

# GEOTECHNICAL INVESTIGATIONS

1 of 5



Community and Transportation Services  
Transportation Engineering Branch

**Geotechnical Services**

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**ORIGINAL - Do Not Remove From File**

GR-01-087

HIGHWAY CONSTRUCTION

**GEOTECHNICAL INVESTIGATION**  
KM 1803.95 TO KM 1820.4  
YUKON, 2000-2001

ALASKA HIGHWAY #1

**HIGHWAY CONSTRUCTION**  
**km 1803.95 to km 1820.4**  
**ALASKA HIGHWAY #1**  
**Yukon, 2000-2001**  
**Volume I of 5**

This Data Package prepared for project viewing:

February, 2000

Transportation Engineering Branch  
Geotechnical Services  
461 Range Road  
Whitehorse, Yukon

## VOLUME CONTENTS

### VOLUME 1 OF 5

Introduction

Centreline "Subsurface Exploration & Testing Report" sheets for holes located from km 1803+925 to km 1810+000

### VOLUME 2 OF 5

Centreline "Subsurface Exploration & Testing Report" sheets for holes located from km 1810+000 to km 1820+400

### VOLUME 3 OF 5

Centreline laboratory sample test result sheets for holes numbered 350 to 500

### VOLUME 4 OF 5

Centreline laboratory sample test result sheets for holes numbered 501 to 849

### VOLUME 5 OF 5

Granular testing - km 1819 LHS

## CONTENTS

### INTRODUCTION

Investigation notes, classification methods and legends.

### CENTRELINE TESTING

"Subsurface Exploration & Testing Report" sheets and laboratory sample test result sheets are provided. The "Subsurface Exploration & Testing Report" sheets for the centreline holes are arranged according to project location, starting at km 1803+925 and increasing to km 1820+400. The laboratory sample test result sheets are arranged according to hole number.

#### **Auger Testing**

1999	TEST HOLES 350 to 400	shown on logs with prefix 509-
	TEST HOLES 401 to 425	shown on logs with prefix 511-
	TEST HOLES 426 to 436	shown on logs with prefix 512-
	TEST HOLES 440 to 448	shown on logs with prefix 512-
	TEST HOLES 429 to 500	shown on logs with prefix 513-
	TEST HOLES 501 to 512	shown on logs with prefix 514-
	TEST HOLES 563 to 566	shown on logs with prefix 519-
	TEST HOLES 572 to 575	shown on logs with prefix 519-
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	TEST HOLES 659 to 709	shown on logs with prefix 526-
	TEST HOLES 710 to 731	shown on logs with prefix 527-
	TEST HOLES 834 to 844	shown on logs with prefix 531-
	TEST HOLES 485 to 849	shown on logs with prefix 532-

#### **Notes on plotting of Centreline Holes:**

1. Hole 495 shown at ~ 1807+225 on Sheet 5 of 19 should be removed
2. Hole 400 shown at ~ 1808+520 on Sheet 6 of 19 should be removed
3. Add Hole 440 at 1811+870 (centreline) on Sheet 9 of 19
4. Add Hole 408 at 1814+625 (centreline) on Sheet 12 of 19
5. Hole 391 shown at ~ 1816+500 on Sheet 14 of 19 should read Hole 392
6. Hole 392 shown at ~ 1816+600 on Sheet 14 of 19 should read Hole 391
7. Hole 843 shown at ~ 1817+700 on Sheet 15 of 19 should read Hole 378

## CONTENTS (continued)

### GRANULAR TESTING - KM 1819 LHS

“Subsurface Exploration & Testing Report” sheets, laboratory sample test result sheets, and location plans are provided.

The “Subsurface Exploration & Testing Report” sheets and the laboratory sample test result sheets are arranged according to hole number

#### **Backhoe Testing**

1994	TEST HOLES 4 to 10	shown with prefix 316-
1995	TEST HOLES 230 to 247, 249 to 250, & 252 to 253	shown with prefix 369-

#### **Auger Testing**

1995	TEST HOLES 1 to 9	shown with prefix 351-
	TEST HOLES 10 to 26	shown with prefix 352-

HIGHWAY CONSTRUCTION

**GEOTECHNICAL INVESTIGATION**  
KM 1803.95 TO KM 1820.4  
YUKON, 2000-2001

ALASKA HIGHWAY #1

# **INTRODUCTION**

### GEOTECHNICAL INVESTIGATION DATA

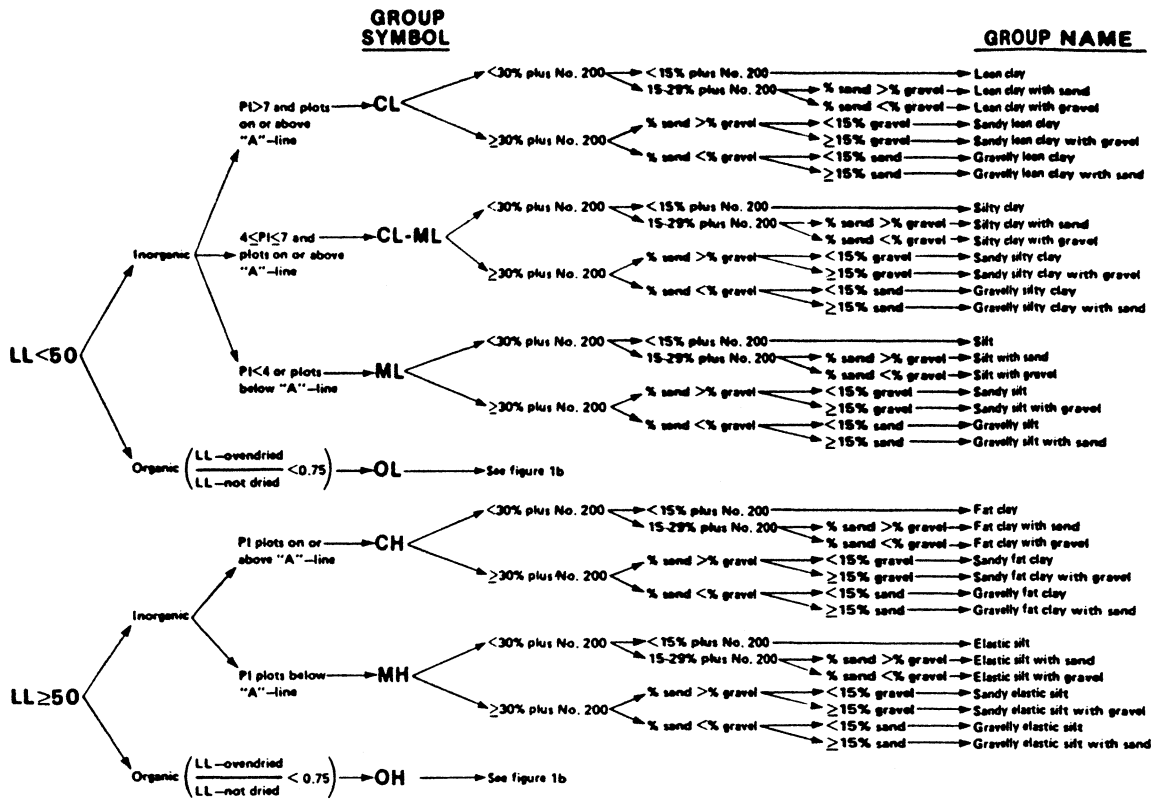
This geotechnical investigation data is provided to assist in the interpretation of soil conditions encountered within this project area. The data presented was prepared solely for Departmental designing and estimating purposes.

The "Soil Description" shown on the Subsurface Exploration & Testing Reports is a textural description of retrieved material based on identification by the field drilling technician at the time of investigation. The retrieved material may be comprised of soil and/or rock.. The 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, excavation equipment used or testing preparation procedures.

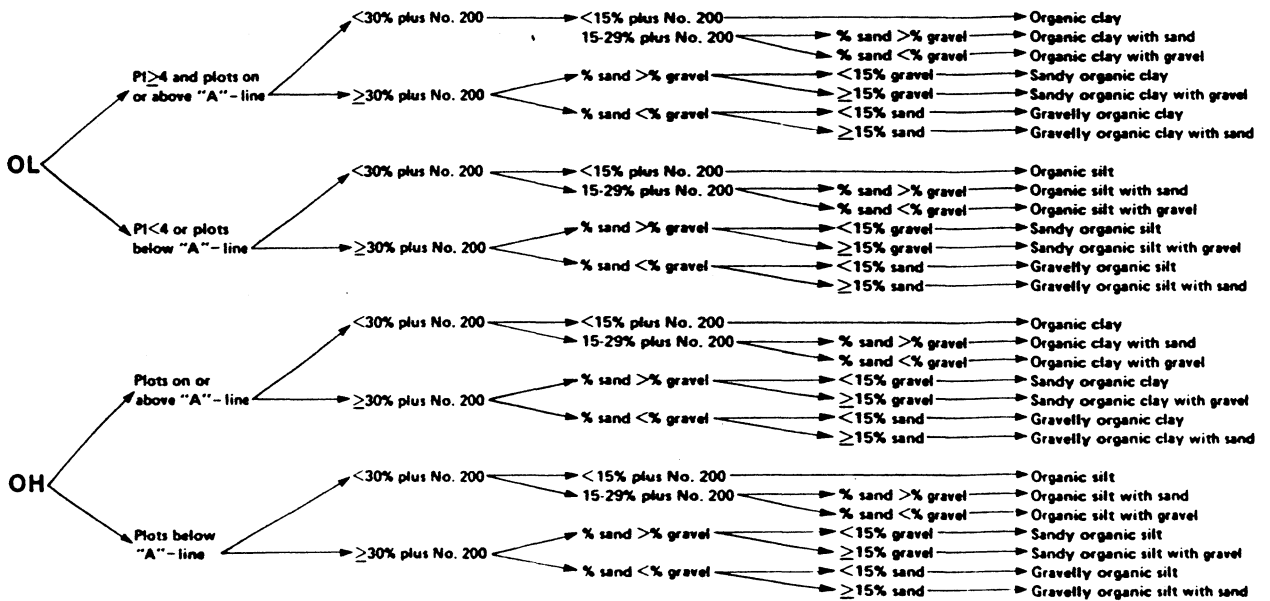
These descriptions are not intended to be conclusive as to the nature of any material encountered, or to conditions between or around the test borings/pits.

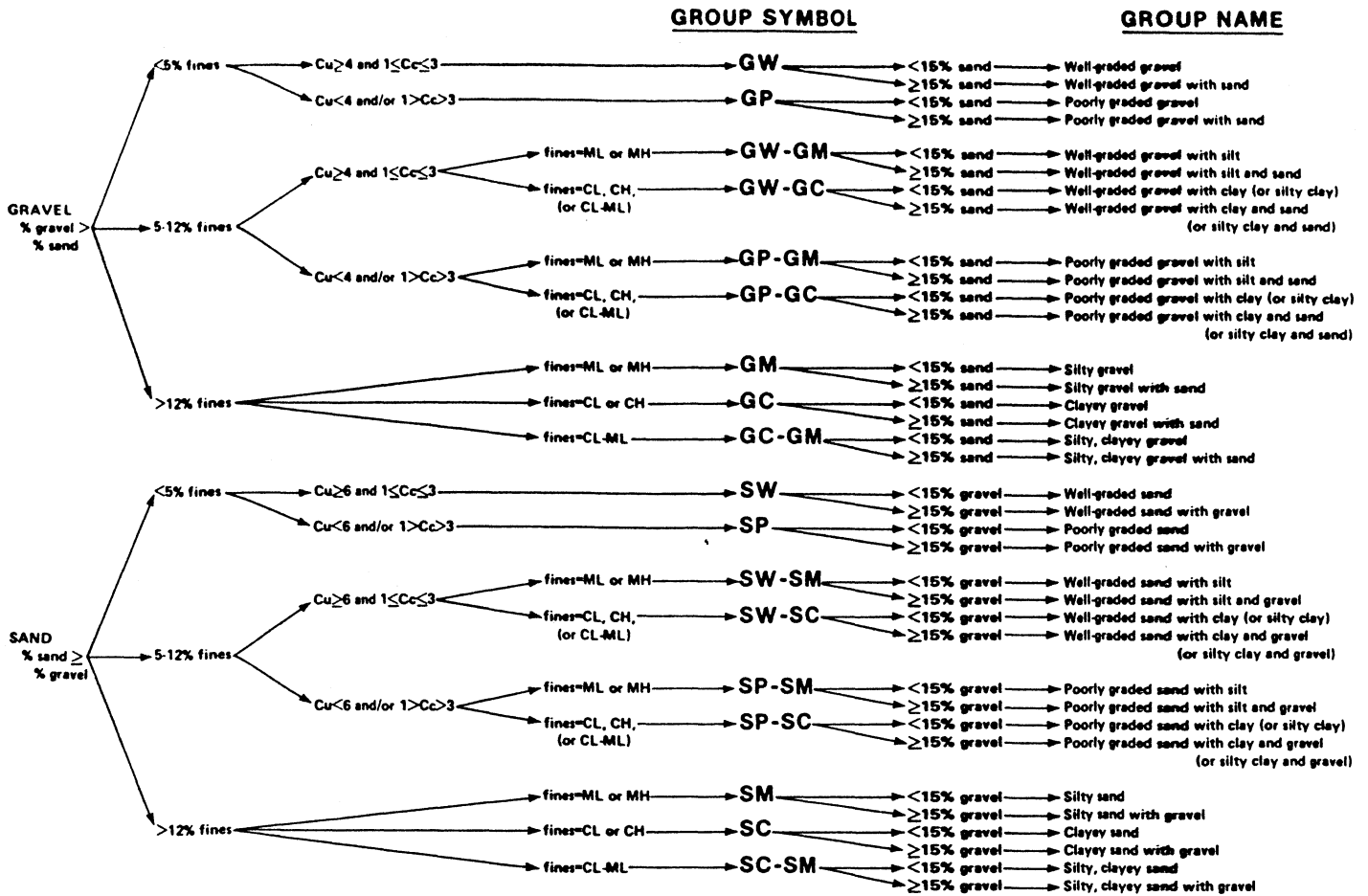
It is recommended that a site inspection, combined with consideration of the regional geology and climatic conditions be conducted. An evaluation of the investigation methods and development work done since the time of investigation should be done prior to interpreting the subsurface conditions for construction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



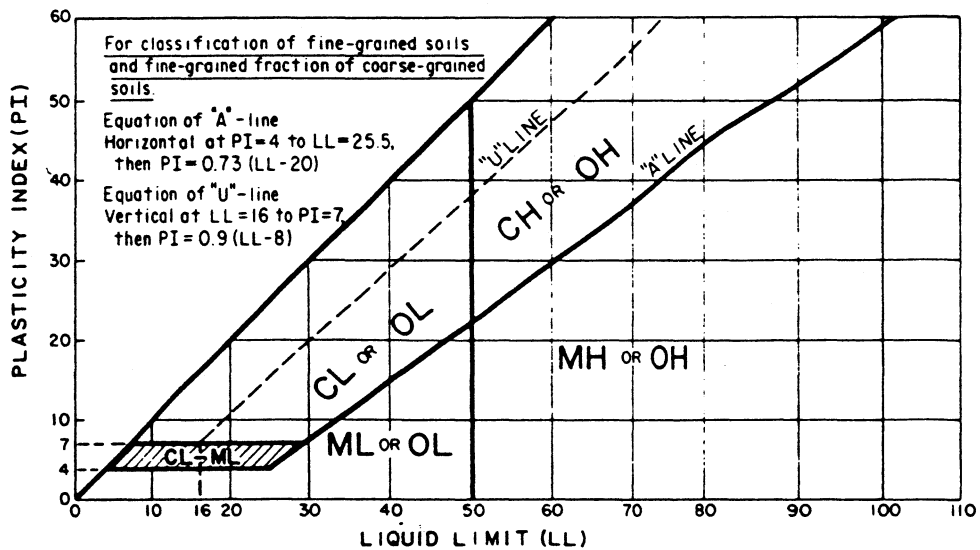
**GROUP SYMBOL**

**GROUP NAME**





Flow chart for classifying coarse-grained soil.



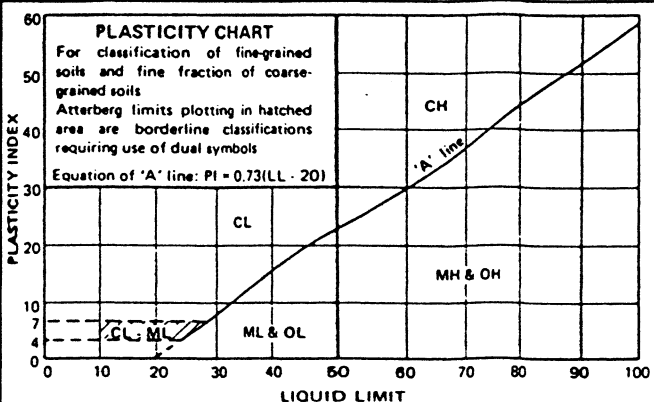
Plasticity chart.

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	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
	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  
 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 > 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			
		SANDS WITH FINES	GM	Silty gravels, gravel-sand-silt mixtures			
		SANDS 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 GM, GC, SM, SC 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 or 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			
		<b>FINE-GRAINED SOILS</b> 50% or more passes No. 200 sieve*	<b>SILTS AND CLAYS</b> Liquid limit 50% or less	ML		Inorganic silts, very fine sands, rock flour, silty or clayey fine sands	<div style="border: 1px solid black; padding: 5px;"> <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: <math>PI = 0.73(LL - 20)</math> </div> 
				CL		Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays	
OL	Organic silts and organic silty clays of low plasticity						
<b>SILTS AND CLAYS</b> Liquid limit greater than 50%	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	*Based on the material passing the 3 in. (75 mm) sieve †ASTM Designation D 2487, for identification procedure see D 2488			

## 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	

**NOTE:**

1. Dual symbols are used to indicate borderline or mixed ice classifications
2. Visual estimates of ice contents indicated on borehole logs  $\pm 5\%$
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

### 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

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

		BOUNDARY LINES ON DRILL LOGS			TEST HOLE NO: 3			
ENGINEERING-CAPITAL					Project No:			
					ELEVATION: 0.00 (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 PLASTIC      M.C.      LIQUID ————— 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	BOUNDARY LINES							0.0
	A solid line is used when a definite soil change is logged and a depth is known.							
1.0	A dashed line is used when a definite soil change is noted either by the field log or the sample test results and the depth of change is unknown.							1.0
2.0	A dotted line is used when a gradual or gradational change is noted by field notes and sample test results.							2.0
3.0								3.0
4.0	▼ A triangle over two lines indicates water level detected at the time of drilling, unless otherwise noted							4.0
5.0								5.0
6.0								6.0
Government of Yukon Transportation Engineering				LOGGED BY:		COMPLETION DEPTH: 6.0 m		
				REVIEWED BY:		COMPLETE: / /		
				Fig. No:		Page 1 of 1		

HIGHWAY CONSTRUCTION

GEOTECHNICAL INVESTIGATION  
KM 1803.95 TO KM 1820.4  
YUKON, 2000-2001

ALASKA HIGHWAY #1

# **CENTRELINE TESTING**

**km 1803+925 to km 1810+000  
Subsurface Exploration & Testing Reports**

SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION		TEST HOLE NO: 519-572							
SHAKWAK SEG 13		KM 1796-1822 A/H		Project No: 092-202101-0329							
MOBILE B-40L		LOCATION: 1803+925 2M RHS		ELEVATION: 0.00 (m)							
SAMPLE TYPE		S.P.T.		AUGER		BULK		TUBE		CORE	
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲		USC	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)	
				PLASTIC	M.C.			LIQUID	■ PERCENT GRAVEL ■		
0.0	ORGANIC			20	40	60	80	20	40	60	80
	SANDY SILT (ML) -brown -frozen (Vx)										
1.0											
	SILTY SAND WITH GRAVEL (SM) -grey -frozen (Nb) -grindy drilling @ 1.6m		451								
2.0											
3.0	-more rocks below 3.0m		452								
	END HOLE @ 3.2m -refusal - rock dust on bit										
4.0											
5.0											
6.0											

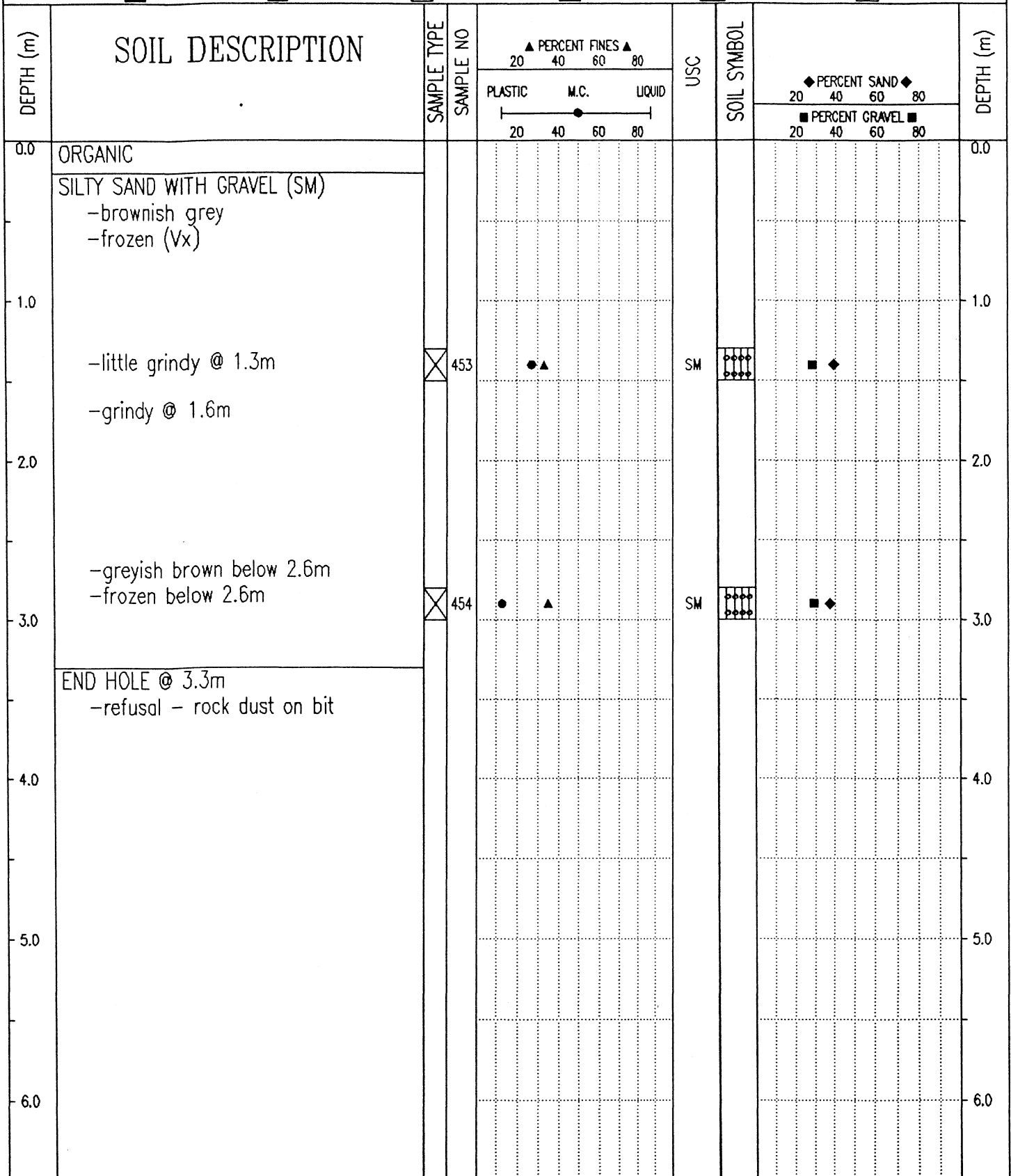
Government of Yukon  
Transportation Engineering

LOGGED BY: S.H.  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.2 m  
COMPLETE: 99/07/05

SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION		TEST HOLE NO: 519-566								
SHAKWAK SEG 13		KM 1796-1822 A/H		Project No: 092-202101-0329								
MOBILE B-40L		LOCATION: 1803+975 30M LHS		ELEVATION: 0.00 (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	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC										0.0	
	ASH											
	SILTY GRAVEL WITH SAND (GM)											
	-grey brown											
	-frozen (Vx)											
1.0											1.0	
	-grindy drilling @ 1.3m	<input checked="" type="checkbox"/>	437	●	▲		GM	▲▲▲	■			
2.0											2.0	
3.0											3.0	
	-grey below 2.8m	<input checked="" type="checkbox"/>	438	●	▲		GM	▲▲▲	◆			
4.0											4.0	
	END HOLE @ 3.2m											
	-refusal											
5.0											5.0	
6.0											6.0	
Government of Yukon Transportation Engineering				LOGGED BY: S.H.		COMPLETION DEPTH: 3.2 m						
				REVIEWED BY:		COMPLETE: 99/07/05						
				Fig. No:		Page 1 of 1						

SUB-SURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RE-CONSTRUCTION	TEST HOLE NO: 519-573
SHAKWAK SEG 13	KM 1796-1822 A/H	Project No: 092-202101-0329
MOBILE B-40L	LOCATION: 1804+025 2M RHS	ELEVATION: 0.00 (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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Fig. No:

COMPLETION DEPTH: 3.3 m

COMPLETE: 99/07/05

Page 1 of 1

SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION		TEST HOLE NO: 519-565							
SHAKWAK SEG 13		KM 1796-1822 A/H		Project No: 092-202101-0329							
MOBILE B-40L		LOCATION: 1804+050 30M LHS		ELEVATION: 0.00 (m)							
SAMPLE TYPE		S.P.T.		AUGER		BULK		TUBE		CORE	
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)			
0.0	ORGANIC							0.0			
	ASH										
	SILTY SAND WITH GRAVEL (SM)										
	-brown										
	-frozen (Nb)										
	-(Vx) below .8m										
1.0		☒	434	● ▲	SM	■ ◆		1.0			
		☒	435	● ▲	SM	■ ◆					
2.0	-grindy drilling @ 2.0m							2.0			
	-grey brown below 2.5m										
3.0		☒	436	● ▲	SM	■ ◆		3.0			
	-rock dust on bit @ 3.0m										
4.0	END HOLE @ 4.0m							4.0			
	-refusal										
5.0								5.0			
6.0								6.0			

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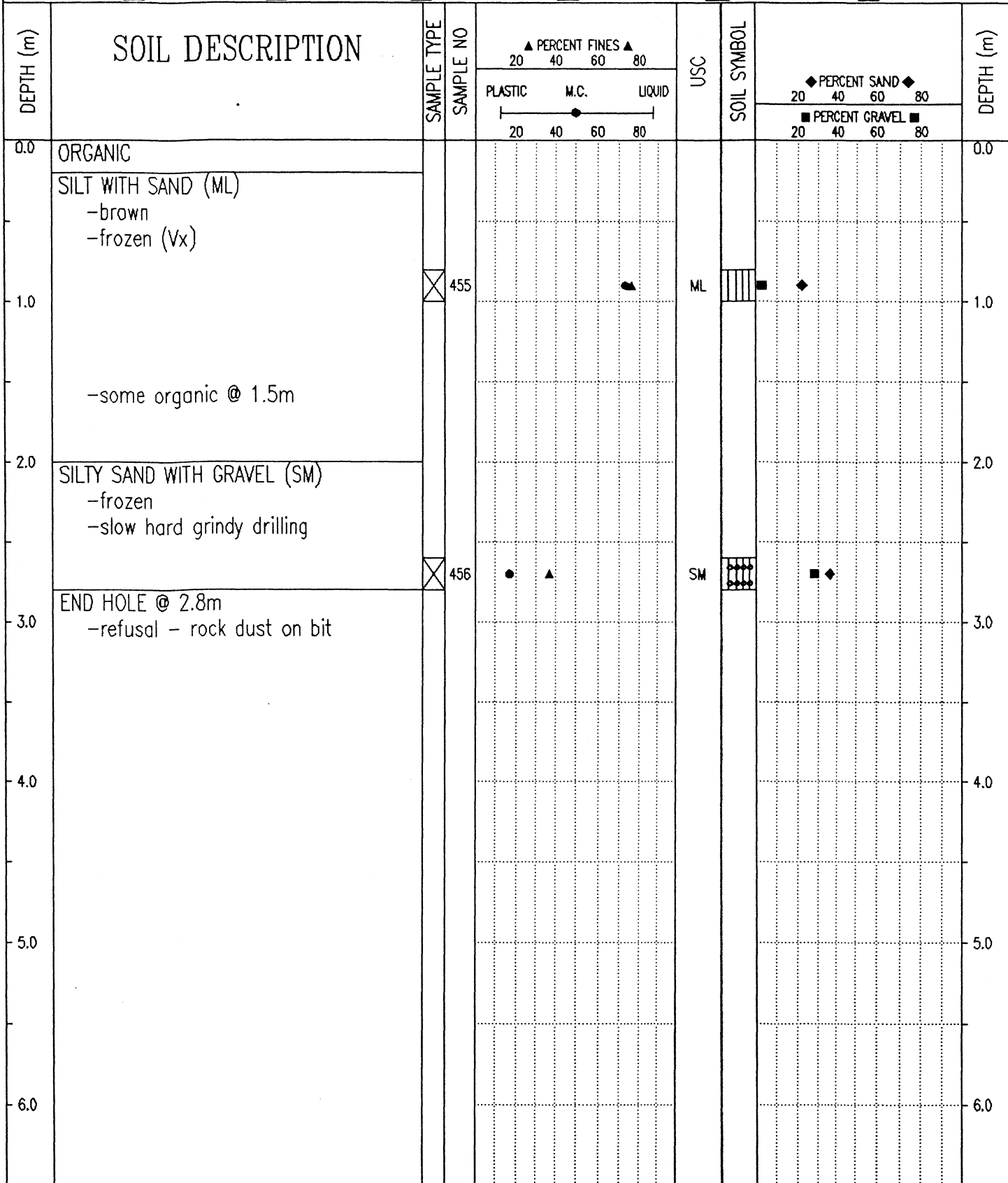
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COMPLETE: 99/07/05

SUB-SURFACE EXPLORATION & TESTING REPORT ALASKA HWY RE-CONSTRUCTION TEST HOLE NO: 519-574

SHAKWAK SEG 13 KM 1796-1822 A/H Project No: 092-202101-0329

MOBILE B-40L LOCATION: 1804+125 2M RHS ELEVATION: 0.00 (m)

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



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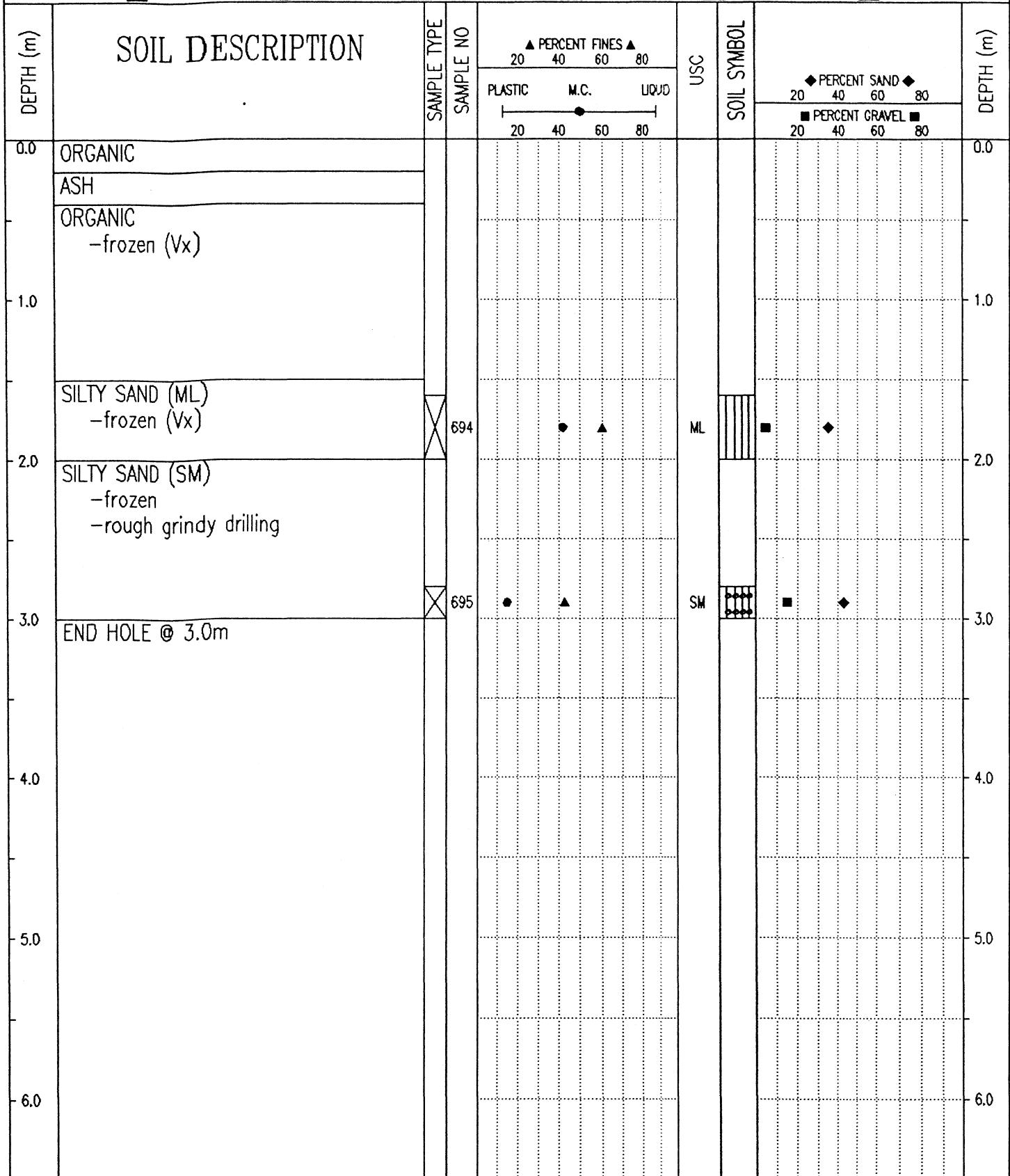
Fig. No:

COMPLETION DEPTH: 2.8 m

COMPLETE: 99/07/05

Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13	TEST HOLE NO: 527-731
ENGINEERING CAPITAL		KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L		LOCATION: 1804+125 20M RT	ELEVATION: 0.00 (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



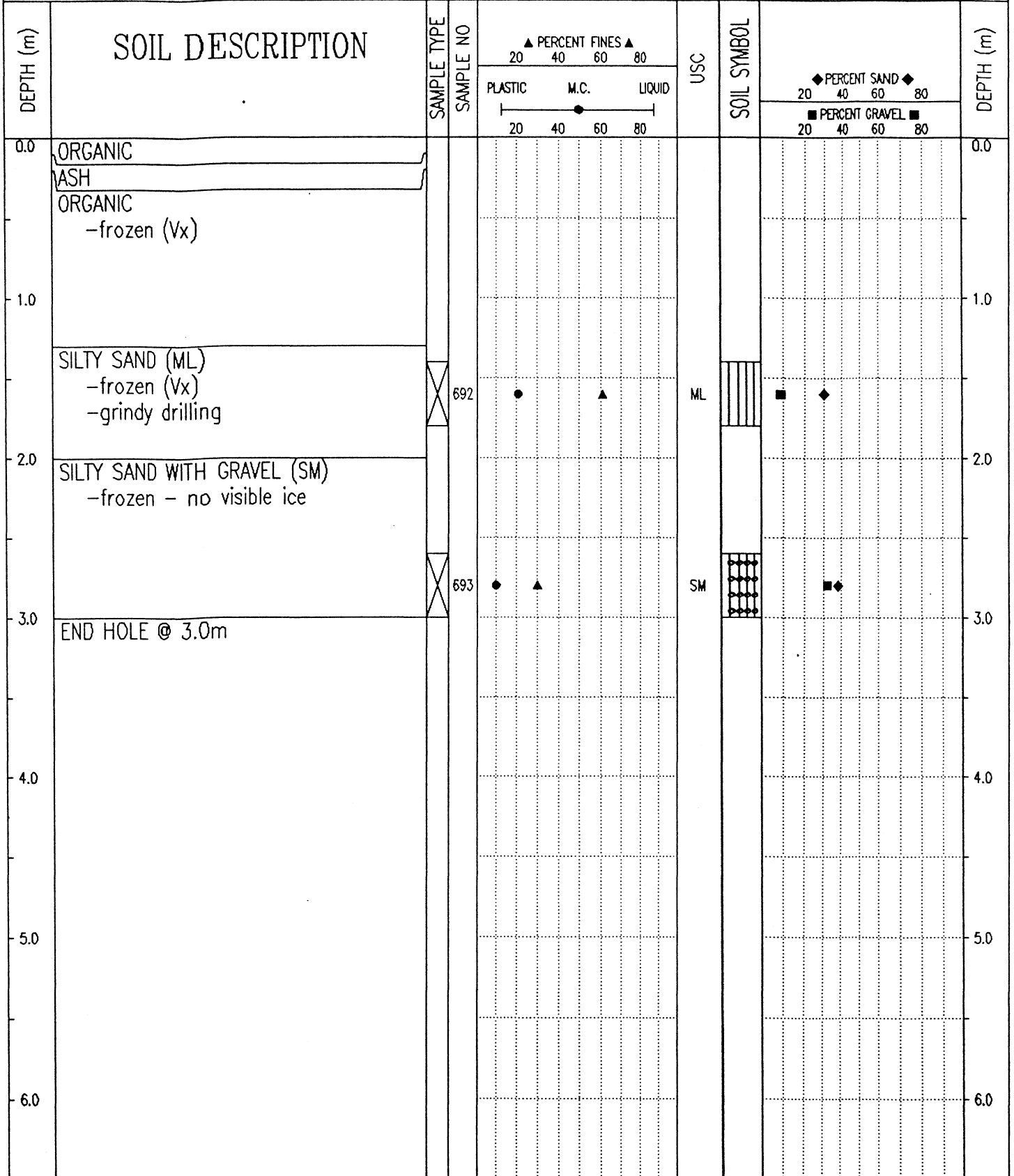
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Transportation Engineering

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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/08/18

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-730
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1804+125 20M LT	ELEVATION: 0.00 (m)

