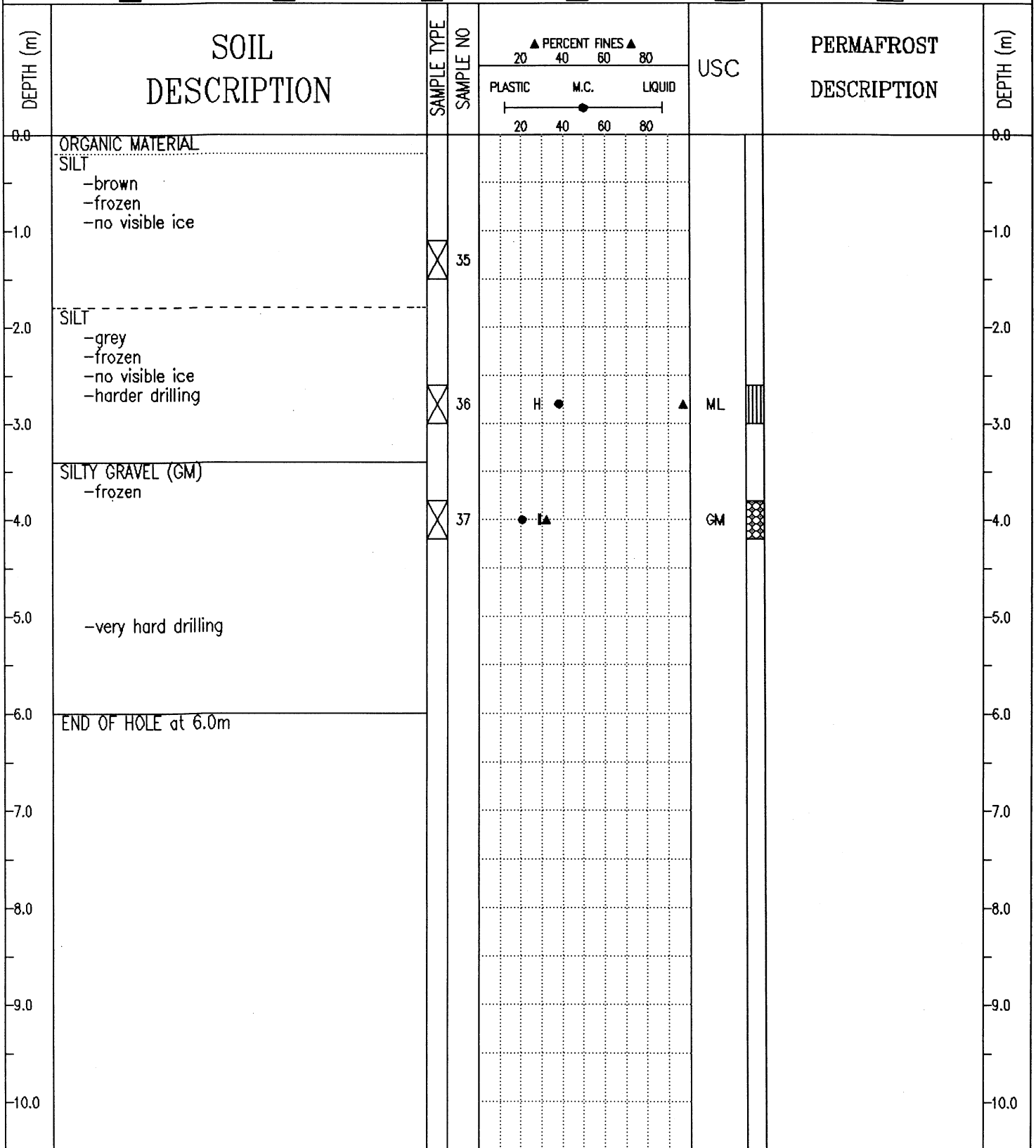
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SHAKWAK PROJECT	A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM	LOCATION: STA 1958+750 o/s 20m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL -frozen Sandy SILT -dark grey -frozen								0.0
-1.0		<input checked="" type="checkbox"/>	27						-1.0
-2.0	Silty SAND with rock fragments								-2.0
-3.0		<input checked="" type="checkbox"/>	28						-3.0
-4.0									-4.0
-5.0	-very hard drilling								-5.0
-6.0	ROCK (broken)	<input checked="" type="checkbox"/>	29						-6.0
-6.0	END OF HOLE at 5.9m -refusal								-6.0
-7.0									-7.0
-8.0									-8.0
-9.0									-9.0
-10.0									-10.0

