

**HIGHWAY CONSTRUCTION**

**km 1852.1 to km 1862.1  
ALASKA HIGHWAY #1  
YUKON, 1996  
CENTRELINE AND  
GRANULAR TESTING**

This Data Package prepared for project viewing:

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GR-01-144

GEOTECHNICAL INVESTIGATION  
HIGHWAY CONSTRUCTION  
km 1852.1 to km 1862.1, ALASKA HIGHWAY, Y.T.  
CENTRELINE AND GRANULAR TESTING

CONTENTS

INTRODUCTION

Investigation notes, classification methods and legends.

CENTRELINE TESTING

Subsurface exploration and testing report sheets are provided. The report for the centreline holes is arranged according to project location, starting at km 1852+195 and increasing to km 1861+100.

**Auger Testing**

1993	TEST HOLES 343 to 348	shown with prefix 264-
	TEST HOLES 350 to 367	shown with prefix 264-
	TEST HOLES 368 to 392	shown with prefix 265-
	TEST HOLES 393 to 417	shown with prefix 266-
	TEST HOLES 418 to 431	shown with prefix 267-
1995	TEST HOLES 177 to 197	shown with prefix 365-
	TEST HOLES 198 to 225	shown with prefix 366-

**Backhoe Testing**

1995	TEST HOLES 270 to 273	shown with prefix 369-
	TEST HOLES 500 to 524	shown with prefix 381-
	TEST HOLES 524A to 540	shown with prefix 382-

GRANULAR TESTING KM 1847 LHS

Subsurface exploration and testing report sheets and photographs, location plans and a production history are provided.

**Backhoe Testing**

1993	TEST HOLES 79	shown with prefix 260-
1995	TEST HOLES 102, 104, 106, 108 and 110	shown with prefix 345-
1996	TEST HOLES 01 to 10	shown with prefix 396-
	TEST HOLES 11 to 18	shown with prefix 397-

GEOTECHNICAL INVESTIGATION  
HIGHWAY CONSTRUCTION  
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# INTRODUCTION

GEOTECHNICAL INVESTIGATION  
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km 1852.1 to km 1862.1, ALASKA HIGHWAY, Y.T.  
CENTRELINE AND GRANULAR TESTING

GEOTECHNICAL INVESTIGATION DATA

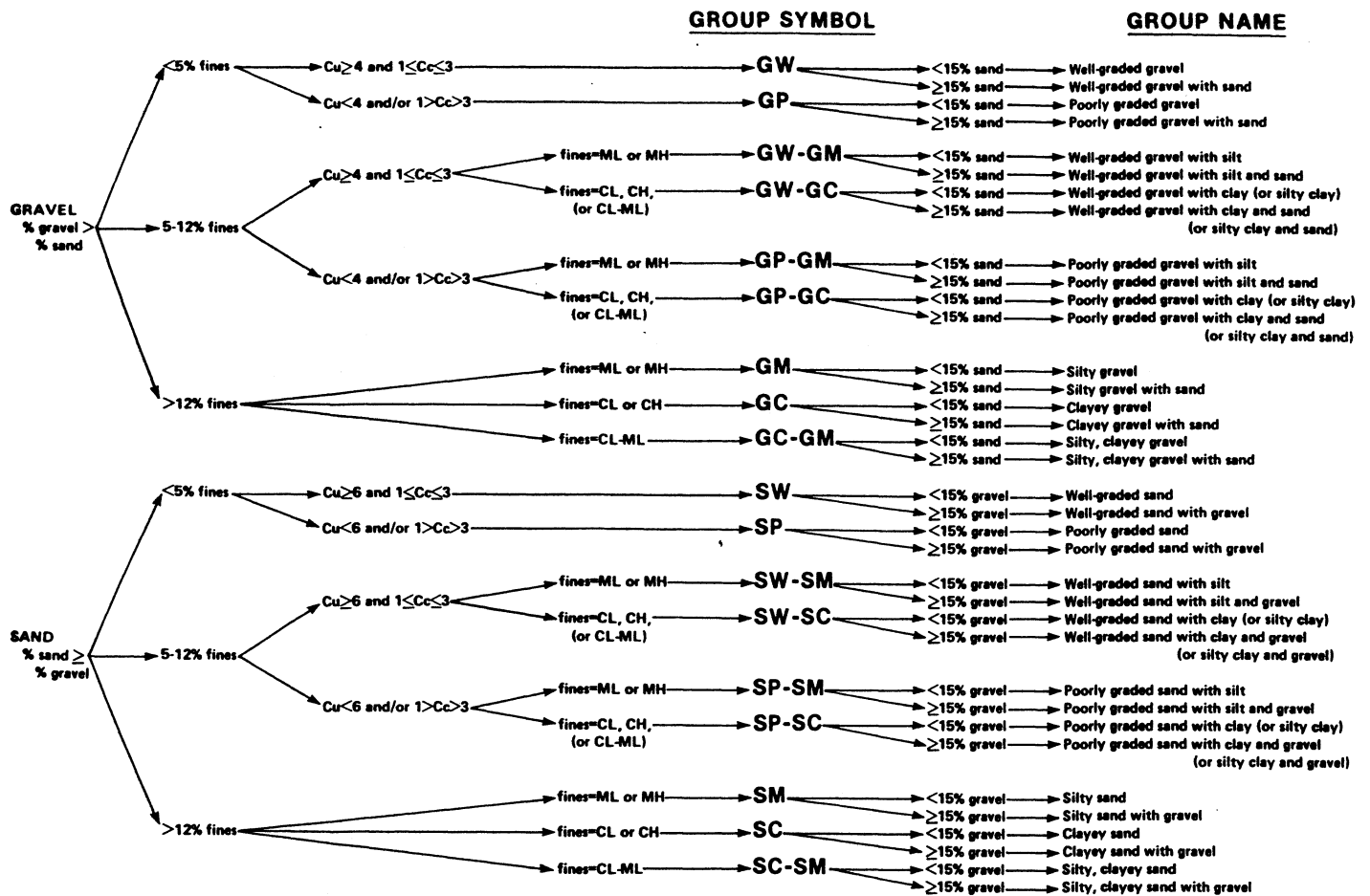
This geotechnical investigation data is provided to assist in the interpretation of soil conditions encountered within this project area. The data presented was prepared solely for Departmental designing and estimating purposes.

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

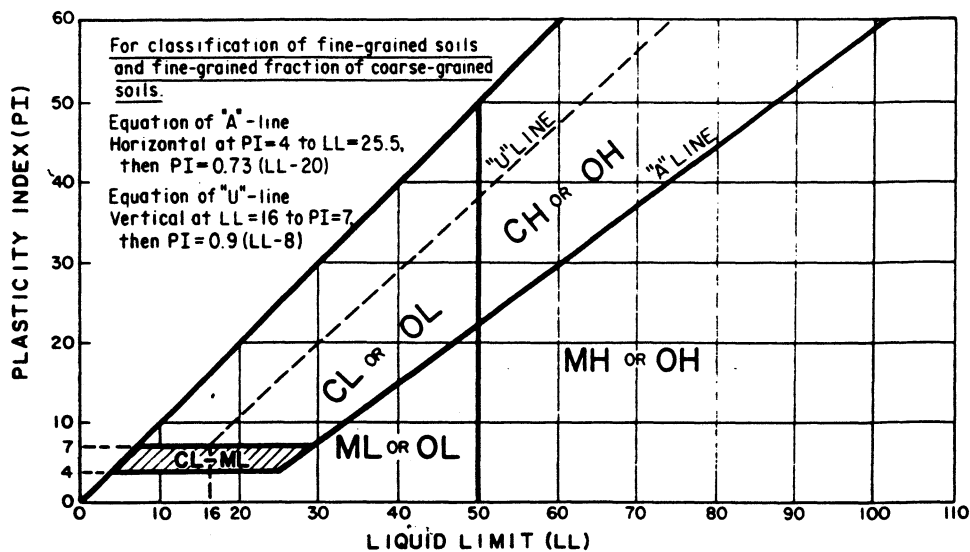
The sample identification and laboratory testing data is provided to give detailed physical properties of selected retrieved samples within the subsurface profile. *These tests may be conducted on disturbed samples and may exhibit properties different from the native materials.* The sample classification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

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

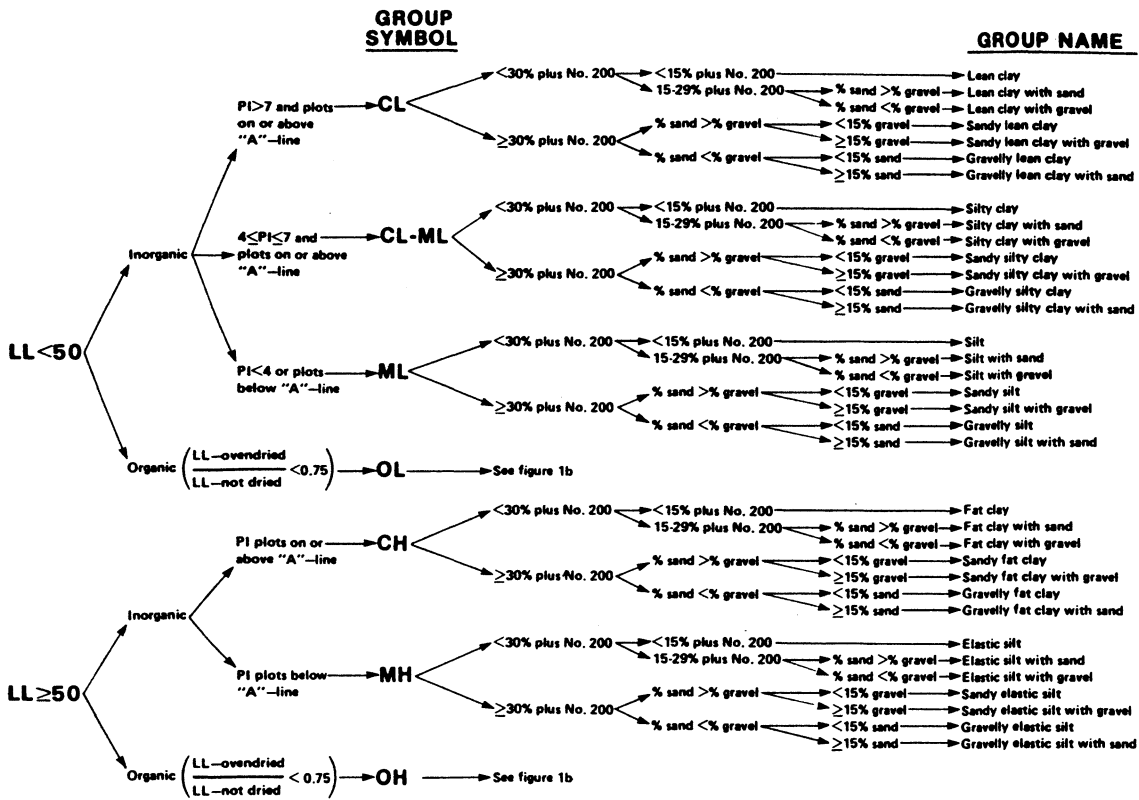
It is recommended that a site inspection, combined with consideration of the regional geology and climatic conditions be conducted. An evaluation of the investigation methods and development work done since the time of investigation should be done prior to interpreting the subsurface conditions for construction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



Flow chart for classifying coarse-grained soil.



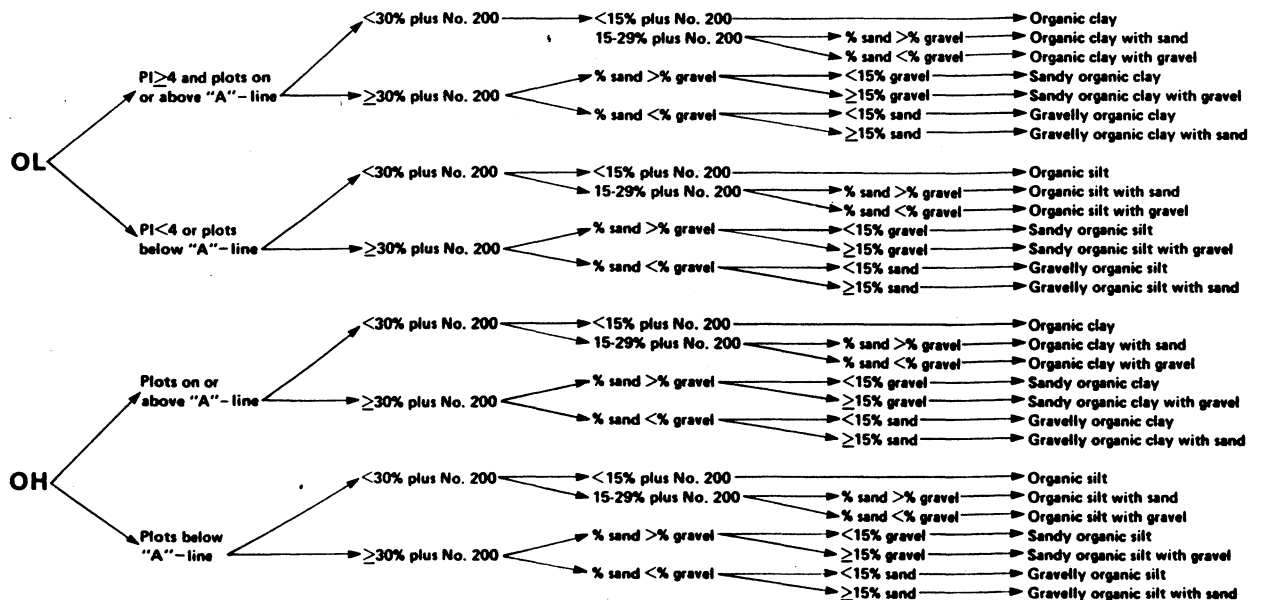
Plasticity chart.



Flow chart for classifying fine-grained soil.

**GROUP SYMBOL**

**GROUP NAME**



Flow chart for classifying organic soil.

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>
	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>
FINE-GRAINED SOILS 50% or more passed the No. 200 sieve	SILTS AND CLAYS Liquid limit less than 50%	inorganic	PI > 7 and plots on or above "A" line <sup>j</sup>	CL	Lean clay <sup>k,l,m</sup>
			PI < 4 or plots below "A" line <sup>j</sup>	ML	Silt <sup>k,l,m</sup>
		organic	$\frac{\text{Liquid limit - oven dried}}{\text{Liquid limit - not dried}} < 0.75$	OL	Organic clay <sup>k, l, m, n</sup> Organic silt <sup>k, l, m, o</sup>
	SILTS AND CLAYS Liquid limit 50% or more	inorganic	PI plots on or above "A" line	CH	Fat clay <sup>k,l,m</sup>
			PI plots below "A" line	MH	Elastic silt <sup>k,l,m</sup>
		organic	$\frac{\text{Liquid limit - oven dried}}{\text{Liquid limit - not dried}} < 0.75$	OH	Organic clay <sup>k, l, m, p</sup> Organic silt <sup>k, l, m, q</sup>
Highly organic soils		Primarily organic matter, dark in color, and organic odor		PT	Peat

- Based on the material passing the 3-in (75-mm) sieve.
- If field sample contained cobbles and/or boulders, add "with cobbles and/or boulders" to group name.
- Gravels with 5 to 12% fines require dual symbols  
GM-GM well graded gravel with silt  
GM-GC well graded gravel with clay  
GP-GM poorly graded gravel with silt  
GP-GC poorly graded gravel with clay
- Sands with 5 to 12% fines require dual symbols  
SM-SM well graded sand with silt  
SM-SC well graded sand with clay  
SP-SM poorly graded sand with silt  
SP-SC poorly graded sand with clay
- $C_u = D_{60}/D_{10}$      $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$
- If soil contains > 15% sand, add "with sand" to group name.
- If fines classify as CL-ML, use dual symbol GC-GM, SC-SM.
- If fines are organic, add "with organic fines" to group name.
- If soil contains > 15% gravel, add "with gravel" to group name.
- If Atterberg limits plot in hatched area, soil is a CL-ML, silty clay.
- If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel" whichever is predominant.
- If soil contains > 30% plus No. 200, predominantly sand, add "sandy" to group name.
- If soil contains  $\geq 30\%$  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*	GRAVELS 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 $C_u = D_{60}/D_{10}$ 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
			GRAVELS WITH FINES	GP	Poorly-graded gravels and gravel-sand mixtures, little or no fines	
		SANDS More than 50% of coarse fraction passes No. 4 sieve	CLEAN SANDS	SW	Well-graded sands and gravelly sands, little or no fines	
			SANDS WITH FINES	SP	Poorly-graded sands and gravelly sands, little or no fines	
	FINE-GRAINED SOILS	50% or more passes No. 200 sieve*	SILTS AND CLAYS 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;"> <p style="text-align: center;"><b>PLASTICITY CHART</b></p> <p>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></p> </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	
		SILTS AND CLAYS 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		
<b>HIGHLY ORGANIC SOILS</b>		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	
<b>N</b>	Nf	Poorly-bonded or friable	
	Nbn	No excess ice, well-bonded	
	Nbe	Excess ice, well-bonded	

### VISIBLE ICE LESS THAN 50% BY VOLUME

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

### VISIBLE ICE GREATER THAN 50% BY VOLUME

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

**NOTE:**

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

		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	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	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								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			

GEOTECHNICAL INVESTIGATION  
HIGHWAY CONSTRUCTION  
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# CENTRELINE TESTING

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 365-177
ENGINEERING-CAPITAL	SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: Sta. 1852+195 o/s 12m 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 ■			
				20 40 60 80				20 40 60 80				
0.0	SANDY GRAVEL -access road -grindy drilling										0.0	
1.0	ORGANIC MATERIAL -dark brown -damp -smooth drilling										1.0	
2.0	SILTY SAND (SM) -light gray -damp to dry -ash										2.0	
3.0											3.0	
4.0	-frozen below 3.8m -denser drilling below 3.8m										4.0	
5.0											5.0	
6.0	END HOLE at 6.0m -water at 6.0m	<input checked="" type="checkbox"/>	438	▲	●		SM	◆	■		6.0	

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	REVIEWED BY:	COMPLETE: 95/06/10
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 264-343
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1852+250 o/s 150m 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		
0.0	ORGANIC MATERIAL										0.0	
	ASH											
1.0	ORGANIC SILT -frozen										1.0	
2.0	SILTY SAND WITH GRAVEL (SM) -rough drilling -first refusal at 1.6m		468	●	▲		SM	◆	■	◆	2.0	
3.0	END HOLE at 2.2m -refusal -bedrock on surface at 1852+425 and 1852+450 to 1852+650										3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 2.2 m
	REVIEWED BY:	COMPLETE: 93/10/08
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT      SHAKWAK PROJECT      TEST HOLE NO: 365-178

ENGINEERING-CAPITAL      SEGMENT 14      Project No: 092-202101-0314

DRILL: B40L 150mm Dia. SOLID STEM AUGER      LOCATION: Sta. 1852+301 o/s 9m 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	
0.0	ORGANIC MATERIAL -dark brown -moist -smooth drilling									0.0	
1.0	SILTY SAND (SM) -light gray -saturated -ash  -frozen (Nf) below 1.4m -denser drilling below 1.4m									1.0	
2.0										2.0	
3.0										3.0	
4.0										4.0	
5.0										5.0	
6.0	END HOLE at 6.0m	<input checked="" type="checkbox"/>	439	▲	●		SM		◆	6.0	

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 REVIEWED BY:      COMPLETE: 95/06/10  
 Fig. No:      Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 365-179
ENGINEERING-CAPITAL		SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER		LOCATION: Sta. 1852+402 o/s 4m 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	

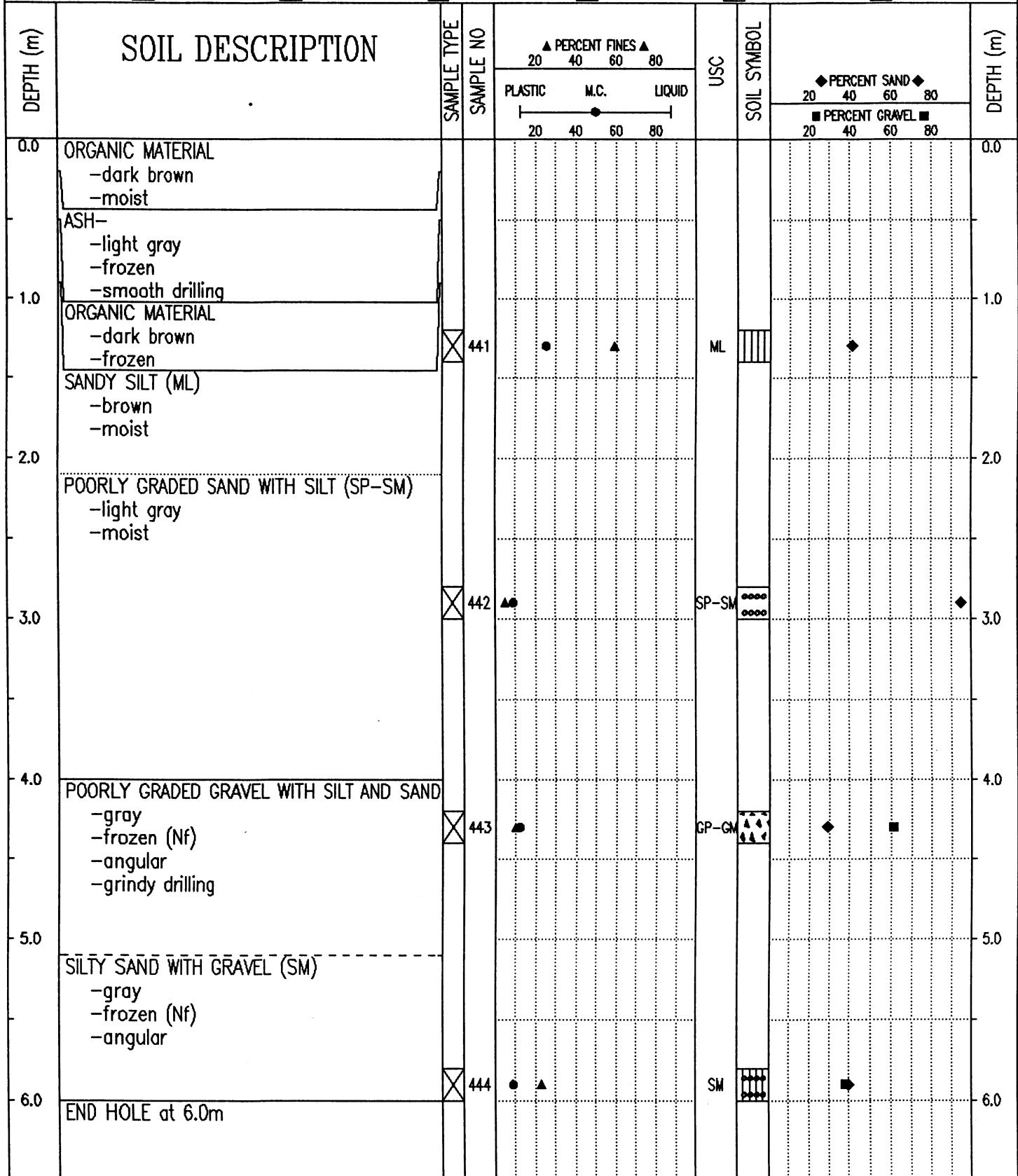
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			PERCENT GRAVEL ■			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	20	40	
0.0	ORGANIC MATERIAL -dark brown -frozen -smooth drilling													0.0	
1.0														1.0	
2.0	ASH -light gray -frozen													2.0	
2.0	GRAVELLY SAND -gray -frozen -grindy drilling													2.0	
3.0	SILTY SAND (SM) -light gray -frozen (Nf) -ash -smooth drilling													3.0	
4.0														4.0	
5.0														5.0	
6.0	END HOLE at 6.0m	<input checked="" type="checkbox"/>	440	▲	●		SM	◆						6.0	

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COMPLETION DEPTH: 6.0 m  
COMPLETE: 95/06/10

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT		TEST HOLE NO: 365-180	
ENGINEERING-CAPITAL		SEGMENT 14		Project No: 092-202101-0314	
DRILL: B40L 150mm Dia. SOLID STEM AUGER		LOCATION: Sta. 1852+476 o/s 1m 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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SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 365-181
ENGINEERING-CAPITAL	SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: Sta. 1852+477 o/s 13m 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)
				20	40	60			80	20	
0.0	ORGANIC MATERIAL -dark brown -frozen										0.0
1.0	ASH -light gray -frozen -smooth drilling										1.0
2.0	ORGANIC MATERIAL -dark brown -frozen -grindy drilling at 1.4m -refusal twice at 1.4m										2.0
2.0	END HOLE at 1.5m -refusal -rock dust on bit										2.0
3.0											3.0
4.0											4.0
5.0											5.0
6.0											6.0

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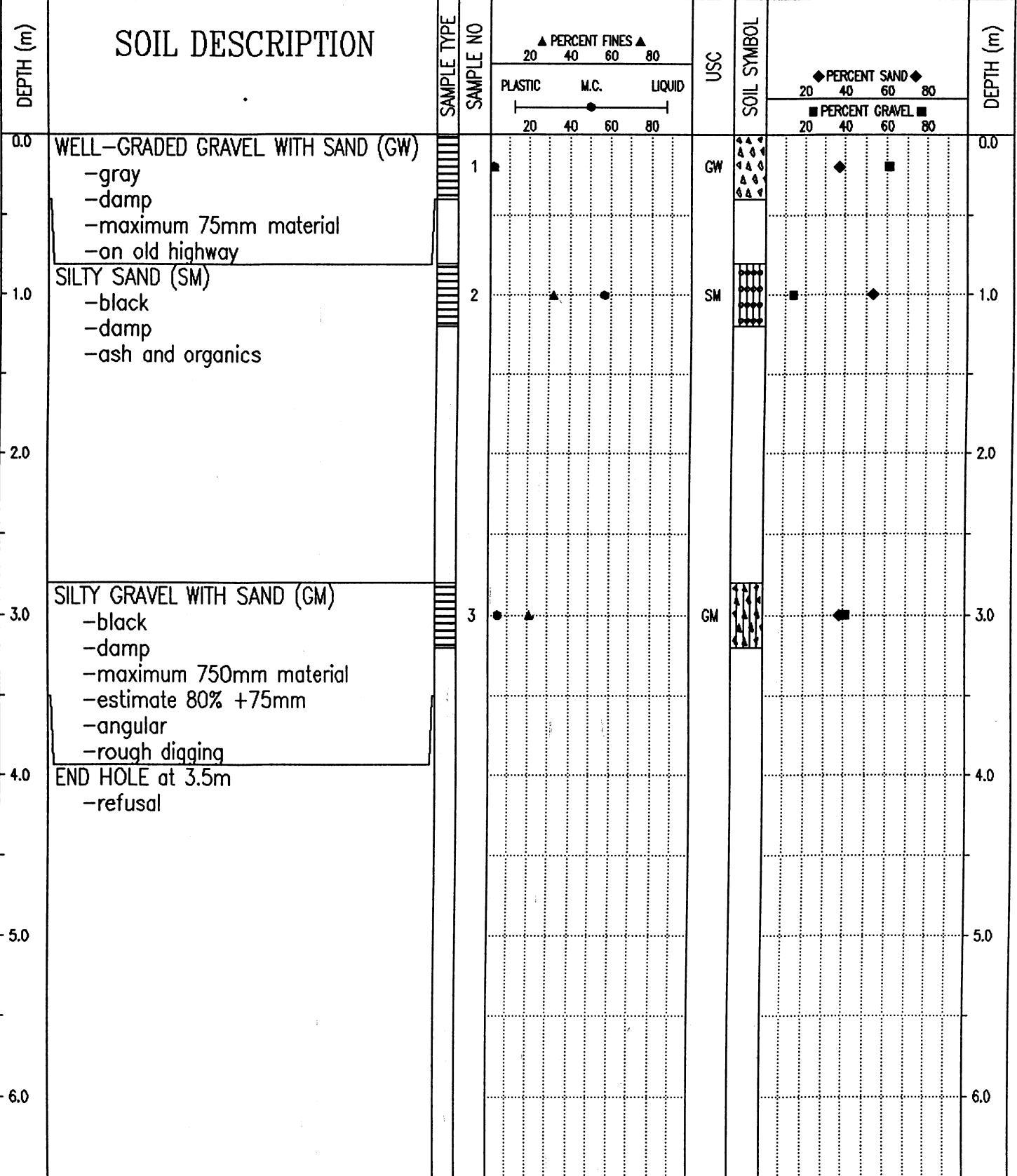
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COMPLETE: 95/06/10

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 365-182
ENGINEERING-CAPITAL	SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: Sta. 1852+576 o/s 2m 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 MATERIAL -dark brown -frozen -smooth drilling											0.0
0.5	ASH -light gray -frozen											1.0
1.0	ORGANIC MATERIAL -dark brown -frozen											2.0
3.0	POORLY GRADED GRAVEL WITH SILT AND SAND (GP-GM) -frozen (Nf) -grindy drilling END HOLE at 3.2m -refusal -rock dust on bit	<input checked="" type="checkbox"/>	445	▲	●		GP-GM	◆		■		3.0
4.0												4.0
5.0												5.0
6.0												6.0

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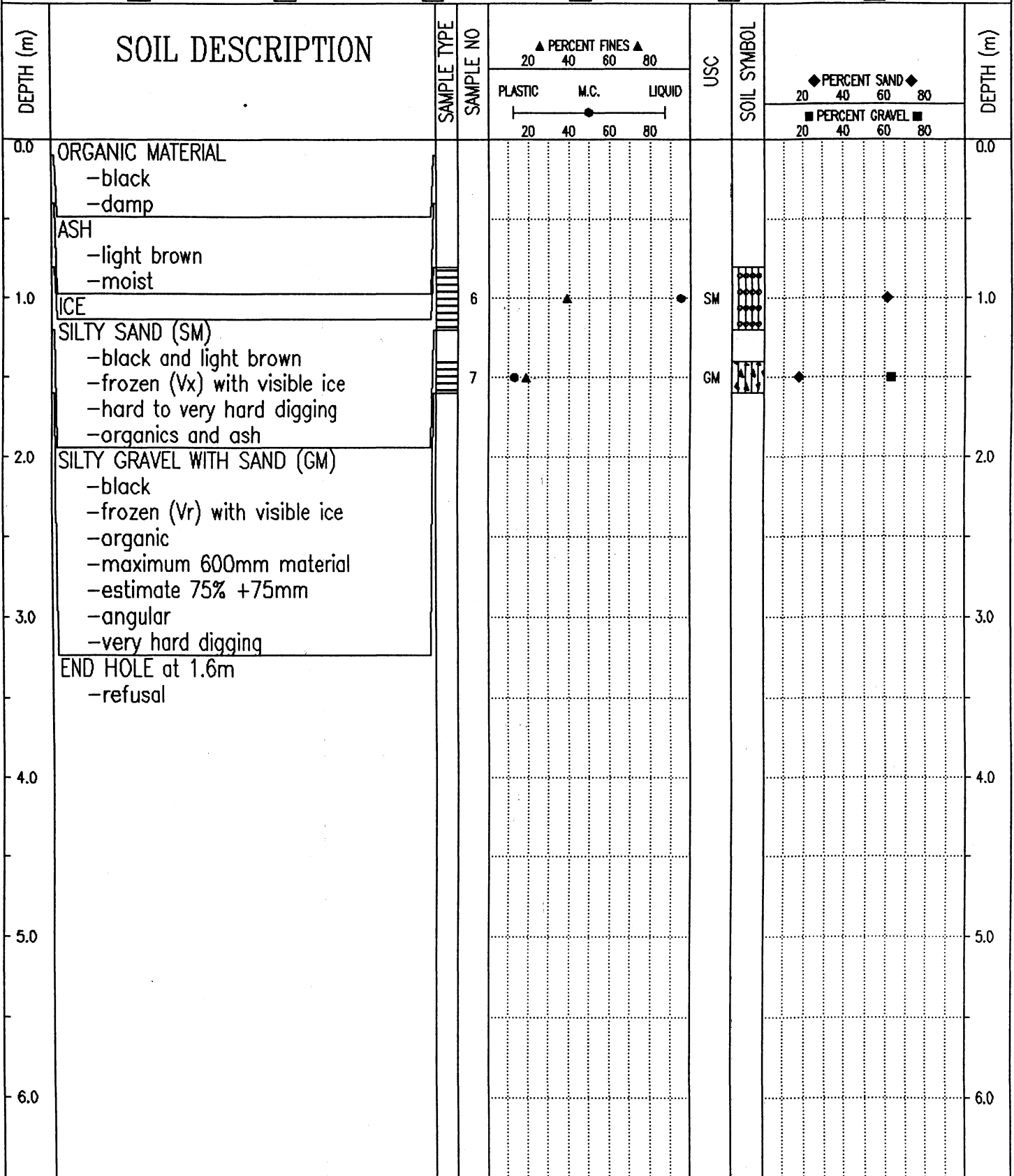
SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE



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LOGGED BY: KJ	COMPLETION DEPTH: 3.5 m
REVIEWED BY:	COMPLETE: 95/09/07
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 381-501
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172		LOCATION: Sta. 1852+715 o/s 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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Fig. No:

COMPLETION DEPTH: 1.6 m  
COMPLETE: 95/09/07  
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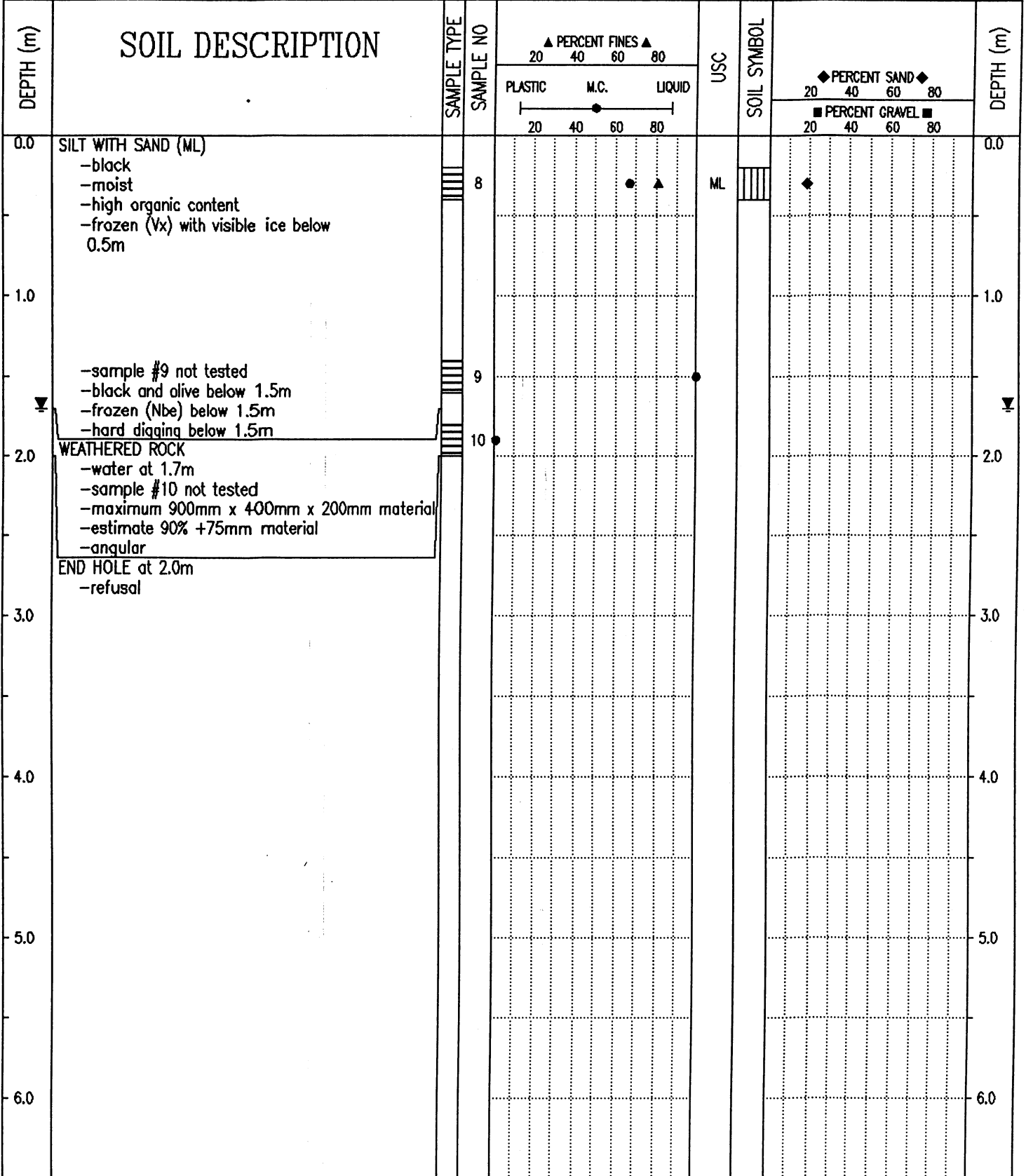
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 264-344
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1852+800 o/s 30m Rt.	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" 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 MATERIAL											0.0	
1.0	SILT -black											1.0	
2.0	END HOLE at 2.0m -refusal -on pipeline right-of-way											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: GC	COMPLETION DEPTH: 2.0 m
	REVIEWED BY:	COMPLETE: 93/10/08
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 381-502
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172	LOCATION: Sta. 1852+825 o/s 30m Rt.	ELEVATION: 0.00 (m)

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



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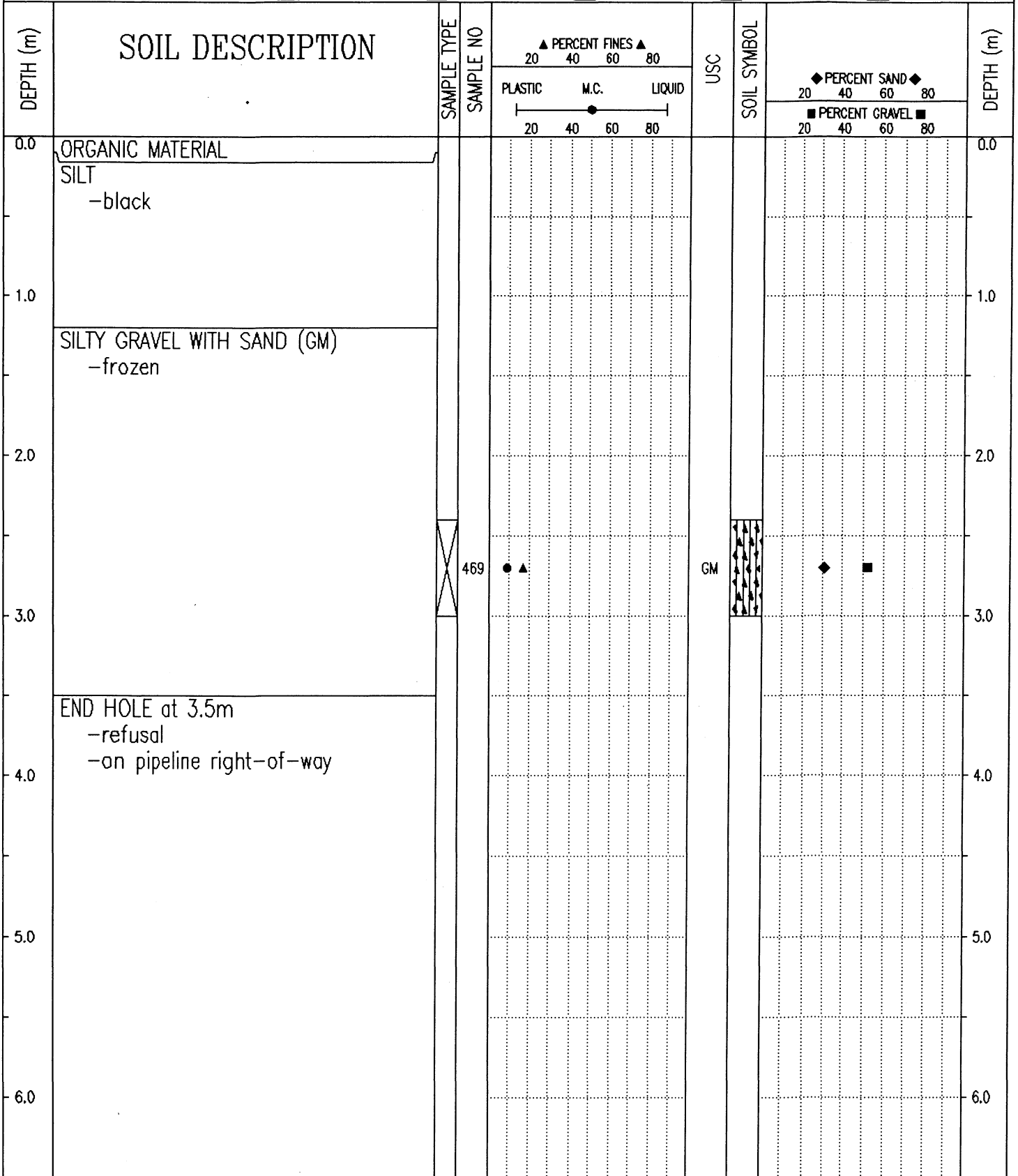
LOGGED BY: KJ	COMPLETION DEPTH: 2.0 m
REVIEWED BY:	COMPLETE: 95/09/07
Fig. No:	Page 1 of 1

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 MATERIAL -dark brown -moist											0.0
	ASH -light gray -frozen											
1.0	-smooth drilling											1.0
	ORGANIC MATERIAL -dark brown											
	SILTY GRAVEL WITH SAND (GM) -brown -frozen (Nf) -grindy drilling											
2.0												2.0
			445	▲			GM	◆	■			
3.0												3.0
			447	▲			GM	◆	■			
	END HOLE at 3.2m -refusal -rock dust on bit											
4.0												4.0
5.0												5.0
6.0												6.0

95/11/17 08:31AM

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 264-345
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1852+900 o/s 40m 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

LOGGED BY: GC  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.5 m  
COMPLETE: 93/10/08

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 ◆	
				20	40	60		20	40	60	80
0.0	ASH -light gray										
	ORGANIC MATERIAL -black										
	-frozen (Nbe) below 0.6m										
	-sample #11 not tested		11								
	-very slow digging below 0.6m										
1.0											
	-(Vx) visible ice below 1.2m										
	-ice lenses at 1.5m										
2.0	ICE										
	SILTY SAND WITH GRAVEL (SM)										
	-black										
	-frozen (Vs) with visible ice										
	-organics										
	-maximum 100mm x 250mm x 50mm material		12								
	-estimate 1% +75mm										
	-angular										
3.0											
	END HOLE at 3.5m										
4.0											
5.0											
6.0											

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LOGGED BY: KJ

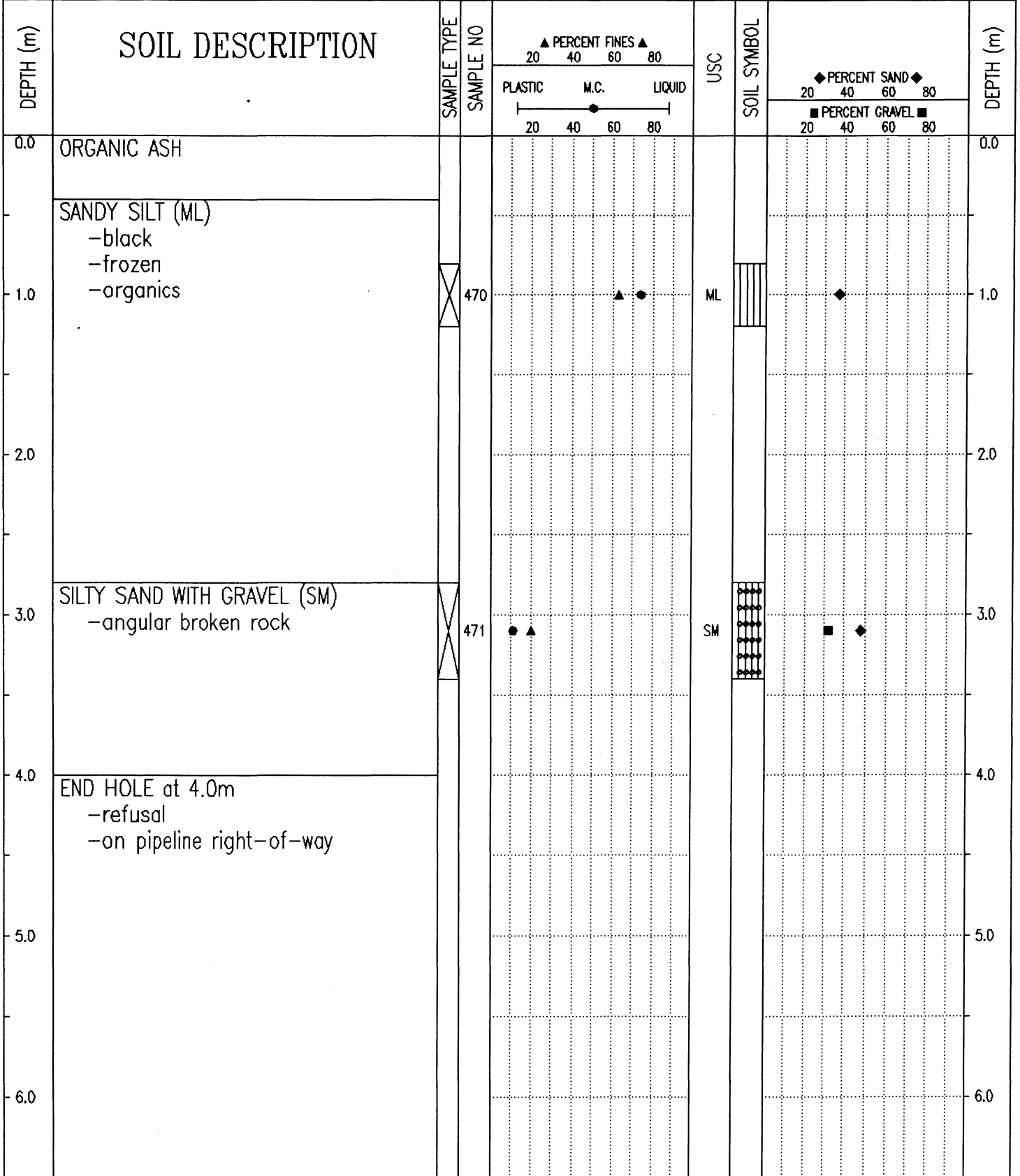
REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 3.5 m

COMPLETE: 95/09/07

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



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LOGGED BY: GC	COMPLETION DEPTH: 4.0 m
REVIEWED BY:	COMPLETE: 93/10/08
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 MATERIAL -brown -moist											0.0
1.0	ASH -light gray -moist -smooth drilling											1.0
2.0												2.0
3.0												3.0
4.0	ORGANIC MATERIAL -dark brown -frozen											4.0
4.6	SILTY GRAVEL WITH SAND (GM) -brown -frozen (Nf) -grindy drilling END HOLE at 4.6m	<input checked="" type="checkbox"/>	448				GM	◆	■			4.6
5.0												5.0
6.0												6.0

95/11/17 09:33AM

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 264-347
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1853+125 o/s 50m 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 MATERIAL											0.0
	SILT -frozen											
	ASH -frozen											
1.0												1.0
2.0	SILT -black -frozen											2.0
3.0												3.0
	-ice lenses below 3.2m											
4.0	END HOLE at 3.5m -on old telephone line											4.0
5.0												5.0
6.0												6.0

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LOGGED BY: GC  
REVIEWED BY:  
Fig. No:

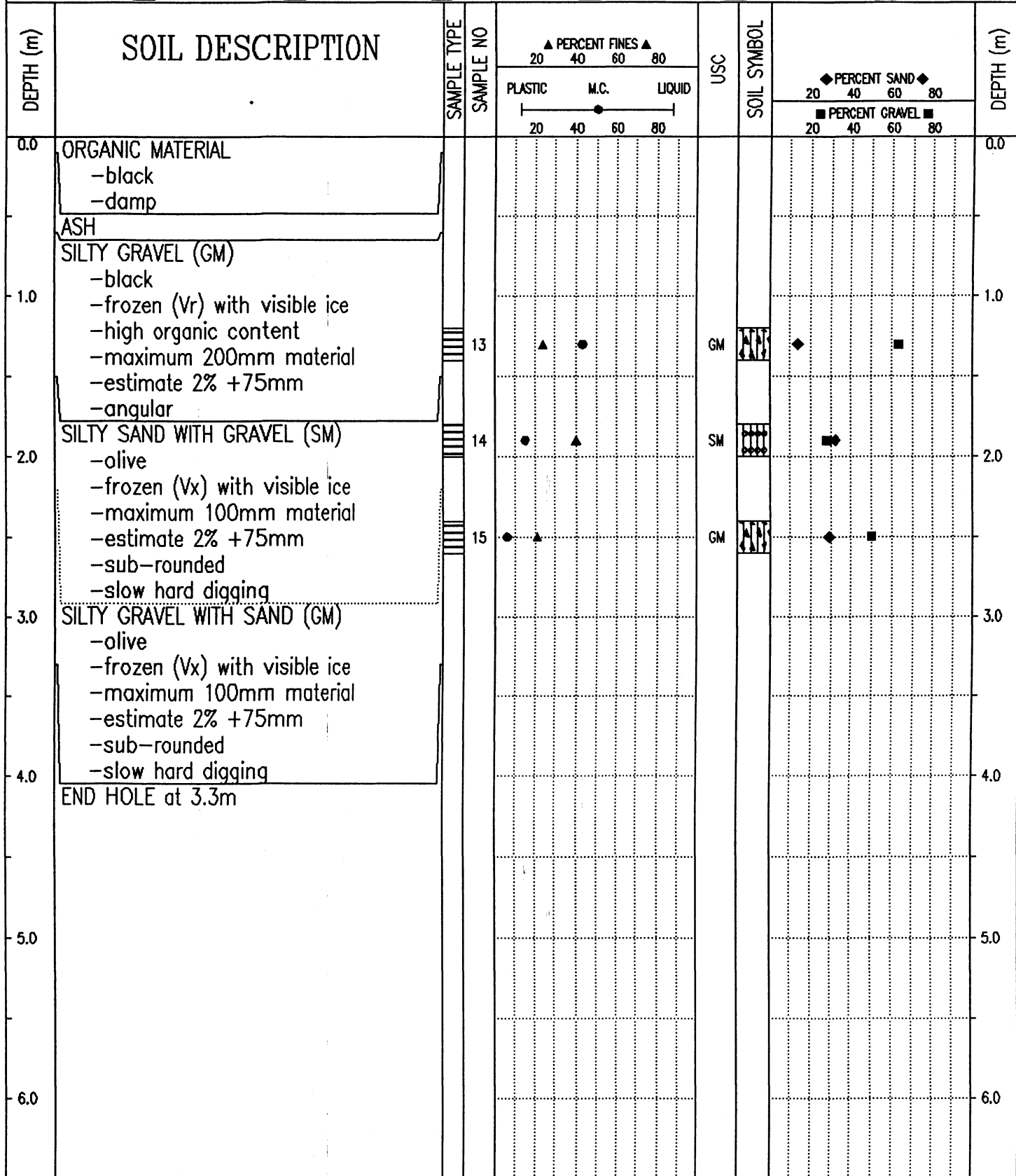
COMPLETION DEPTH: 3.5 m  
COMPLETE: 93/10/08

SUBSURFACE EXPLORATION AND TEST REPORT      SHAKWAK PROJECT      TEST HOLE NO: 381-504

ENGINEERING-CAPITAL      SEGMENT 15      Project No: 092-202101-0311

BACKHOE: HITACHI UH-172      LOCATION: Sta. 1853+135 o/s 12m Rt.      ELEVATION: 0.00 (m)

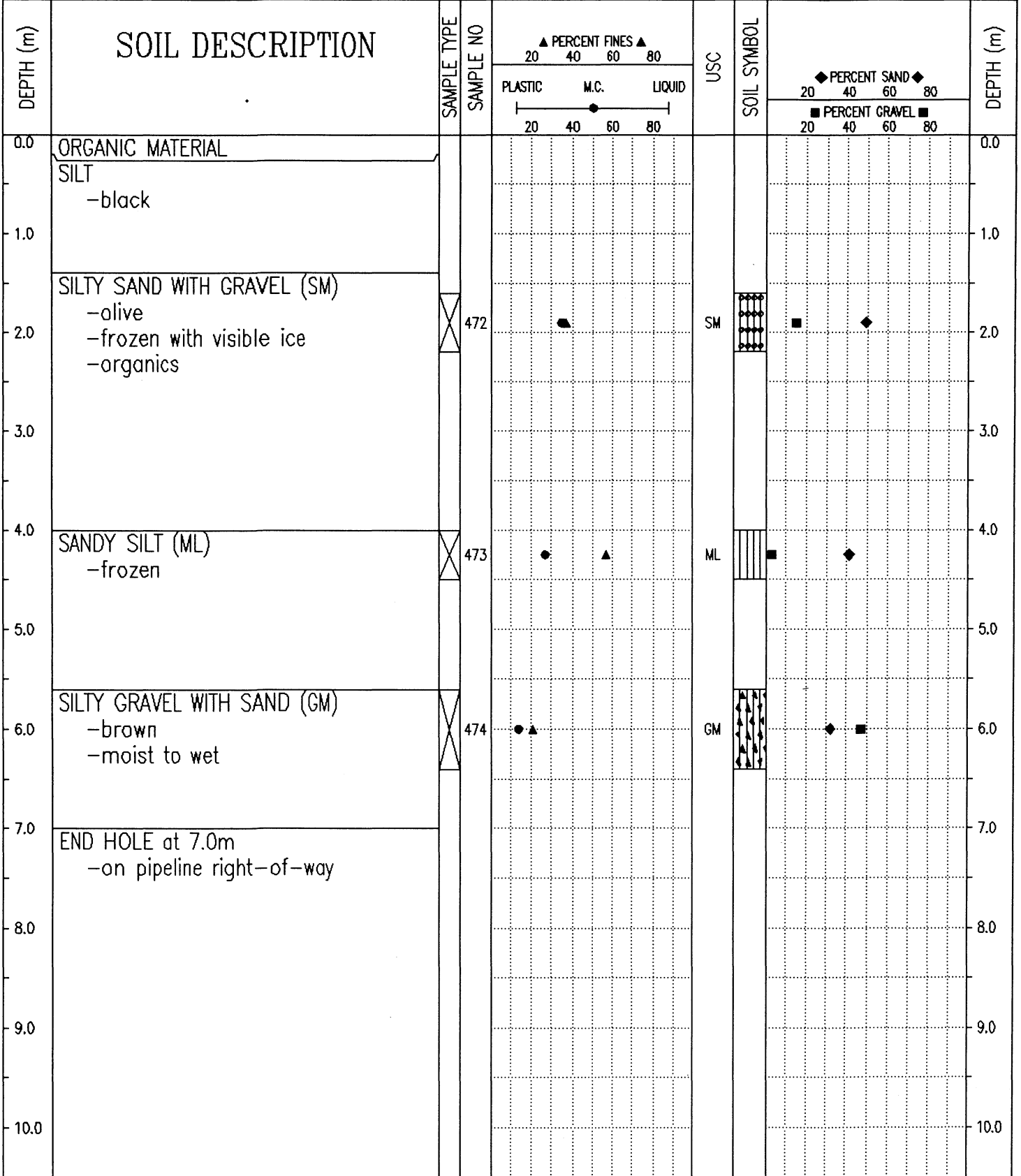
SAMPLE TYPE     RETURN     S.P.T.     AUGER     BULK     TUBE     CORE



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LOGGED BY: KJ      COMPLETION DEPTH: 3.3 m  
 REVIEWED BY:      COMPLETE: 95/09/08  
 Fig. No:      Page 1 of 1

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



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LOGGED BY: GC  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 7.0 m  
COMPLETE: 93/10/08

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 381-505
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172	LOCATION: Sta. 1853+312 o/s 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 MATERIAL -black -moist											0.0	
1.0	ASH -light brown -moist											1.0	
1.0	ORGANIC MATERIAL -frozen		16	●	▲		SM	▨	◆	■		1.0	
2.0	SILTY SAND WITH GRAVEL (SM) -dark brown -frozen (Vx) with visible ice -maximum 200mm material -estimate 2% +75mm -sub-angular		17	●			GM	▨	◆	■		2.0	
3.0	SILTY GRAVEL WITH SAND (GM) -dark brown -frozen (Vc) with visible ice -some organics -maximum 200mm material -estimate 2% +75mm -sub-angular -some stratified ice formations <10mm (Vs) at 3.3m		18	●	▲		GM	▨	◆	■		3.0	
4.0	SILTY SAND WITH GRAVEL (SM) -olive -frozen (Vc) with visible ice -trace of organics -maximum 200mm material -estimate 2% +75mm -sub-angular -some stratified ice formations 5 to 10mm thick at 3.9m		19	●	▲		SM	▨	◆	■		4.0	
5.0	END HOLE at 4.0m											5.0	
6.0												6.0	

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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 4.0 m  
COMPLETE: 95/09/08

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 264-350
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1853+325 o/s 25m 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)
				20	40	60			80	20		
0.0	ASH											0.0
1.0	SILT -black -wet											1.0
3.0	SILTY GRAVEL WITH SAND (GM) -black -frozen		475	▲	●		GM	◆		■		3.0
4.0	END HOLE at 4.0m											4.0
5.0												5.0
6.0												6.0

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LOGGED BY: GC  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 4.0 m  
COMPLETE: 93/10/08

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 365-185
ENGINEERING-CAPITAL		SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER		LOCATION: Sta. 1853+335 o/s 16m 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 MATERIAL -dark brown -frozen -smooth drilling										0.0
1.5	SILTY SAND WITH GRAVEL (SM) -frozen (Nb) -organic -grindy drilling	<input checked="" type="checkbox"/>	449	▲	●		SM		◆		
2.5	SILTY GRAVEL WITH SAND (GM) -gray -frozen (Nb) -grindy drilling	<input checked="" type="checkbox"/>	450	●	▲		GM		◆	■	
3.0	ORGANIC MATERIAL -dark brown -frozen -smooth drilling										3.0
4.0	SILTY GRAVEL WITH SAND (GM) -gray -frozen (Nf) -denser drilling										4.0
5.0	END HOLE at 5.0m	<input checked="" type="checkbox"/>	451	●	▲		GM		◆	■	5.0
6.0											6.0

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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 5.0 m  
COMPLETE: 95/06/11

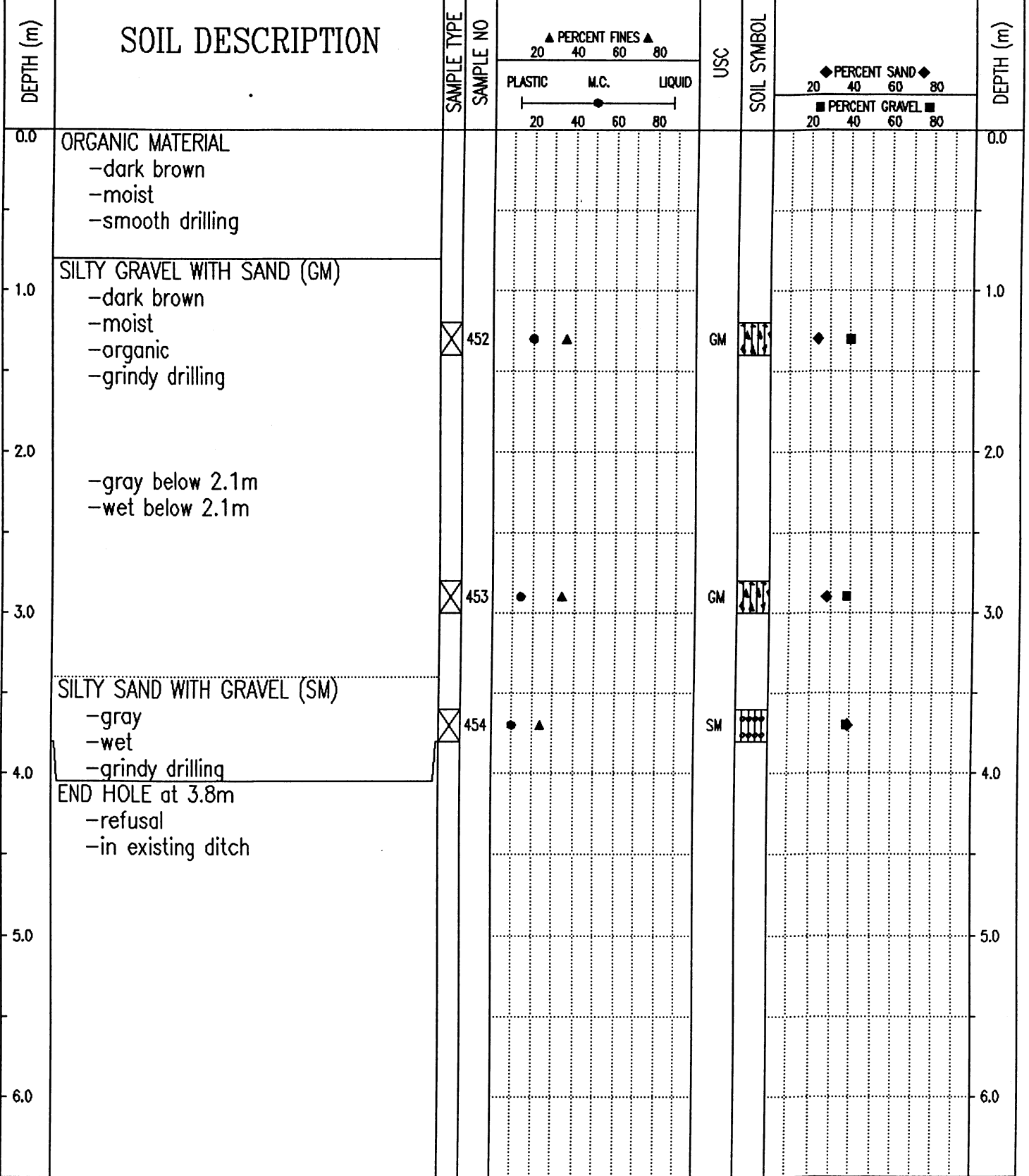
Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 365-187
ENGINEERING-CAPITAL	SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: Sta. 1853+340 o/s 2m 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 MATERIAL -dark brown -moist										0.0	
1.0	SILTY SAND WITH GRAVEL (SM) -brown -moist -grindy drilling -first refusal at 1.2m		455	●	▲		SM	◆	■		1.0	
2.0	END HOLE at 1.5m -refusal -in existing ditch										2.0	
3.0											3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

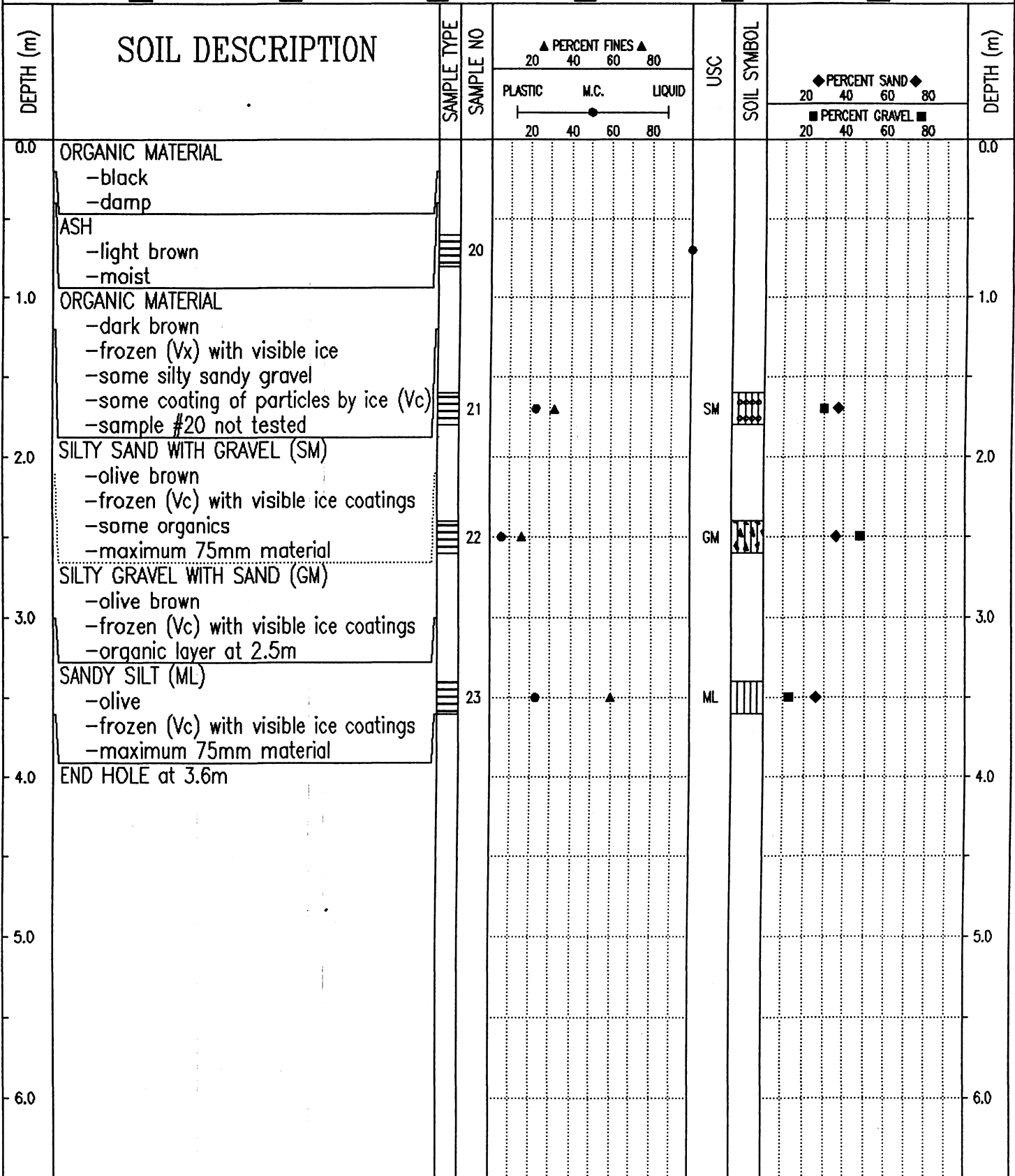
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SAMPLE TYPE  RETURN     S.P.T.     AUGER     BULK     TUBE     CORE