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

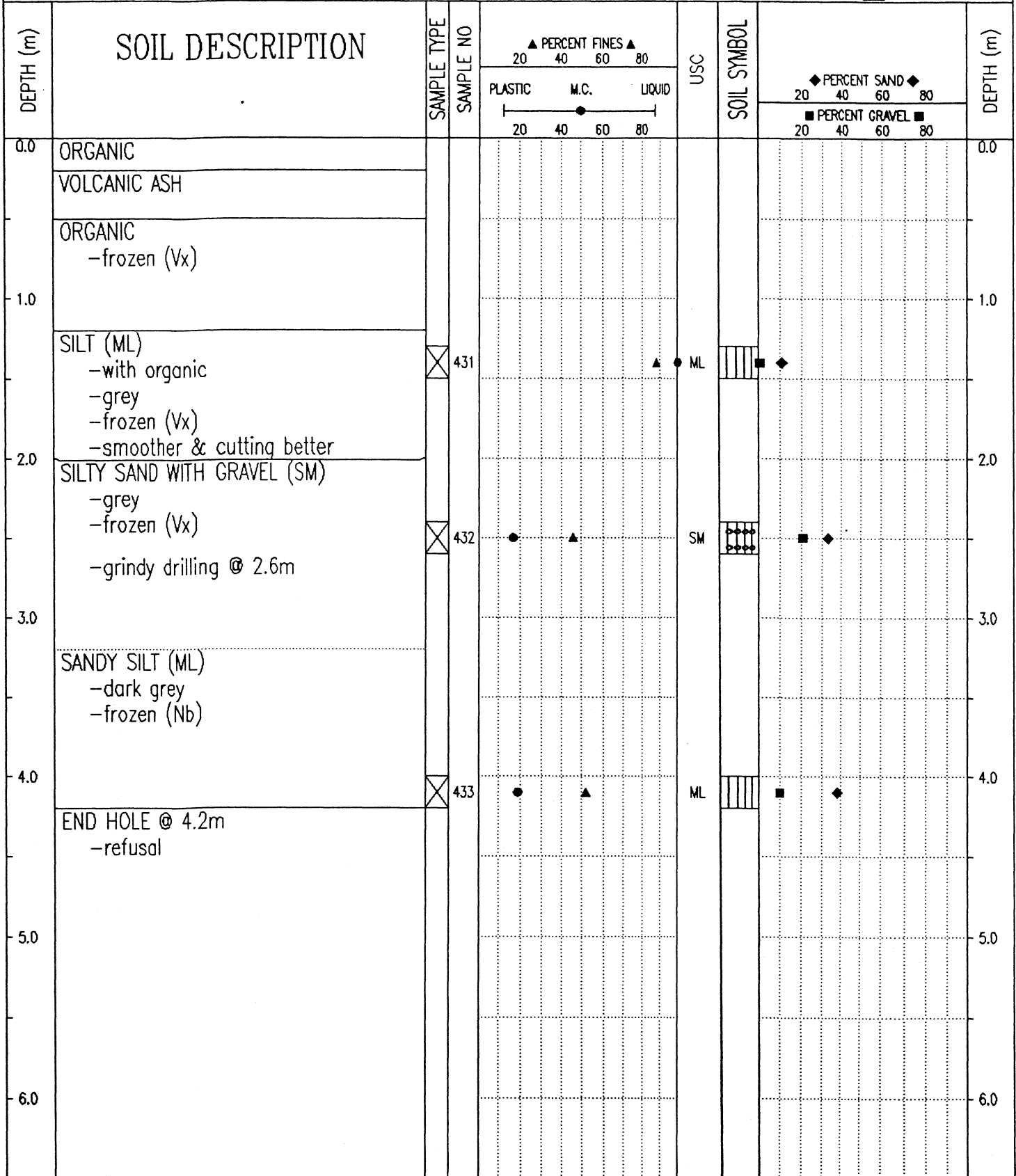


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Fig. No:

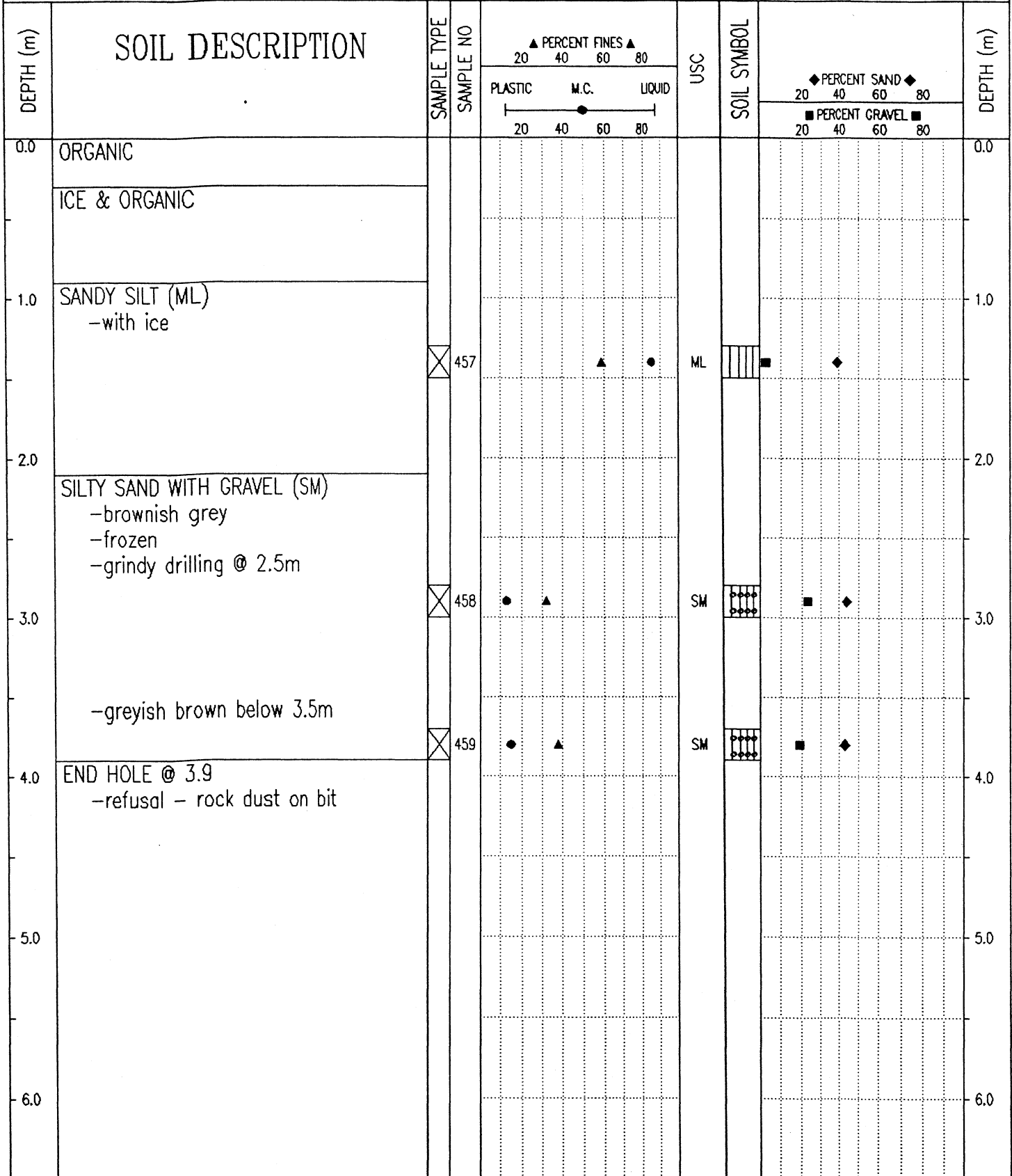
COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/08/18

SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION	TEST HOLE NO: 519-564
SHAKWAK SEG 13		KM 1796-1822 A/H	Project No: 092-202101-0329
MOBILE B-40L		LOCATION: 1804+150 30M LHS	ELEVATION: 0.00 (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



Government of Yukon Transportation Engineering	LOGGED BY: S.H.	COMPLETION DEPTH: 4.2 m
	REVIEWED BY:	COMPLETE: 99/07/05
	Fig. No:	Page 1 of 1

SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION	TEST HOLE NO: 519-575
SHAKWAK SEG 13		KM 1796-1822 A/H	Project No: 092-202101-0329
MOBILE B-40L		LOCATION: 1804+225 2M RHS	ELEVATION: 0.00 (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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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.9 m  
COMPLETE: 99/07/05

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL		DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL	
0.0	ORGANIC									0.0	
0.0 - 0.8	SILT WITH SAND (ML) -grey -frozen (Vx) below .4m		427		55	75	ML		■ ◆	0.8	
0.8 - 1.8	SANDY SILT WITH GRAVEL (ML) -grey -frozen (Vx) -grindy drilling		428		55	75	ML		■ ◆	1.8	
1.8 - 2.8	SILTY GRAVEL WITH SAND (GM) -grey -frozen (Vx)		429	15	55	75	GM		■ ◆	2.8	
2.8 - 3.8	SILTY SAND WITH GRAVEL (SM) -grey -frozen (Vx) -hard slow grindy drilling		430	15	55	75	SM		■ ◆	3.8	
3.8 - 4.0	END HOLE @ 4.0m -refusal - rock dust on bit									4.0	

99/11/25 11:54AM

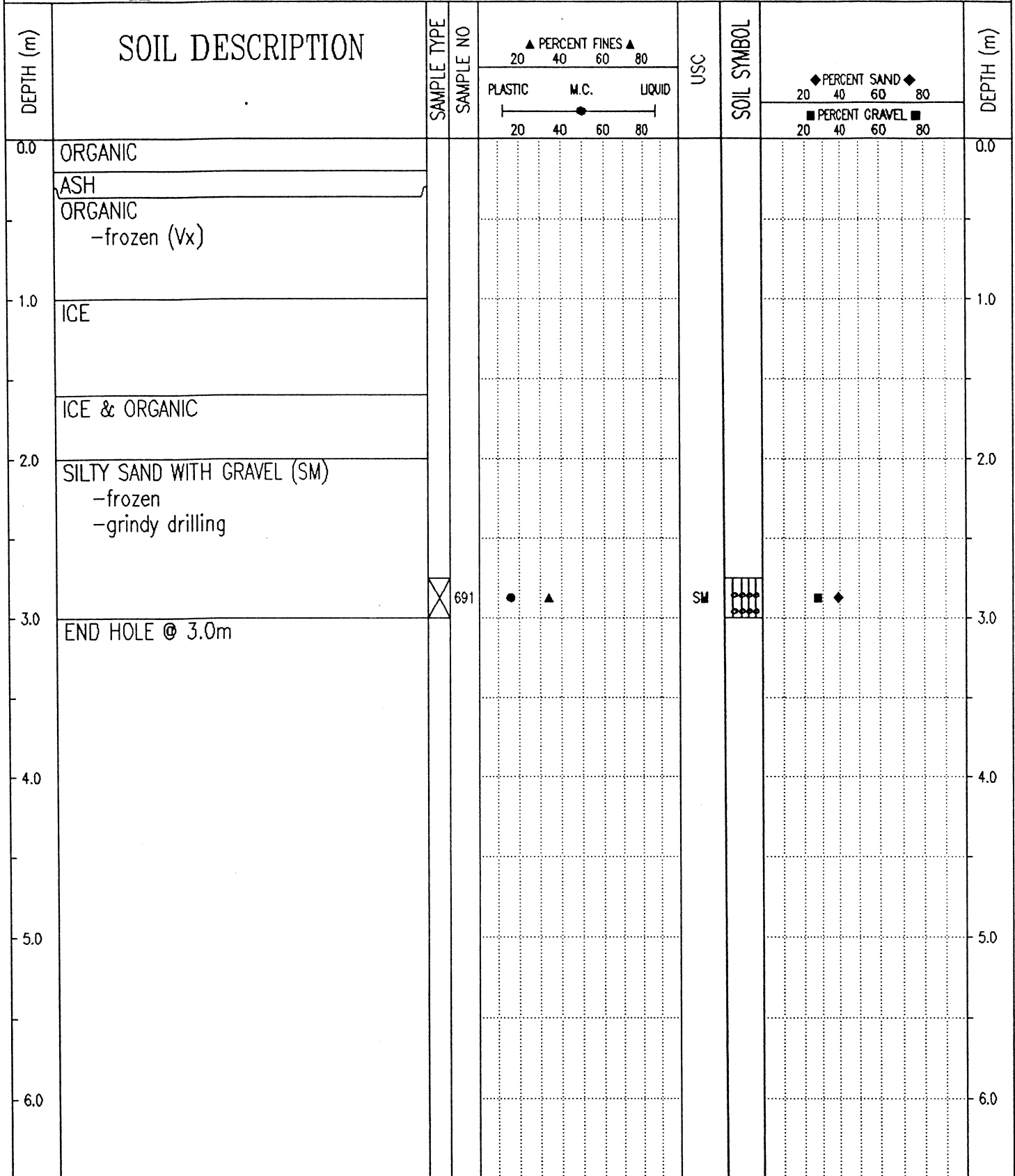
SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 514-512									
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329									
NODWELL B-40L		LOCATION: 1804+275 CENTRELINE		ELEVATION: 0.00 (m)									
SAMPLE TYPE <input type="checkbox"/> RETURN		<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	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	
0.0	ORGANIC											0.0	
	SILT WITH SAND (ML) -frozen	<input checked="" type="checkbox"/>	423	●		▲	ML		◆				
1.0	SILTY SAND WITH GRAVEL TO SANDY SILT WITH GRAVEL (SM)-(ML) -frozen (Vx)	<input checked="" type="checkbox"/>	424	●	▲		SM		◆	■		1.0	
2.0	SANDY SILT (ML) -not frozen	<input checked="" type="checkbox"/>	425	●	▲		ML		◆	■		2.0	
3.0	END HOLE @ 3.0m	<input checked="" type="checkbox"/>	426	●	▲		ML		◆	■		3.0	
4.0												4.0	
5.0												5.0	
6.0												6.0	

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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/05/07

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13	TEST HOLE NO: 527-729
ENGINEERING CAPITAL		KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L		LOCATION:1804+325 30M LT	ELEVATION: 0.00 (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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LOGGED BY: G.C.	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 99/08/18
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-728
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1804+420 30M LT	ELEVATION: 0.00 (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	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40		
0.0	ORGANIC										0.0	
	ASH											
	ORGANIC & ICE -frozen (Vx)											
1.0											1.0	
	ORGANIC, ASH & ICE MIX											
2.0											2.0	
	SILTY GRAVEL (GM) -frozen -grindy drilling											
3.0	END HOLE @ 3.0m	<input checked="" type="checkbox"/>	690	●▲			GM	◆■			3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 3.0 m
	REVIEWED BY:	COMPLETE: 99/08/13
	Fig. No:	Page 1 of 1

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC											0.0
	ASH											
	-frozen											
1.0	ORGANIC											1.0
	-frozen (Vx)											
2.0	ICE WITH SILT											2.0
		<input checked="" type="checkbox"/>	421				ML					
	SANDY SILT WITH GRAVEL (ML)											
	frozen											
3.0	END HOLE @ 3.0m											3.0
		<input checked="" type="checkbox"/>	422				ML					

99/11/16 02:51PM

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	PERCENT SAND ◆ 20 40 60 80 PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC							0.0
	SILT							
1.0	ICE -smooth drilling							1.0
2.0								2.0
3.0	SILTY SAND WITH GRAVEL (SM) -drill starts grinding @ 2.5m	<input checked="" type="checkbox"/>	420	● ▲	SM	◆ ■		3.0
4.0	END HOLE @ 3.0m							4.0
5.0								5.0
6.0								6.0

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC SILTY ASH WITH ICE -frozen (Vx)											0.0
1.0		<input checked="" type="checkbox"/>	688	●	▲		ML	▨	◆			1.0
2.0	SILTY SAND (SM) -frozen -grindy drilling											2.0
3.0		<input checked="" type="checkbox"/>	689	●	▲		SM	▨	◆			3.0
3.0	END HOLE @ 3.0m											3.0
4.0												4.0
5.0												5.0
6.0												6.0

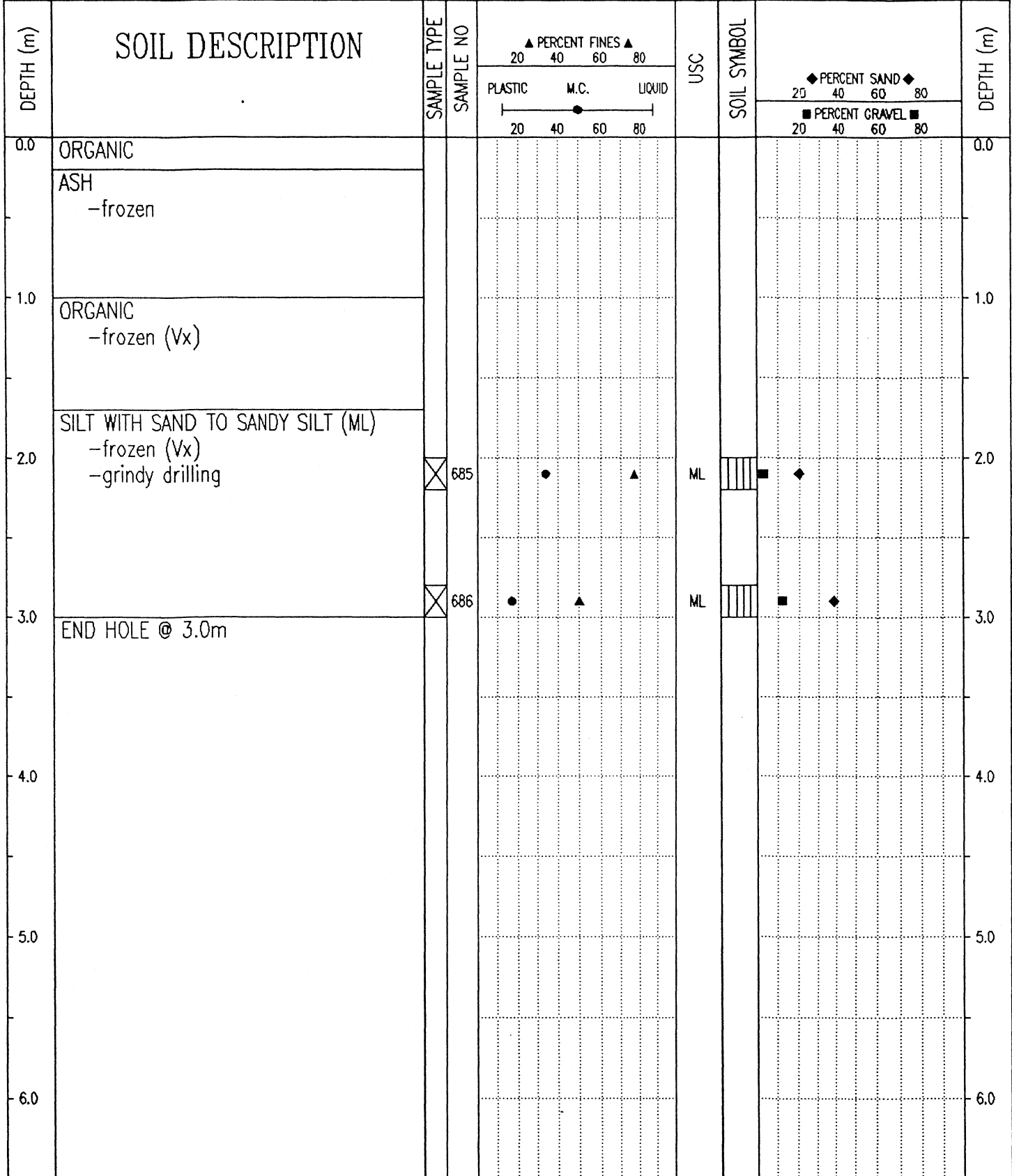
99/12/02 11:42AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-726
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1804+575 20M LT	ELEVATION: 0.00 (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	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC										0.0	
	ASH -frozen											
1.0	ORGANIC & ASH MIX -frozen (Vx)										1.0	
2.0											2.0	
3.0	SILTY SAND WITH GRAVEL (SM) -frozen	<input checked="" type="checkbox"/>	687	●	▲		SM	■	◆		3.0	
	END HOLE @ 3.0m											
4.0											4.0	
5.0											5.0	
6.0											6.0	

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 3.0 m
	REVIEWED BY:	COMPLETE: 99/08/17
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-725
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1804+650 30M LT	ELEVATION: 0.00 (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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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/08/17

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 514-509								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1804+725 CENTRELINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE		RETURN		S.P.T.								
AUGER		BULK		TUBE								
CORE												
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES		USC	SOIL SYMBOL	PERCENT SAND		PERCENT GRAVEL		DEPTH (m)
				PLASTIC	M.C.			20	40	60	80	
0.0	ORGANIC											0.0
	ASH											
	ICE											
1.0	ICE WITH SILT											1.0
	ICE - SILT - ODD ROCK -no sample		417			ML						
2.0	ICE - SILT - ODD ROCK -no sample											2.0
3.0	SILTY SAND WITH GRAVEL (SM) -frozen - no visible ice		418			SM						3.0
	-not frozen below 3.6m											
4.0	END HOLE @ 3.6m		419			SM						4.0
5.0												5.0
6.0												6.0

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Fig. No:  
COMPLETION DEPTH: 4.0 m  
COMPLETE: 99/05/07  
Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-724
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION:1804+775 30M LT	ELEVATION: 0.00 (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	SOIL SYMBOL	◆ PERCENT SAND ◆		■ PERCENT GRAVEL ■	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40		
0.0	ORGANIC										0.0	
	ASH											
	ORGANIC -frozen (Vx)											
1.0											1.0	
2.0	SANDY SILT WITH GRAVEL TO SILTY GRAVEL WITH SAND (ML)-(GM) -frozen -grindy drilling	<input checked="" type="checkbox"/>	683	●	▲		ML	▨	◆	■	2.0	
3.0											3.0	
4.0	END HOLE @ 4.0m	<input checked="" type="checkbox"/>	684	●	▲		GM	▨	◆	■	4.0	
5.0											5.0	
6.0											6.0	

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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 4.0 m  
COMPLETE: 99/08/17

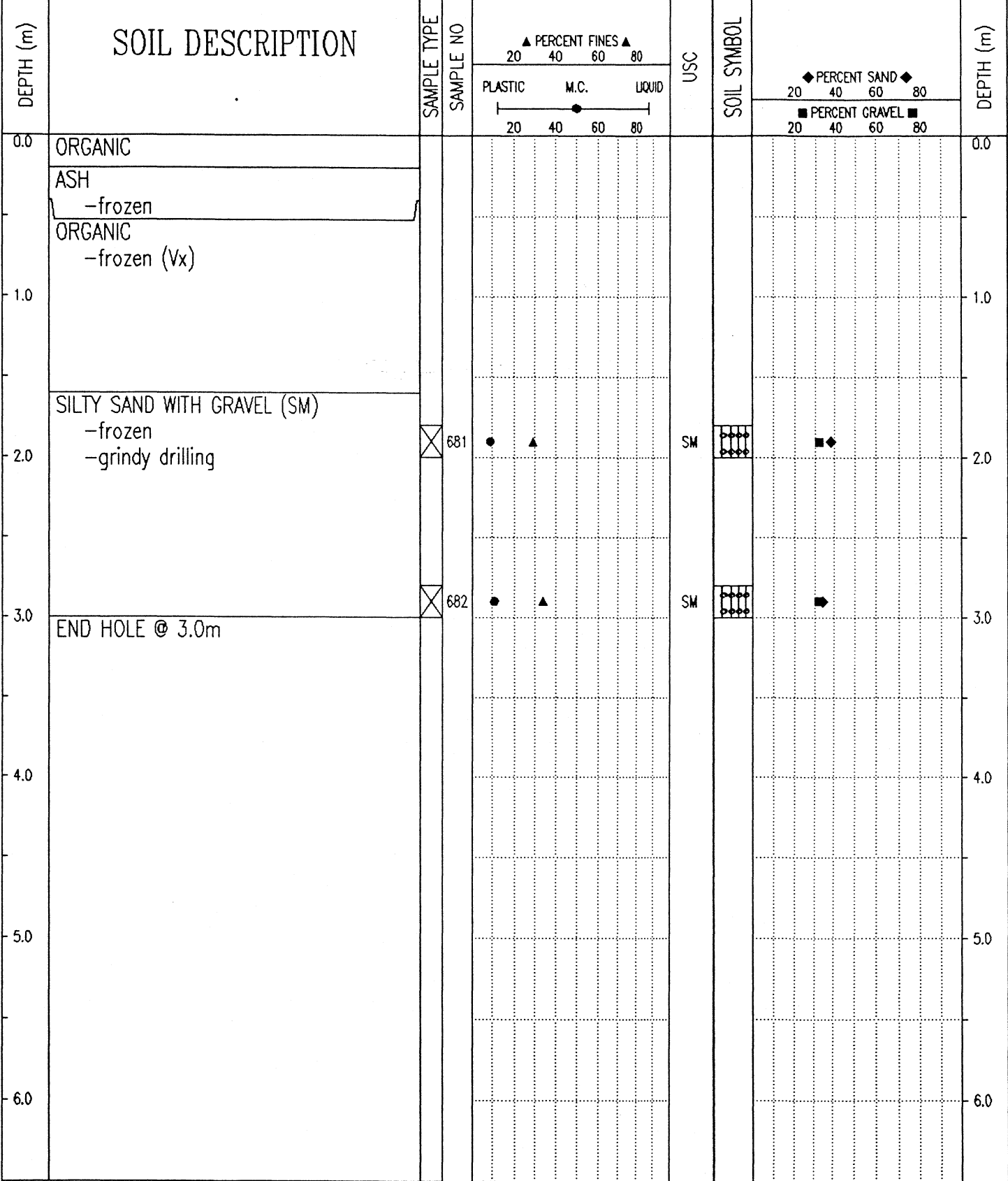
SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 514-508								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1804+850 CENTRELINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE		RETURN		S.P.T.								
AUGER		BULK		TUBE								
CORE												
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANICS -frozen (Vx)											0.0
1.0	ICE -no sample											1.0
2.0	ICE WITH SILT	⊗	414			▲	●	ML	▨	◆		2.0
3.0	SILT (ML) -frozen (Vx) -drill grinding @ 2.2m	⊗	415		●	▲		ML	▨	■		3.0
4.0	SILTY SAND WITH GRAVEL (SM) -frozen (Vx)	⊗	416	●	▲			SM	▨	■	◆	4.0
4.0	END HOLE @ 4.0M											4.0
5.0												5.0
6.0												6.0

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REVIEWED BY:  
Fig. No:

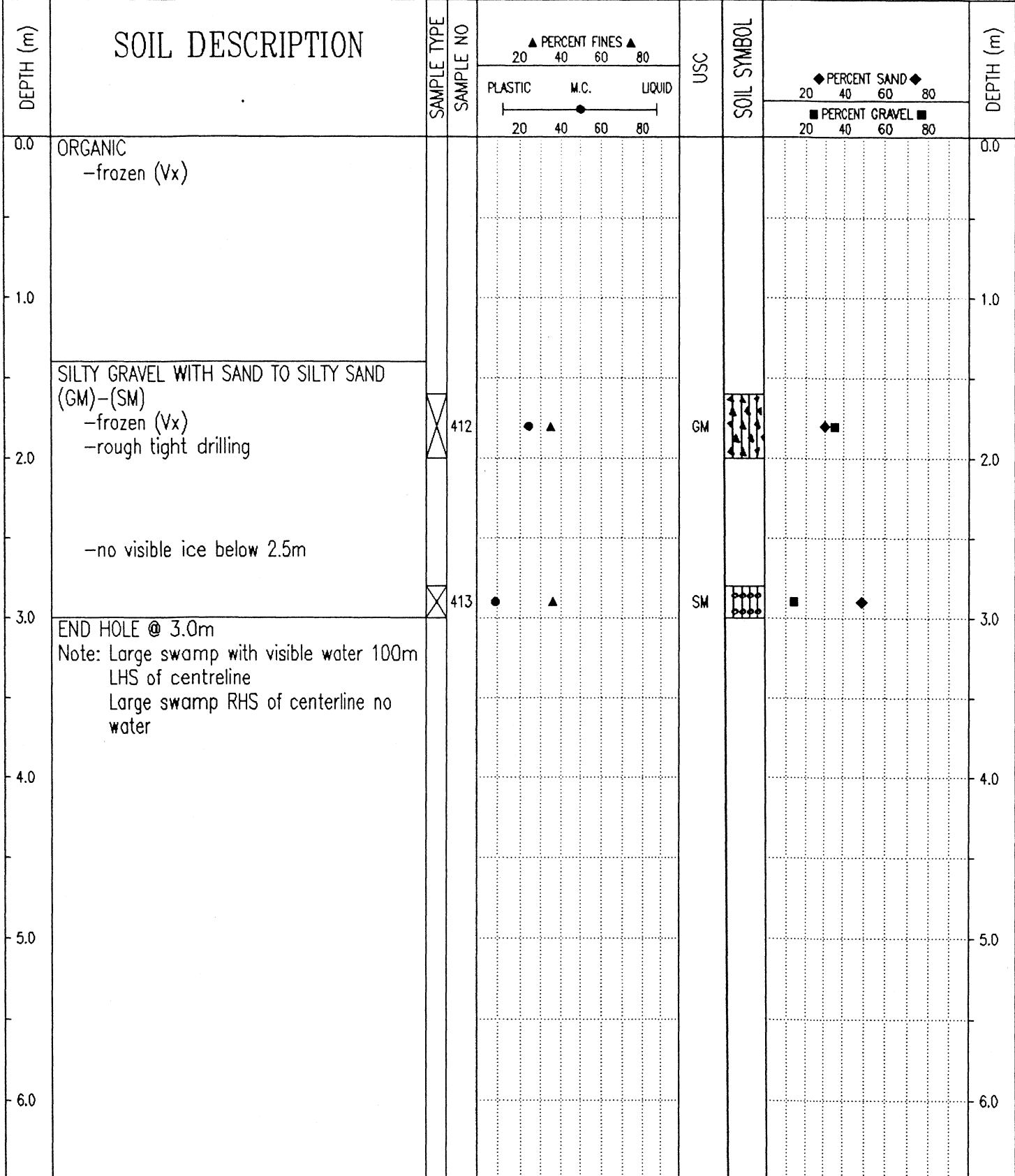
COMPLETION DEPTH: 4.0 m  
COMPLETE: 99/05/07

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



99/12/09 03:19PM

SUBSURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 514-507
SHAKWAK PROJECT SEG 13B	KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L	LOCATION: 1804+950 CENTRELINE	ELEVATION: 0.00 (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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REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 99/05/07

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC      M.C.      LIQUID ────────────┬───────────┬─────────── 20      40      60      80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC ASH							0.0
0.0 - 2.0	ORGANIC -frozen (Vx)							1.0
2.0	SILTY GRAVEL WITH SAND (GM) -frozen	<input checked="" type="checkbox"/>	678	● ▲	GM	◆ ■		2.0
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: G.C.	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 99/08/17
Fig. No:	Page 1 of 1

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)	
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■	PERCENT SAND ◆	PERCENT GRAVEL ■		
				20	40	60			20	40	60	80	
0.0	ORGANIC												0.0
	ASH												
	ORGANIC -frozen (Vx)												
1.0													1.0
	SILTY SAND WITH GRAVEL (SM) -frozen												
2.0	-grindy drilling below 2.0m		679	●	▲		SM	◻	■	◆			2.0
3.0	END HOLE @ 3.0m		680	●	▲		SM	◻	■	◆			3.0
4.0													4.0
5.0													5.0
6.0													6.0

99/12/02 11:41AM

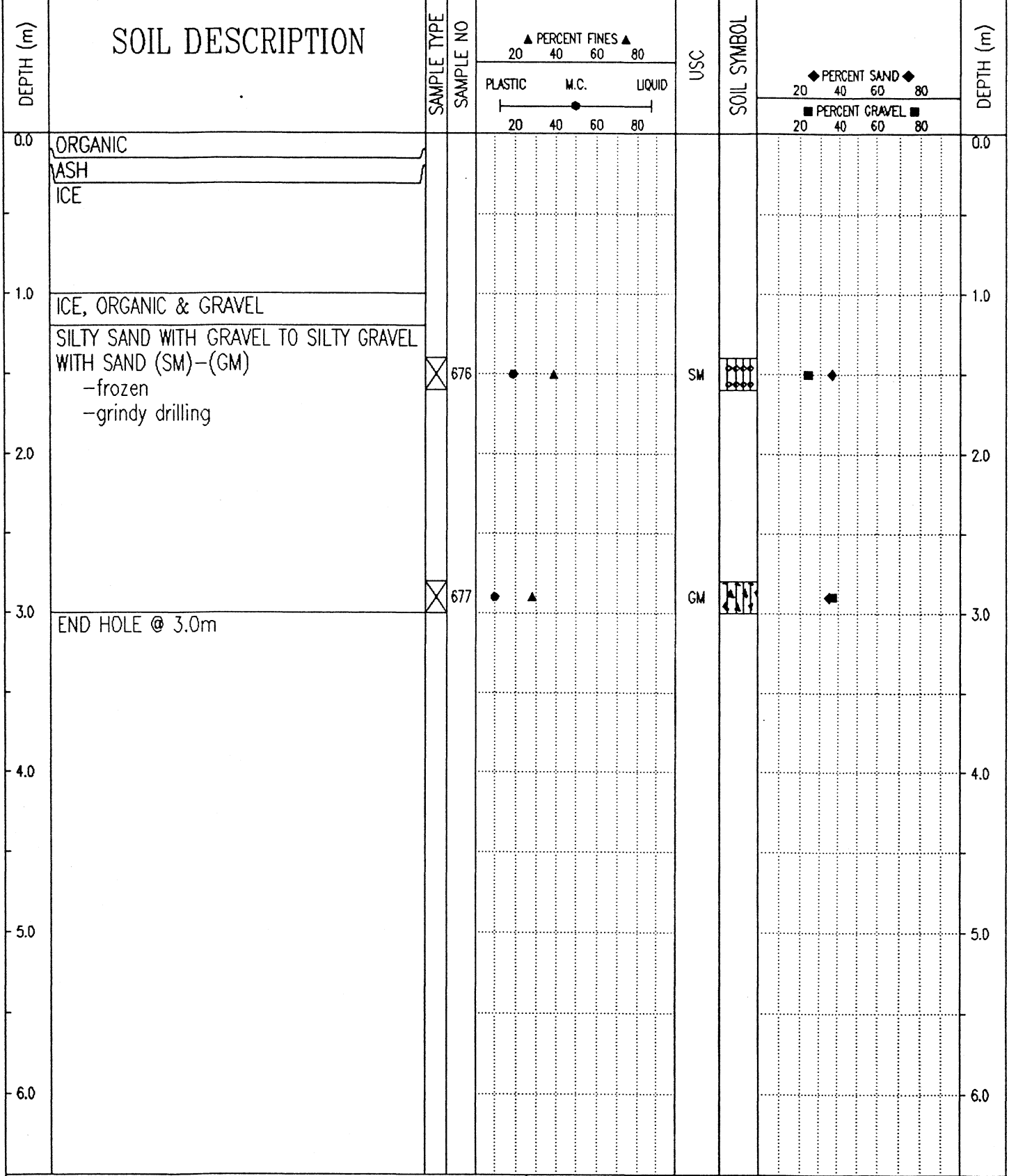
SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	
0.0	ORGANIC										0.0
	ASH										
	ORGANIC WITH SILT -frozen (Vx)										
1.0											1.0
		<input checked="" type="checkbox"/>	409				ML				
2.0	SILTY GRAVEL WITH SAND (GM) -frozen -no visible ice										2.0
		<input checked="" type="checkbox"/>	410	●	▲		GM		◆	■	
3.0											3.0
		<input checked="" type="checkbox"/>	411	●	▲		GM		◆	■	
	END HOLE @ 3.2m										
4.0											4.0
5.0											5.0
6.0											6.0

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LOGGED BY: G.C.	COMPLETION DEPTH: 3.2 m
REVIEWED BY:	COMPLETE: 99/05/07
Fig. No:	Page 1 of 1

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



99/12/02 11:41AM

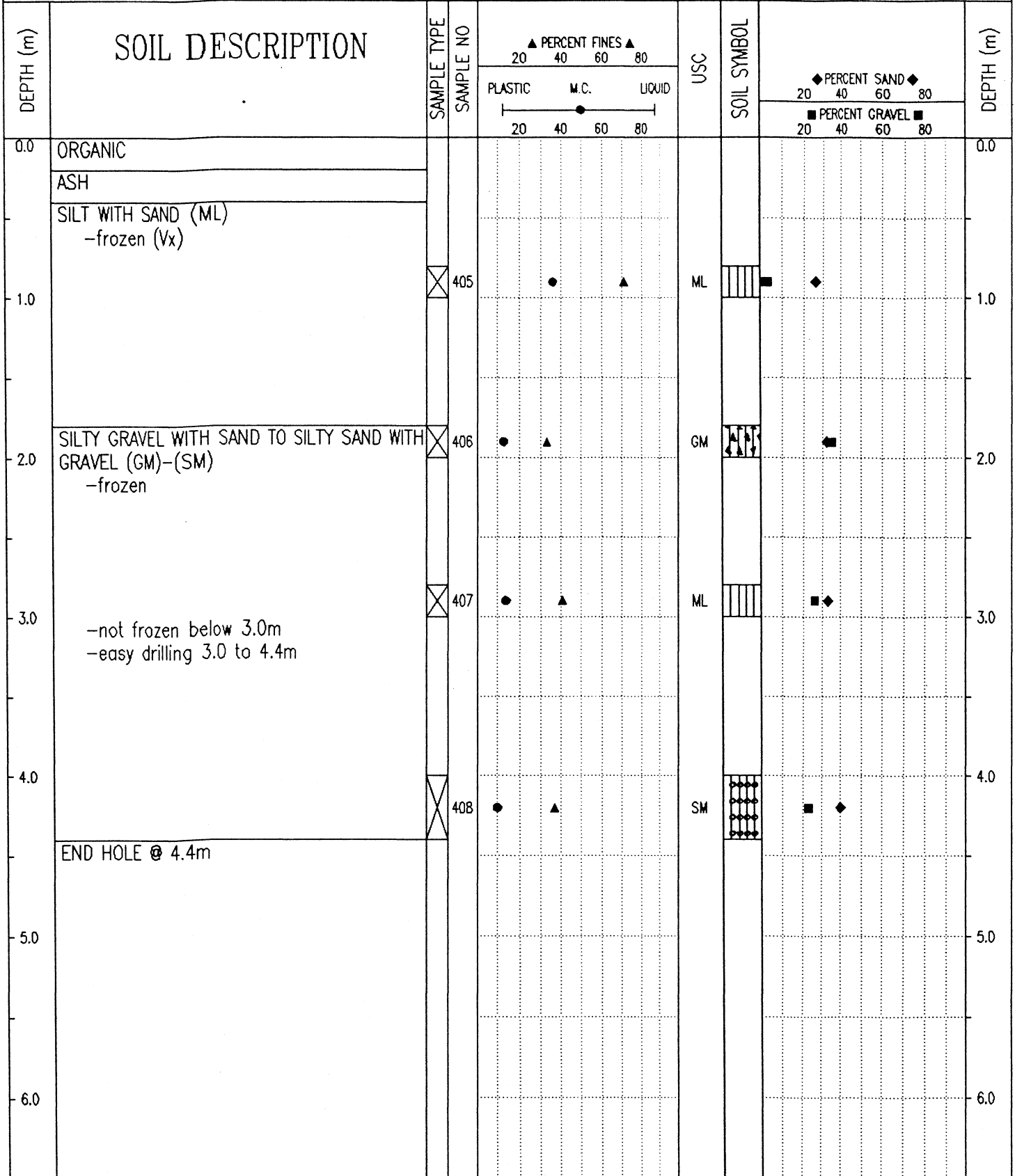
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ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329							
MOBILE B40-L		LOCATION:1805+172 30M RT		ELEVATION: 0.00 (m)							
SAMPLE TYPE <input type="checkbox"/> RETURN		<input checked="" type="checkbox"/> S.P.T.		<input checked="" 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	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	
0.0	ORGANIC ASH ORGANIC -frozen										0.0
1.0	GRAVELLY SILT WITH SAND (ML) -frozen (Vx) -grindy drilling										1.0
2.0	SILTY GRAVEL WITH SAND (GM) -frozen										2.0
3.0	END HOLE @ 3.0m										3.0
4.0											4.0
5.0											5.0
6.0											6.0