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 222-08
SHAKWAK PROJECT	A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM	LOCATION: STA 1958+800 centerline	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
	SILT -brown -frozen								
-1.0		<input checked="" type="checkbox"/>	30					-1.0	
	SILT -grey -frozen -steady drilling								
-2.0		<input checked="" type="checkbox"/>	31					-2.0	
	-drill grinding -visible ice								
-3.0		<input checked="" type="checkbox"/>	32					-3.0	
	-large ice chunks some silt								
-4.0		<input checked="" type="checkbox"/>	33					-4.0	
	SILT -brown -frozen -visible ice								
-5.0		<input checked="" type="checkbox"/>	34					-5.0	
	Gravelly SILT -brown and grey -frozen								
-6.0	END OF HOLE at 7.4m -refusal							-6.0	
-7.0								-7.0	
-8.0								-8.0	
-9.0								-9.0	
-10.0								-10.0	

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 222-09
SHAKWAK PROJECT		A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM		LOCATION: STA 1958+800 o/s 20m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
			<input checked="" type="checkbox"/> BULK
			<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE



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COMPLETION DEPTH 6.0 m

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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 222-10
SHAKWAK PROJECT		A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM		LOCATION: STA 1958+850 o/s 20m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
			<input type="checkbox"/> BULK
			<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE

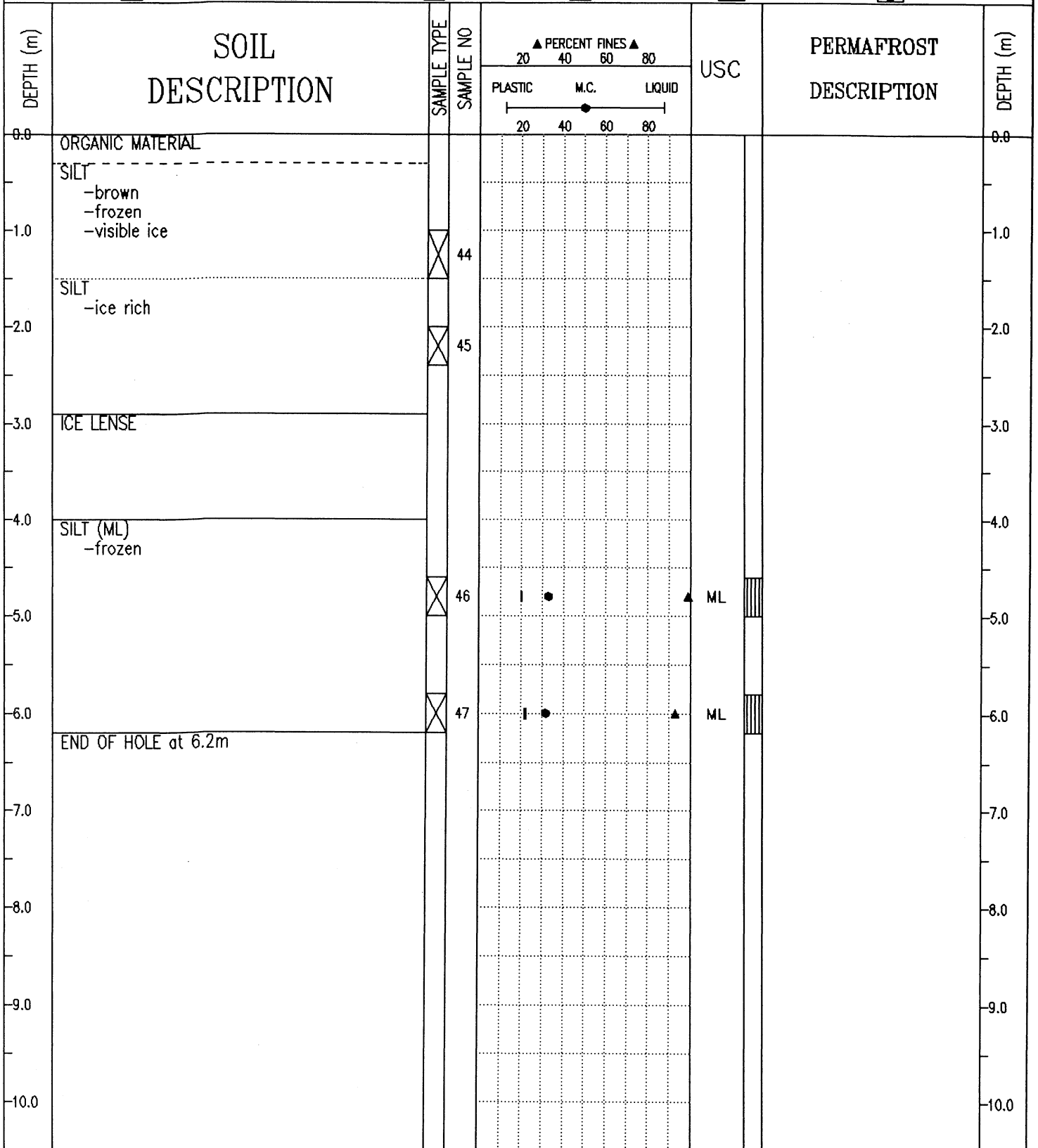
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
	SILT -brown, grey -frozen								
-1.0		<input checked="" type="checkbox"/>	38					-1.0	
	-organic material, wood ect.								
-2.0								-2.0	
	SILT -grey -frozen	<input checked="" type="checkbox"/>	39						
-3.0								-3.0	
	SILT -light brown -frozen -ice chunks	<input checked="" type="checkbox"/>	40						
-4.0								-4.0	
	ICE								
-5.0								-5.0	
	SILT -light brown -frozen								
-6.0	END OF HOLE at 6.0m							-6.0	
-7.0								-7.0	
-8.0								-8.0	
-9.0								-9.0	
-10.0								-10.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 222-11
SHAKWAK PROJECT	A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM	LOCATION: STA 1958+850 o/s 20m Lt.	ELEVATION 0.000 (m)

SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
0.0 - 1.0	SILT -dark brown -frozen -trace of organics -smooth drilling		41					1.0	
1.0 - 2.0								2.0	
2.0 - 3.0	Gravelly SILT -brown -frozen -trace of organics, wood ect.		42					3.0	
3.0 - 4.0								4.0	
4.0 - 5.0	SILT -with Angular rock fragments  -hard drilling		43					5.0	
5.0 - 10.0	END OF HOLE at 5.1m -refusal							6.0 7.0 8.0 9.0 10.0	

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 222-12
SHAKWAK PROJECT	A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM	LOCATION: STA 1958+900 o/s 20m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 222-13
SHAKWAK PROJECT	A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM	LOCATION: STA 1958+900 o/s 19m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	SILT -brown -frozen							0.0	
1.0	-easy drilling	<input checked="" type="checkbox"/>	48					1.0	
3.0	SILT -brown -frozen -visible ice -lots of ice	<input checked="" type="checkbox"/>	49					3.0	
4.0	SILT -grey/brown -frozen -No visible ice	<input checked="" type="checkbox"/>	50					4.0	
6.0	-rock fragments							6.0	
8.0	-rock fragments with silt	<input checked="" type="checkbox"/>	51					8.0	
8.6	END OF HOLE at 8.6m							8.6	
10.0								10.0	

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Whitehorse, Yukon Territory.

COMPLETION DEPTH 8.6 m

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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 223-14
SHAKWAK PROJECT	A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM	LOCATION: STA 1958+950 o/s 20m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
0.0 - 1.0	SILT -grey -frozen -visible ice		52					1.0	
1.0 - 3.0	-easy drilling		53					3.0	
3.0 - 5.0	SILT -grey/brown -frozen -no visible ice		54					5.0	
5.0 - 6.0			55					6.0	
6.0	END OF HOLE at 6.0m							6.0	
6.0 - 10.0								10.0	

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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 223-15
SHAKWAK PROJECT	A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM	LOCATION: STA 1958+950 o/s 20m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK	<input type="checkbox"/> TUBE <input type="checkbox"/> CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL								0.0
-1.0	SILT -grey/brown -trace organics -frozen -visible ice	<input checked="" type="checkbox"/>	56						-1.0
-3.0	SILT -brown -frozen -visible ice	<input checked="" type="checkbox"/>	57						-3.0
-5.0	SILT -predominantly rock fragments -grinding drilling after 4.6m	<input checked="" type="checkbox"/>	58						-5.0
-6.0	END OF HOLE at 6.0m -refusal								-6.0
-7.0									-7.0
-8.0									-8.0
-9.0									-9.0
-10.0									-10.0