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LOGGED BY: CC	COMPLETION DEPTH: 3.8 m
REVIEWED BY:	COMPLETE: 95/06/11
Fig. No:	Page 1 of 1

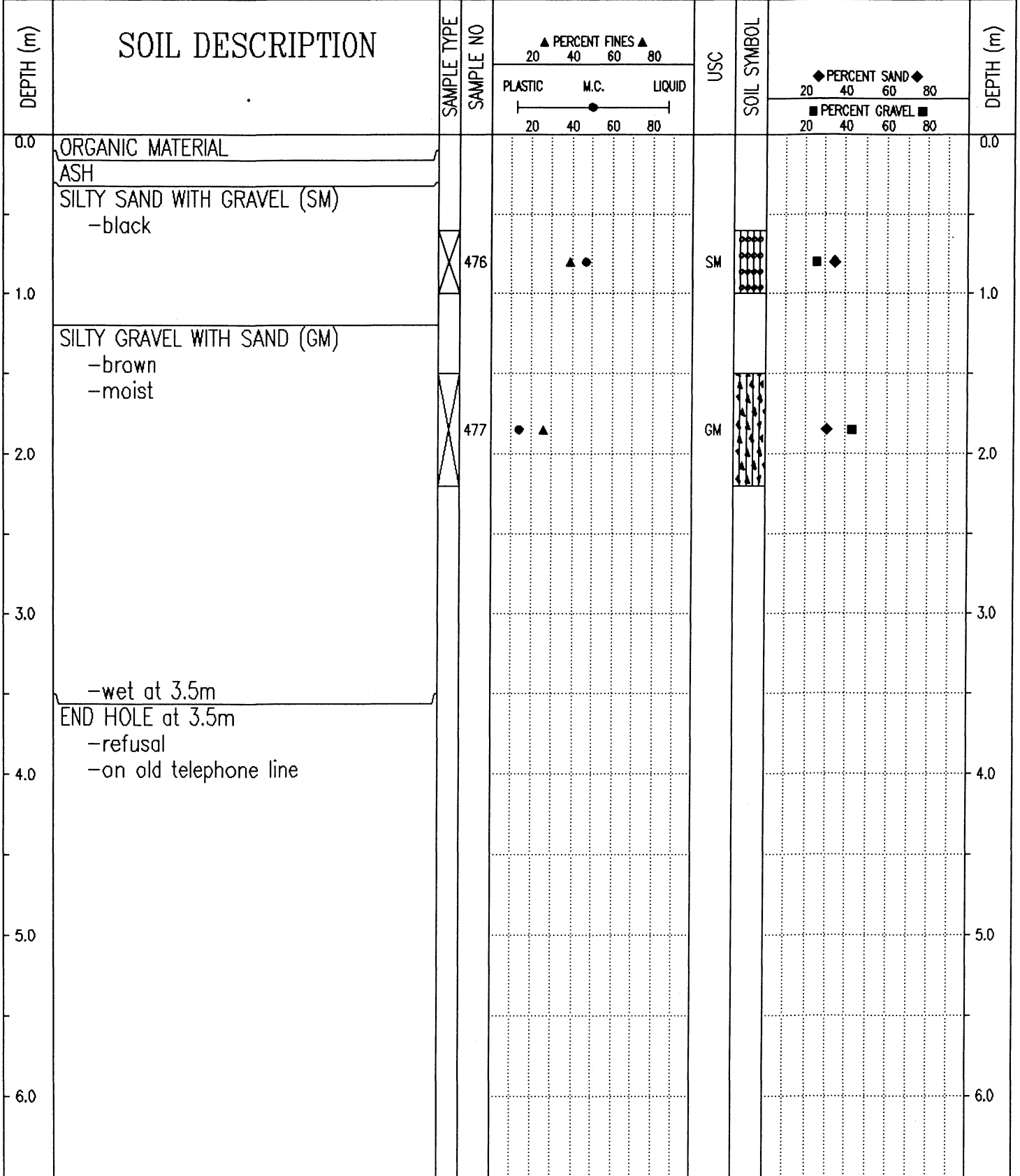


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LOGGED BY: KJ	COMPLETION DEPTH: 3.6 m
REVIEWED BY:	COMPLETE: 95/09/08
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 264-351
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL:CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1853+450 o/s 50m Rt.	ELEVATION: 0.00 (m)

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



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LOGGED BY: GC

REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 3.5 m

COMPLETE: 93/10/10

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 365-188
ENGINEERING-CAPITAL		SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER		LOCATION: Sta. 1853+545 o/s 12m 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	

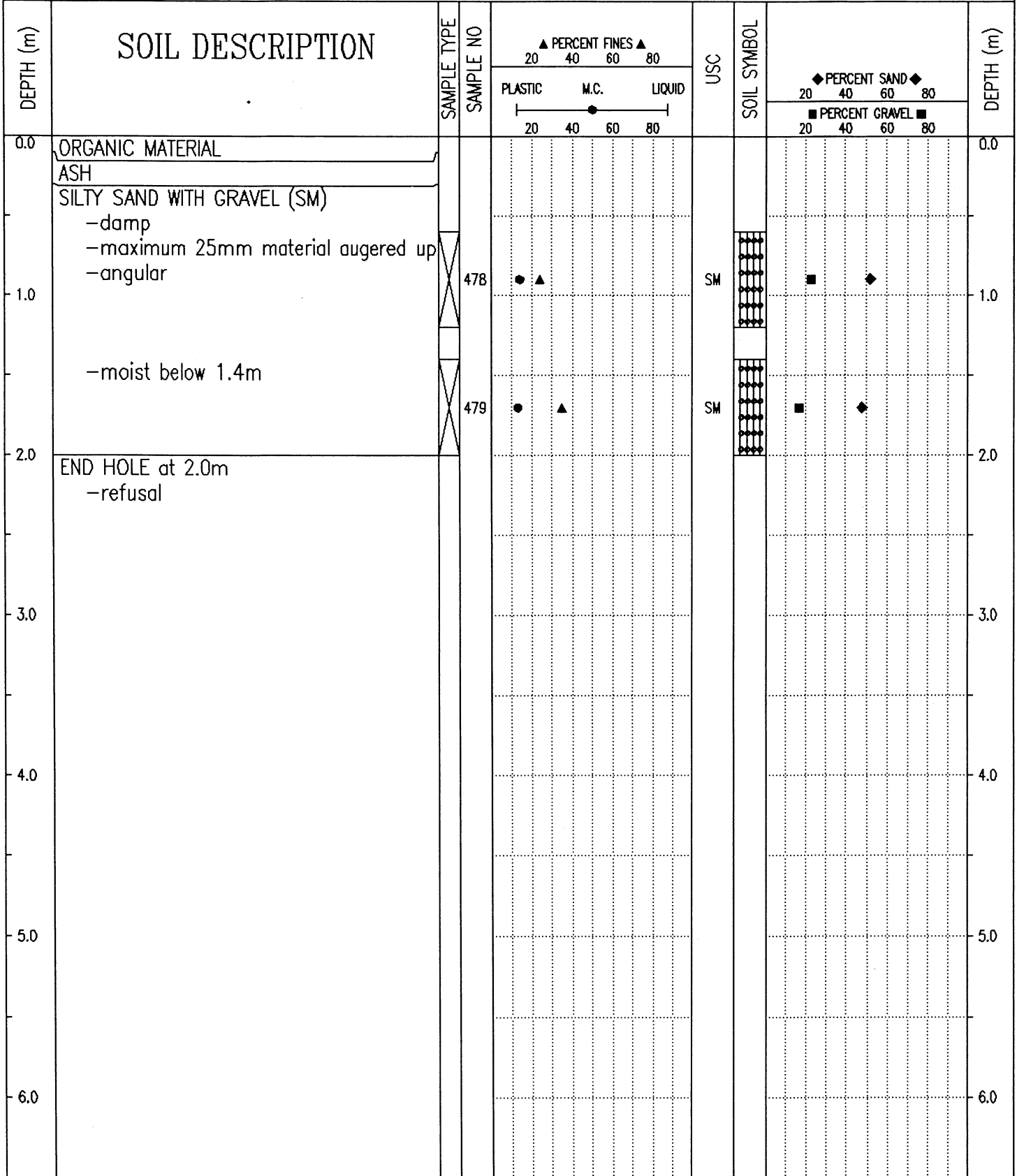
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	
0.0	ORGANIC MATERIAL -dark brown										0.0
1.0	SILTY SANDY GRAVEL -brown -moist -first refusal at 0.6m END HOLE at 0.8m -refusal twice at 0.8m -boulders on surface to 1000mm -rock dust on bit										1.0
2.0											2.0
3.0											3.0
4.0											4.0
5.0											5.0
6.0											6.0

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LOGGED BY: CC  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 0.8 m  
COMPLETE: 95/06/11

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 264-352
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1853+550 o/s 50m 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: GC  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 2.0 m  
COMPLETE: 93/10/10

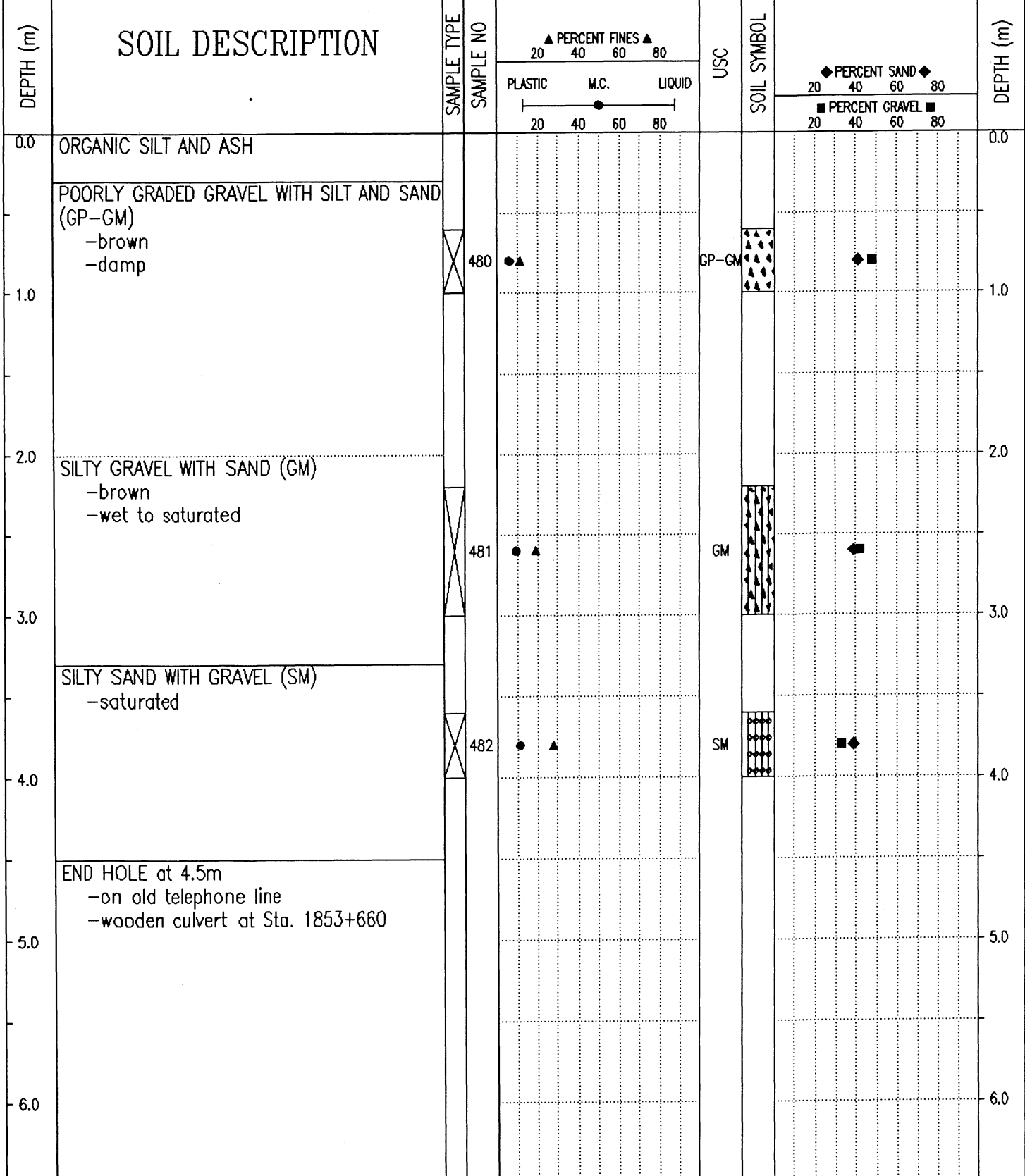
SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 381-507
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172		LOCATION: Sta. 1853+600 o/s 10m Rt.	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> 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 MATERIAL ASH -light brown -wet									0.0	
1.0	ORGANIC MATERIAL -saturated -frozen (Vx) with visible ice below 0.6m										
1.0	SILTY SAND WITH GRAVEL (SM) -olive -frozen (Vs) with visible ice layers 5mm thick		24	●	▲		SM	■	◆	1.0	
2.0	ICE										
2.0	SILTY SAND WITH GRAVEL (SM) -olive -frozen (Vc) with visible ice -maximum 400mm material -estimate 15% +75mm -sub-angular		25	●	▲		SM	■	◆	2.0	
3.0	WELL-GRADED GRAVEL WITH SILT AND SAND (GW-GM) -brown -frozen (Vc) with visible ice -maximum 750mm material -estimate 35% +75mm -sub-angular		26	●	▲		GW-GM	■	◆	3.0	
4.0	END HOLE at 3.0m -refusal									4.0	
5.0										5.0	
6.0										6.0	

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LOGGED BY: KJ  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 95/09/09



94/01/24 02:16PM

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	SILTY GRAVEL WITH SAND (GM) -gray -moist -grindy drilling										0.0	
1.0											1.0	
2.0	SILTY SAND (SM) -gray -moist										2.0	
3.0											3.0	
4.0	SILTY GRAVEL WITH SAND (GM) -gray -moist										4.0	
4.0	END HOLE at 4.0m -refusal -rock dust on bit										4.0	
5.0											5.0	
6.0											6.0	

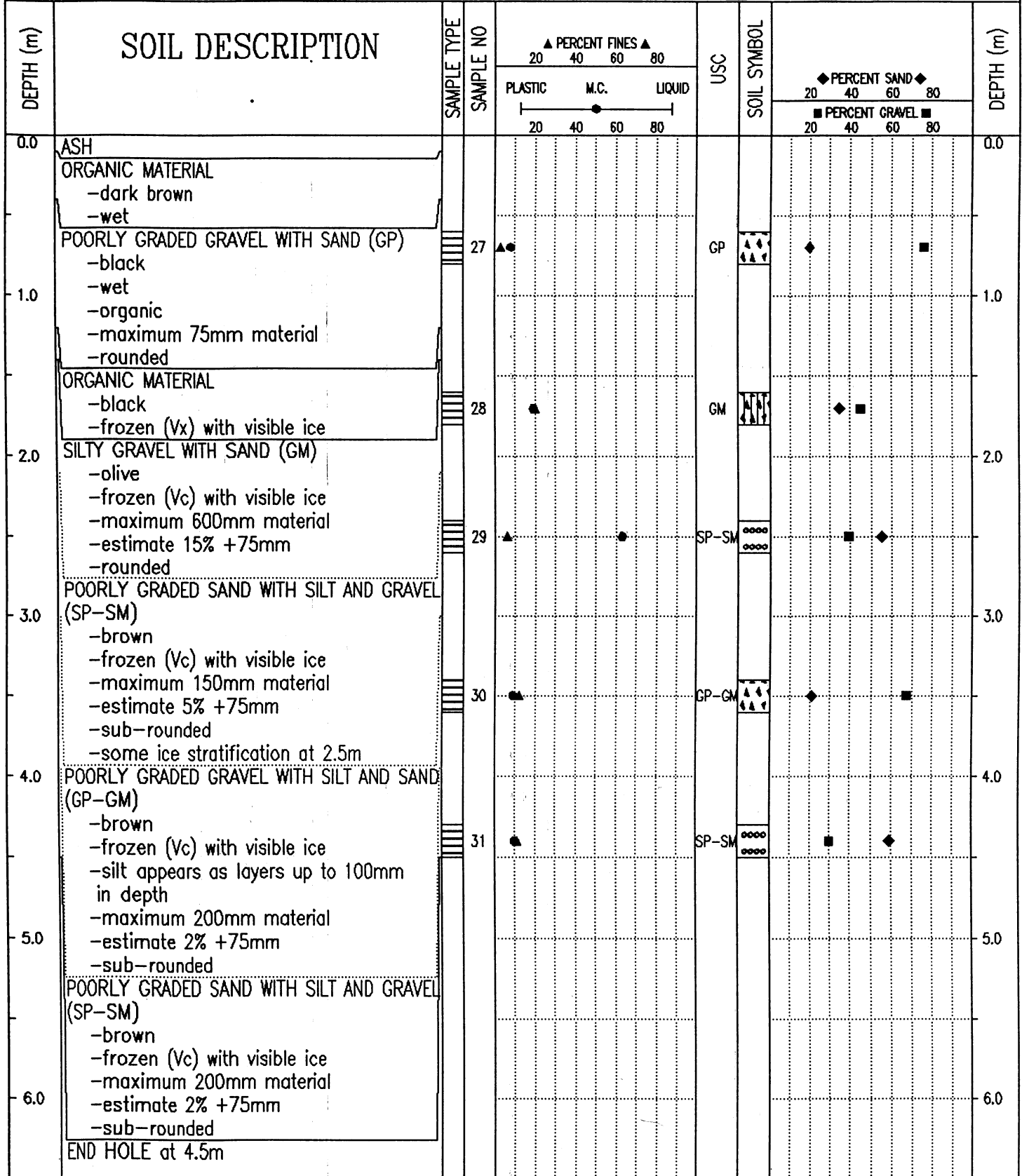
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ENGINEERING-CAPITAL	SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: Sta. 1853+660 o/s 16m Rt.	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input 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	SILTY GRAVEL WITH SAND (GM) -brown -moist -grindy drilling										0.0
1.0											1.0
2.0											2.0
2.2	END HOLE at 2.2m -refusal	<input checked="" type="checkbox"/>	459	●	▲		GM	◆	■		2.2
3.0											3.0
4.0											4.0
5.0											5.0
6.0											6.0

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LOGGED BY: CC	COMPLETION DEPTH: 2.2 m
REVIEWED BY:	COMPLETE: 95/06/11
Fig. No:	Page 1 of 1

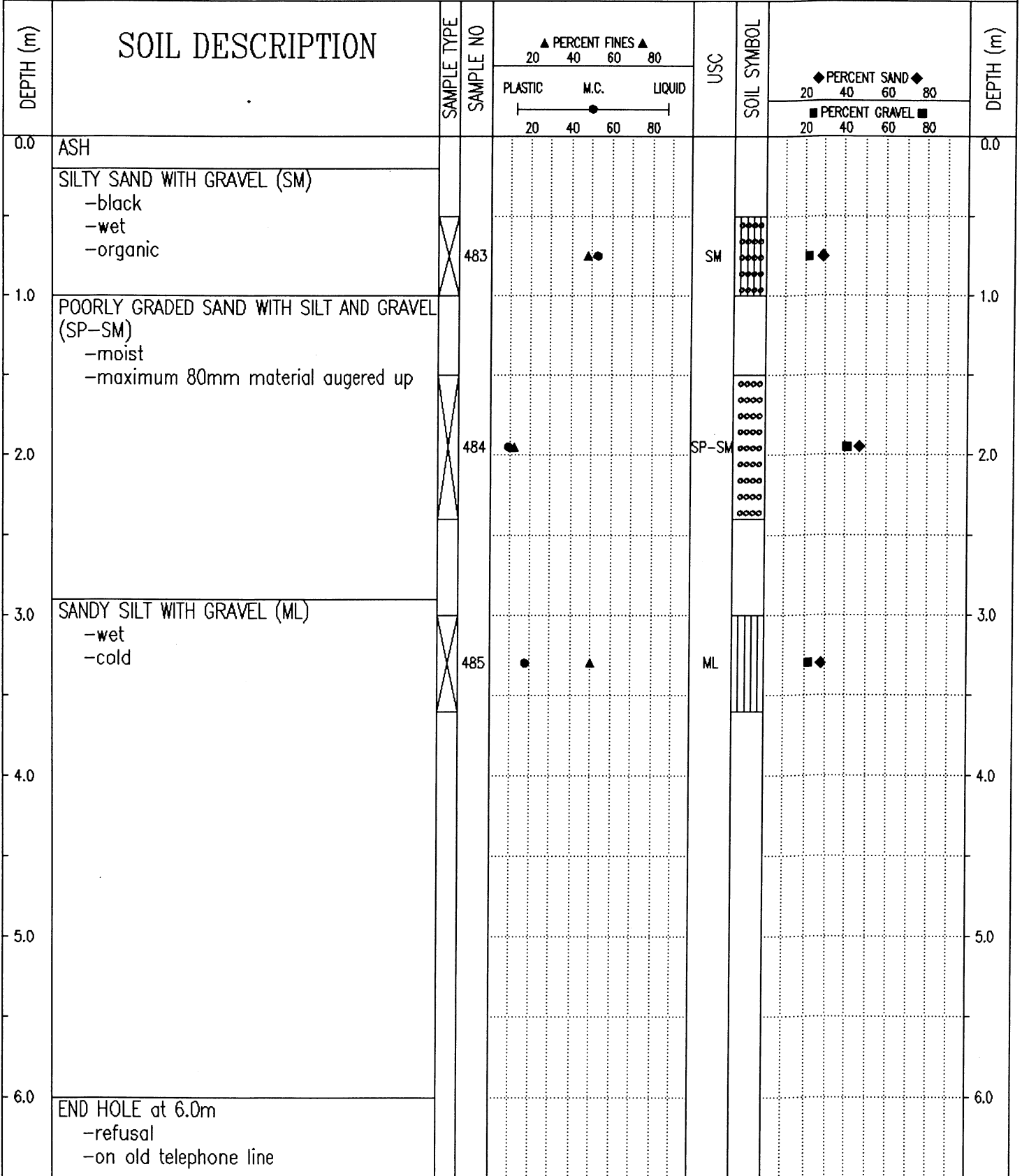
SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE



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LOGGED BY: KJ	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 95/09/09
Fig. No:	Page 1 of 1

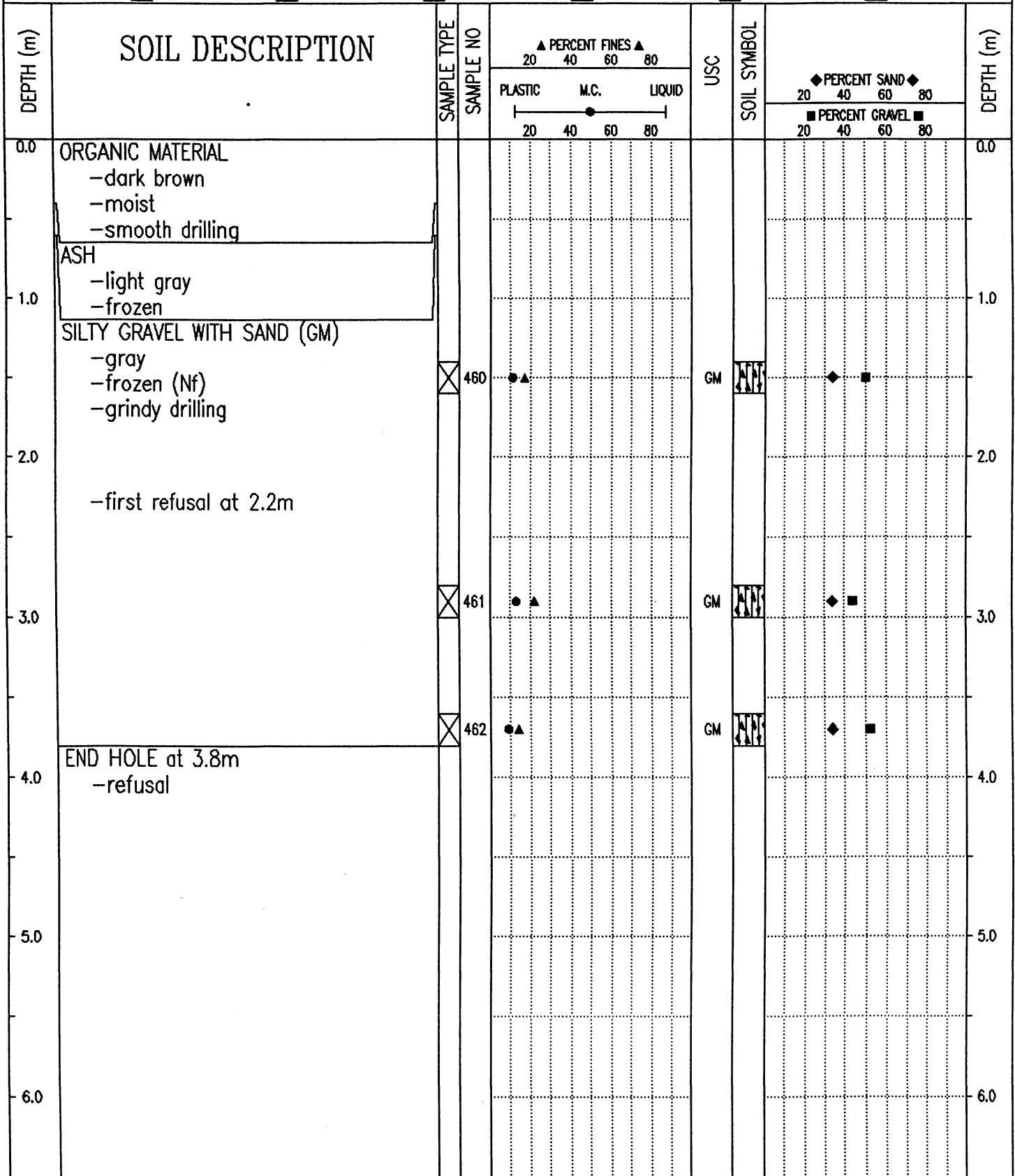
SAMPLE TYPE  RETURN     S.P.T.     AUGER     BULK     TUBE     CORE



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LOGGED BY: GC	COMPLETION DEPTH: 6.0 m
REVIEWED BY:	COMPLETE: 93/10/10
Fig. No:	Page 1 of 1

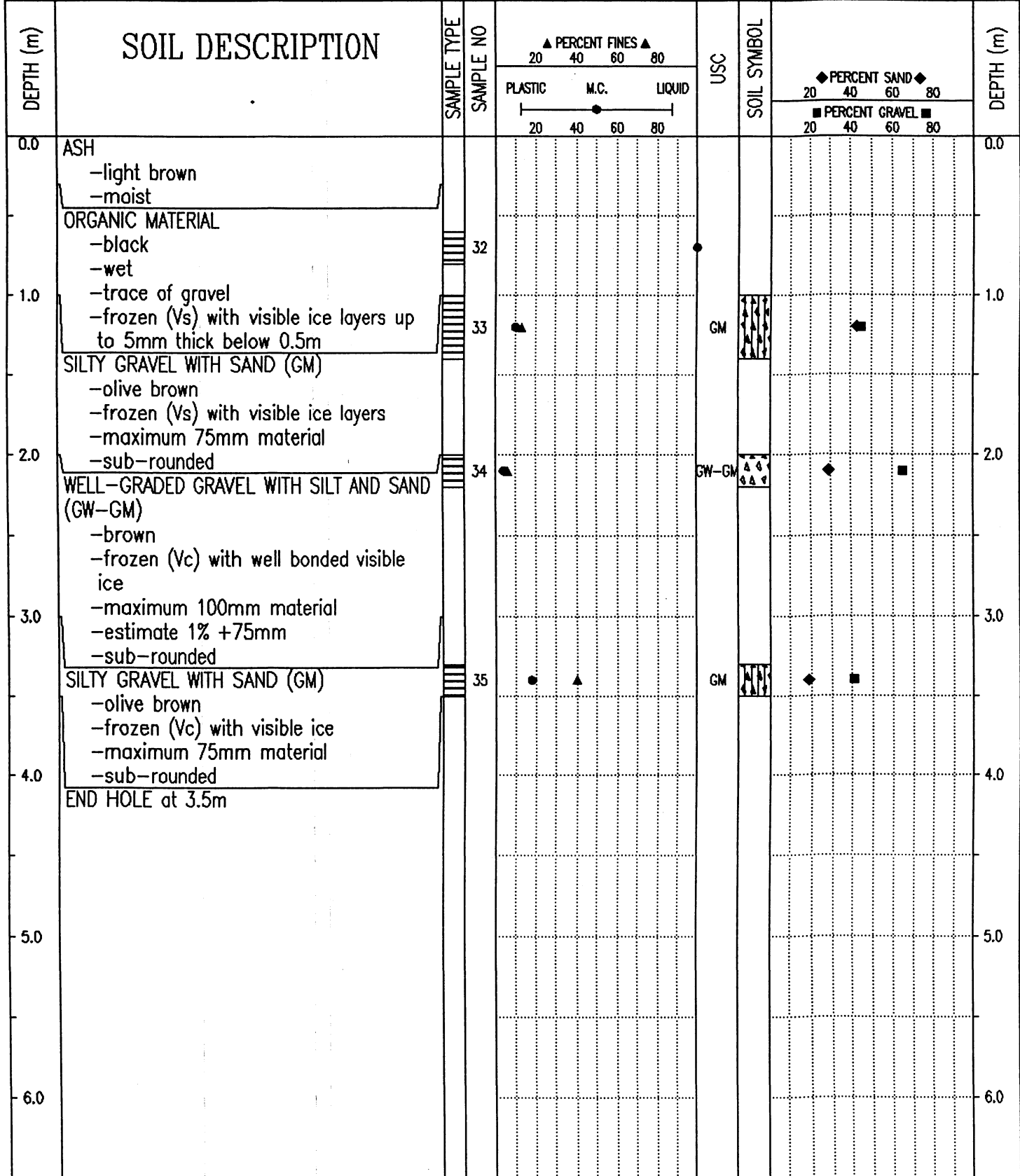
SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 365-191
ENGINEERING-CAPITAL	SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: Sta. 1853+853 o/s 7m Rt.	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" 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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LOGGED BY: CC	COMPLETION DEPTH: 3.8 m
REVIEWED BY:	COMPLETE: 95/06/11
Fig. No:	Page 1 of 1

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

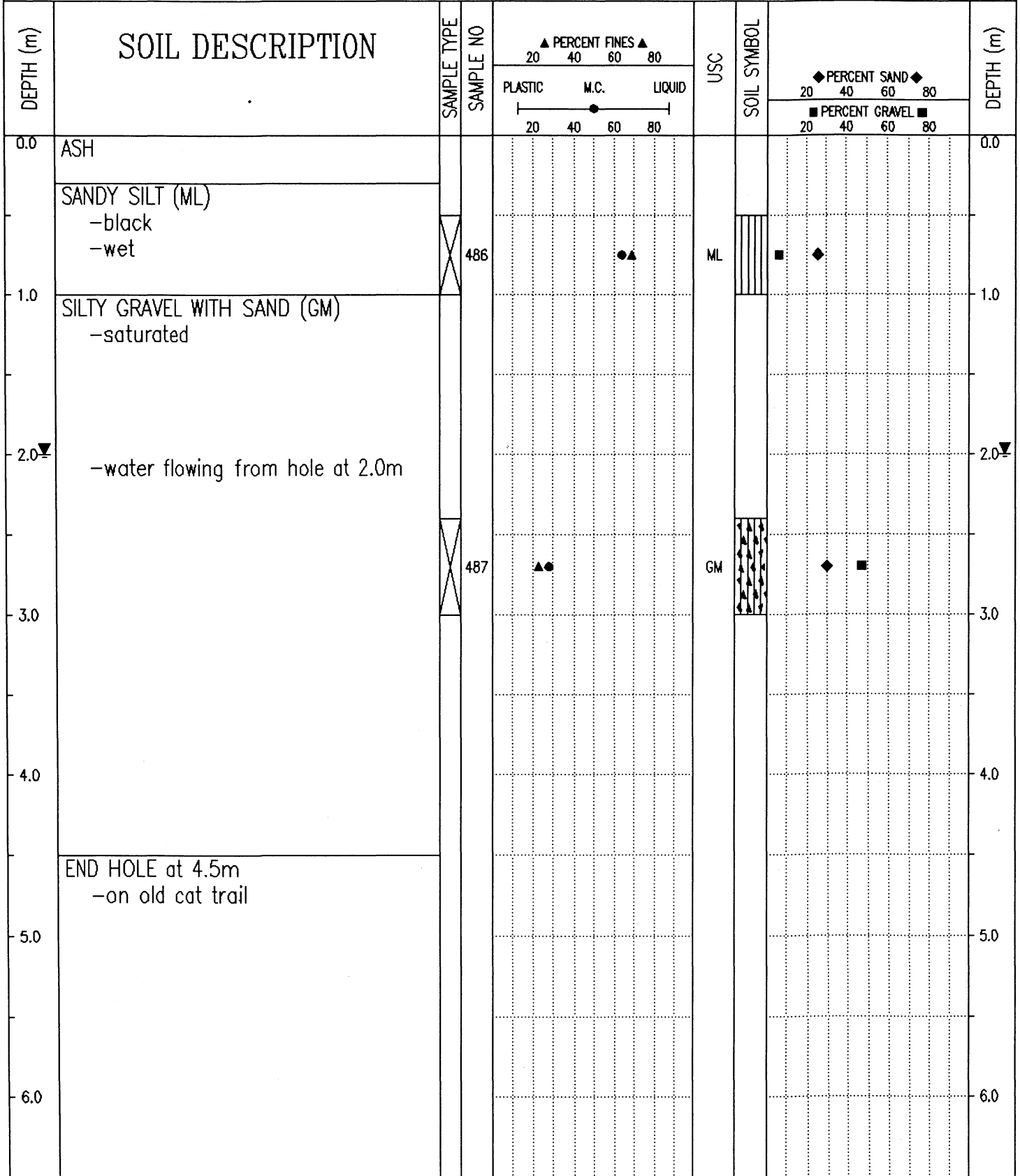


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LOGGED BY: KJ  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.5 m  
COMPLETE: 95/09/09

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 264-355
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1853+900 o/s 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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REVIEWED BY:

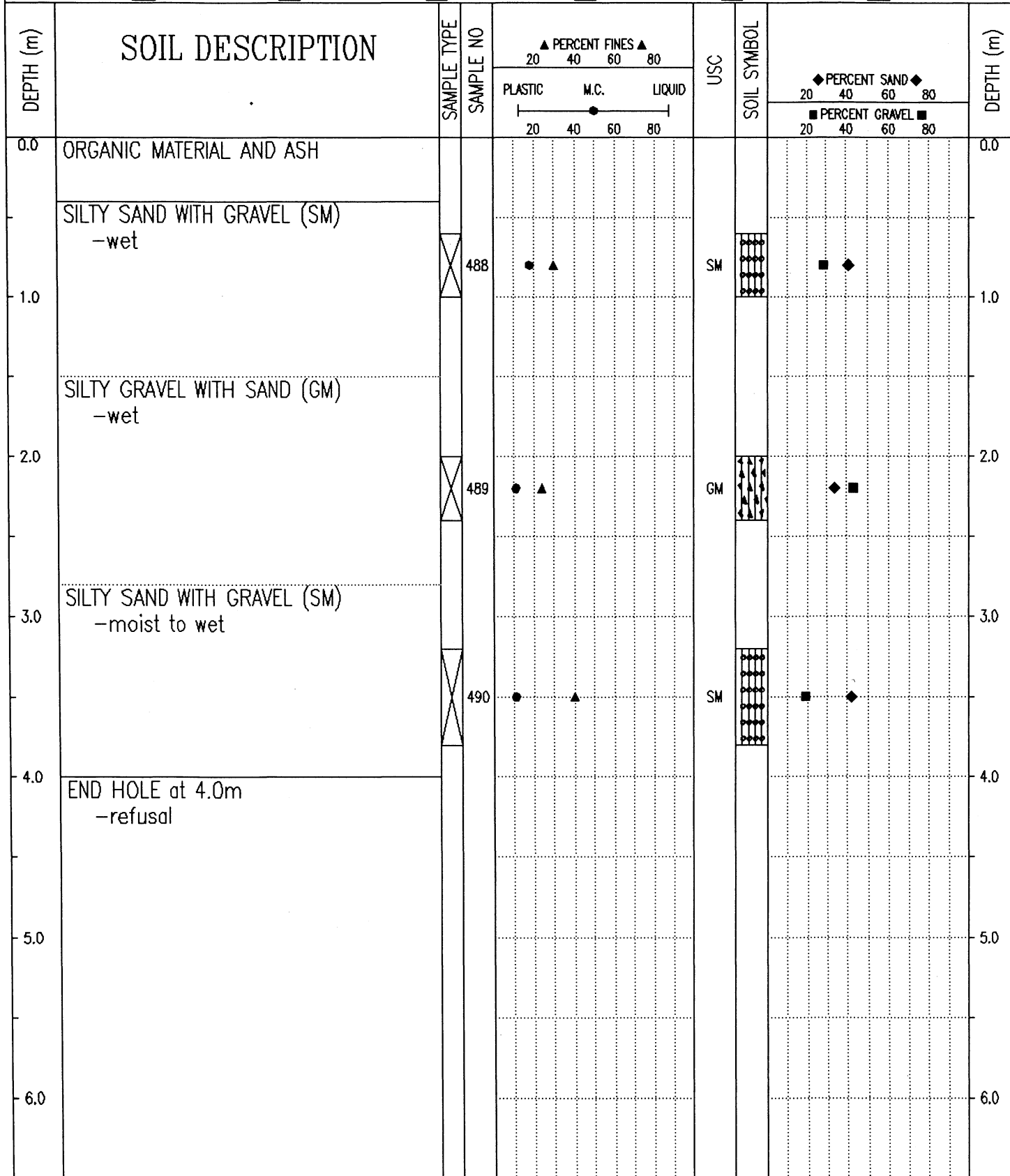
Fig. No:

COMPLETION DEPTH: 4.5 m

COMPLETE: 93/10/10

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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 264-356
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1854+000 o/s 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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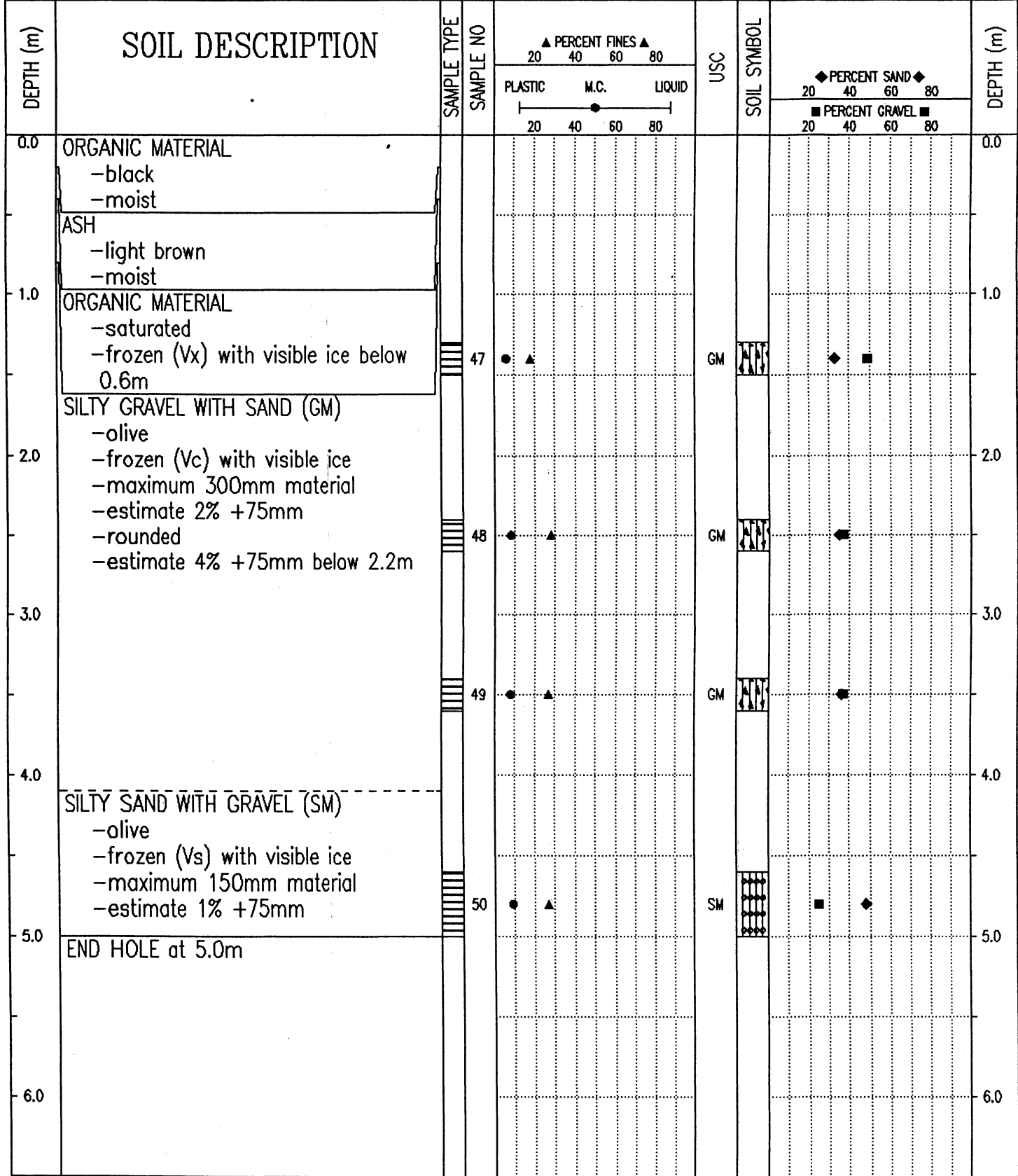
Fig. No:

COMPLETION DEPTH: 4.0 m

COMPLETE: 93/10/10

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



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LOGGED BY: KJ	COMPLETION DEPTH: 5.0 m
REVIEWED BY:	COMPLETE: 95/09/10
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 MATERIAL ASH							0.0
0.0 - 1.0	SANDY SILT WITH GRAVEL (ML) -black -frozen (Vc) with visible ice -high organic content		36	▲ 60, ● 75	ML	▨	◆ 45, ■ 45	1.0
1.0 - 2.0	SILTY SAND WITH GRAVEL (SM) -olive brown -frozen (Vc & Vs) with visible ice -maximum 800mm material -estimate 2% +75mm -sub-angular		37	● 20, ▲ 30	SM	▨	◆ 45, ■ 45	2.0
2.0 - 3.0	POORLY GRADED GRAVEL WITH SILT AND SAND (GP-GM) -brown -frozen (Vc) with visible ice -maximum 800mm material -estimate 5% +75mm -sub-angular		38	▲ 20	GP-GM	▨	◆ 45, ■ 45	3.0
3.0 - 4.2	SILTY GRAVEL WITH SAND (GM) -olive -frozen (Vs) with visible ice -maximum 150mm material -estimate 1% +75mm -sub-angular		39	● 20, ▲ 30	GM	▨	◆ 45, ■ 45	4.0
4.2	END HOLE at 4.2m							4.2

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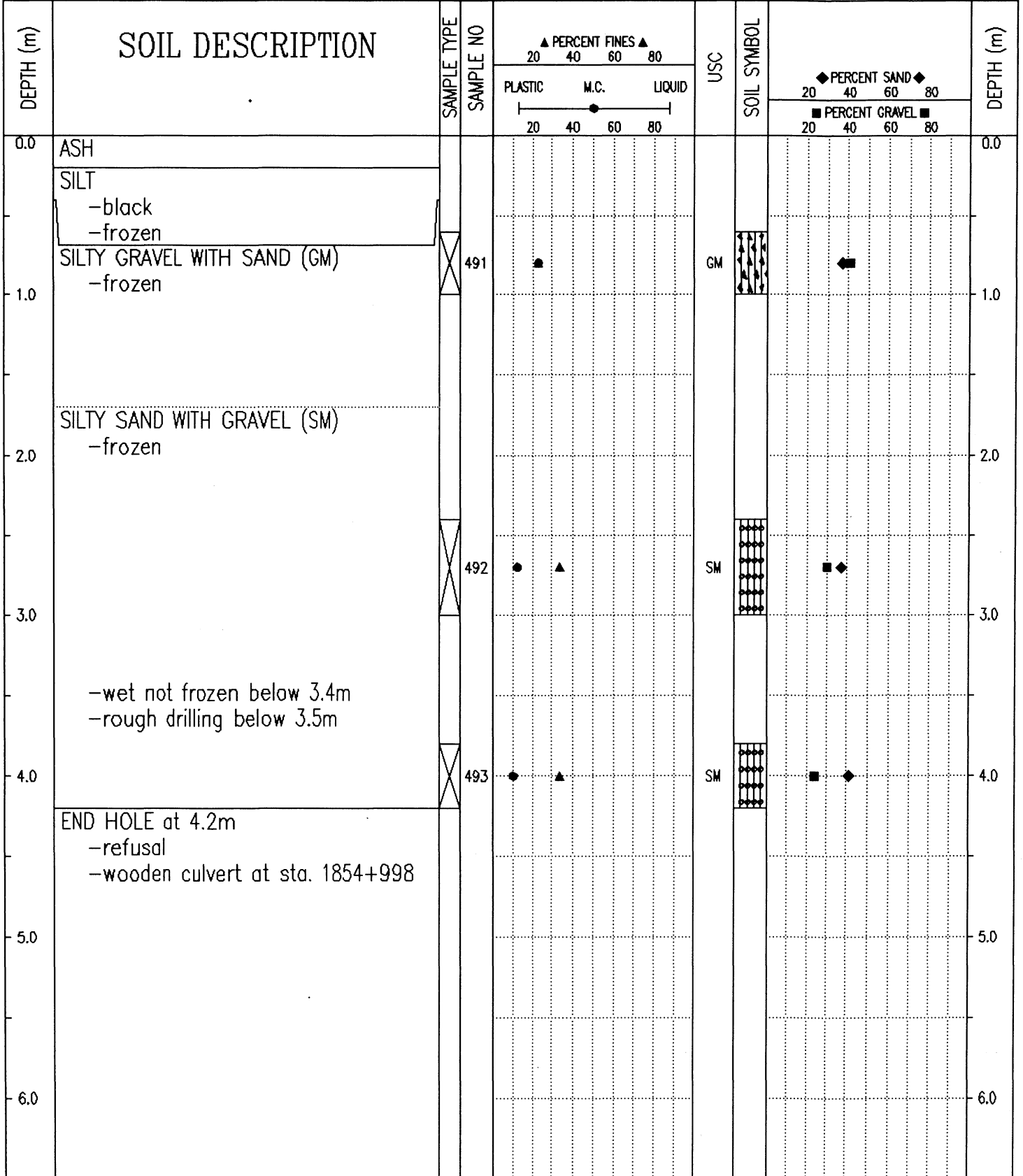
REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 4.2 m

COMPLETE: 95/09/09

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 264-357
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1854+100 o/s 25m 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

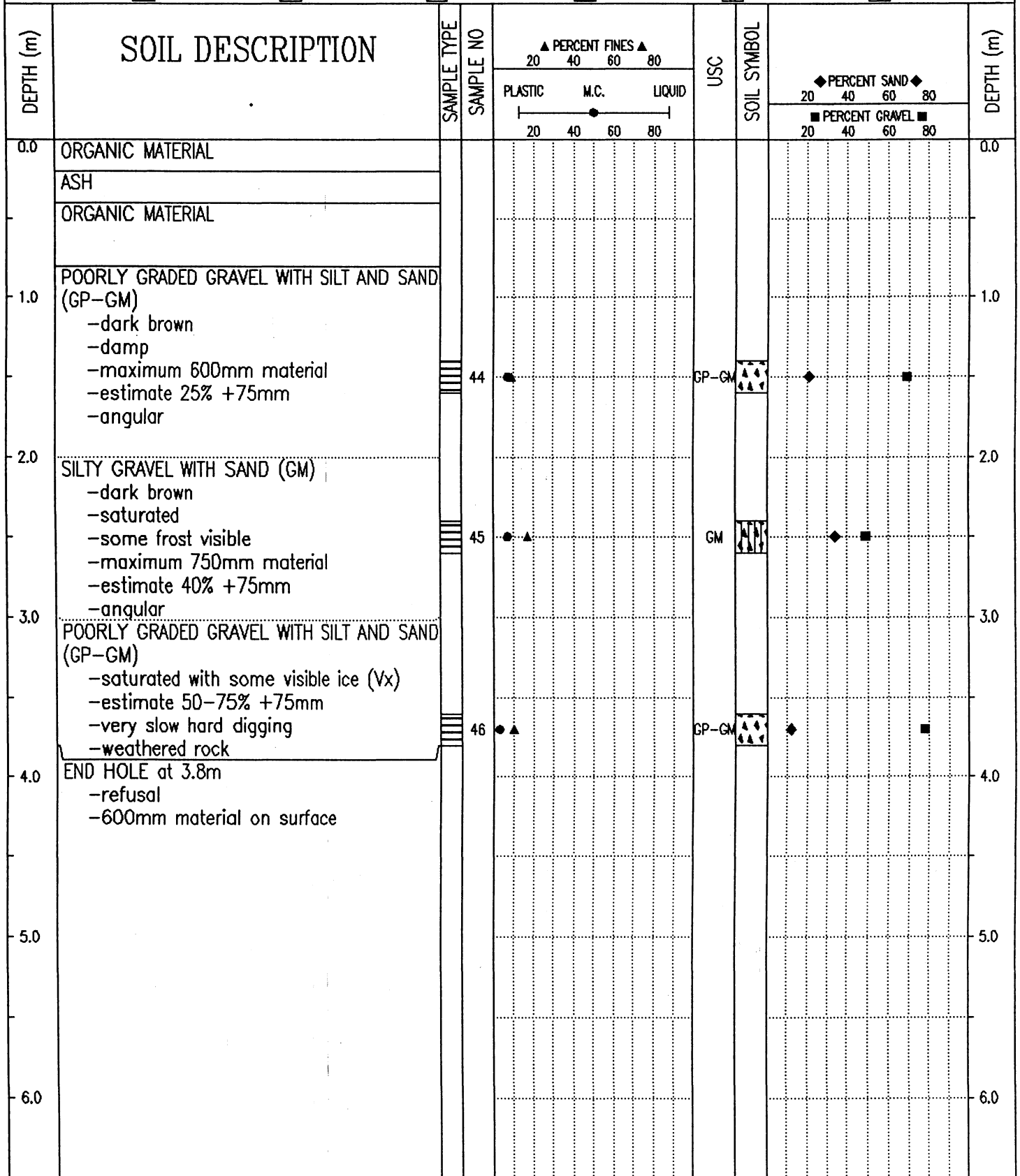


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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 4.2 m  
COMPLETE: 93/10/10

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 381-512
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172		LOCATION: Sta. 1854+155 o/s 15m 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: 3.8 m

COMPLETE: 95/09/10

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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 264-358
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1854+165 o/s 5m 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)
				20	40	60			80	20	40	
0.0	WEATHERED ROCK											0.0
1.0	END HOLE at 0.75m -refusal -bedrock on surface sta. 1854+150 to sta. 1854+265 right of centerline -poplar and spruce cover											1.0
2.0												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: GC	COMPLETION DEPTH: 0.8 m
	REVIEWED BY:	COMPLETE: 93/10/10
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST HOLE NO: 264-359							
SHAKWAK PROJECT		SEGMENT 15		Project No: 202101-0311-193							
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1854+210 o/s 25m Rt.		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			20	40	
0.0	SILTY SAND (SM) -black -organic	X	494				SM				0.0
1.0	WEATHERED ROCK -silty sand with gravel (sm) -orange	X	495				SM				1.0
2.0	END HOLE at 1.9m -refusal -rock on surface -poplar and spruce cover										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: 1.9 m

COMPLETE: 93/10/10

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 381-511
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172		LOCATION: Sta. 1854+215 o/s 6m 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 MATERIAL -dark brown -damp									0.0	
0.0 - 1.0	SILTY GRAVEL WITH SAND (GM) -dark brown -damp -maximum 300mm material -estimate 10% +75mm -angular		40				GM			1.0	
1.0 - 2.0			41				GM			2.0	
2.0 - 3.0	-maximum 1000mm material below 2.0m -estimate 20% +75mm below 2.0m										
3.0	ORGANIC MATERIAL -black -damp									3.0	
3.0 - 4.0	SILTY GRAVEL WITH SAND (GM) -olive -moist -maximum 200mm material -estimate 1% +75mm -sub-angular		42				GM			4.0	
4.0 - 5.0			43				GM			5.0	
5.0	END HOLE at 5.0m -600mm material on surface									5.0	
6.0										6.0	

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Fig. No:

COMPLETION DEPTH: 5.0 m

COMPLETE: 95/09/10

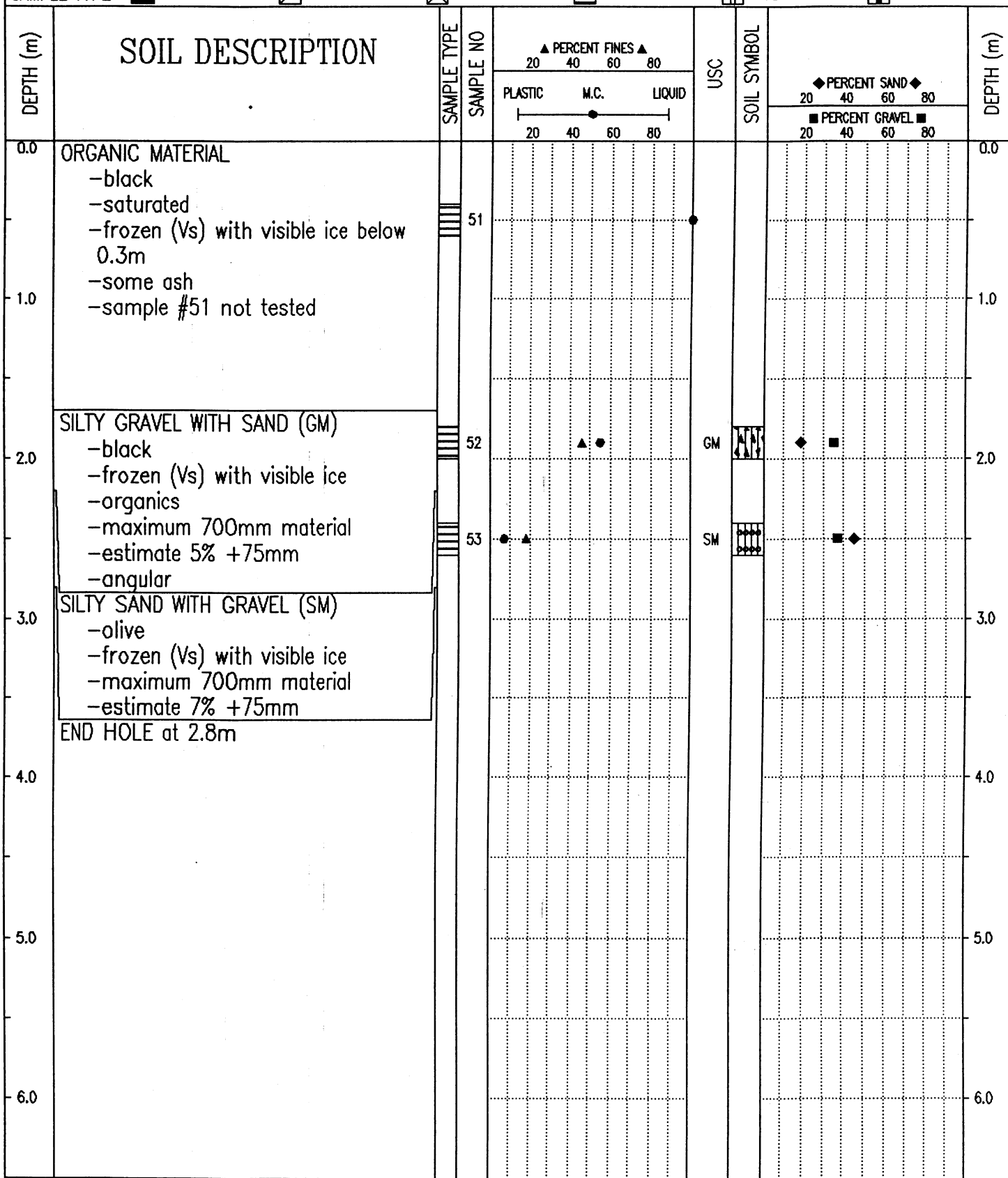
Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 264-360
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1854+250 o/s 25m 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 SILT										0.0	
1.0	END HOLE at 1.0m -refusal										1.0	
2.0											2.0	
3.0											3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

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LOGGED BY: GC	COMPLETION DEPTH: 1.0 m
REVIEWED BY:	COMPLETE: 93/10/10
Fig. No:	Page 1 of 1

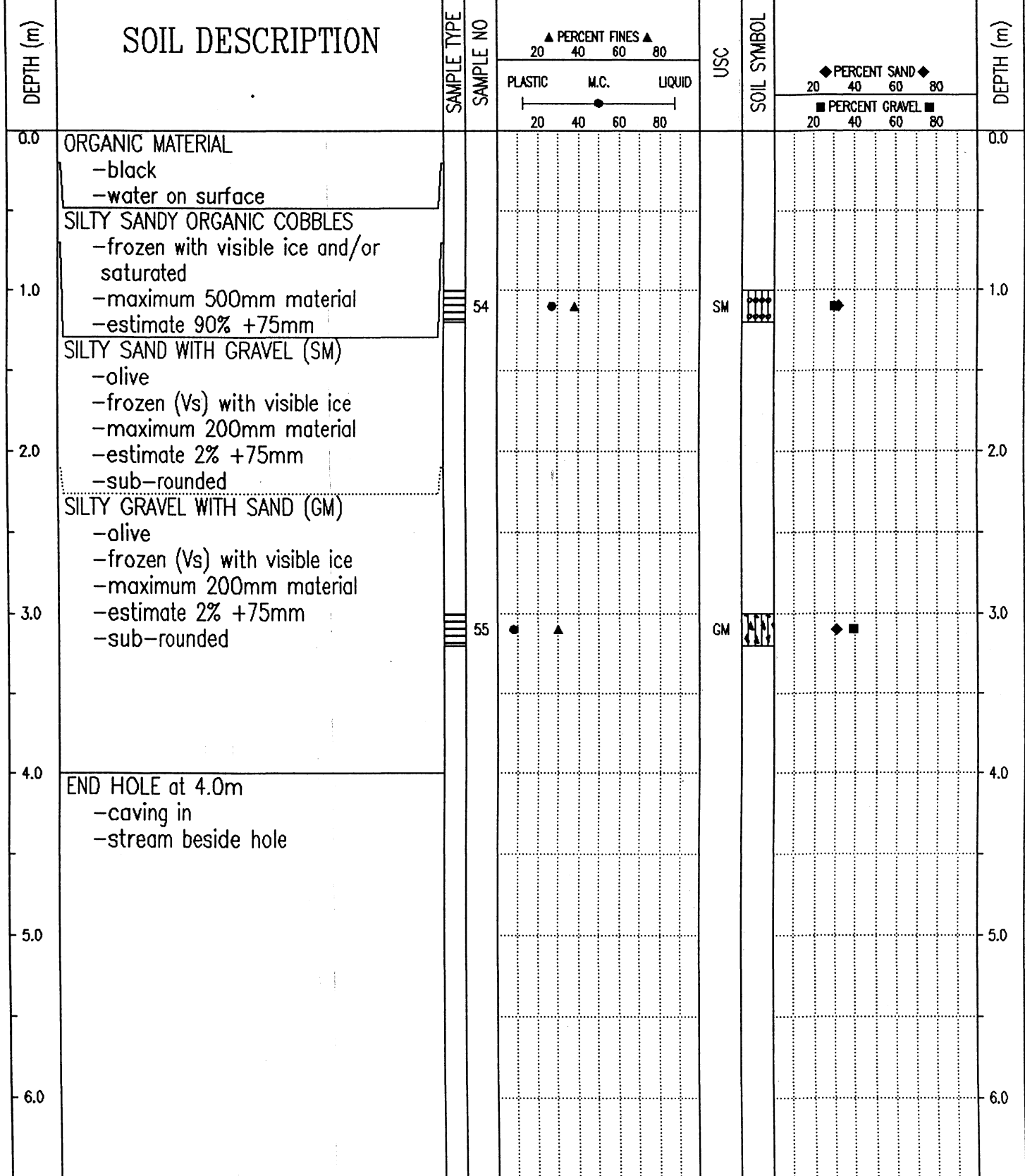


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LOGGED BY: KJ	COMPLETION DEPTH: 2.8 m
REVIEWED BY:	COMPLETE: 95/09/10
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 381-515
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172	LOCATION: Sta. 1854+290 o/s 8m Rt.	ELEVATION: 0.00 (m)

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



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LOGGED BY: KJ	COMPLETION DEPTH: 4.0 m
REVIEWED BY:	COMPLETE: 95/09/11
Fig. No:	Page 1 of 1

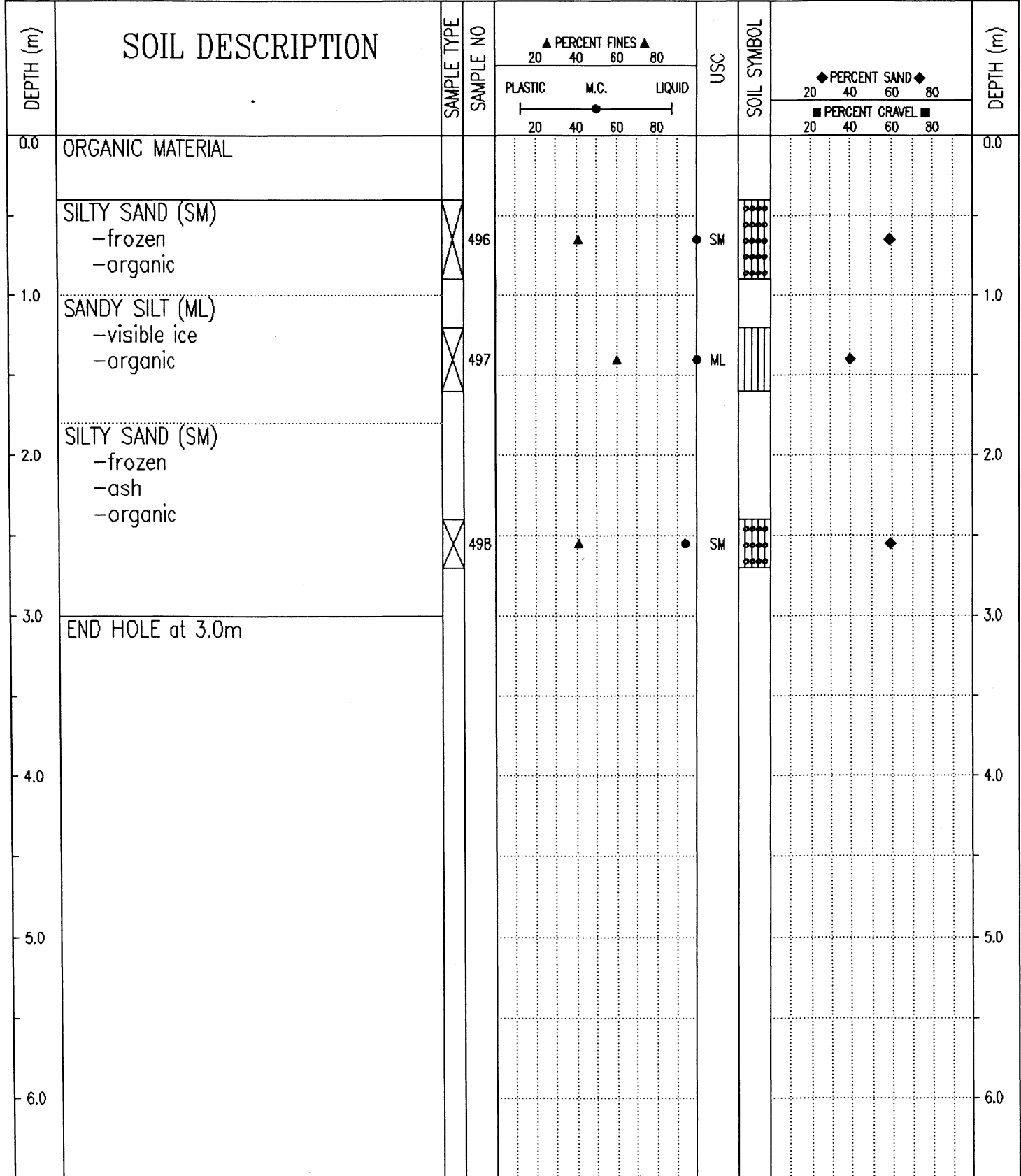
SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 365-192
ENGINEERING-CAPITAL		SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER		LOCATION: Sta. 1854+347 o/s 4m Lt.	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> 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	20	40	
0.0	ORGANIC MATERIAL -dark brown -saturated -smooth drilling													0.0	
1.0	ASH -light gray -saturated													1.0	
2.0	ORGANIC MATERIAL -dark brown -saturated													2.0	
	ASH -light gray -water at 1.0m -frozen below 1.5m -denser drilling below 1.5m													2.0	
3.0														3.0	
4.0														4.0	
5.0	END HOLE at 4.5m													5.0	
6.0														6.0	