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LOGGED BY: G.C.  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/08/17

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



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REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 4.4 m

COMPLETE: 99/05/07

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 527-718						
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329						
MOBILE B40-L		LOCATION: 1805+275 30M RT		ELEVATION: 0.00 (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	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.			LIQUID	◆ PERCENT GRAVEL ◆	
0.0	ORGANIC LASH ORGANIC -frozen									0.0
1.0	SILTY SAND WITH GRAVEL (SM) -frozen (Vx) -grindy drilling									1.0
2.0										2.0
3.0										3.0
4.0										4.0
5.0										5.0
6.0										6.0
	END HOLE @3.0m									

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 527-716					
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329					
MOBILE B40-L		LOCATION: 1805+325 20M RT		ELEVATION: 0.00 (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	SOIL SYMBOL	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC -surface water								0.0
	ASH								
	ORGANIC -frozen (Vx)								
1.0									1.0
2.0	SILTY SAND WITH GRAVEL -frozen -grindy drilling	<input checked="" type="checkbox"/>	670	●	▲		SM	■ ◆	2.0
3.0	END HOLE @ 2.8m								3.0
4.0									4.0
5.0									5.0
6.0									6.0

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Fig. No:

COMPLETION DEPTH: 2.8 m  
COMPLETE: 99/08/17

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-717
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION:1805+325 20M LT	ELEVATION: 0.00 (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	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	
0.0	ORGANIC -visible surface water											0.0	
	ASH												
	ORGANIC -free water to .5m -frozen below .5m												
1.0												1.0	
2.0	SILTY SAND WITH GRAVEL (SM) -frozen -grinding drilling											2.0	
3.0		<input checked="" type="checkbox"/>	671	●	▲		SM	◆	■			3.0	
	HOLE @ 3.0m -refusal												
4.0												4.0	
5.0												5.0	
6.0												6.0	

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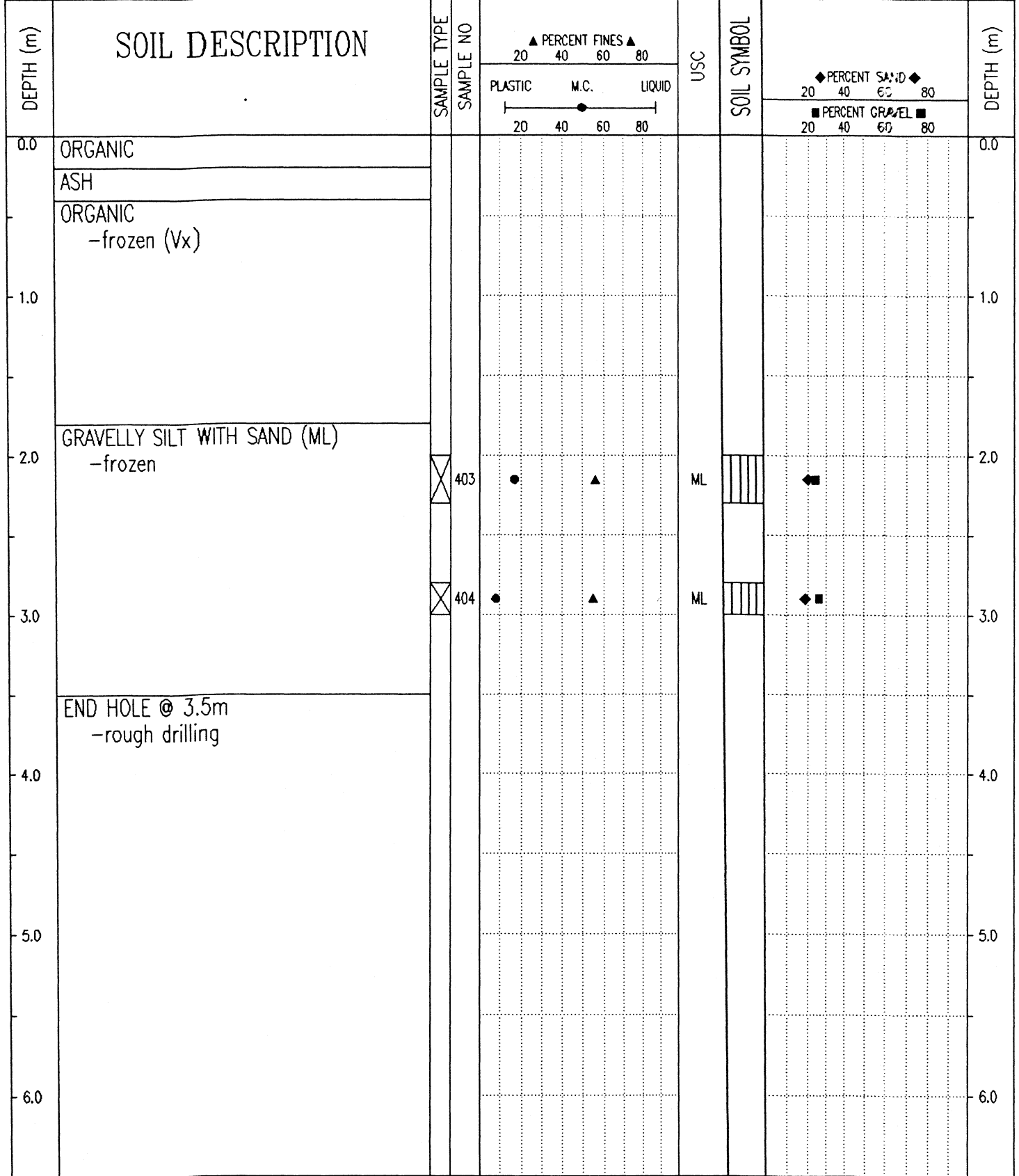
Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 99/08/17

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SUBSURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 514-504
SHAKWAK PROJECT SEG 13B	KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L	LOCATION: 1805+350 CENTRELINE	ELEVATION: 0.00 (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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 REVIEWED BY:      COMPLETE: 99/05/06  
 Fig. No:      Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-714
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION:1805+425 20M RT	ELEVATION: 0.00 (m)

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	
0.0	ORGANIC -free water on surface											0.0	
	ASH												
	ORGANIC -frozen												
1.0												1.0	
	SILTY GRAVEL WITH SAND (GM) -frozen (Vx) -test hole is saturated @ 1.5m												
2.0												2.0	
3.0	-sample #668 contaminated with ash & organic END HOLE @ 3.0	<input checked="" type="checkbox"/>	668	●	▲		GM	◆	■			3.0	
4.0												4.0	
5.0												5.0	
6.0												6.0	

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Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 99/08/17

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SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 527-715									
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329									
MOBILE B40-L		LOCATION: 1805+425 20M LT		ELEVATION: 0.00 (m)									
SAMPLE TYPE		RETURN		S.P.T.									
		AUGER		BULK									
		TUBE		CORE									
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)	
				PLASTIC	M.C.	LIQID			PERCENT GRAVEL ■				
				20	40	60	80		20	40	60	80	
				20	40	60	80		20	40	60	80	
0.0	ORGANIC												0.0
	ASH												
	ORGANIC & SILT MIX -frozen (Vx)												
1.0													1.0
	SILT WITH SAND (ML) -frozen (Vx)												
2.0													2.0
			669				ML						
3.0	SILTY GRAVEL WITH SAND -frozen -grindy drilling -no visible ice END HOLE @ 3m												3.0
			669A				GM						
4.0													4.0
5.0													5.0
6.0													6.0

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Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 99/08/17

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SUBSURFACE EXPLORATION & TESTING REPORT ALASKA HWY RECONSTRUCTION TEST HOLE NO: 514-503

SHAKWAK PROJECT SEG 13B KM 1799 - 1822 A/H Project No: 092-202101-0329

NODWELL B-40L LOCATION: 1805+450 CENTRELINE ELEVATION: 0.00 (m)

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC -frozen (Vx)											0.0
	ASH -frozen (Vx)											
	ORGANICS -frozen (Vx)											
1.0												1.0
	SILT WITH SAND (ML) -frozen (Vx)	<input checked="" type="checkbox"/>	400	●		▲	ML	▨	◆			2.0
2.0												
	SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (GM)-)SM) -frozen	<input checked="" type="checkbox"/>	401	●	▲		GM	▨	◆	■		3.0
3.0												
		<input checked="" type="checkbox"/>	402	●	▲		SM	▨	◆	■		4.0
4.0	END HOLE @ 4.0m											
5.0												5.0
6.0												6.0

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REVIEWED BY: COMPLETE: 99/05/06  
Fig. No: Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 527-713								
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329								
MOBILE B40-L		LOCATION:1805+450 20M RT		ELEVATION: 0.00 (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	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC ASH ORGANIC -water entering hole @ 0.5m -organic & ash satirated @ 0.5m -frozen (Vx) below 0.5m										0.0	
2.0	SILTY GRAVEL WITH SAND (GM) -with ash contamination -frozen	<input checked="" type="checkbox"/>	666	●	▲		GM	◆	■		2.0	
3.0	SILTY SAND WITH GRAVEL (SM) -frozen -drill grinding	<input checked="" type="checkbox"/>	667	●	▲		SM	■	◆		3.0	
3.0	END HOLE @ 3.0m											

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Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 99/08/17

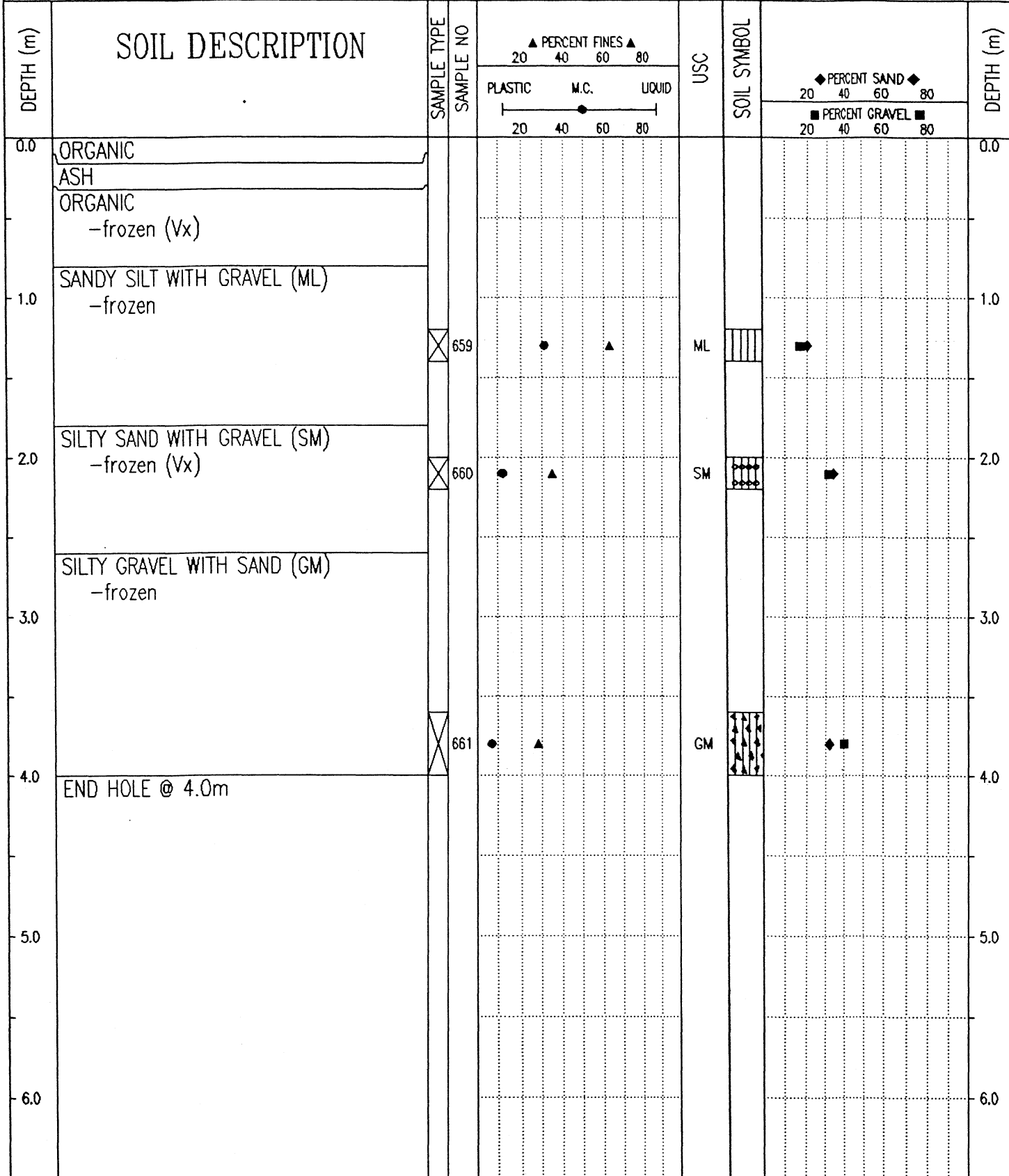
Page 1 of 1

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC										0.0	
	ASH											
	ORGANIC -frozen (Vx)											
1.0											1.0	
	SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (GM)-(SM) -frozen -grindy drilling											
2.0		<input checked="" type="checkbox"/>	664	●	▲		GM	◆	■		2.0	
3.0		<input checked="" type="checkbox"/>	665	●	▲		SM	◆	■		3.0	
	END HOLE @ 3.0m											
4.0											4.0	
5.0											5.0	
6.0											6.0	

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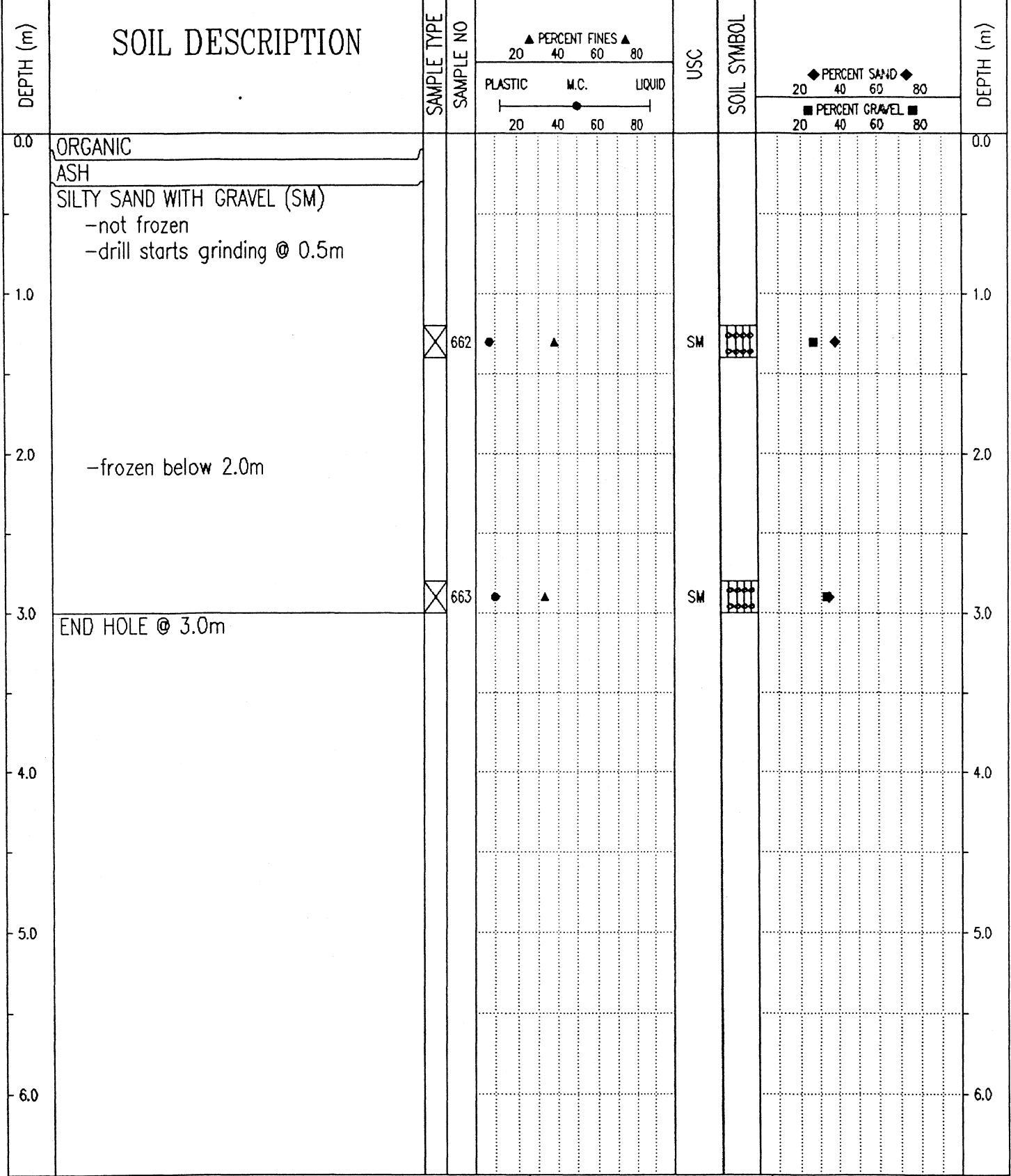
SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE



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REVIEWED BY:	COMPLETE: 99/08/05 17
Fig. No:	Page 1 of 1

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



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REVIEWED BY:	COMPLETE: 99/08/17
Fig. No:	Page 1 of 1

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC											0.0
	ASH											
	ORGANIC -frozen											
1.0	SILTY GRAVEL WITH SAND (GM) -frozen (Vx) -rough drilling		398	●	▲		GM	◆	■			1.0
2.0												2.0
3.0	SILTY SAND WITH GRAVEL (SM) -not frozen		399	●	▲		SM	◆	■			3.0
	END HOLE @ 3.0m											
4.0												4.0
5.0												5.0
6.0												6.0

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COMPLETION DEPTH: 3.0 m

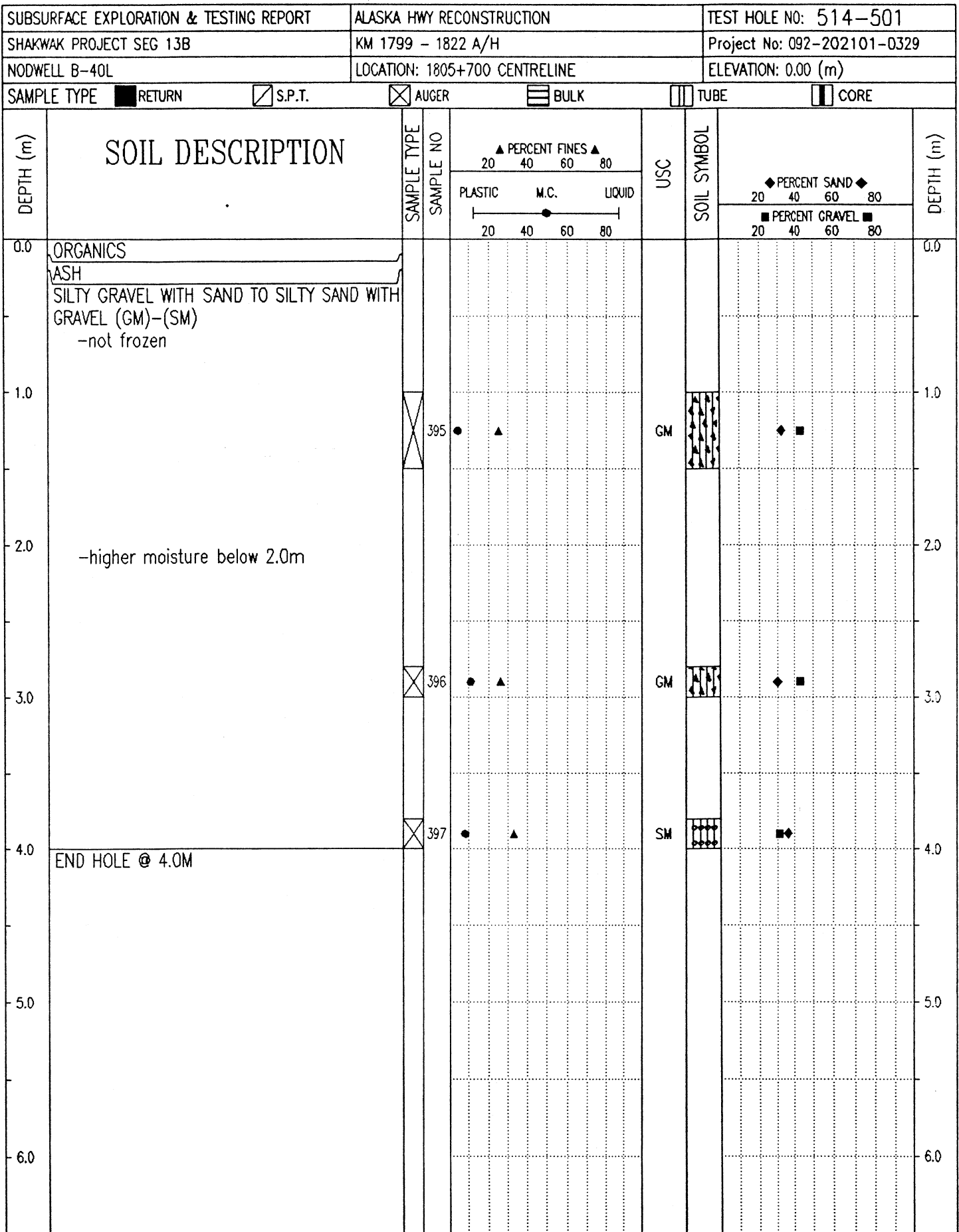
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COMPLETE: 99/05/06

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SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 526-709								
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329								
MOBILE B40-L		LOCATION: 1805+590 30M RT		ELEVATION: 0.00 (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	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC ASH											0.0
1.0	ORGANIC -frozen											1.0
2.0	SILTY SAND WITH GRAVEL (SM) -frozen (Vx) -grindy											2.0
3.0	END HOLE @ 3.0m	<input checked="" type="checkbox"/>	658	●	▲		SM		◆	■		3.0
4.0												4.0
5.0												5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C.		COMPLETION DEPTH: 3.0 m						
				REVIEWED BY:		COMPLETE: 99/08/13						
				Fig. No:				Page 1 of 1				



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Fig. No:

COMPLETION DEPTH: 4.0 m  
COMPLETE: 99/05/06

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 526-708
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1805+700 30M RT	ELEVATION: 0.00 (m)

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC ASH										0.0	
0.0 - 1.0	ORGANIC -frozen										1.0	
1.0 - 2.0	SILTY SAND WITH GRAVEL (SM) -frozen -grindy drilling	<input checked="" type="checkbox"/>	656	●	▲		SM	◆◆◆◆	■	◆	2.0	
2.0 - 3.0		<input checked="" type="checkbox"/>	657	●	▲		SM	◆◆◆◆	■	◆	3.0	
3.0	END HOLE @ 3.0m										3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

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 REVIEWED BY:      COMPLETE: 99/08/13  
 Fig. No:      Page 1 of 1

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	
0.0	ORGANIC											0.0	
	ASH												
	ORGANIC -frozen (Vx)												
1.0												1.0	
	SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND (SM) -(GM) -frozen -rough drilling	<input checked="" type="checkbox"/>	393	●	▲		SM		■			2.0	
2.0													
		<input checked="" type="checkbox"/>	394	●	▲		GM		◆	■		3.0	
3.0	END HOLE @ 3.0m -refusal												
4.0												4.0	
5.0												5.0	
6.0												6.0	

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Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/05/06

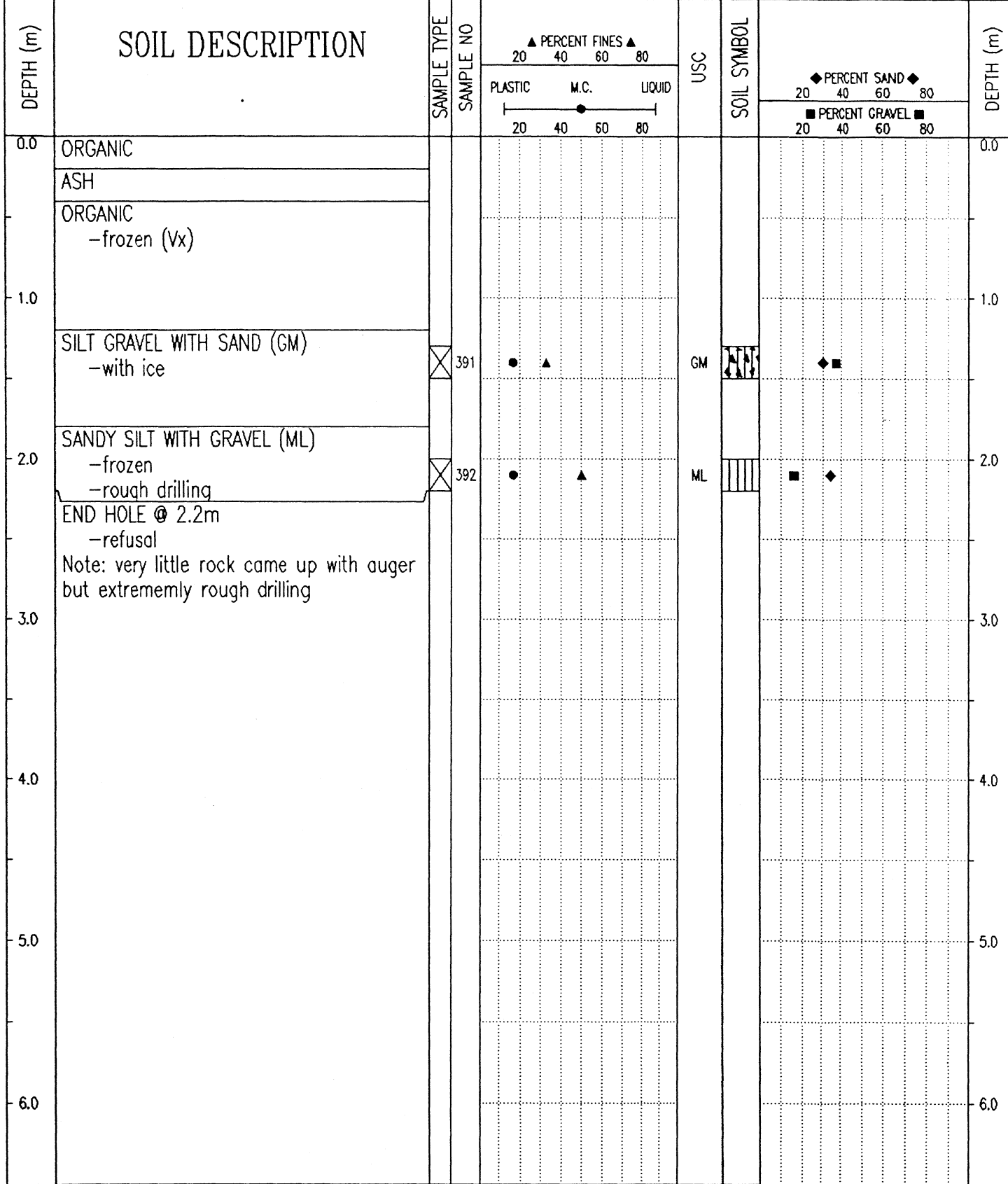
SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■	PERCENT SAND ◆	
0.0	ORGANIC WASH SILTY SAND WITH GRAVEL (SM) -frozen -grindy @ 0.4m										0.0
1.0	-possible rock below 1.5m		655	●	▲		SM	◆	■		1.0
2.0	-wet - no sample @ 2.0m										2.0
2.2	END HOLE @ 2.2m -refusal										2.2
3.0											3.0
4.0											4.0
5.0											5.0
6.0											6.0

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REVIEWED BY:	COMPLETE: 99/08/13
Fig. No:	Page 1 of 1

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



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REVIEWED BY:	COMPLETE: 99/05/06
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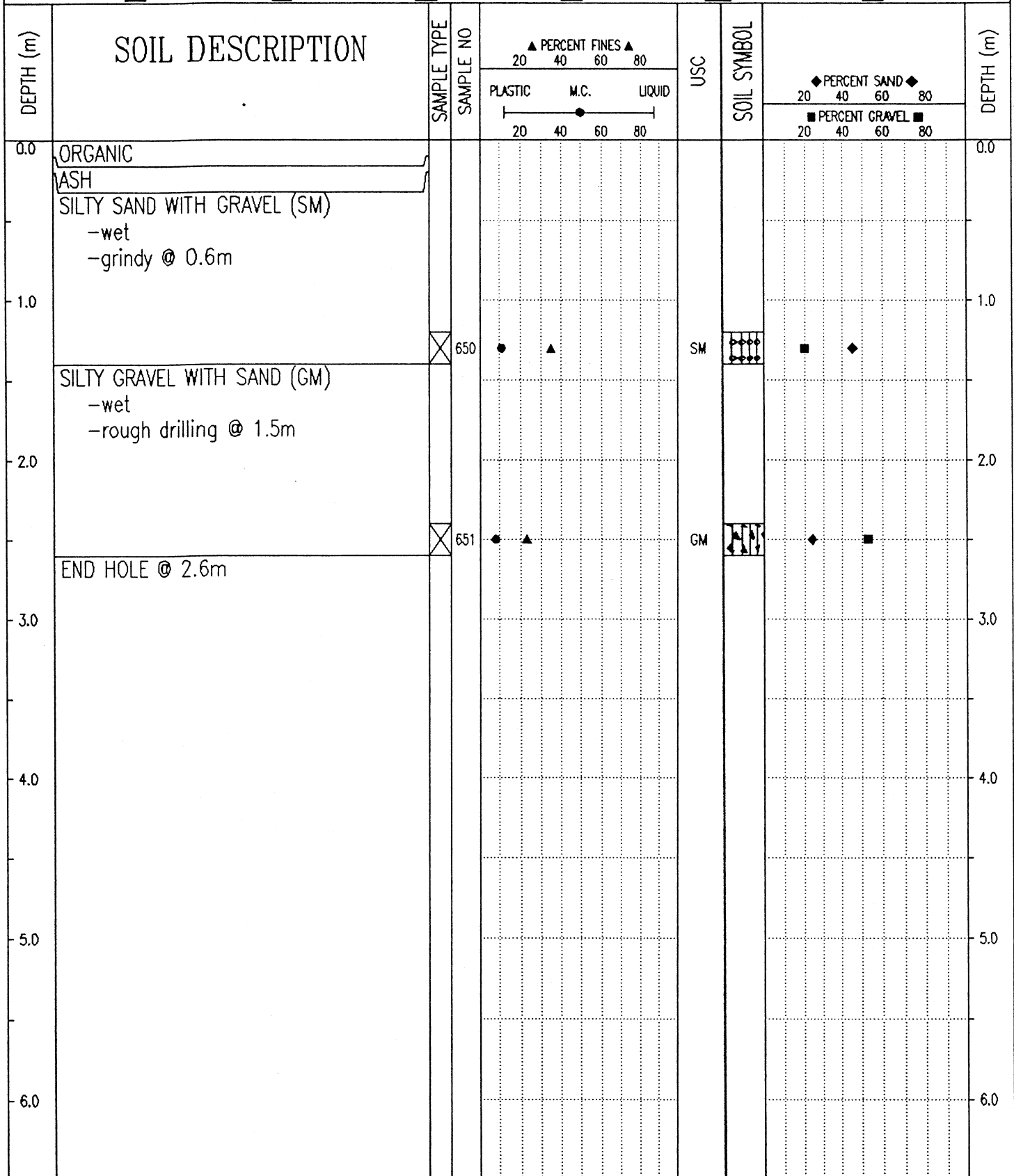
SAMPLE TYPE    RETURN    S.P.T.    AUGER    BULK    TUBE    CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			PERCENT GRAVEL ■			DEPTH (m)	
				PLASTIC	M.C.	LIQUID			20	40	60	80	20	40		60
0.0	ORGANIC															0.0
	ASH															
	ORGANIC -frozen															
2.0	SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND (SM)-(GM) -frozen -grindy drilling	<input checked="" type="checkbox"/>	652	●	▲		SM	◻◻◻◻◻◻	■	◆						2.0
3.0	END HOLE @ 3.0m Note: old stripping from pipeline stockpile. Rt of centreline. Check testhole @ 1805+900 centreline	<input checked="" type="checkbox"/>	653	●	▲		GM	◻◻◻◻◻◻		◆	■					3.0
4.0																4.0
5.0																5.0
6.0																6.0

98/12/16 02:42PM

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 526-706								
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329								
MOBILE B40-L		LOCATION: 1805+915 20M LT		ELEVATION: 0.00 (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	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)		
				PLASTIC	M.C.			LIQUID	PERCENT GRAVEL ■			
0.0	ORGANIC ASH			20	40	60	80	20	40	60	80	0.0
1.0	ORGANIC -frozen											1.0
2.0	SILTY SAND WITH GRAVEL (SM) -frozen -grindy drilling											2.0
3.0	END HOLE @ 3.0m	<input checked="" type="checkbox"/>	654	20	40	60	80	SM	◆			3.0
4.0												4.0
5.0												5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C.		COMPLETION DEPTH: 3.0 m						
				REVIEWED BY:		COMPLETE: 99/08/13						
				Fig. No:		Page 1 of 1						

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 526-704
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1806+000 30M RT	ELEVATION: 0.00 (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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Fig. No:

COMPLETION DEPTH: 1.6 m

COMPLETE: 99/08/13

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SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 513-498					
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329					
NODWELL B-40L		LOCATION: 1806+075 CENTRELINE		ELEVATION: 0.00 (m)					
SAMPLE TYPE		RETURN		S.P.T.					
AUGER		BULK		TUBE					
CORE									
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC ASH SANDY SILT (ML) -frozen								0.0
1.0			388	●	▲		ML	■ ◆	1.0
2.0	SILTY SAND WITH GRAVEL (SM) -rough drilling below 2.0m								2.0
3.0			389	◆	▲		SM	■ ◆	3.0
4.0	-tight drilling below 3.6m								4.0
4.0	END HOLE @ 4.0m		390	●	▲		SM	■ ◆	4.0
5.0									5.0
6.0									6.0

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Fig. No:

COMPLETION DEPTH: 4.0 m  
COMPLETE: 99/05/06

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL ◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC ASH ORGANIC -frozen						0.0
1.0	SILTY SAND WITH GRAVEL (SM) -frozen -grindy drilling		648	● ▲	SM	◆ ■	1.0
2.0	-rough drilling @ 2.0m						2.0
3.0	END HOLE @ 2.9m -refusal		649	● ▲	SM	◆ ■	3.0
4.0							4.0
5.0							5.0
6.0							6.0

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SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 526-702											
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329											
MOBILE B40-L		LOCATION: 1806+200 30M RT		ELEVATION: 0.00 (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	SOIL SYMBOL	PERCENT SAND ◆			PERCENT GRAVEL ■			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	20	40	
0.0	ORGANIC ASH													0.0	
	ORGANIC -frozen														
1.0														1.0	
2.0	SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (GM)-(SM) -frozen -grindy drilling -rougher drilling below 2.0m	<input checked="" type="checkbox"/>	646	●	▲		GM	▲▲▲	◆	■				2.0	
3.0	END HOLE @ 2.8m -refusal	<input checked="" type="checkbox"/>	647	●	▲		SM	●●●●	■	◆				3.0	
4.0														4.0	
5.0														5.0	
6.0														6.0	
Government of Yukon Transportation Engineering				LOGGED BY: G.C. REVIEWED BY: Fig. No:				COMPLETION DEPTH: 2.8 m COMPLETE: 99/08/13							