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 223-16
SHAKWAK PROJECT	A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM	LOCATION: STA 1959+000 o/s 20m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL								0.0
0.0 - 1.0	SILT -grey/brown -frozen -easy drilling	<input checked="" type="checkbox"/>	59						1.0
1.0 - 2.0	SILT -grey -frozen	<input checked="" type="checkbox"/>	60						2.0
2.0 - 3.0		<input checked="" type="checkbox"/>	61						3.0
3.0 - 4.0		<input checked="" type="checkbox"/>	62						4.0
4.0 - 5.0		<input checked="" type="checkbox"/>	63						5.0
5.0 - 6.0	SILT -grey -frozen -visible ice	<input checked="" type="checkbox"/>	62						6.0
6.0 - 7.0		<input checked="" type="checkbox"/>	63						7.0
7.0 - 8.0	-denser material								8.0
8.0 - 9.0	ROCK -no sample -hole squeezing END OF HOLE at 8.7m								9.0
9.0 - 10.0									10.0

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COMPLETION DEPTH 8.7 m

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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 223-17
SHAKWAK PROJECT	A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM	LOCATION: STA 1959+000 o/s 20m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	SILTY SAND -brown -dry -easy drilling								0.0
1.0			64						1.0
2.0									2.0
3.0			65						3.0
4.0	SANDY SILT -grey -frozen		66						4.0
5.0									5.0
6.0									6.0
7.0	SILT -brown -few pebbles -frozen		67						7.0
8.0	-rocks at 7.9m								8.0
9.0	SILT -grey -frozen -visible ice		68						9.0
10.0	ROCK -grinding drilling END OF HOLE at 9.6m -refusal								10.0



SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 223-19
SHAKWAK PROJECT	A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM	LOCATION: STA 1959+050 o/s 20m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL								0.0
0.0 - 1.0	SILT -grey/brown -few roots to 0.5m -frozen below 0.4m	<input checked="" type="checkbox"/>	74						1.0
1.0 - 3.0	SILT -grey -frozen	<input checked="" type="checkbox"/>	75						3.0
3.0 - 4.0		<input checked="" type="checkbox"/>	76						4.0
4.0 - 5.0									5.0
5.0 - 6.9	ROCK -brownish grey -grindy drilling								6.0
6.9 - 7.0	END OF HOLE at 6.9m -refusal								7.0
7.0 - 8.0									8.0
8.0 - 9.0									9.0
9.0 - 10.0									10.0

Public Works Canada  
Whitehorse, Yukon Territory.

COMPLETION DEPTH 6.9 m

COMPLETE 93/06/05

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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 223-20
SHAKWAK PROJECT	A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM	LOCATION: STA 1959+100 o/s 20m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
0.0 - 1.0	SILT -grey -frozen -slow drilling -visible ice	<input checked="" type="checkbox"/>	77					1.0	
1.0 - 2.0								2.0	
2.0 - 3.0								3.0	
3.0 - 4.0								4.0	
4.0 - 5.0	SILT -grey -frozen -smooth drilling	<input checked="" type="checkbox"/>	79					5.0	
5.0 - 5.2	END OF HOLE at 5.2m							5.2	
5.2 - 6.0								6.0	
6.0 - 7.0								7.0	
7.0 - 8.0								8.0	
8.0 - 9.0								9.0	
9.0 - 10.0								10.0	