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LOGGED BY: CC	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 95/06/11
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 264-361
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1854+350 o/s 3m 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		

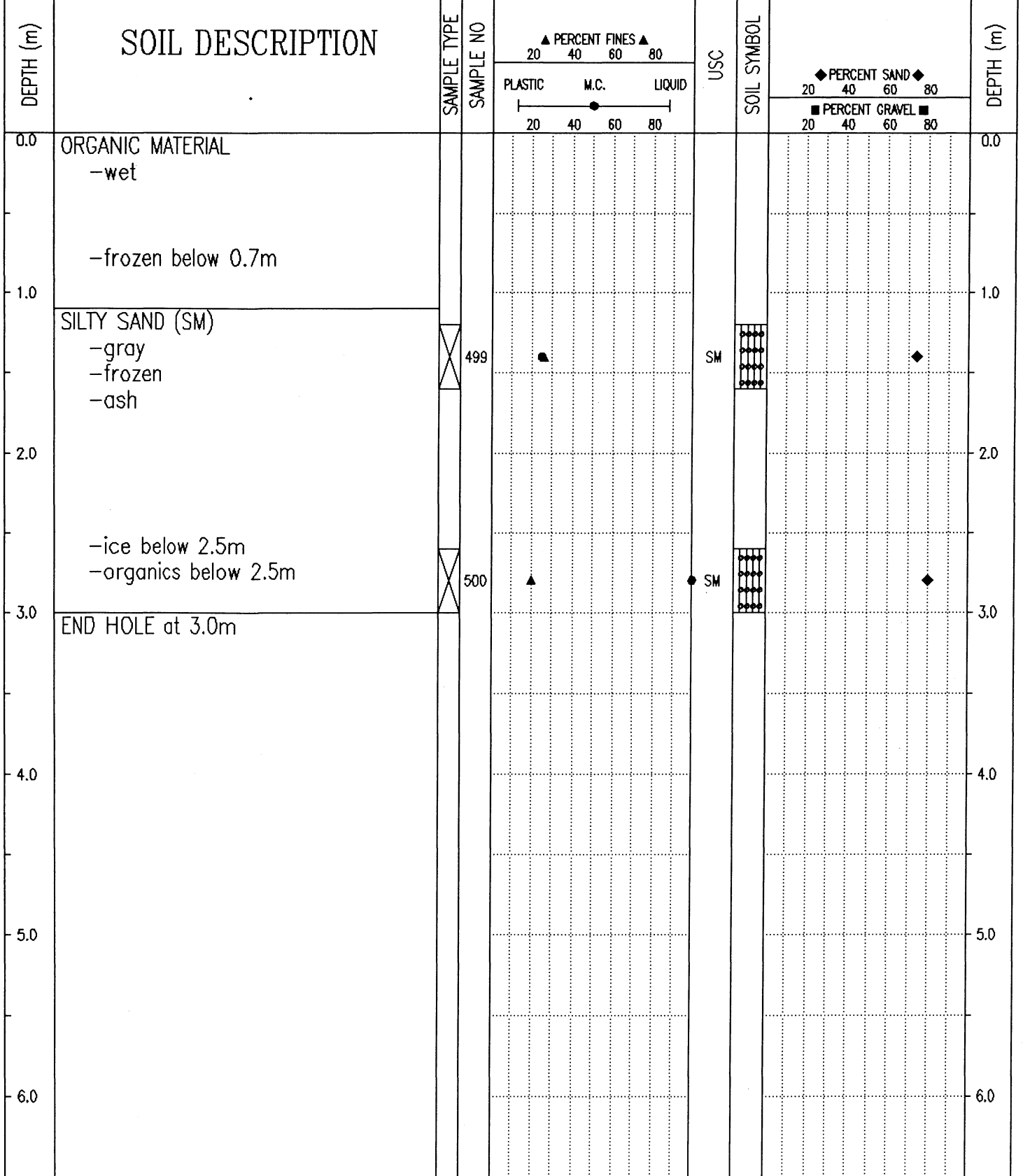


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LOGGED BY: GC  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 93/10/10

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 264-362
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL:CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1854+475 o/s 10m 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		



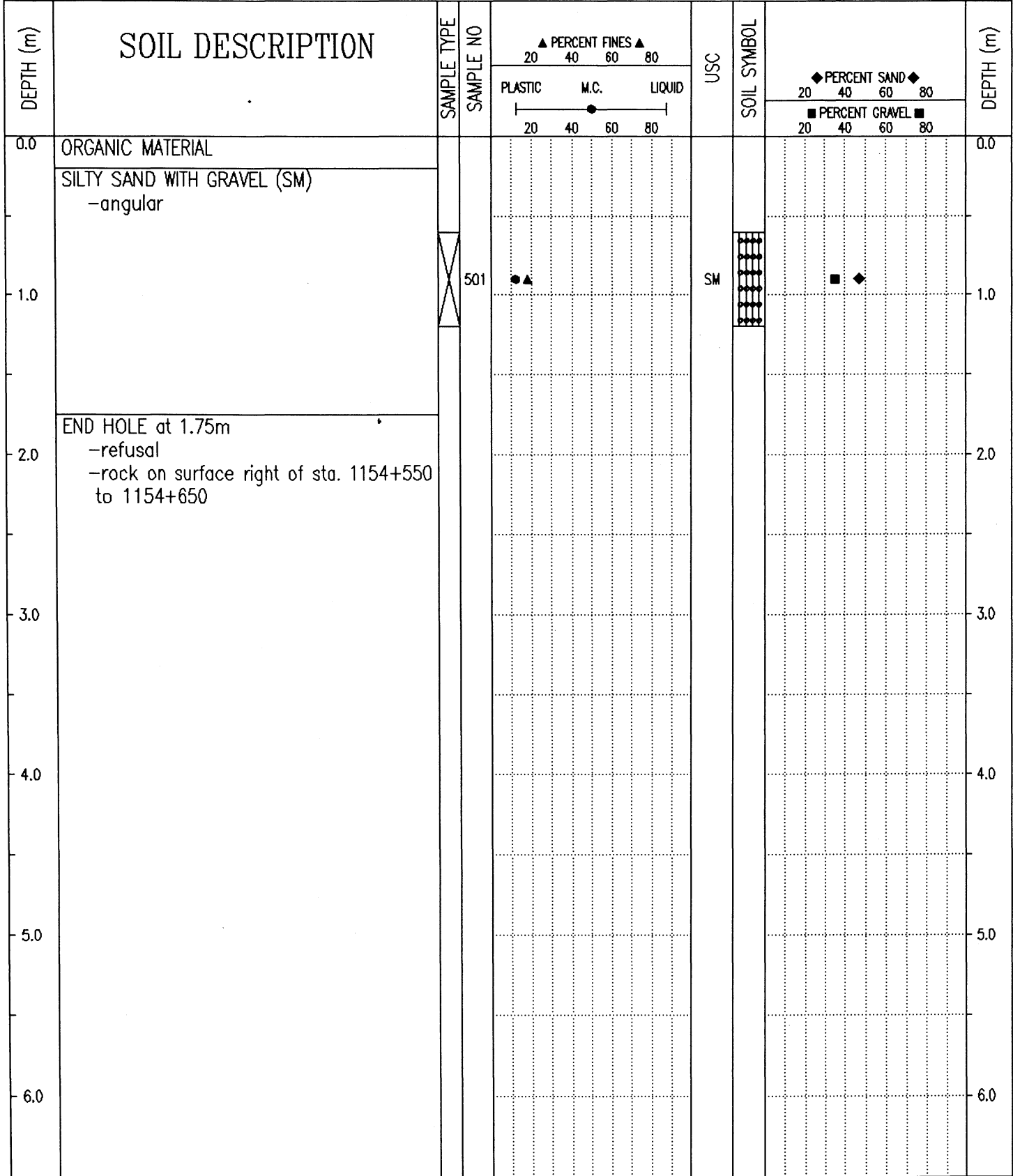
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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 365-193
ENGINEERING-CAPITAL		SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER		LOCATION: Sta. 1854+543 o/s 12m Rt.	ELEVATION: 0.00 (m)
SAMPLE TYPE <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)
				20	40	60			80	20		
0.0	ORGANIC MATERIAL -dark brown -frozen -smooth drilling  -first refusal at 1.2m -grindy drilling below 1.2m END HOLE at 1.3m -refusal -rock dust on bit			PLASTIC	M.C.	LIQUID						0.0
1.0												1.0
2.0												2.0
3.0												3.0
4.0												4.0
5.0												5.0
6.0												6.0

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	REVIEWED BY:	COMPLETE: 95/06/11
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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 264-363
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1854+550 o/s 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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LOGGED BY: GC	COMPLETION DEPTH: 1.8 m
REVIEWED BY:	COMPLETE: 93/10/10
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SUBSURFACE EXPLORATION AND TEST REPORT      SHAKWAK PROJECT      TEST HOLE NO: 365-194

ENGINEERING-CAPITAL      SEGMENT 14      Project No: 092-202101-0314

DRILL: B40L 150mm Dia. SOLID STEM AUGER      LOCATION: Sta. 1854+551 o/s 8m 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	
0.0	ORGANIC MATERIAL -dark brown -saturated									0.0	
0.5	ASH -light gray -water at 0.3m -smooth drilling									1.0	
1.5	ORGANIC MATERIAL -dark brown -saturated									2.0	
2.0	SILTY GRAVEL WITH SAND (GM) -gray -frozen (Nb) -grindy drilling	<input checked="" type="checkbox"/>	463				GM			2.0	
2.8	ORGANIC MATERIAL -dark brown									3.0	
3.0	END HOLE at 2.8m -refusal -in existing ditch									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: 95/06/11

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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 264-364
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1854+600 o/s 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	PERCENT GRAVEL	DEPTH (m)
				PLASTIC	M.C.	LIQUID					
0.0	ORGANIC SILT WITH GRAVEL									0.0	
1.0	END HOLE at 1.0m - refusal - rock on surface									1.0	
2.0										2.0	
3.0										3.0	
4.0										4.0	
5.0										5.0	
6.0										6.0	

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REVIEWED BY:  
Fig. No:

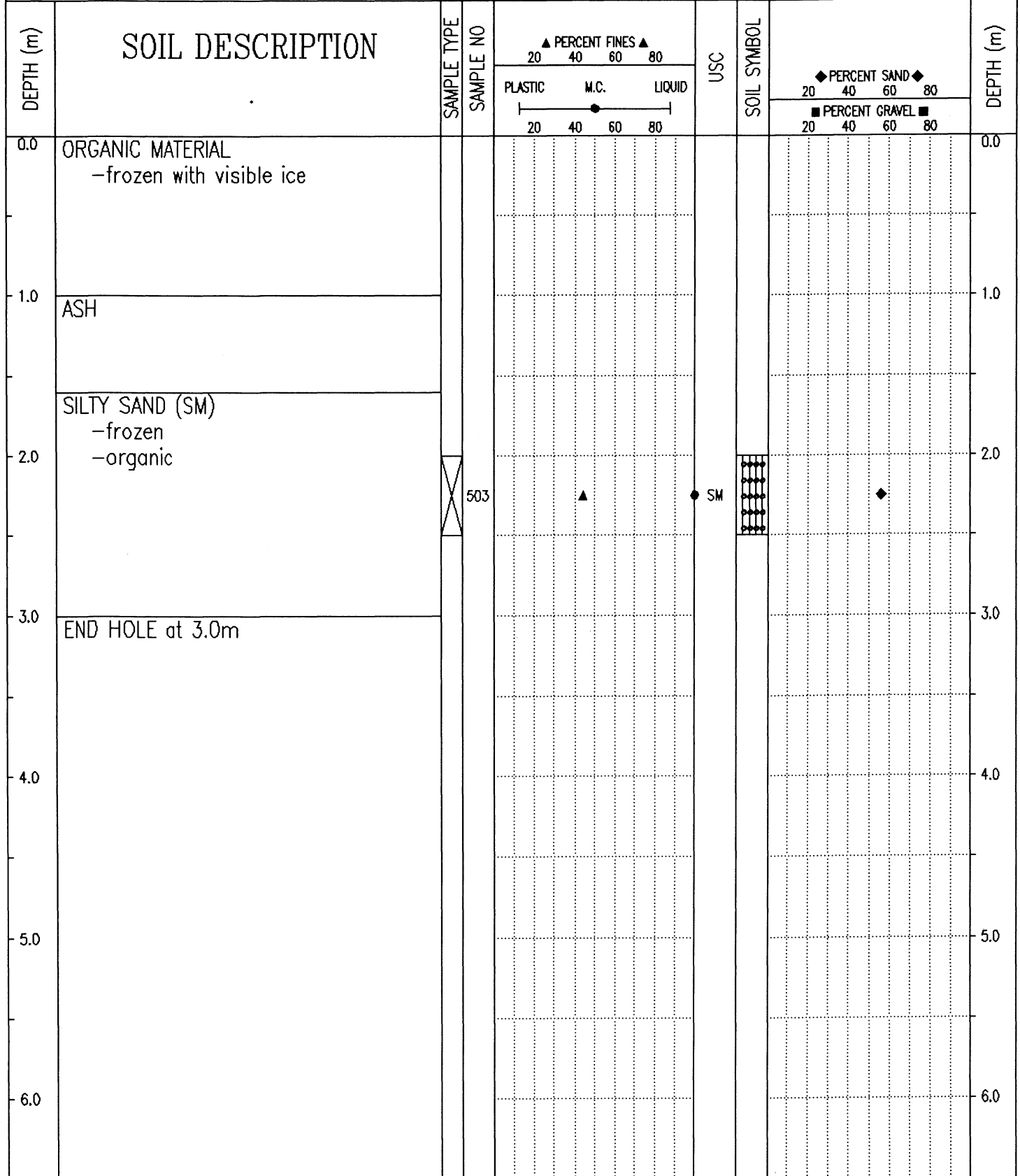
COMPLETION DEPTH: 1.0 m  
COMPLETE: 93/10/10

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 264-365
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1854+650 o/s 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 ◆		PERCENT GRAVEL ■		DEPTH (m)
				20	40	60			80	20	40	60	
0.0	ORGANIC MATERIAL											0.0	
	ASH												
1.0	ORGANIC MATERIAL -frozen											1.0	
2.0	SILTY SAND WITH GRAVEL (SM) -frozen -angular											2.0	
3.0	END HOLE at 3.0m -visible rock in right backslope -culvert at 1854+625		502	▲	●		SM	◆	■			3.0	
4.0												4.0	
5.0												5.0	
6.0												6.0	

Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
	REVIEWED BY:	COMPLETE: 93/10/10
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 264-366
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1854+750 o/s 25m 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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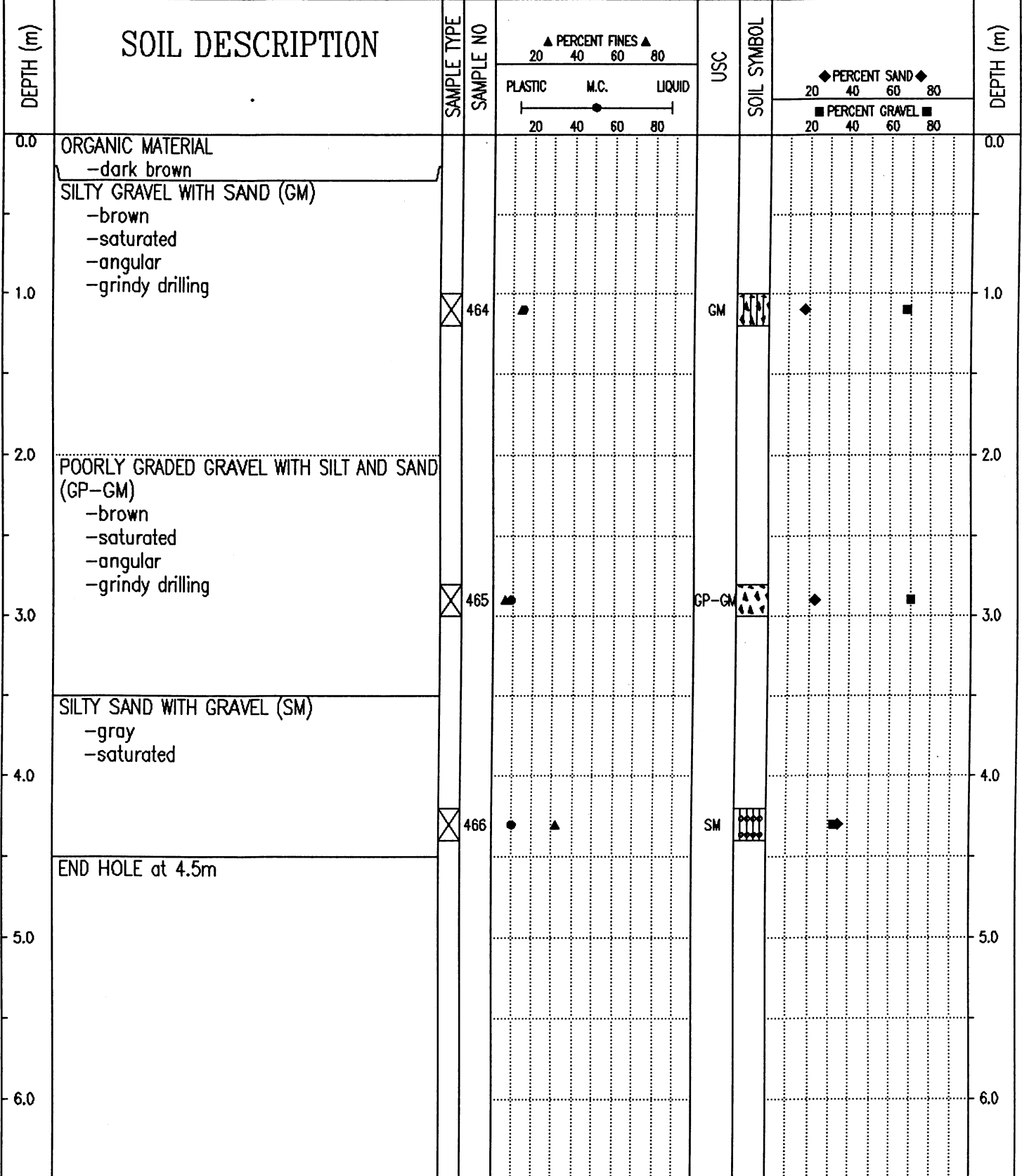
Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 93/10/10

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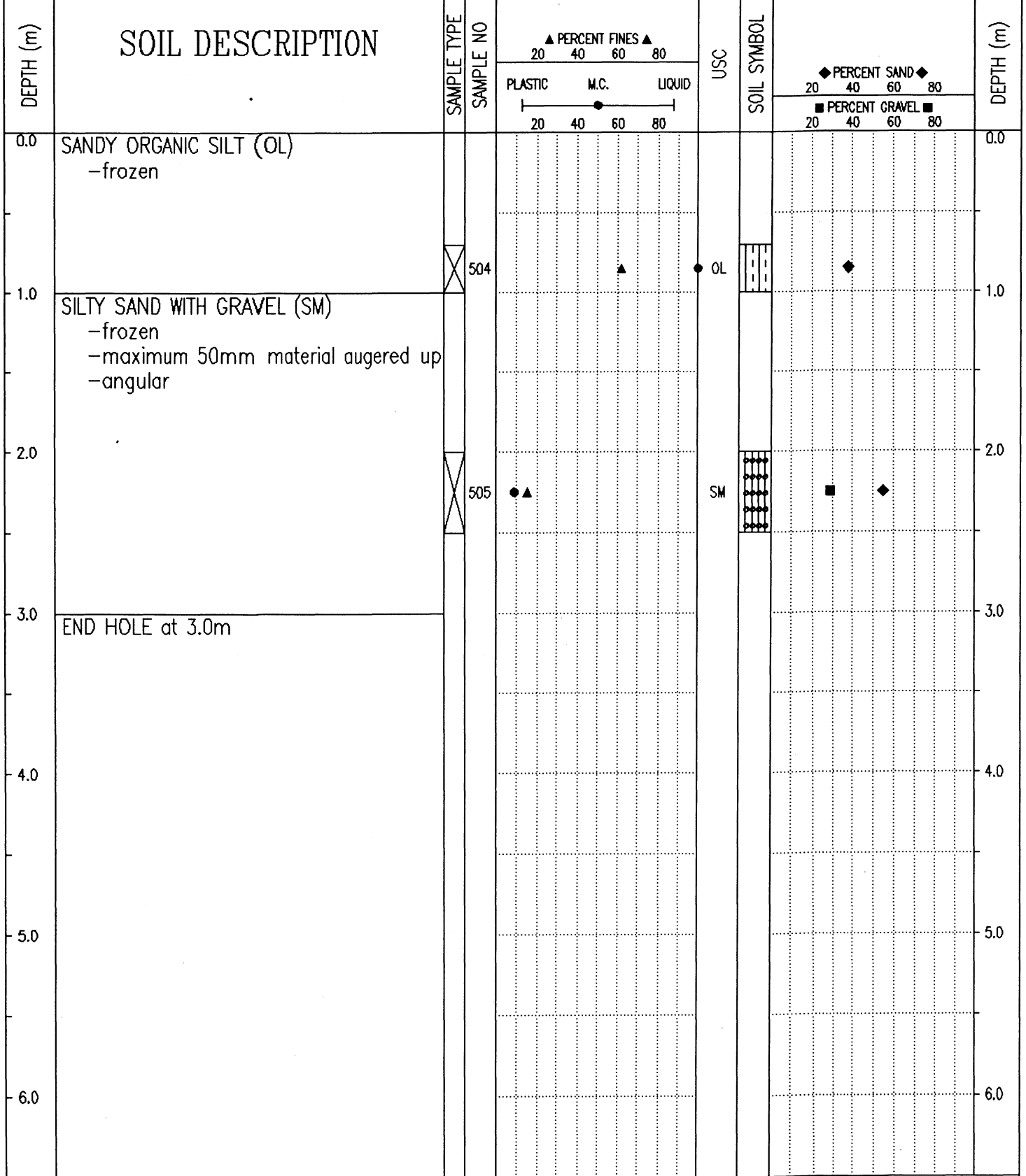
SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE



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LOGGED BY: CC	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 95/06/11
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 264-367
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1854+850 o/s 25m 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: 93/10/10

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SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 365-196
ENGINEERING-CAPITAL	SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: Sta. 1854+948 o/s 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	

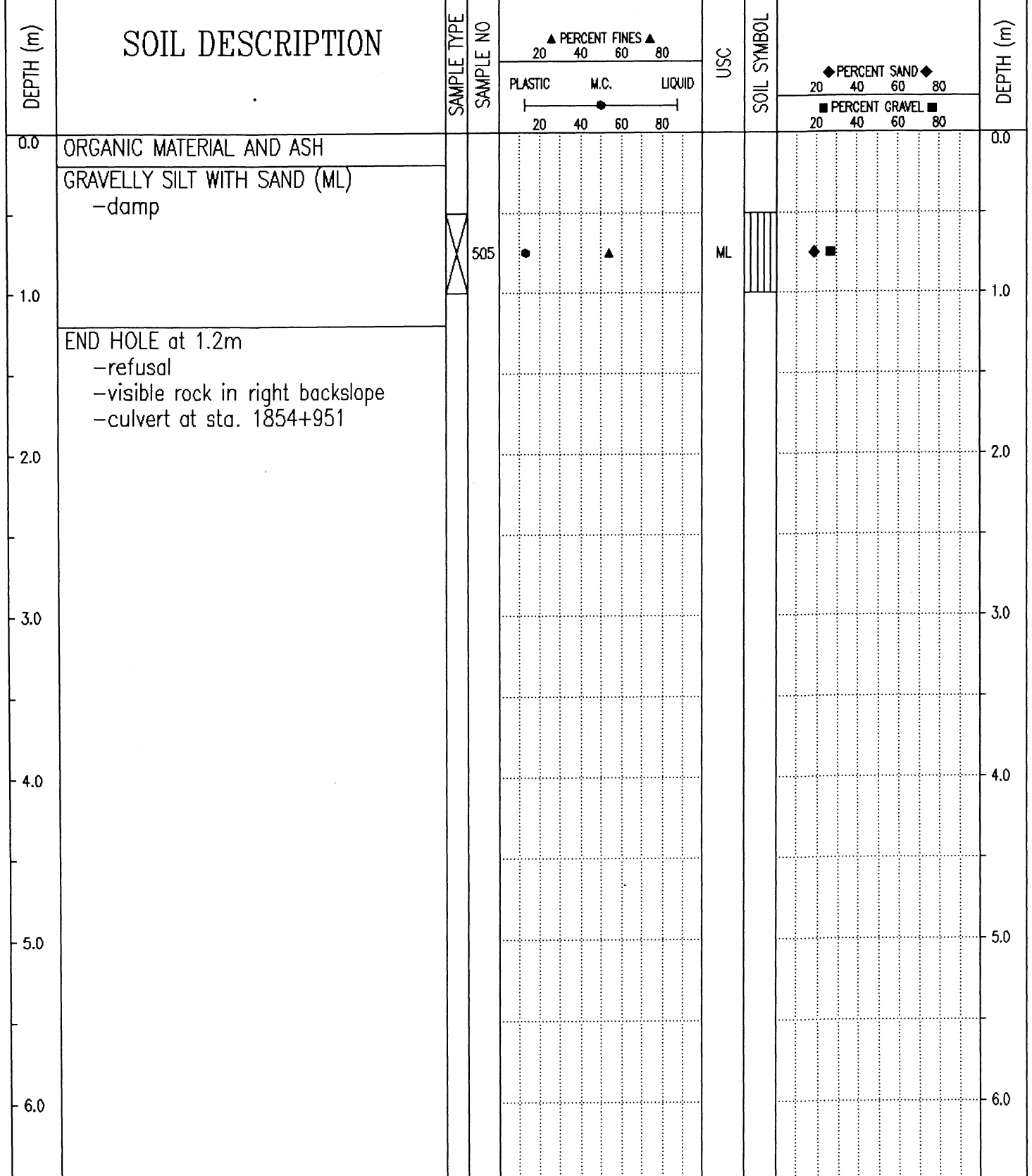
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	
0.0	ORGANIC MATERIAL -dark brown										0.0
1.0	POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM) -brown -damp -weathered rock -smooth drilling	<input checked="" type="checkbox"/>	467	▲	●	▲	SP-SM	◆	■		1.0
2.0	END HOLE at 1.5m -refusal -bedrock on surface										2.0
3.0											3.0
4.0											4.0
5.0											5.0
6.0											6.0

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LOGGED BY: CC  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 1.5 m  
COMPLETE: 95/06/11

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 265-368
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1854+950 o/s 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			

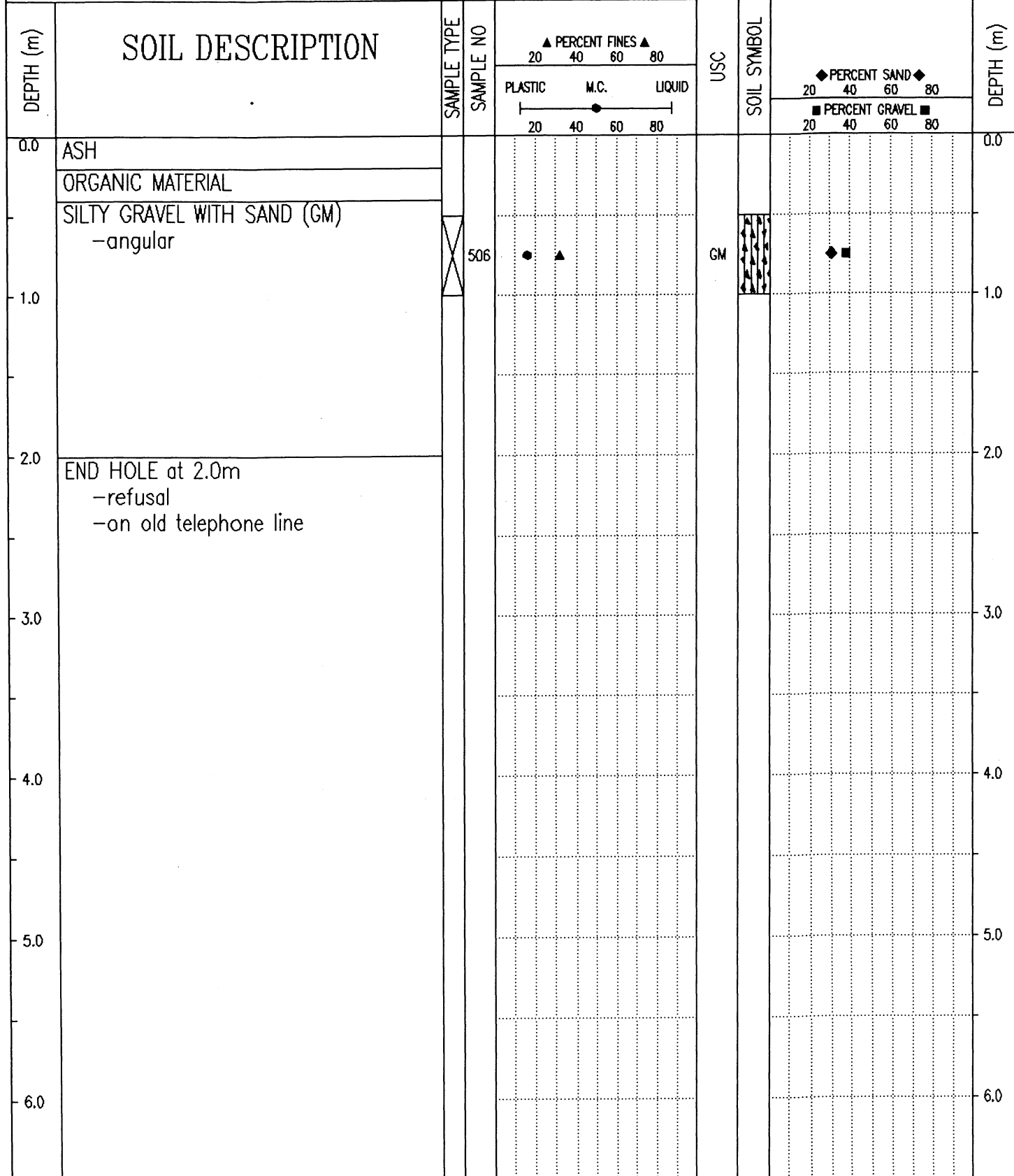


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Fig. No:

COMPLETION DEPTH: 1.2 m  
COMPLETE: 93/10/10

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 265-369
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1855+050 o/s 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: 2.0 m

COMPLETE: 93/10/10

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SUBSURFACE EXPLORATION AND TEST REPORT      SHAKWAK PROJECT      TEST HOLE NO: 365-197

ENGINEERING-CAPITAL      SEGMENT 14      Project No: 092-202101-0314

DRILL: B40L 150mm Dia. SOLID STEM AUGER      LOCATION: Sta. 1855+137 o/s 15m 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 MATERIAL -dark brown -free water -smooth drilling										0.0	
2.0	SILTY GRAVEL WITH SAND (GM) -gray -saturated -grindy drilling										2.0	
4.0	END HOLE at 4.5m -water flowing from hole	<input checked="" type="checkbox"/>	468	●	▲		GM	◆			4.0	
5.0											5.0	
6.0											6.0	

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LOGGED BY: CC      COMPLETION DEPTH: 4.5 m  
 REVIEWED BY:      COMPLETE: 95/06/11  
 Fig. No:      Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 366-199
ENGINEERING-CAPITAL		SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER		LOCATION: Sta. 1855+145 o/s 8m 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 MATERIAL -dark brown -moist -smooth drilling -frozen below 0.3m -denser drilling below 0.3m										0.0	
2.0	SILTY GRAVEL WITH SAND (GM) -gray -frozen (Nf) -weathered rock -grindy drilling END HOLE at 2.0m -refusal -rock dust on bit	<input checked="" type="checkbox"/>	470	▲	●		GM	◆	■		2.0	
3.0											3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

SUBSURFACE EXPLORATION AND TEST REPORT      SHAKWAK PROJECT      TEST HOLE NO: 366-198

ENGINEERING-CAPITAL      SEGMENT 14      Project No: 092-202101-0314

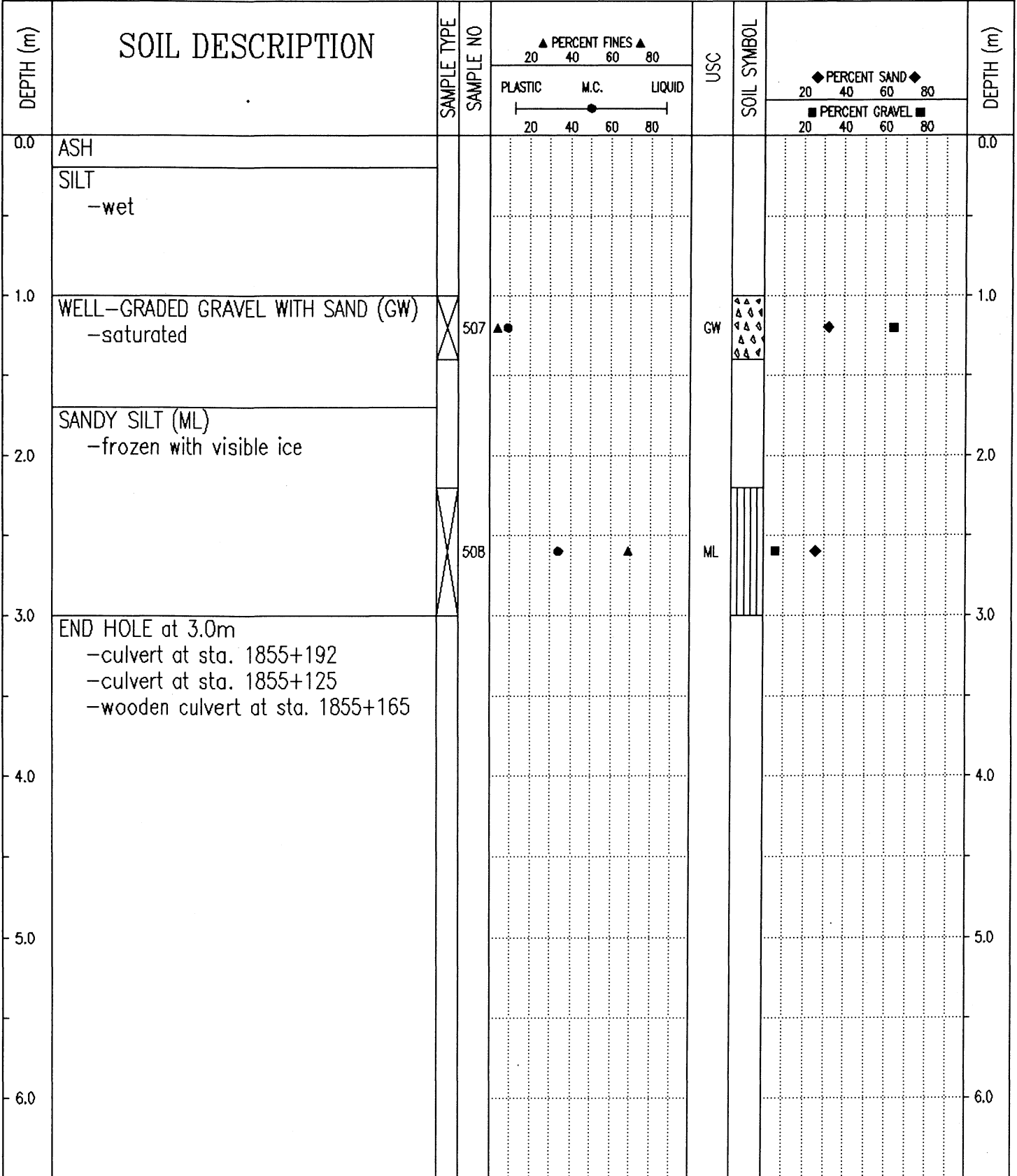
DRILL: B40L 150mm Dia. SOLID STEM AUGER      LOCATION: Sta. 1855+175 o/s 9m Rt.      ELEVATION: 0.00 (m)

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	
0.0	ORGANIC MATERIAL									0.0	
	SILT WITH SAND (ML) -gray -frozen (Nb) -smooth drilling										
1.0										1.0	
		<input checked="" type="checkbox"/>	469				ML	<input type="checkbox"/>			
2.0										2.0	
	ORGANIC MATERIAL -dark brown -frozen										
3.0	-grindy drilling below 2.8m									3.0	
	END HOLE at 3.0m -refusal -rock dust on bit										
4.0										4.0	
5.0										5.0	
6.0										6.0	

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LOGGED BY: CC      COMPLETION DEPTH: 3.0 m  
 REVIEWED BY:      COMPLETE: 95/06/11  
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SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 366-200
ENGINEERING-CAPITAL	SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: Sta. 1855+200 o/s 11m 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.	LIQUID			20	40	
0.0	ORGANIC MATERIAL -dark brown -frozen -smooth drilling										0.0
2.0	SILTY SANDY GRAVEL -gray -frozen -grindy drilling										2.0
3.0	ORGANIC MATERIAL -dark brown -frozen -smooth drilling		471	▲	●		GM	◆	■		3.0
4.0	SILTY GRAVEL WITH SAND (GM) -gray -frozen (Nf) -weathered rock										4.0
4.0	END HOLE at 3.2m -refusal -rock dust on bit -in existing ditch										4.0
5.0											5.0
6.0											6.0

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LOGGED BY: CC  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.2 m  
COMPLETE: 95/06/12

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 265-371
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1855+325 o/s 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)
				20	40	60			80	20	40	60	
0.0	ORGANIC MATERIAL ASH -wet											0.0	
1.0	SANDY SILT (ML) -frozen -organics											1.0	
3.0	END HOLE at 3.0m -wooden culvert at sta. 1855+325 -visible rock from sta. 1855+350 to sta. 1855+550 -on old telephone line		509				ML					3.0	
4.0												4.0	
5.0												5.0	
6.0												6.0	

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Transportation Engineering

LOGGED BY: GC  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 93/10/10

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 381-516
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172	LOCATION: Sta. 1855+435 o/s 15m 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 SAND	PERCENT GRAVEL		
0.0	ORGANIC MATERIAL -black -damp										0.0	
	ASH											
1.0	WEATHERED ROCK -shattered -some silt -maximum 750mm material -estimate 90% +75mm										1.0	
2.0	END HOLE at 2.0m -refusal										2.0	
3.0											3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

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LOGGED BY: KJ  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 2.0 m  
COMPLETE: 95/09/18

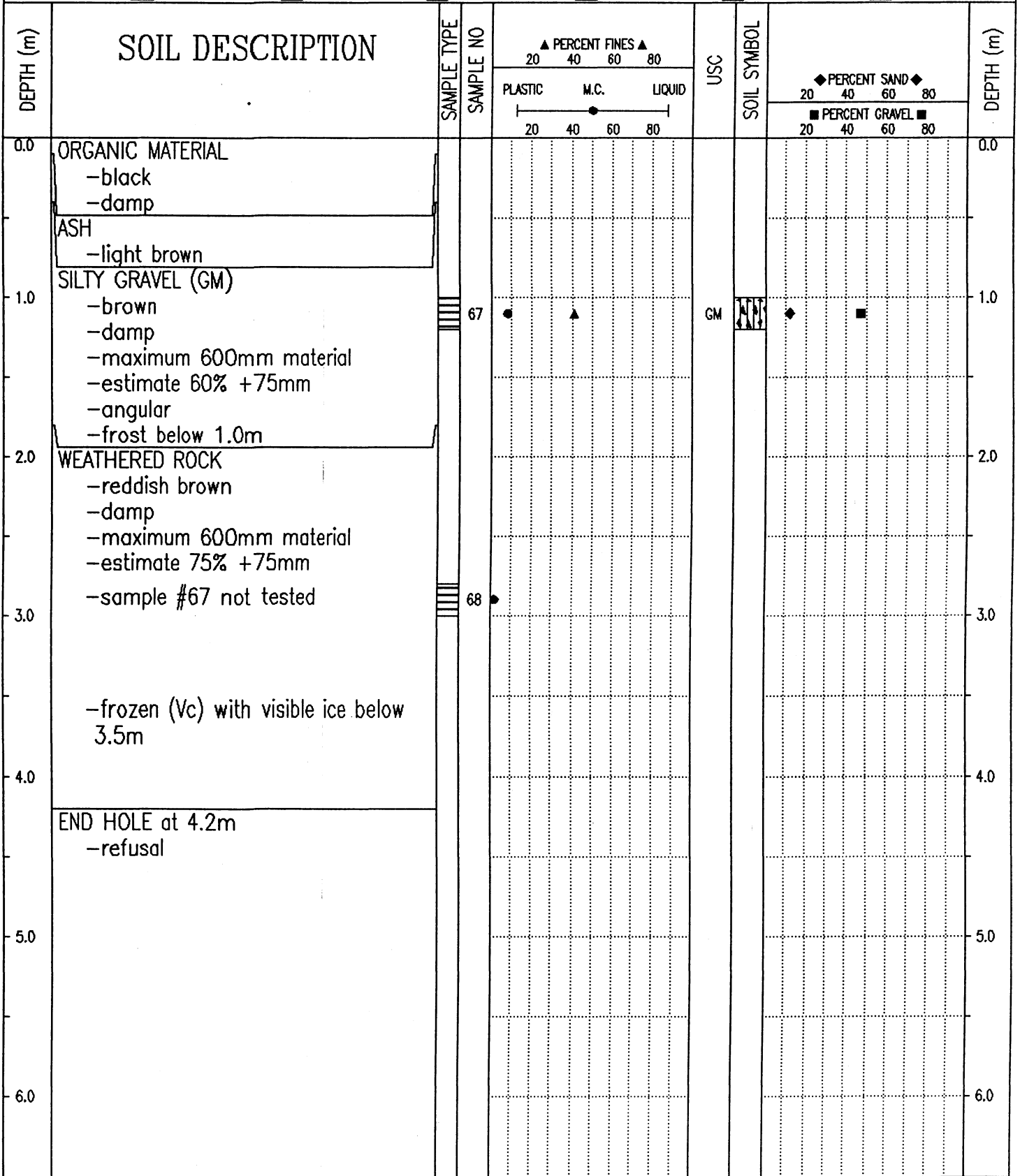
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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 265-372
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1855+460 o/s 30m Rt.	ELEVATION: 0.00 (m)
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					
0.0	ORGANIC MATERIAL ASH									0.0	
1.0	END HOLE at 0.8m -refusal									1.0	
2.0										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: GC	COMPLETION DEPTH: 0.8 m
	REVIEWED BY:	COMPLETE: 93/10/11
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SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 381-522
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172	LOCATION: Sta. 1855+480 o/s 12m 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: KJ	COMPLETION DEPTH: 4.2 m
REVIEWED BY:	COMPLETE: 95/09/19
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 265-373
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1855+500 o/s 25m 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	20	40	
0.0	ORGANIC MATERIAL													0.0	
	ASH														
	SANDY SILT (ML) -black -frozen														
1.0														1.0	
	END HOLE at 1.2m -refusal														
2.0														2.0	
3.0														3.0	
4.0														4.0	
5.0														5.0	
6.0														6.0	

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Transportation Engineering

LOGGED BY: GC  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 1.2 m  
COMPLETE: 93/10/11

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 381-517
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172	LOCATION: Sta. 1855+550 o/s 10m 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 MATERIAL -black -moist										0.0	
1.0	ASH -gray -frozen (Vx) with visible ice		56								1.0	
2.0	WEATHERED ROCK -shattered -some silt and organics -maximum 750mm material -estimate 85% +75mm										2.0	
3.0	END HOLE at 3.0m -refusal										3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

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LOGGED BY: KJ  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 95/09/18  
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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 265-374
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1855+550 o/s 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 ◆		PERCENT GRAVEL ■	DEPTH (m)
				20	40	60			80	20		
0.0	ORGANIC MATERIAL											0.0
	ASH											
1.0	SANDY SILT (ML) -black -organics	<input checked="" type="checkbox"/>	510		50		ML		50			1.0
2.0	END HOLE at 1.5m -refusal											2.0
3.0												3.0
4.0												4.0
5.0												5.0
6.0												6.0

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REVIEWED BY:

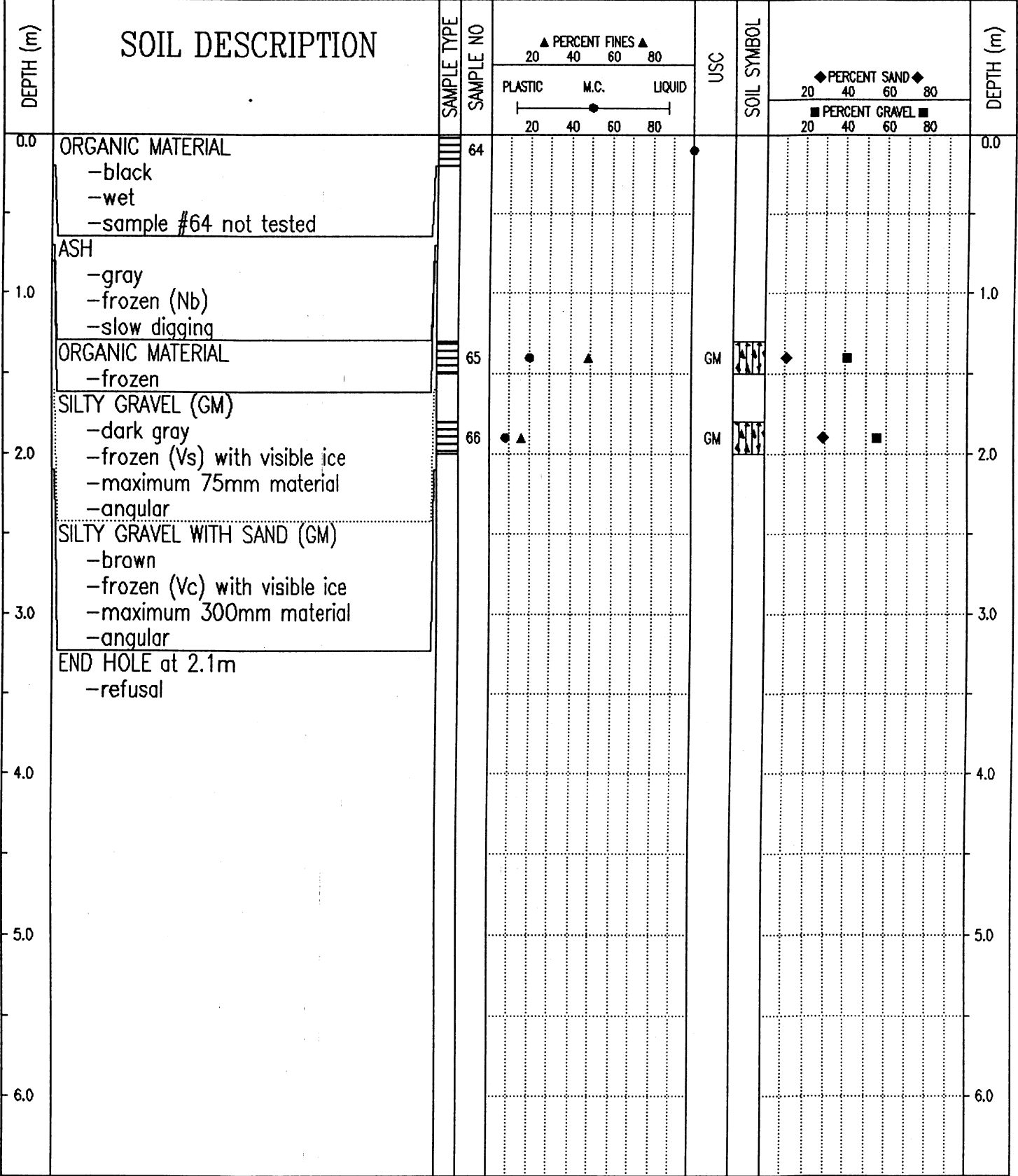
Fig. No:

COMPLETION DEPTH: 1.5 m

COMPLETE: 93/10/11

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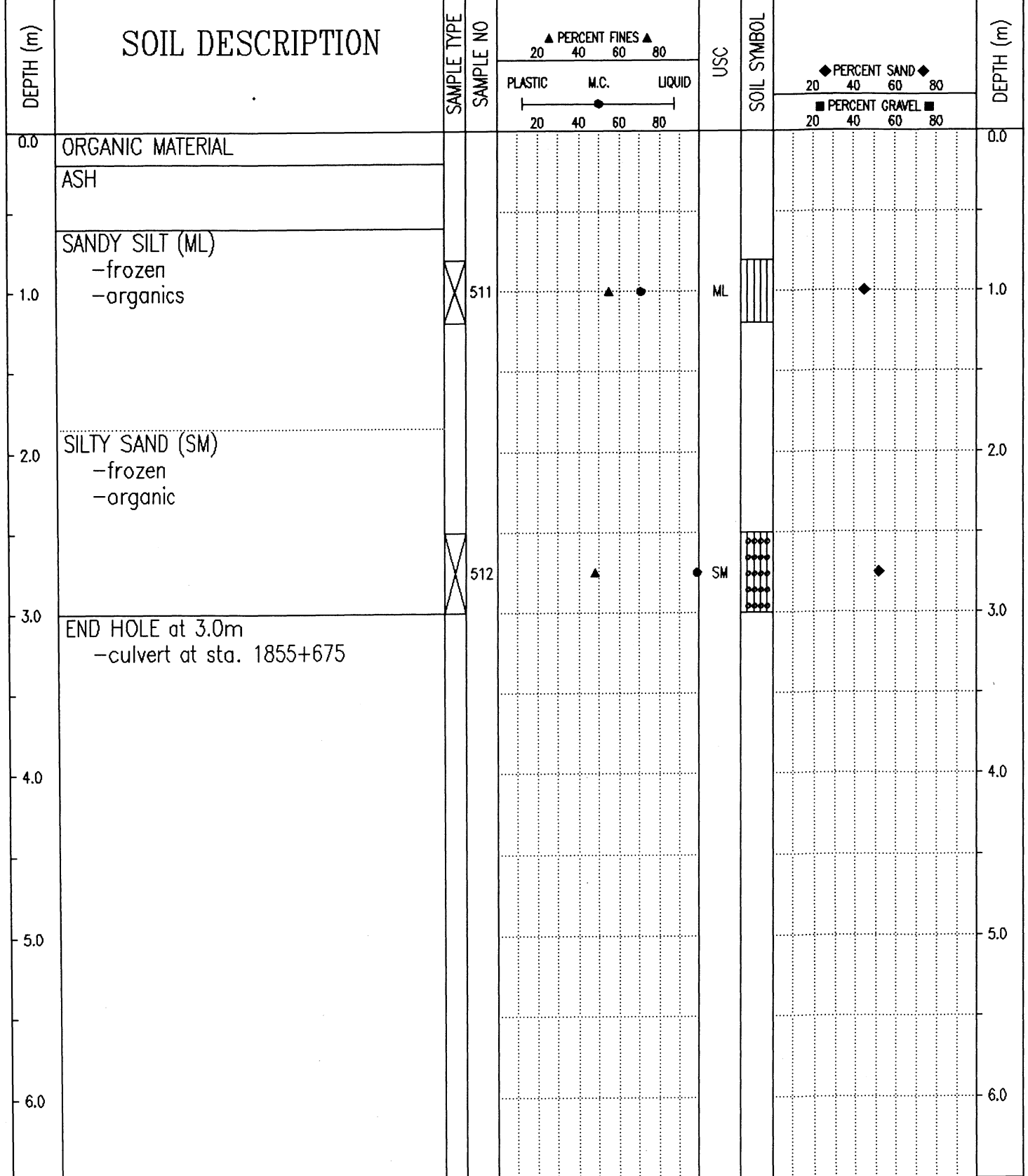
SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE



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LOGGED BY: KJ	COMPLETION DEPTH: 2.1 m
REVIEWED BY:	COMPLETE: 95/09/18
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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 265-375
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1855+640 o/s 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: GC

REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 93/10/11

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SUBSURFACE EXPLORATION AND TEST REPORT      SHAKWAK PROJECT      TEST HOLE NO: 381-518

ENGINEERING-CAPITAL      SEGMENT 15      Project No: 092-202101-0311

BACKHOE: HITACHI UH-172      LOCATION: Sta. 1855+725 o/s 13m 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	
0.0	ORGANIC MATERIAL -black -moist									0.0	
0.8	ASH -light brown -wet										
1.0	ORGANIC MATERIAL -black -moist		57		55	75	ML		55	1.0	
1.5	SILT WITH SAND (ML) -brown -frozen (Vs) with visible ice -organic		58	15	55	75	GM	15	55	1.5	
2.0	SILTY GRAVEL (GM) -brown -frozen (Vs) with visible ice -maximum 100mm material -estimate 20% +75mm -angular -slow hard digging									2.0	
3.0	WEATHERED ROCK -shattered -maximum 300mm material -estimate 90% +75mm -angular									3.0	
4.0	END HOLE at 2.8m -refusal									4.0	
5.0										5.0	
6.0										6.0	

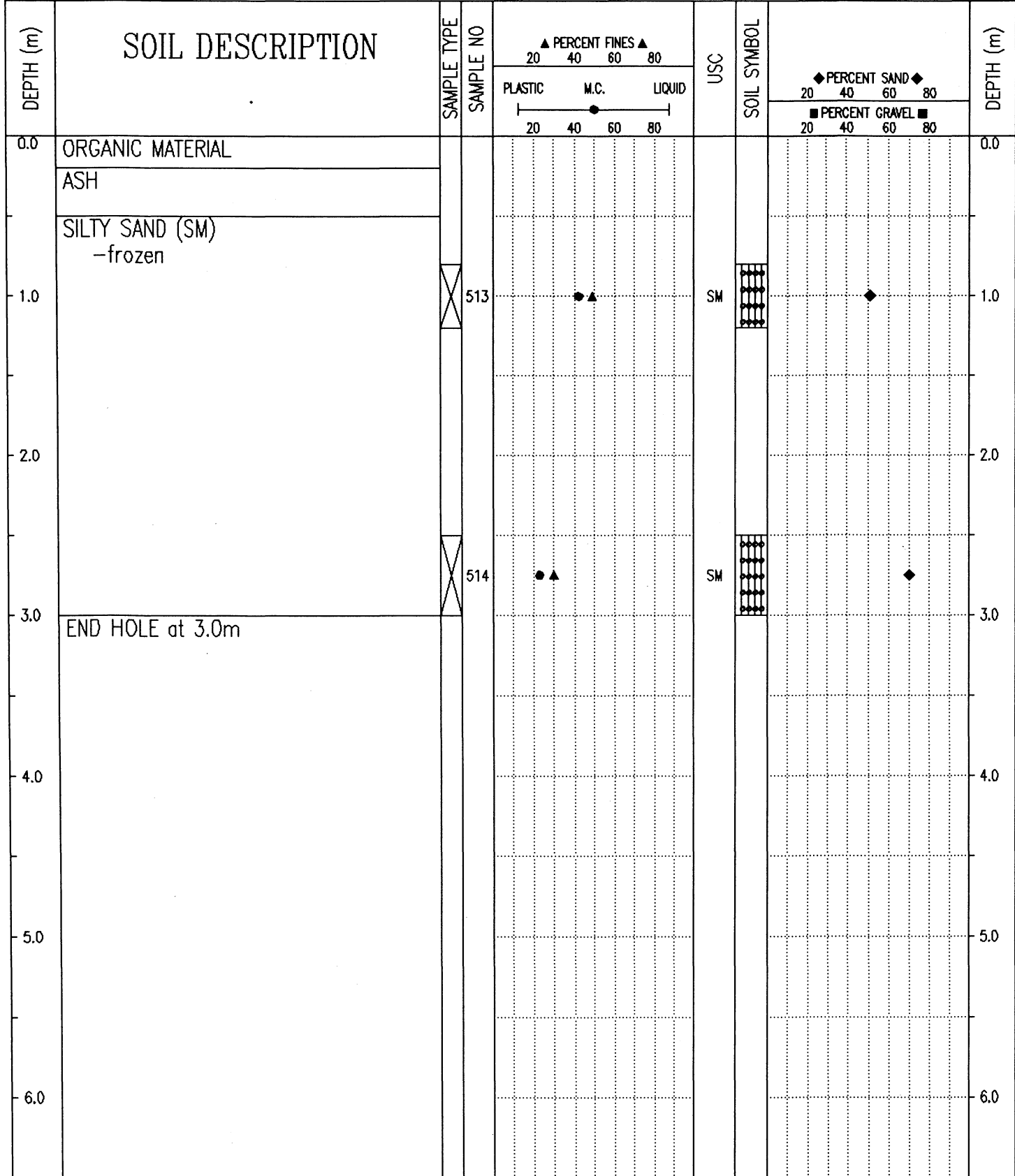
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Transportation Engineering

LOGGED BY: KJ  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 2.8 m  
COMPLETE: 95/09/18

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 265-376
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1855+725 o/s 30m Rt.	ELEVATION: 0.00 (m)

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



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LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 93/10/11
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 381-520
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172	LOCATION: Sta. 1855+785 o/s 18m 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

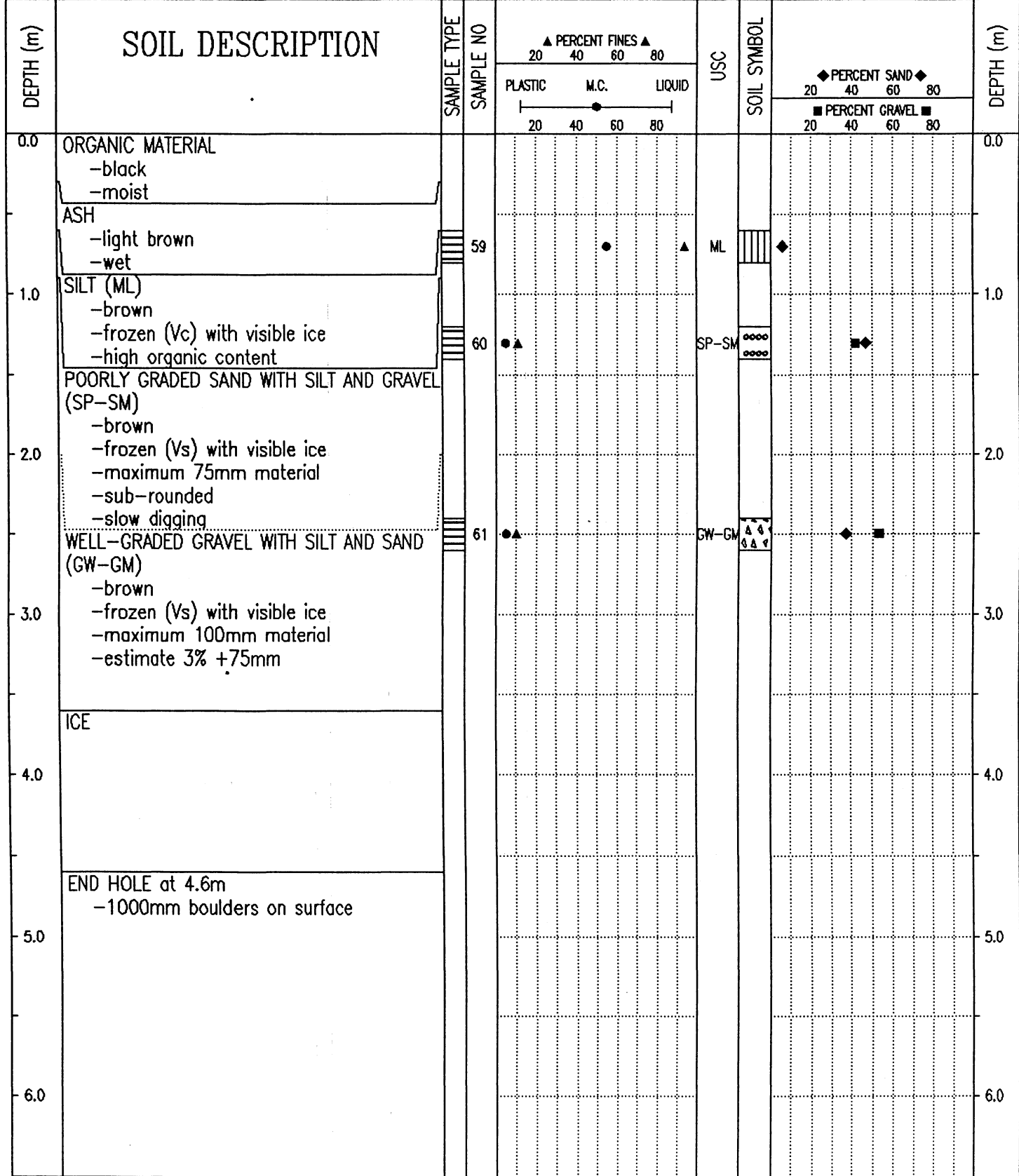
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	
0.0	POORLY GRADED GRAVEL WITH SILT (GP-GM) -brown -damp -organic -maximum 750mm material -estimate 50% +75mm -angular		62	▲			GP-GM	◆	■	0.0	
1.0	WEATHERED ROCK -reddish brown -maximum 750mm material -estimate 85% +75mm -angular									1.0	
2.0	-sample #63 not tested		63	●						2.0	
3.0	END HOLE at 3.0m -boulders to 1000mm on surface									3.0	
4.0										4.0	
5.0										5.0	
6.0										6.0	

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LOGGED BY: KJ	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 95/09/18
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SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 381-519
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172	LOCATION: Sta. 1855+825 o/s 18m Rt.	ELEVATION: 0.00 (m)

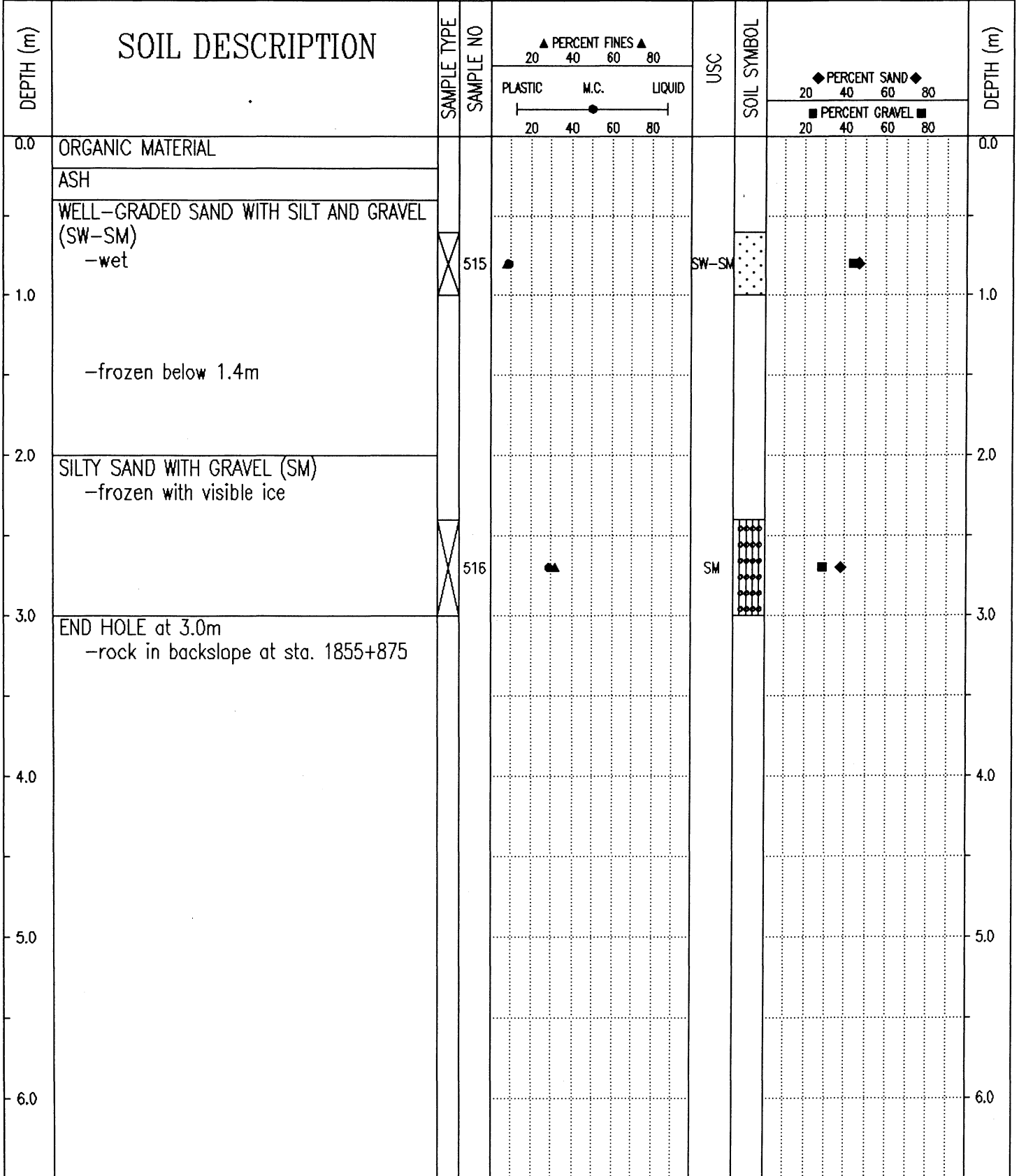
SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE



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LOGGED BY: KJ	COMPLETION DEPTH: 4.6 m
REVIEWED BY:	COMPLETE: 95/09/18
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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 265-377
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1855+890 o/s 25m 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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Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 93/10/11

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SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 366-204
ENGINEERING-CAPITAL	SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: Sta. 1855+900 o/s 10m Lt.	ELEVATION: 0.00 (m)