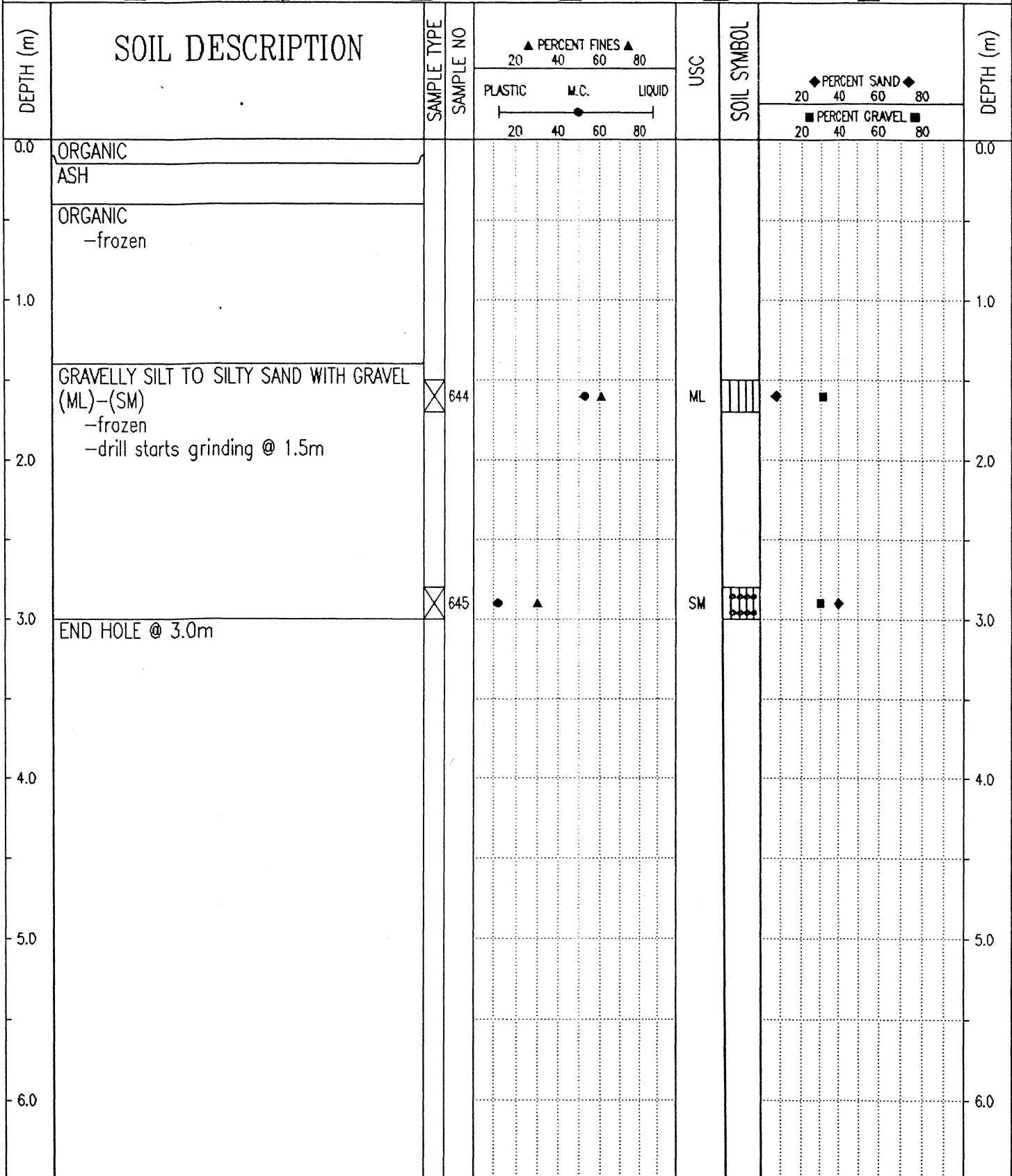
SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 513-497						
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329						
NODWELL B-40L		LOCATION: 1806+225 CENTRELINE		ELEVATION: 0.00 (m)						
SAMPLE TYPE <input type="checkbox"/> RETURN		<input checked="" 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	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.			LIQUID	20	
0.0	ORGANIC									0.0
	ASH									
	ORGANIC -frozen (Vx)									
1.0	SILTY SAND WITH GRAVEL (SM) -frozen (Vx) -rough drilling									1.0
2.0		<input checked="" type="checkbox"/>	387A	◆	▲	SM	◆	◆		2.0
3.0	END HOLE @ 2.6m -refusal									3.0
4.0										4.0
5.0										5.0
6.0										6.0

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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 2.6 m  
COMPLETE: 99/05/06

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13	TEST HOLE NO: 526-701
ENGINEERING CAPITAL		KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L		LOCATION:1806+300 30M RT	ELEVATION: 0.00 (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



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REVIEWED BY:	COMPLETE: 99/08/13
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 513-496								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1806+325 CENTRELINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE		RETURN		S.P.T.								
		AUGER		BULK								
		TUBE		CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC										0.0	
	ASH											
	ORGANIC -frozen (Vx)											
1.0											1.0	
	SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND (SM)-(GM) -frozen		386	●	▲		SM	◆	■			
2.0											2.0	
			387	●	▲		GM	◆	■			
3.0	END HOLE @ 3.0m -refusal										3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

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Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/05/06

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 526-700								
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329								
MOBILE B40-L		LOCATION: 1806+400 30M RT		ELEVATION: 0.00 (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	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40		
0.0	ORGANIC ASH											0.0
0.0 - 1.0	SILTY SAND WITH GRAVEL TO SANDY SILT WITH GRAVEL (SM)-(ML) -frozen -drill starts grinding @ 0.8M											
0.8		<input checked="" type="checkbox"/>	642	●	▲		SM	◆	■			0.8
3.0	END HOLE @ 3.0m	<input checked="" type="checkbox"/>	643	●	▲		ML	◆	■			3.0

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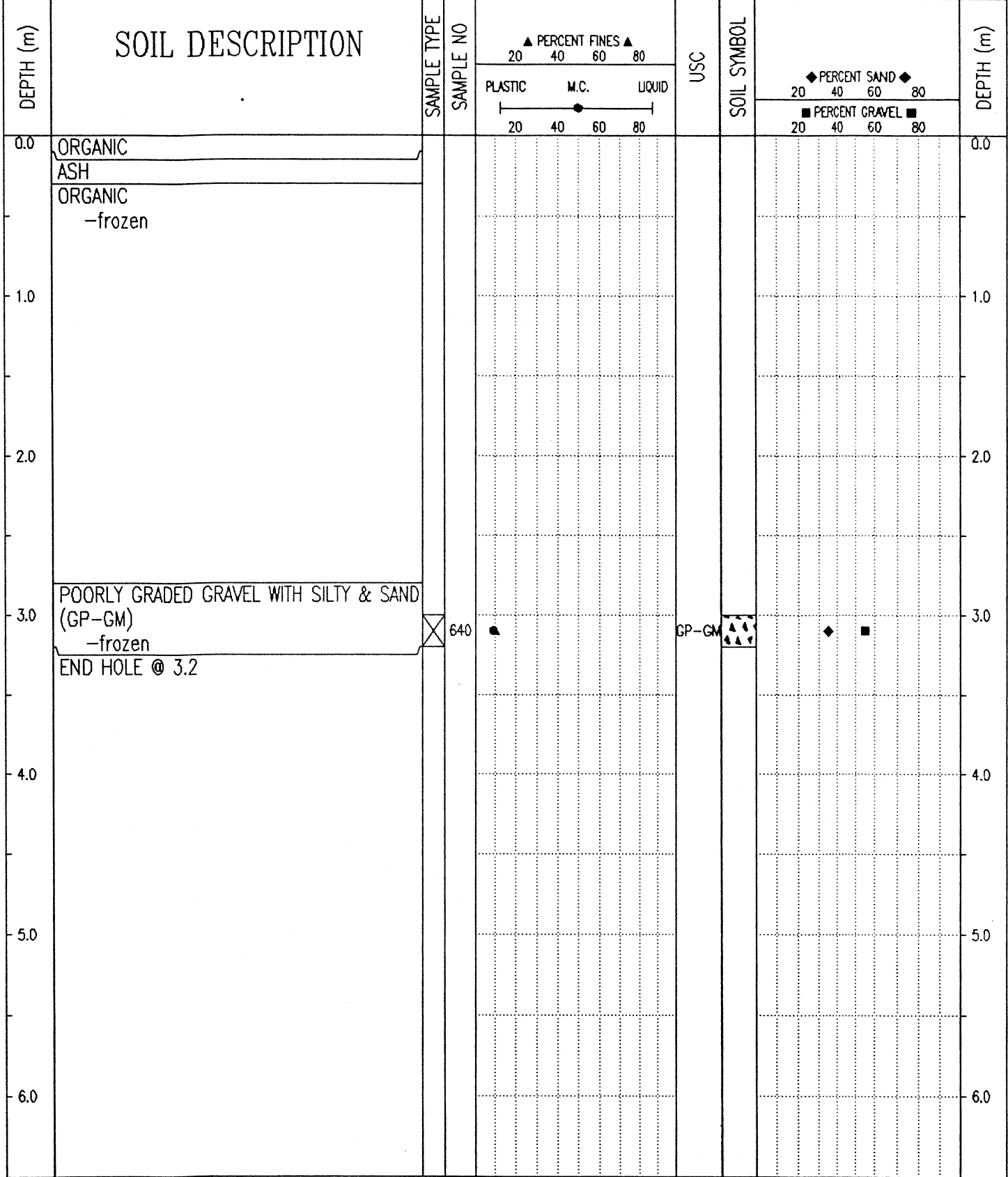
Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 99/08/13

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



99/12/10 02:42PM

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	SOIL SYMBOL	◆ PERCENT SAND ◆			DEPTH (m)
				20	40	60			80	20	40	
0.0	ORGANIC											0.0
	ASH											
	ORGANIC -frozen											
1.0												1.0
2.0												2.0
3.0	SILTY GRAVEL WITH SAND (GM) -frozen -grindy drilling END HOLE @ 3.0m	<input checked="" type="checkbox"/>	641	●	▲		GM	GM	◆	■		3.0
4.0												4.0
5.0												5.0
6.0												6.0

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LOGGED BY: G.C.	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 99/08/12
Fig. No:	Page 1 of 1

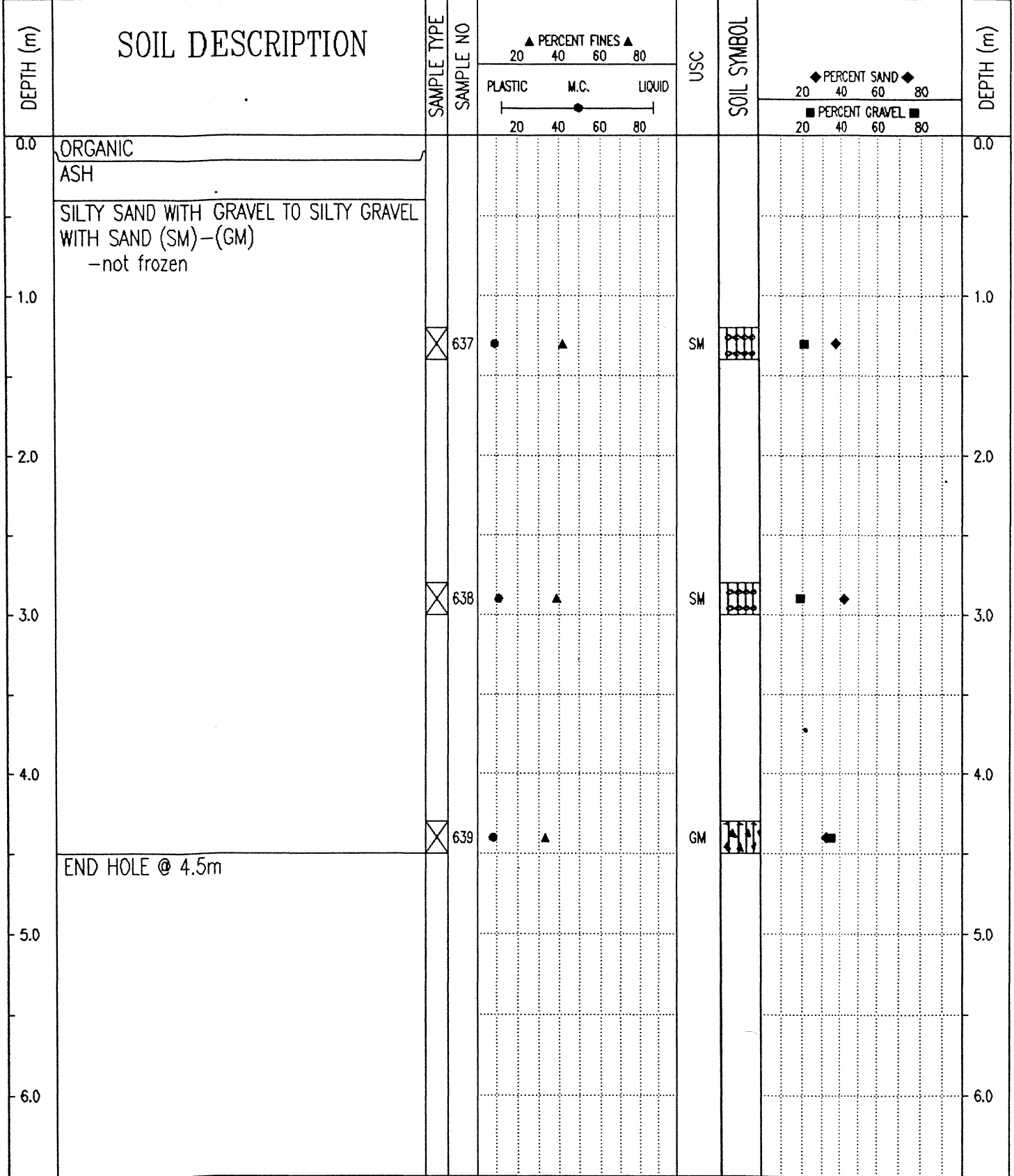
SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	PERCENT SAND ◆ 20 40 60 80 PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC							0.0
	ASH							
	ORGANIC -frozen (Vx)							
1.0								1.0
2.0								2.0
	ICE							
3.0	SILTY SAND WITH GRAVEL (SM) -frozen -grindy drilling @ 2.9m END HOLE @ 3.0m	<input checked="" type="checkbox"/>	385	● ▲	SM	◆ ■		3.0
4.0								4.0
5.0								5.0
6.0								6.0

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REVIEWED BY:	COMPLETE: 99/05/06
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13	TEST HOLE NO: 526-697
ENGINEERING CAPITAL		KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L		LOCATION: 1806+575 30M RT	ELEVATION: 0.00 (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



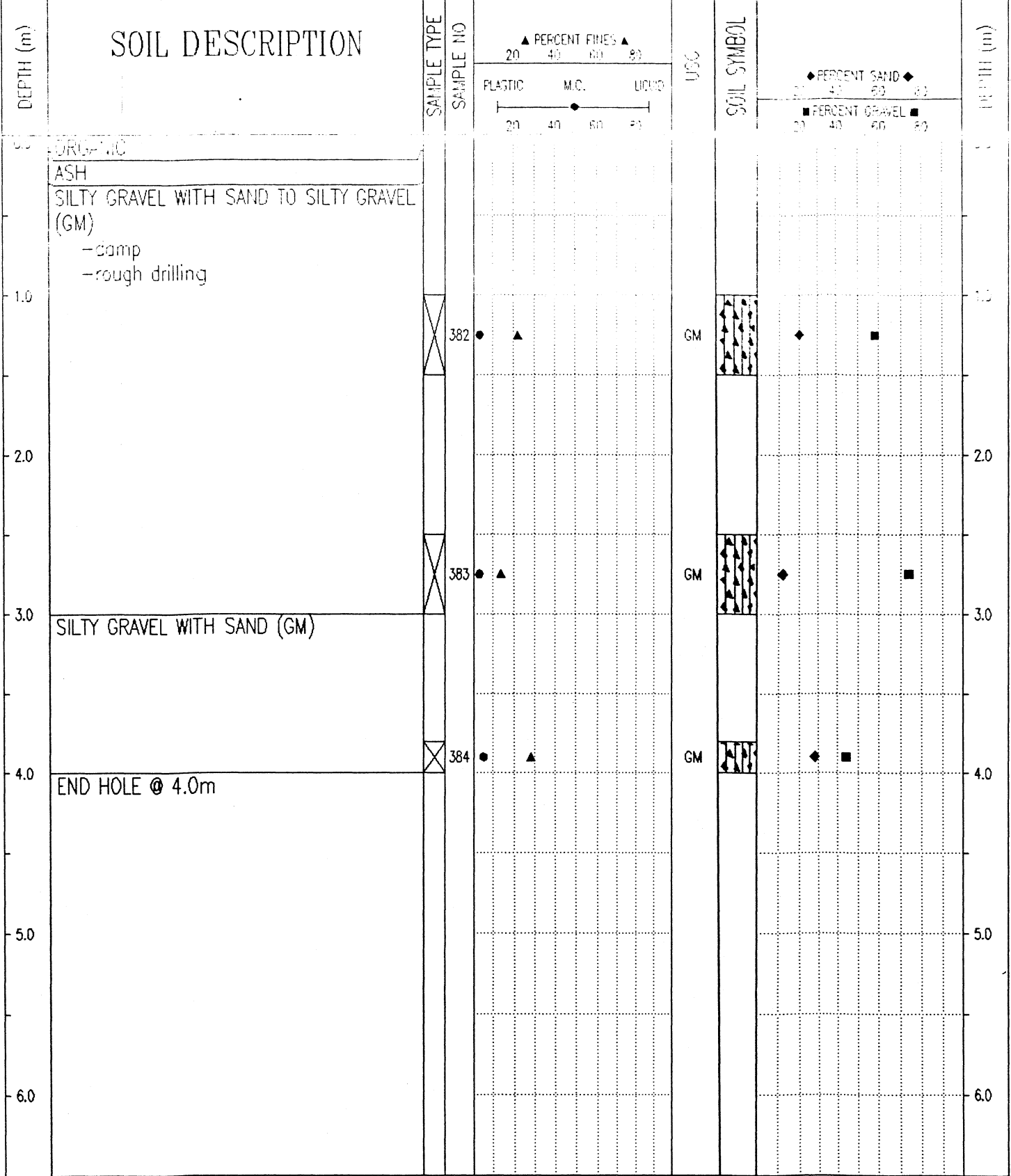
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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 4.5 m  
COMPLETE: 99/08/12

99/12/13 09:50AM

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

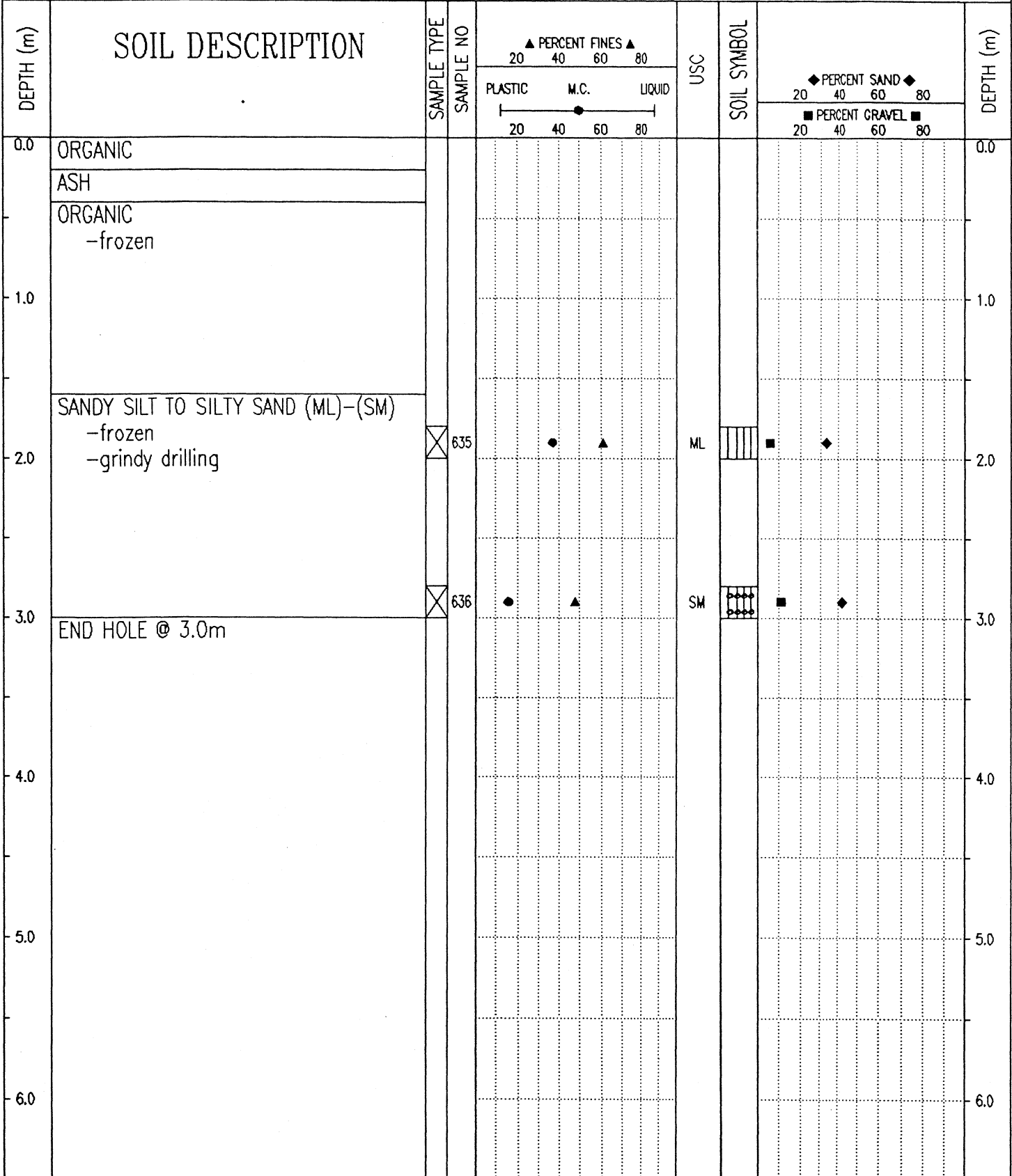


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LOGGED BY: G.C.	COMPLETION DEPTH: 4.0 m
REVIEWED BY:	COMPLETE: 99/05/06
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 526-695								
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329								
MOBILE B40-L		LOCATION:1806+695 20M RT		ELEVATION: 0.00 (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	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)		
				PLASTIC	M.C.			LIQUID	PERCENT GRAVEL ■			
0.0	ORGANIC			20	40	60	80	20	40	60	80	0.0
	ASH											
	ORGANIC -frozen (Vx)											
1.0												1.0
2.0	SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (GM)-(SM) -frozen -grindy drilling	<input checked="" type="checkbox"/>	633	●	▲			GM	◆			2.0
3.0	END HOLE @ 3.0m	<input checked="" type="checkbox"/>	634	●	▲			SM	◆			3.0
4.0												4.0
5.0												5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 3.0 m COMPLETE: 99/08/12		Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 526-696
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1806+705 20M LT	ELEVATION: 0.00 (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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Fig. No:

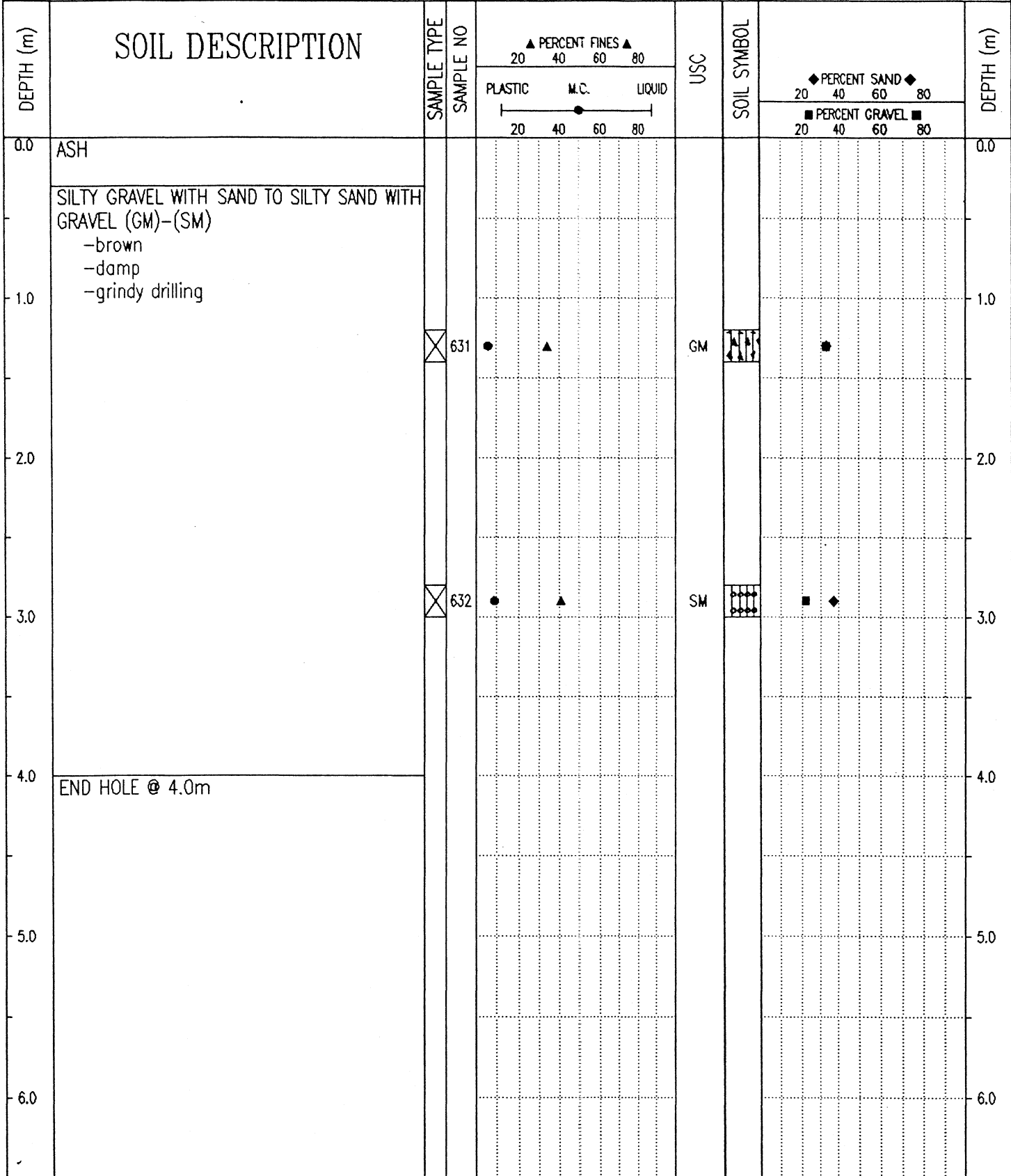
COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/08/12

SUBSURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 513-493
SHAKWAK PROJECT SEG 13B	KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L	LOCATION: 1806+725 CENTRELINE	ELEVATION: 0.00 (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	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC										0.0	
	ASH											
	ORGANIC -frozen (Vx)											
1.0											1.0	
	SILTY SAND WITH GRAVEL (SM) -frozen -grindy drilling	<input checked="" type="checkbox"/>	380	▲			SM	■	◆		2.0	
2.0												
		<input checked="" type="checkbox"/>	381	●	▲		SM	■	◆		3.0	
3.0	END HOLE @ 3.0m -refusal											
4.0											4.0	
5.0											5.0	
6.0											6.0	

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	REVIEWED BY:	COMPLETE: 99/05/06
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 526-694
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1806+800 30M RT	ELEVATION: 0.00 (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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Fig. No:

COMPLETION DEPTH: 4.0 m  
COMPLETE: 99/08/12

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 513-492							
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329							
NODWELL B-40L		LOCATION: 1806+825 CENTRELINE		ELEVATION: 0.00 (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 ▲		U.C.	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)	
				PLASTIC	M.C.			LIQUID	◆ PERCENT GRAVEL ◆		
0.0	ORGANIC			20	40	60	80	20	40	60	80
	ASH										
	SILTY SANDY GRAVEL -frozen -last sample #378										
1.0			378								
	SILTY GRAVEL WITH SAND (GM) -frozen -rough drilling										
2.0											
	END HOLE @ 2.8m										
3.0			379								
4.0											
5.0											
6.0											

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Fig. No:

COMPLETION DEPTH: 2.8 m

COMPLETE: 99/05/06

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SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 513-491									
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329									
NODWELL B-40L		LOCATION: 1806+875 CENTRELINE		ELEVATION: 0.00 (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	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	
0.0	ORGANIC											0.0	
	ASH												
	ORGANIC -frozen (Vx)												
1.0												1.0	
2.0	SANDY SILT (ML) -frozen (Vx)	<input checked="" type="checkbox"/>	366				ML					2.0	
	SILTY SAND WITH GRAVEL (SM) -frozen (Vx) -drill grinding	<input checked="" type="checkbox"/>	377				SM						
3.0	END HOLE @ 3.0											3.0	
4.0												4.0	
5.0												5.0	
6.0												6.0	

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Fig. No:

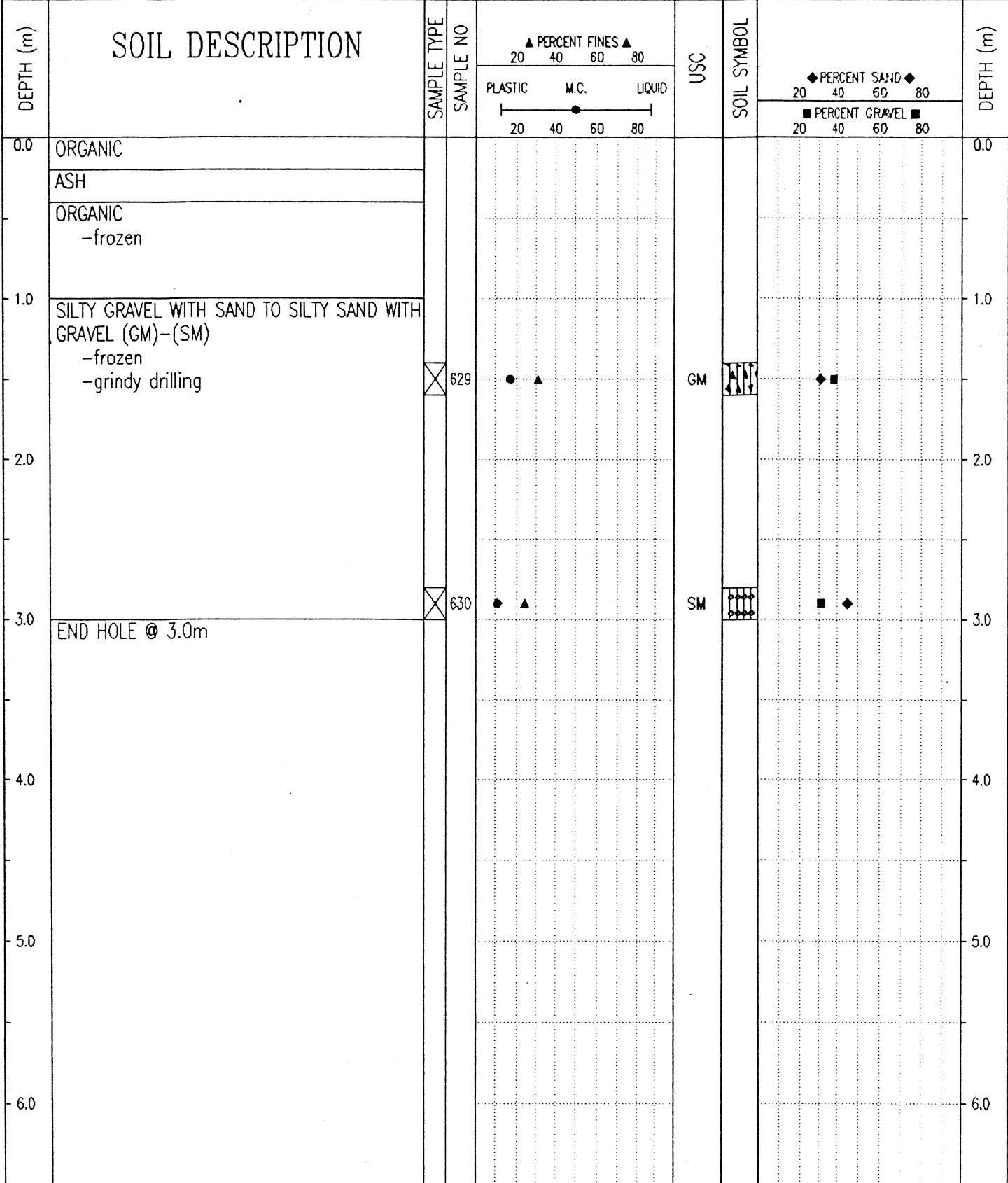
COMPLETION DEPTH: 3.0 m

COMPLETE: 99/05/06

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SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 526-692								
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329								
MOBILE B40-L		LOCATION: 1806+887 20M RT		ELEVATION: 0.00 (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	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC			20	40	60	80					0.0
	ASH											
	ORGANIC -frozen											
1.0												1.0
	SILTY SAND WITH GRAVEL (SM) -frozen -grindy drilling	<input checked="" type="checkbox"/>	627	●	▲			SM	■	◆		2.0
2.0												
	SILTY GRAVEL WITH SAND (GM) -frozen	<input checked="" type="checkbox"/>	628	●	▲			GM	■	◆		3.0
3.0	END HOLE @ 3.0m											
4.0												4.0
5.0												5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C.				COMPLETION DEPTH: 3.0 m				
				REVIEWED BY:				COMPLETE: 99/08/12				
				Fig. No:				Page 1 of 1				

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



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REVIEWED BY:	COMPLETE: 99/08/12
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SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 526-691								
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329								
MOBILE B40-L		LOCATION: 1806+950 30M RT		ELEVATION: 0.00 (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	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC ASH										0.0	
0.0 - 1.0	SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND (SM)-(GM) -brown -damp -grindy drilling											
1.0			625	●	▲		SM	◆	■		1.0	
2.0												
3.0	END HOLE @ 3.0m		626	●	▲		GM	◆	■		3.0	
4.0												
5.0												
6.0												

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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/08/12

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 526-690
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1807+025 30M RT	ELEVATION: 0.00 (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	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	
0.0	ORGANIC -surface water entering Test hole										0.0
	ASH										
	ORGANIC -frozen										
1.0											1.0
2.0	-drill starts grinding @ 1.8m -no sample - washed off auger										2.0
3.0	END HOLE @ 3.0m										3.0
4.0											4.0
5.0											5.0
6.0											6.0

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	REVIEWED BY:	COMPLETE: 99/08/12
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 526-688								
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329								
MOBILE B40-L		LOCATION: 1807+060 20M RT		ELEVATION: 0.00 (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	SOIL SYMBOL	◆ PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC -surface water entering test hole ASH										0.0	
1.0	PEAT MOSS										1.0	
2.0	SILTY ORGANICS -odd gravel -frozen & grindy										2.0	
3.0	SILTY SAND WITH GRAVEL (SM) -contaminated with silt, ash, & H2O from above -frozen -real grindy		622	●	▲		SM	■	◆		3.0	
4.0	END HOLE @ 3.0m										4.0	
5.0											5.0	
6.0											6.0	

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Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 99/08/12

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC											0.0
	ASH -surface water contaminating test hole											
	ORGANIC -frozen											
1.0												1.0
	SILTY SAND WITH GRAVEL (SM) -frozen -grindy drilling	<input checked="" type="checkbox"/>	623	●	▲		SM	■	◆			
2.0												2.0
	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -frozen	<input checked="" type="checkbox"/>	624	▲			GP-GM	◆	■			
3.0	END HOLE @ 3.0m											3.0
4.0												4.0
5.0												5.0
6.0												6.0

99/12/07 11:39AM

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	
0.0	ORGANIC ASH										0.0
0.0 - 2.0	ORGANIC -frozen (Vx)										1.0
2.0	SANDY SILT (ML) -frozen -little scrapping - not grinding	<input checked="" type="checkbox"/>	620				ML				2.0
3.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -frozen -clean END HOLE @ 3.0m	<input checked="" type="checkbox"/>	621				GP-GM				3.0
4.0											4.0
5.0											5.0
6.0											6.0

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 513-490						
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329						
NODWELL B-40L		LOCATION: 1807+150 CENTRELINE		ELEVATION: 0.00 (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	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.			LIQUID	PERCENT GRAVEL ■	
0.0	ORGANIC									0.0
	ASH									
	ORGANIC -frozen (Vx)									
1.0	SILT WITH SAND (ML) -frozen (Vx)		364			ML				1.0
2.0	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -frozen -rough drilling		365			SW-SM				2.0
3.0	END HOLE @ 3.0m									3.0
4.0										4.0
5.0										5.0
6.0										6.0

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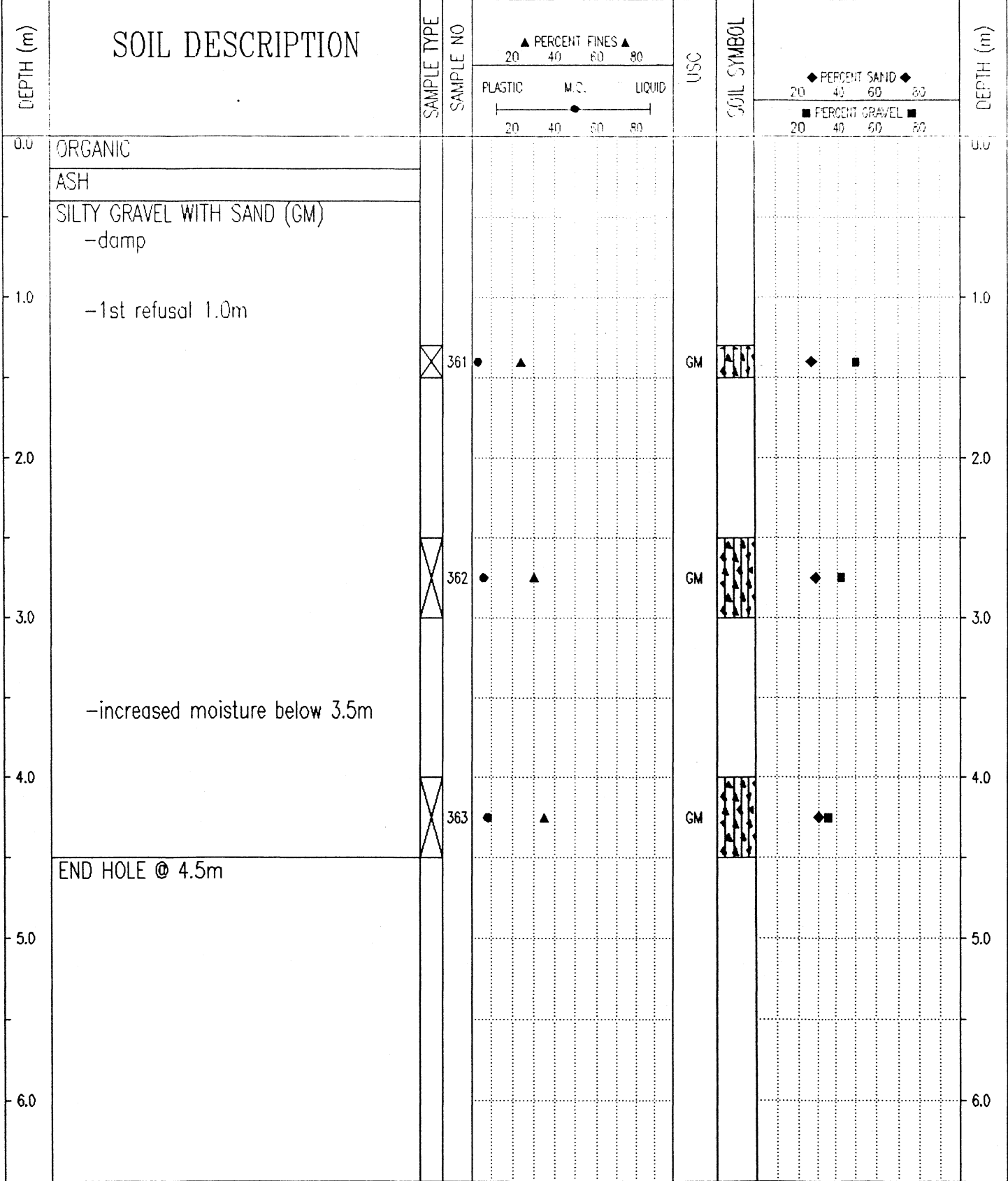
LOGGED BY: G.C.	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 99/05/05
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 526-686								
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329								
MOBILE B40-L		LOCATION: 1807+200 30M RT		ELEVATION: 0.00 (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	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40		
0.0	ORGANIC											0.0
	ASH											
	ORGANIC											
1.0	GRAVELLY SILT (ML) -frozen (Vx) -grinding drilling	<input checked="" type="checkbox"/>	618				ML					1.0
	SILTY GRAVEL WITH SAND (GM) -frozen											
2.0												2.0
3.0	END HOLE @ 3.0m	<input checked="" type="checkbox"/>	619				GM					3.0
4.0												4.0
5.0												5.0
6.0												6.0