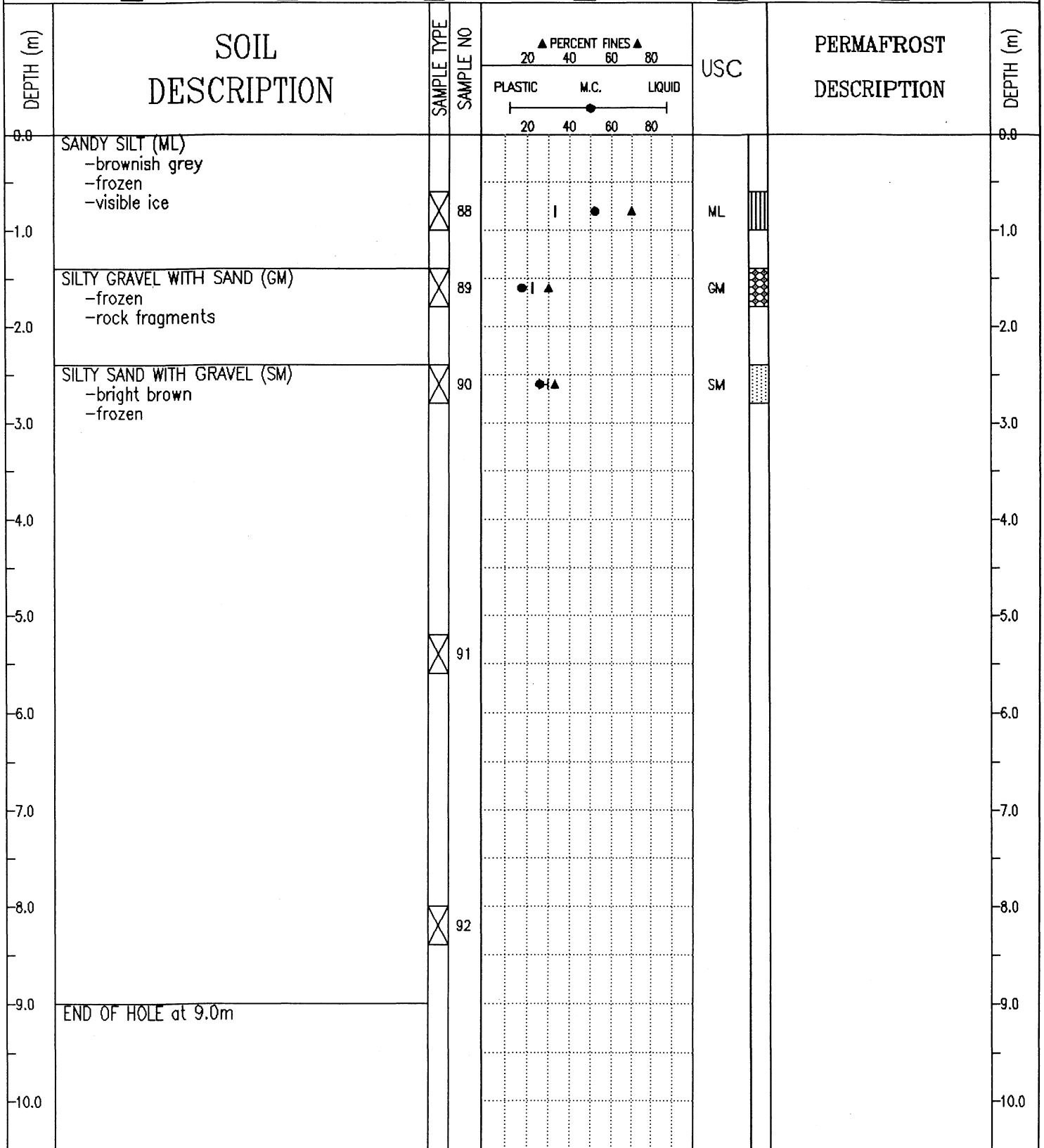
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 223-21
SHAKWAK PROJECT	A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM	LOCATION: STA 1959+100 o/s 20m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL SILT -brown/grey -frozen -easy drilling								0.0
1.0			80						1.0
2.0									2.0
3.0	-grey below 2.6m		81						3.0
4.0	SILT -light brown -rock fragments -frozen -grindy drilling		82						4.0
5.0									5.0
6.0			83						6.0
6.2	END OF HOLE at 6.2m -refusal								6.2
7.0									7.0
8.0									8.0
9.0									9.0
10.0									10.0

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 223-22
SHAKWAK PROJECT	A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM	LOCATION: STA 1959+150 o/s 20m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL								0.0
0.0 - 1.0	SILT -brown/grey -frozen		84						1.0
1.0 - 2.0	SILTY GRAVEL -wood fragments		85						2.0
2.0 - 4.4	ROCK -brown -silty -frozen -visible ice -grindy drilling		86						4.0
4.4 - 5.4	-no visible ice below 4.4m								5.0
5.4 - 6.0	-smoother drilling below 5.4m		87						6.0
6.0 - 10.0	END OF HOLE at 6.0m -refusal								7.0
									8.0
									9.0
									10.0

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 223-23
SHAKWAK PROJECT	A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM	LOCATION: STA 1959+150 o/s 20m Lt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



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COMPLETION DEPTH 9.0 m	COMPLETE 93/06/06
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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	BOREHOLE No. 223-24
SHAKWAK PROJECT	A/H Km 1949.6-1966.0	Project No: SEGMENT 18 B
DRILL: CME 750 150mm Dia. SOLID STEM	LOCATION: STA 1959+200 o/s 20m Rt.	ELEVATION 0.000 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	PERMAFROST DESCRIPTION	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC MATERIAL							0.0	
	SILT								
-1.0	-grey -frozen	<input checked="" type="checkbox"/>	93					-1.0	
-2.0								-2.0	
-3.0								-3.0	
-4.0	ROCK fragments -some silt -grindy drilling	<input checked="" type="checkbox"/>	95					-4.0	
-5.0	END OF HOLE at 5.0m -refusal							-5.0	
-6.0								-6.0	
-7.0								-7.0	
-8.0								-8.0	
-9.0								-9.0	
-10.0								-10.0	