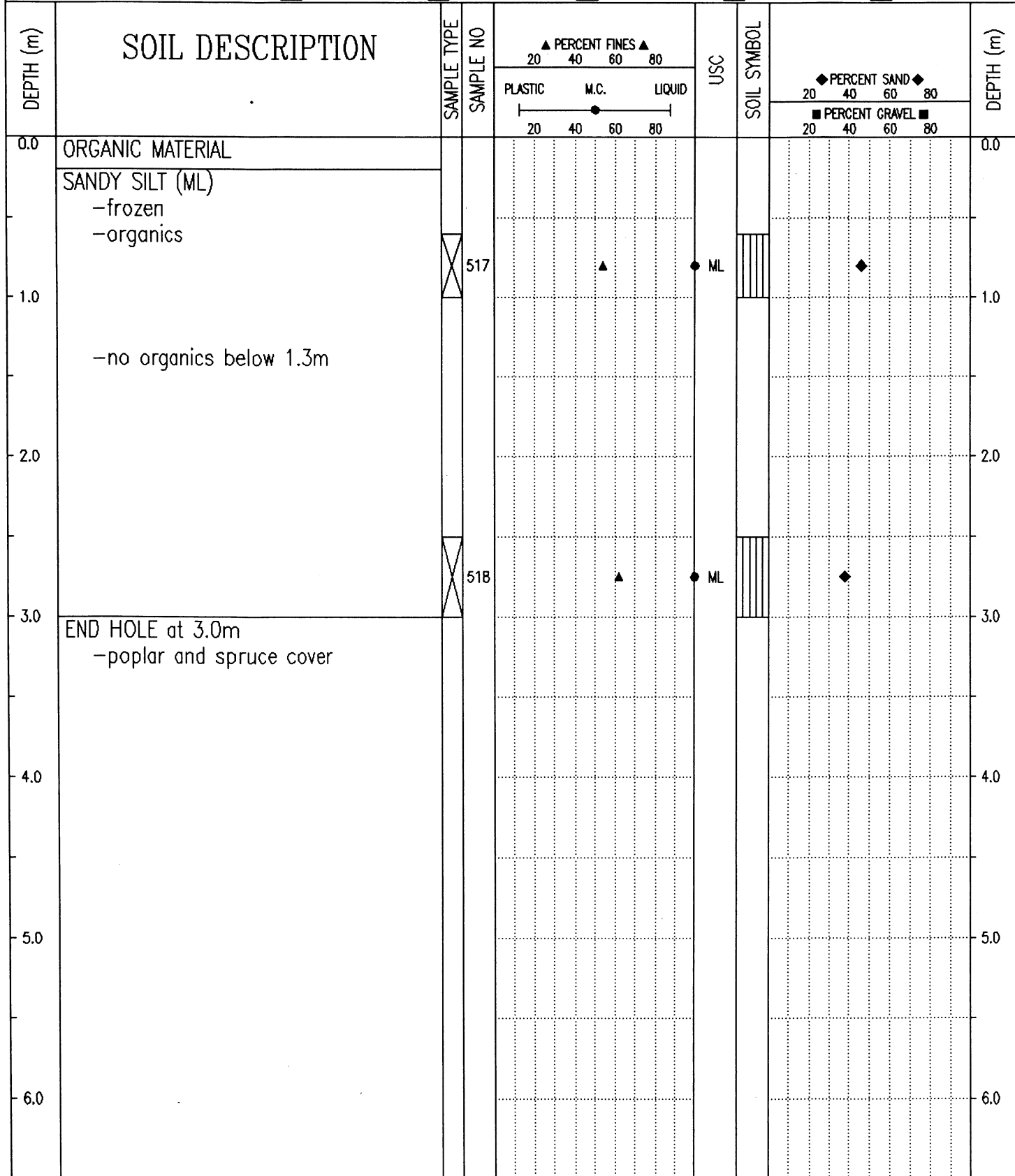
SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				20	40	60			80	20	40	60	
0.0	ORGANIC MATERIAL -dark brown -moist -smooth drilling											0.0	
1.0	SILTY SAND WITH GRAVEL (SM) -gray -wet -grindy drilling END HOLE at 1.0m -refusal twice -rock dust on bit	<input checked="" type="checkbox"/>	476	▲				SM	◆	■		1.0	
2.0												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: 1.0 m  
COMPLETE: 95/06/12  
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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 265-378
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1856+025 o/s 25m 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		



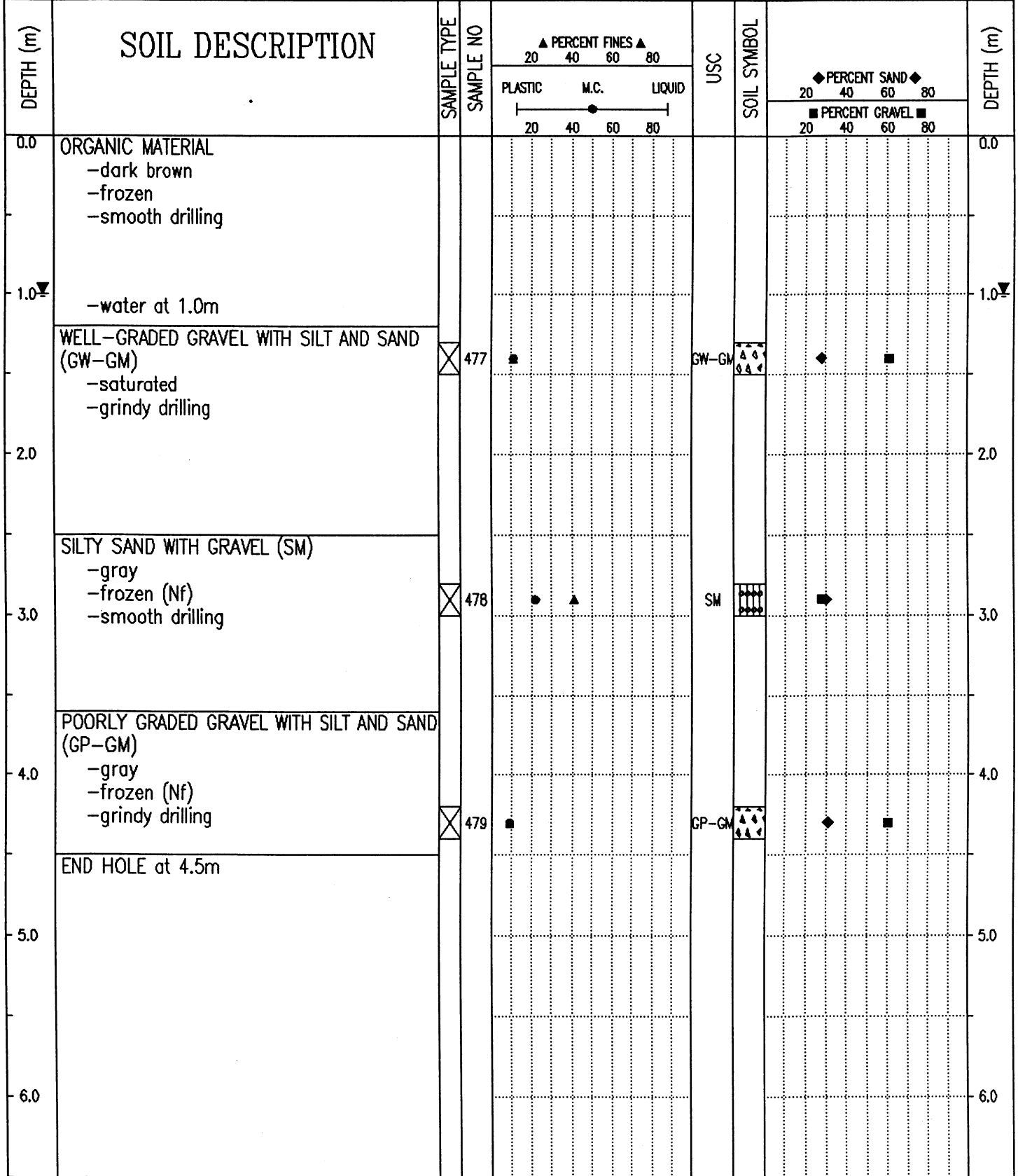
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Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 93/10/11

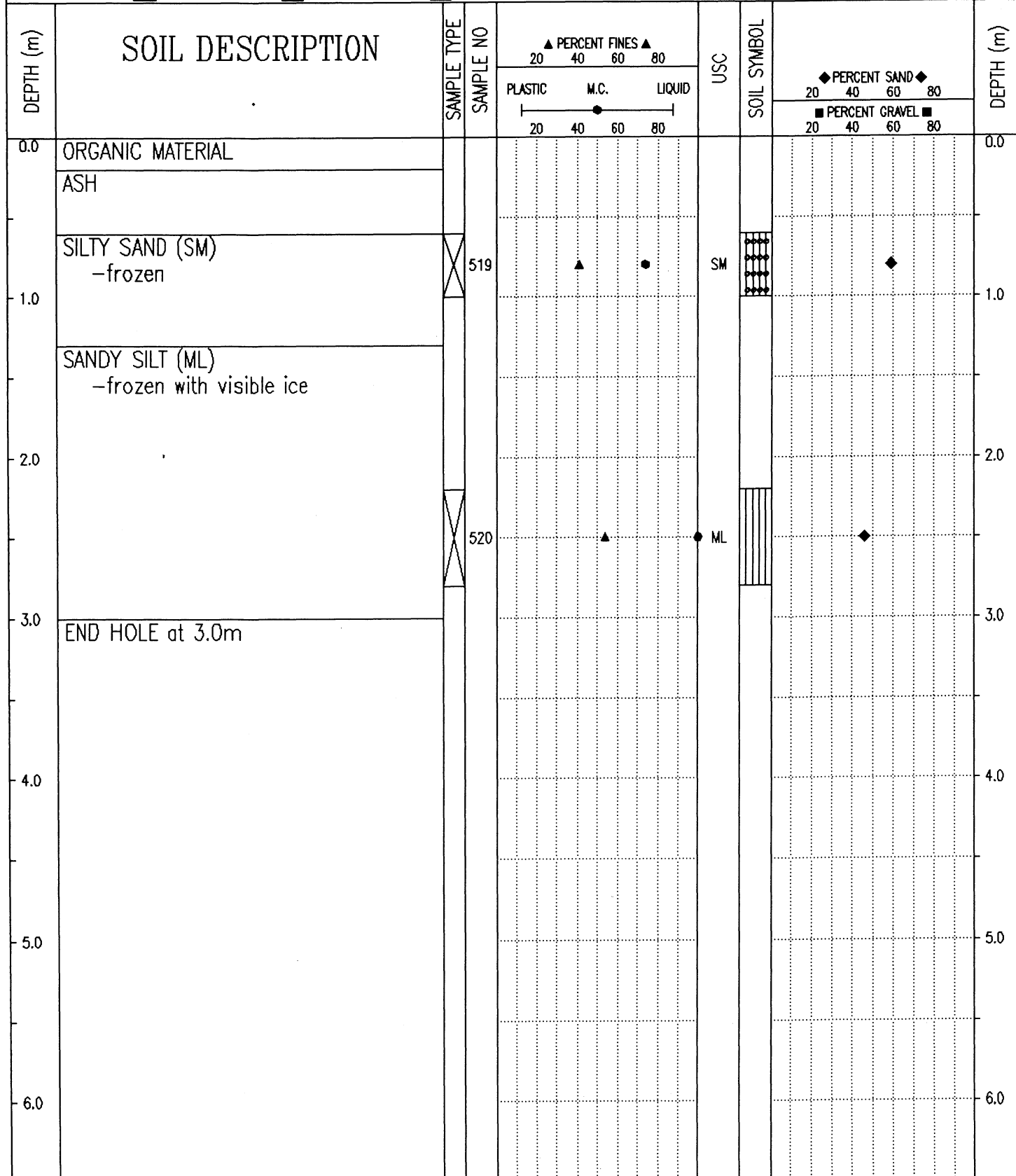
SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 366-205
ENGINEERING-CAPITAL	SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: Sta. 1856+030 o/s 10m Lt.	ELEVATION: 0.00 (m)

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



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	REVIEWED BY:	COMPLETE: 95/06/12
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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 265-379
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1856+150 o/s 25m 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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Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 93/10/12

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SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 366-206
ENGINEERING-CAPITAL	SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: Sta. 1856+175 o/s 8m 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.	LIQUID			20	80	
0.0	ORGANIC MATERIAL -dark brown -wet -smooth drilling										0.0
1.0	ASH -light gray -wet										1.0
2.0	ORGANIC MATERIAL -dark brown -wet  -frozen with visible ice below 2.4m -denser drilling below 2.4m										2.0
3.0											3.0
4.0	SILTY SAND (SM) -gray -frozen (Nb)										4.0
4.6	END HOLE at 4.6m	<input checked="" type="checkbox"/>	480				SM				4.6
5.0											5.0
6.0											6.0

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	REVIEWED BY:	COMPLETE: 95/06/12
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SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 366-207
ENGINEERING-CAPITAL	SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: Sta. 1856+275 o/s 8m 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.	LIQUID			20	40	
0.0	ORGANIC MATERIAL -dark brown -frozen -smooth drilling										0.0
1.0	ASH -light gray -saturated										1.0
2.0	ORGANIC MATERIAL -dark brown										2.0
3.0	-frozen below 2.5m -denser drilling below 2.5m										3.0
4.0											4.0
5.0	END HOLE at 4.5m										5.0
6.0											6.0

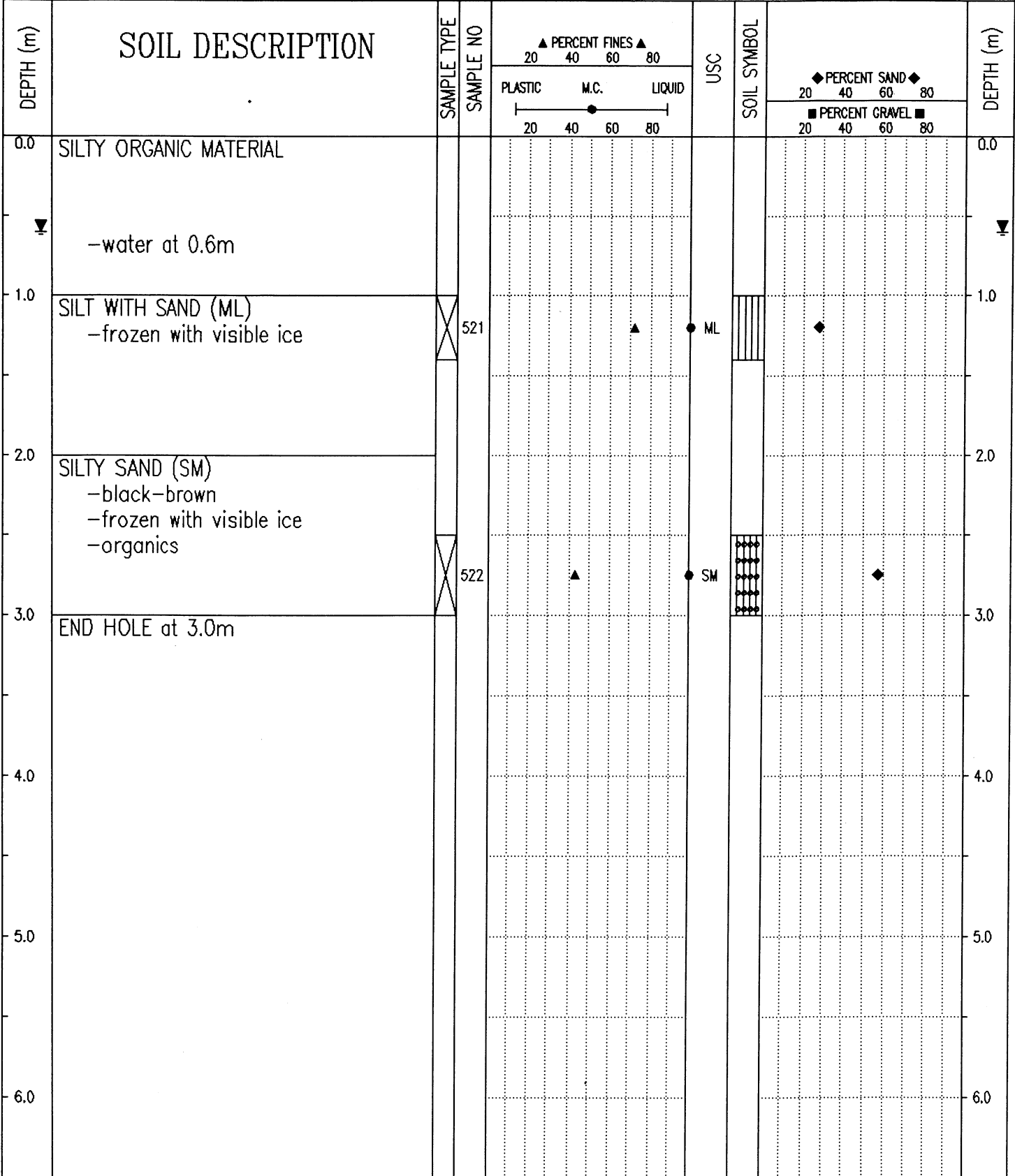
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Fig. No:

COMPLETION DEPTH: 4.5 m  
COMPLETE: 95/06/12  
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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 265-380
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1856+300 o/s 40m Rt.	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: 93/10/12

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 366-208
ENGINEERING-CAPITAL		SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER		LOCATION: Sta. 1856+399 o/s 12m 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

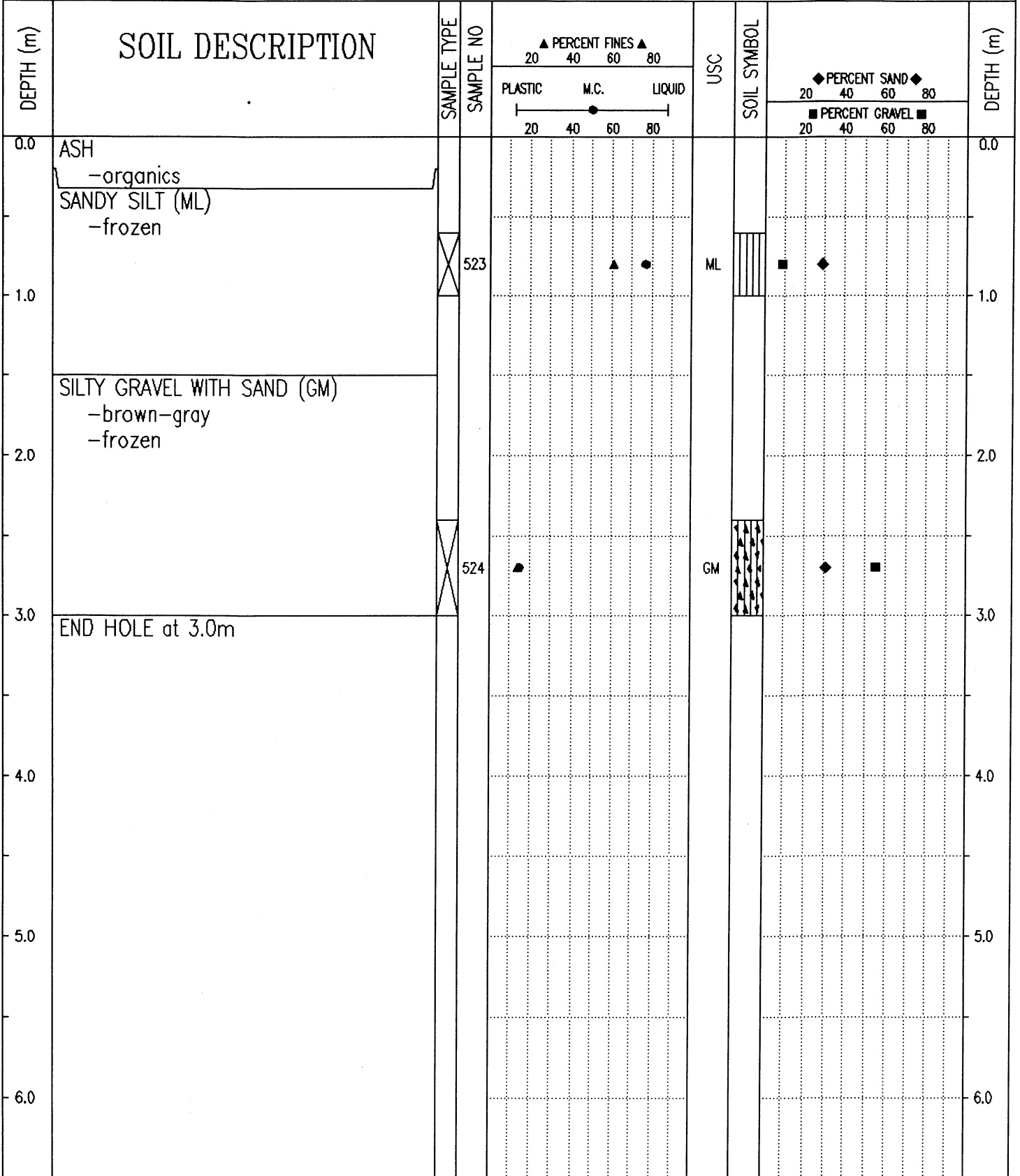
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC MATERIAL -dark brown -saturated -smooth drilling											0.0
1.0	ASH -light gray -saturated											1.0
2.0	ORGANIC MATERIAL -dark brown -saturated  -frozen below 2.0m -denser drilling below 2.0m											2.0
3.0	ICE ORGANIC MATERIAL -dark brown -frozen											3.0
4.0	SILTY GRAVEL WITH SAND (GM) -gray -frozen (Nf) -grindy drilling END HOLE at 4.5m	<input checked="" type="checkbox"/>	481	●	▲		GM	◆	■			4.0
5.0												5.0
6.0												6.0

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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 4.5 m  
COMPLETE: 95/06/12

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 265-381
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1856+400 o/s 40m 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		

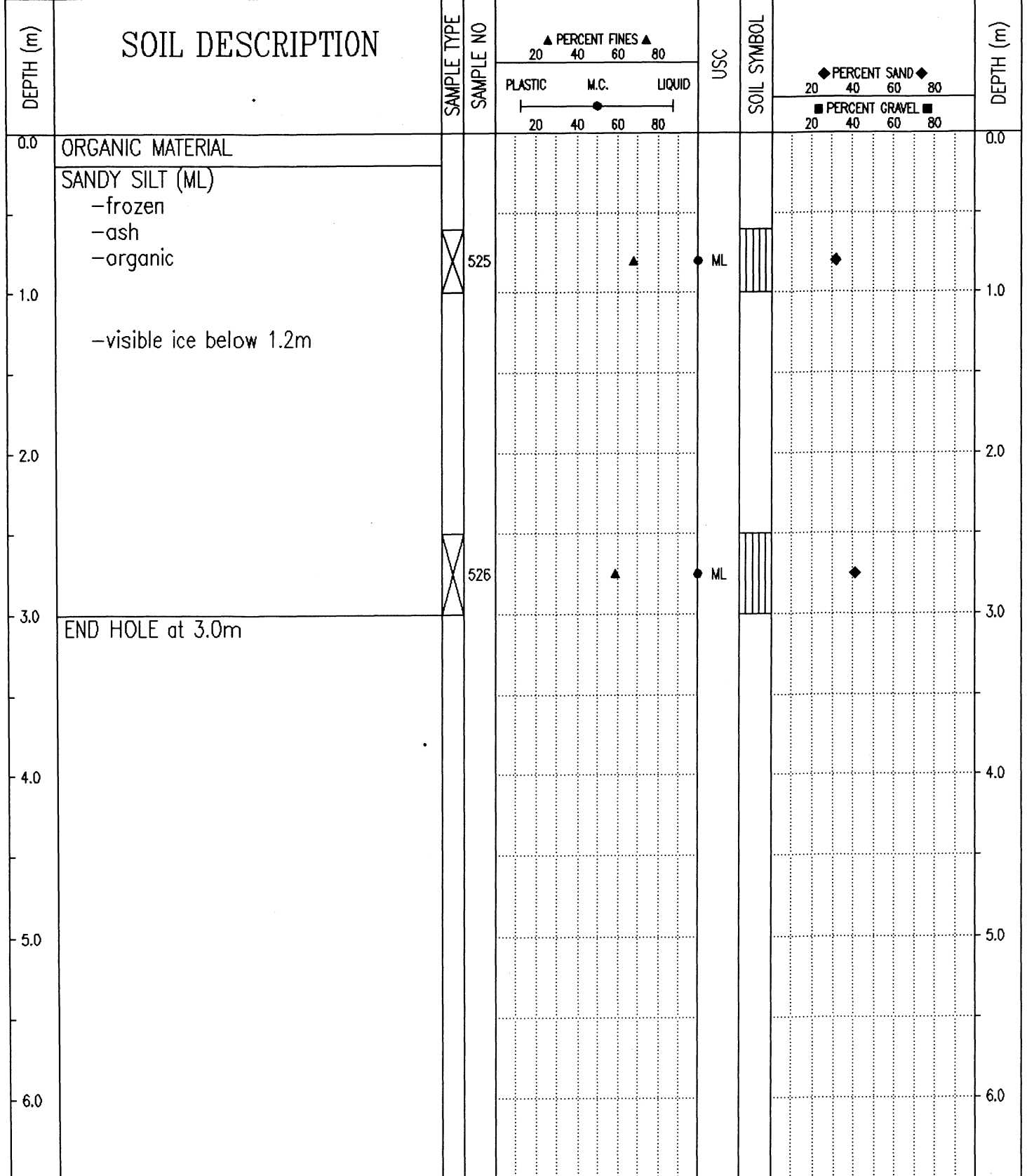


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Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 93/10/12

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 265-382
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1856+500 o/s 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: 93/10/12
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SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 366-209
ENGINEERING-CAPITAL	SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: Sta. 1856+501 o/s 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		

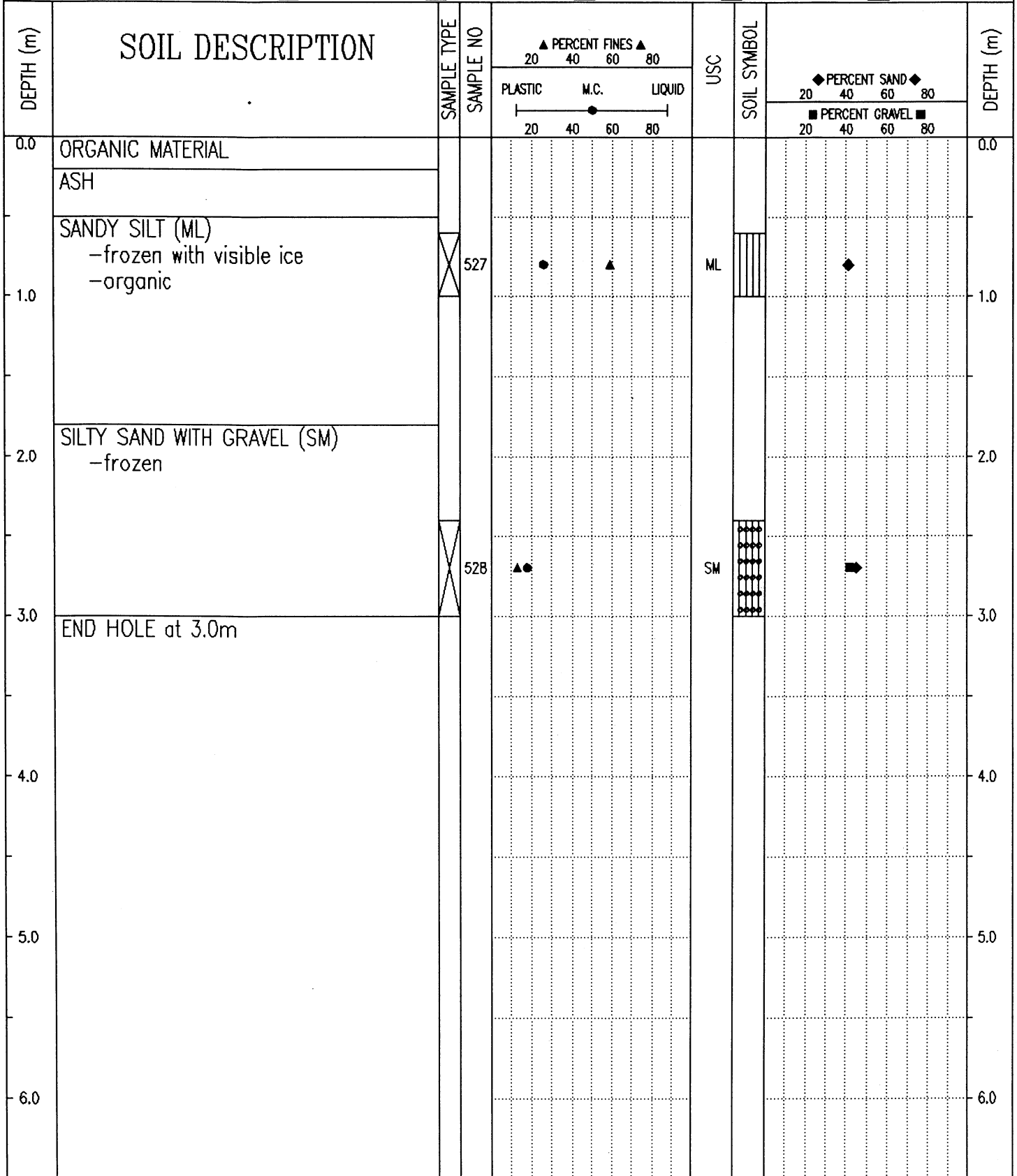
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	
0.0	ORGANIC MATERIAL -dark brown -frozen with visible ice -smooth drilling										0.0
1.0											1.0
2.0											2.0
3.0	END HOLE at 3.0m -refusal -rock dust on bit										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: 95/06/12

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 265-383
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1856+600 o/s 10m 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		

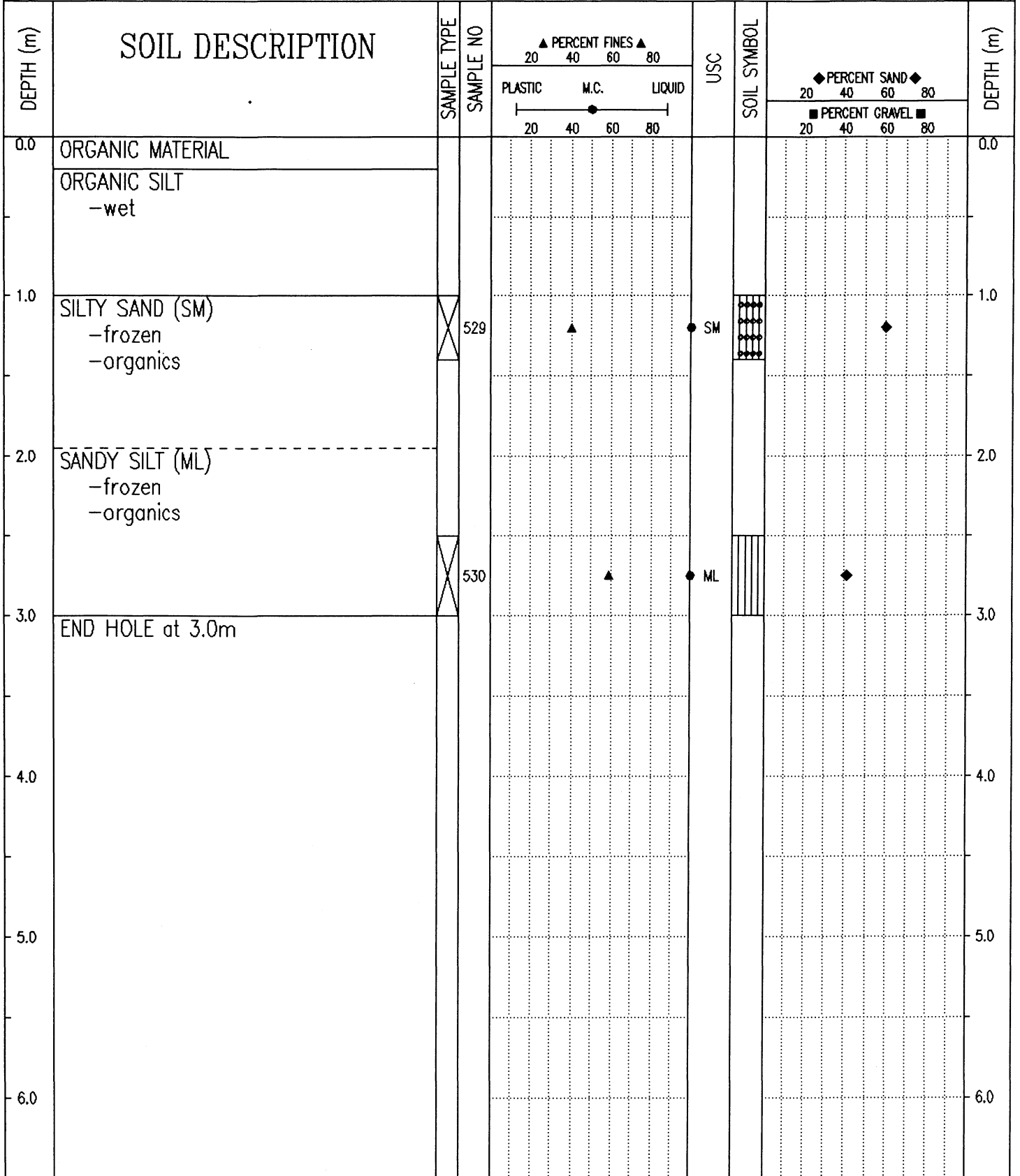


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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 93/10/12

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 265-384
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1856+700 o/s 2m 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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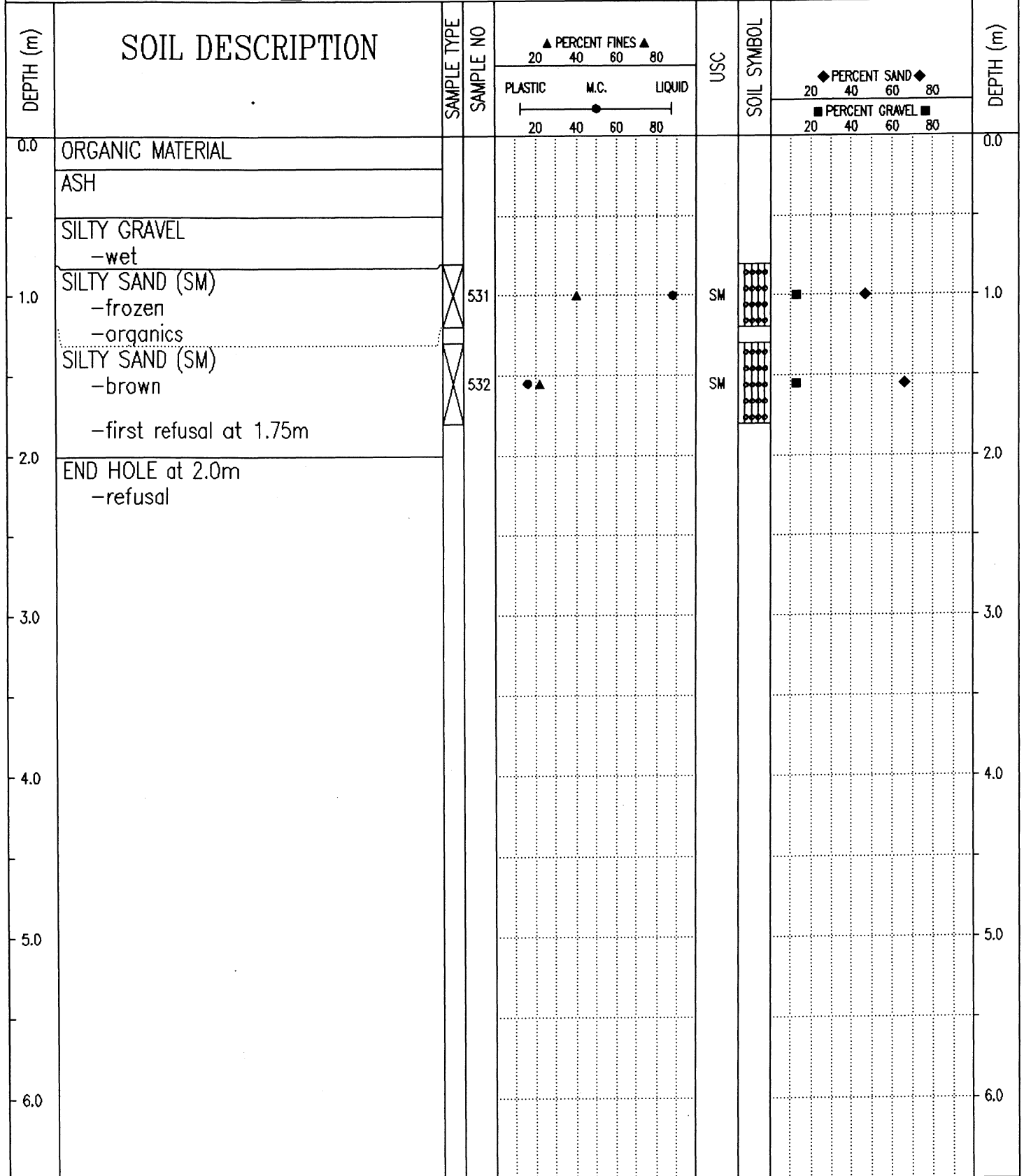
Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 93/10/12

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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 265-385
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1856+800 o/s 5m 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:

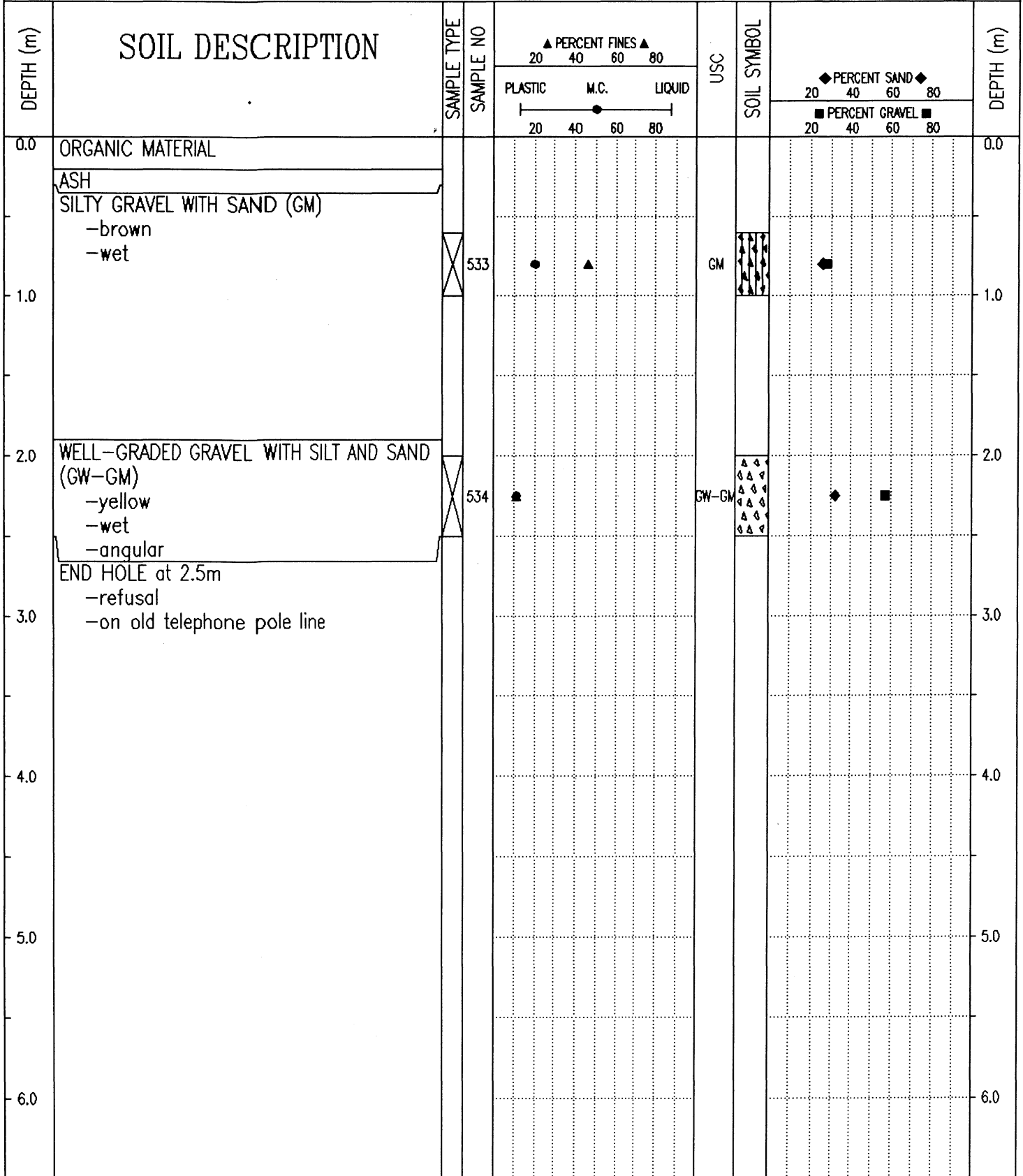
COMPLETION DEPTH: 2.0 m  
COMPLETE: 93/10/12

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 366-210
ENGINEERING-CAPITAL		SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER		LOCATION: Sta. 1856+800 o/s 10m 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)
				20	40	60			80	20		
0.0	ORGANIC MATERIAL -dark brown -frozen with visible ice -smooth drilling											0.0
2.0	END HOLE at 2.0m -refusal twice -rock dust on bit											2.0
3.0												3.0
4.0												4.0
5.0												5.0
6.0												6.0

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	REVIEWED BY:	COMPLETE: 95/06/12
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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 265-386
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1856+900 o/s 10m 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	



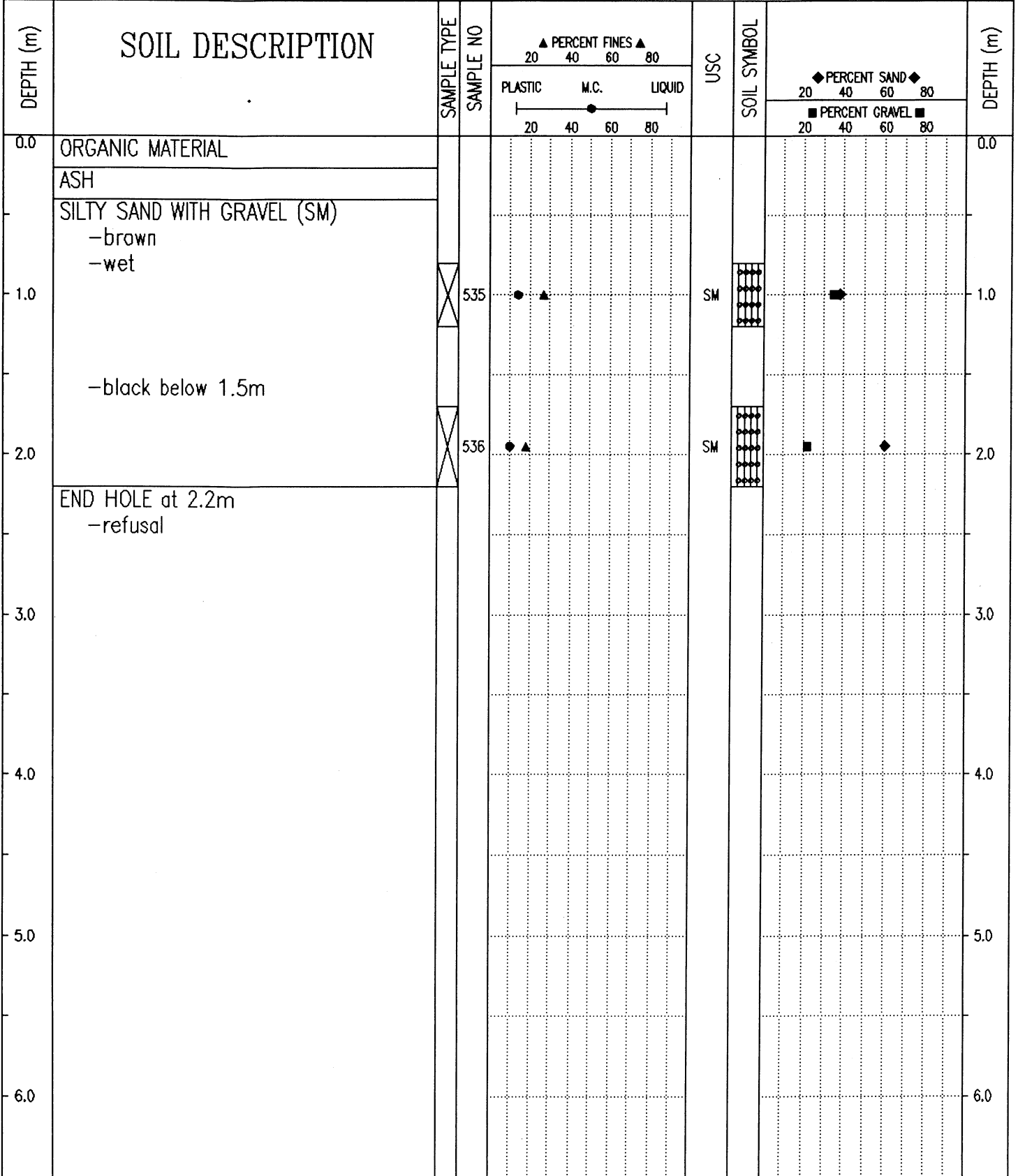
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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 2.5 m  
COMPLETE: 93/10/12

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 265-387
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1857+000 o/s 10m Rt.	ELEVATION: 0.00 (m)

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



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Fig. No:

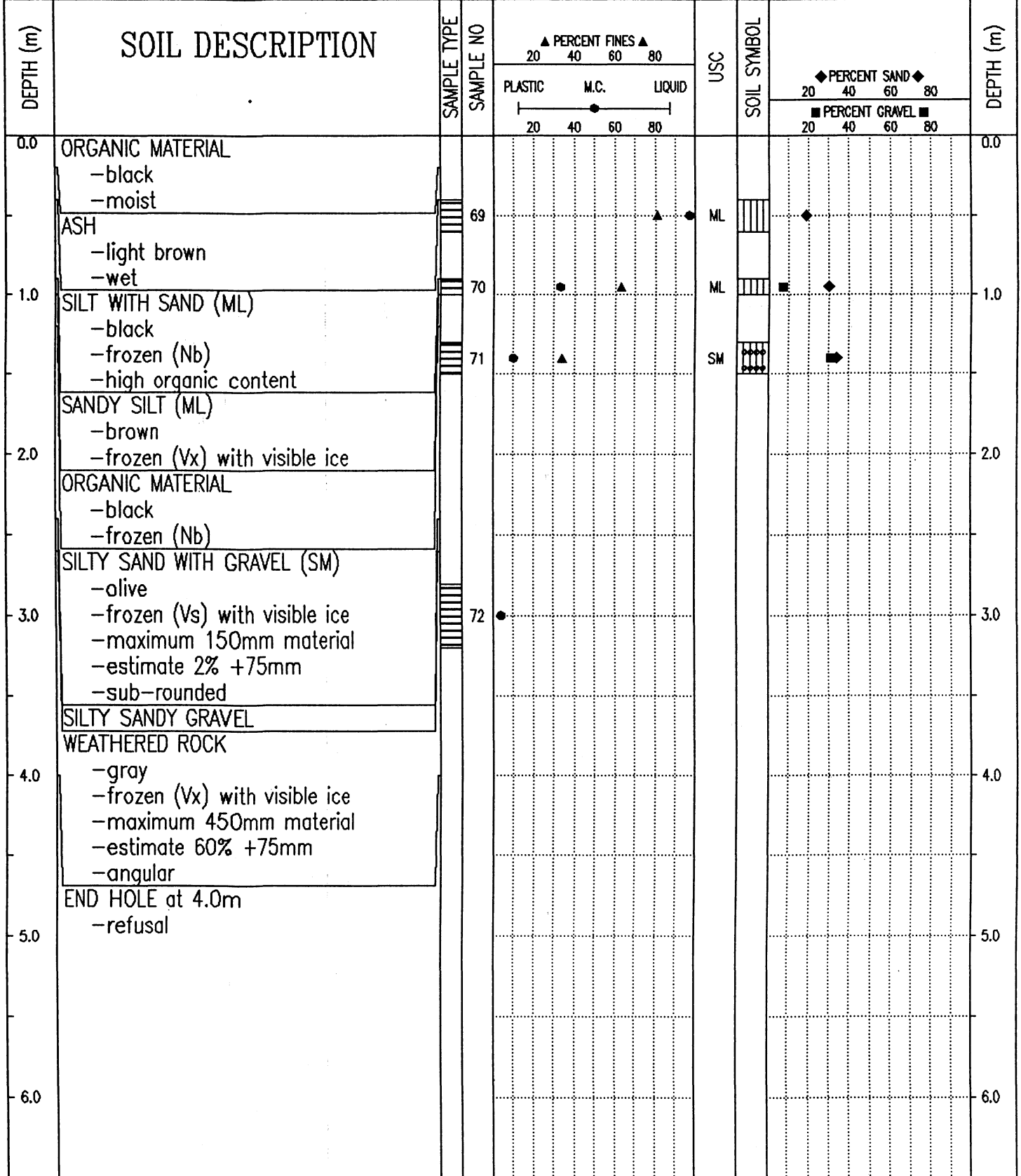
COMPLETION DEPTH: 2.2 m

COMPLETE: 93/10/12

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SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 381-523
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172	LOCATION: Sta. 1857+025 o/s 8m Rt.	ELEVATION: 0.00 (m)

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

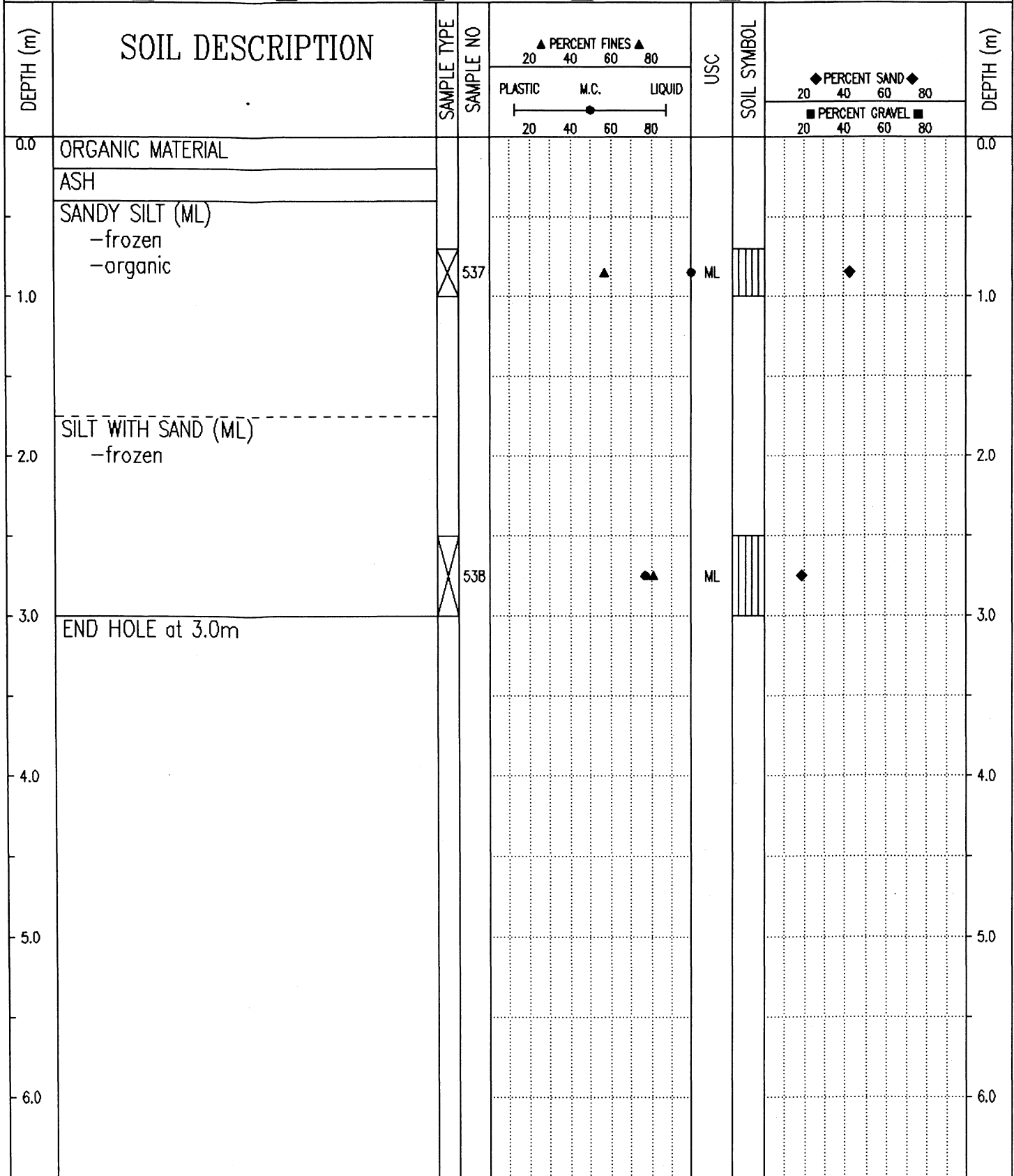


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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 4.0 m  
COMPLETE: 95/09/19

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 265-388
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1857+100 o/s 10m 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		



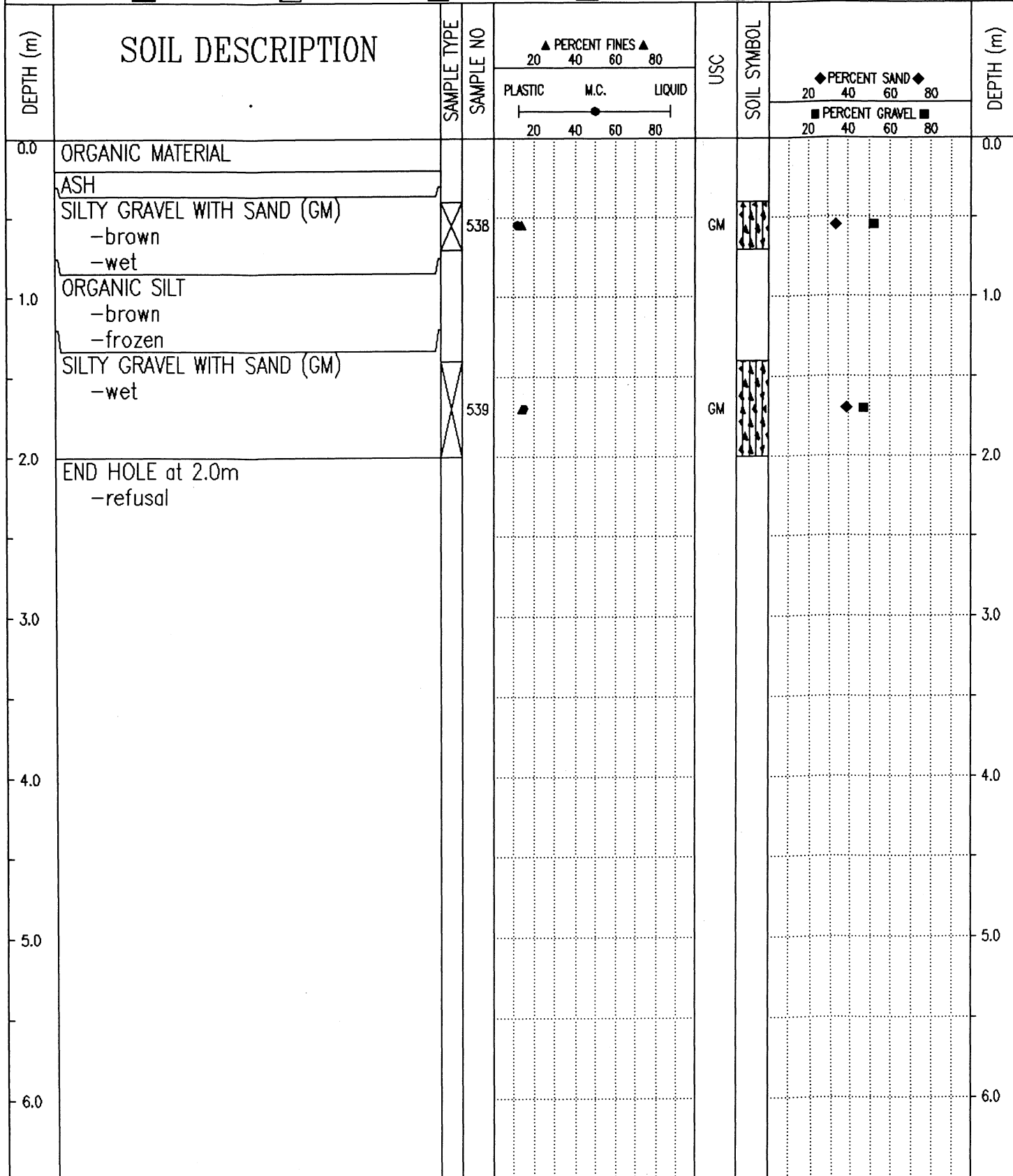
Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
	REVIEWED BY:	COMPLETE: 93/10/12
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SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 366-211
ENGINEERING-CAPITAL	SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: Sta. 1857+123 o/s 8m 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			20	40	
0.0	ORGANIC MATERIAL -dark brown -frozen -smooth drilling										0.0
1.0	SILTY SAND WITH GRAVEL -brown -frozen (Nf) -weathered rock -grindy drilling -first refusal at 0.8m	<input checked="" type="checkbox"/>	482	● ▲			SM	■ ◆			1.0
2.0	END HOLE at 1.4m -refusal -rock dust on bit										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: CC	COMPLETION DEPTH: 1.4 m
	REVIEWED BY:	COMPLETE: 95/06/12
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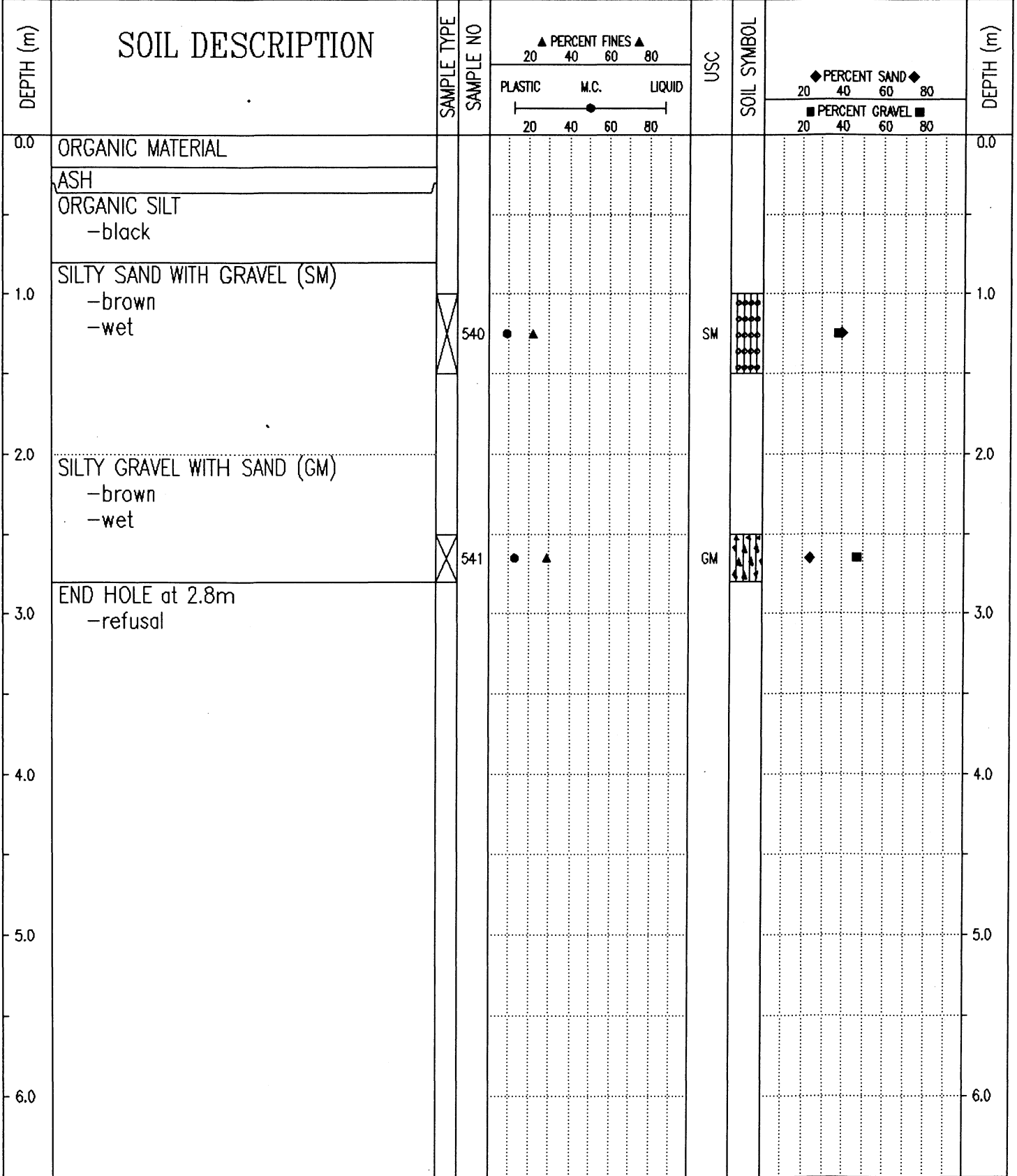
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 265-389
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1857+200 o/s 12m Rt.	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<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

LOGGED BY: GC	COMPLETION DEPTH: 2.0 m
REVIEWED BY:	COMPLETE: 93/10/12
Fig. No:	Page 1 of 1

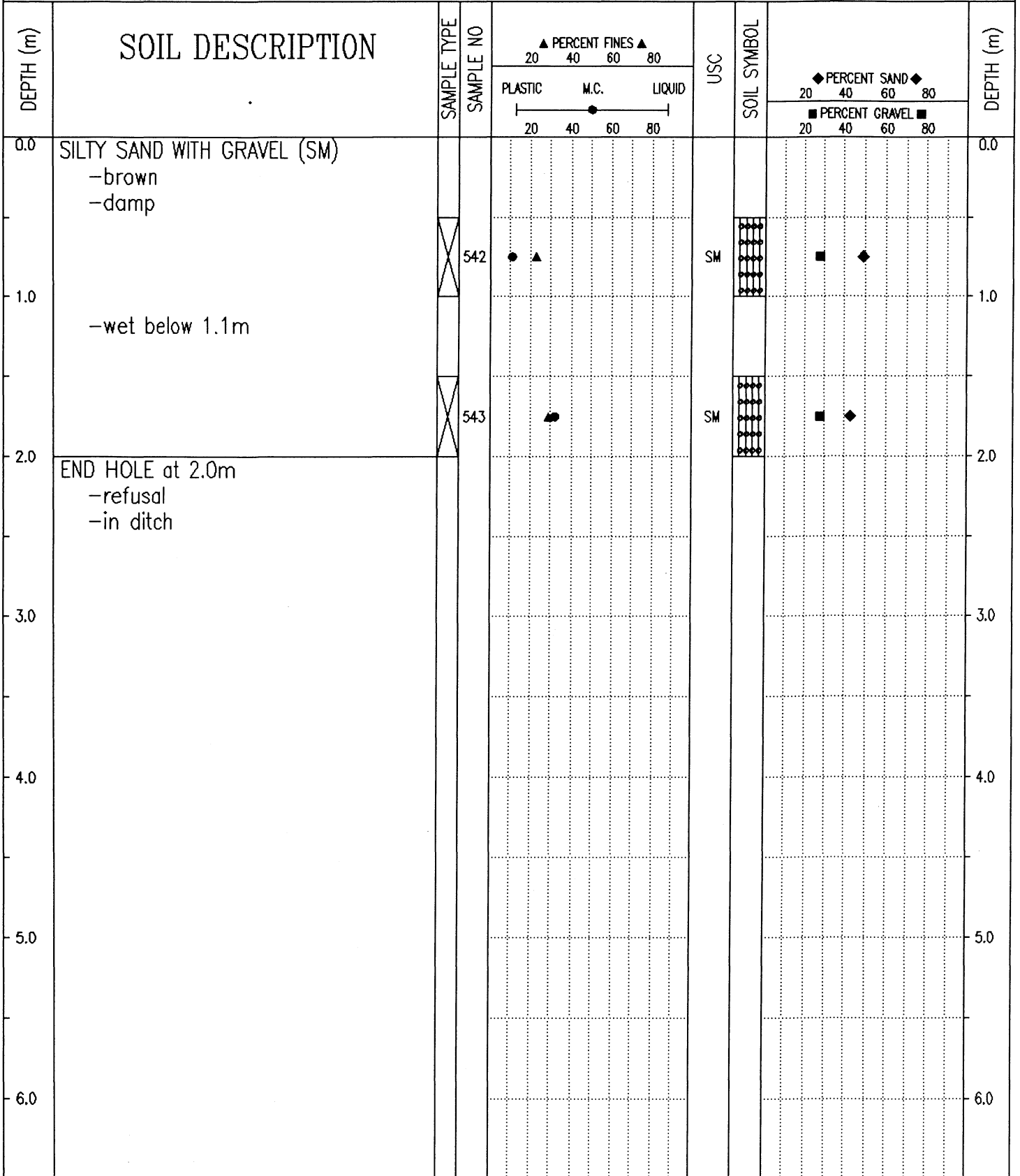
SAMPLE TYPE  RETURN     S.P.T.     AUGER     BULK     TUBE     CORE



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LOGGED BY: GC	COMPLETION DEPTH: 2.8 m
REVIEWED BY:	COMPLETE: 93/10/12
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 265-391
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1857+310 o/s 2m 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