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LOGGED BY: G.C.	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 99/08/12
Fig. No:	Page 1 of 1

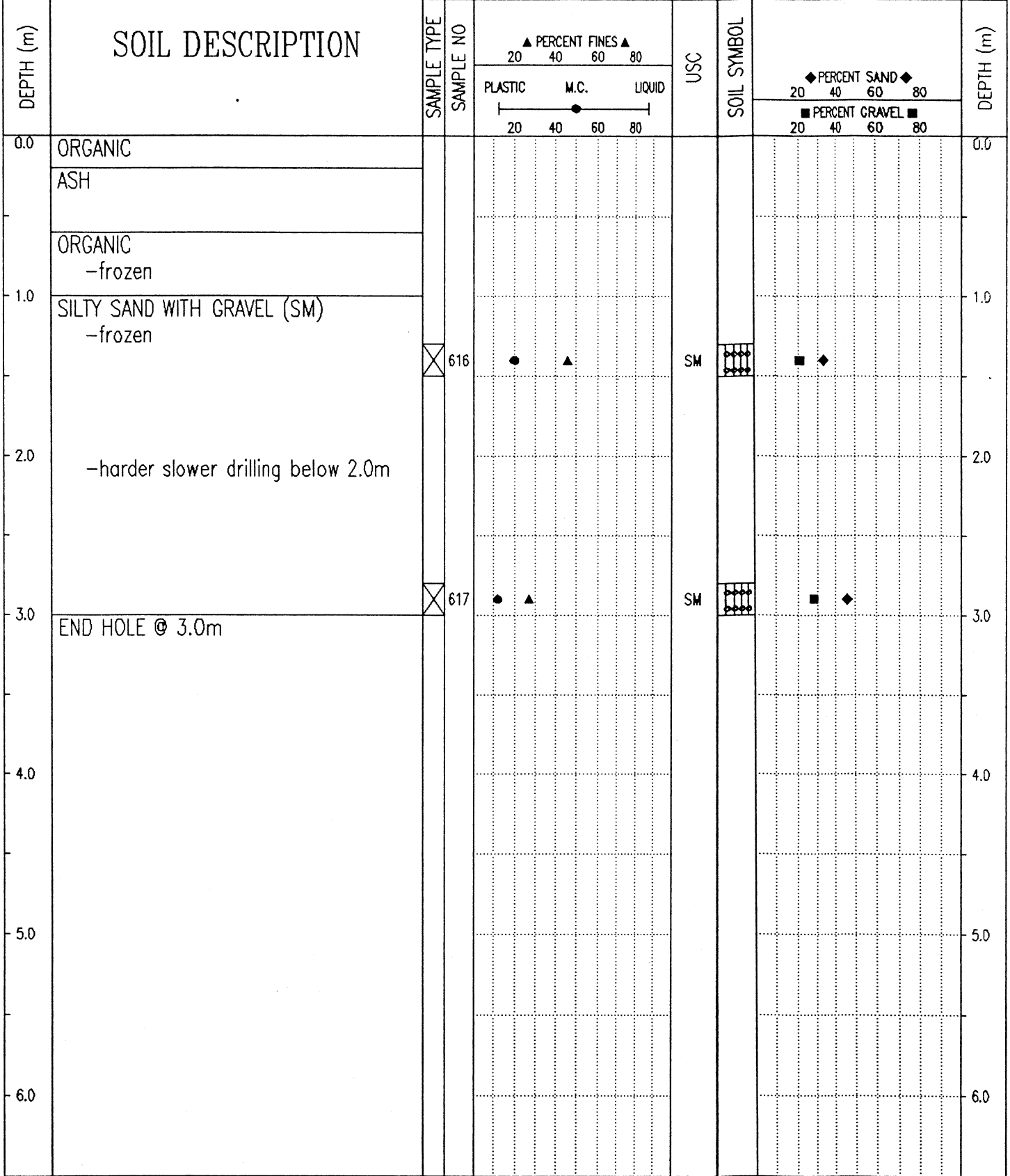
SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE



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Transportation Engineering

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REVIEWED BY:	COMPLETE: 99/05/05
Fig. No:	Page 1 of 1

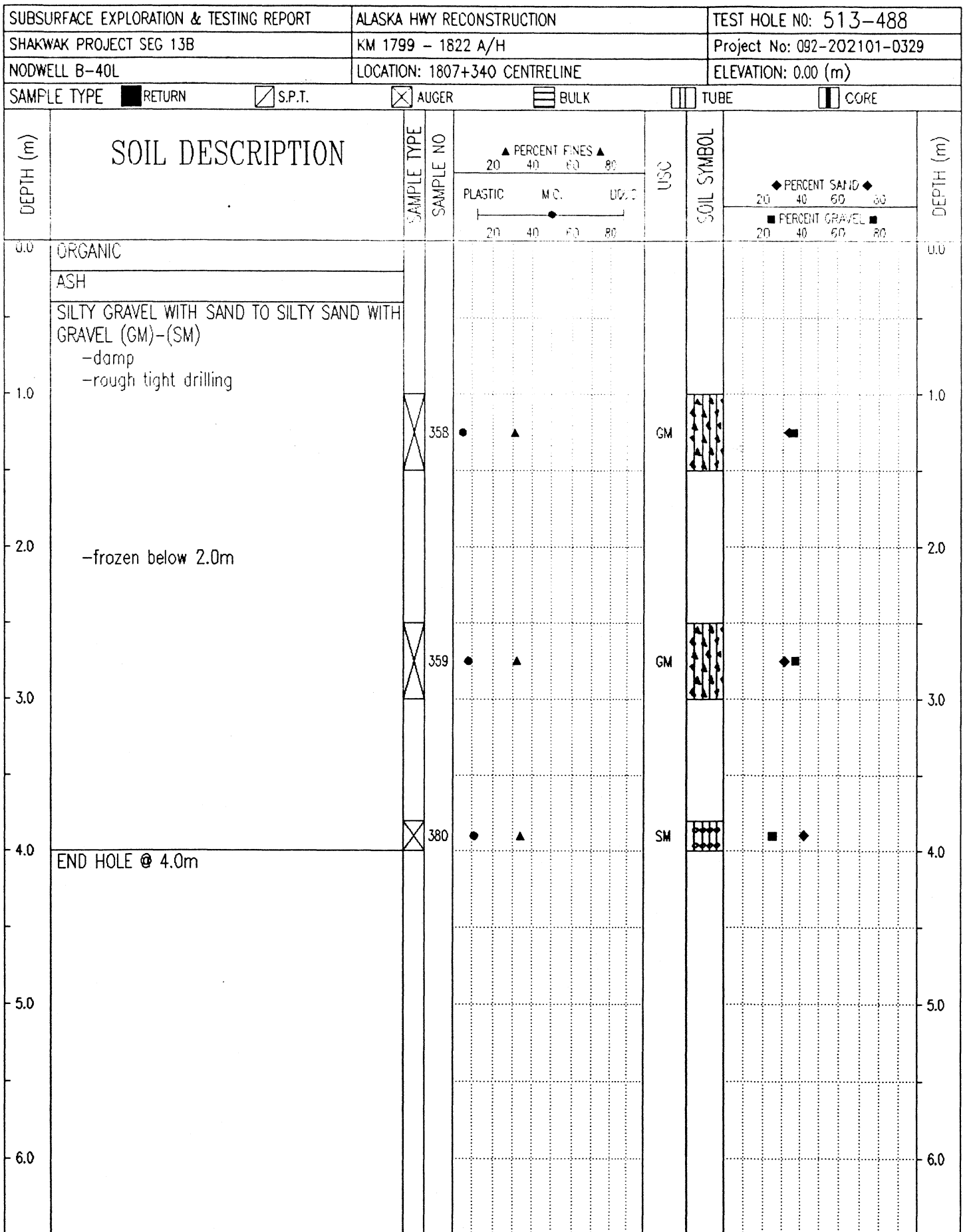
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 526-684
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION:1807+300 30M RT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
		<input type="checkbox"/> BULK
		<input type="checkbox"/> TUBE
		<input type="checkbox"/> CORE



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LOGGED BY: G.C.  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/08/13 12  
Page 1 of 1



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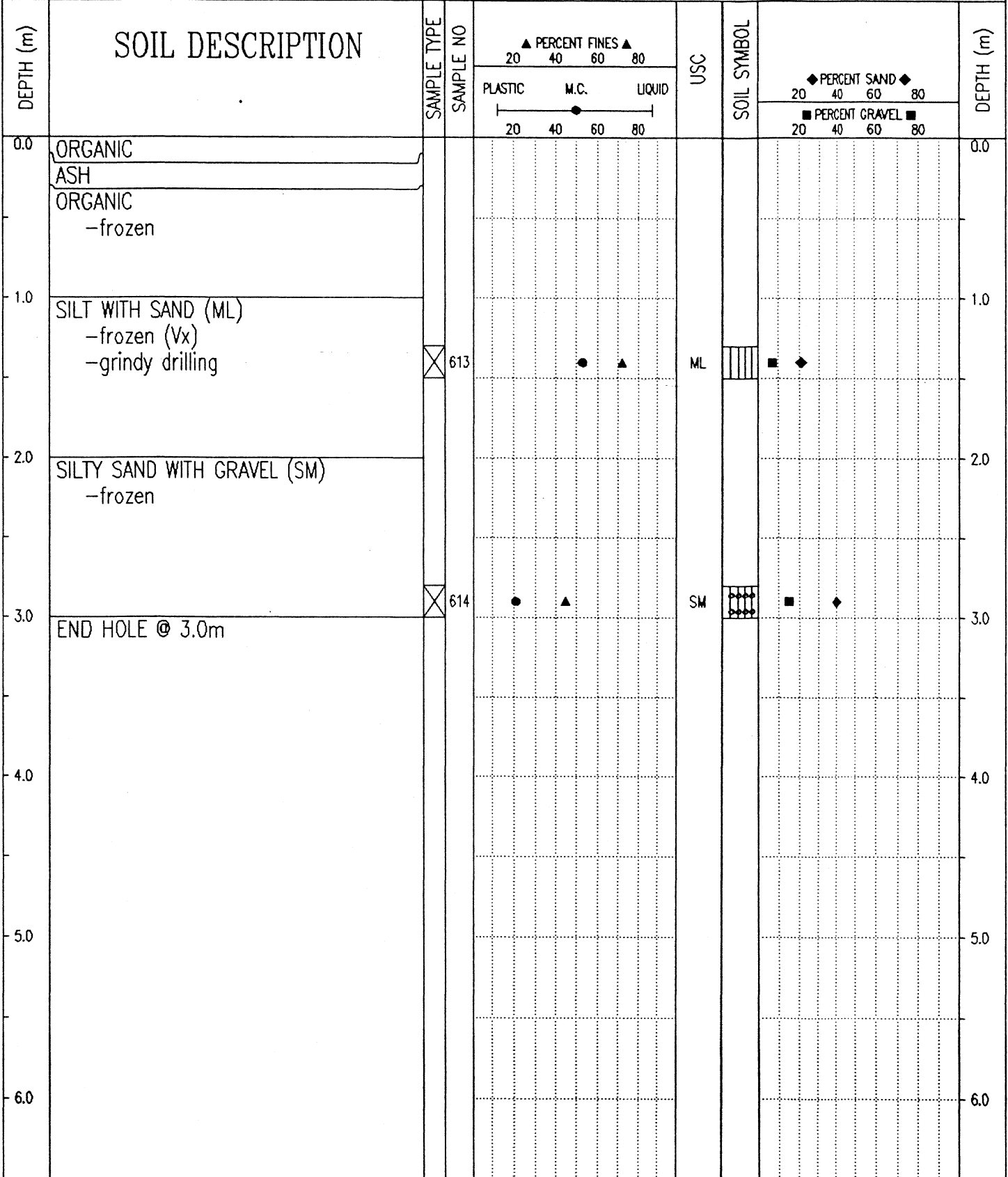
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REVIEWED BY:	COMPLETE: 99/05/05
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT      SHAKWAK SEG 13      TEST HOLE NO: 526-683

ENGINEERING CAPITAL      KM 1799-1822 A/H      Project No: 092-202101-0329

MOBILE B40-L      LOCATION:1807+345 20M RT      ELEVATION: 0.00 (m)

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



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LOGGED BY: G.C.      COMPLETION DEPTH: 3.0 m  
 REVIEWED BY:      COMPLETE: 99/08/11  
 Fig. No:      Page 1 of 1

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	
0.0	ORGANIC ASH											0.0	
0.0 - 1.0	ORGANIC -frozen (Vx)											1.0	
1.0 - 2.5	SILTY GRAVEL WITH SAND (GM) -frozen (Vx) -grindy drill	<input checked="" type="checkbox"/>	615	20	40	60	GM	◆	■			2.0	
2.5 - 2.5	END HOLE @ 2.5m -refusal											3.0	
3.0 - 6.0												4.0	
												5.0	
												6.0	

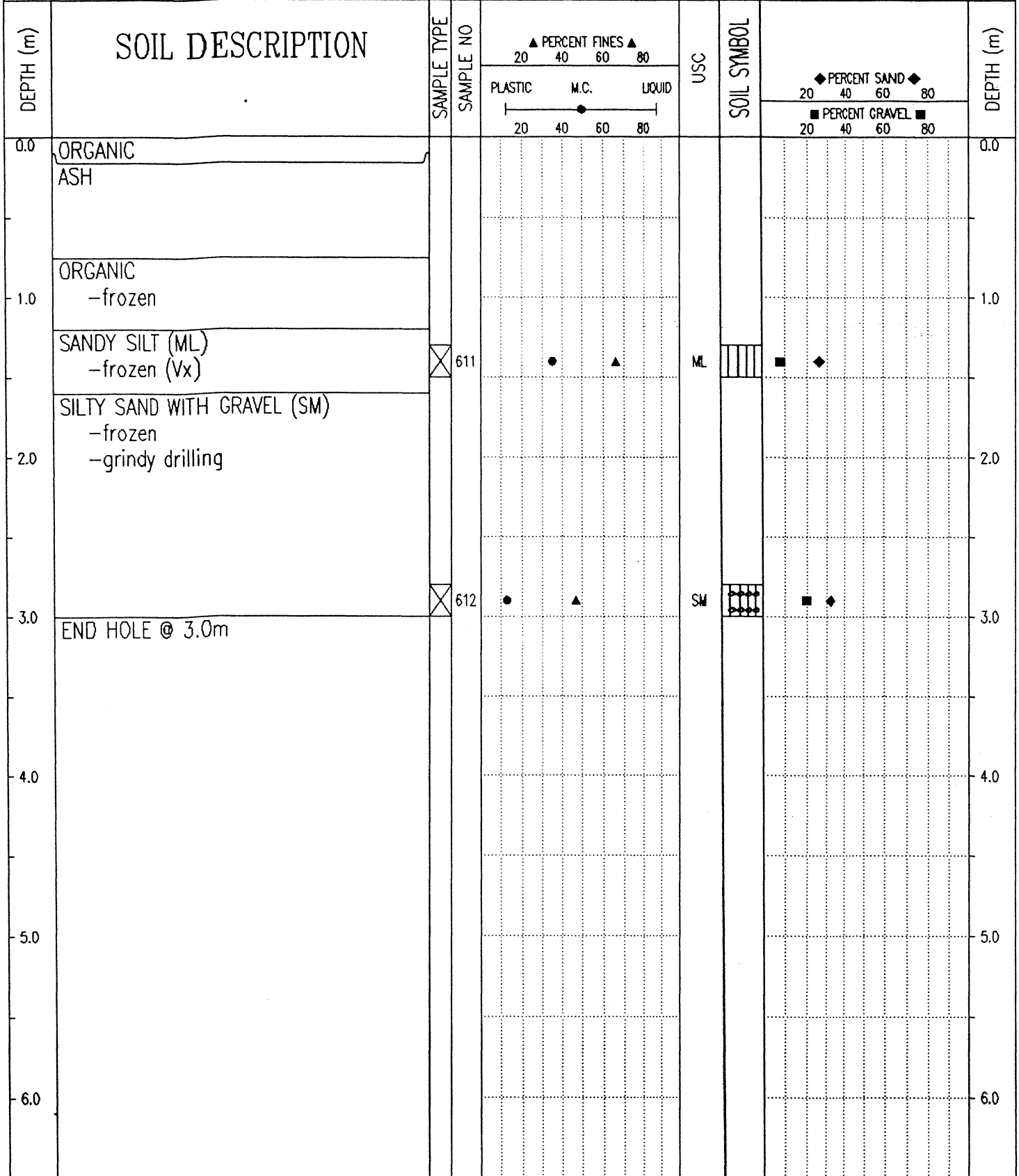
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LOGGED BY: G.C.  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 2.5 m  
COMPLETE: 99/08/13 12

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 526-682
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1807+400 30M RT	ELEVATION: 0.00 (m)

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

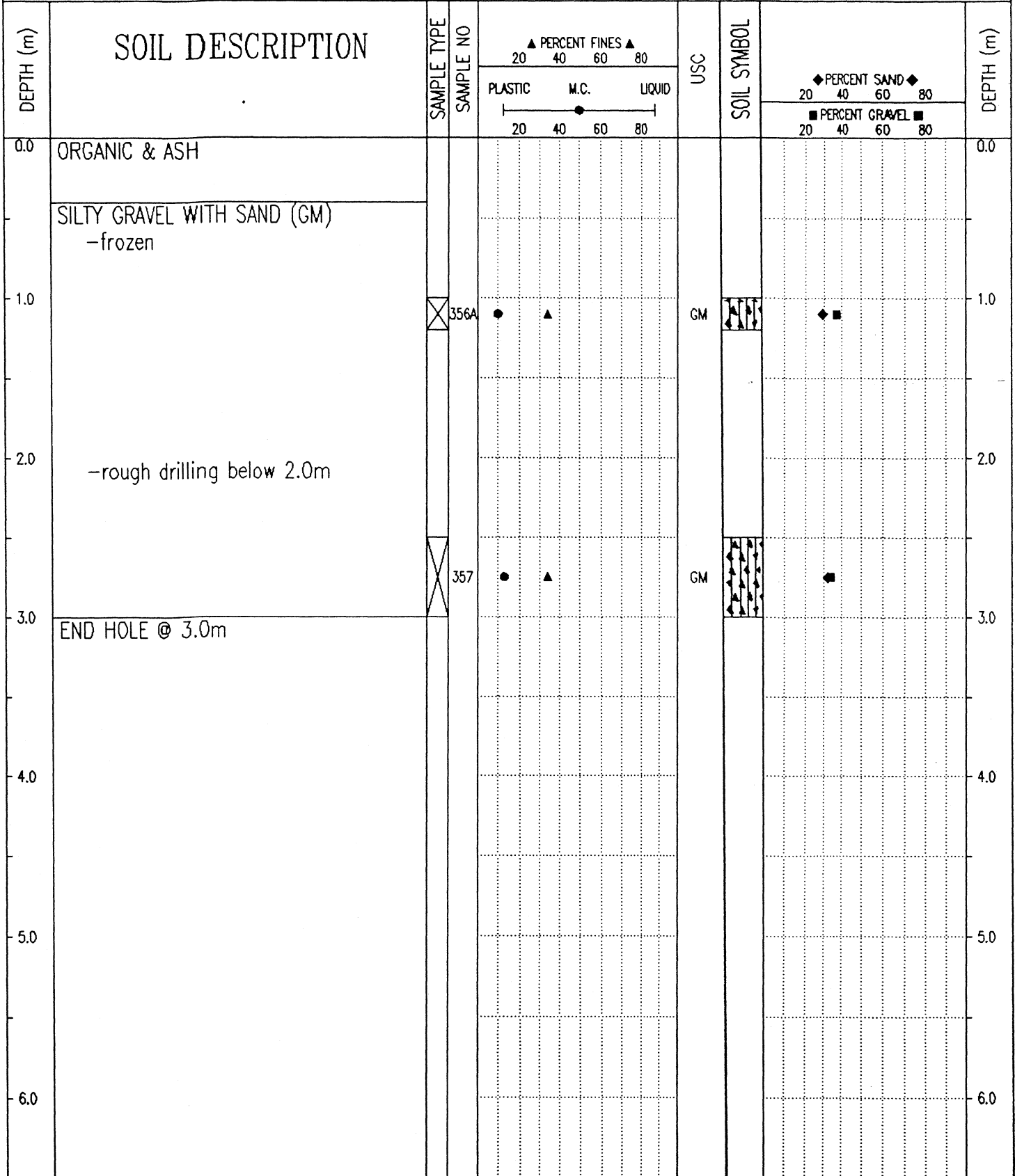


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REVIEWED BY:  
Fig. No:

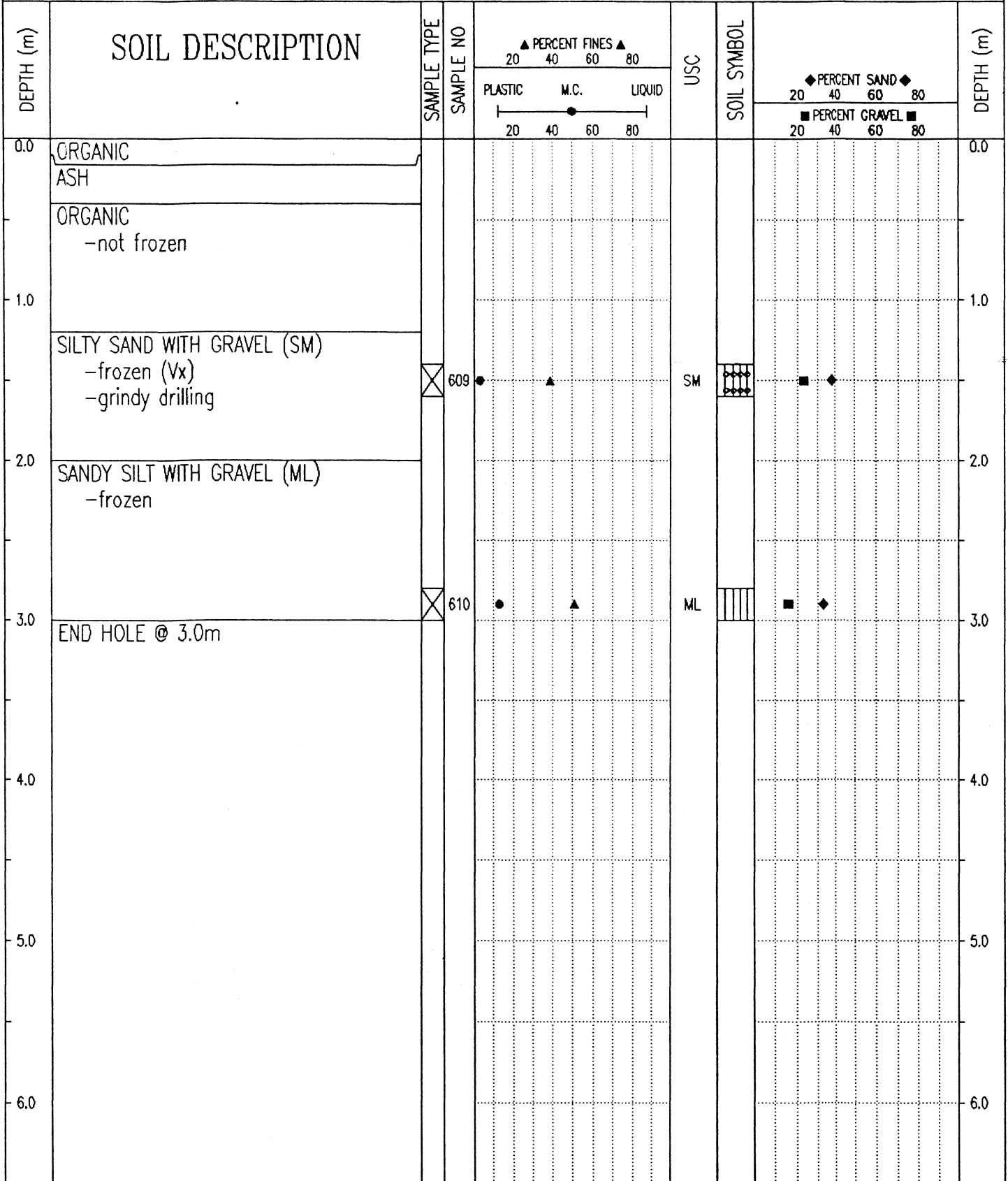
COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/08/11

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 513-481
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L		LOCATION: 1807+475 CENTRELINE	ELEVATION: 0.00 (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

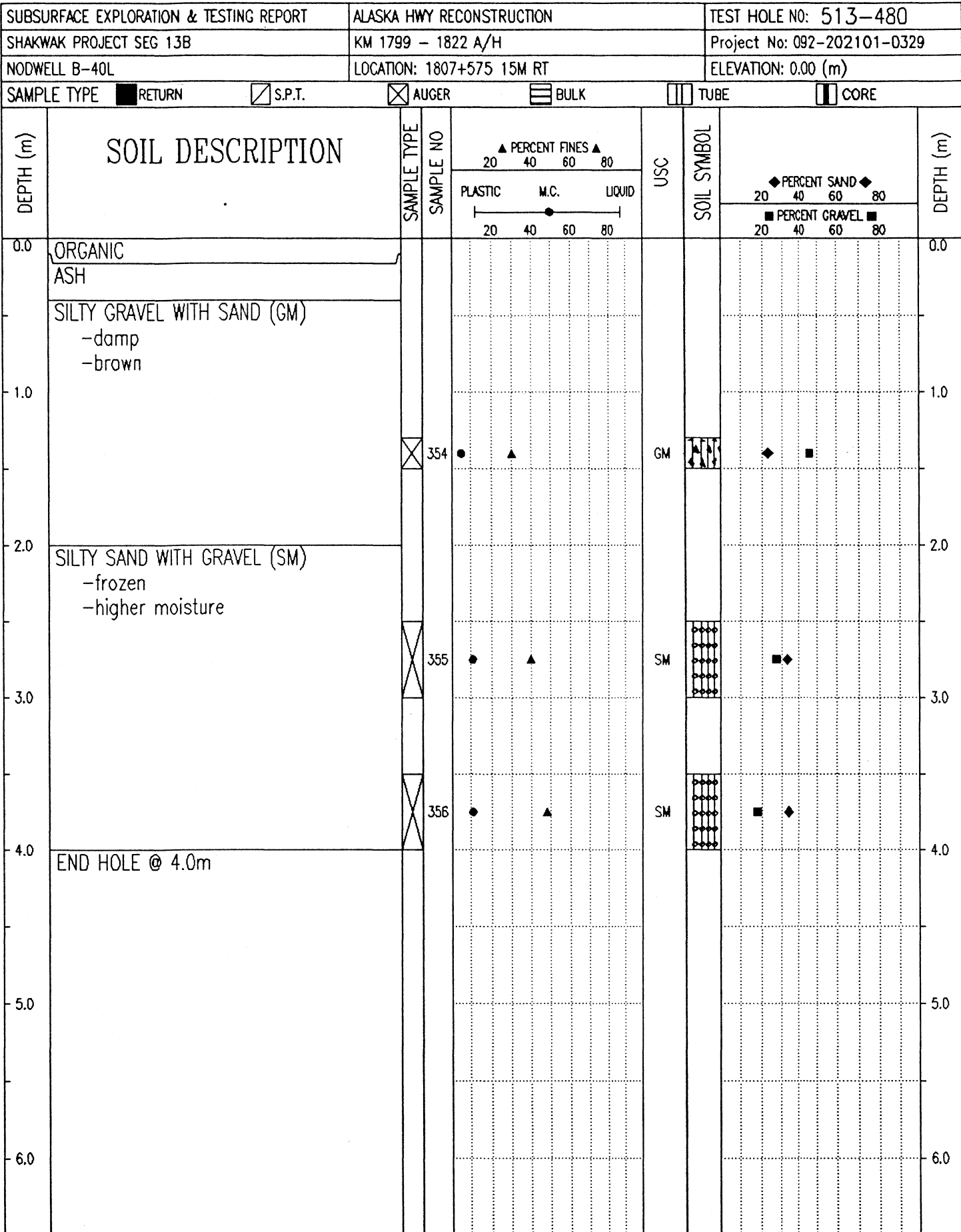


Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 3.0 m
	REVIEWED BY:	COMPLETE: 99/05/05
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 526-681
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1807+500 30M RT	ELEVATION: 0.00 (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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	Fig. No:	Page 1 of 1



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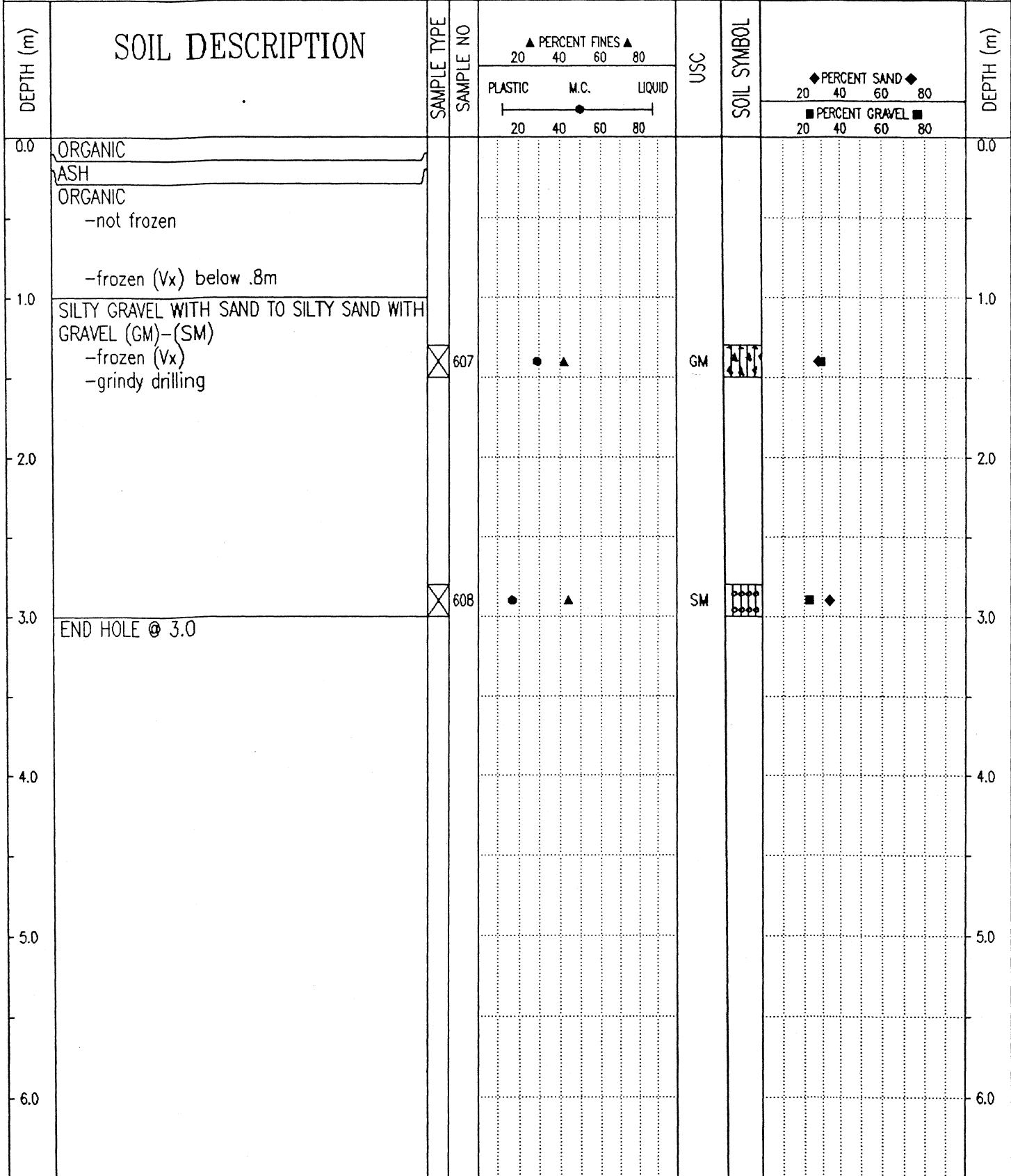
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COMPLETION DEPTH: 4.0 m

COMPLETE: 99/05/05

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 526-680
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1807+600 30M RT	ELEVATION: 0.00 (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

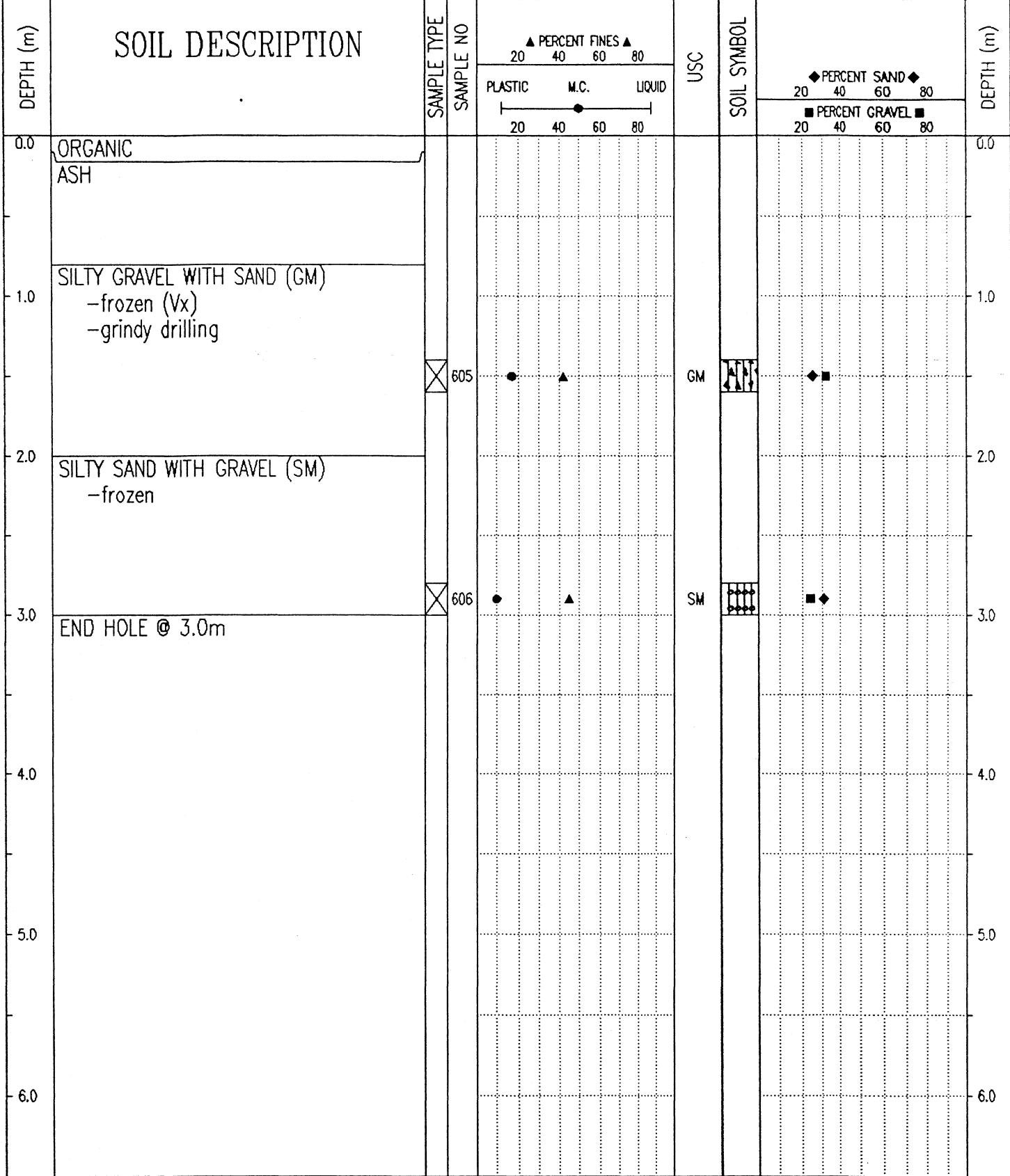


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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/08/11

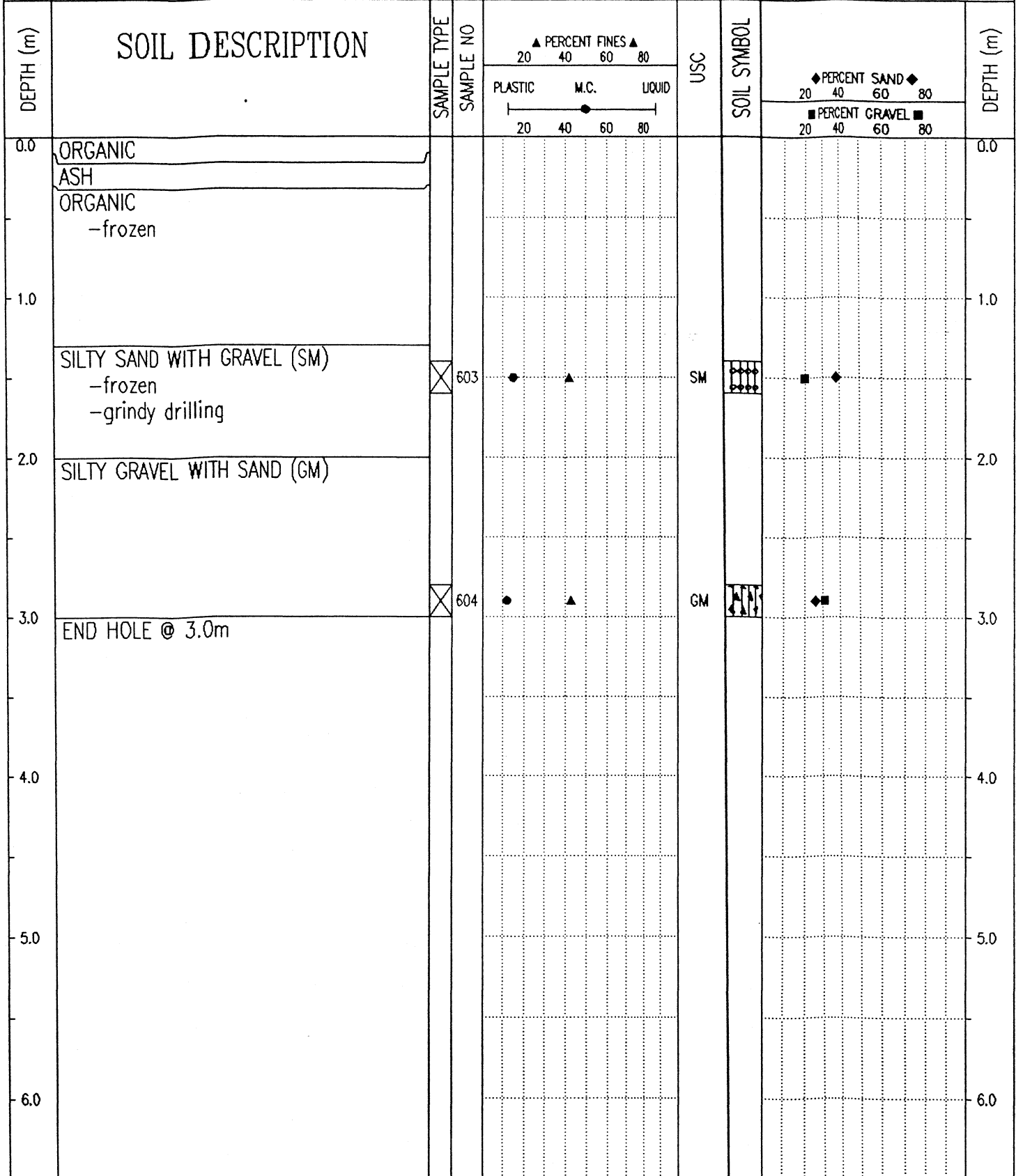
SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE



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LOGGED BY: G.C.	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 99/08/11
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13	TEST HOLE NO: 526-678
ENGINEERING CAPITAL		KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L		LOCATION: 1807+640 20M LT	ELEVATION: 0.00 (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

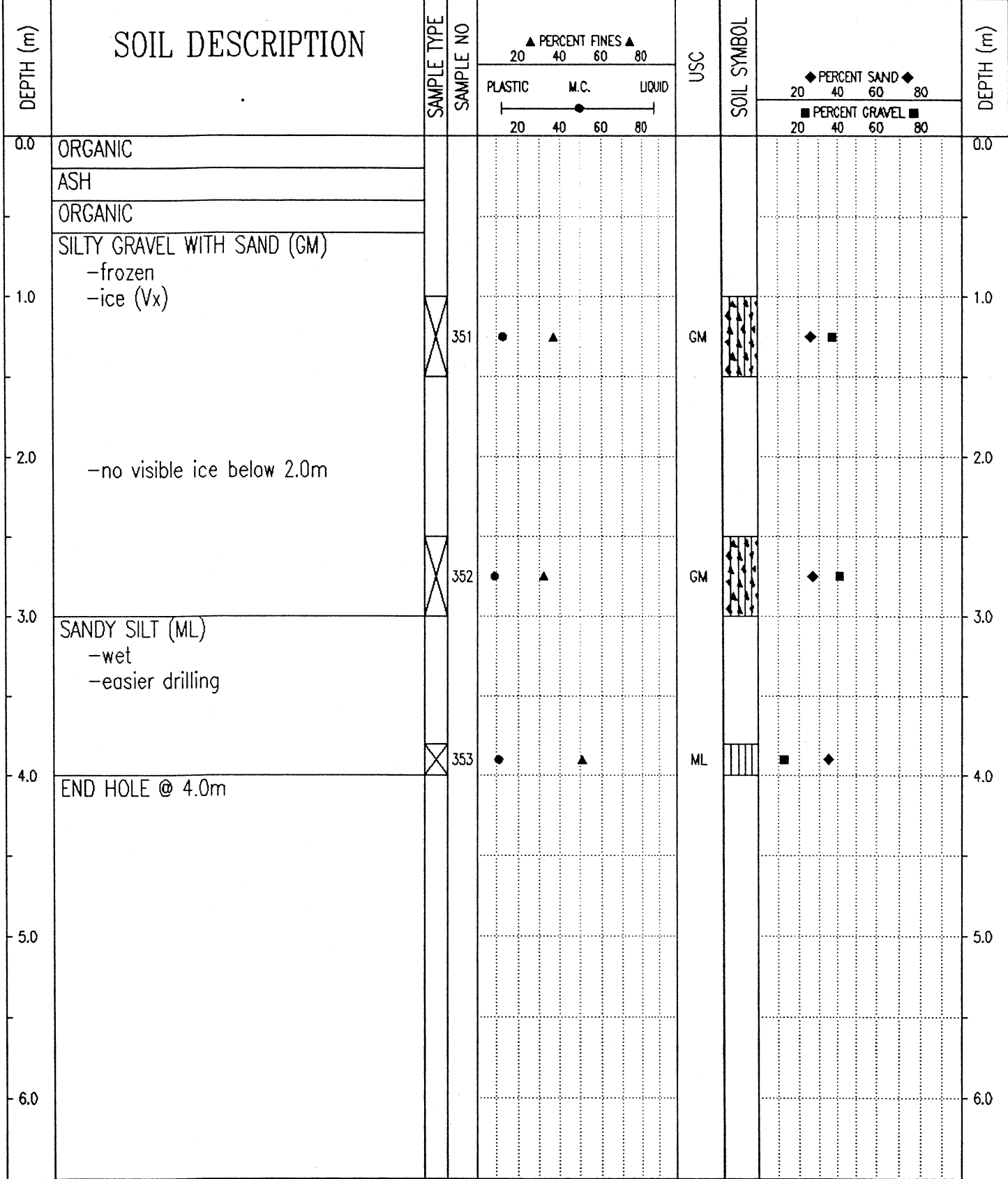


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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/08/11

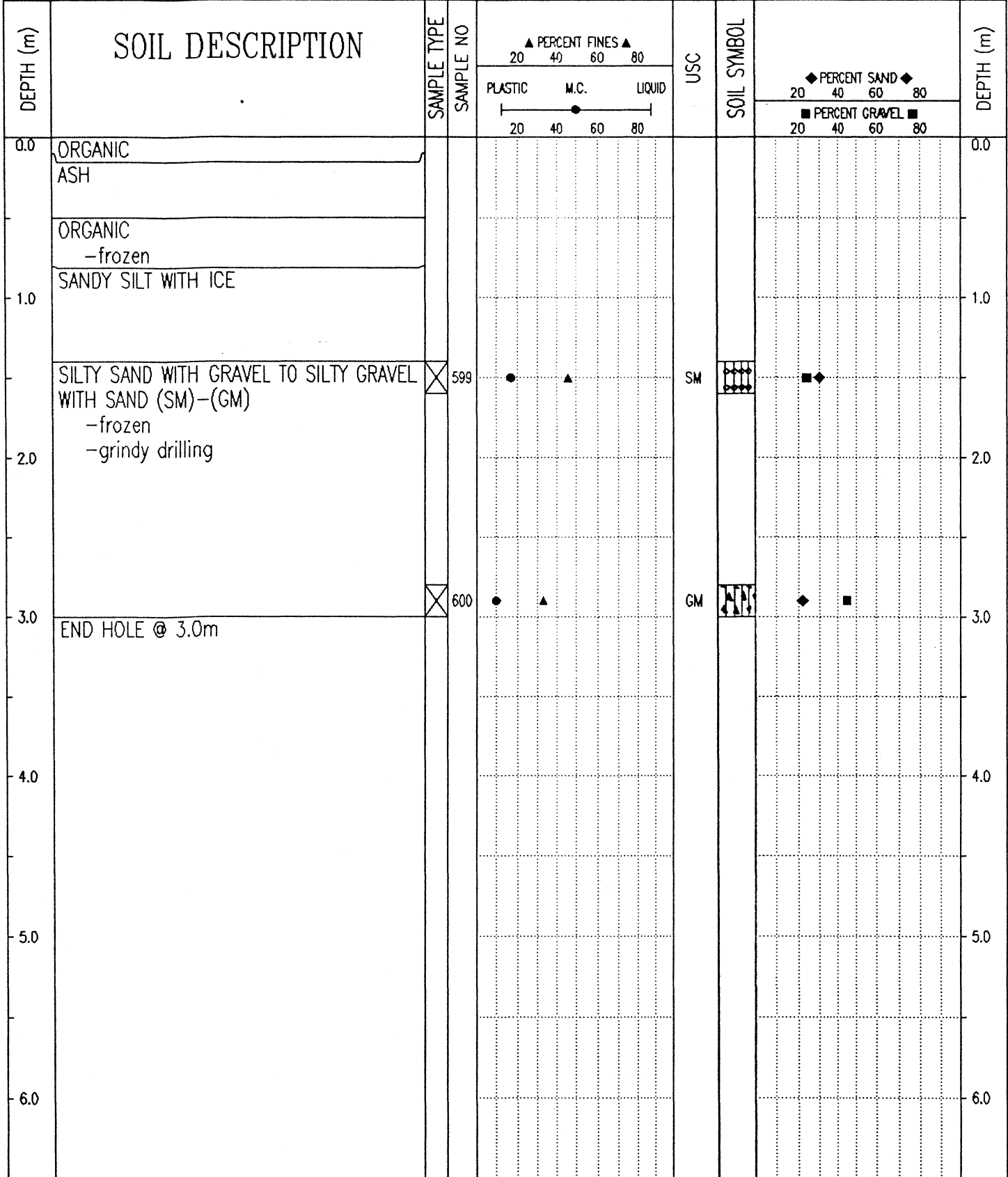
SUBSURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 513-479
SHAKWAK PROJECT SEG 13B	KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L	LOCATION: 1807+675 CENTRELINE	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



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 REVIEWED BY:      COMPLETE: 99/05/05  
 Fig. No:      Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEC 13	TEST HOLE NO: 526-676
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION:1807+725 20M LT	ELEVATION: 0.00 (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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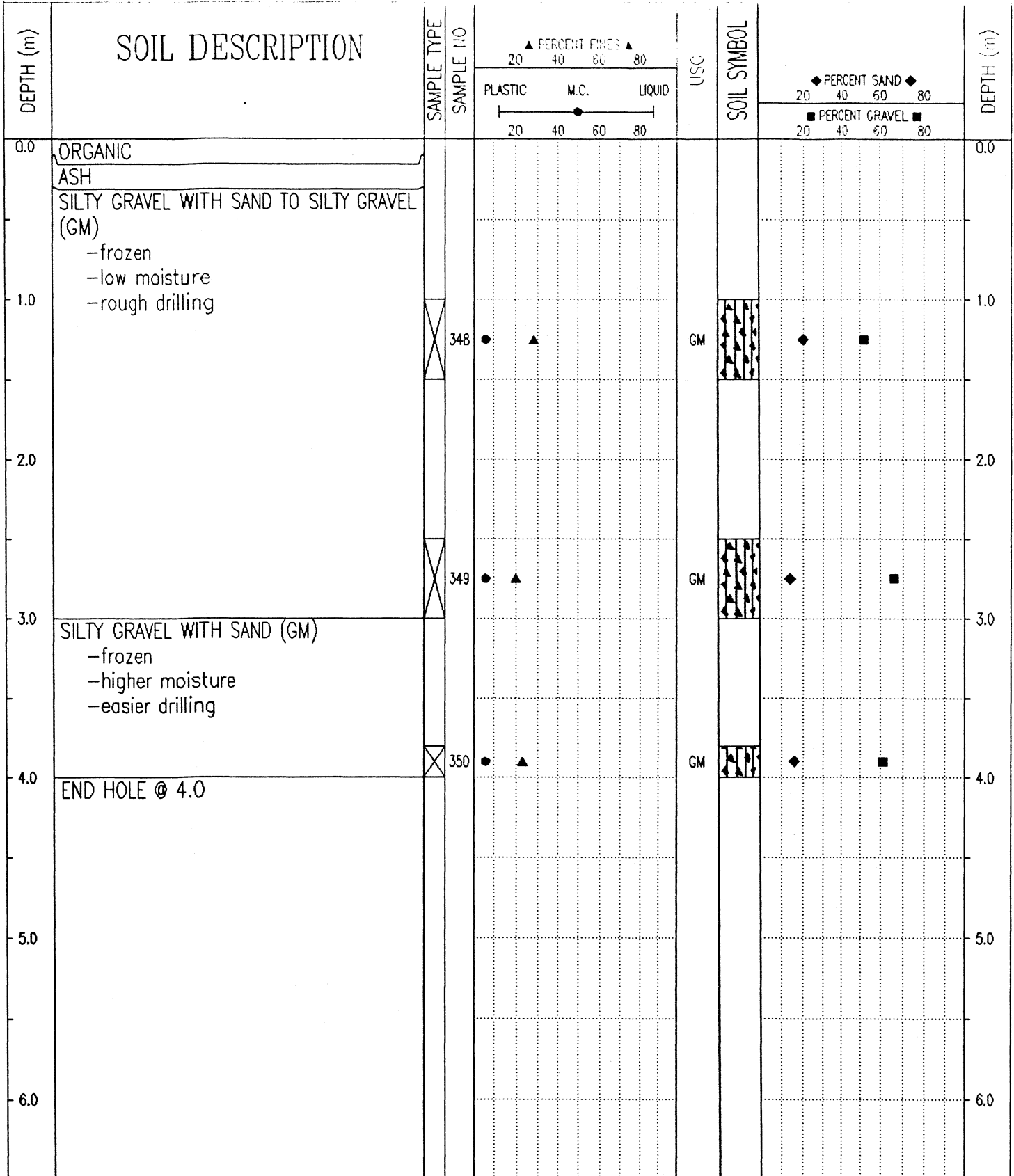
LOGGED BY: G.C.  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/08/11

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

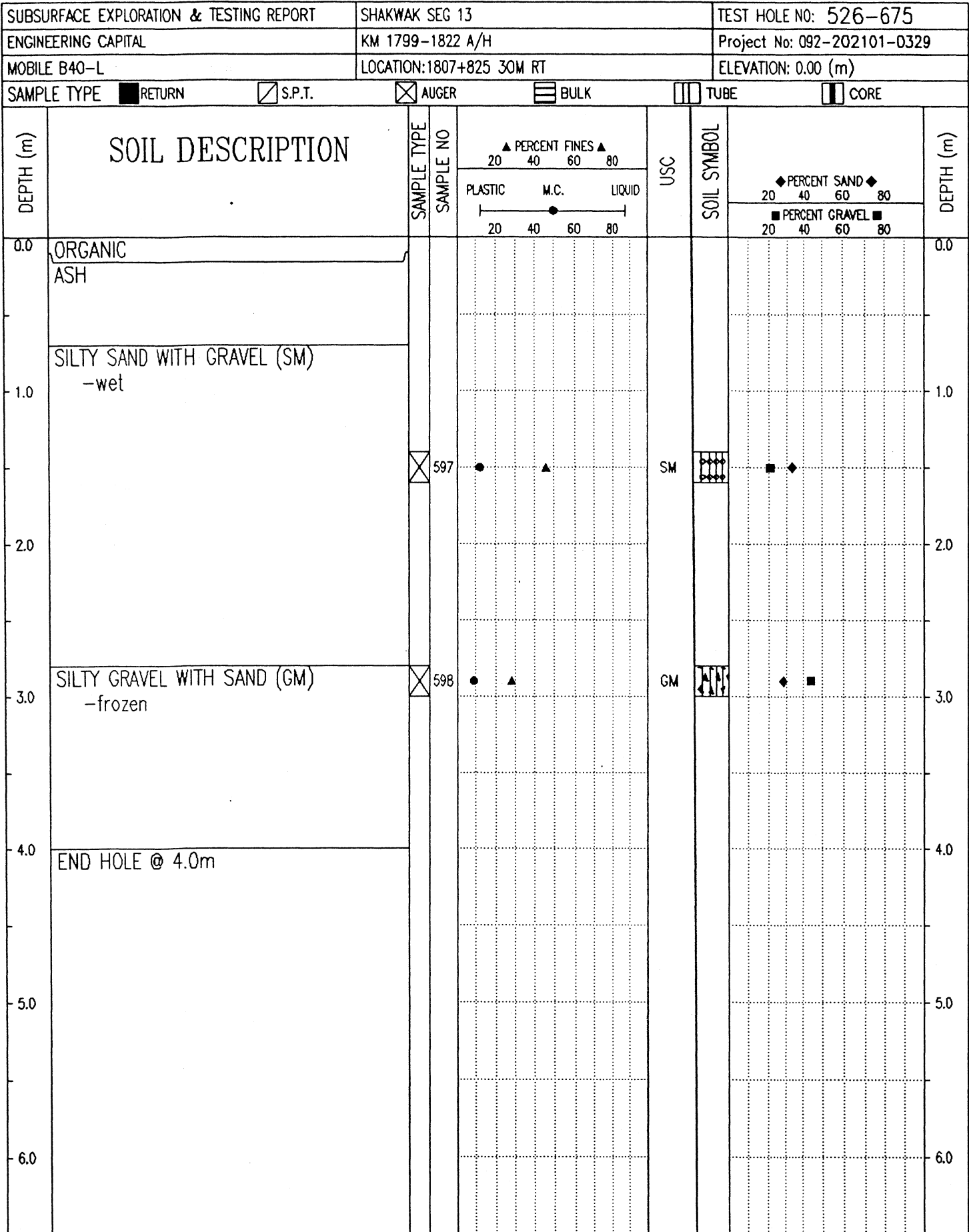
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			PERCENT GRAVEL ■			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	20	40	
0.0	ORGANIC														0.0
	ASH														
	ORGANIC -frozen														
1.0															1.0
	SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND (SM)-(GM) -frozen -grindy drilling	<input checked="" type="checkbox"/>	601	●	▲		SM	◻◻◻◻◻◻◻◻◻◻	■	◆					
2.0															2.0
		<input checked="" type="checkbox"/>	602	●	▲		GM	◻◻◻◻◻◻◻◻◻◻	■	◆					
3.0	END HOLE @ 3.0m														3.0
4.0															4.0
5.0															5.0
6.0															6.0

99/12/06 02:58PM



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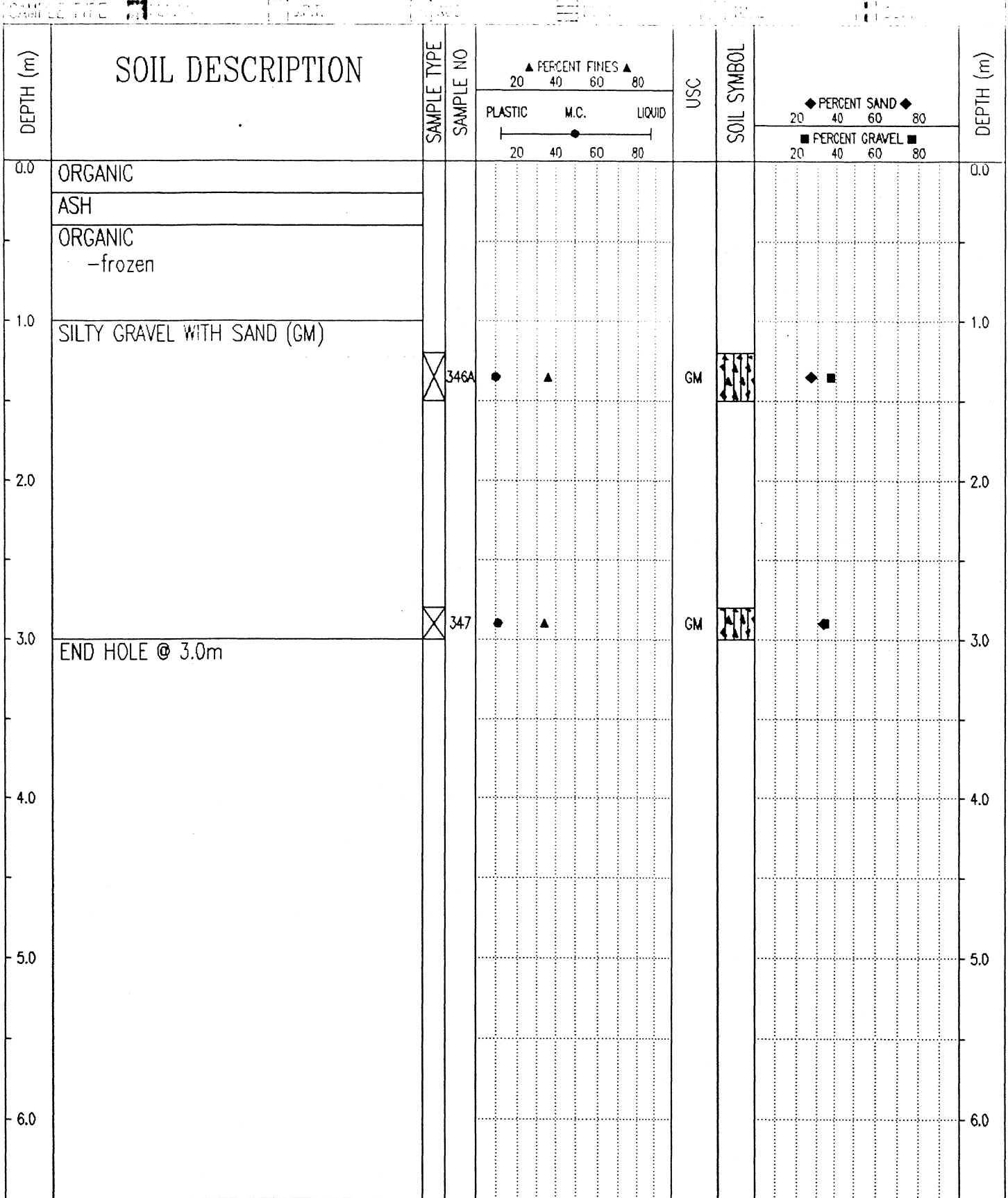
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REVIEWED BY:	COMPLETE: 99/05/05
Fig. No:	Page 1 of 1



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REVIEWED BY:	COMPLETE: 99/08/11
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 513-477
SHAKWAK PROJECT SEG 13B	KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L	LOCATION: 1807+875 CENTRELINE	ELEVATION: 0.00 (m)



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LOGGED BY: G.C.	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 99/05/05
Fig. No:	Page 1 of 1

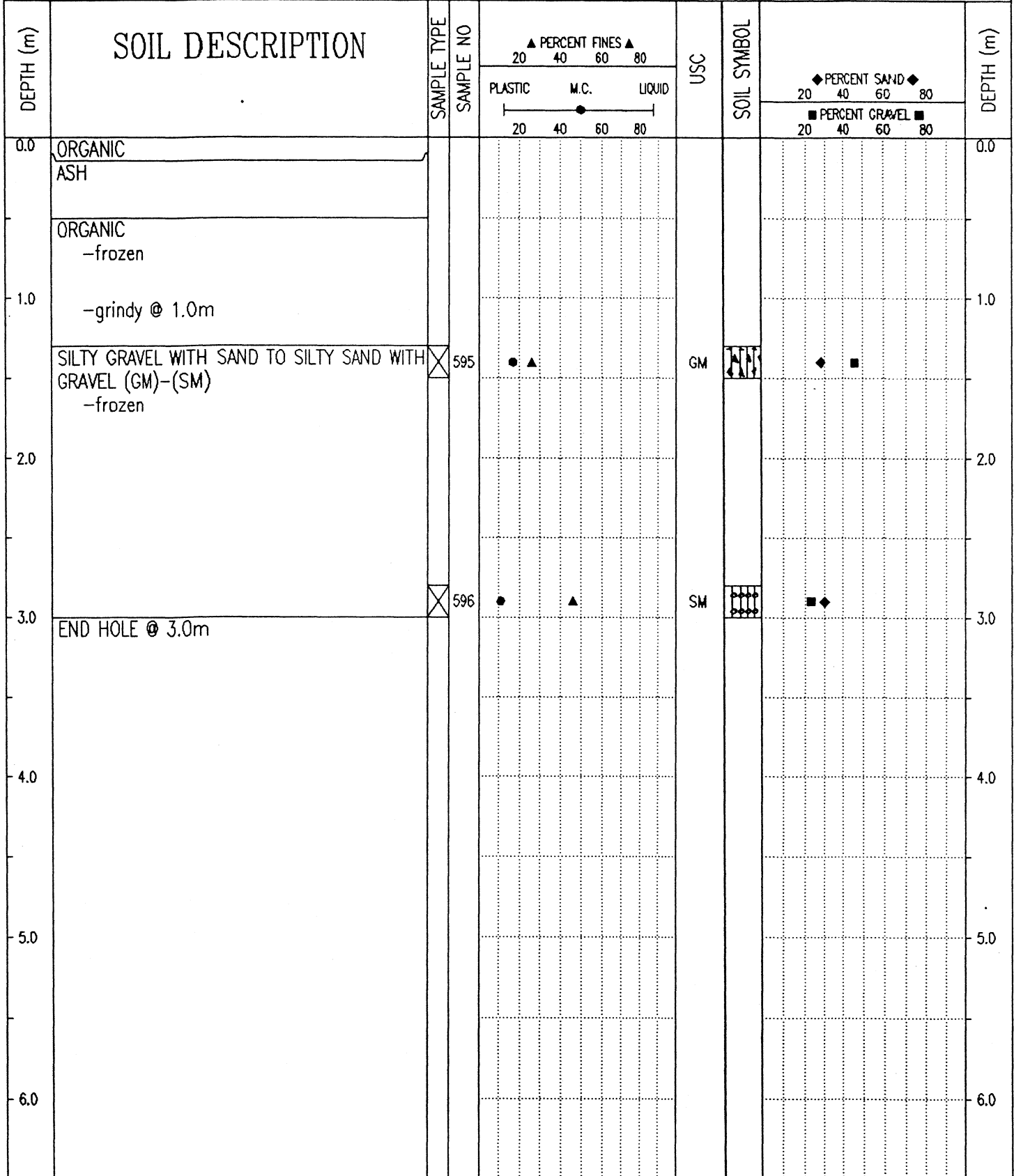
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 526-673
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION:1807+880 20M RT	ELEVATION: 0.00 (m)

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC ASH											0.0
1.0	ORGANIC -frozen											1.0
2.0	SILTY SAND WITH GRAVEL (SM) -frozen -grindy drilling	<input checked="" type="checkbox"/>	593	●	▲		SM	◆◆◆◆	■	◆		2.0
3.0	END HOLE @ 3.0m	<input checked="" type="checkbox"/>	594	●	▲		SM	◆◆◆◆	■			3.0
4.0												4.0
5.0												5.0
6.0												6.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 3.0 m
	REVIEWED BY:	COMPLETE: 99/08/11
	Fig. No:	Page 1 of 1

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



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LOGGED BY: G.C.

REVIEWED BY:

Fig. No:

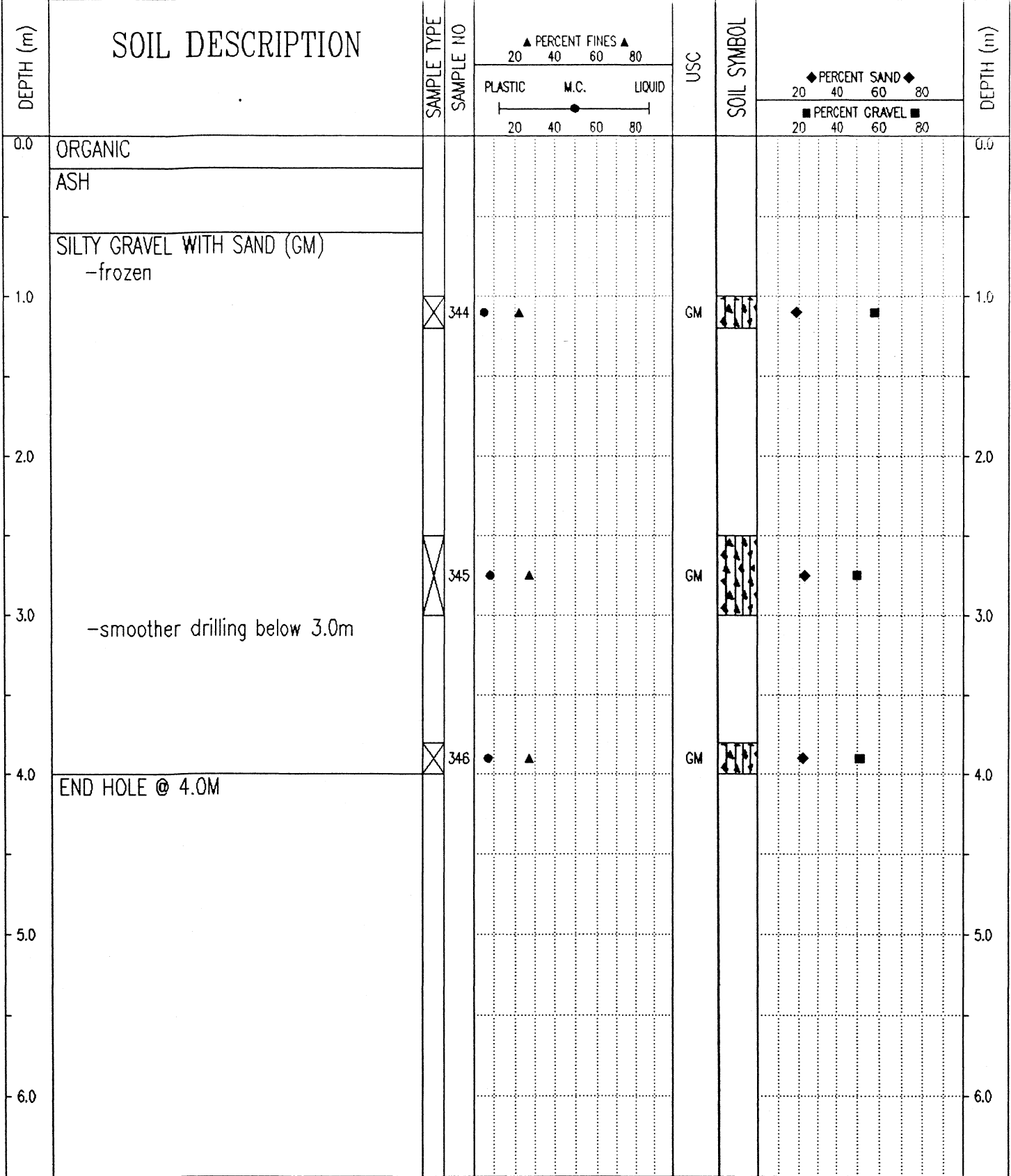
COMPLETION DEPTH: 3.0 m

COMPLETE: 99/08/11

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	SOIL SYMBOL	◆ PERCENT SAND ◆			DEPTH (m)
				20	40	60			80	20	40	
0.0	ORGANIC ASH											0.0
0.0 - 1.0	ORGANIC -frozen											
1.0 - 2.0	SILTY GRAVEL WITH SAND (GM) -frozen -grindy drilling	<input checked="" type="checkbox"/>	591	●	▲		GM		◆	■		
2.0 - 3.0	SILTY SAND WITH GRAVEL (SM) -frozen -smoother drilling	<input checked="" type="checkbox"/>	592	●	▲		SM		■	◆		
3.0 - 6.0	END HOLE @ 3.0m											

SAMPLE TYPE  RETURN  S.P.T.  AW  C.P.T.  TEST  SOPT



99/05/24 09:56AM

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	SOIL SYMBOL	◆ PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC ASH											0.0
0.0 - 1.0	ORGANIC -frozen											1.0
1.0 - 2.0	SILTY GRAVEL WITH SAND (GM) -frozen (Vx) -grindy drilling  -more gravel @ 2.0m	<input checked="" type="checkbox"/>	587	●	▲		GM	◆	■			2.0
2.0 - 3.0	SILTY SAND (SM) -frozen -smoother drilling	<input checked="" type="checkbox"/>	588	●	▲		SM	■		◆		3.0
3.0 - 6.0	END HOLE @ 3.0m											6.0

99/12/06 10:57PM

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 526-671						
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329						
MOBILE B40-L		LOCATION:1808+035 20M LT		ELEVATION: 0.00 (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	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.			LIQUID	■ PERCENT GRAVEL ■	
0.0	ORGANIC VOLCANIC ASH									0.0
1.0	ORGANIC -frozen (Vx)									1.0
2.0	SILTY SAND WITH GRAVEL (SM) -frozen (Vx) -grindy drilling	<input checked="" type="checkbox"/>	589	●	▲		SM	■	◆	2.0
3.0	END HOLE @ 3.0m	<input checked="" type="checkbox"/>	590	●	▲		SM	■	◆	3.0
4.0										4.0
5.0										5.0
6.0										6.0

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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/08/11

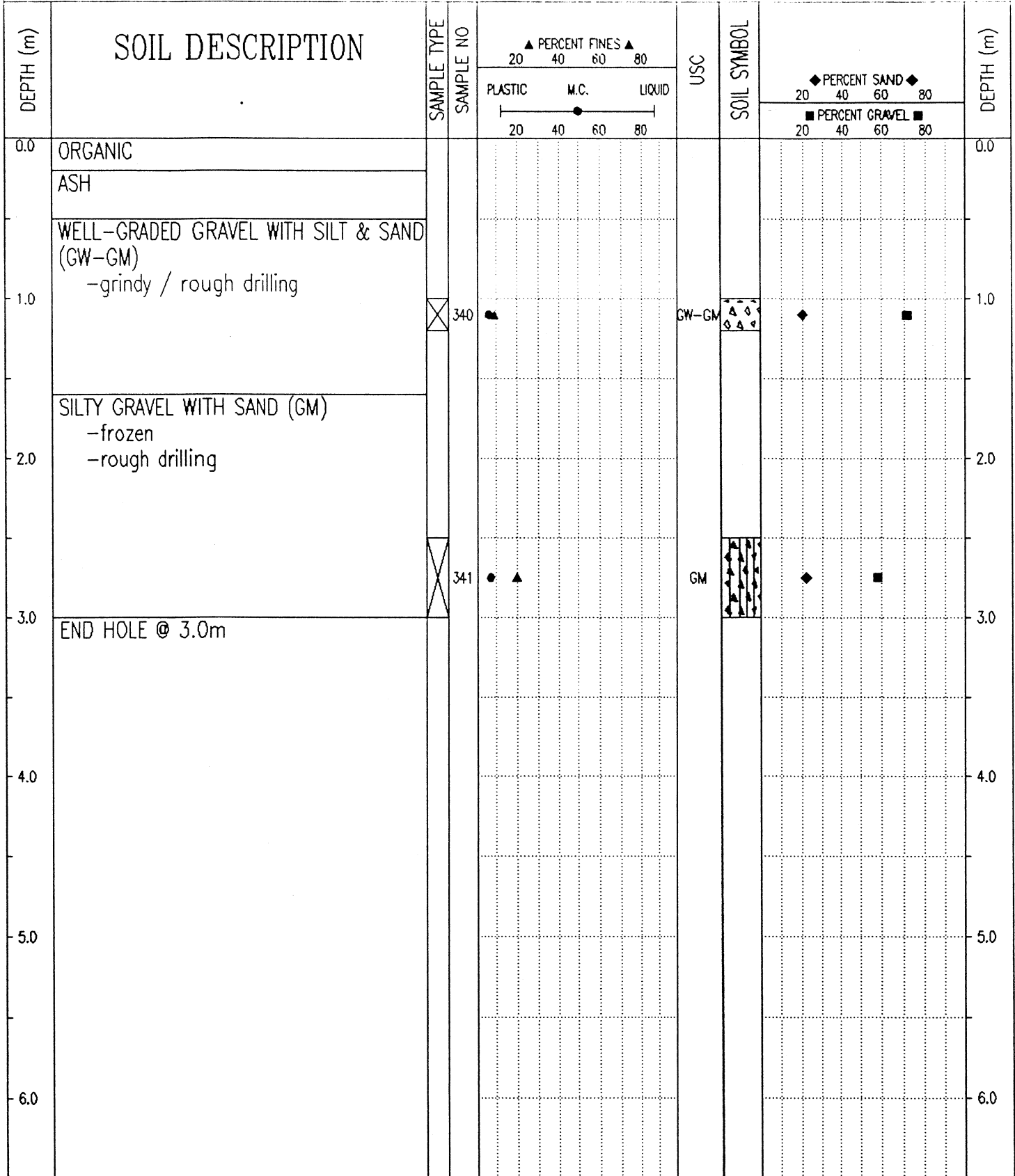
SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 513-475								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1808+040 CENTRELINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input type="checkbox"/> A.U.T. <input type="checkbox"/> P.U.A. <input type="checkbox"/> T.U.C. <input type="checkbox"/> CORE												
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC										0.0	
	ASH											
	ORGANIC -frozen											
1.0											1.0	
	SILTY SAND WITH GRAVEL (SM) -frozen -rough drilling		342	●	▲		SM	◆	■		2.0	
2.0												
			343	●	▲		SM	◆	■		3.0	
3.0	END HOLE @ 3.0m											
4.0											4.0	
5.0											5.0	
6.0											6.0	