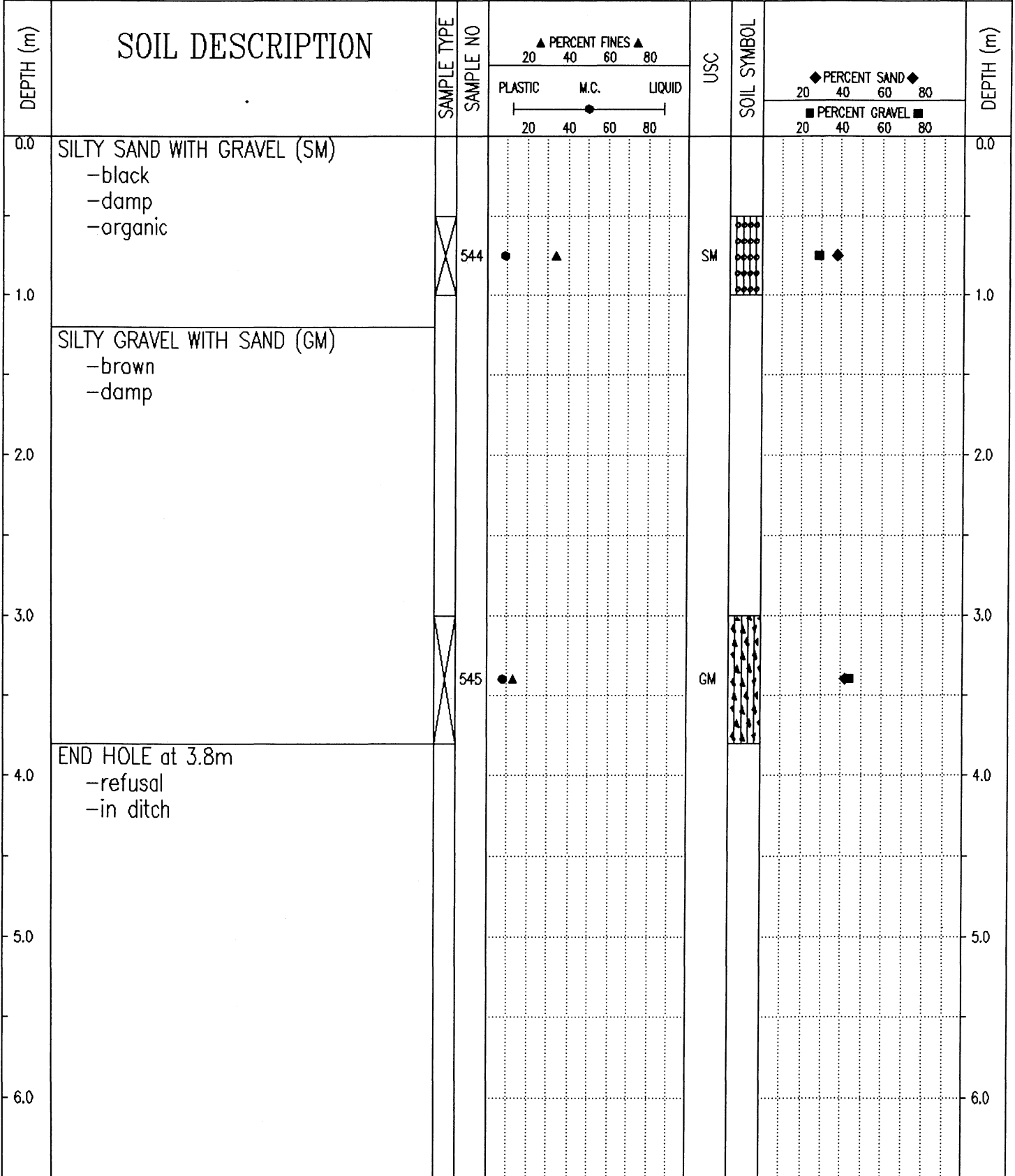


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Transportation Engineering

LOGGED BY: GC  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 2.0 m  
COMPLETE: 93/10/12

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 265-392
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL:CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1857+400 o/s 3m 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

LOGGED BY: GC  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.8 m  
COMPLETE: 93/10/12

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 381-524
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172	LOCATION: Sta. 1857+400 o/s 12m Lt.	ELEVATION: 0.00 (m)

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

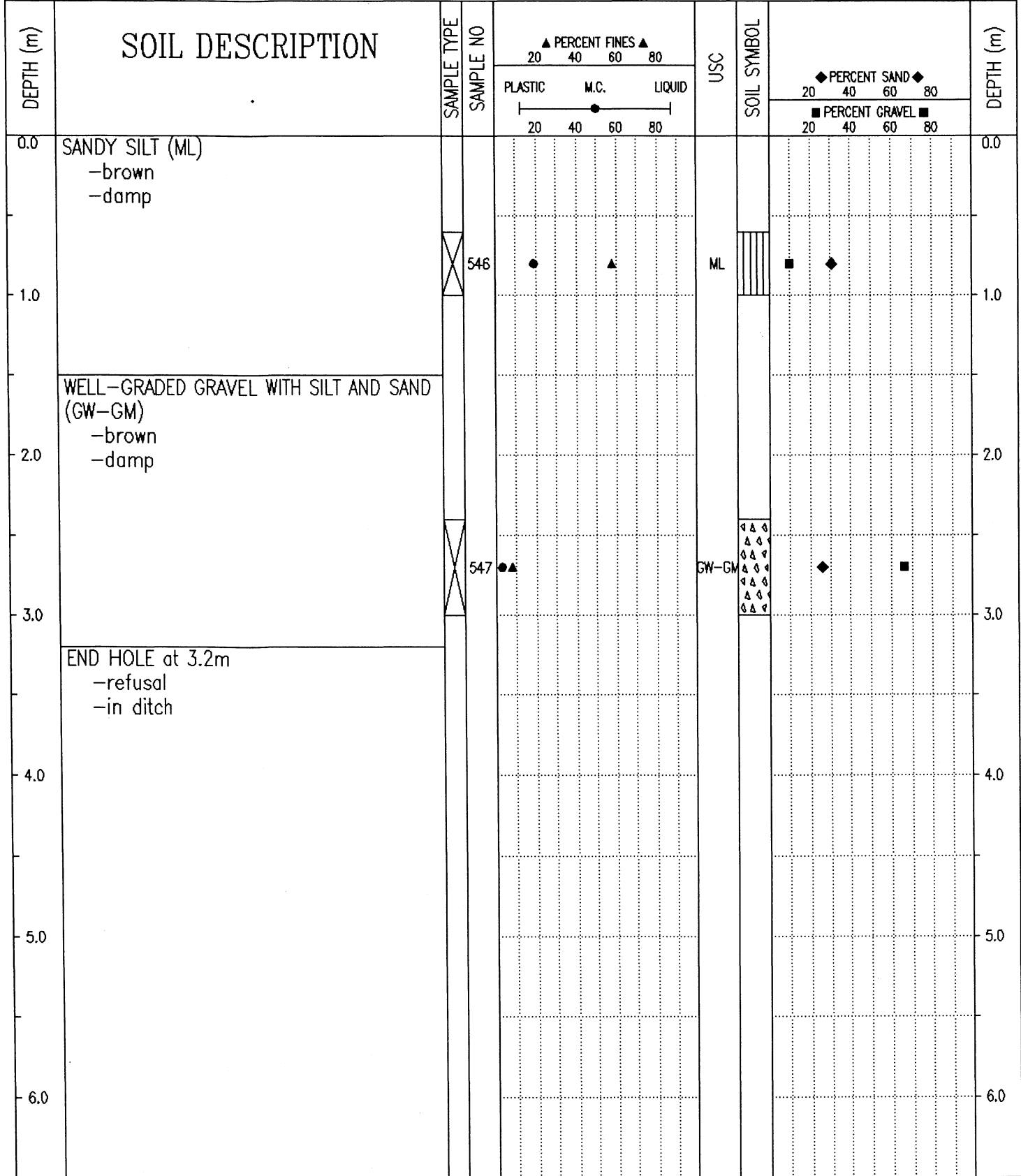
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND		PERCENT GRAVEL	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40		
0.0	ORGANIC MATERIAL -black -moist										0.0	
	ASH -rust -wet											
1.0	ORGANIC MATERIAL -black -wet -frozen below 0.8m										1.0	
2.0	SILTY SAND WITH GRAVEL (SM) -olive -frozen (Vc) with visible ice -maximum 150mm material -estimate 1% +75mm -sub-rounded -water at 2.0m		73	●	▲		SM	◆	■		2.0	
3.0	END HOLE at 2.8m -caving in										3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 2.8 m  
COMPLETE: 95/09/19

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST HOLE NO: 266-393	
SHAKWAK PROJECT		SEGMENT 15		Project No: 202101-0311-193	
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1857+450 o/s 3m 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	

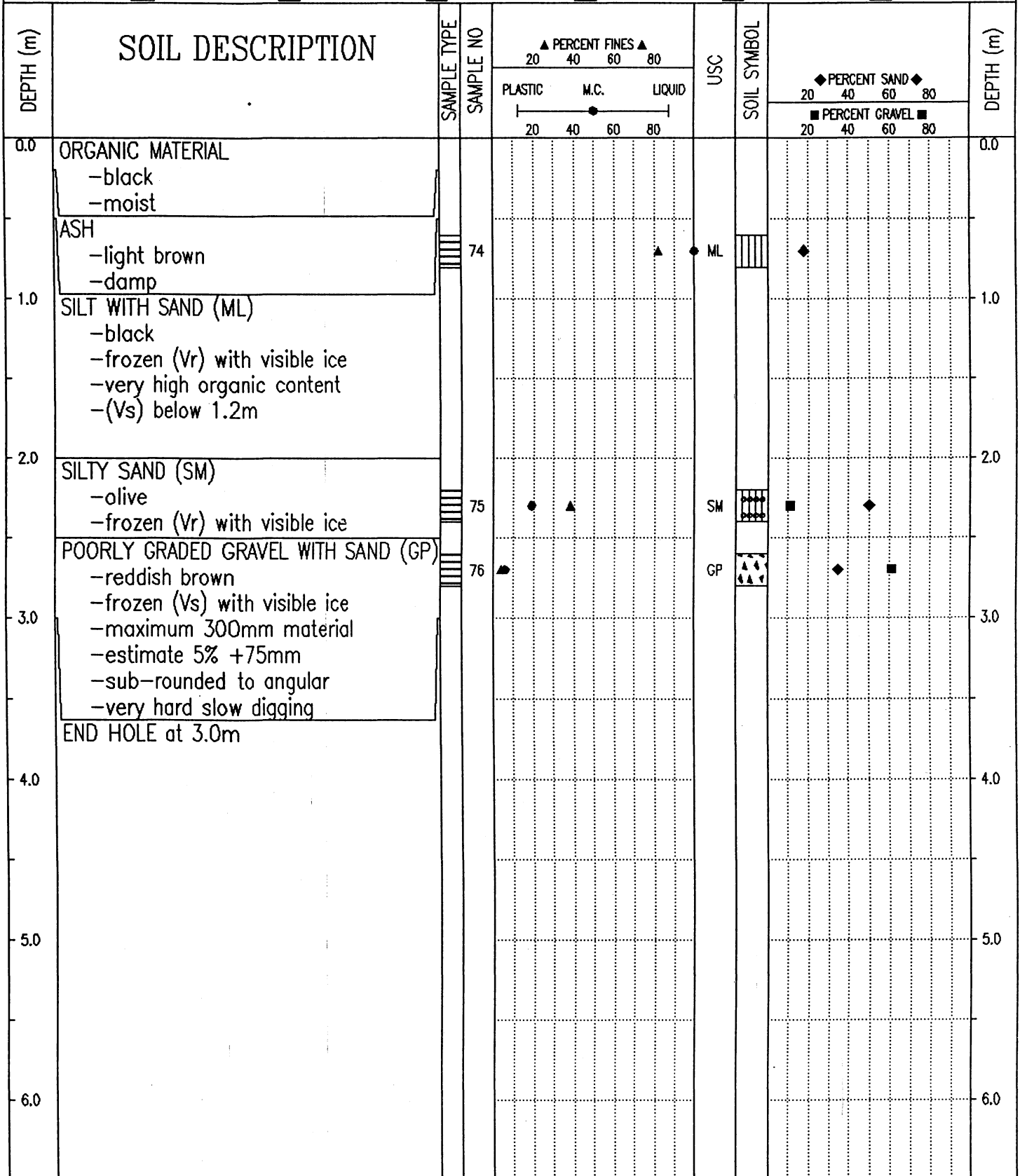


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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.2 m  
COMPLETE: 93/10/12

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 382-524A
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172		LOCATION: Sta. 1857+500 o/s 12m 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

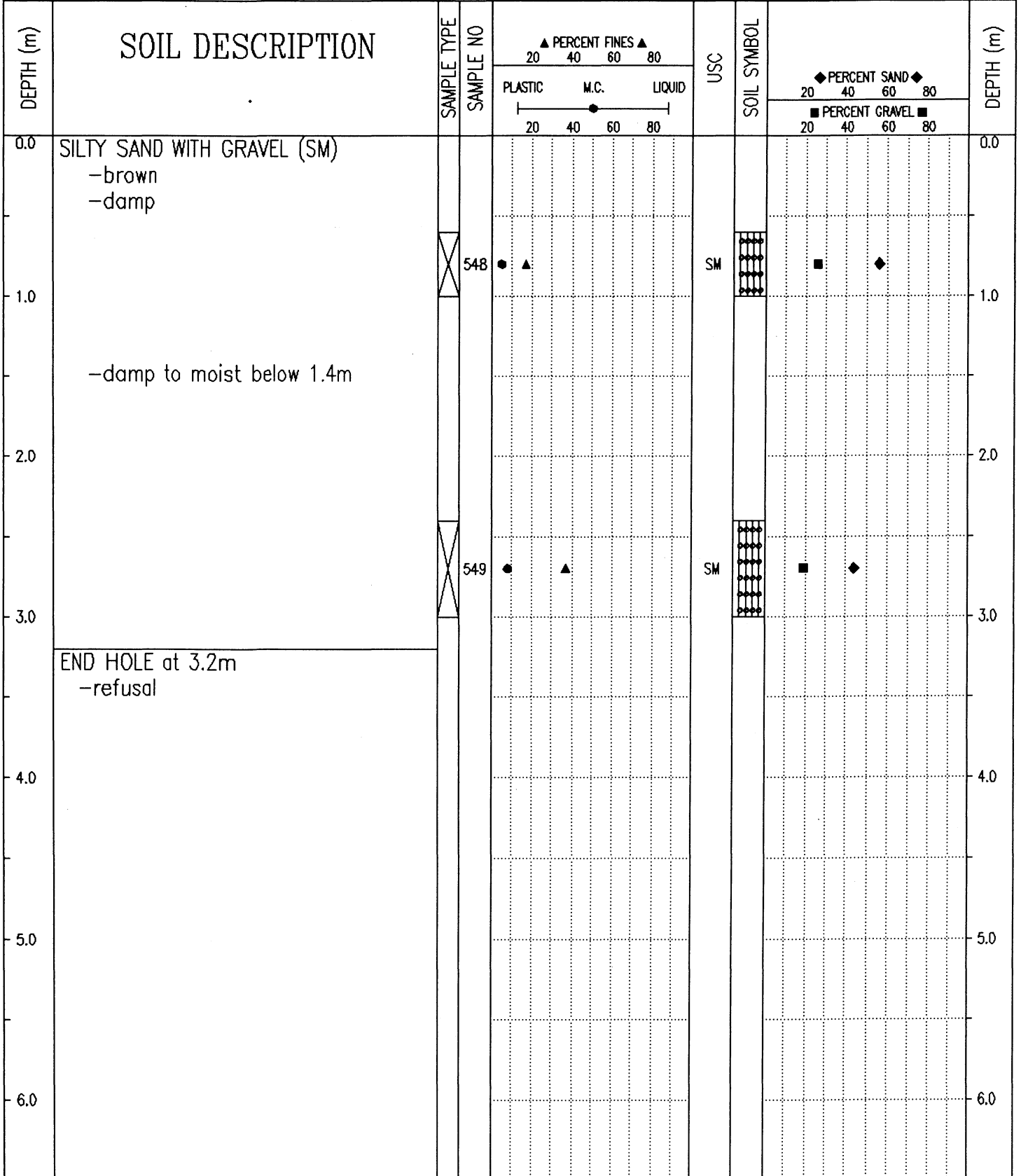


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LOGGED BY: KJ  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 95/09/19

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 266-394
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1857+550 o/s 50m 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:

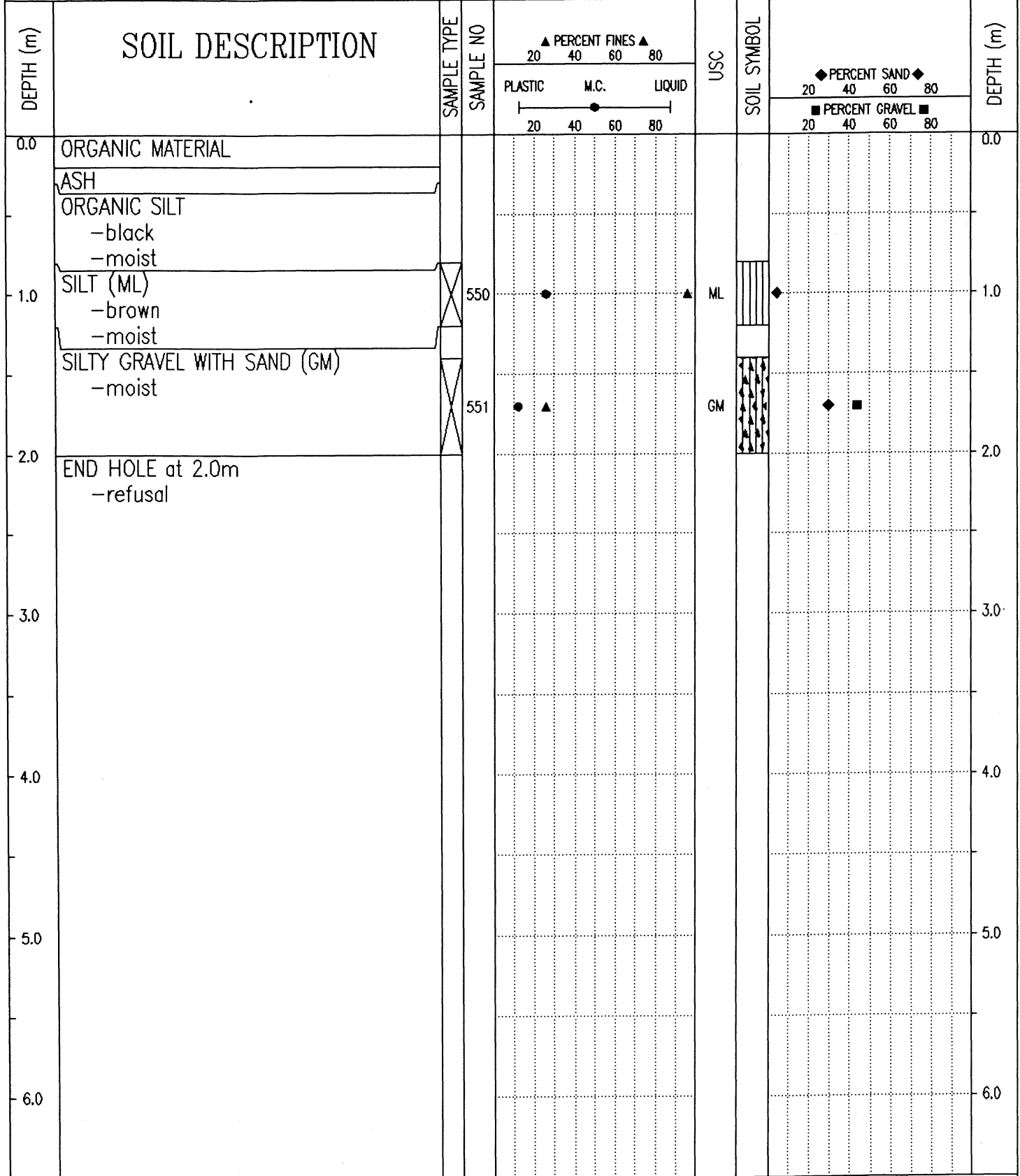
Fig. No:

COMPLETION DEPTH: 3.2 m

COMPLETE: 93/10/12

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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 266-395
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1857+625 o/s 50m 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

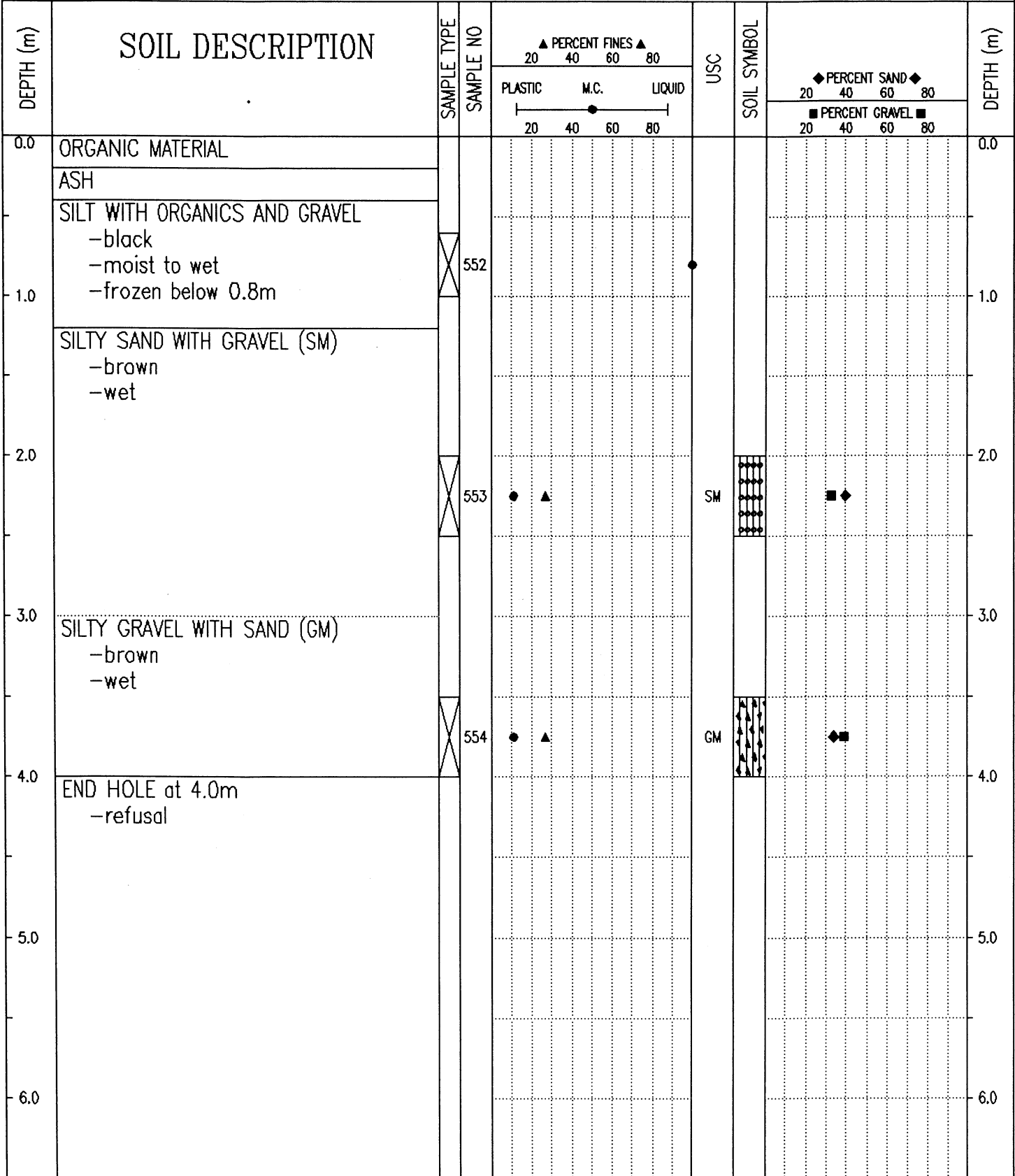


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LOGGED BY: GC  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 2.0 m  
COMPLETE: 93/10/13

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 266-396
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1857+725 o/s 25m 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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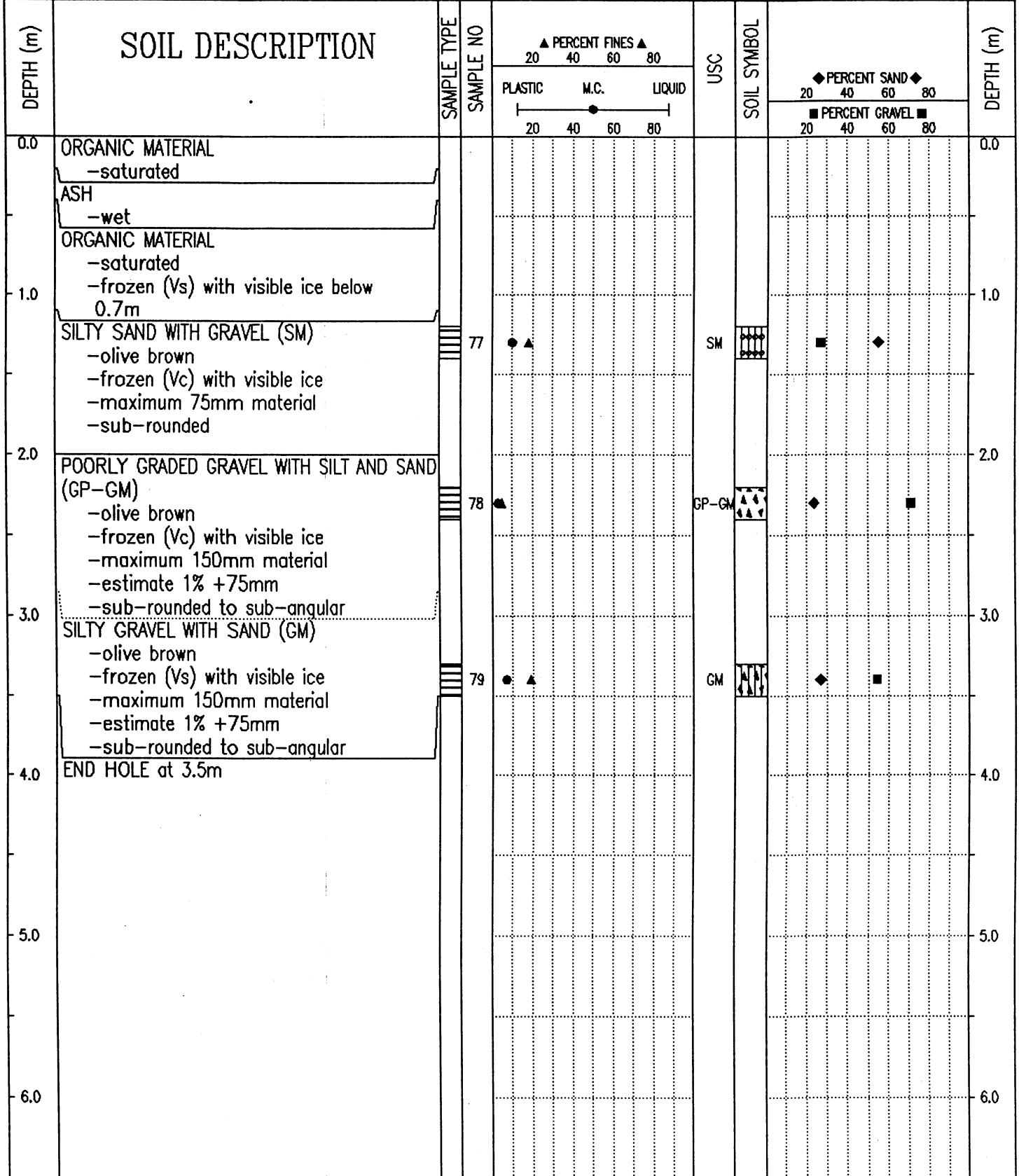
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REVIEWED BY:	COMPLETE: 93/10/13
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 382-525
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ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
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BACKHOE: HITACHI UH-172	LOCATION: Sta. 1857+800 o/s 15m Rt.	ELEVATION: 0.00 (m)
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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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LOGGED BY: KJ

REVIEWED BY:

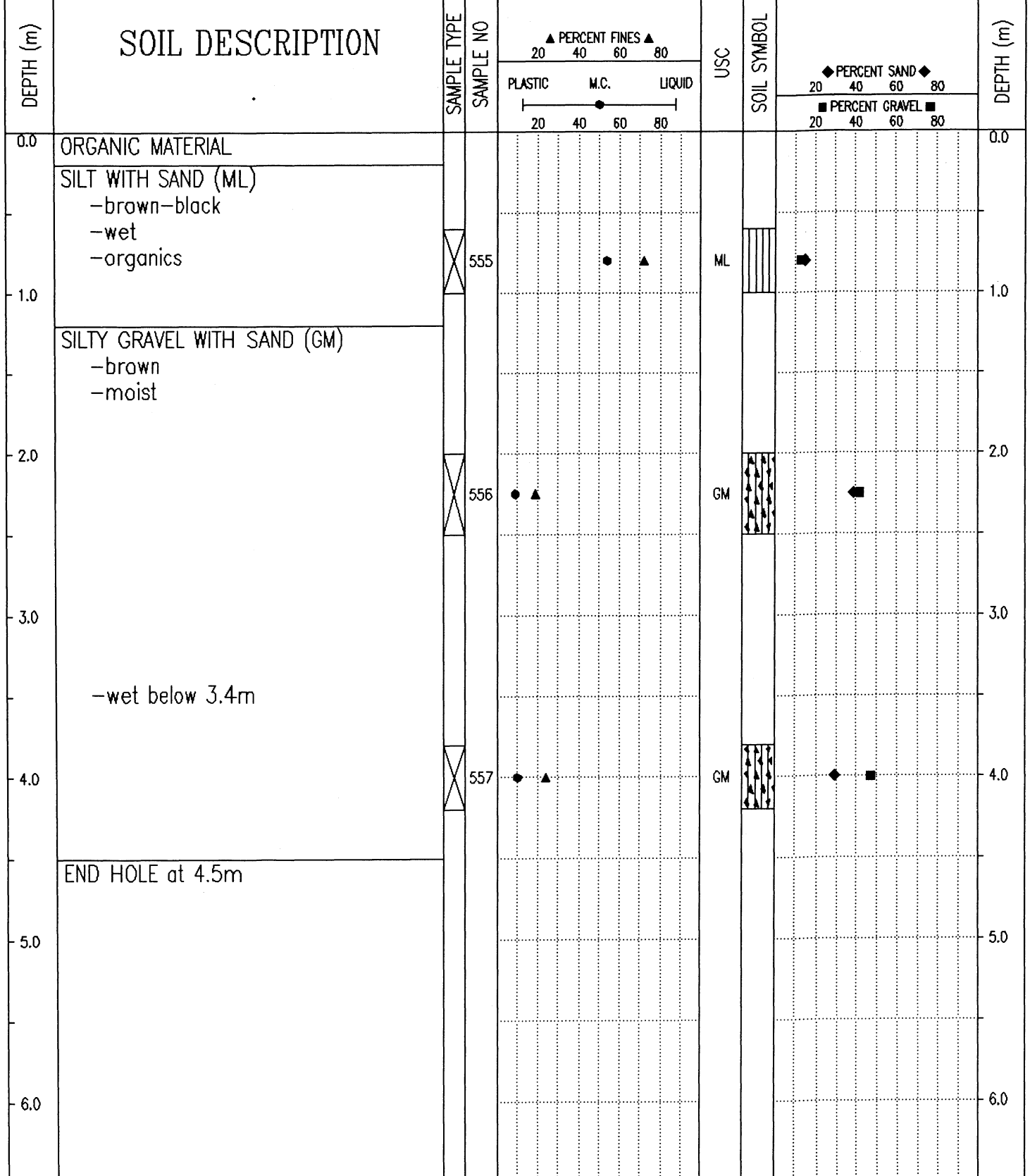
Fig. No:

COMPLETION DEPTH: 3.5 m

COMPLETE: 95/09/19

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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 266-397
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1857+835 o/s 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

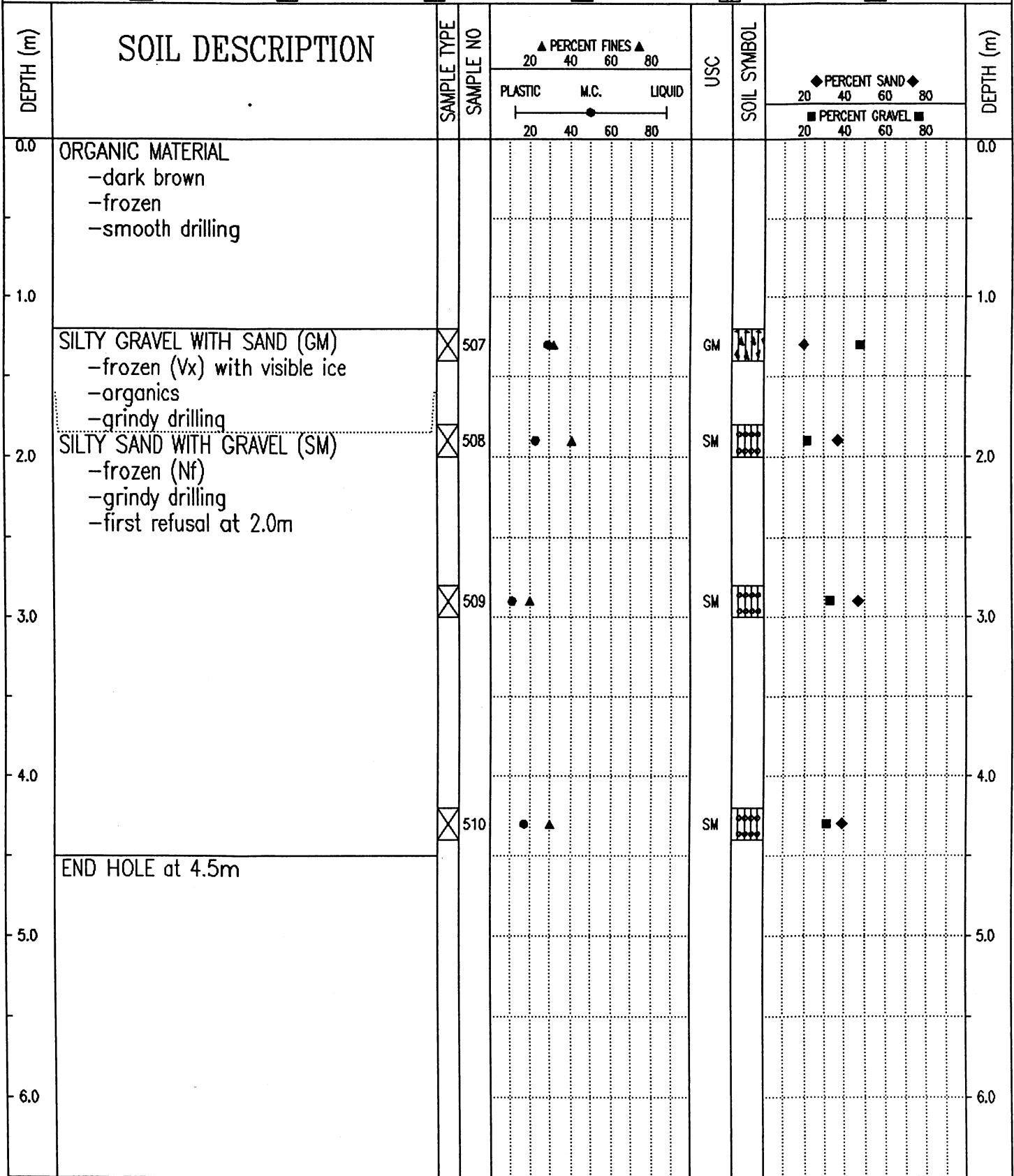


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LOGGED BY: GC  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 4.5 m  
COMPLETE: 93/10/13

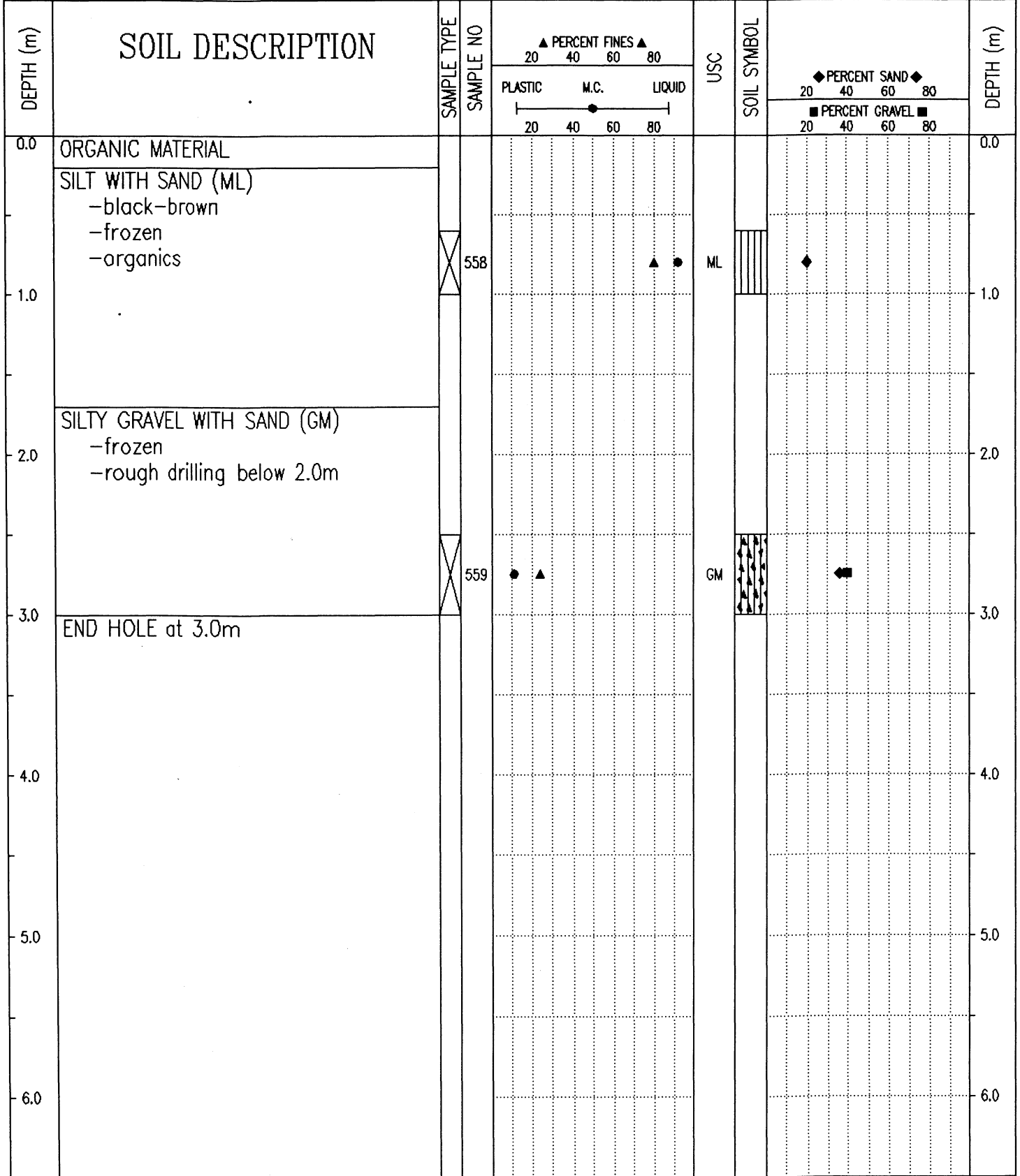
SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 366-221
ENGINEERING-CAPITAL		SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER		LOCATION: Sta. 1857+900 o/s 21m Rt.	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE			



95/11/22 12:20PM

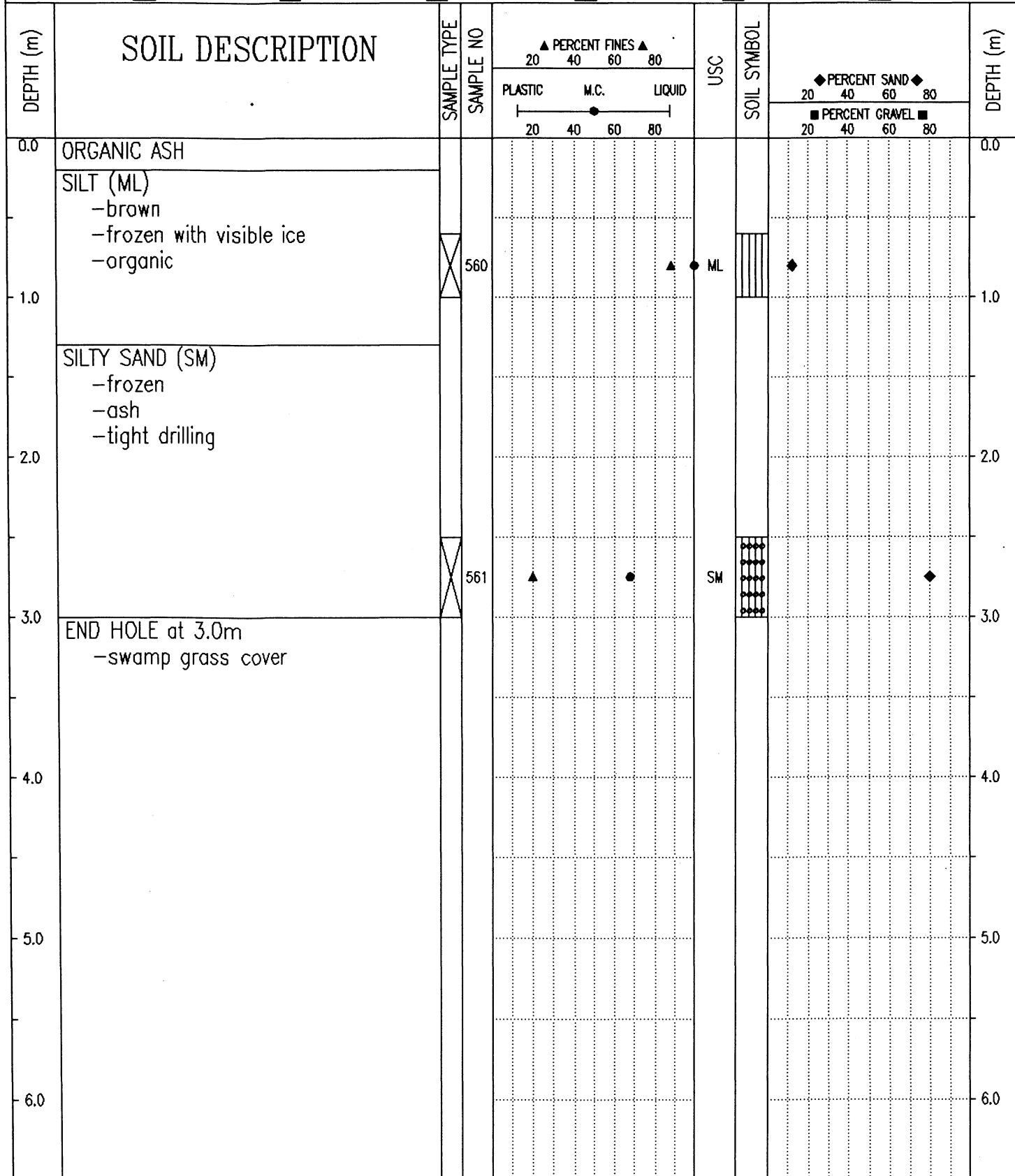
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 266-398
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1857+950 o/s 25m Rt.	ELEVATION: 0.00 (m)

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



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	REVIEWED BY:	COMPLETE: 93/10/13
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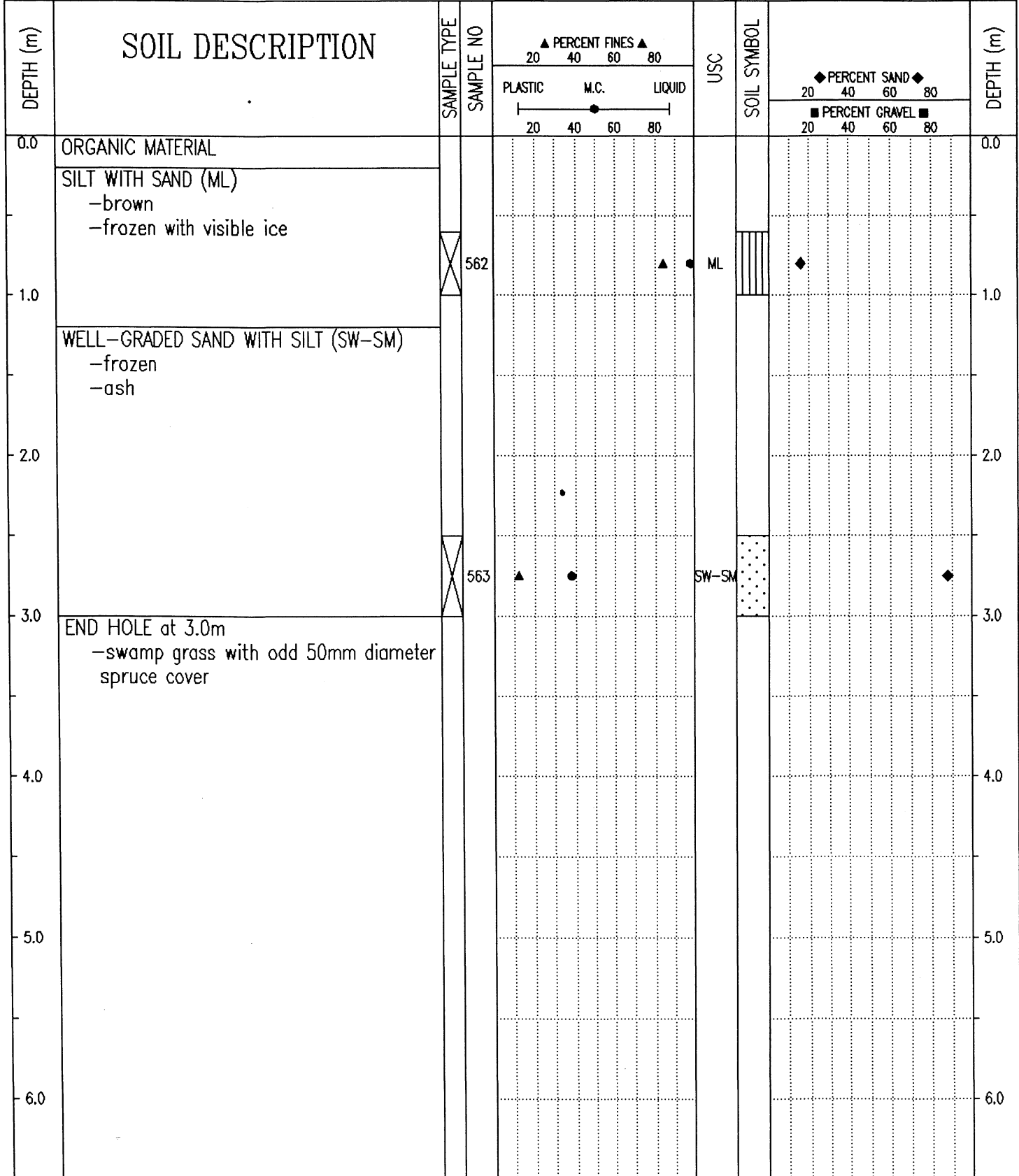
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 266-399
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1858+050 o/s 25m Rt.	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" 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:	COMPLETE: 93/10/13
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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 266-400
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1858+150 o/s 25m 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: 93/10/13

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 366-222
ENGINEERING-CAPITAL	SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: Sta. 1858+285 o/s 8m Rt.	ELEVATION: 0.00 (m)

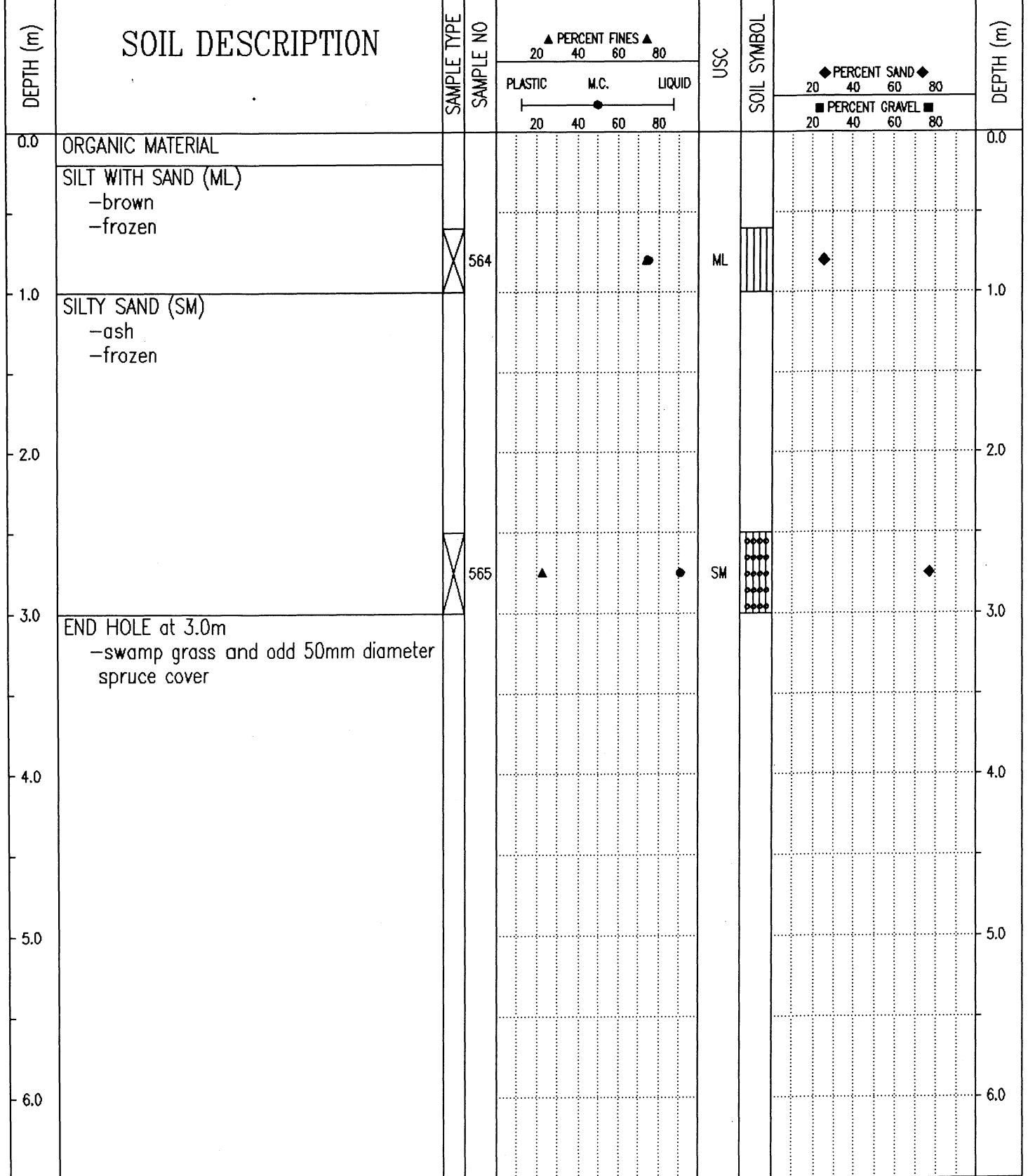
SAMPLE TYPE  RETURN  S.P.T.  AUGER  BULK  TUBE  CORE

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 MATERIAL -dark brown -moist											0.0	
1.0	ASH -light gray -saturated -frozen below 1.0m -denser drilling below 1.0m											1.0	
2.0												2.0	
3.0												3.0	
4.0	END HOLE at 3.8m											4.0	
5.0												5.0	
6.0												6.0	

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LOGGED BY: CC	COMPLETION DEPTH: 3.8 m
REVIEWED BY:	COMPLETE: 95/06/13
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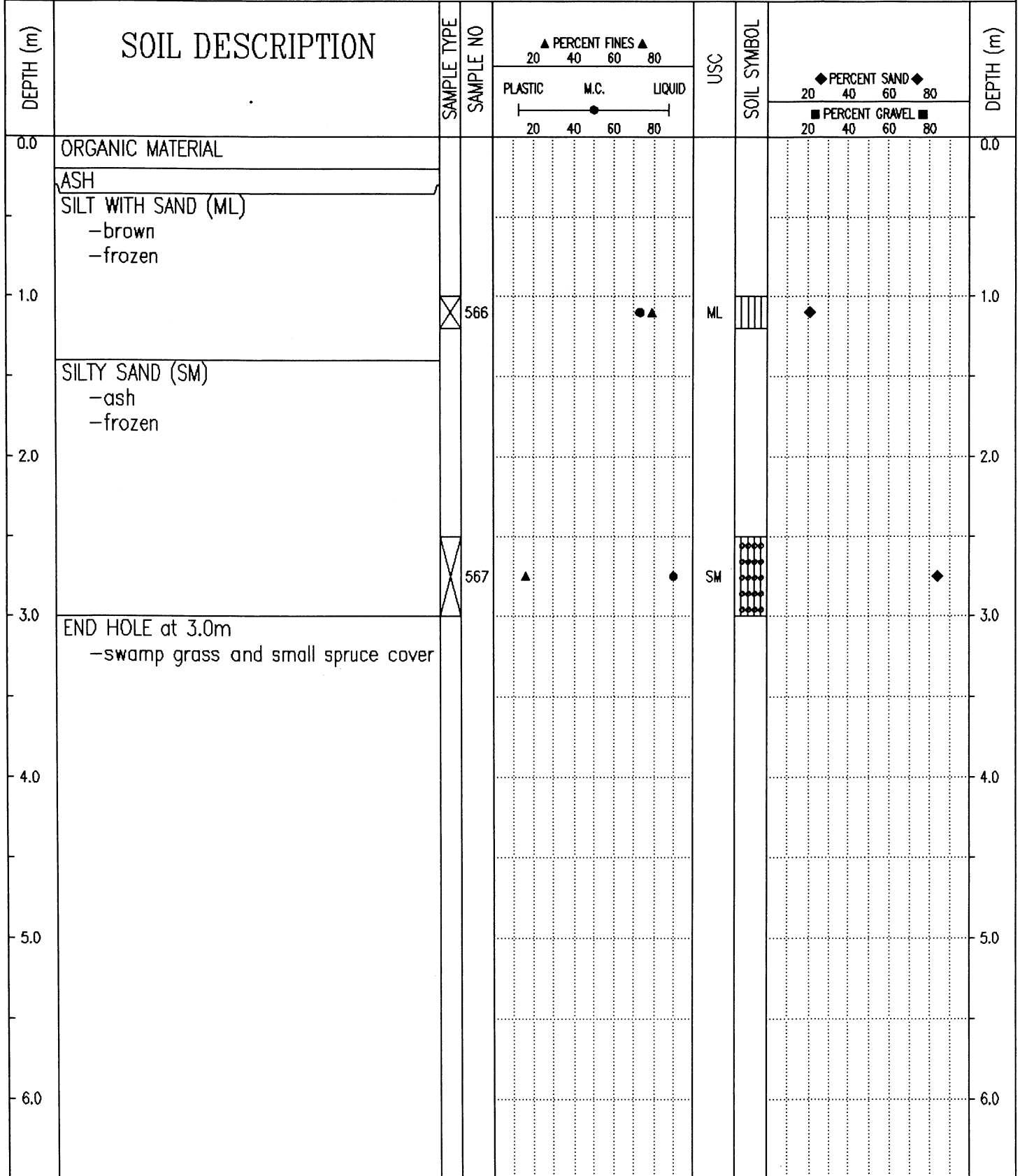
SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 266-401
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1858+350 o/s 25m Lt.	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
		<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE



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LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 93/10/13
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 266-402
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1858+450 o/s 25m 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		



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LOGGED BY: GC

REVIEWED BY:

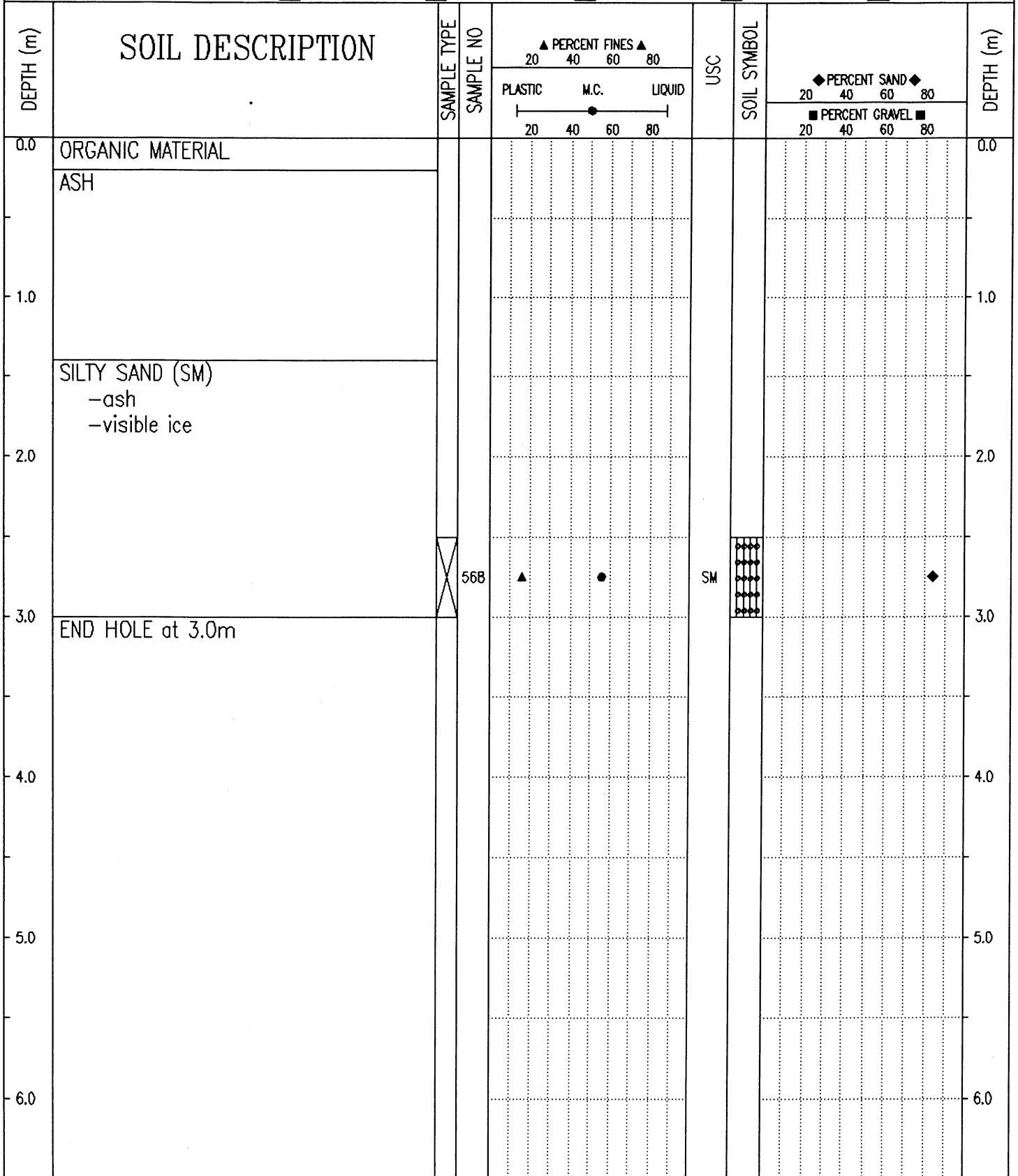
Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 93/10/13

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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 266-403
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1858+550 o/s 25m 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: 93/10/13

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 266-404
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1858+625 o/s 10m 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	
0.0	SILTY SAND (SM) -brown -damp -road fill											0.0	
1.0		<input checked="" type="checkbox"/>	569				SM					1.0	
1.5	ORGANIC SILT -wet												
2.0	ASH -white												
3.0	END HOLE at 3.0m -in ditch												
4.0													
5.0													
6.0													

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	REVIEWED BY:	COMPLETE: 93/10/13
	Fig. No:	Page 1 of 1

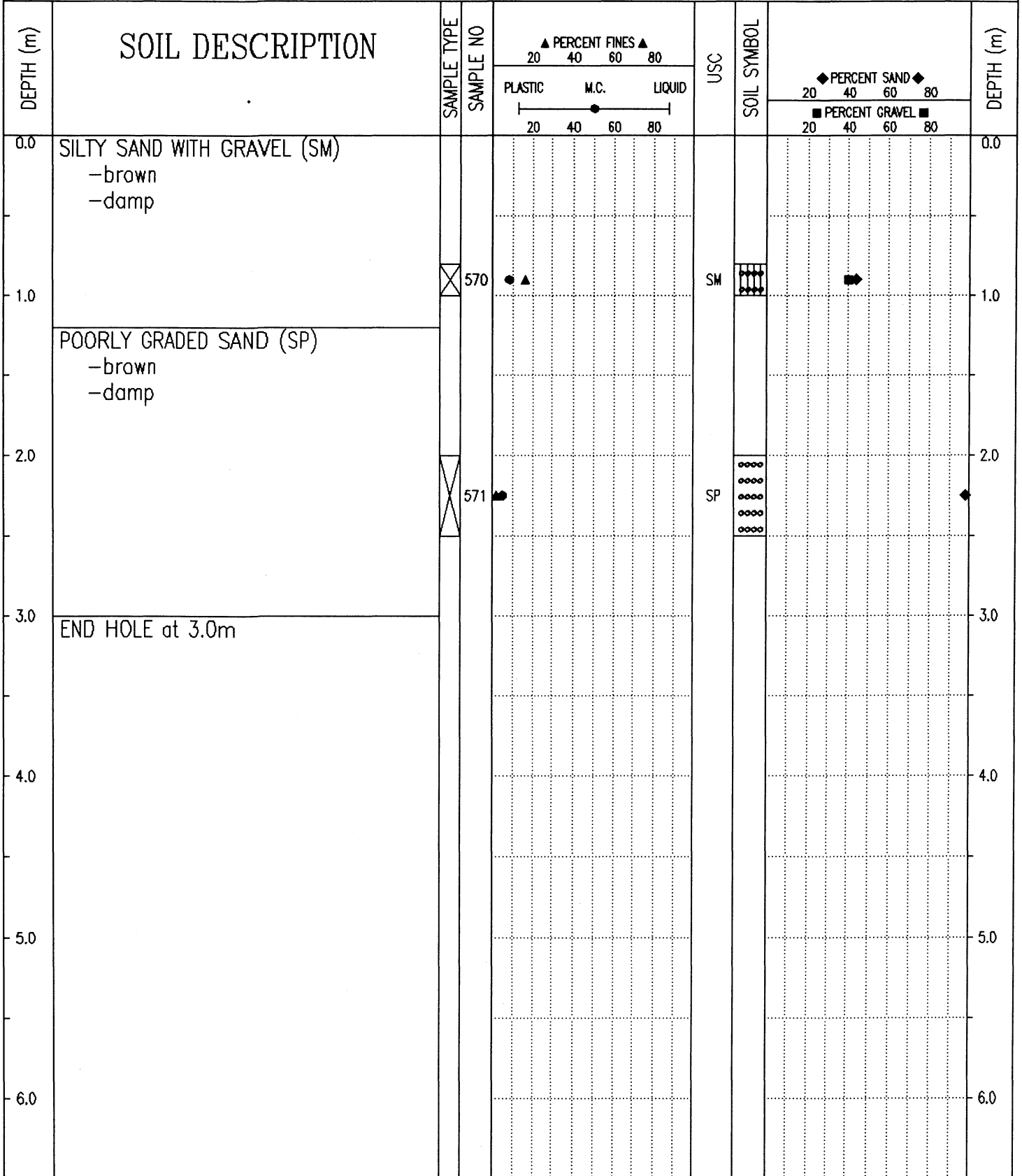
SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 366-223
ENGINEERING-CAPITAL	SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: Sta. 1858+758 o/s 12m Lt.	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> 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 MATERIAL -dark brown -damp										0.0	
0.5	ASH -light gray -damp -smooth drilling										1.0	
1.0	SILT -gray -moist										2.0	
1.5	SAND -trace of gravel										2.0	
2.0	ASH -light gray -moist										3.0	
3.0											4.0	
4.0	-saturated below 4.1m										5.0	
4.5	END HOLE at 4.5m										6.0	

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LOGGED BY: CC	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 95/06/13
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 266-405
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1858+815 o/s 10m 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:

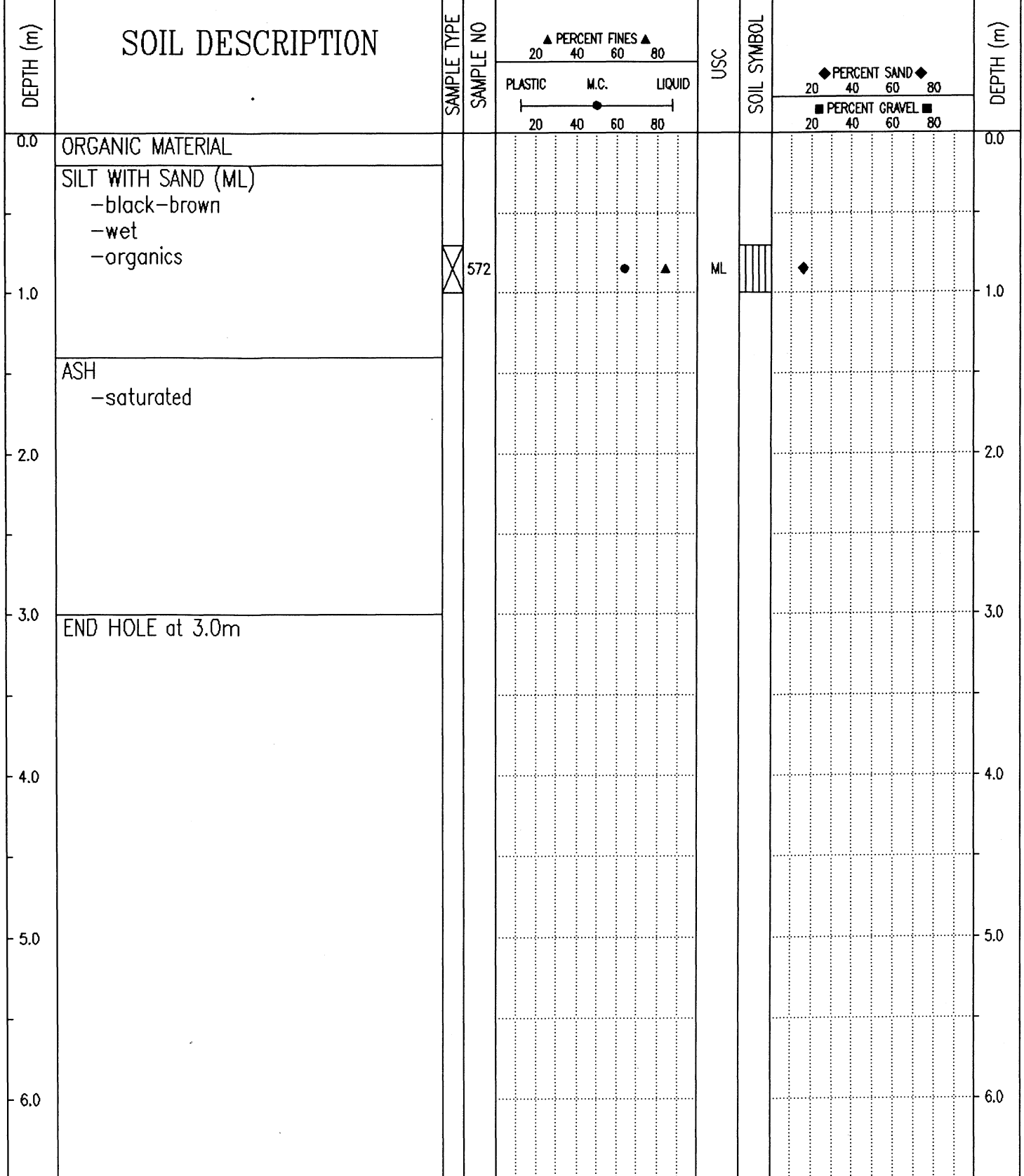
Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 93/10/13

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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 266-406
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1858+900 o/s 25m 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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LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 93/10/13
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 266-407
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1859+350 o/s 15m 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		

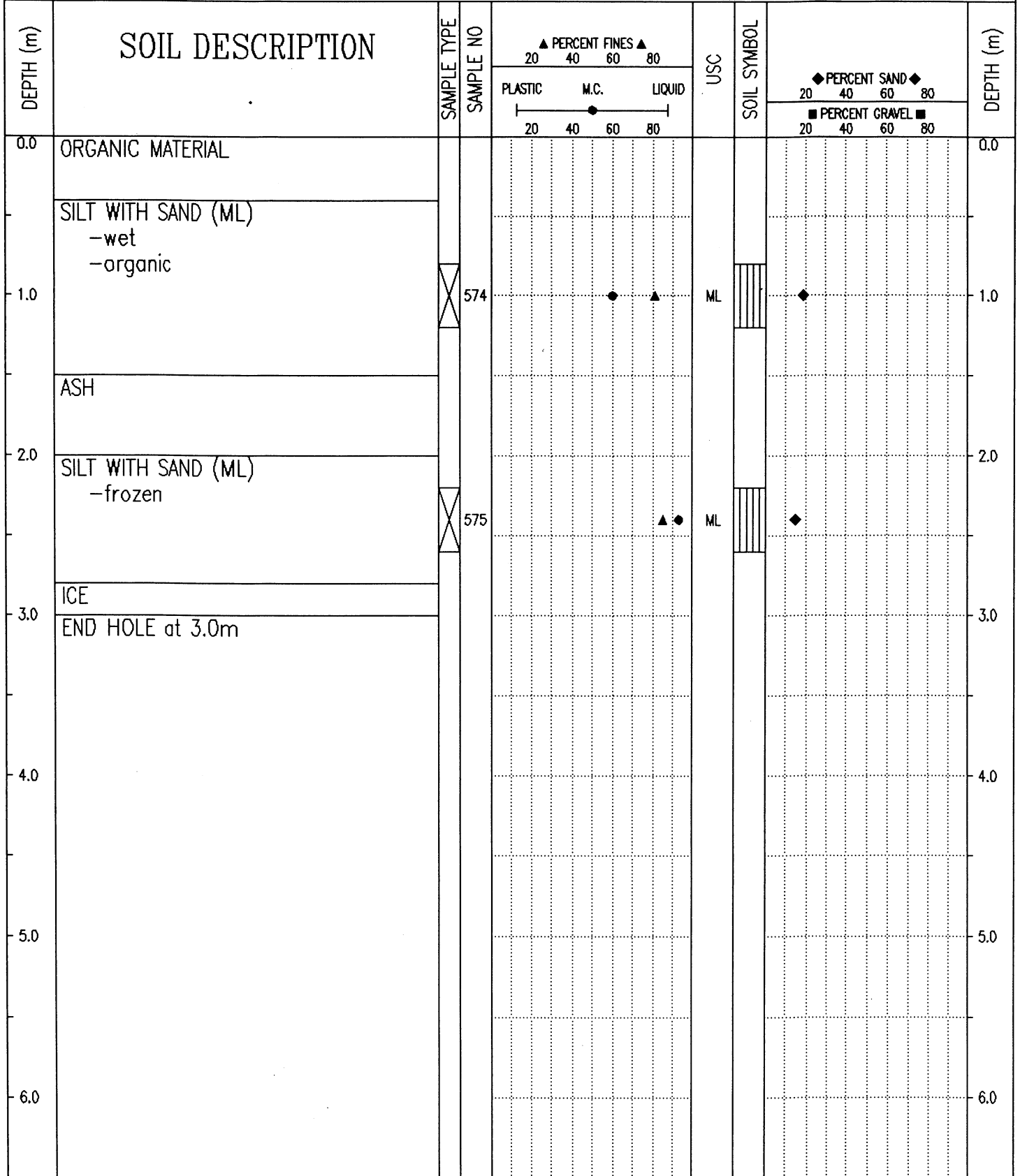
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND		PERCENT GRAVEL		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	
0.0	ORGANIC MATERIAL											0.0	
0.0 - 1.0	SILT (ML) -brown -wet  -frozen below 0.8m	<input checked="" type="checkbox"/>	573				ML						
1.0 - 3.0	ASH -frozen												
3.0	END HOLE at 3.0m												
4.0													
5.0													
6.0													

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Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 93/10/13

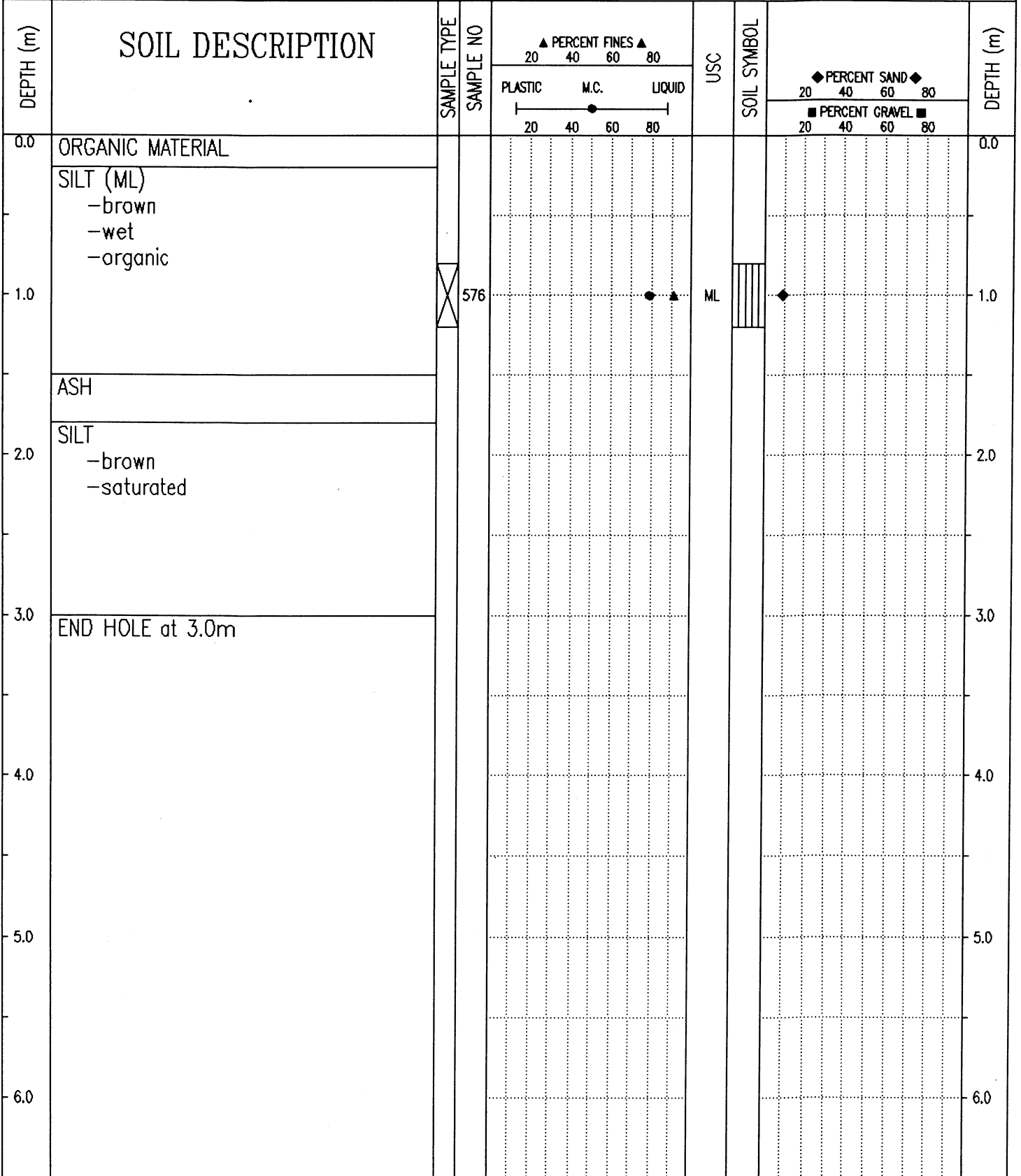
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 266-408
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1859+500 o/s 10m Lt.	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" 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: GC	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 93/10/13
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 266-409
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1859+600	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	

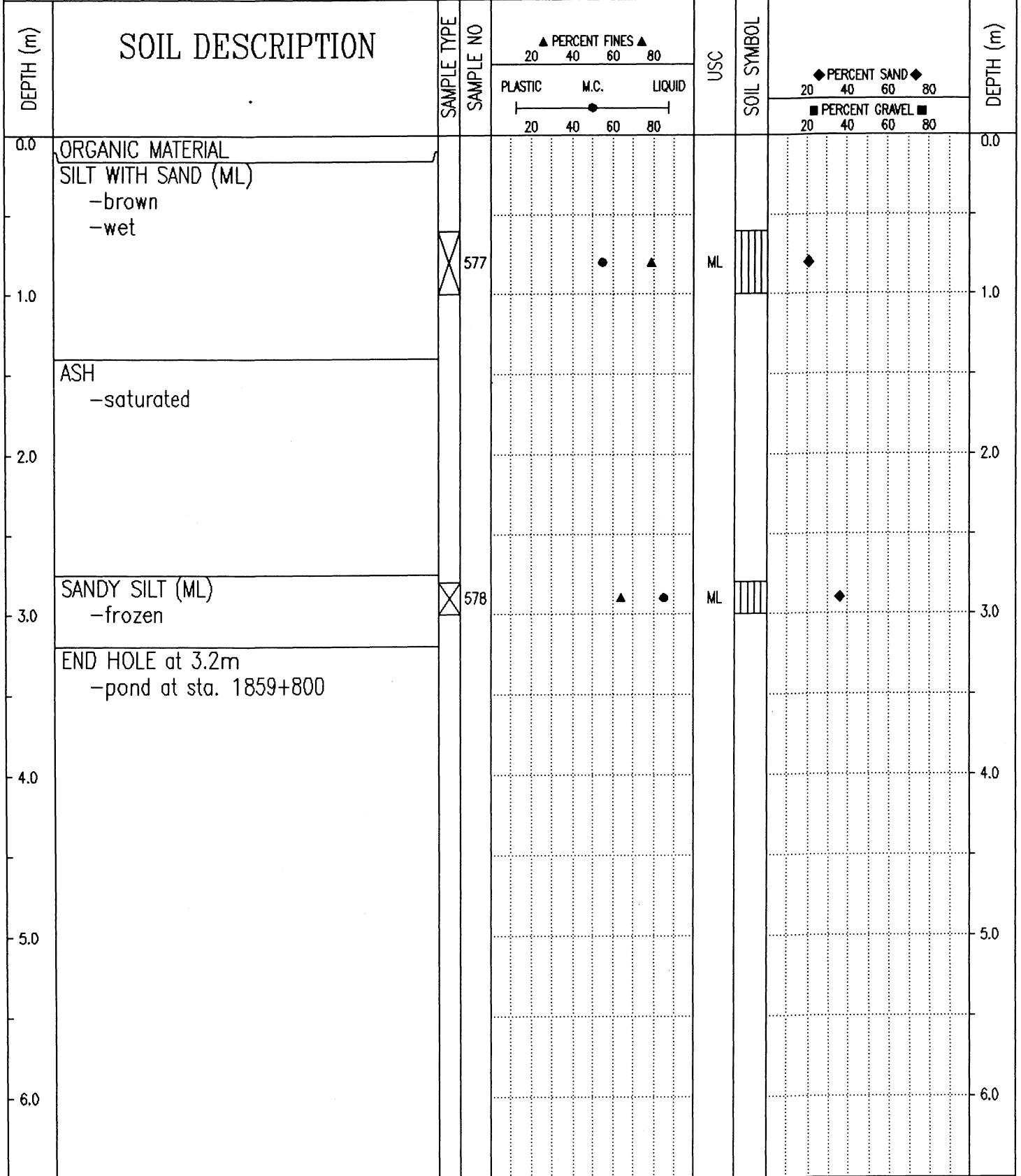


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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.0 m  
COMPLETE: 93/10/13

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 266-410
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1859+700 o/s 5m 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			



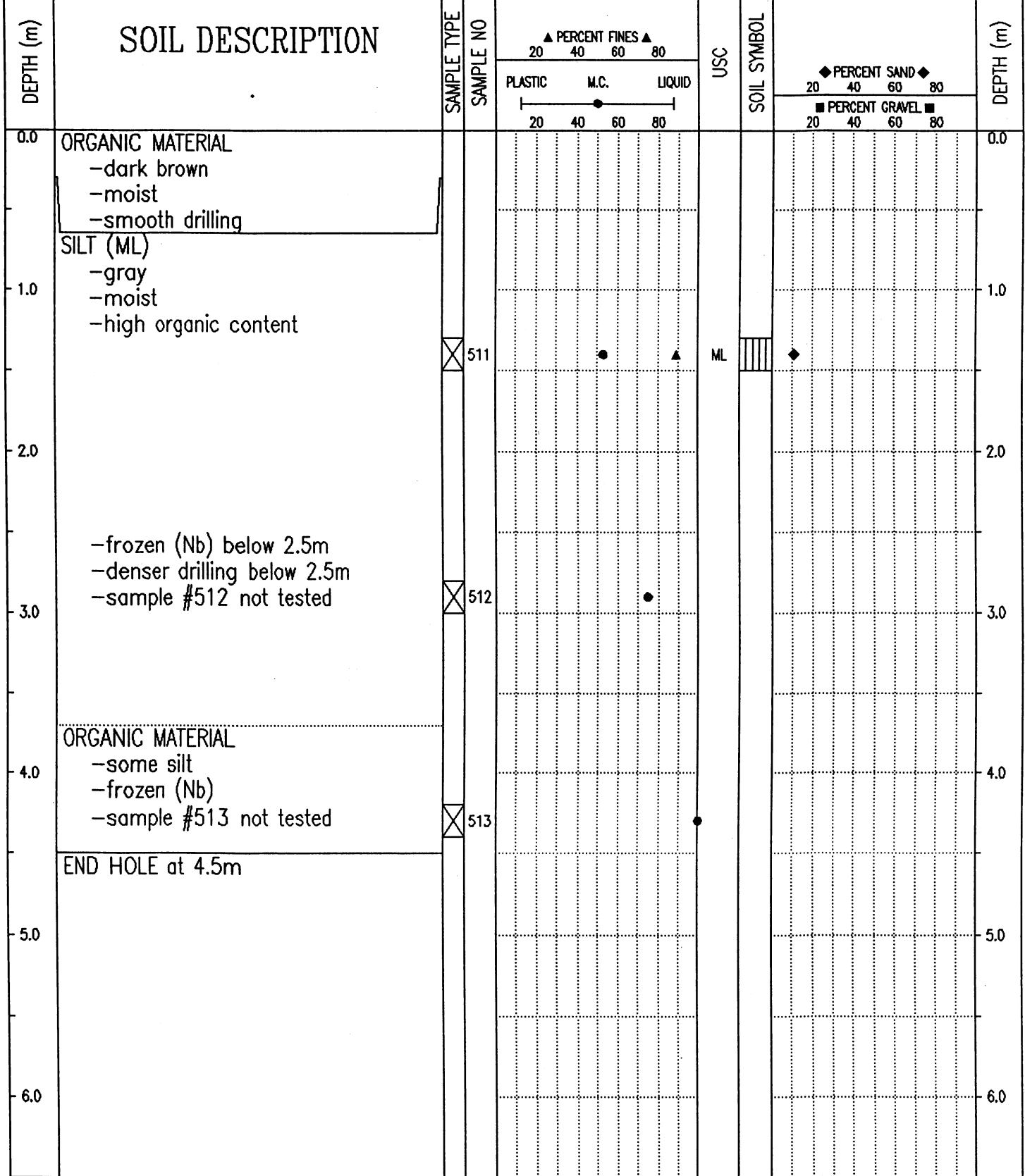
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LOGGED BY: GC  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.2 m  
COMPLETE: 93/10/13

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 366-224
ENGINEERING-CAPITAL	SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: Sta. 1859+775 o/s 7m Lt.	ELEVATION: 0.00 (m)

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



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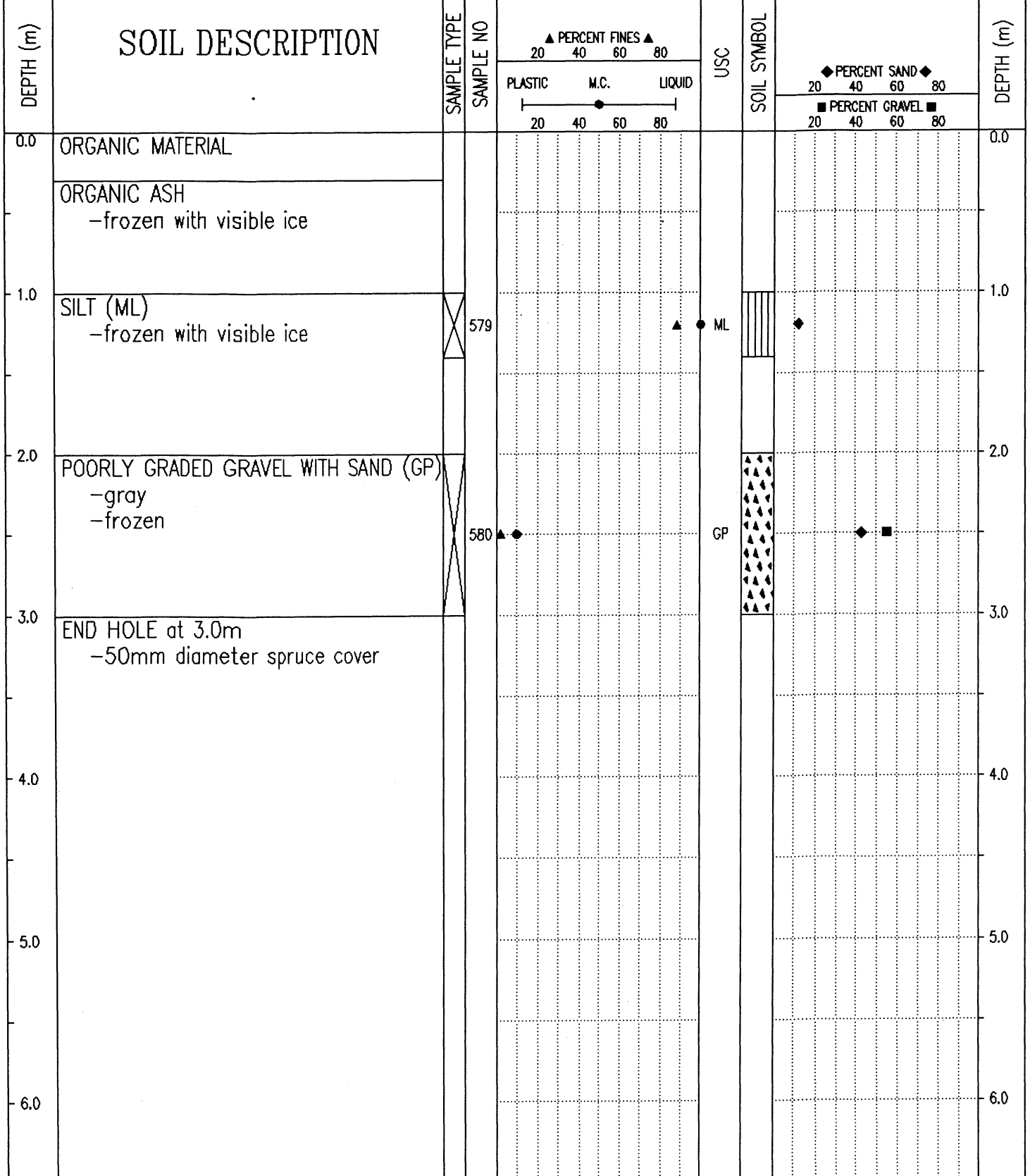
LOGGED BY: CC	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 95/06/20
Fig. No:	Page 1 of 1

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 & GRAVEL		DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL	
0.0	ORGANIC MATERIAL -dark brown -frozen -smooth dense drilling									0.0	
1.0	-visible ice (Vx) below 1.0m -sample #514 not tested -some silt below 1.2m	<input checked="" type="checkbox"/>	514							1.0	
2.0										2.0	
3.0	SILT (ML) -gray -frozen (Vx) with visible ice -organics	<input checked="" type="checkbox"/>	515				ML			3.0	
4.0	SILTY SAND (SM) -gray -frozen (Nb) -organics	<input checked="" type="checkbox"/>	516				SM			4.0	
5.0	END HOLE at 4.5m									5.0	
6.0										6.0	

95/11/22 12:27PM

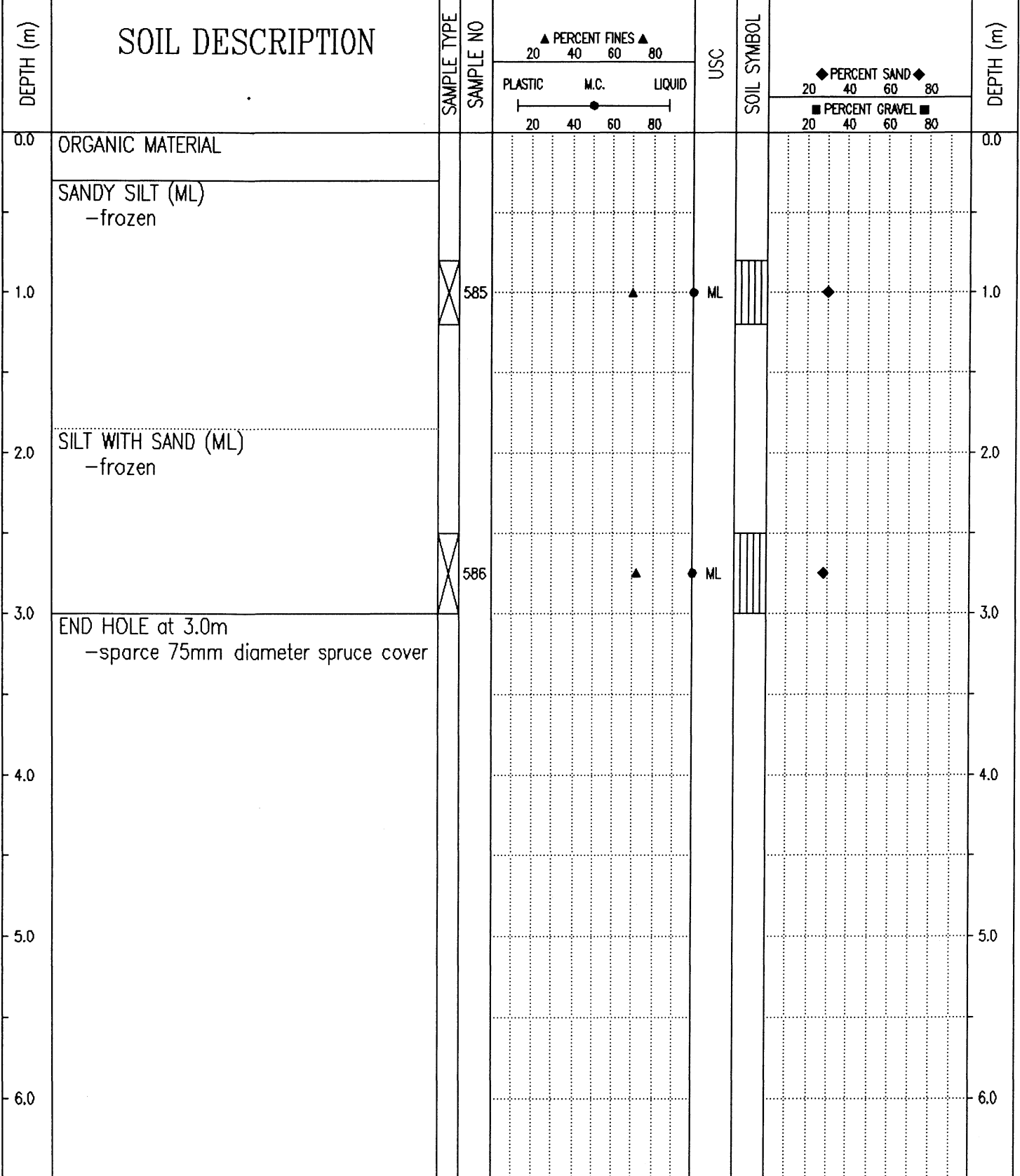
SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING		TEST HOLE NO: 266-411	
SHAKWAK PROJECT		SEGMENT 15		Project No: 202101-0311-193	
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1860+025		ELEVATION: 0.00 (m)	
SAMPLE TYPE		<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> TUBE
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> CORE



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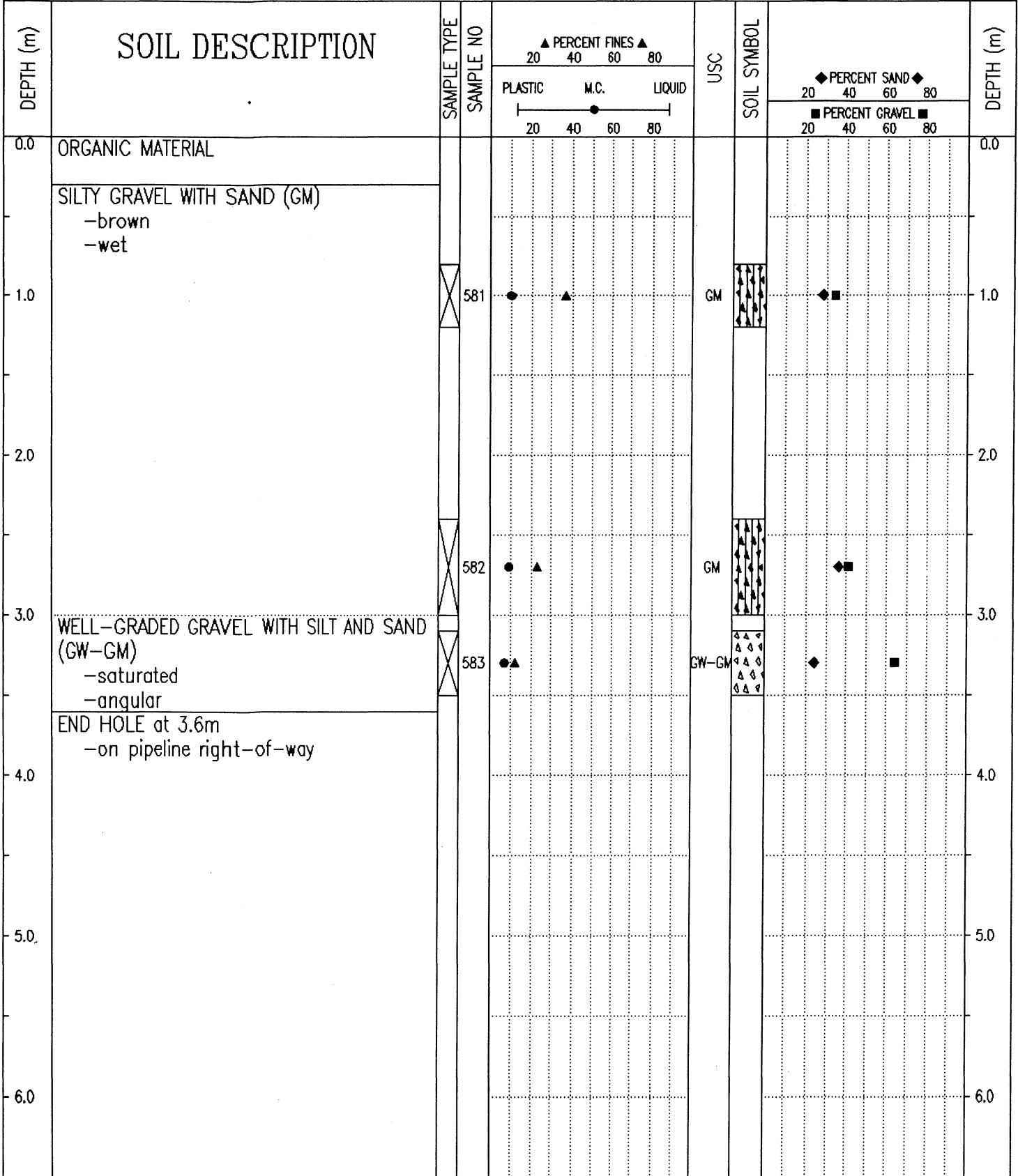
LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 93/10/13
Fig. No:	Page 1 of 1

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



94/02/01 02:29PM

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 266-412
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1860+125 o/s 100m 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		

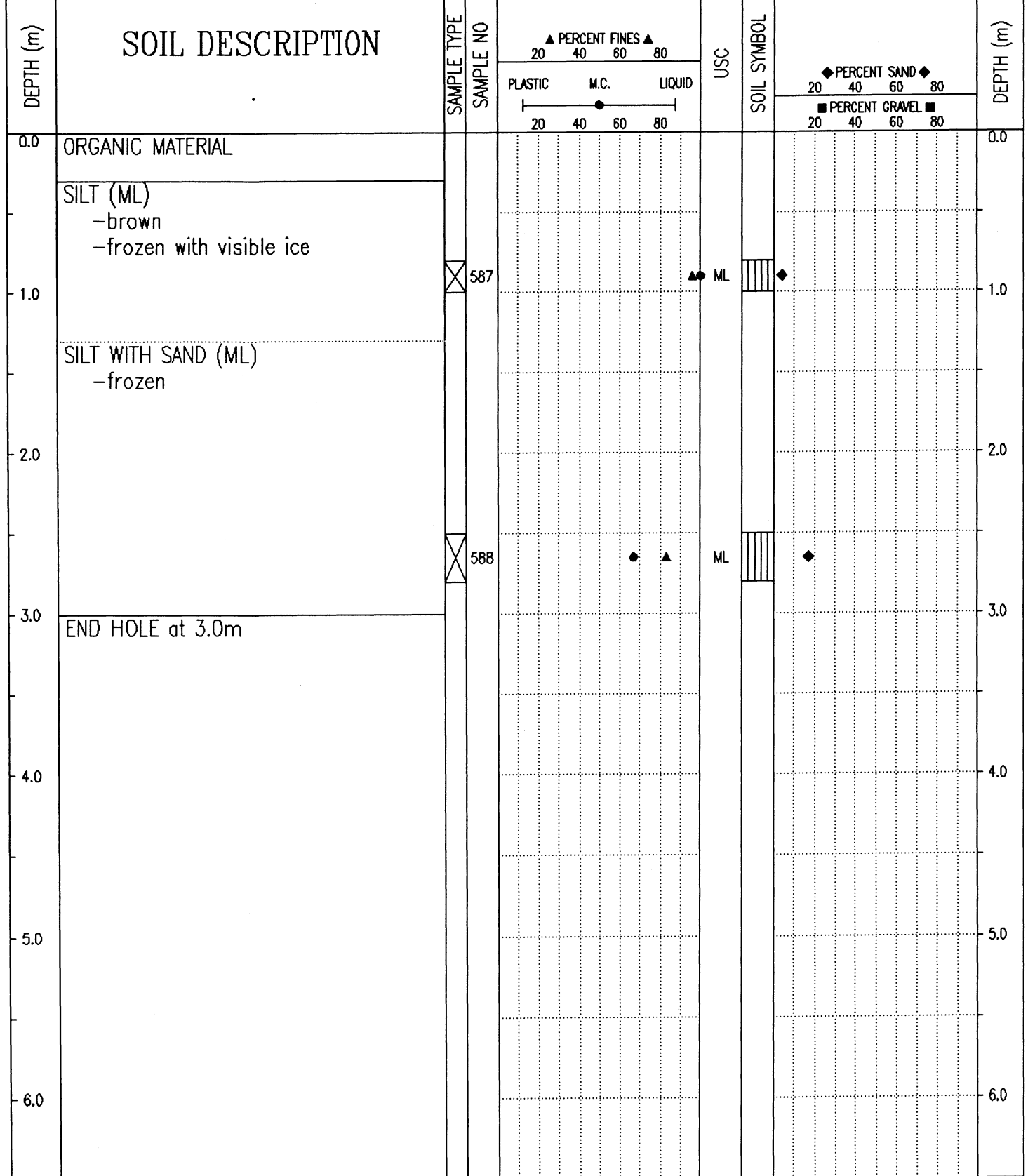


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LOGGED BY: GC  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.6 m  
COMPLETE: 93/10/13

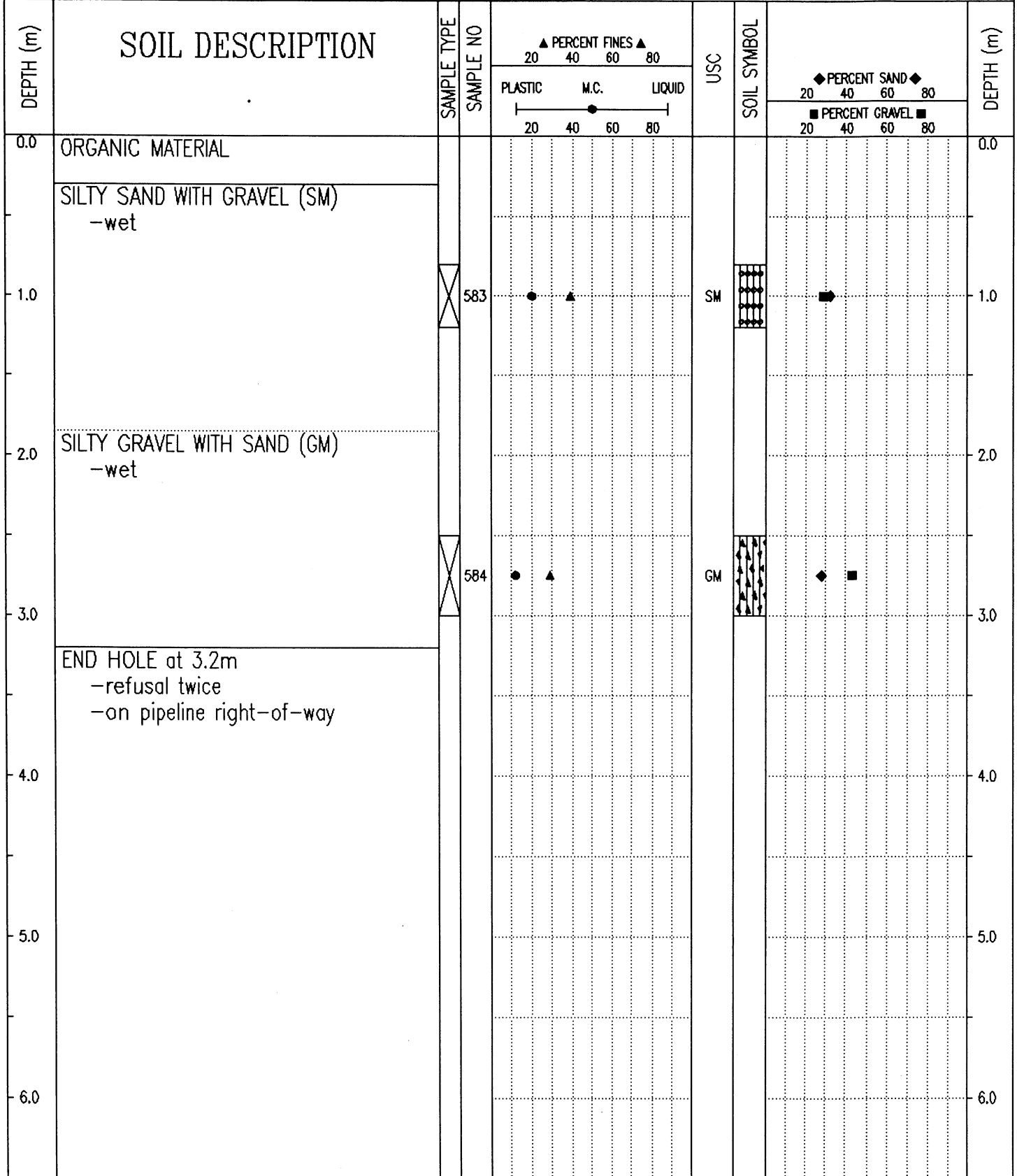
SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 266-415
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1860+225 o/s 5m Lt.	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
		<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE



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LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 93/10/13
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 266-413
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1860+250 o/s 100m 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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Fig. No:

COMPLETION DEPTH: 3.2 m

COMPLETE: 93/10/13

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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 266-416
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1860+350	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 MATERIAL										0.0	
	ORGANIC SILT -black -frozen											
1.0	SILTY GRAVEL WITH SAND (GM) -brown -frozen	<input checked="" type="checkbox"/>	589	●	▲		GM	◆	■		1.0	
2.0	END HOLE at 2.0m -refusal -125mm diameter spruce cover										2.0	
3.0											3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

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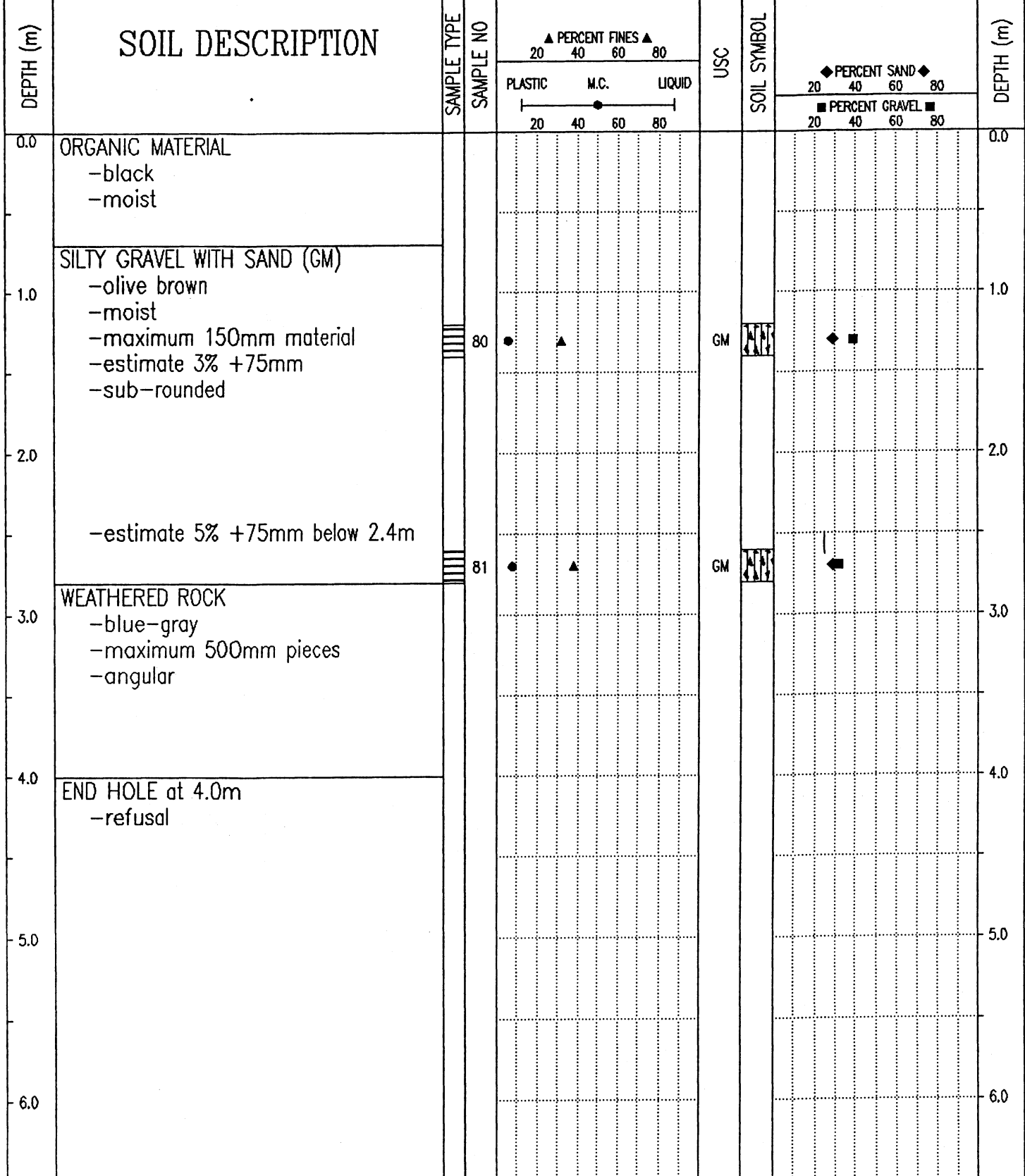
Fig. No:

COMPLETION DEPTH: 2.0 m

COMPLETE: 93/10/13

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 382-526
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172		LOCATION: Sta. 1860+400 o/s 18m 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			

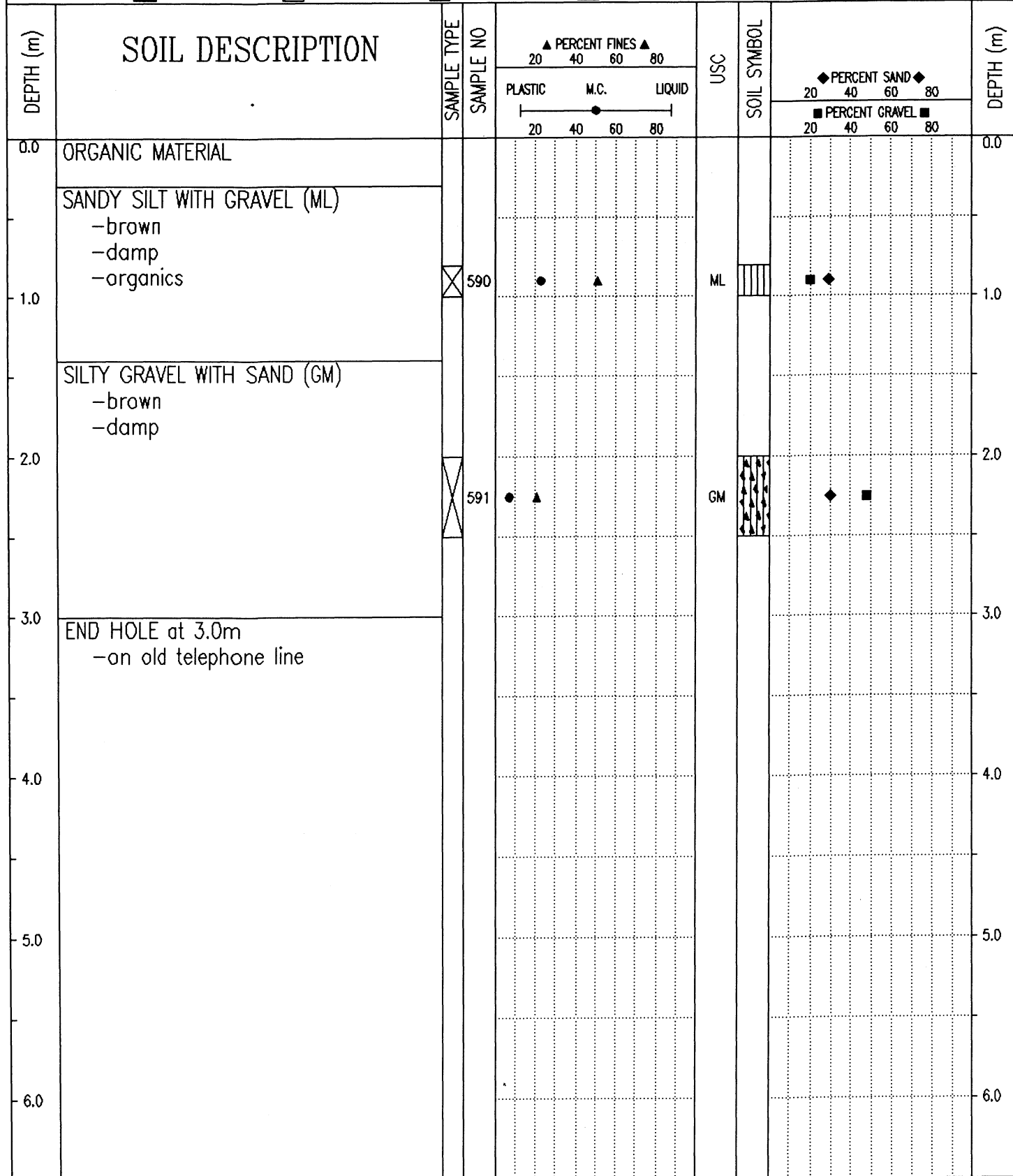


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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 4.0 m  
COMPLETE: 95/09/20  
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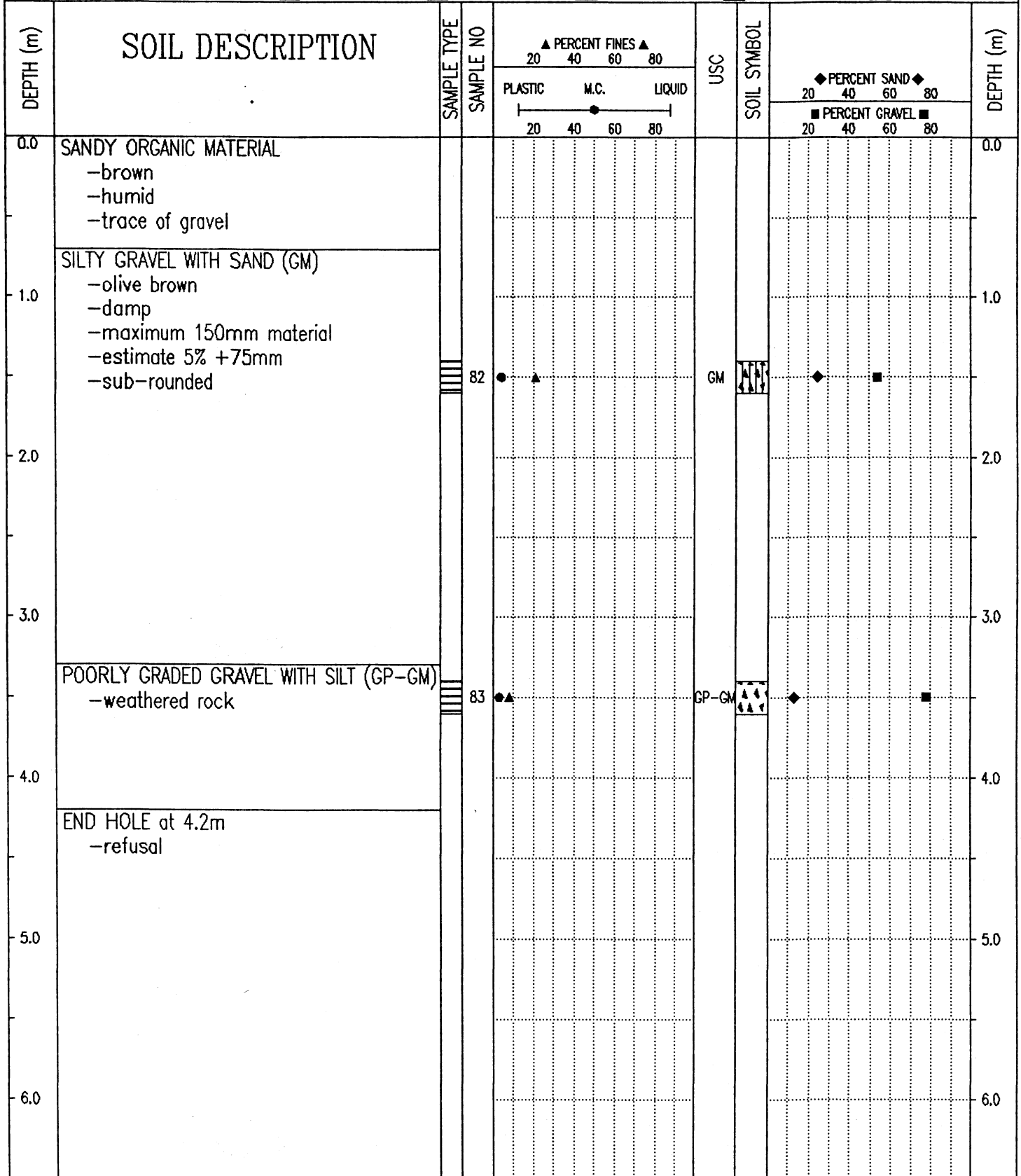
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 266-417
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1860+475 o/s 40m Lt.	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



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REVIEWED BY:	COMPLETE: 93/10/14
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 382-527
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172		LOCATION: Sta. 1860+485 o/s 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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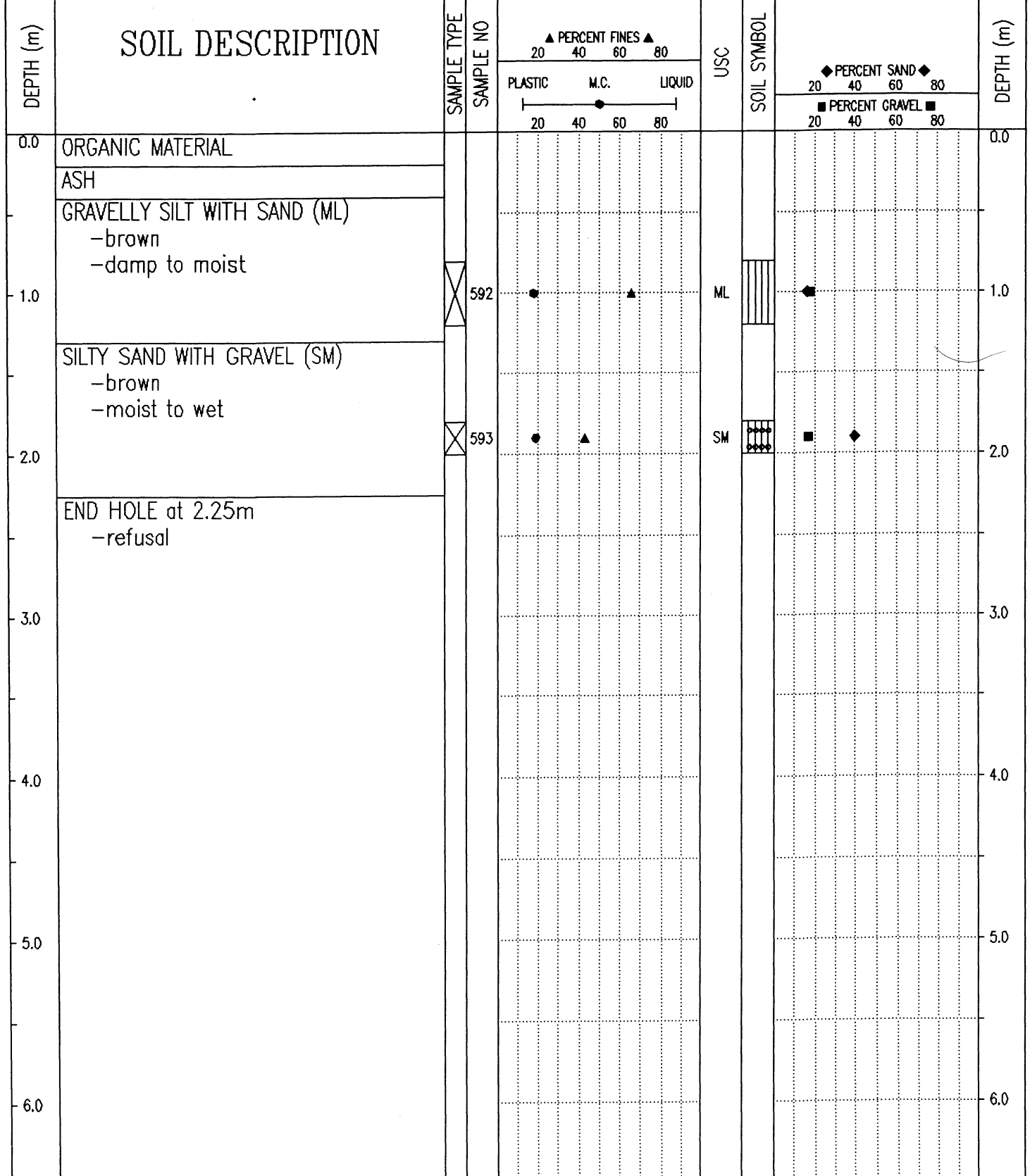
Fig. No:

COMPLETION DEPTH: 4.2 m

COMPLETE: 95/09/20

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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 267-418
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1860+550 o/s 40m 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



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LOGGED BY: GC	COMPLETION DEPTH: 2.3 m
REVIEWED BY:	COMPLETE: 93/10/14
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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 382-528
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172		LOCATION: Sta. 1860+610 o/s 10m 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 ■			
				20	40	60			80	20	40	
0.0	WEATHERED ROCK -blueish gray -sandy gravel in top 0.2m -sandy gravel is light brown -maximum 600mm material -estimate 90% +75mm										0.0	
1.0											1.0	
2.0	END HOLE at 1.2m -refusal -on highway pull-out near rock cut										2.0	
3.0											3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

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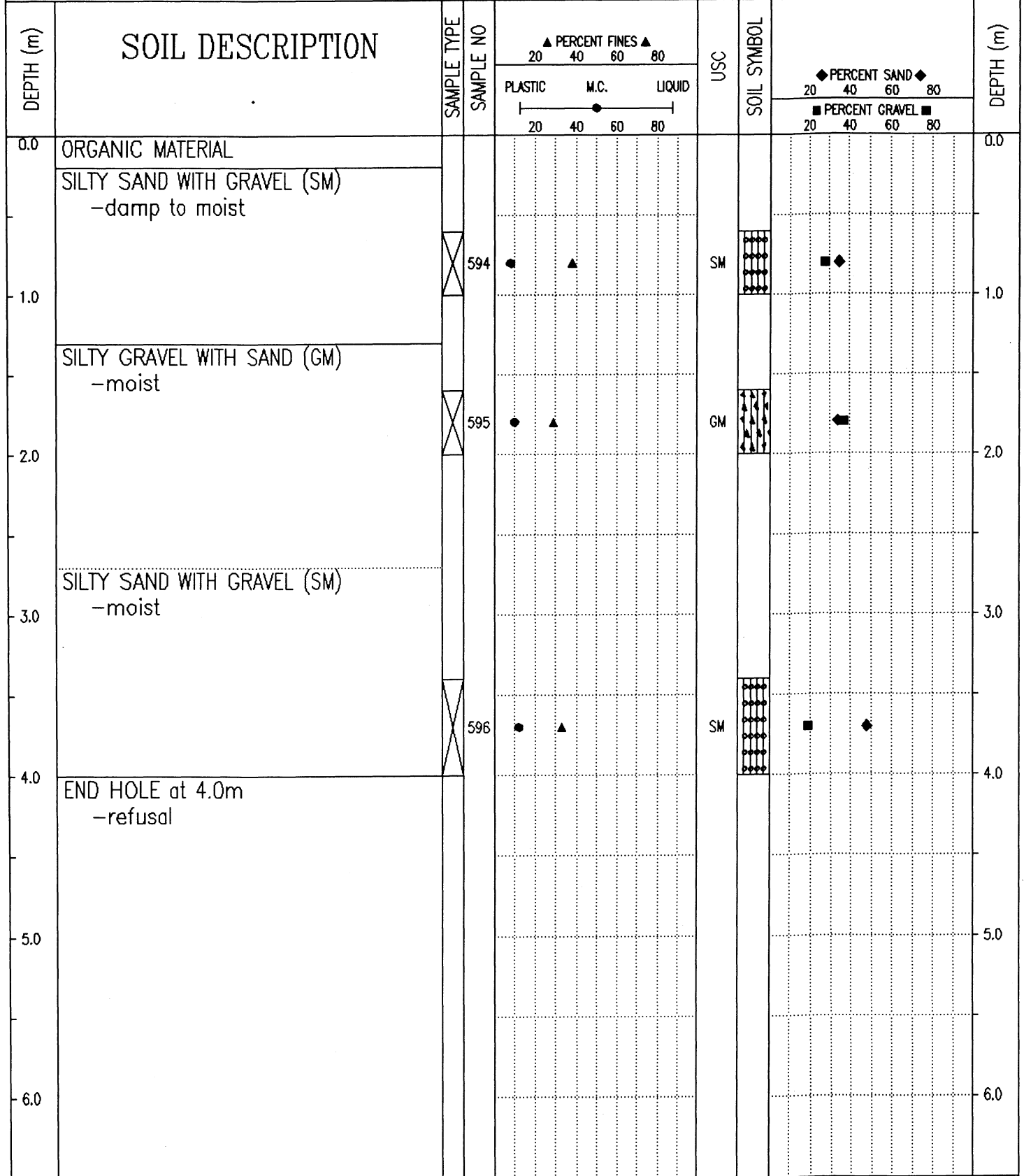
Fig. No:

COMPLETION DEPTH: 1.2 m

COMPLETE: 95/09/20

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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 267-419
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1860+675 o/s 15m 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

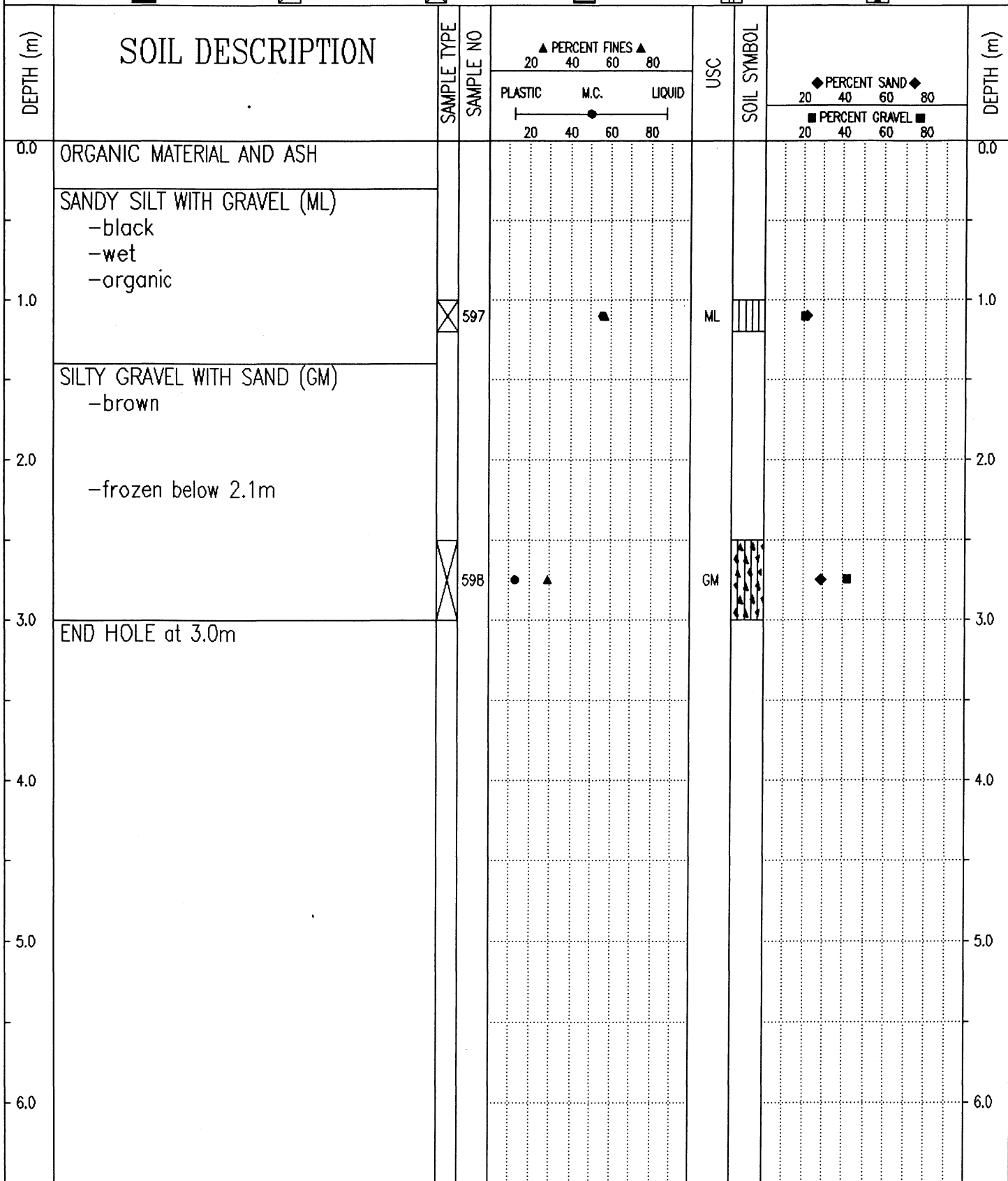


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Fig. No:

COMPLETION DEPTH: 4.0 m  
COMPLETE: 93/10/14

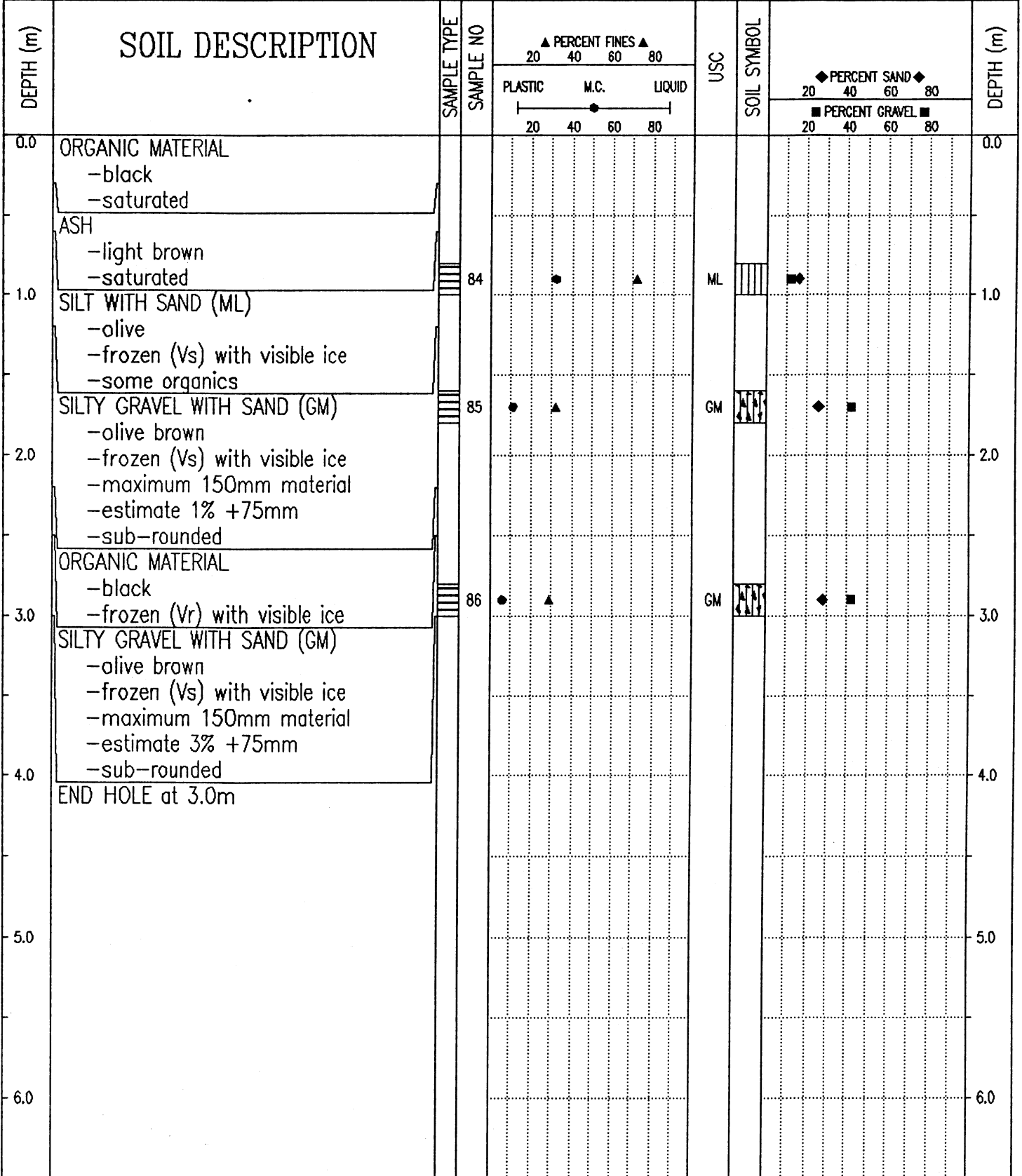
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SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1860+750 o/s 15m Lt.	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