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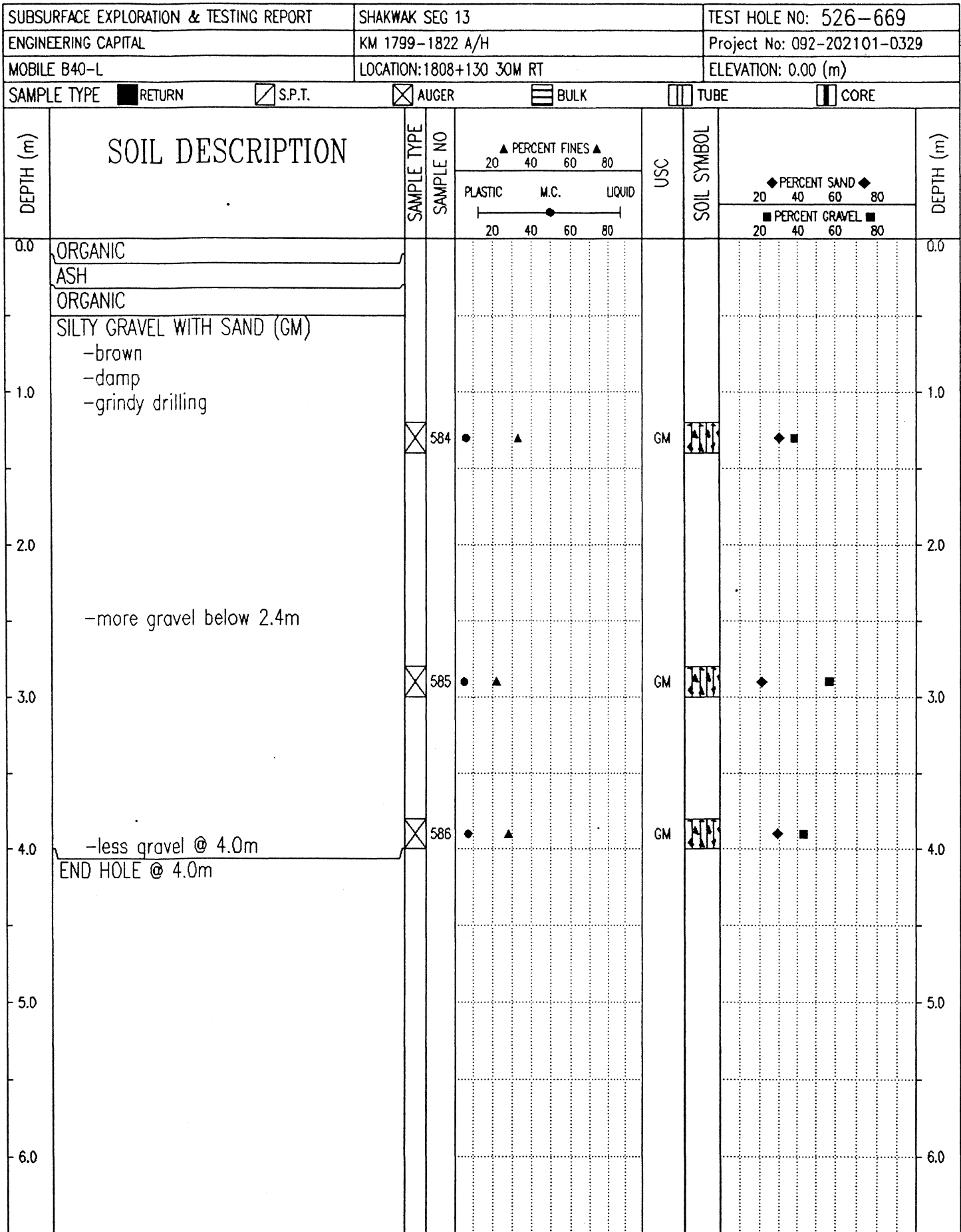
LOGGED BY: G.C.  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/05/05

SUBSURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 513-474
SHAKWAK PROJECT SEG 13B	KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L	LOCATION: 1808+125 CENTRELINE	ELEVATION: 0.00 (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		



Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 3.0 m
	REVIEWED BY:	COMPLETE: 99/05/05
	Fig. No:	Page 1 of 1



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Fig. No:

COMPLETION DEPTH: 4.0 m  
COMPLETE: 99/08/11

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 526-667								
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329								
MOBILE B40-L		LOCATION: 1808+200 15M RT		ELEVATION: 0.00 (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	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)		
				PLASTIC	M.C.			LIQUID	◆ PERCENT GRAVEL ◆			
0.0	ORGANIC VOLCANIC ASH			20	40	60	80	20	40	60	80	0.0
1.0	ORGANIC -frozen (Vx)											1.0
2.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -frozen -grindy drilling											2.0
2.8		<input checked="" type="checkbox"/>	581	●▲			GP-GM	◆	■			2.8
3.0	END HOLE @ 2.75m -refusal											3.0
4.0												4.0
5.0												5.0
6.0												6.0

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Fig. No:

COMPLETION DEPTH: 2.8 m  
COMPLETE: 99/08/10

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 526-668					
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329					
MOBILE B40-L		LOCATION:1808+200 20M LT		ELEVATION: 0.00 (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	SOIL SYMBOL	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
				20	40	60	80		
				20	40	60	80		
0.0	ORGANIC ASH ORGANIC -frozen								0.0
1.0	SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (GM)-(SM) -frozen -grinding drilling -more gravel @ 1.3m	<input checked="" type="checkbox"/>	582	●	▲			GM	1.0
2.0	-rough drilling @ 2.0m								2.0
3.0	END HOLE @ 2.4m -refusal	<input checked="" type="checkbox"/>	583	●	▲			SM	3.0
4.0									4.0
5.0									5.0
6.0									6.0

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Fig. No:

COMPLETION DEPTH: 2.4 m  
COMPLETE: 99/08/10

SUBSURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 513-473
SHAKWAK PROJECT SEG 13B	KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L	LOCATION: 1808+220 CENTRELINE	ELEVATION: 0.00 (m)

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)
				20	40	60			80	20		
0.0	ORGANIC											0.0
	ASH											
	ORGANIC -frozen (Vx)											
1.0												1.0
	SILTY SAND WITH GRAVEL (SM) -frozen -grindy drilling											
2.0	END HOLE @ 2.0m -refusal 1st refusal @ 2.0m 2nd refusal @ 1.8m	<input checked="" type="checkbox"/>	339	●	▲		SM	◆	◆	■		2.0
3.0												3.0
4.0												4.0
5.0												5.0
6.0												6.0

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LOGGED BY: G.C.	COMPLETION DEPTH: 2.0 m
REVIEWED BY:	COMPLETE: 99/05/05
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13	TEST HOLE NO: 526-666
ENGINEERING CAPITAL		KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L		LOCATION: 1808+250 30M RT	ELEVATION: 0.00 (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	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	
0.0	ORGANIC VOLCANIC ASH											0.0	
1.0	ORGANIC & SILT MIX -frozen (Vx)											1.0	
2.0	SILTY SAND WITH GRAVEL (SM) -frozen -grinding drilling	<input checked="" type="checkbox"/>	579	●	▲		SM	▢	◆	■		2.0	
3.0	END HOLE @ 3.0m	<input checked="" type="checkbox"/>	580	●	▲		SM	▢	◆	■		3.0	
4.0												4.0	
5.0												5.0	
6.0												6.0	

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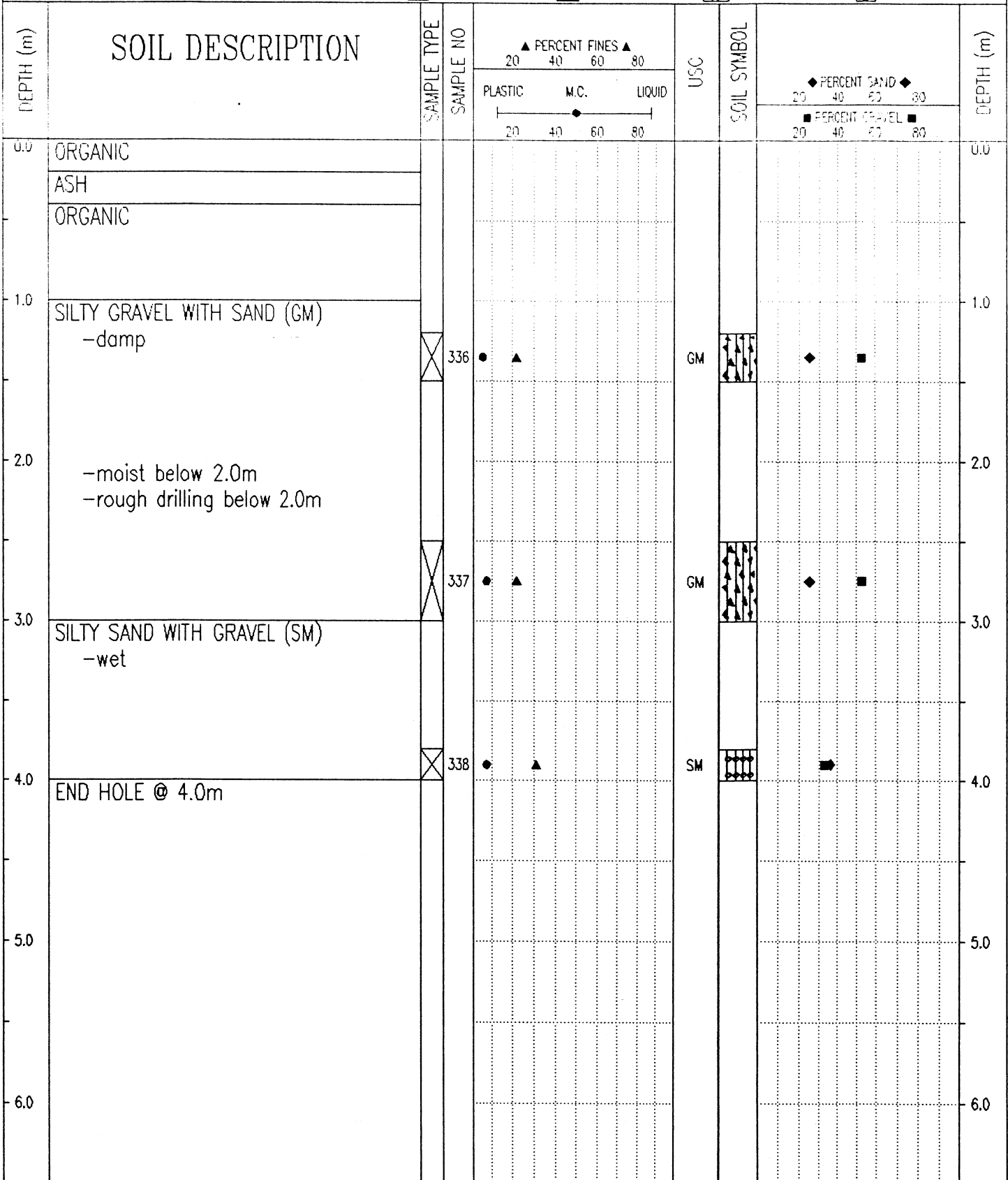
Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 99/08/10

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SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 513-487
SHAWWAK PROJECT SEG 13B		KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L		LOCATION: 1808+300 CENTRELINE	ELEVATION: 0.00 (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



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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 4.0 m  
COMPLETE: 99/05/04

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 526-665								
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329								
MOBILE B40-L		LOCATION: 1808+350 30M RT		ELEVATION: 0.00 (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	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				PLASTIC	M.C.			LIQUID	20	40	60	
0.0	ORGANIC											0.0
	VOLCANIC ASH											
1.0	ICE RICH ORGANIC											1.0
	ICE LENSE -grindy drilling @ 1.3m											
2.0	SILTY SAND WITH GRAVEL (SM) -with 50% ice	<input checked="" type="checkbox"/>	577	●	▲		SM	◆	■			2.0
	SILTY GRAVEL WITH SAND (GM) -frozen											
3.0	END HOLE @ 3.0m	<input checked="" type="checkbox"/>	578	●	▲		GM	◆	■			3.0
4.0												4.0
5.0												5.0
6.0												6.0

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Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 99/08/10

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
				20	40	60		20	40	60	80	
0.0	ORGANIC											0.0
	ASH											
	ORGANIC											
1.0	SILTY SAND WITH GRAVEL (SM) -frozen  -1st refusal @ 1.5m	<input checked="" type="checkbox"/>	335	●	▲		SM	◆	■			1.0
2.0	END HOLE @ 2.0m -refusal											2.0
3.0												3.0
4.0												4.0
5.0												5.0
6.0												6.0

99/11/16 01:13PM

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC VOLCANIC ASH										0.0	
1.0	ORGANIC -frozen (Vx)										1.0	
2.0	SILTY SAND WITH GRAVEL (SM) -frozen -grindy drilling	<input checked="" type="checkbox"/>	576	◆	▲		SM	◆	■		2.0	
3.0	END HOLE @ 2.8m -refusal - rock dust on bit										3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

99/12/06 02:56PM

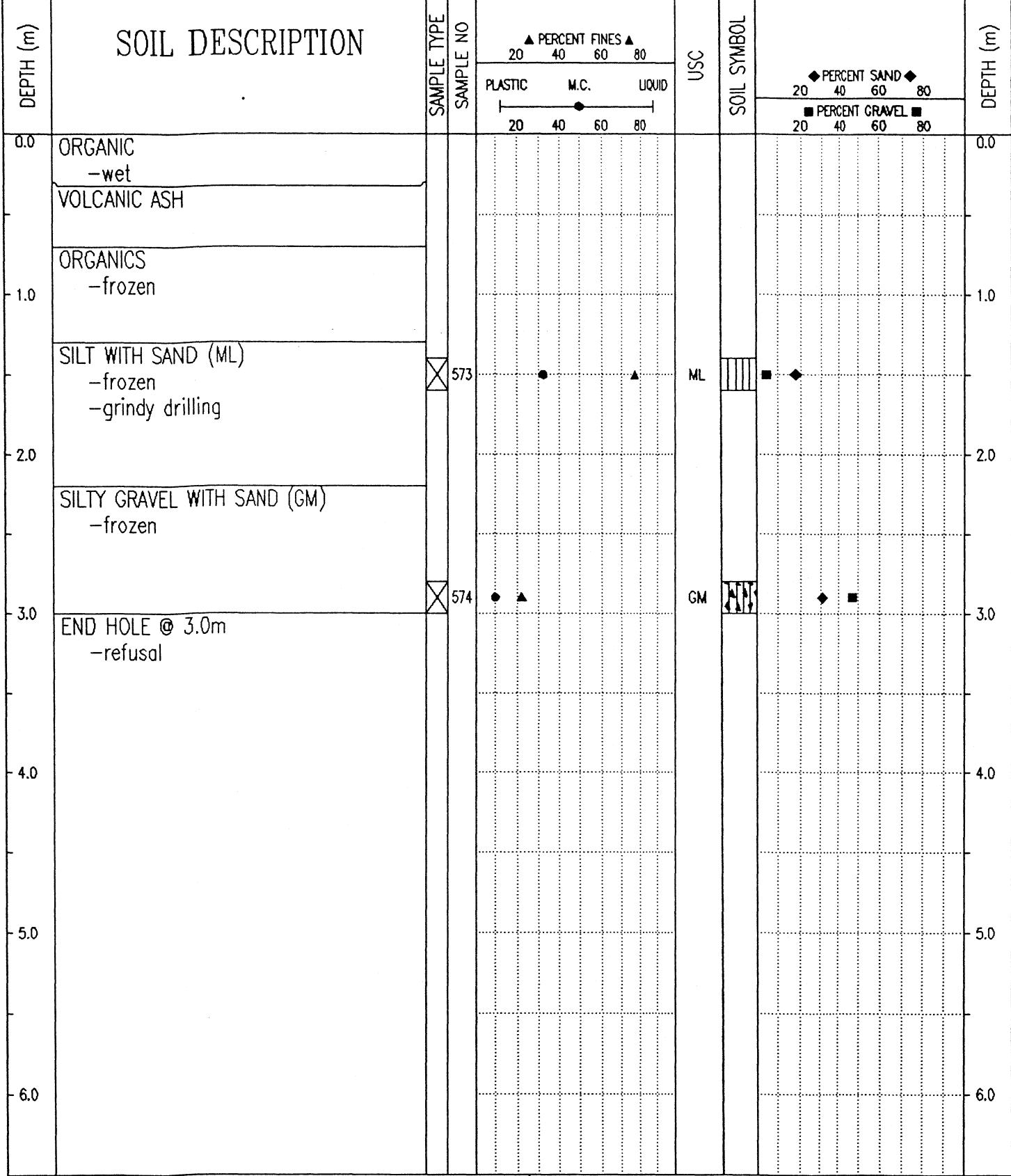
SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC											0.0
	ASH											
	ORGANIC -frozen											
1.0												1.0
	SILTY GRAVEL WITH SAND (GM) -frozen with ice (Vx)		333	●	▲		GM		■			2.0
2.0												
	SILTY SAND WITH GRAVEL (SM) -not frozen		334	●	▲		SM		■	◆		3.0
3.0	END HOLE @ 3.0m											3.0
4.0												4.0
5.0												5.0
6.0												6.0

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REVIEWED BY:	COMPLETE: 99/05/04
Fig. No:	Page 1 of 1

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



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REVIEWED BY:	COMPLETE: 99/08/10
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 526-663						
ENGINEERING CAPITAL		KM 1739-1822 A/H		Project No: 092-202101-0329						
MOBILE B40-L		LOCATION: 1808+510 20M LT		ELEVATION: 0.00 (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	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.			LIQUID	■ PERCENT GRAVEL ■	
0.0	ORGANIC -wet									0.0
	ASH -wet									
1.0	ORGANIC -frozen									1.0
	SILTY SAND WITH GRAVEL (SM) -frozen -grindy drilling -sample contaminated from above	<input checked="" type="checkbox"/>	575	●	▲	SM	◆	■	◆	
2.0	END HOLE @ 2.0m -refusal									2.0
3.0										3.0
4.0										4.0
5.0										5.0
6.0										6.0

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Fig. No:

COMPLETION DEPTH: 2.0 m

COMPLETE: 99/08/10

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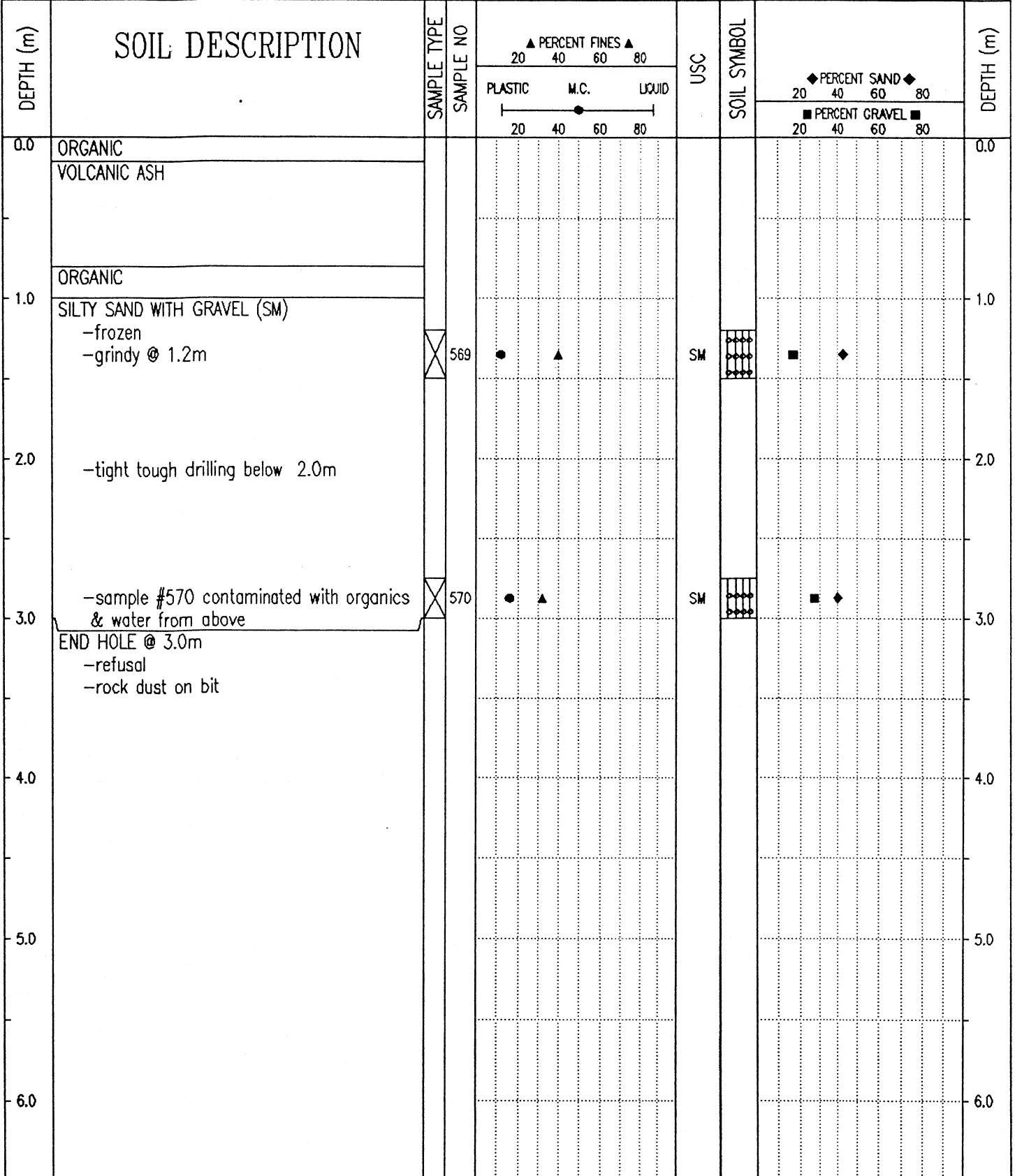
SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 513-484						
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329						
NODWELL B-40L		LOCATION: 1808+575 CENTRELINE		ELEVATION: 0.00 (m)						
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN		<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	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.			LIQUID	PERCENT GRAVEL ■	
0.0	ORGANIC & ASH -mixed with H2O (surface)									0.0
1.0	ORGANIC -frozen									1.0
2.0	-1st refusal @ 1.5m SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND (SM)-(GM) -frozen	<input checked="" type="checkbox"/>	331	●	▲		SM	■	◆	2.0
3.0	END HOLE @ 3.0m	<input checked="" type="checkbox"/>	332	●	▲		GM	■	◆	3.0
4.0										4.0
5.0										5.0
6.0										6.0

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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/05/04

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 526-660
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION:1808+575 20M RT	ELEVATION: 0.00 (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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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/08/10

SUBSURFACE EXPLORATION & TESTING REPORT      SHAKWAK SEG 13      TEST HOLE NO: 526-661

ENGINEERING CAPITAL      KM 1799-1822 A/H      Project No: 092-202101-0329

MOBILE B40-L      LOCATION: 1808+575 20M LT      ELEVATION: 0.00 (m)

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40		
0.0	ORGANIC VOLCANIC ASH										0.0	
1.0	ORGANIC -frozen										1.0	
2.0	SILT WITH SAND (ML) -frozen SILT WITH SAND & GRAVEL (SM) -frozen -grindy drilling	<input checked="" type="checkbox"/>	571			80	ML	■ ◆			2.0	
3.0		<input checked="" type="checkbox"/>	572	20	40	80	SM	■ ◆			3.0	
4.0	END HOLE @ 3.8m -refusal - rock dust on bit -no sample churned up										4.0	
5.0											5.0	
6.0											6.0	

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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.8 m  
COMPLETE: 99/08/10

99/12/10 02:38PM

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 526-659							
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329							
MOBILE B40-L		LOCATION: 1808+650 30M RT		ELEVATION: 0.00 (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	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	
0.0	SILTY GRAVEL WITH SAND (GM) -brown -damp										0.0
1.0											1.0
2.0	SILTY SAND WITH GRAVEL (SM) -brown -moist										2.0
3.0											3.0
4.0	SILTY GRAVEL WITH SAND (GM) -brown -damp -rougher drilling										4.0
5.0	END HOLE @ 4.6m										5.0
6.0											6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C.		COMPLETION DEPTH: 4.6 m					
				REVIEWED BY:		COMPLETE: 99/08/10					
				Fig. No:		Page 1 of 1					

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 513-483								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1808+673 CENTRELINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE		RETURN		S.P.T.								
		AUGER		BULK								
		TUBE		CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
0.0	ORGANIC										0.0	
	ASH											
	ORGANIC -frozen											
1.0	SILTY GRAVEL WITH SAND (GM) -frozen										1.0	
		X	328	●	▲		GM	◊	■			
2.0											2.0	
	-not frozen below 2.2m											
3.0		X	329	●	▲		GM	◊	■		3.0	
4.0		X	330	●	▲		GM	◊	■		4.0	
	END HOLE @ 4.0m											
5.0											5.0	
6.0											6.0	

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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 4.0 m  
COMPLETE: 99/05/04

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC											0.0
	ASH											
	ORGANIC -frozen (Vx)											
1.0	SILTY SAND WITH GRAVEL (SM) -frozen with ice (Vx)	<input checked="" type="checkbox"/>	325	●	▲		SM		◆	■		1.0
2.0												2.0
3.0	SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (GM)-(SM) -frozen	<input checked="" type="checkbox"/>	326	●	▲		GM		◆	■		3.0
4.0												4.0
4.0	END HOLE @ 4.0M	<input checked="" type="checkbox"/>	327	●	▲		SM		◆	■		4.0
5.0												5.0
6.0												6.0

99/11/16 01:12PM

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 521-658								
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329								
MOBILE B 40 L		LOCATION: 1808+750 37M RT		ELEVATION: 0.00 (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	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC -black -damp ASH -moist										0.0	
1.0	ORGANIC -trace rock -black -frozen (Vx) below .8m										1.0	
2.0	SILTY SAND WITH GRAVEL (SM) -grindy drilling -frozen (Nf)										2.0	
3.0	-hard drilling below 3.0m	<input checked="" type="checkbox"/>	564	●	▲		SM	■	◆		3.0	
4.0	END HOLE @ 4.0m -refusal	<input checked="" type="checkbox"/>	565	●	▲		SM	■	◆		4.0	
5.0											5.0	
6.0											6.0	

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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 4.0 m  
COMPLETE: 99/08/06

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 513-472	
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329	
NODWELL B-40L		LOCATION: 1808+850 CENTRELIN		ELEVATION: 0.00 (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	

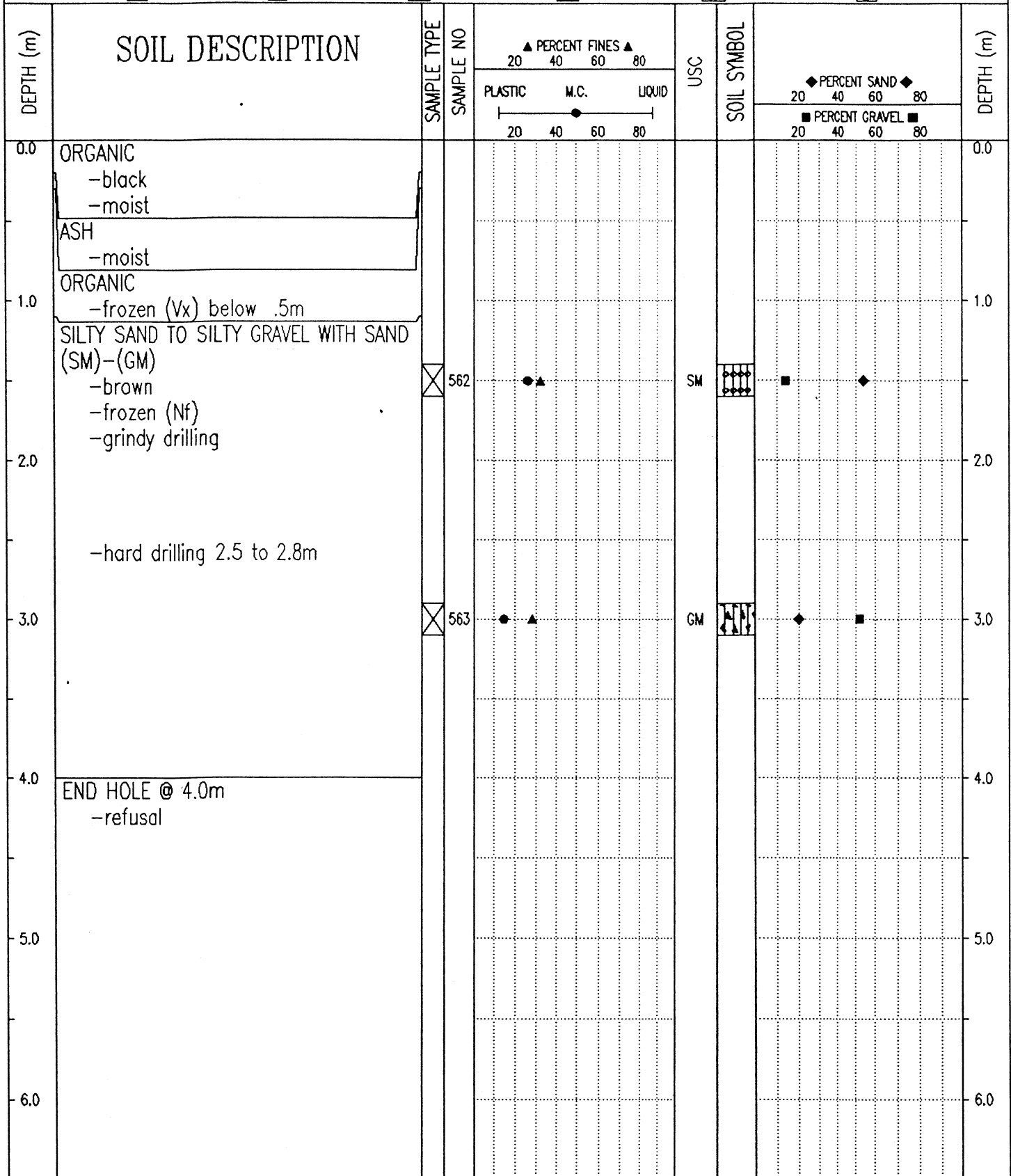
  

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	SOIL SYMBOL	◆ PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC										0.0	
	ASH											
	ORGANIC -frozen (Vx)											
1.0											1.0	
	SILTY SAND WITH GRAVEL (SM) -frozen											
2.0	END HOLE @ 2.0m -refusal	<input checked="" type="checkbox"/>	324	●	▲		SM	◆	■		2.0	
3.0											3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

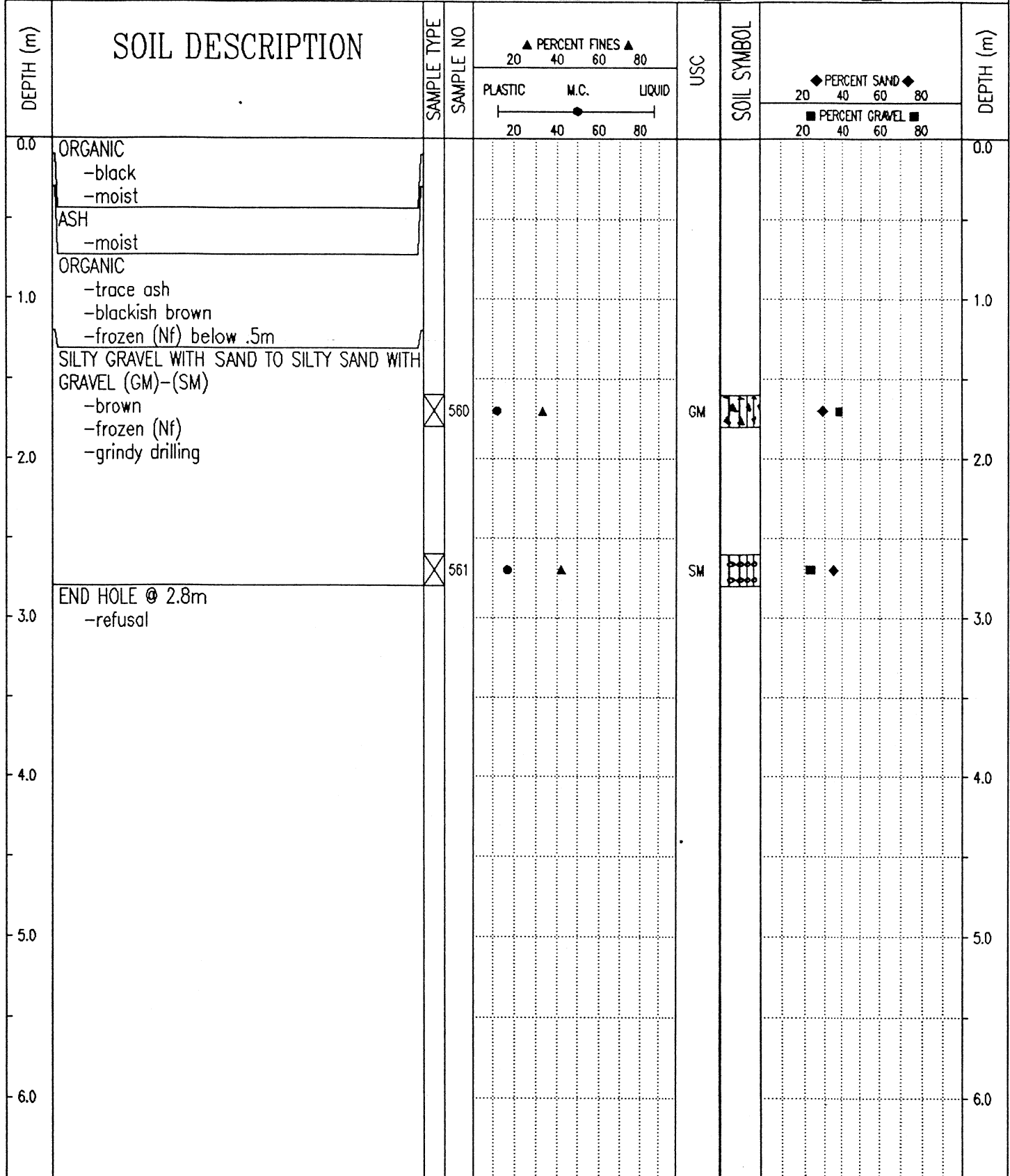
Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 2.0 m
	REVIEWED BY:	COMPLETE: 99/05/04
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT SEG 13	TEST HOLE NO: 521-657
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B 40 L	LOCATION: 1808+860 20M LT	ELEVATION: 0.00 (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



Government of Yukon Transportation Engineering	LOGGED BY: W.E.	COMPLETION DEPTH: 4.0 m
	REVIEWED BY:	COMPLETE: 99/08/06
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13	TEST HOLE NO: 521-656
ENGINEERING CAPITAL		KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B 40 L		LOCATION: 1808+865 22M RT	ELEVATION: 0.00 (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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Fig. No:

COMPLETION DEPTH: 3.8 m  
COMPLETE: 99/08/06

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 513-471						
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329						
NODWELL B-40L		LOCATION: 1808+950 CENTRELINE		ELEVATION: 0.00 (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	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80		DEPTH (m)
				PLASTIC M.C. LIQUID 20 40 60 80				■ PERCENT GRAVEL ■ 20 40 60 80		
0.0	ORGANIC									0.0
	ASH									
	ORGANIC -frozen (Vx)									
1.0										1.0
	SILTY GRAVEL WITH SAND (GM) -frozen (Vx)	X	322	● ▲		GM		◆ ■		
2.0										2.0
	SILTY SAND WITH GRAVEL (SM) -frozen									
3.0		X	323	● ▲		SM		■ ◆		3.0
	END HOLE @ 3.0M -refusal									
4.0										4.0
5.0										5.0
6.0										6.0

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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/05/04

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 521-655							
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329							
MOBILE B 40 L		LOCATION: 1808+950 40M RT		ELEVATION: 0.00 (m)							
SAMPLE TYPE		S.P.T.		AUGER		BULK		TUBE		CORE	
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	PERCENT SAND ◆ 20 40 60 80 PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)			
0.0	ORGANIC -trace ash -blackish brown -damp							0.0			
1.0	SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND (SM)-(GM) -brown -frozen (Nf) below .8m							1.0			
2.0		☒	558	● ▲	SM	◆ ■		2.0			
3.0	-hard drilling @ 2.6m	☒	559	● ▲	GM	◆ ■		3.0			
3.0	END HOLE @ 3.0m -refusal							3.0			
4.0								4.0			
5.0								5.0			
6.0								6.0			

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COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/08/06

SUBSURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 513-470
SHAKWAK PROJECT SEG 13B	KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L	LOCATION: 1809+025 CENTRELINE	ELEVATION: 0.00 (m)

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

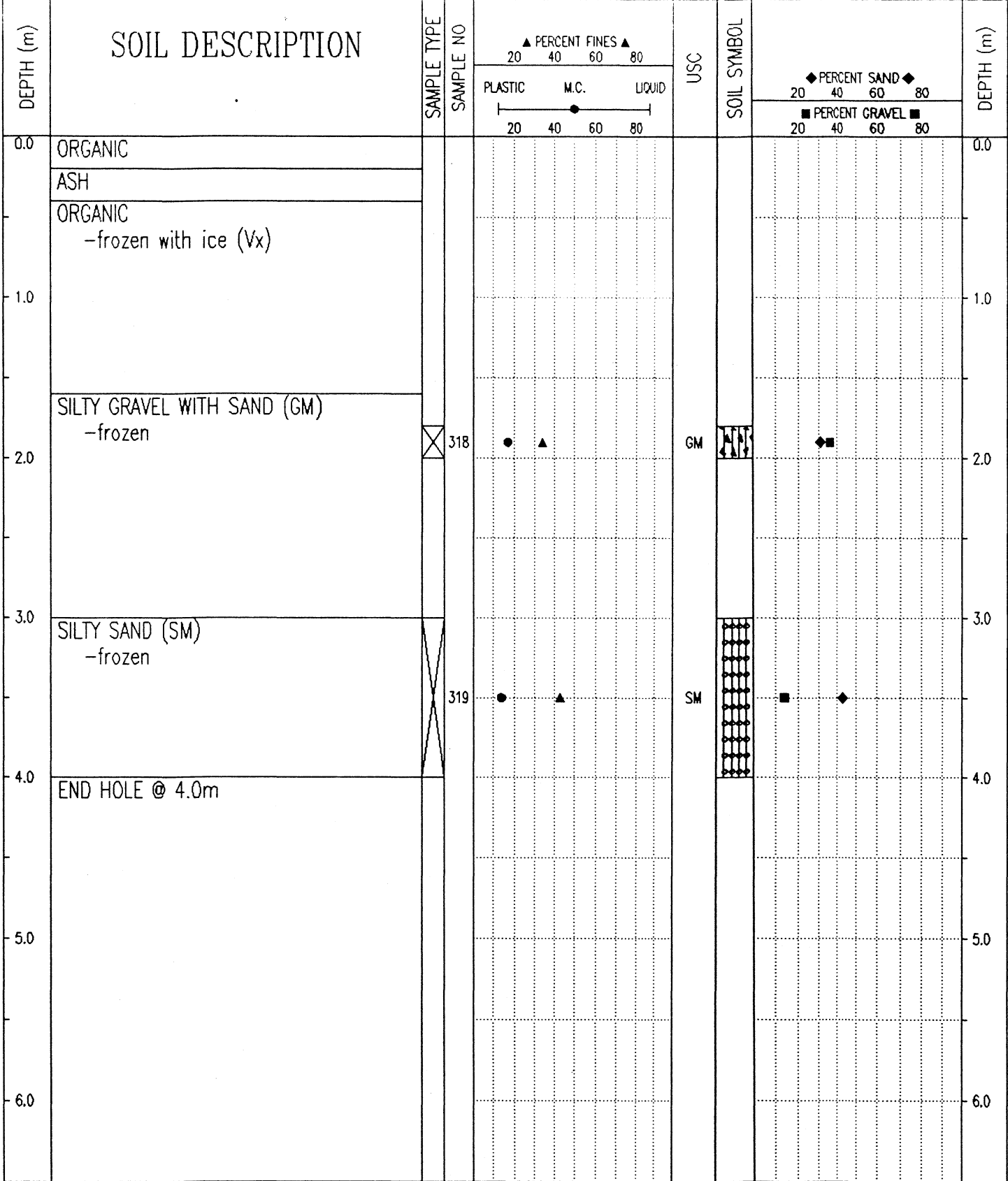
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	
0.0	ORGANIC -frozen											0.0	
	ASH												
	ORGANIC -frozen												
1.0												1.0	
2.0	SILTY SAND WITH GRAVEL TO SANDY SILT WITH GRAVEL (SM)-(ML) -frozen	<input checked="" type="checkbox"/>	320	●	▲		SM	▣	◆	■		2.0	
3.0	END HOLE @ 3.0m	<input checked="" type="checkbox"/>	321	●	▲		ML	▣	◆	■		3.0	
4.0												4.0	
5.0												5.0	
6.0												6.0	

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Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/05/04

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



SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 521-652							
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329							
MOBILE B 40 L		LOCATION: 1809+150 35M RT		ELEVATION: 0.00 (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	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	
0.0	ORGANIC -black -moist										0.0
	ASH -moist										
1.0	SILTY SAND WITH GRAVEL (SM) -greyish brown -frozen (Nf) below 1.0m										
		<input checked="" type="checkbox"/>	554	●	▲		SM	◼	◆		
2.0											
3.0	END HOLE @ 3.0m -refusal										
		<input checked="" type="checkbox"/>	555	●	▲		SM	◼	■		
4.0											
5.0											
6.0											

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Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/08/06

SUBSURFACE EXPLORATION & TESTING REPORT ALASKA HWY RECONSTRUCTION TEST HOLE NO: 513-468

SHAKWAK PROJECT SEG 13B KM 1799 - 1822 A/H Project No: 092-202101-0329

NODWELL B-40L LOCATION: 1809+200 CENTRELINE ELEVATION: 0.00 (m)

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			PERCENT GRAVEL ■			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	20	40	
0.0	ORGANIC													0.0	
	ASH														
	ORGANIC -frozen														
1.0	SILTY SAND WITH GRAVEL (SM) -frozen -rough drilling -grindy drilling	<input checked="" type="checkbox"/>	316	●	▲		SM	◆	■					1.0	
2.0	END HOLE @ 2.0m -refusal	<input checked="" type="checkbox"/>	317	●	▲		SM	◆	■					2.0	
3.0														3.0	
4.0														4.0	
5.0														5.0	
6.0														6.0	

Government of Yukon Transportation Engineering

LOGGED BY: G.C. COMPLETION DEPTH: 2.0 m  
 REVIEWED BY: COMPLETE: 99/05/04  
 Fig. No: Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 521-651								
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329								
MOBILE B 40 L		LOCATION: 1809+250 20M LT		ELEVATION: 0.00 (m)								
SAMPLE TYPE		S.P.T.		AUGER								
RETURN		BULK		TUBE								
CORE												
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC -black -damp ASH -moist ORGANIC -black -frozen ICE										0.0	
3.0	SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND (SM)-(GM) -brownish grey -frozen (Vx) -grindy drilling	☒	552	●	▲		SM	■	◆		3.0	
4.0	-frozen (Nf) below 3.8m										4.0	
5.0	END HOLE @ 4.5m	☒	553	●	▲		GM	■	◆		5.0	
6.0											6.0	

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Fig. No:

COMPLETION DEPTH: 4.5 m  
COMPLETE: 99/08/06

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13	TEST HOLE NO: 521-650
ENGINEERING CAPITAL		KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B 40 L		LOCATION: 1809+255 21M RT	ELEVATION: 0.00 (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	SOIL SYMBOL	PERCENT SAND ◆			PERCENT GRAVEL ■	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60		
0.0	ORGANIC -black -moist											0.0	
	ASH -moist												
1.0	SILTY SAND (SM) -brown -frozen											1.0	
2.0	-grindy drilling @ 1.9m											2.0	
	-smooth drilling @ 2.4m												
	-sample #551 contaminated with org & water	<input checked="" type="checkbox"/>	551	▲	●		SM	◆	■				
3.0	SANDY GRAVELLY SILT -brown -grindy drilling @ 3.0											3.0	
4.0	END HOLE @ 4.0m											4.0	
5.0												5.0	
6.0												6.0	

Government of Yukon Transportation Engineering	LOGGED BY: W.E.	COMPLETION DEPTH: 4.0 m
	REVIEWED BY:	COMPLETE: 99/08/06
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 513-467						
SHAKWAK PROJECT SEG 1.3B		KM 1799 - 1822 A/H		Project No: 092-202101-0329						
NODWELL B-40L		LOCATION: 1809+285 CENTRELINE		ELEVATION: 0.00 (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	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.			LIQUID	20	
0.0	ORGANIC -frozen with ice (Vx)									0.0
1.0										1.0
2.0										2.0
3.0	SANDY SILT WITH GRAVEL (ML) -frozen (Vx)		315	●	▲	ML	▨	◆		3.0
4.0	END HOLE @ 3.0M -refusal									4.0
5.0										5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C.		COMPLETION DEPTH: 3.0 m				
				REVIEWED BY:		COMPLETE: 99/05/04				
				Fig. No:		Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 513-466					
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329					
NODWELL B-40L		LOCATION: 1809+325 CENTRELINE		ELEVATION: 0.00 (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	SOIL SYMBOL	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
				20 40 60 80	20 40 60 80	20 40 60 80			
0.0	ORGANIC								0.0
	ASH								
	ORGANIC -frozen (Vx)								
1.0									1.0
	SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (GM)-(SM) -frozen -drill starts grinding @ 1.5m	<input checked="" type="checkbox"/>	313	● ▲			GM	◆ ■	2.0
2.0									
		<input checked="" type="checkbox"/>	314	● ▲			SM	◆ ■	3.0
3.0	END HOLE @ 3.0m								3.0
4.0									4.0
5.0									5.0
6.0									6.0

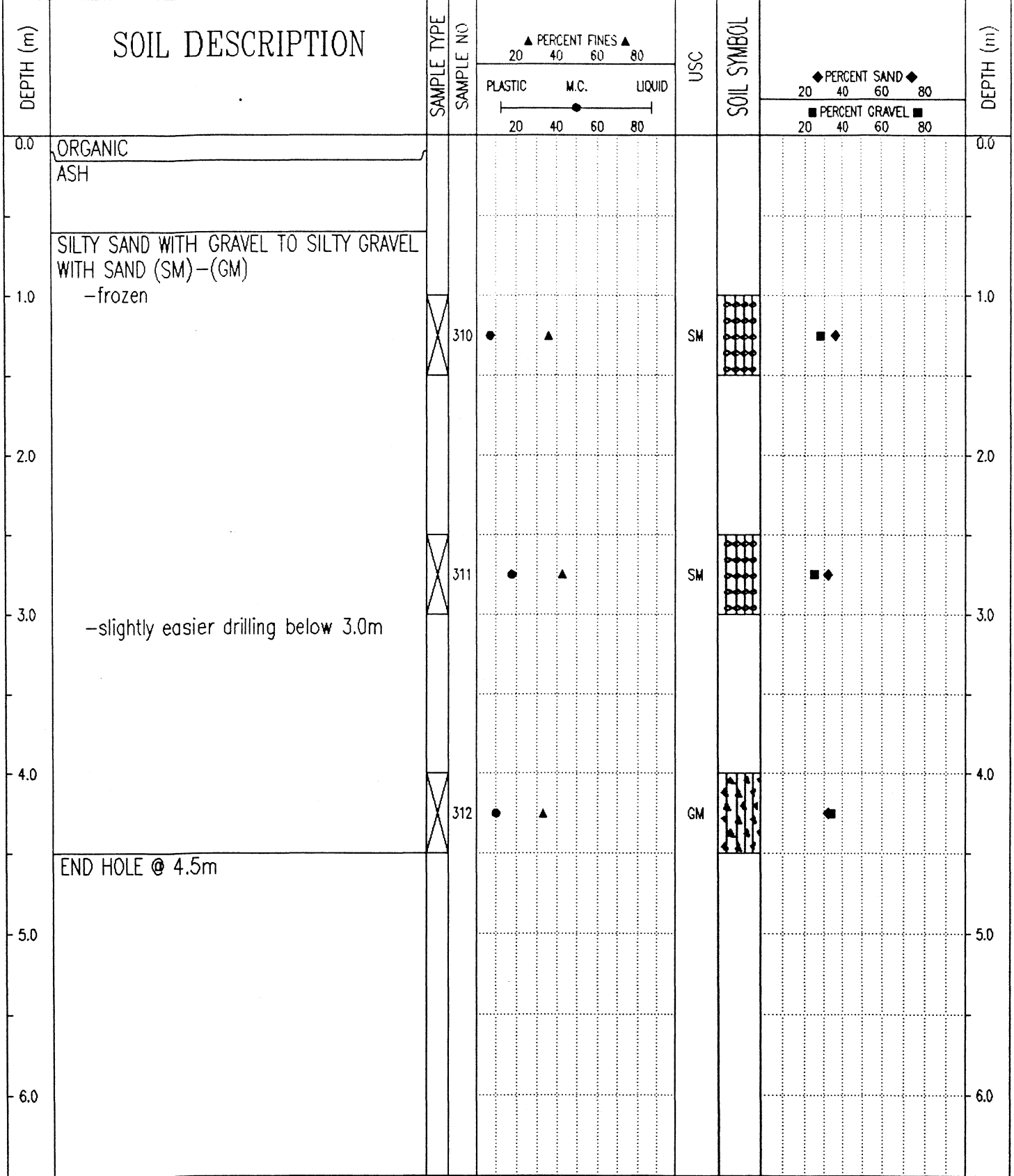
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Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/05/04

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 521-649								
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329								
MOBILE B 40 L		LOCATION: 1809+410 40M RT		ELEVATION: 0.00 (m)								
SAMPLE TYPE		RETURN		S.P.T.								
		AUGER		BULK								
		TUBE		CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL			
0.0	ORGANIC -black -damp										0.0	
0.0 - 1.0	SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND (SM)-(GM) -brown -moist -grindy drilling											
1.0											1.0	
2.0											2.0	
3.0											3.0	
4.0											4.0	
5.0	END HOLE @ 4.5m										5.0	
6.0											6.0	
Government of Yukon Transportation Engineering				LOGGED BY: W.E. REVIEWED BY: Fig. No:				COMPLETION DEPTH: 4.5 m COMPLETE: 99/08/06 Page 1 of 1				

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



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LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 99/05/04
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 513-464
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L		LOCATION: 1809+475 CENTRELINE	ELEVATION: 0.00 (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	SOIL SYMBOL	PERCENT SAND & GRAVEL		DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL	
0.0	ORGANIC									0.0	
	ASH										
	ORGANIC -frozen (Vx)										
2.0	SILTY GRAVEL WITH SAND (GM) -with ice (Vx)	<input checked="" type="checkbox"/>	308	●	▲		GM	◊	■	2.0	
3.0	SILTY SAND WITH GRAVEL (SM) -frozen	<input checked="" type="checkbox"/>	309	●	▲		SM	◊	■	3.0	
3.0	END HOLE @ 3.0m										
4.0										4.0	
5.0										5.0	
6.0										6.0	

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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/05/04

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 521-648					
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329					
MOBILE B 40 L		LOCATION: 1809+520 20M LT		ELEVATION: 0.00 (m)					
SAMPLE TYPE		RETURN		S.P.T.					
		AUGER		BULK					
		TUBE		CORE					
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	ORGANIC -black -moist								0.0
	ASH -moist								
1.0	ORGANIC -black -frozen (Nf)								1.0
2.0	SILTY SAND WITH GRAVEL (SM) -brown -frozen (Nf) -grindy drilling	X	545	●	▲		SM	■ ◆	2.0
3.0		X	546	●	▲		SM	■ ◆	3.0
4.0		X	547	●	▲		SM	■ ◆	4.0
	END HOLE @ 4.1m								
5.0									5.0
6.0									6.0

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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 4.1 m  
COMPLETE: 99/08/05

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 521-647											
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329											
MOBILE B 40 L		LOCATION: 1809+530 18M RT		ELEVATION: 0.00 (m)											
SAMPLE TYPE		RETURN		S.P.T.											
		AUGER		BULK											
		TUBE		CORE											
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND			PERCENT GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	20	40	
0.0	ORGANIC -black -moist													0.0	
	ASH -moist														
1.0	ORGANIC -black - some brown -frozen (Nf)													1.0	
2.0	SILTY GRAVEL TO SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (GM)-(SM) -brown -frozen (Nf)	X	542	●	▲		GM	▲▲▲	◆		■			2.0	
3.0	-more rock @ 3.0m	X	543	●	▲		GM	▲▲▲	◆		■			3.0	
4.0	END HOLE @ 4.0m -refusal	X	544	●	▲		SM	▲▲▲	◆		■			4.0	
5.0														5.0	
6.0														6.0	

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Fig. No:

COMPLETION DEPTH: 4.0 m  
COMPLETE: 99/08/05

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 513-463								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1809+575 CENTRELINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE		RETURN		S.P.T.								
		AUGER		BULK								
		TUBE		CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC ASH										0.0	
1.0	SANDY SILT (ML) -frozen	☒	305	●	▲		ML	■	◆		1.0	
2.0	SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND (SM)-(GM) -frozen -rough tight drilling	☒	306	●	▲		SM	■	◆		2.0	
3.0	END HOLE @ 3.0m	☒	307	●	▲		GM	■	◆		3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

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Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 99/05/04

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SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 513-462						
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329						
NODWELL B-40L		LOCATION: 1809+670 CENTRELINE		ELEVATION: 0.00 (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	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80		DEPTH (m)
				PLASTIC	M.C.			LIQUID	■ PERCENT GRAVEL ■ 20 40 60 80	
0.0	ORGANIC									0.0
	ASH									
	ORGANIC -frozen (Vx)									
1.0										1.0
2.0		<input checked="" type="checkbox"/>	304							2.0
3.0										3.0
4.0	END HOLE @ 4.0M -drill starts grinding @ 4.0m -no sample recovered									4.0
5.0										5.0
6.0										6.0

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Fig. No:

COMPLETION DEPTH: 4.0 m

COMPLETE: 99/05/04

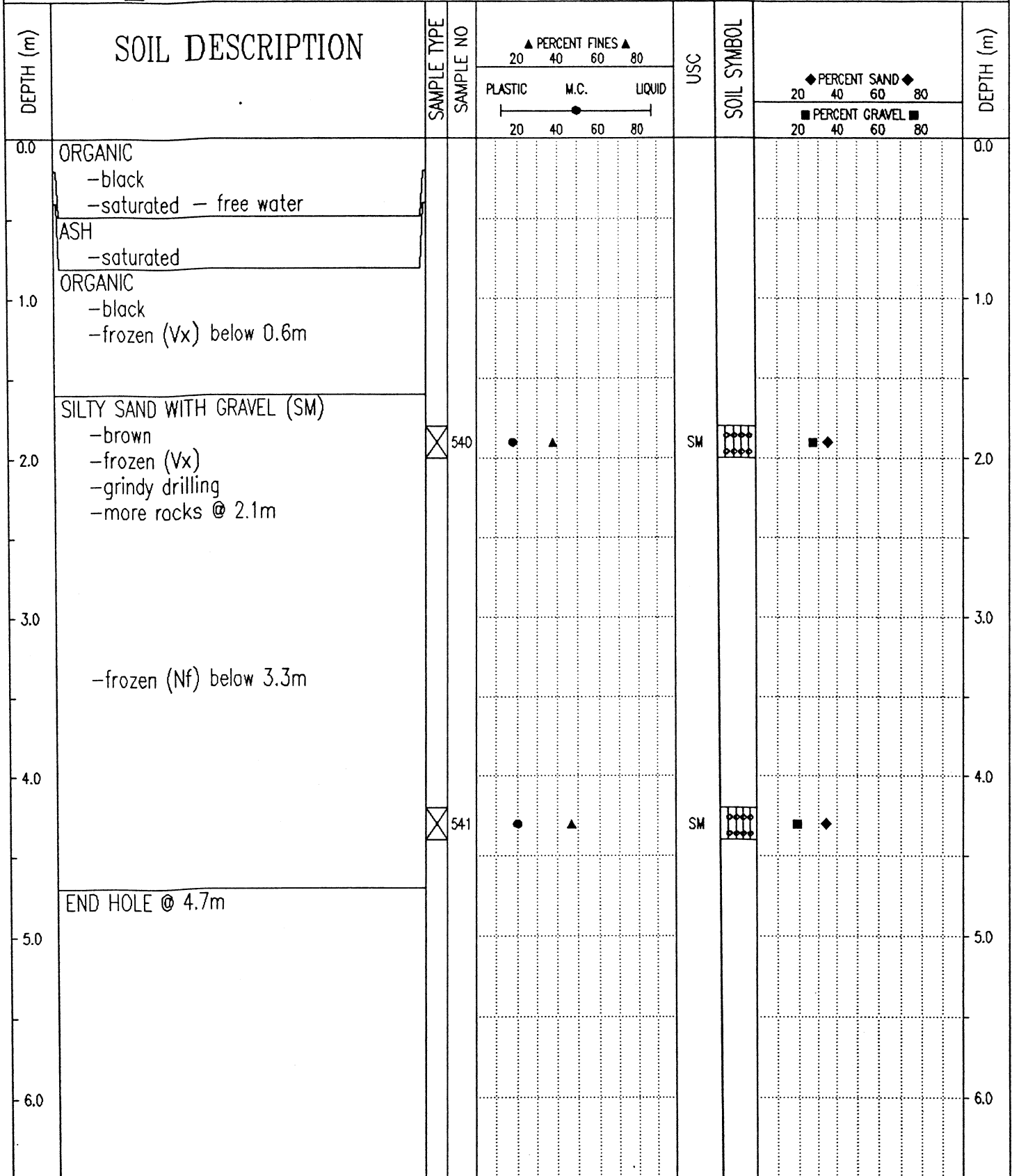
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT SEG 13	TEST HOLE NO: 521-645
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B 40 L	LOCATION: 1809+675 22M RT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> 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	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC -black -free water -frozen (Vx) below .4m										0.0	
1.0											1.0	
2.0	-grindy drilling 2.0-2.1m -first refusal @ 2.0m -smooth drilling @ 2.1m										2.0	
3.0	-some rocks @ 3.1m										3.0	
4.0	END HOLE @ 3.5m -grindy drilling & refusal										4.0	
5.0											5.0	
6.0											6.0	

Government of Yukon Transportation Engineering	LOGGED BY: W.E.	COMPLETION DEPTH: 3.5 m
	REVIEWED BY:	COMPLETE: 99/08/05
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT SEG 13	TEST HOLE NO: 521-646
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B 40 L	LOCATION: 1809+675 21M LHS	ELEVATION: 0.00 (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		



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Fig. No:

COMPLETION DEPTH: 4.7 m  
COMPLETE: 99/08/05

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 513-461								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1809+740 CENTRELINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE		RETURN		S.P.T.								
AUGER		BULK		TUBE								
CORE												
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC											0.0
	ASH											
	ORGANIC											
	SILTY GRAVEL WITH SAND (GM)											
	-frozen											
	-rough tight drilling											
1.0		⊗	302	●	▲		GM	◆	■			1.0
2.0												2.0
3.0		⊗	303	●	▲		GM	◆	■			3.0
4.0												4.0
5.0												5.0
6.0												6.0
	END HOLE @ 3.0M											

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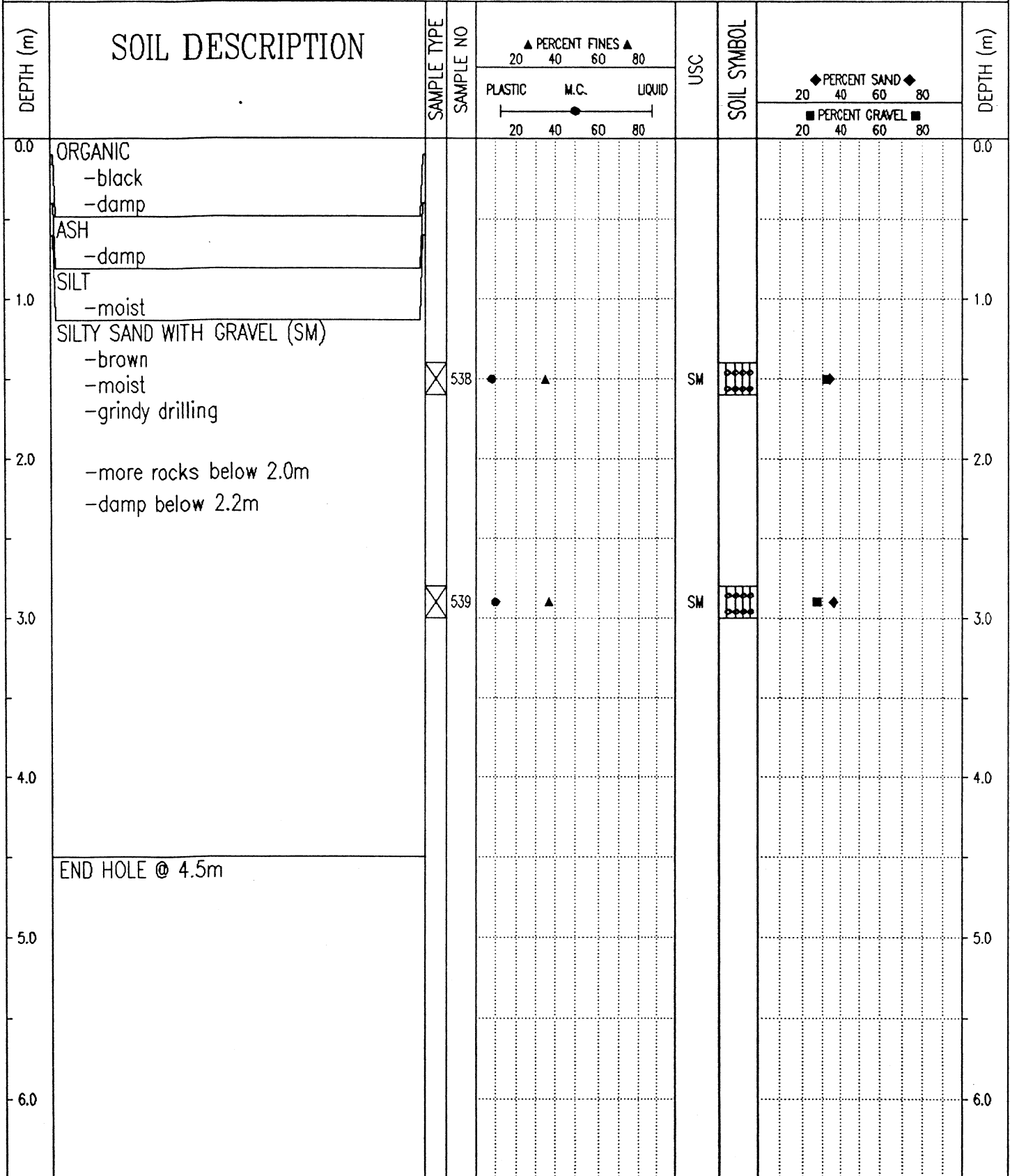
COMPLETION DEPTH: 3.0 m  
COMPLETE: 99/05/04

SUB-SURFACE EXPLORATION & TESTING REPORT ALASKA HWY RE-CONSTRUCTION TEST HOLE NO: 520-644

SHAKWAK SEG 13 KM 1796-1822 A/H Project No: 092-202101-0329

MOBILE B-40L LOCATION: 1809+800 40 RHS ELEVATION: 0.00 (m)

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



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 REVIEWED BY: COMPLETE: 99/08/05  
 Fig. No: Page 1 of 1

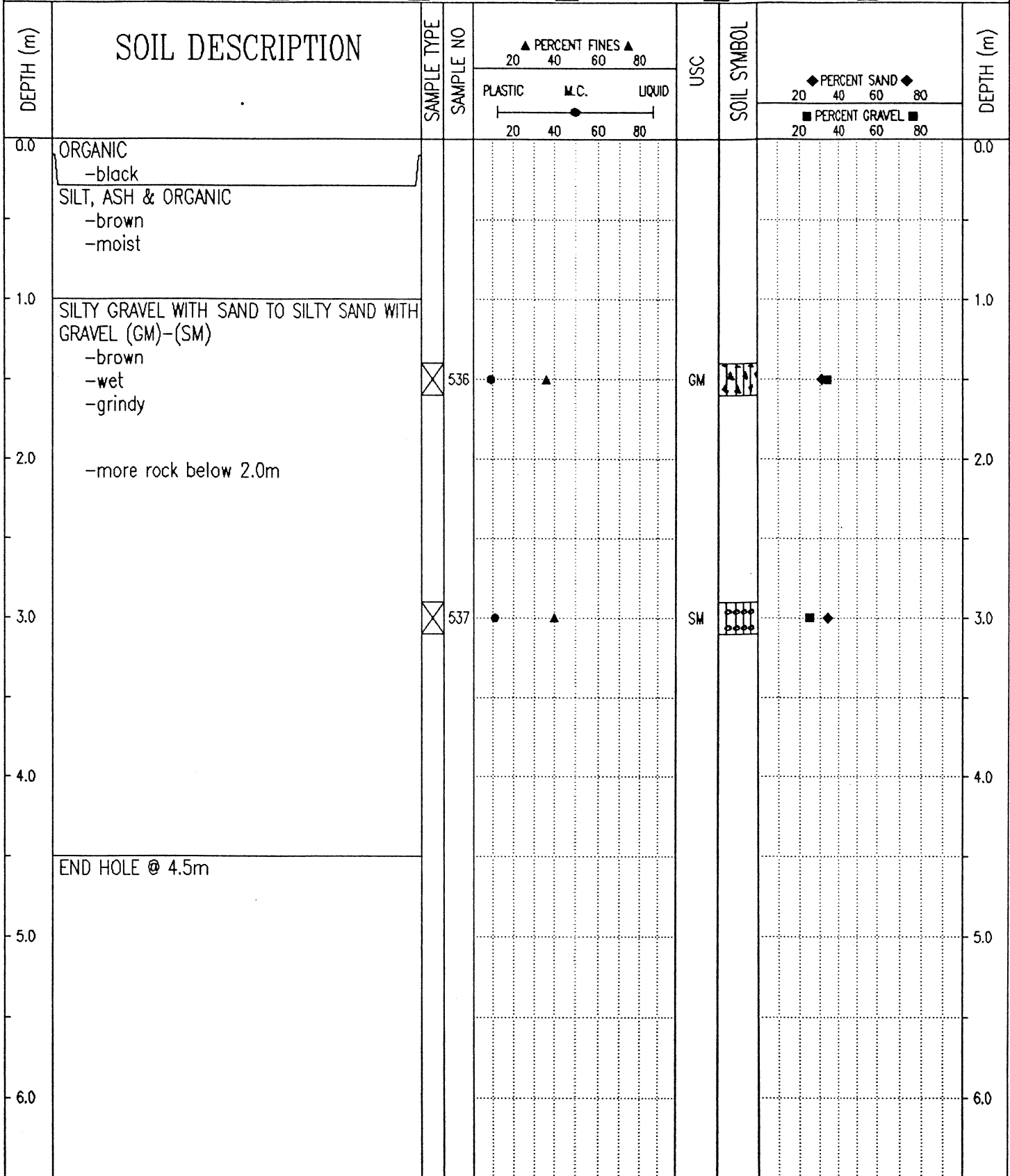
SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 513-460						
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329						
NODWELL B-40L		LOCATION: 1809+825 CENTRELINE		ELEVATION: 0.00 (m)						
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" 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	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.			LIQUID	20	
0.0	ORGANIC									0.0
	ASH									
	ORGANIC -frozen									
1.0										1.0
	ORGANICS WITH SILT -frozen (Vx)		301			ML				
2.0										2.0
3.0	END HOLE @ 3.0m									3.0
4.0										4.0
5.0										5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C.		COMPLETION DEPTH: 3.0 m				
				REVIEWED BY:		COMPLETE: 99/05/03				
				Fig. No:		Page 1 of 1				

SUB-SURFACE EXPLORATION & TESTING REPORT ALASKA HWY RE-CONSTRUCTION TEST HOLE NO: 520-643

SHAKWAK SEG 13 KM 1796-1822 A/H Project No: 092-202101-0329

MOBILE B-40L LOCATION: 1809+895 28 RHS ELEVATION: 0.00 (m)

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



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Fig. No:

COMPLETION DEPTH: 4.5 m

COMPLETE: 99/08/05

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SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 513-459						
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329						
NODWELL B-40L		LOCATION: 1809+950 CENTRELIN		ELEVATION: 0.00 (m)						
SAMPLE TYPE		RETURN		S.P.T.						
		AUGER		BULK						
		TUBE		CORE						
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲		USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.			LIQUID	PERCENT GRAVEL ■	
0.0	ORGANIC									0.0
	ASH									
	ORGANIC -frozen									
1.0	SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (GM)-(SM) -frozen	⊗	299	●	▲		GM	◆	■	1.0
2.0										2.0
3.0		⊗	300	●	▲		SM	◆	■	3.0
4.0										4.0
5.0										5.0
6.0										6.0
	END HOLE @ 3.0m -refusal									

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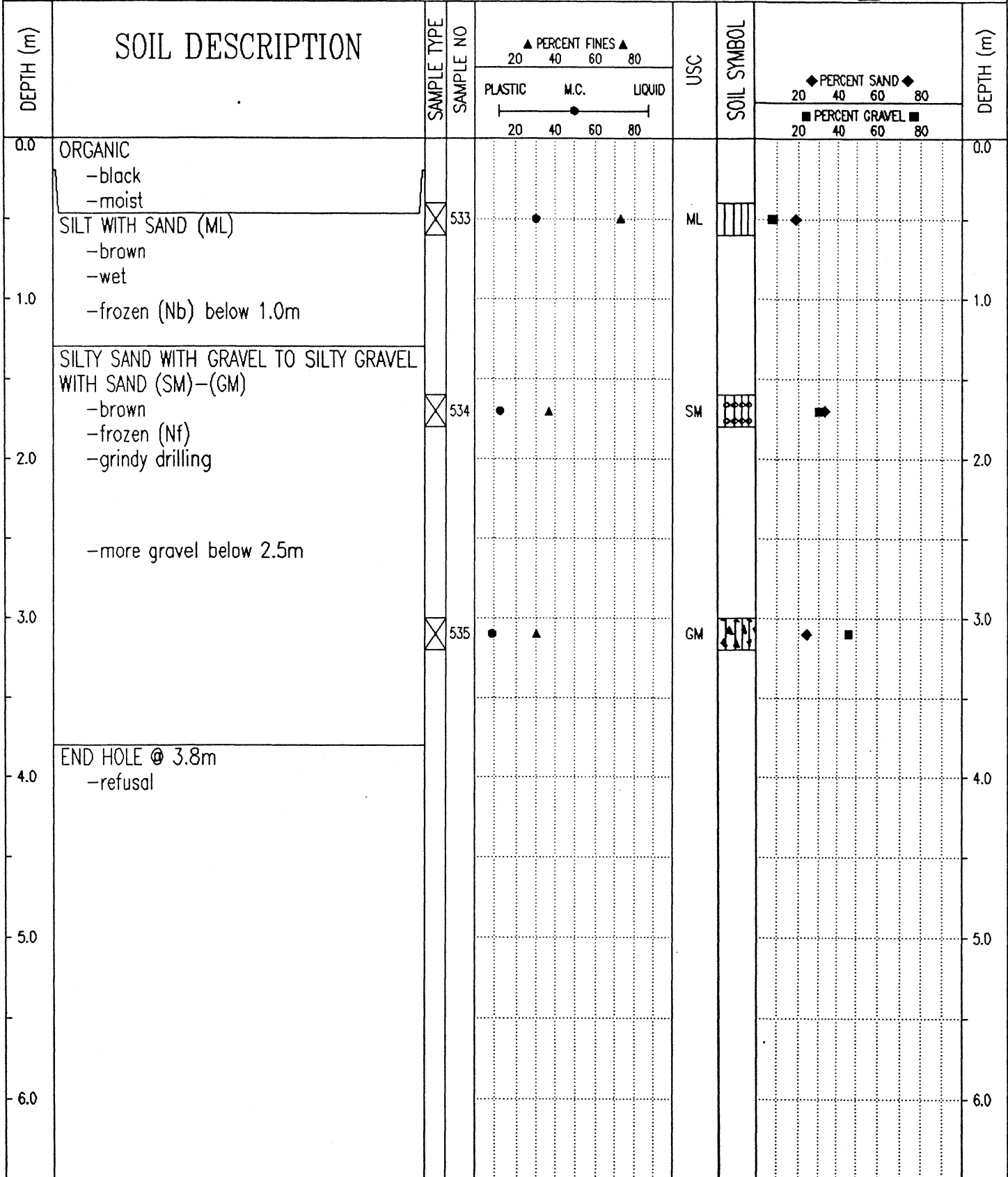
Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 99/05/03

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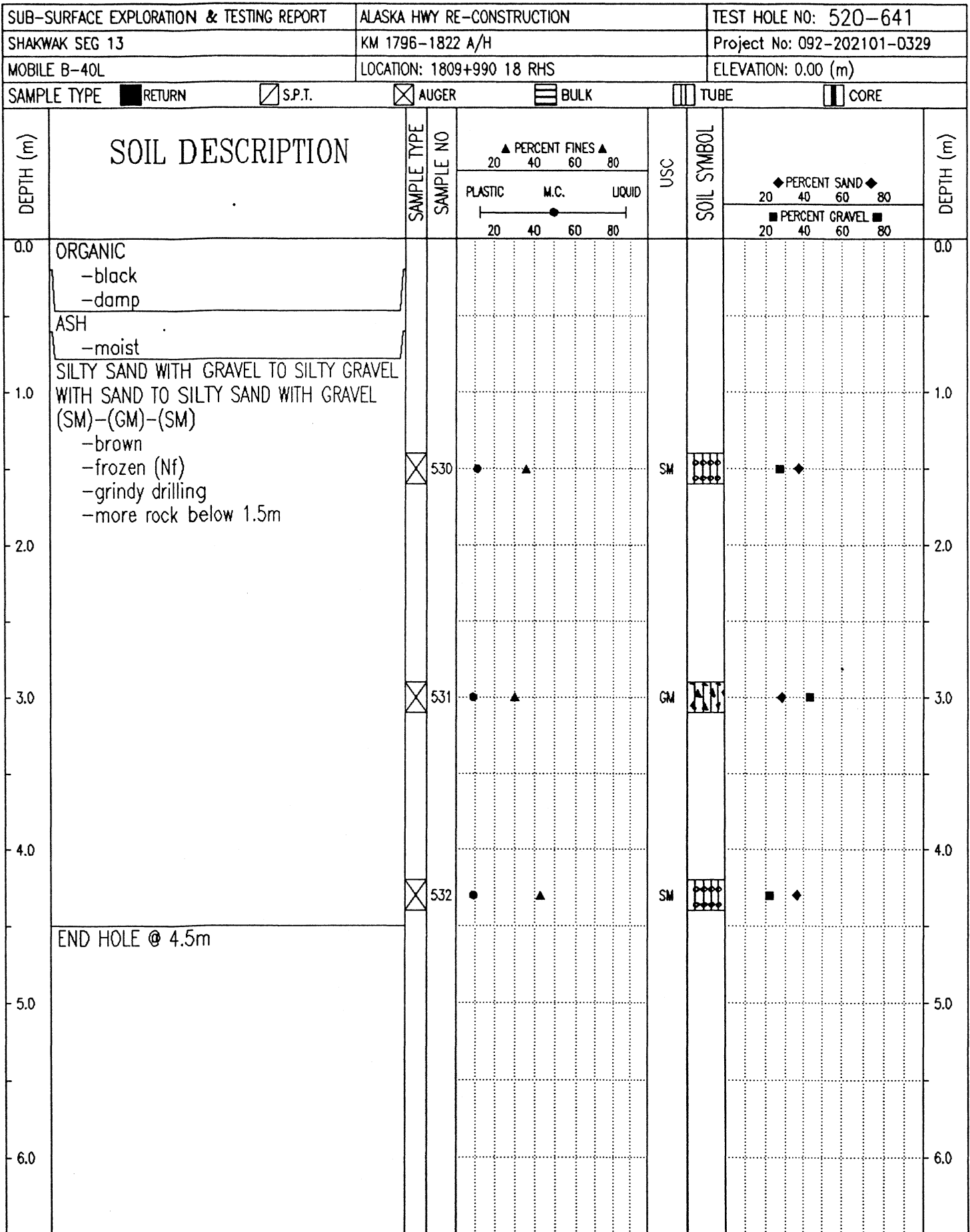
SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION	TEST HOLE NO: 520-642
SHAKWAK SEG 13		KM 1796-1822 A/H	Project No: 092-202101-0329
MOBILE B-40L		LOCATION: 1809+990 18 LHS	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
			<input type="checkbox"/> BULK
			<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE



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COMPLETION DEPTH: 3.8 m  
COMPLETE: 99/08/05  
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COMPLETION DEPTH: 4.5 m  
COMPLETE: 99/08/05



SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 521-653					
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329					
MOBILE B 40 L		LOCATION: 1809+025 21M RT		ELEVATION: 0.00 (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	SOIL SYMBOL	DEPTH (m)	
				PLASTIC	M.C.				LIQUID
0.0	ORGANIC -black -wet							0.0	
	ASH -wet								
1.0	ORGANIC -trace ash -blackish brown -frozen (Nf) below .5m							1.0	
2.0	SILTY SAND WITH GRAVEL (SM) -brown -frozen (Nf) -grindy drilling -sample # 556 contaminated with org END HOLE @ 2.0m -refusal	<input checked="" type="checkbox"/>	556	●	▲	SM	■ ◆	2.0	
3.0								3.0	
4.0								4.0	
5.0								5.0	
6.0								6.0	
Government of Yukon Transportation Engineering				LOGGED BY: W.E. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 2.0 m COMPLETE: 99/08/06 Page 1 of 1			

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC -dark brown -wet											0.0
	ASH -wet											
1.0	ORGANIC -dark brown -frozen (Nf)											1.0
2.0	SILTY GRAVEL WITH SAND (GM) -brownish grey -frozen (Nf) -grindy drilling											2.0
3.0	END HOLE @ 3.1m -refusal	<input checked="" type="checkbox"/>	557	●	▲		GM	◆	■			3.0
4.0												4.0
5.0												5.0
6.0												6.0

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LOGGED BY: W.E.	COMPLETION DEPTH: 3.1 m
REVIEWED BY:	COMPLETE: 99/08/06
Fig. No:	Page 1 of 1