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LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 93/10/14
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SAMPLE TYPE  RETURN     S.P.T.     AUGER     BULK     TUBE     CORE

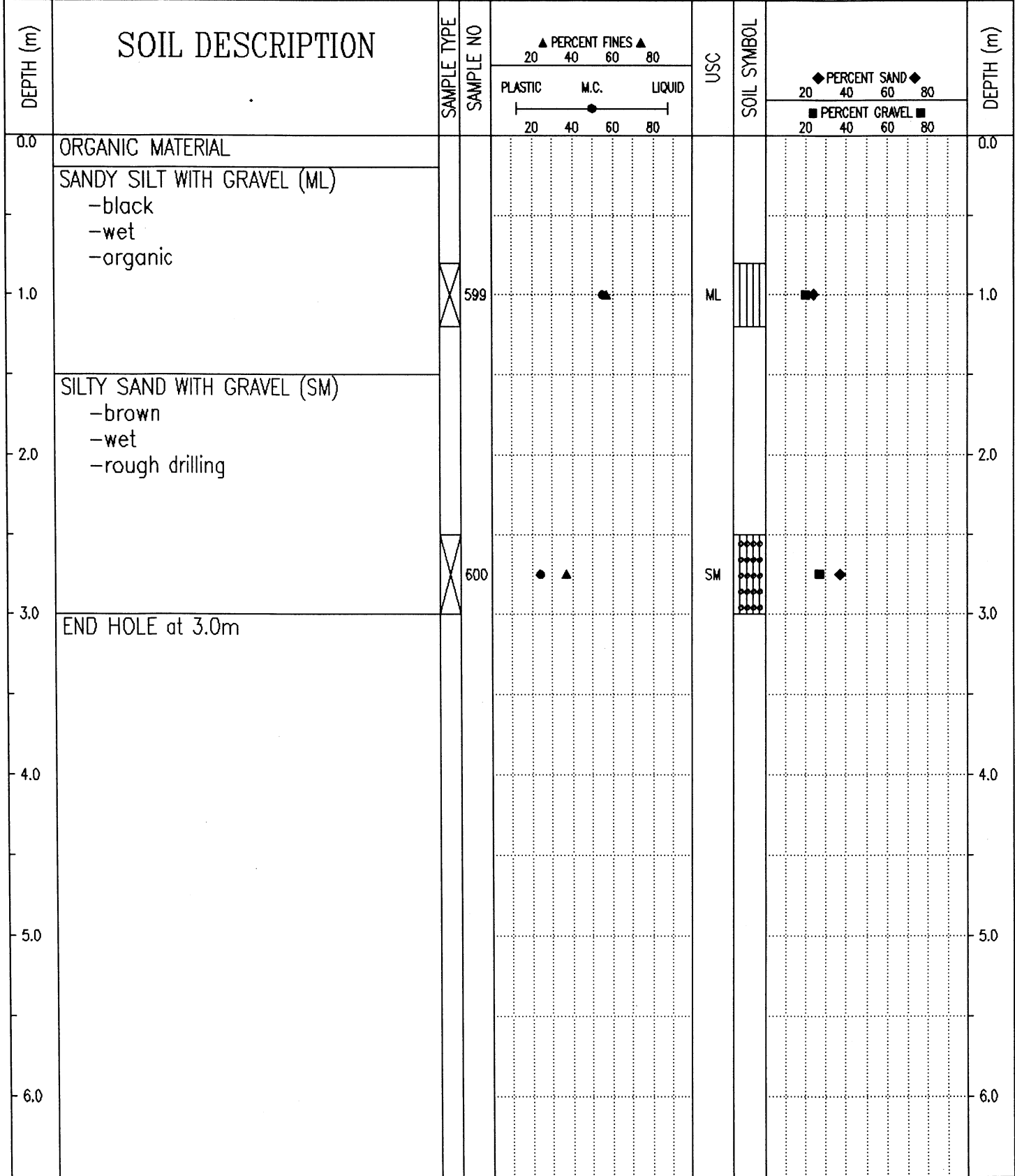


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LOGGED BY: KJ	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 95/09/20
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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 267-421
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1860+850 o/s 10m Lt.	ELEVATION: 0.00 (m)

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



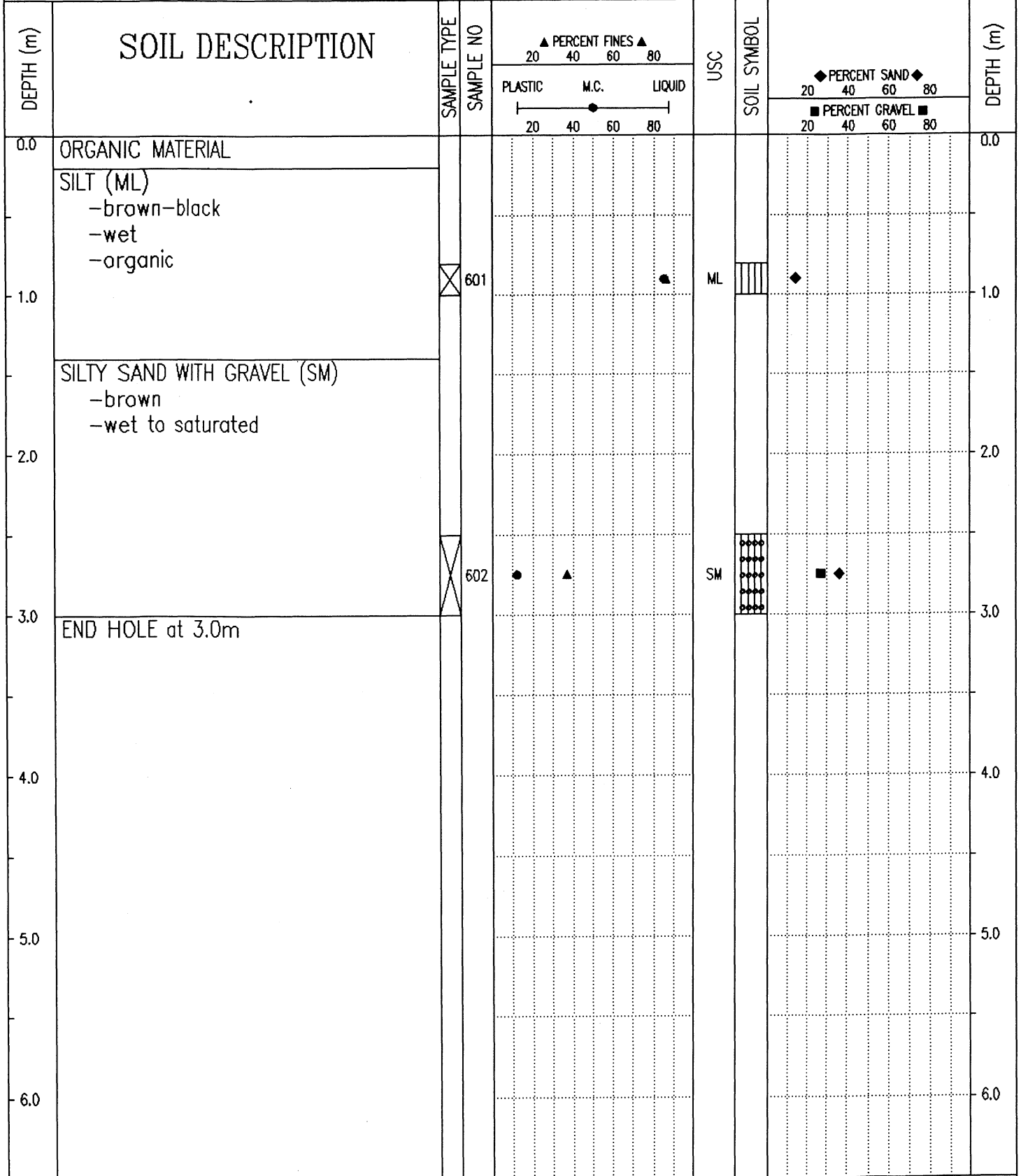
Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
	REVIEWED BY:	COMPLETE: 93/10/14
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 382-530
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172		LOCATION: Sta. 1860+850 o/s 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 ◆		PERCENT GRAVEL ■		DEPTH (m)
				20	40	60			80	20	40	60	
0.0	ORGANIC ASH -wet											0.0	
0.0 - 1.0	ORGANIC MATERIAL -black -frozen (Nb)												
1.0	SILTY SAND WITH GRAVEL (SM) -olive -frozen (Vs) with estimated 30% visible ice -maximum 100mm material -sub-rounded		87	●	▲		SM	◆◆◆◆	◆	■		1.0	
2.0	POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM) -olive brown -frozen (Vc) with visible ice -maximum 150mm material -estimate 5% +75mm -sub-rounded		88	▲			SP-SM	○○○○		■	◆	2.0	
3.0	SILTY SAND WITH GRAVEL (SM) -olive brown -frozen (Vc) with visible ice -maximum 150mm material -estimate 5% +75mm -sub-rounded		89	●	▲		SM	◆◆◆◆	◆	■		3.0	
4.0	END HOLE at 3.8m -refusal											4.0	
5.0												5.0	
6.0												6.0	

Government of Yukon Transportation Engineering	LOGGED BY: KJ	COMPLETION DEPTH: 3.8 m
	REVIEWED BY:	COMPLETE: 95/09/21
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SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 267-422
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1860+950 o/s 10m 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: 93/10/14

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

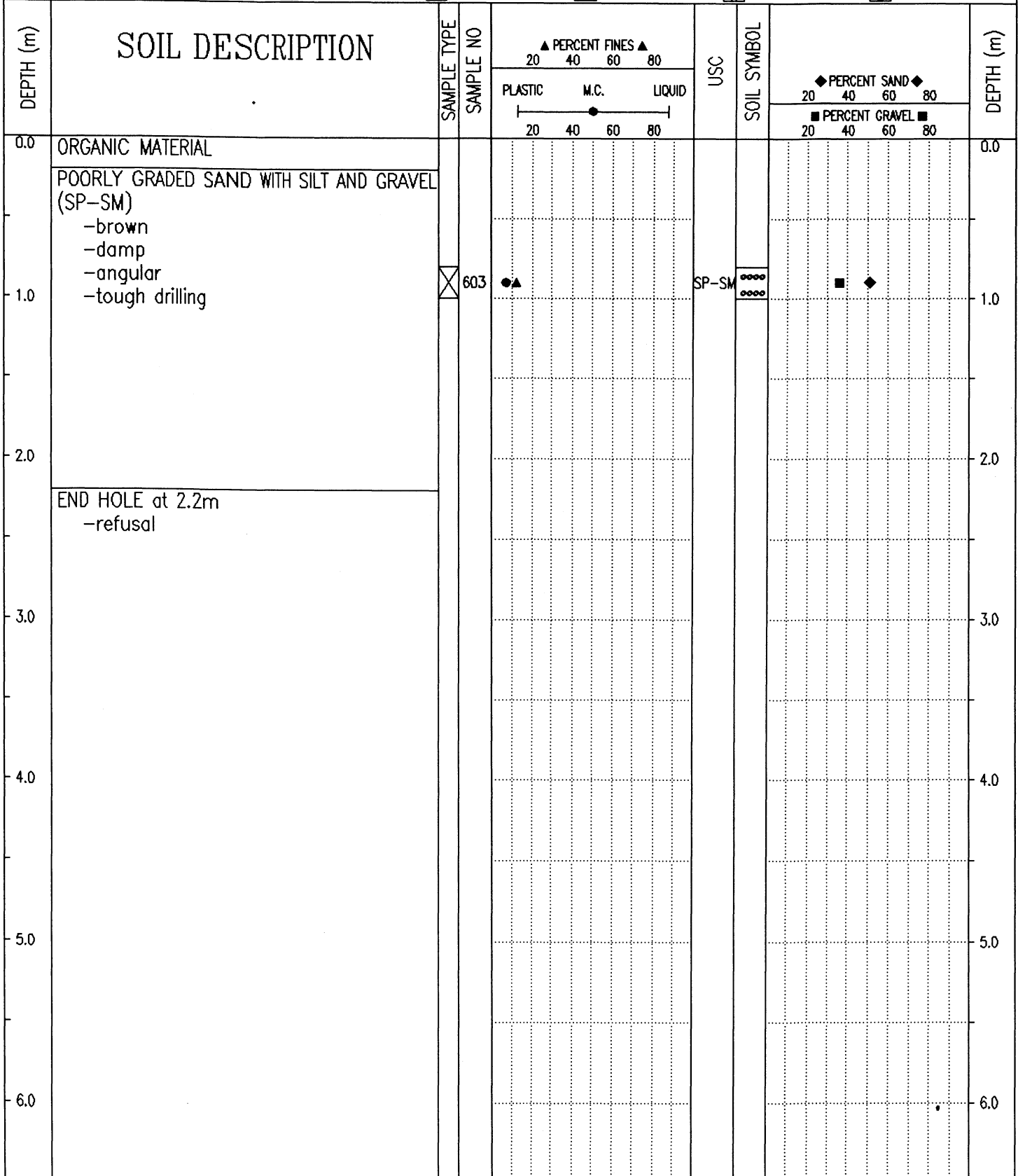
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	
0.0	ORGANIC ASH -WET -wet										0.0
0.0 - 1.0	SILT WITH SAND (ML) -black -frozen (Vs) with visible ice -very high organic content		90			▲	ML		◆		
1.0 - 2.0	SILTY GRAVEL WITH SAND (GM) -olive brown -frozen (Vs) with visible ice -maximum 75mm material -sub-rounded		91	●	▲		GM	◆	■		
2.0 - 3.2	SILTY SAND WITH GRAVEL (SM) -olive brown -frozen (Vs) with visible ice -maximum 150mm material -estimate 5% +75mm -sub-rounded		92	●	▲		SM		■		
3.2 - 6.0	END HOLE at 3.2m -refusal										

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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.2 m  
COMPLETE: 95/09/21

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 267-423
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1861+050 o/s 40m 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



Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 2.2 m
	REVIEWED BY:	COMPLETE: 93/10/14
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT      SHAKWAK PROJECT      TEST HOLE NO: 369-270

ENGINEERING-CAPITAL      SEGMENT 15      Project No: 092-202101-0314

BACKHOE: HITACHI EX 200 LC      LOCATION: Sta. 1861+100 o/s 15m Rt.      ELEVATION: 0.00 (m)

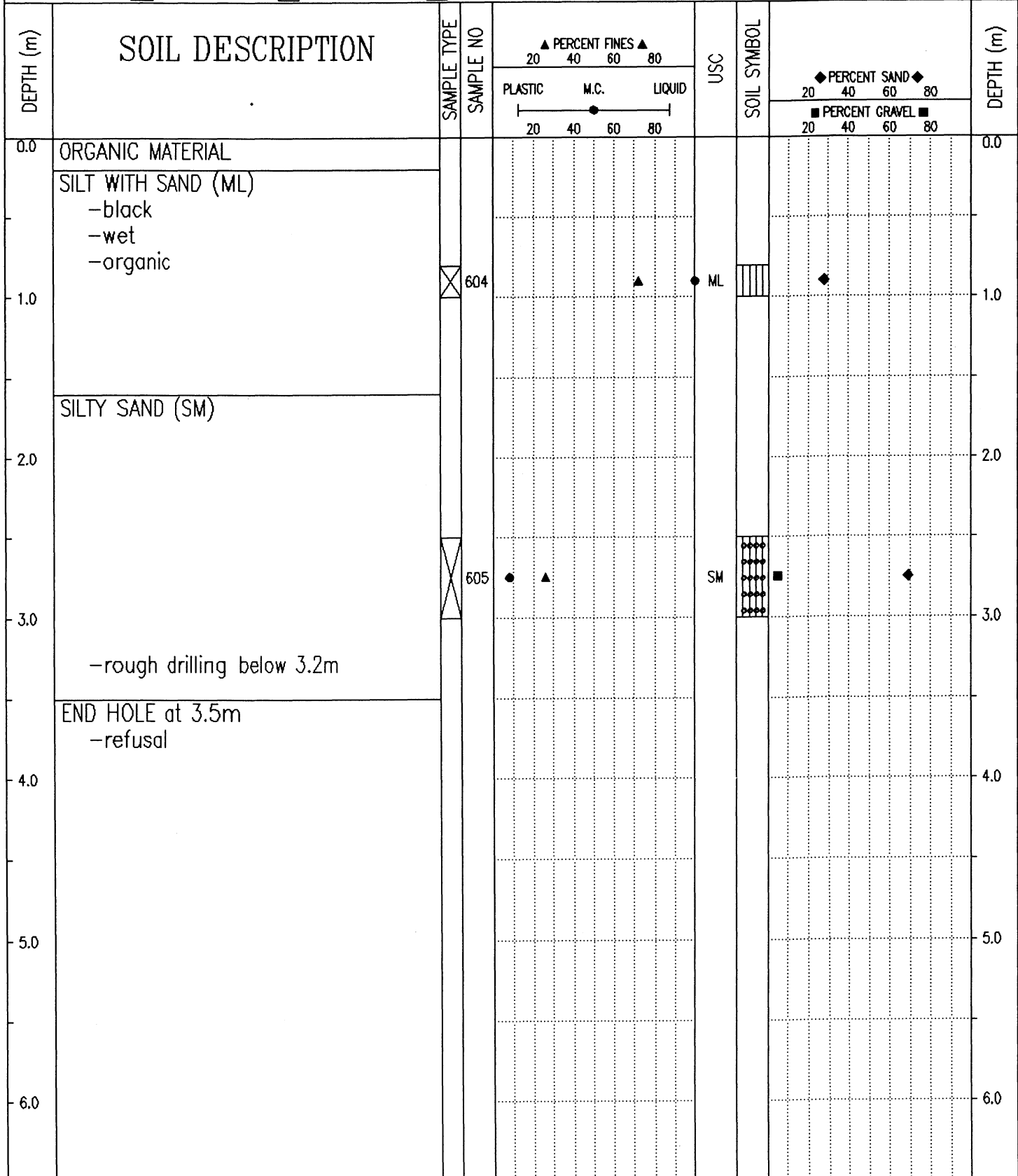
SAMPLE TYPE     RETURN     S.P.T.     AUGER     BULK     TUBE     CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)
				20	40	60			80	20		
0.0	ORGANIC MATERIAL ASH -smooth easy digging											0.0
1.0	ORGANIC MATERIAL -black -frozen (Vx) with visible ice -smooth hard digging											1.0
2.0	END HOLE at 1.6m -refusal											2.0
3.0												3.0
4.0												4.0
5.0												5.0
6.0												6.0

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LOGGED BY: DT      COMPLETION DEPTH: 1.6 m  
 REVIEWED BY:      COMPLETE: 95/07/12  
 Fig. No:      Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 267-423A
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1861+165	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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LOGGED BY: GC

REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 3.5 m

COMPLETE: 93/10/14

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 382-533
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172	LOCATION: Sta. 1861+200 o/s 16m 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 / GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
0.0	ORGANIC MATERIAL -black -moist										0.0	
0.5	ASH -light brown -moist										1.0	
1.0	ORGANIC MATERIAL -wet -frozen (Nb) below 0.6m										1.0	
1.5	POORLY GRADED GRAVEL WITH SAND (GP) -brown -frozen (Vr) with visible ice -angular		93				GP	▲▲▲▲	◆	■	2.0	
2.0	WEATHERED ROCK -frozen (Vr) with visible ice -maximum 400mm material -angular										2.0	
3.0	END HOLE at 1.8m -refusal										3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

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Fig. No:

COMPLETION DEPTH: 1.8 m

COMPLETE: 95/09/21

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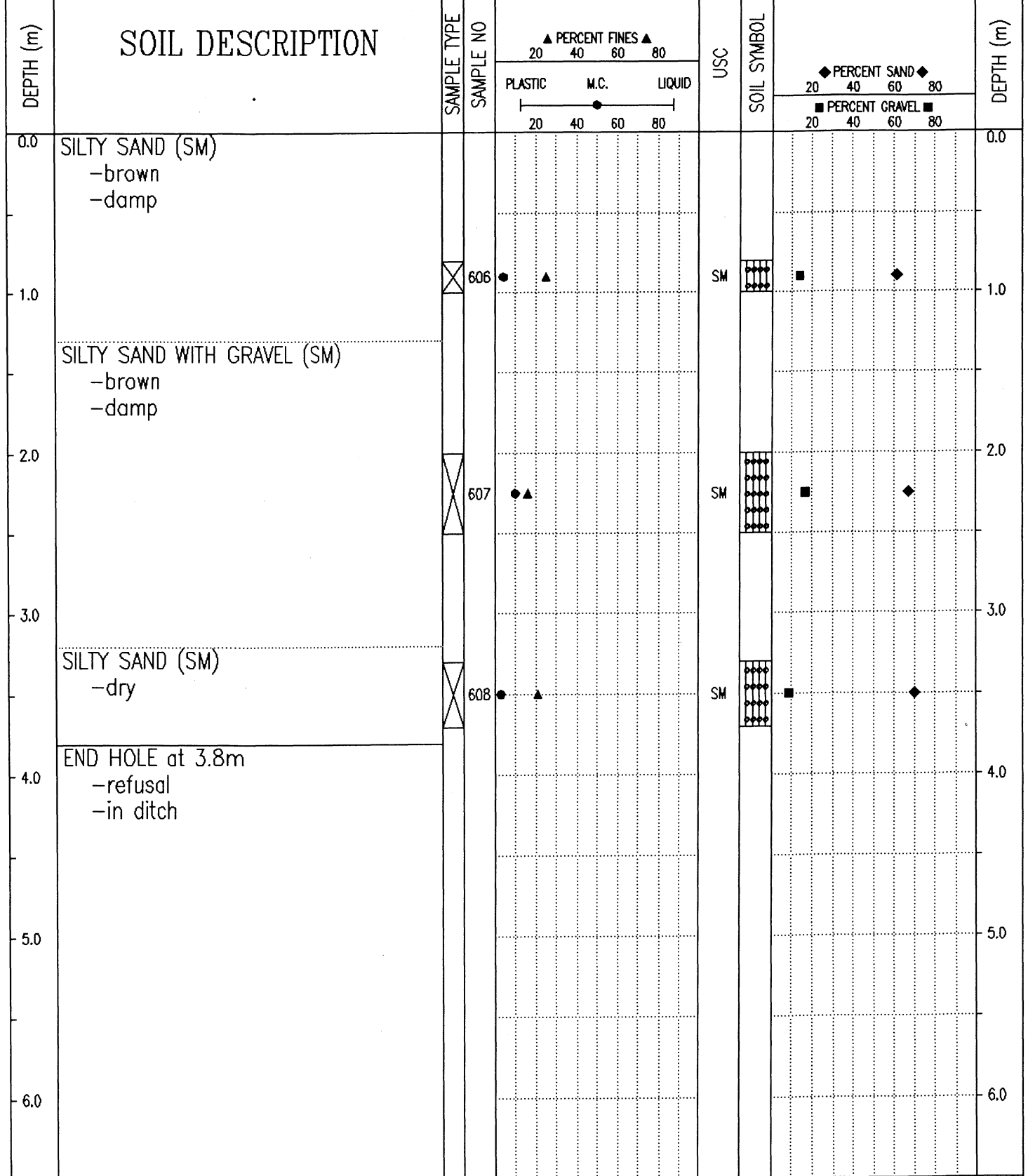
SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 382-532
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172		LOCATION: Sta. 1861+225 o/s 15m Rt.	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <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)
				20	40	60			80	20	40	
0.0	ORGANIC ASH -wet											0.0
1.0	ORGANIC MATERIAL -frozen (Vs) with visible ice											1.0
2.0	-dark brown at 1.7m -ice pockets below 1.7m											2.0
3.0	BOULDERS AND COBBLES -sub-angular to angular -maximum 1000mm END HOLE at 2.4m -refusal											3.0
4.0												4.0
5.0												5.0
6.0												6.0

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LOGGED BY: KJ	COMPLETION DEPTH: 2.4 m
REVIEWED BY:	COMPLETE: 95/09/21
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 267-424
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1861+300 o/s 7m 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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LOGGED BY: GC	COMPLETION DEPTH: 3.8 m
REVIEWED BY:	COMPLETE: 93/10/14
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SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 369-271
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0314
BACKHOE: HITACHI EX 200 LC	LOCATION: Sta. 1861+325 o/s 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			20	40	
0.0	ORGANIC MATERIAL ASH									0.0	
0.0 - 1.0	ORGANIC MATERIAL -black -frozen (Vx) with visible ice -smooth hard digging										
1.0 - 2.7	SILTY SAND WITH GRAVEL -frozen (Vx) with visible ice -cobbles -angular -hard noisy digging										
2.7 - 3.0	WEATHERED ROCK										
3.0 - 6.0	END HOLE at 2.7m -refusal										

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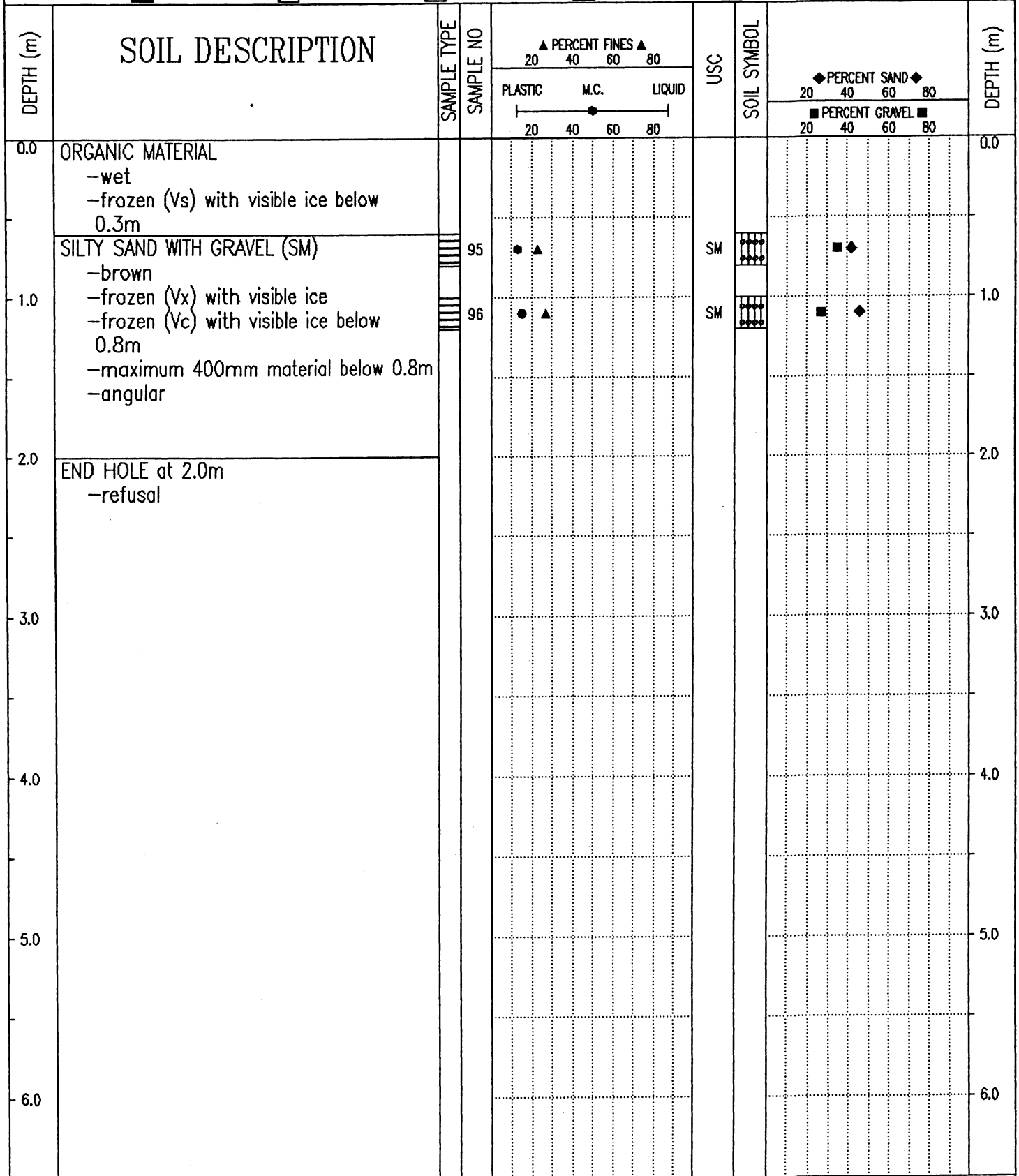
LOGGED BY: DT  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 2.7 m  
COMPLETE: 95/07/12

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 MATERIAL -moist									0.0	
0.5	-frozen (Vs) with visible ice below 0.5m										
1.7	SILTY GRAVEL (GM) -frozen (Vs) with visible ice		94	●	▲		GM	◆	■		
2.0	WEATHERED ROCK -blue green -frozen (Vx) with visible ice -maximum 400mm material -angular										
1.7	END HOLE at 1.7m -refusal										

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 382-535
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172		LOCATION: Sta. 1861+395 o/s 25m 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			

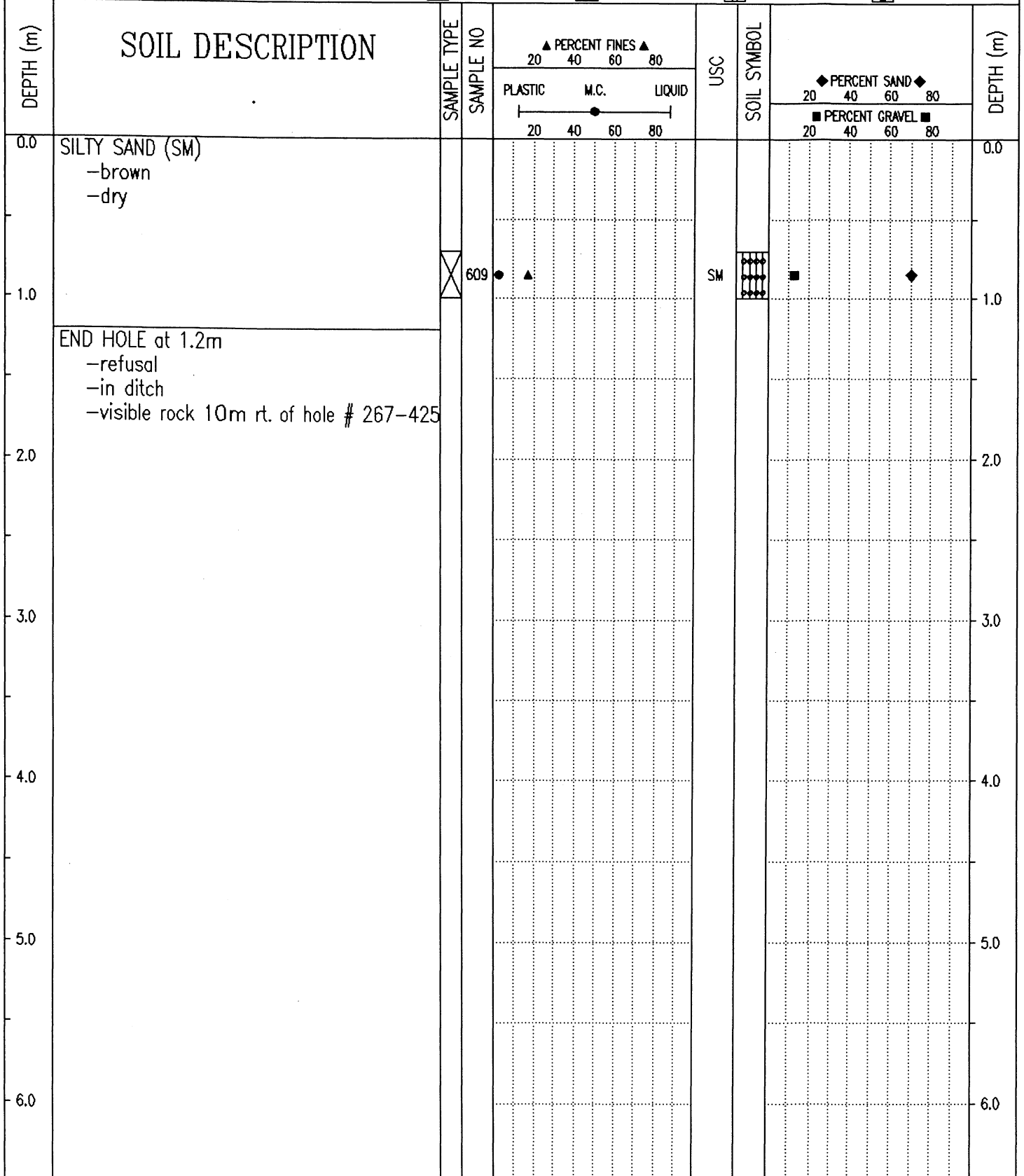


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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 2.0 m  
COMPLETE: 95/09/21

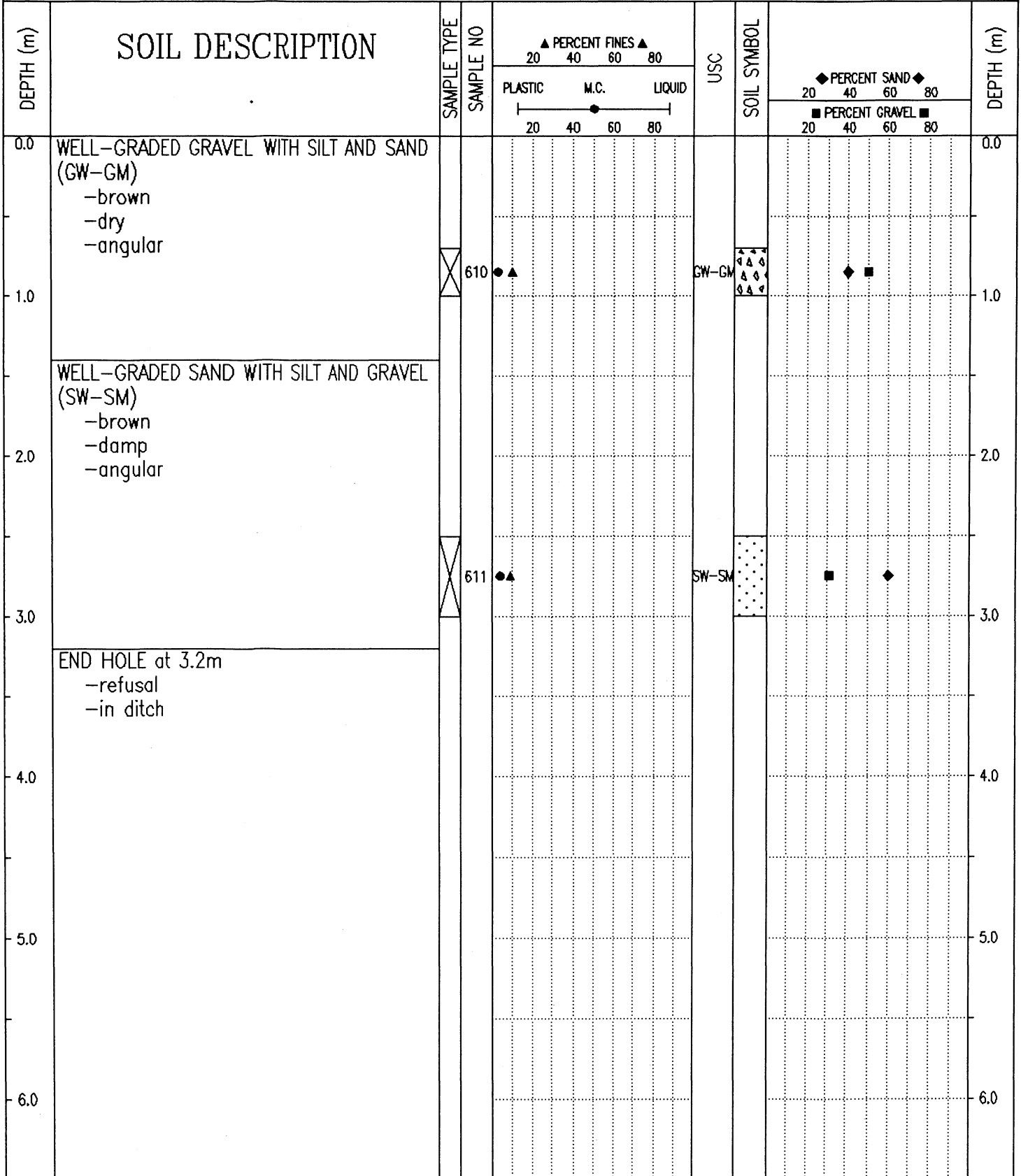
SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 267-425
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1861+460 o/s 10m Rt.	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN		<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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LOGGED BY: GC	COMPLETION DEPTH: 1.2 m
REVIEWED BY:	COMPLETE: 93/10/14
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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 267-426
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1861+480 o/s 12m 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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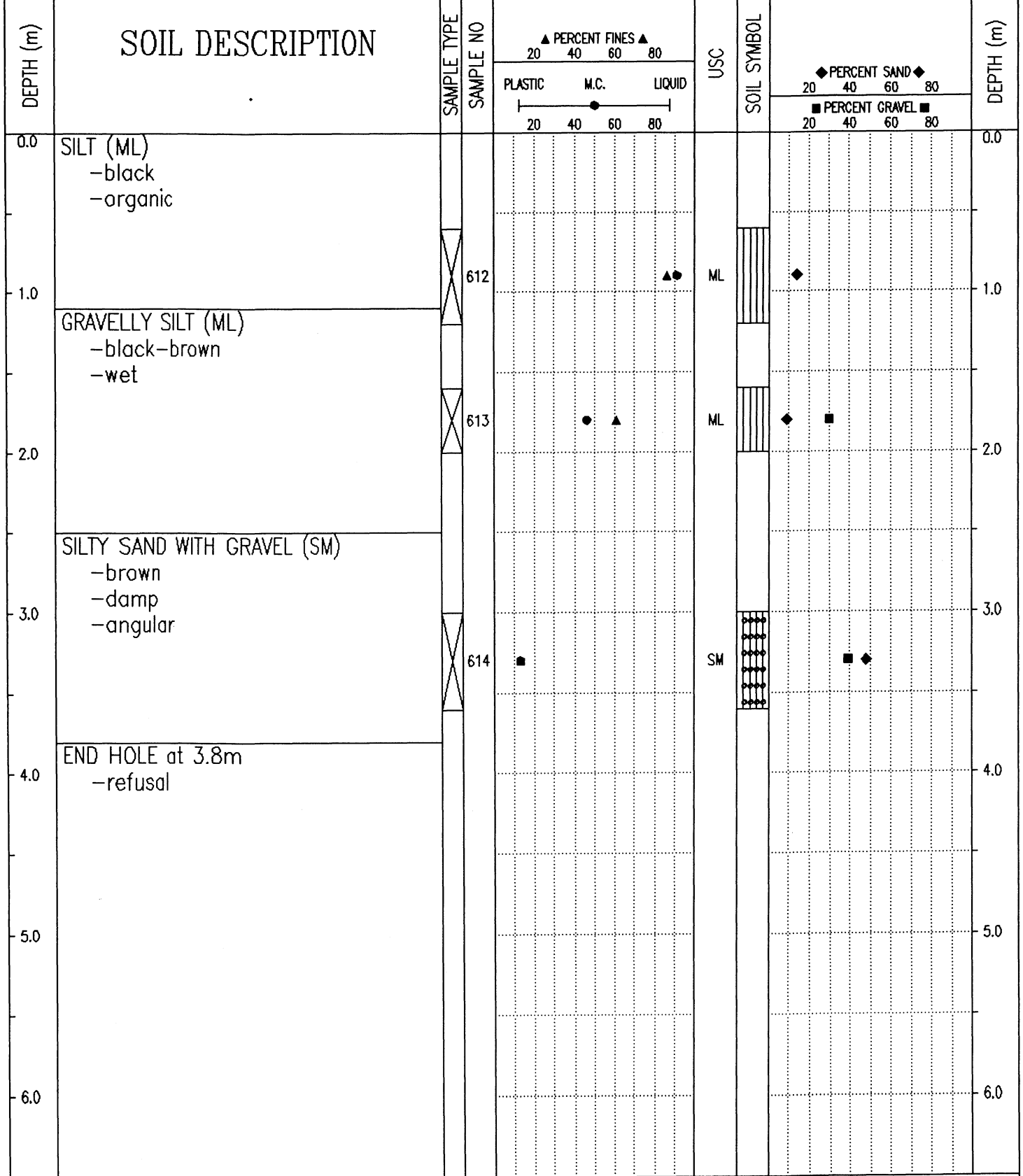
SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 369-272
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0314
BACKHOE: HITACHI EX 200 LC		LOCATION: Sta. 1861+550 o/s 15m Rt.	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN	<input checked="" type="checkbox"/> 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		PERCENT GRAVEL		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	
0.0	ORGANIC MATERIAL -smooth easy digging											0.0	
	ASH												
	ORGANIC MATERIAL -frozen (Vx) with visible ice -smooth hard digging												
1.0	SILTY SAND WITH GRAVEL (SM) -frozen (Vx) with visible ice -weathered rock -hard noisy digging		571				SM					1.0	
	END HOLE at 1.3m -refusal												
2.0												2.0	
3.0												3.0	
4.0												4.0	
5.0												5.0	
6.0												6.0	

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REVIEWED BY:	COMPLETE: 95/07/12
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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 267-427
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1861+600	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

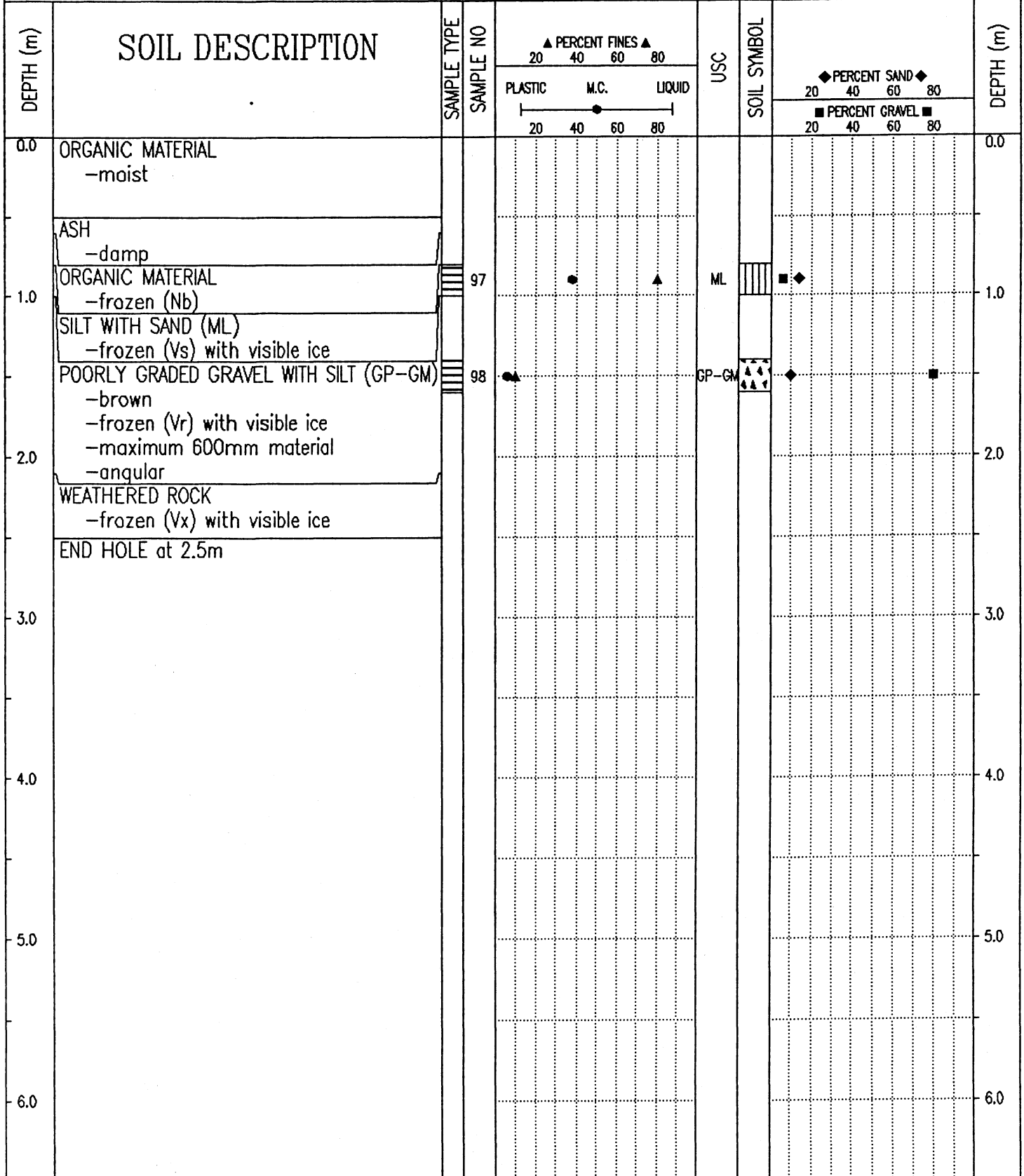


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REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.8 m  
COMPLETE: 93/10/14

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 382-536
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172		LOCATION: Sta. 1861+600 o/s 15m 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			



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Fig. No:

COMPLETION DEPTH: 2.5 m

COMPLETE: 95/09/22

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 369-273
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0314
BACKHOE: HITACHI EX 200 LC		LOCATION: Sta. 1861+625 o/s 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

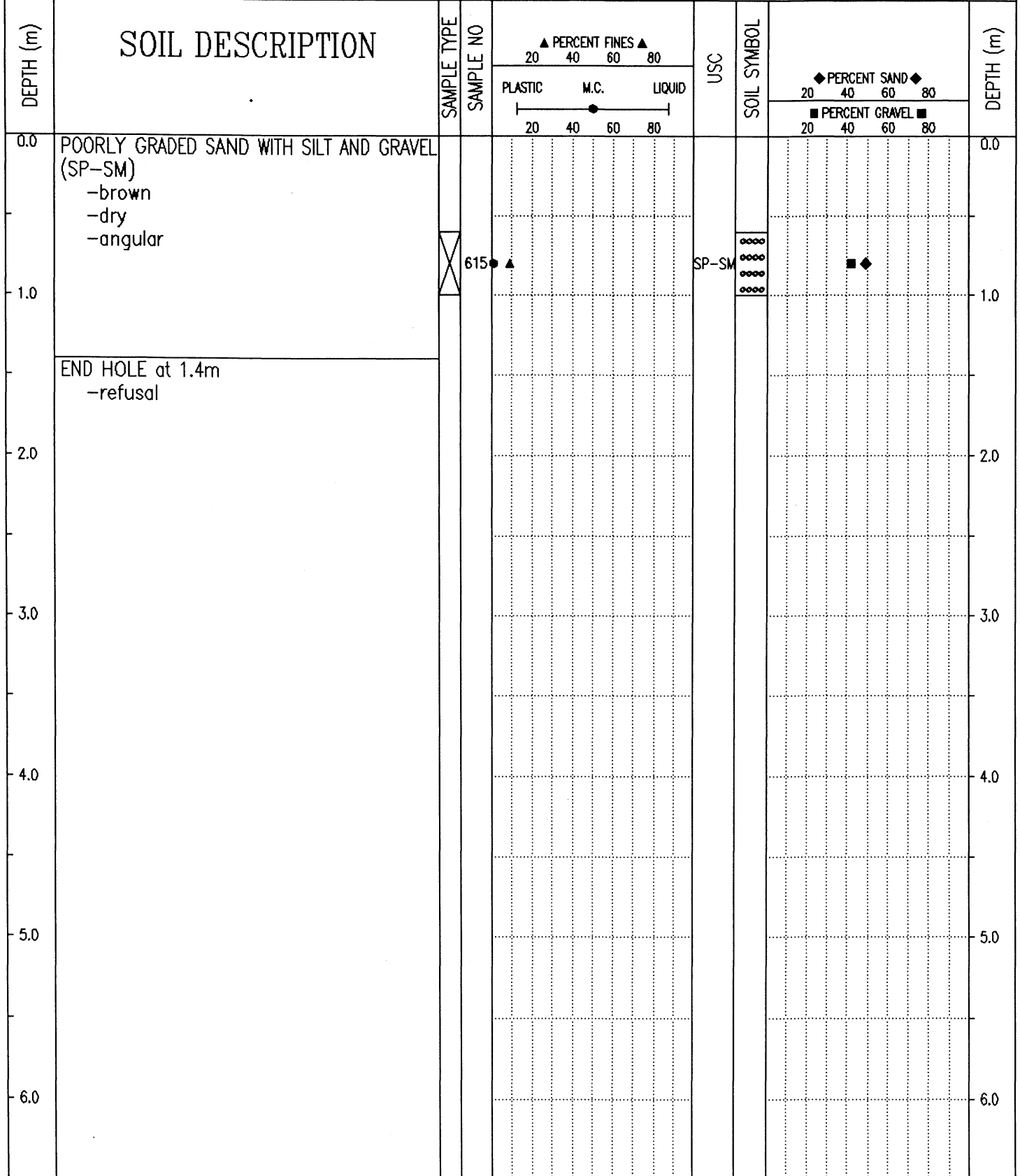
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40		
0.0	ORGANIC MATERIAL ASH ORGANIC MATERIAL -black -frozen (Vx) with visible ice											0.0
1.0												1.0
2.0	SILTY GRAVEL (GM) -frozen (Vx) with visible ice -weathered rock		572	●	▲		GM	◆	■			2.0
2.0	END HOLE at 2.0m -refusal											2.0
3.0												3.0
4.0												4.0
5.0												5.0
6.0												6.0

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LOGGED BY: DT	COMPLETION DEPTH: 2.0 m
REVIEWED BY:	COMPLETE: 95/07/12
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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 267-428
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1861+705	ELEVATION: 0.00 (m)

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



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Fig. No:

COMPLETION DEPTH: 1.4 m  
COMPLETE: 93/10/14

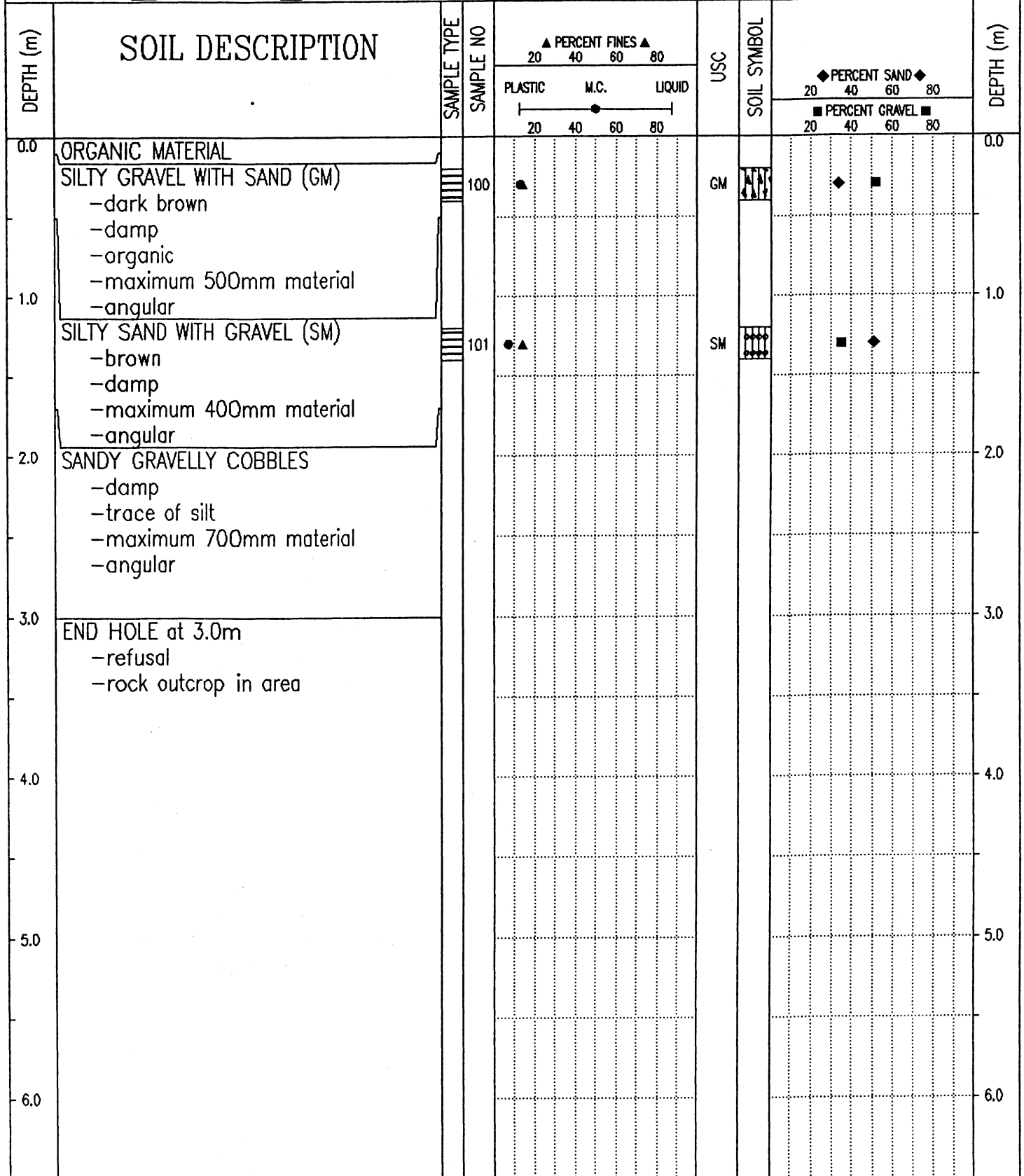
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ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172		LOCATION: Sta. 1861+750 o/s 10m Lt.	ELEVATION: 0.00 (m)

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	60	80	
0.0	ORGANIC MATERIAL -dark brown -moist												0.0
1.0	WELL-GRADED GRAVEL WITH SILT AND SAND (GW-GM) -brown -frozen (Vx) with visible ice -angular		99	▲			GW-GM	▲			■		1.0
2.0	WEATHERED ROCK -brown -frozen (Vx) with visible ice -some silt -maximum 300mm material below 1.9m -angular												2.0
3.0	END HOLE at 2.5m -refusal												3.0
4.0													4.0
5.0													5.0
6.0													6.0

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	REVIEWED BY:	COMPLETE: 95/09/22
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SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 382-538
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172	LOCATION: Sta. 1861+785 o/s 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		



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REVIEWED BY:  
Fig. No:  
COMPLETION DEPTH: 3.0 m  
COMPLETE: 95/09/22  
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SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 267-429
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1861+890 o/s 3m 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	SILT									0.0	
	END HOLE at 0.2m - refusal - in ditch - visible rock on surface - visible rock at sta. 1861+930 4m rt.										
1.0										1.0	
2.0										2.0	
3.0										3.0	
4.0										4.0	
5.0										5.0	
6.0										6.0	

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LOGGED BY: GC

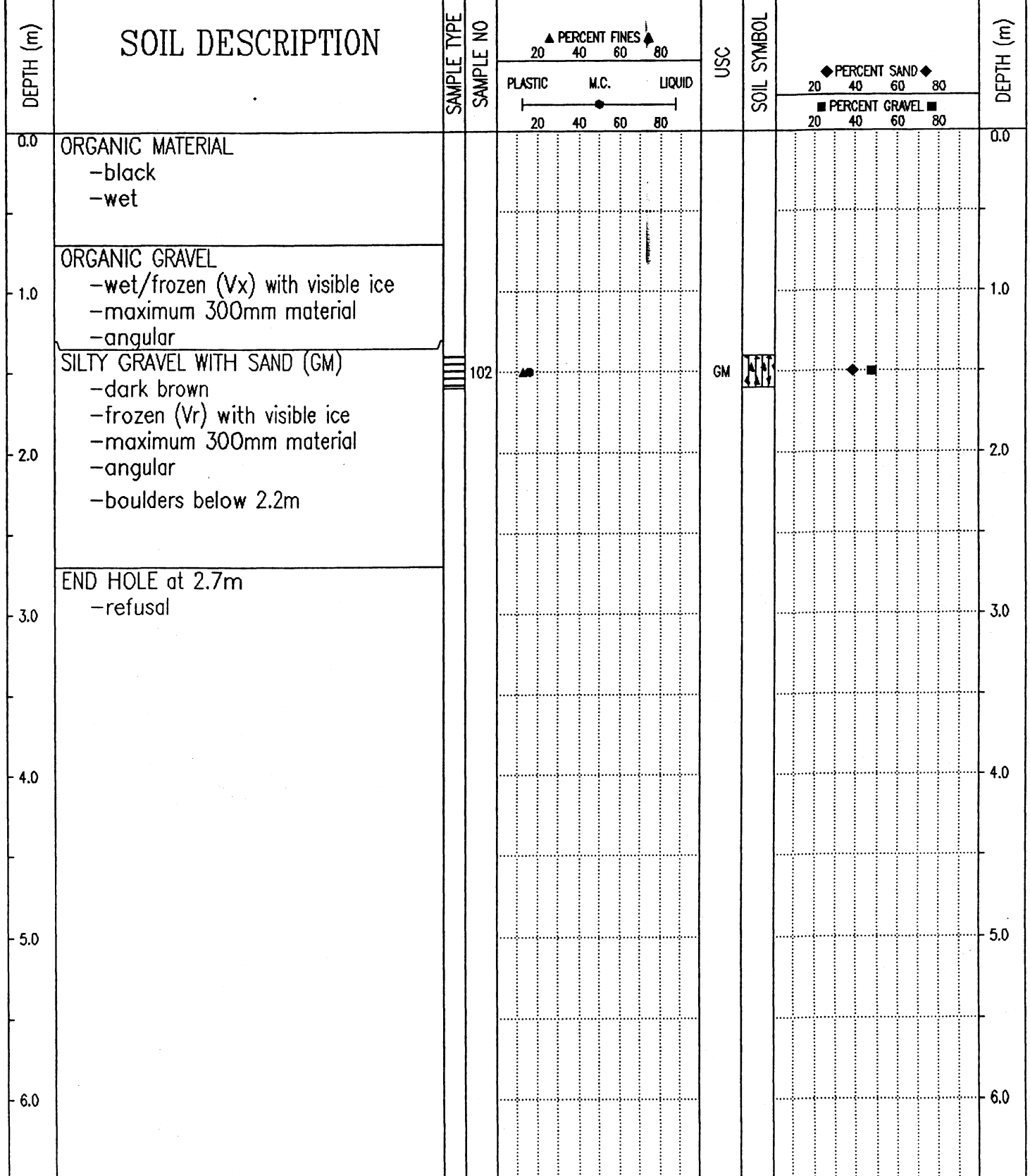
REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 0.2 m

COMPLETE: 93/10/14

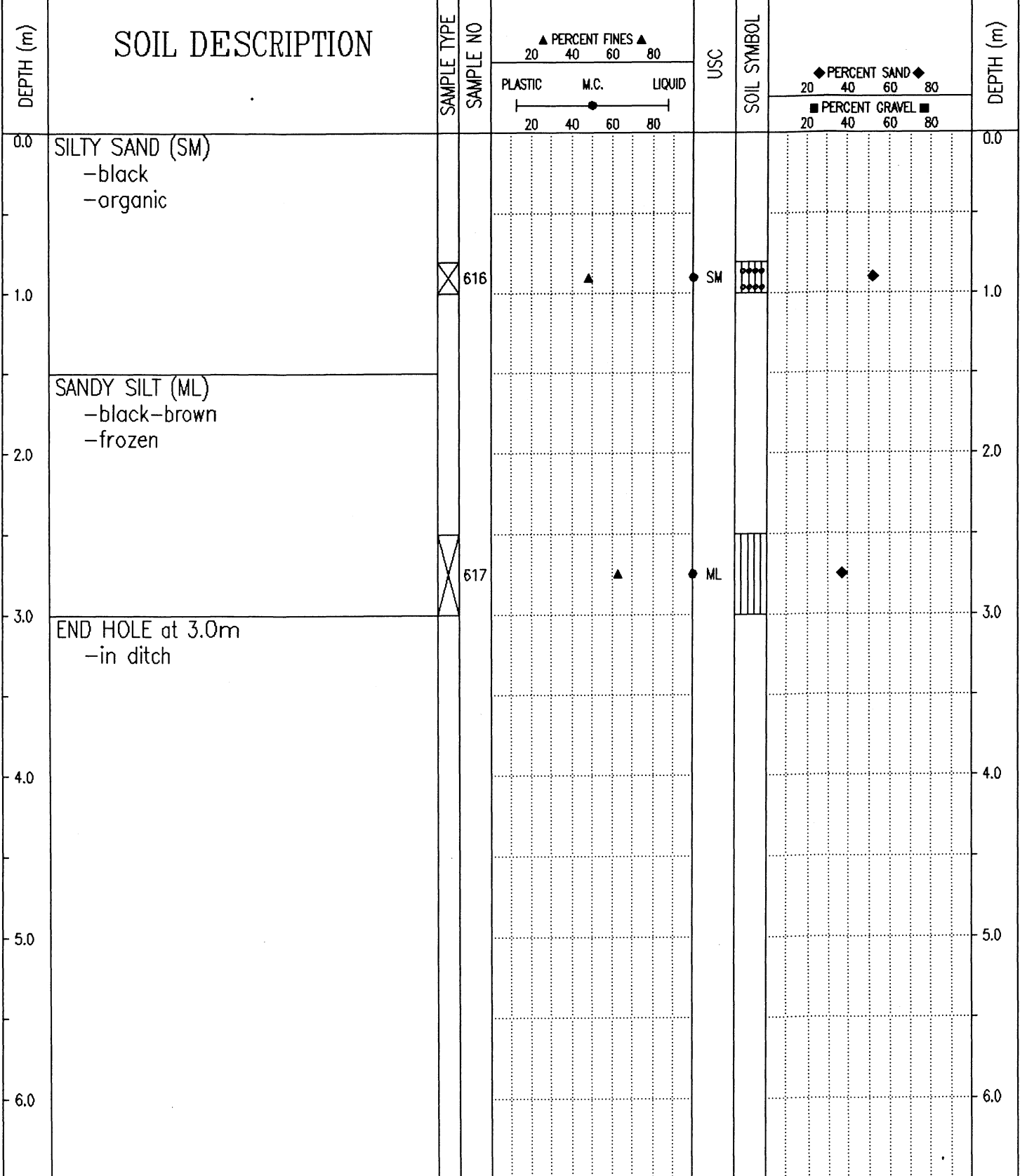
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ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172		LOCATION: Sta. 1861+970 o/s 12m Rt.	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
		<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE



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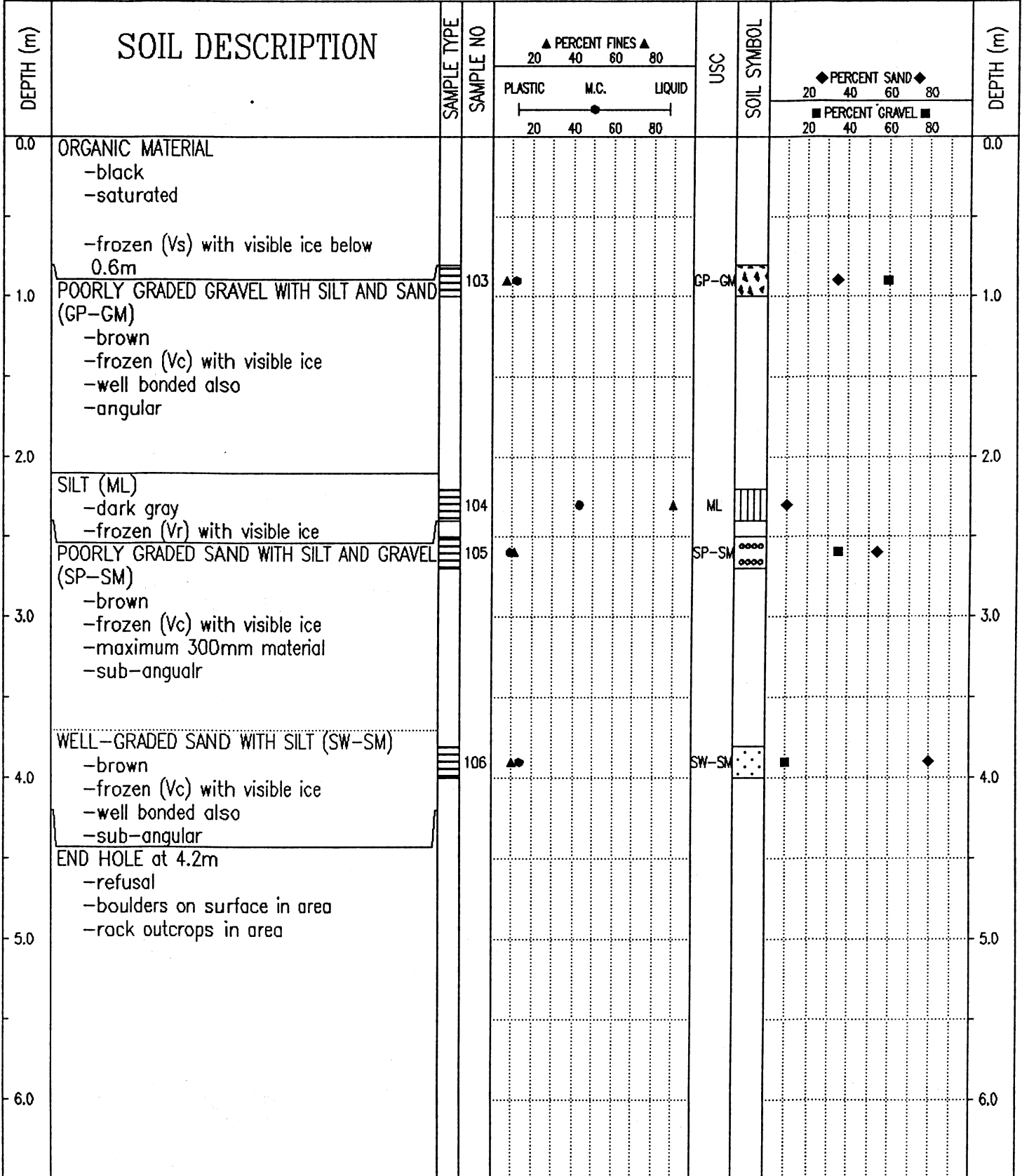
LOGGED BY: KJ	COMPLETION DEPTH: 2.7 m
REVIEWED BY:	COMPLETE: 95/09/22
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 267-430
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1862+000 o/s 5m 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		



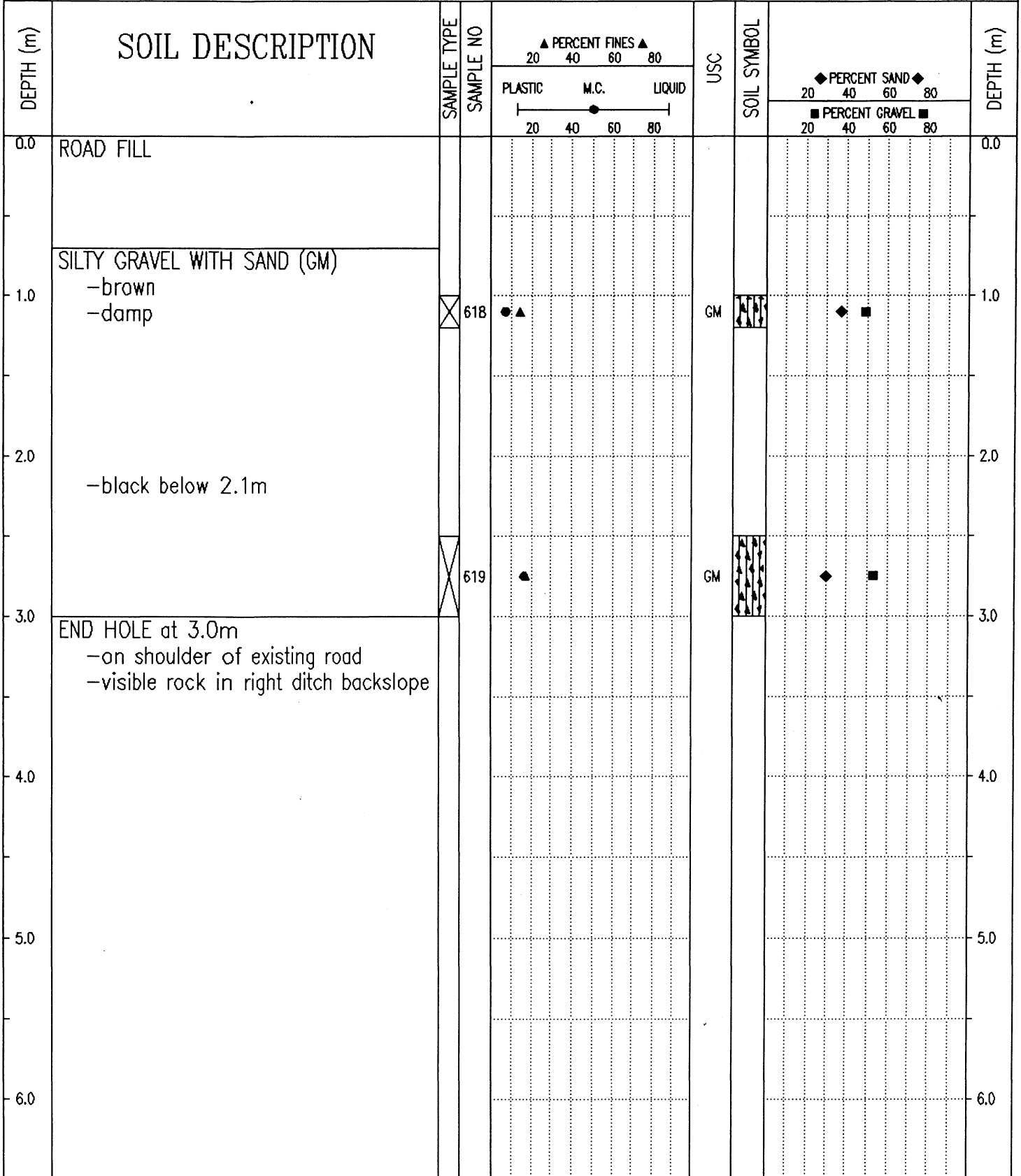
Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
	REVIEWED BY:	COMPLETE: 93/10/14
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 382-540
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172		LOCATION: Sta. 1862+075 o/s 10m 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



Government of Yukon Transportation Engineering		LOGGED BY: KJ	COMPLETION DEPTH: 4.2 m
		REVIEWED BY:	COMPLETE: 95/09/22
		Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 267-431
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1862+100 o/s 2m Rt.	ELEVATION: 0.00 (m)
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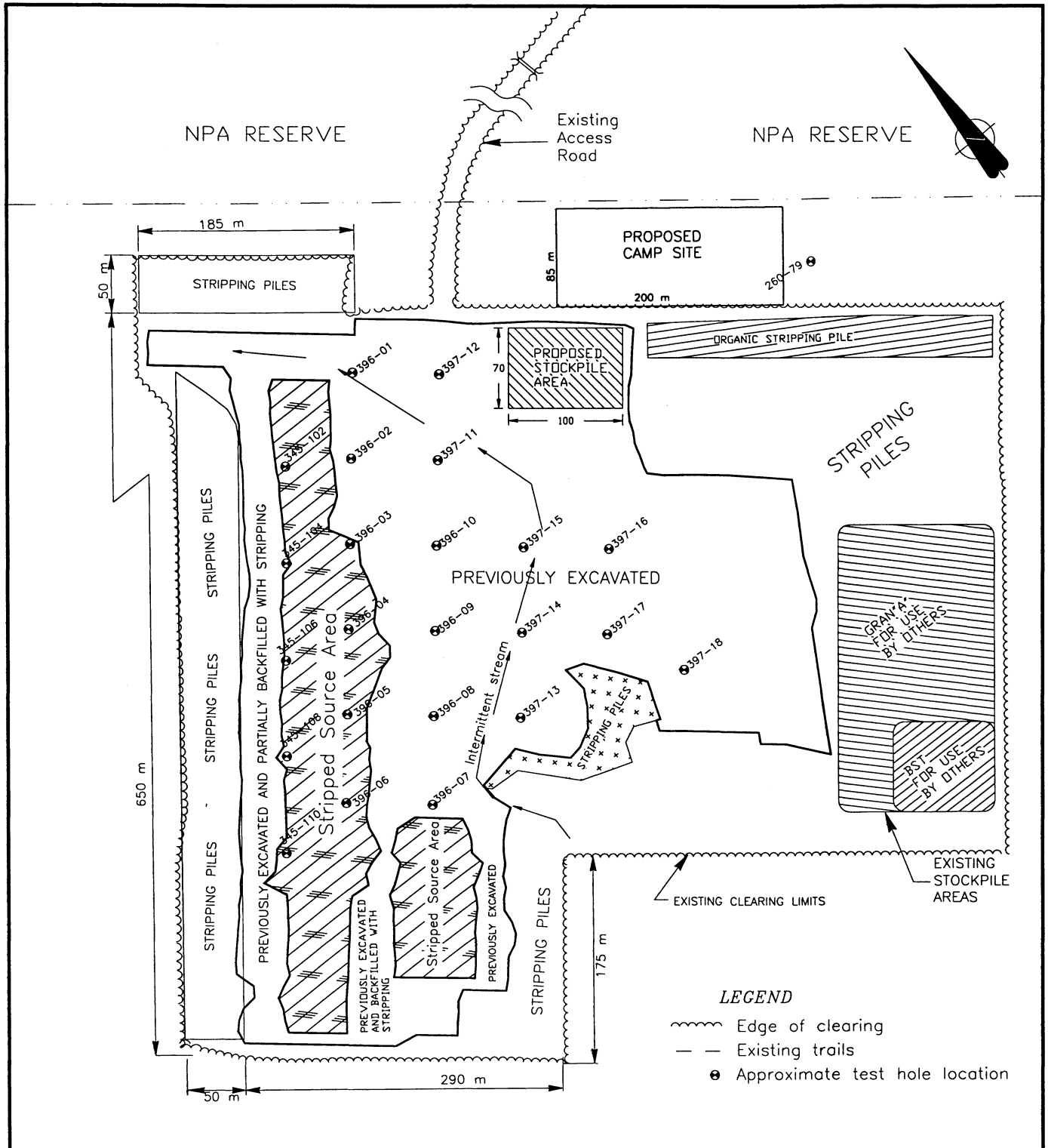


Government of Yukon  
Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 93/10/14
Fig. No:	Page 1 of 1

GEOTECHNICAL INVESTIGATION  
HIGHWAY CONSTRUCTION  
km 1852.1 to km 1862.1, ALASKA HIGHWAY, Y.T.  
CENTRELINE AND GRANULAR TESTING

# ■ GRANULAR TESTING



NOTE: Access approximately 2.8 km west from Edith Creek bridge.

115 F-02

	<p>SITE PLAN GRANULAR SOURCE KM 1847</p>	designed: D.S.
		drawn: D.S./WAE/B.Mc.
<p>Transportation Engineering Branch</p>	<p>ALASKA HIGHWAY, YUKON</p>	app'd:
		date: 96-02-21
		scale: 1 : 5,000
		drwg: 01-1847-SP

# HISTORY OF AGGREGATE DEPOSIT

Alaska Highway Km 1847 L.H.S.

115 F-02

## Average Crusher Run Characteristics of Material Produced

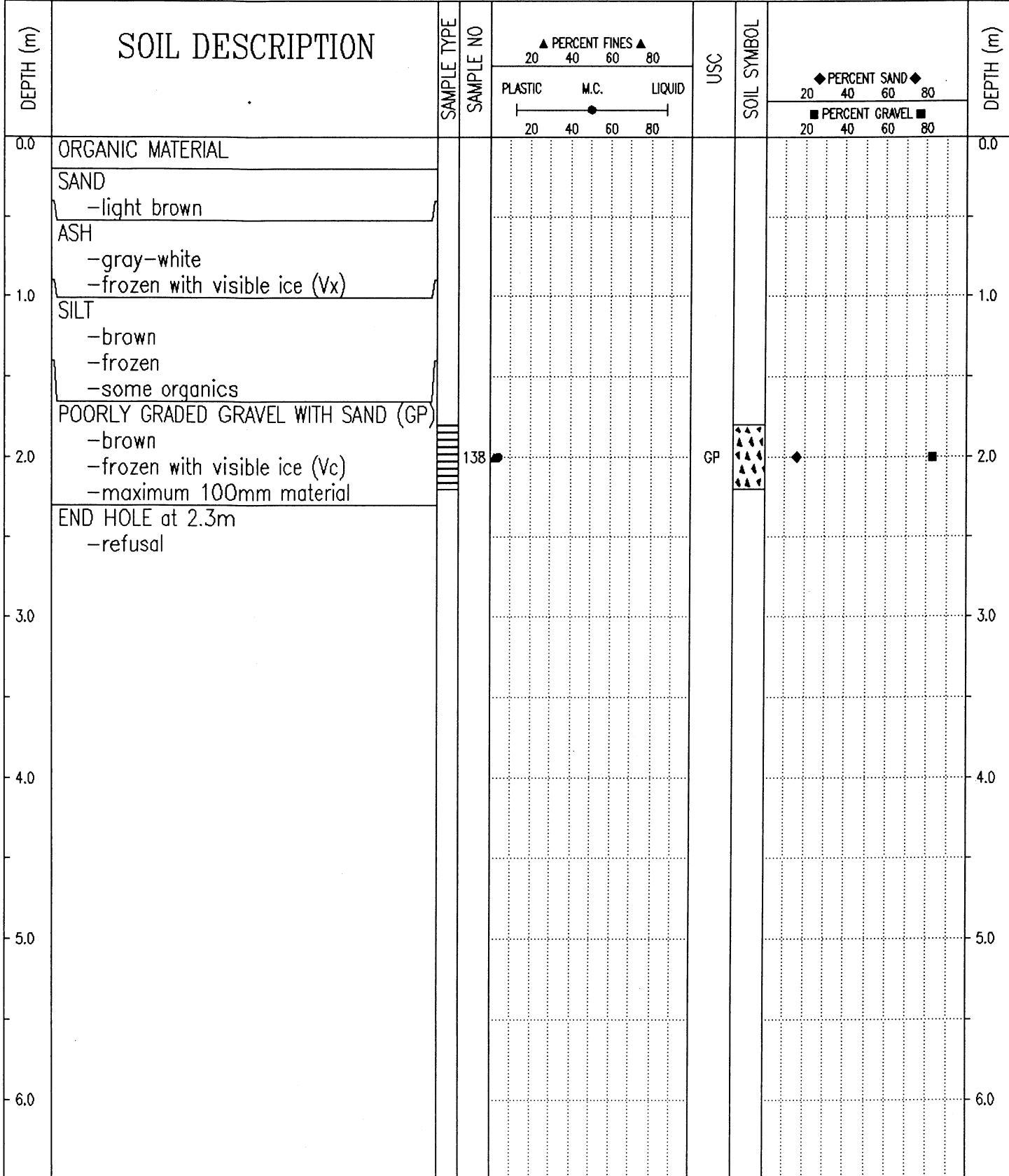
File Number --- Contractor --- Nuway  
Commenced 94-10-24 Completed 94-11-19 No. of tests - 315  
Type of aggregate - Granular "A" (3/4")  
Amount Produced --- 107,189 m<sup>3</sup>

-----  
Sieve Size mm - 50.0 20.0 12.5 5.00 1.25 0.315 0.080  
Percent Passing - - 99.9 80.7 46.5 24.3 9.4 4.6  
Moisture Content - 2.6% Standard Proctor  
Fracture - 74.0% Kg/m<sup>3</sup> @ % moisture  
=====

File Number --- Contractor --- Nuway  
Commenced 94-10-25 Completed 94-11-01 No. of tests - 69  
Type of aggregate - 20 mm B.S.T. Aggregate  
Amount Produced --- 21,780 m<sup>3</sup>

-----  
Sieve Size mm - 20.0 12.5 5.00 2.50 1.25 0.315 0.080  
Percent Passing - 99.9 80.5 45.8 32.5 23.2 8.5 3.8  
Moisture Content - 2.3% Standard Proctor  
Fracture - 72.5% Kg/m<sup>3</sup> @ % moisture  
=====

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



Government of Yukon  
Transportation Engineering

LOGGED BY: DT	COMPLETION DEPTH: 2.3 m
REVIEWED BY:	COMPLETE: 93/10/09
Fig. No:	Page 1 of 1

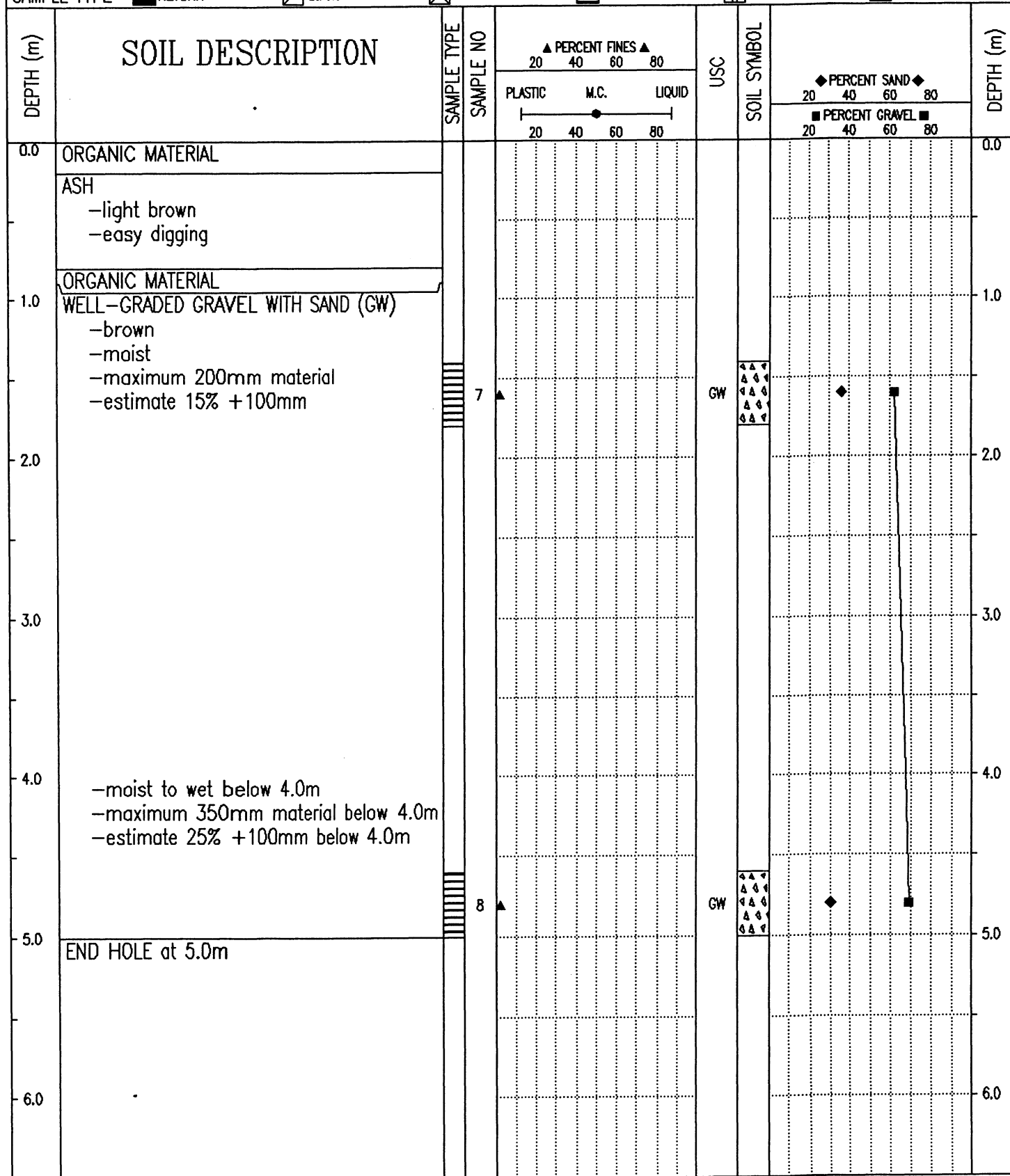
SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT		TEST PIT NO: 345-102								
ENGINEERING-CAPITAL		115F-02		Project No: 092-202101-0311								
BACKHOE: CAT 245		LOCATION: See Plan		ELEVATION: 0.00 (m)								
SAMPLE TYPE <input type="checkbox"/> RETURN		<input checked="" type="checkbox"/> S.P.T.		<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 MATERIAL											0.0
	ASH											
	-light brown to gray											
	-easy digging											
	-frozen (Vx) with visible ice below 0.6m											
1.0	-very hard digging below 0.6m											1.0
	SILT											
	-frozen (Nb)											
	-some sand and gravel											
2.0												2.0
	WELL-GRADED GRAVEL WITH SILT AND SAND (GW-GM)		5									
	-brown											
	-frozen (Vx) with visible ice											
	-maximum 150mm material											
	-estimate 15% +100mm											
	-harder digging below 3.5m											
3.0												3.0
	END HOLE at 4.2m											
	-hoe broke down											
4.0												4.0
5.0												5.0
6.0												6.0

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Transportation Engineering

LOGGED BY: DT  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 4.2 m  
COMPLETE: 94/12/09

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST PIT NO: 345-104
ENGINEERING-CAPITAL	115F-02	Project No: 092-202101-0311
BACKHOE: CAT 245	LOCATION: See Plan	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



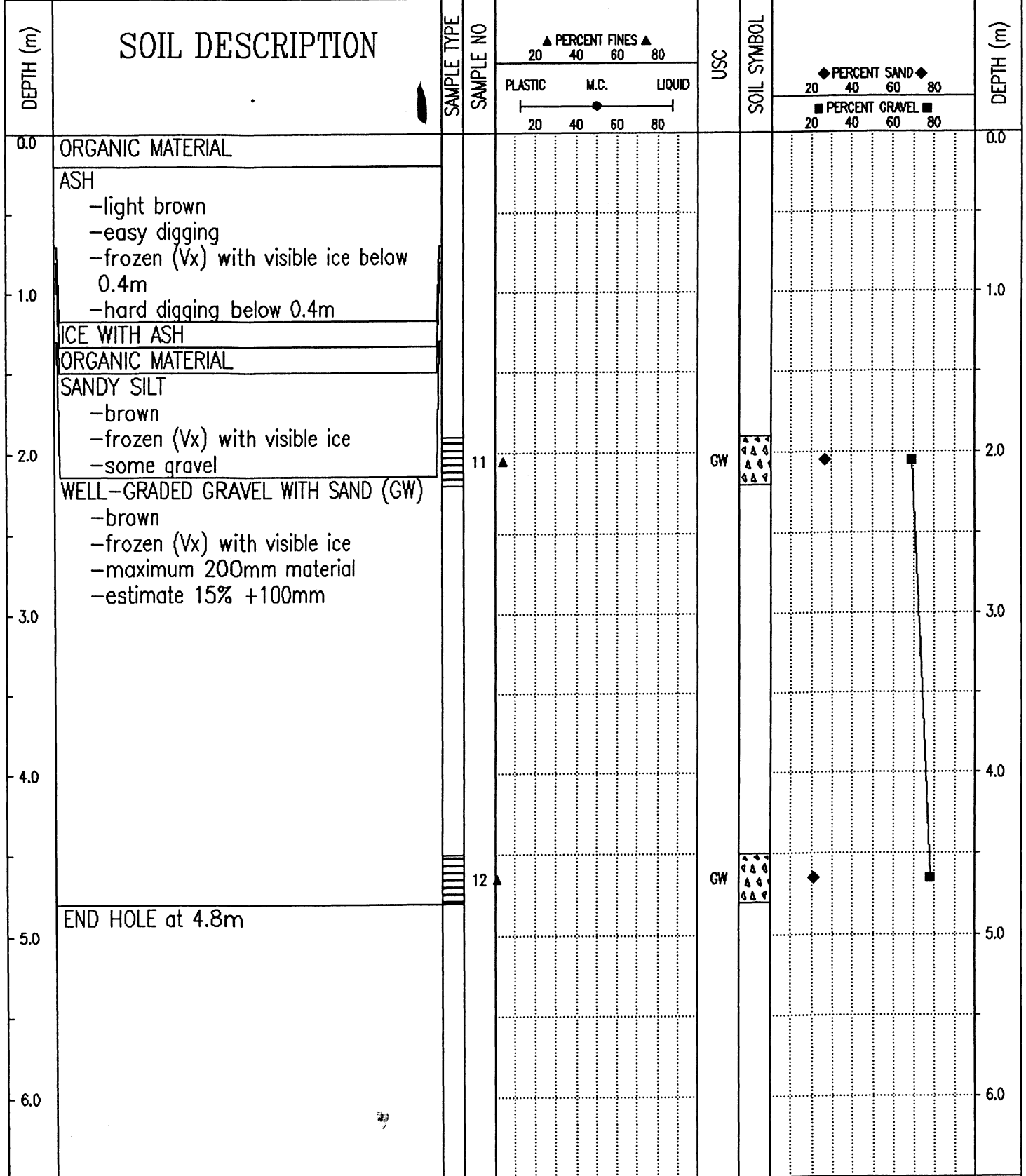
Government of Yukon  
Transportation Engineering

LOGGED BY: DT  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 5.0 m  
COMPLETE: 94/12/11

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST PIT NO: 345-106
ENGINEERING-CAPITAL	115F-02	Project No: 092-202101-0311
BACKHOE: CAT 245	LOCATION: See Plan	ELEVATION: 0.00 (m)

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

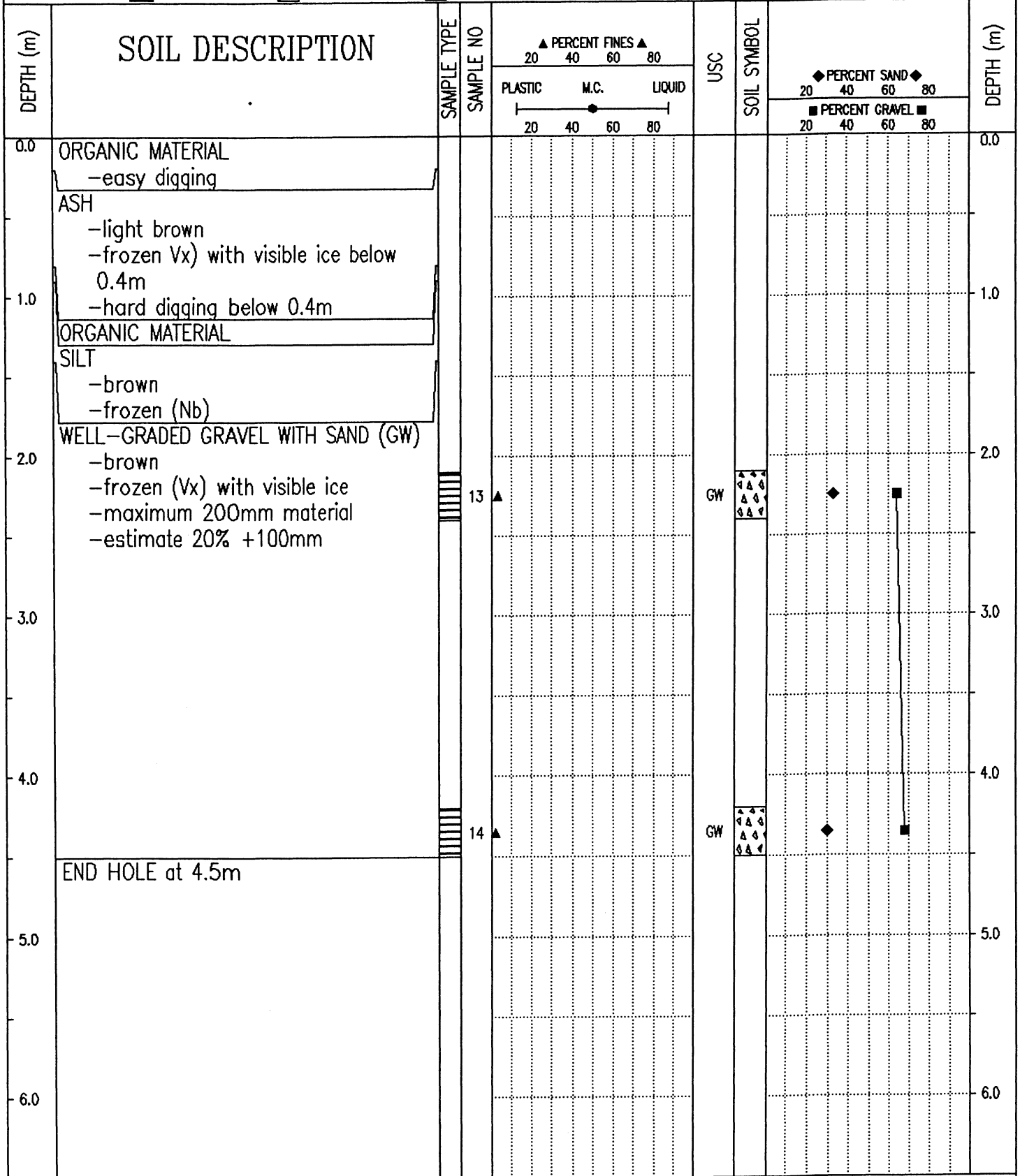


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Transportation Engineering

LOGGED BY: DT  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 4.8 m  
COMPLETE: 94/12/11  
Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST PIT NO: 345-108
ENGINEERING-CAPITAL	115F-02	Project No: 092-202101-0311
BACKHOE: CAT 245	LOCATION: See Plan	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
<input type="checkbox"/> RETURN	<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
<input type="checkbox"/> CORE		



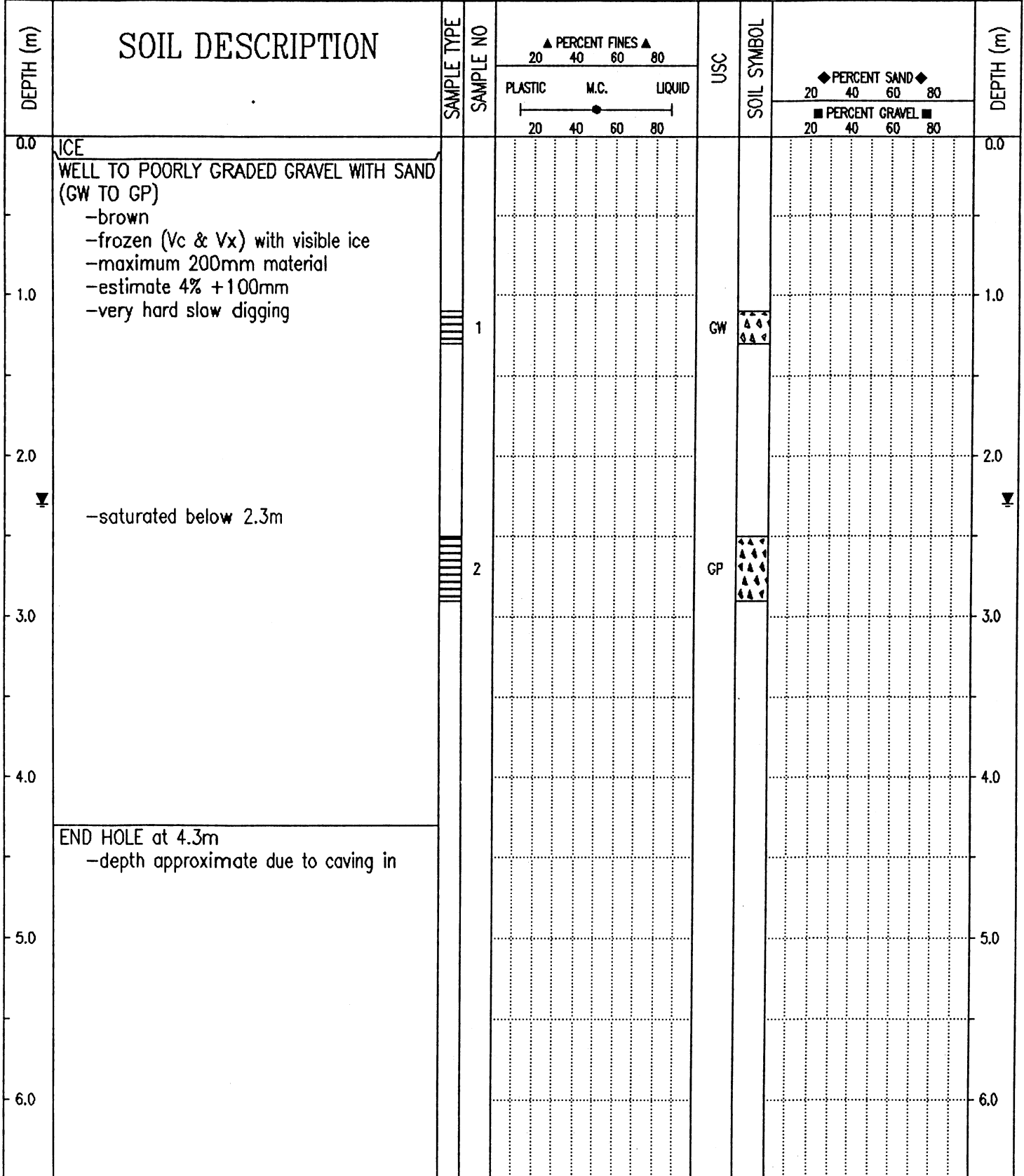
Government of Yukon  
Transportation Engineering

LOGGED BY: DT  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 4.5 m  
COMPLETE: 94/12/11

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST PIT NO: 396-01
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: CAT 245ME	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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



Government of Yukon Transportation Engineering	LOGGED BY: DT	COMPLETION DEPTH: 4.3 m
	REVIEWED BY:	COMPLETE: 96/02/16
	Fig. No:	Page 1 of 1

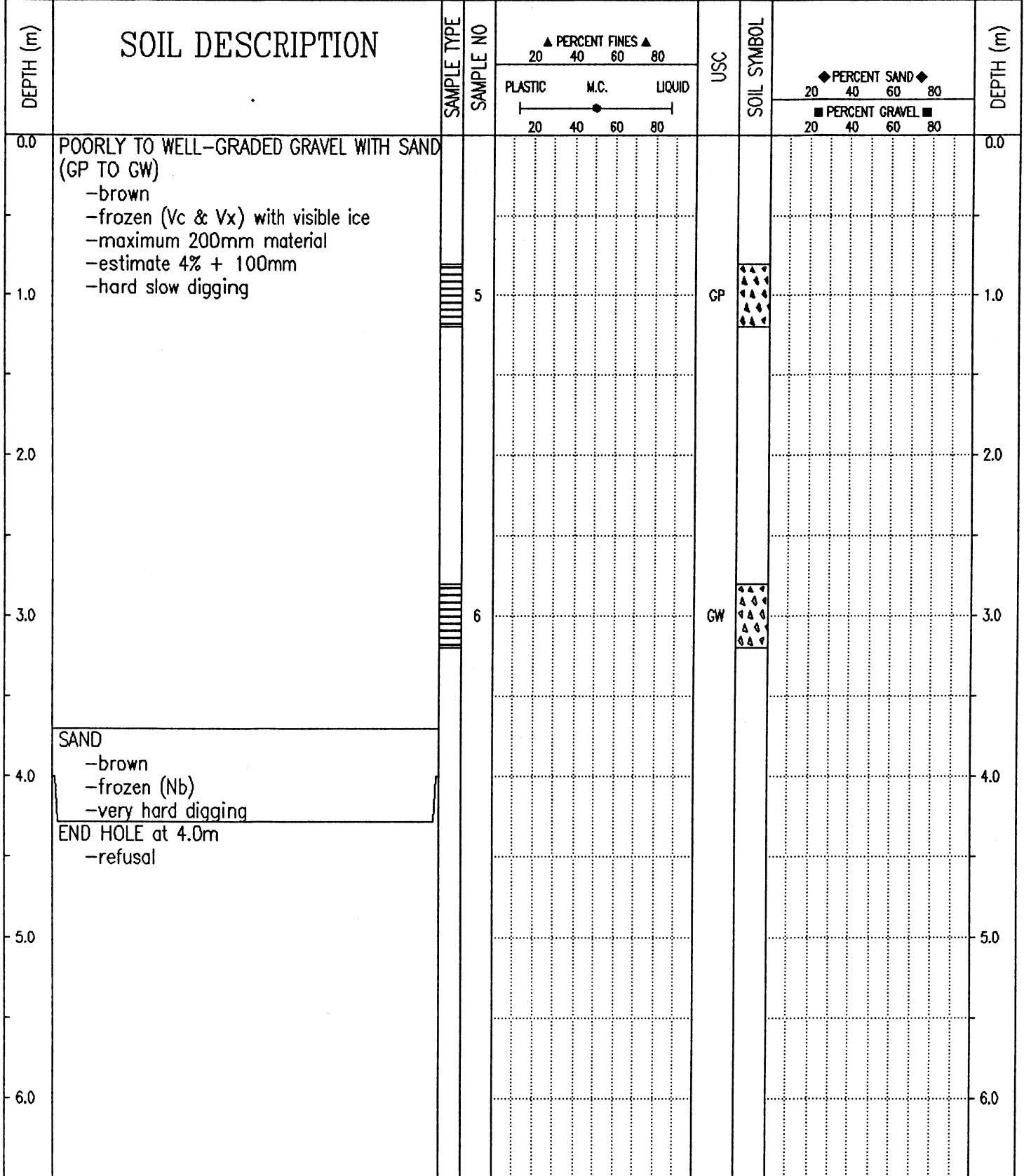
SAMPLE TYPE  RETURN     S.P.T.     AUGER     BULK     TUBE     CORE

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	ICE										0.0	
0.0 - 1.0	POORLY TO WELL-GRADED GRAVEL WITH SAND (GP TO GW) -brown -frozen (Vc & Vx) with visible ice -maximum 200mm material -estimate 4% + 100mm -very hard slow digging		3				GP				1.0	
2.0	-saturated below 2.0m										2.0	
2.0 - 3.0			4				GW				3.0	
4.0	END HOLE at 4.1m -depth approximate due to caving in										4.0	
5.0											5.0	
6.0											6.0	

96/02/16 04:37AM

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST PIT NO: 396-03
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: CAT 245ME	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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



Government of Yukon  
Transportation Engineering

LOGGED BY: DT  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 4.0 m  
COMPLETE: 96/02/16

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST PIT NO: 396-04
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: CAT 245ME	LOCATION: SEE PLAN	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	
0.0	WELL-GRADED GRAVEL WITH SAND (GW) -brown -frozen (Vc & Vx) with visible ice -maximum 200mm material -estimate 6% + 100mm -hard digging									0.0	
1.0			7				GW	▲▲▲▲ ▲▲▲▲ ▲▲▲▲ ▲▲▲▲		1.0	
2.0	SAND -frozen (Nb)									2.0	
3.0	WELL-GRADED GRAVEL WITH SAND (GW) -brown -frozen (Vc & Vx) with visible ice -maximum 200mm material -estimate 4% + 100mm									3.0	
4.0			8				GW	▲▲▲ ▲▲▲		4.0	
5.0	END HOLE at 4.5m									5.0	
6.0										6.0	

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	REVIEWED BY:	COMPLETE: 96/02/16
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST PIT NO: 396-05
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: CAT 245ME	LOCATION: SEE PLAN	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	WELL-GRADED GRAVEL WITH SAND (GW) -brown -frozen (Vc & Vx) with visible ice -maximum 350mm material -estimate 20% + 100mm -very hard digging										0.0
1.0			9				GW	▲ ▲ ▲ ▲			1.0
2.0											2.0
3.0											3.0
4.0			10				GW	▲ ▲ ▲ ▲			4.0
4.4	SAND -frozen (Nb) END HOLE at 4.4m										4.4
5.0											5.0
6.0											6.0

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REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 4.4 m

COMPLETE: 96/02/16

Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST PIT NO: 396-06
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: CAT 245ME	LOCATION: SEE PLAN	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	POORLY TO WELL-GRADED GRAVEL WITH SAND (GP TO GW) -brown -frozen (Vc & Vx) with visible ice -maximum 350mm material -estimate 20% + 100mm -very hard slow digging		11				GP			0.0	
1.0											
2.0										2.0	
3.0										3.0	
4.0			12				GW			4.0	
5.0										5.0	
6.0										6.0	

END HOLE at 4.2m

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LOGGED BY: DT	COMPLETION DEPTH: 4.2 m
REVIEWED BY:	COMPLETE: 96/02/17
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST PIT NO: 396-07
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: CAT 245ME	LOCATION: SEE PLAN	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	POORLY TO WELL-GRADED GRAVEL WITH SAND (GP TO GW) -brown -frozen (Vc & Vx) with visible ice -maximum 350mm material -estimate 20% + 100mm -very hard slow digging		13				GP					0.0
1.0												
2.0												2.0
3.0												3.0
4.0			14				GW					4.0
5.0												5.0
6.0												6.0

END HOLE at 4.2m

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Transportation Engineering

LOGGED BY: DT	COMPLETION DEPTH: 4.2 m
REVIEWED BY:	COMPLETE: 96/02/17
Fig. No:	Page 1 of 1

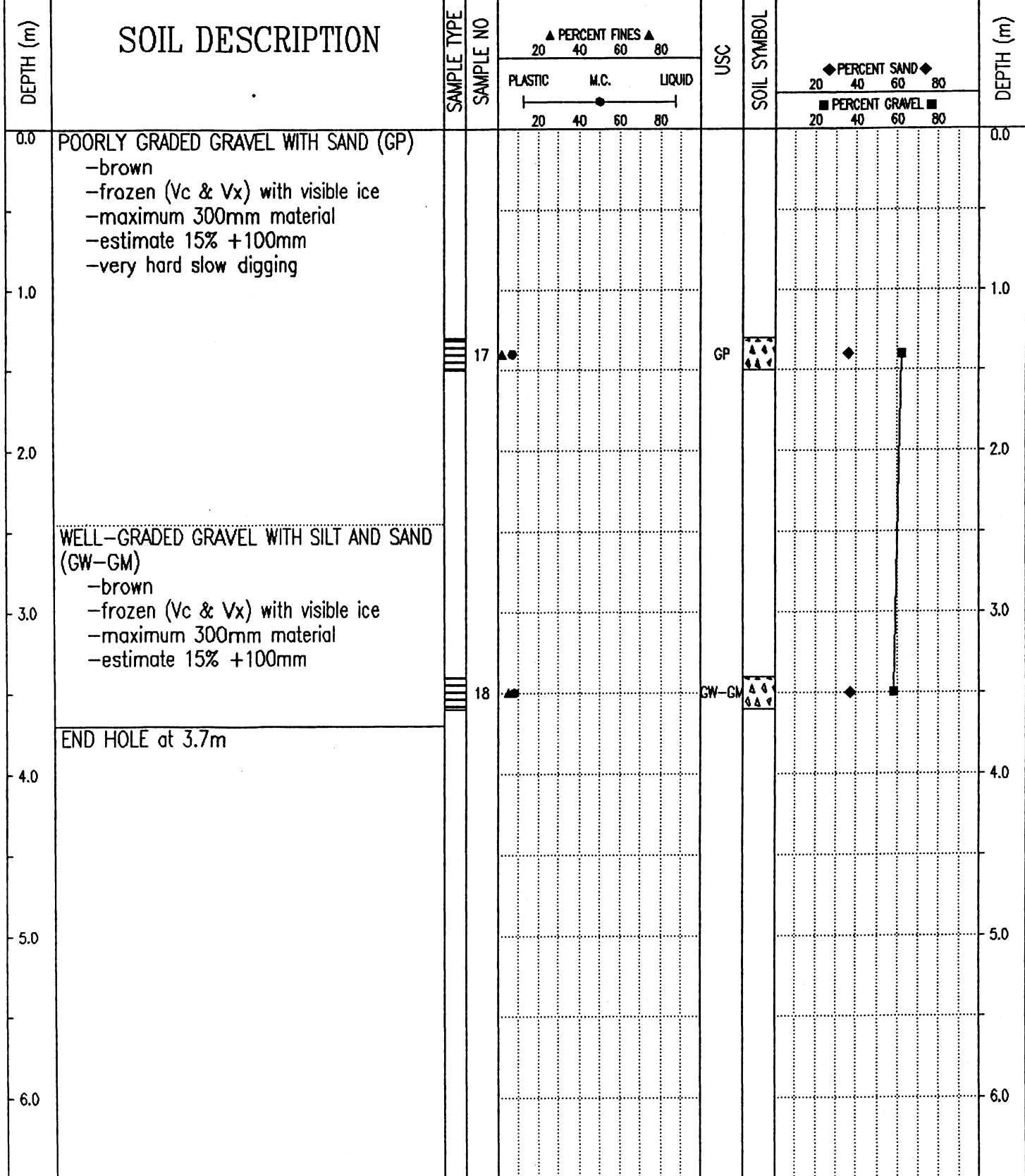
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ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: CAT 245ME	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
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	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				20	40	60			80	20	
0.0	POORLY TO WELL-GRADED GRAVEL WITH SAND (GP TO GW) -brown -frozen (Vc & Vx) with visible ice -maximum 300mm material -estimate 15% + 100mm -very hard slow digging										0.0
1.0			15				GP	▲▲▲			1.0
2.0											2.0
3.0											3.0
4.0	END HOLE at 4.0m		16				GW	▲▲▲			4.0
5.0											5.0
6.0											6.0

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LOGGED BY: DT	COMPLETION DEPTH: 4.2 m
REVIEWED BY:	COMPLETE: 96/02/17
Fig. No:	Page 1 of 1

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



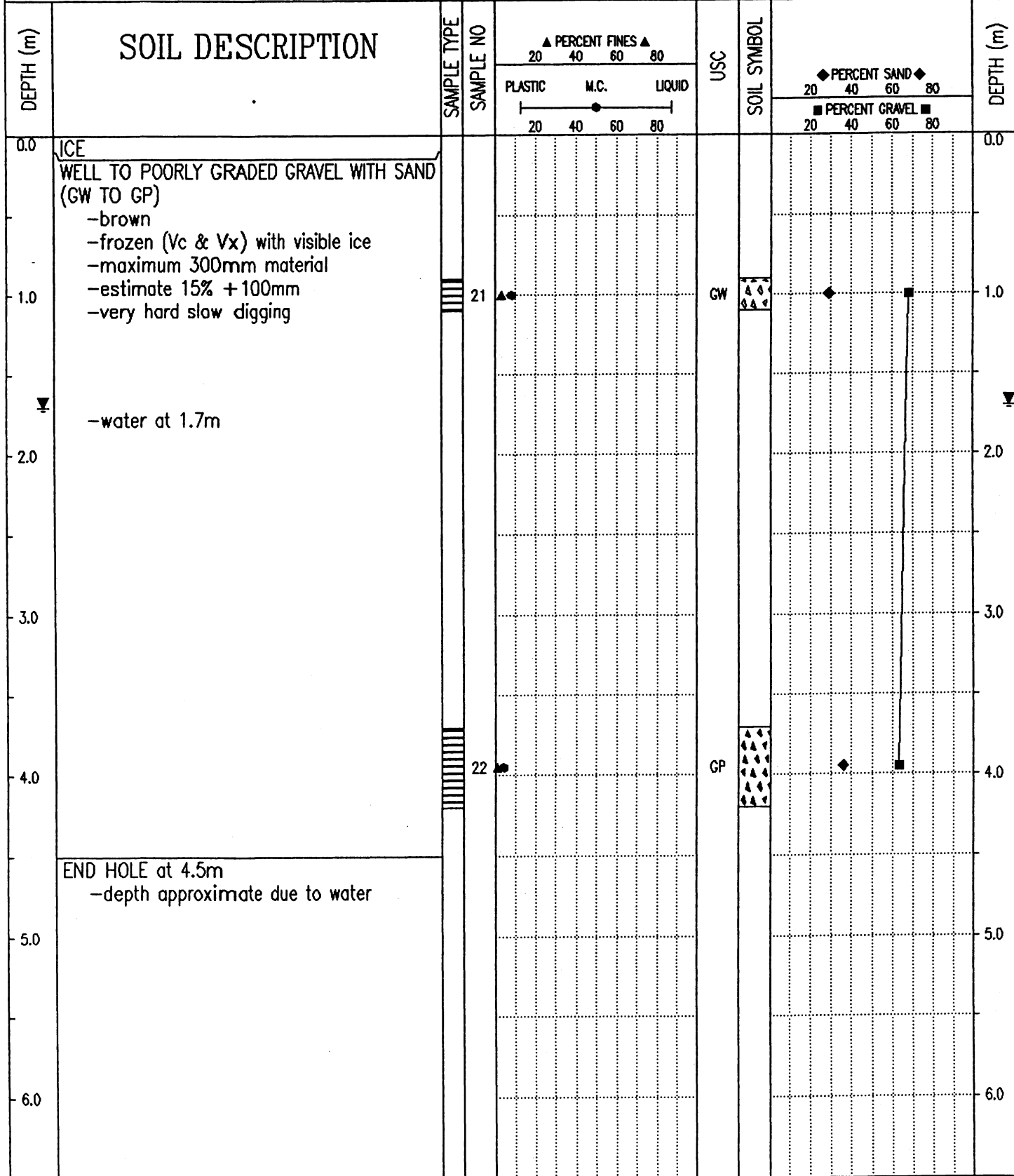
Government of Yukon  
Transportation Engineering

LOGGED BY: DT	COMPLETION DEPTH: 3.7 m
REVIEWED BY:	COMPLETE: 96/02/18
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT		TEST PIT NO: 396-10								
ENGINEERING-CAPITAL		SEGMENT 15		Project No: 092-202101-0311								
BACKHOE: CAT 245ME		LOCATION: SEE PLAN		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	ICE			20	40	60	80	20	40	60	80	0.0
0.0	WELL-GRADED GRAVEL WITH SAND (GW)											0.0
	-brown											
	-frozen (Vc & Vx) with visible ice											
	-maximum 250mm material											
	-estimate 10% +100mm											
	-very hard slow digging											
1.0			19									1.0
2.0	-water at 2.0m											2.0
3.0			20									3.0
4.0												4.0
5.0	END HOLE at 4.3m											5.0
	-depth approximate due to water											
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: DT		COMPLETION DEPTH: 4.3 m						
				REVIEWED BY:		COMPLETE: 96/02/18						
				Fig. No:		Page 1 of 1						

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST PIT NO: 397-11
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: CAT 245ME	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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

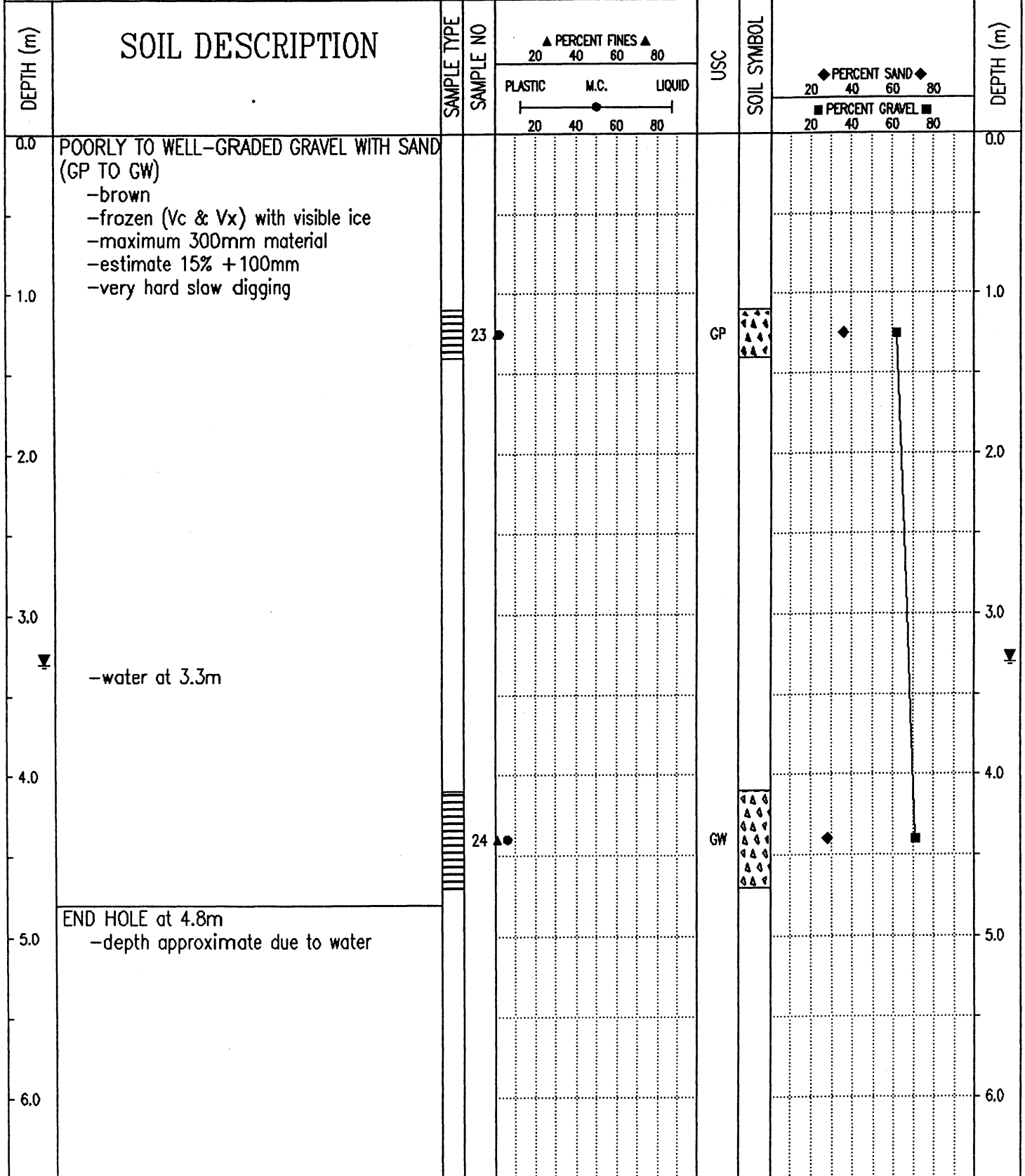


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Transportation Engineering

LOGGED BY: DT  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 4.5 m  
COMPLETE: 96/02/19

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST PIT NO: 397-12
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: CAT 245ME		LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
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			<input type="checkbox"/> BULK
			<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE



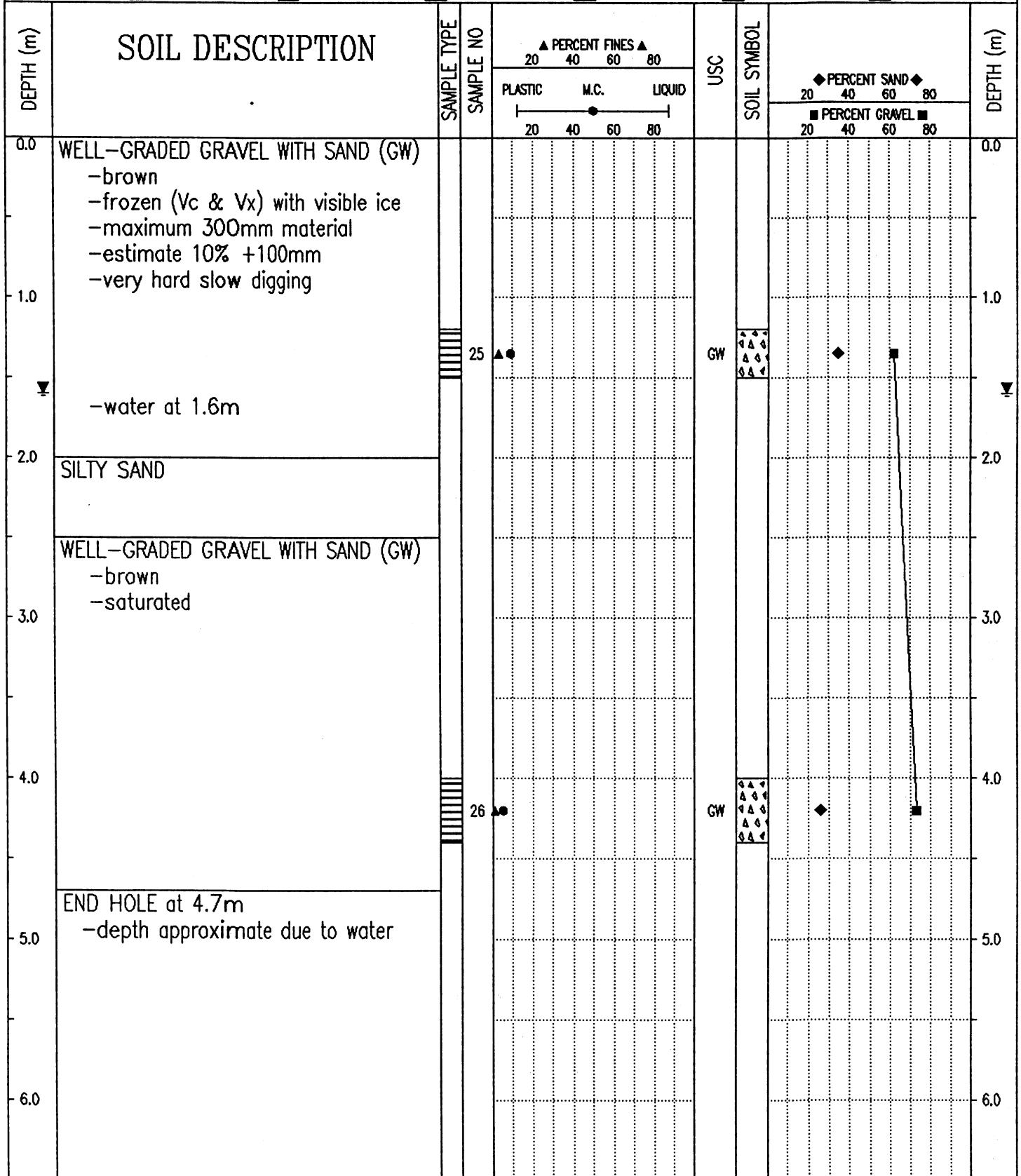
Government of Yukon  
 Transportation Engineering

LOGGED BY: DT  
 REVIEWED BY:  
 Fig. No:

COMPLETION DEPTH: 4.5 m  
 COMPLETE: 96/02/19

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST PIT NO: 397-13
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: CAT 245ME	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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

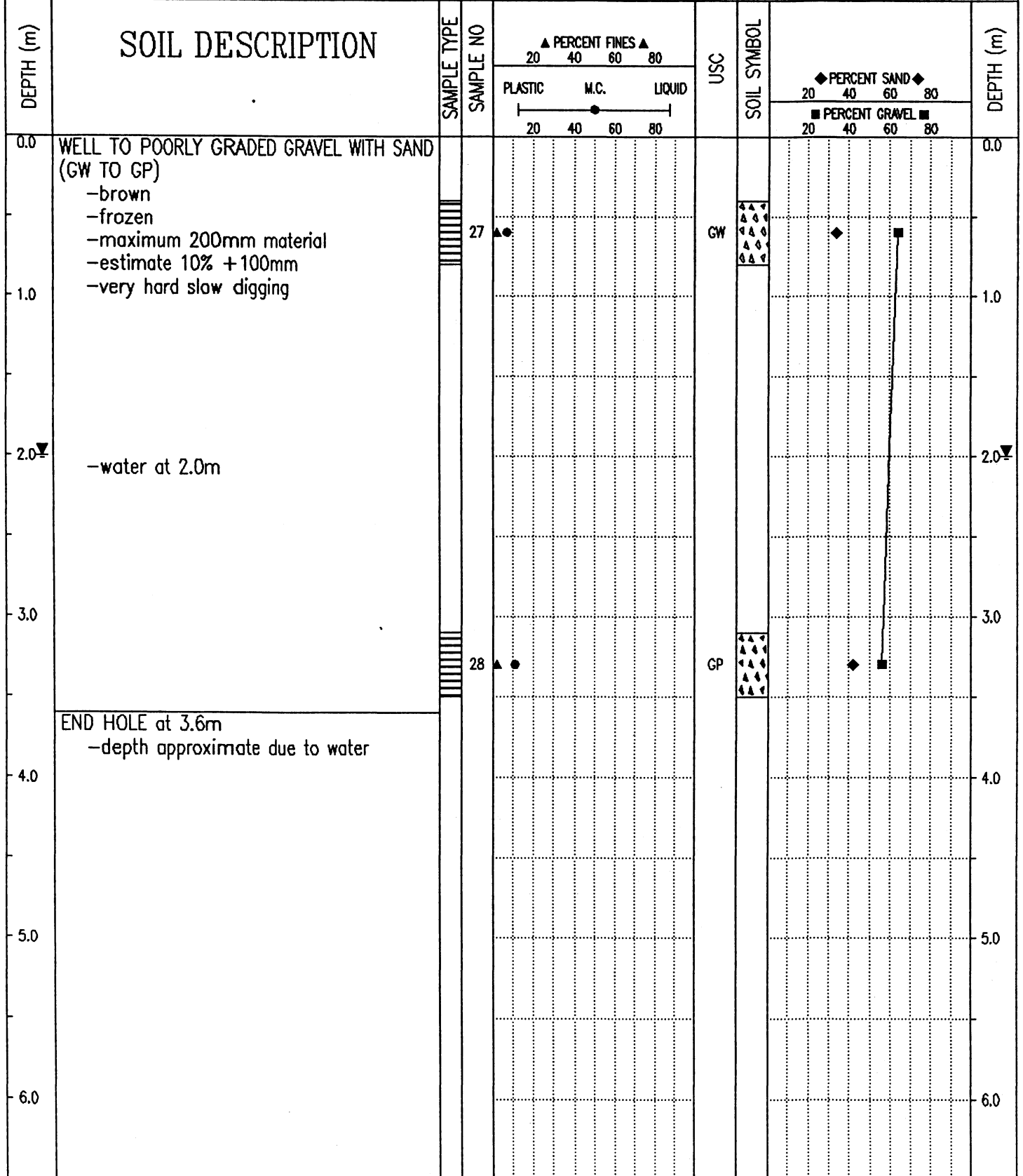


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Transportation Engineering

LOGGED BY: DT	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 96/02/19
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST PIT NO: 397-14
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: CAT 245ME	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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



Government of Yukon  
Transportation Engineering

LOGGED BY: DT

REVIEWED BY:

Fig. No:

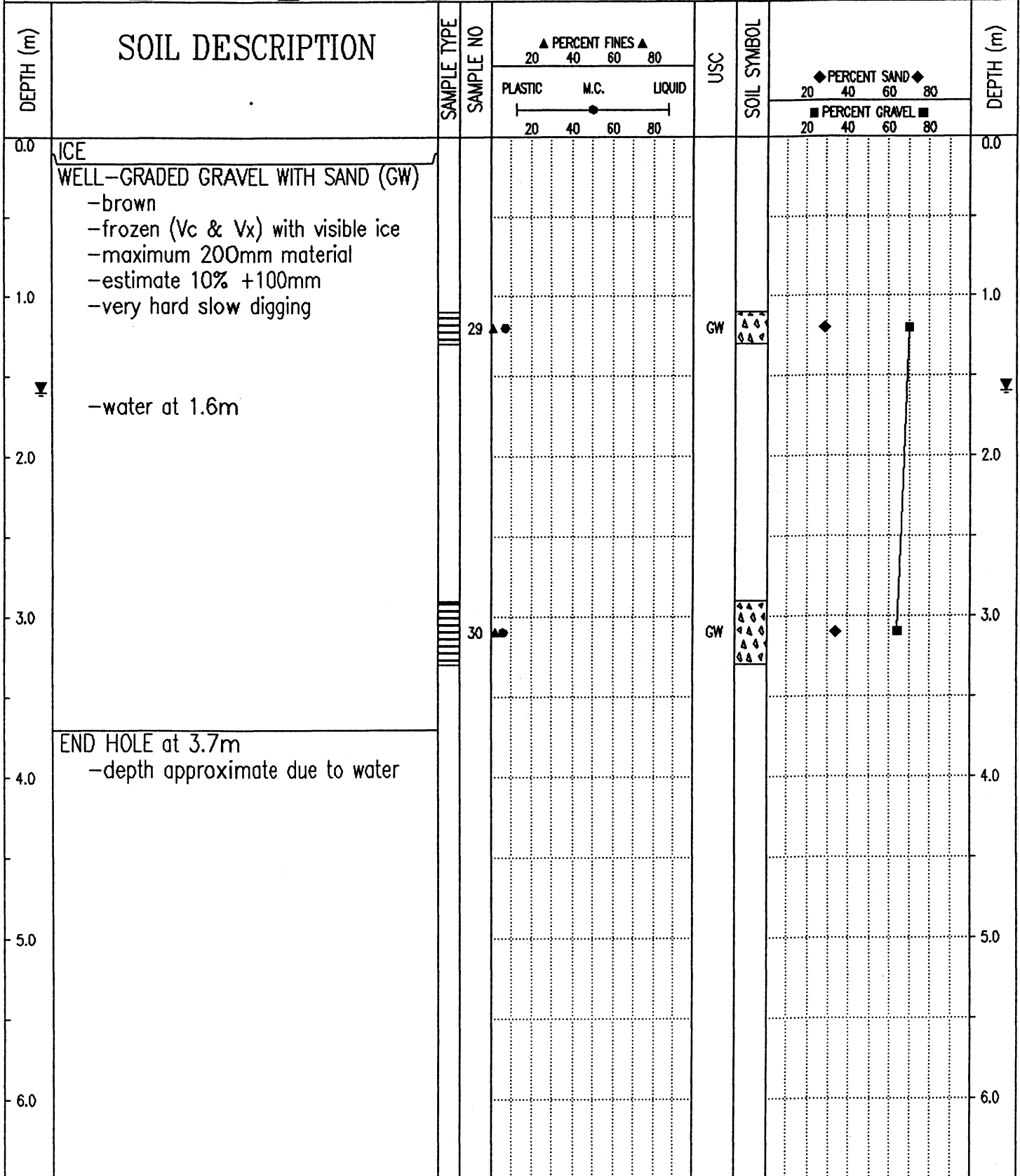
COMPLETION DEPTH: 3.6 m

COMPLETE: 96/02/19

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SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST PIT NO: 397-15
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: CAT 245ME	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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

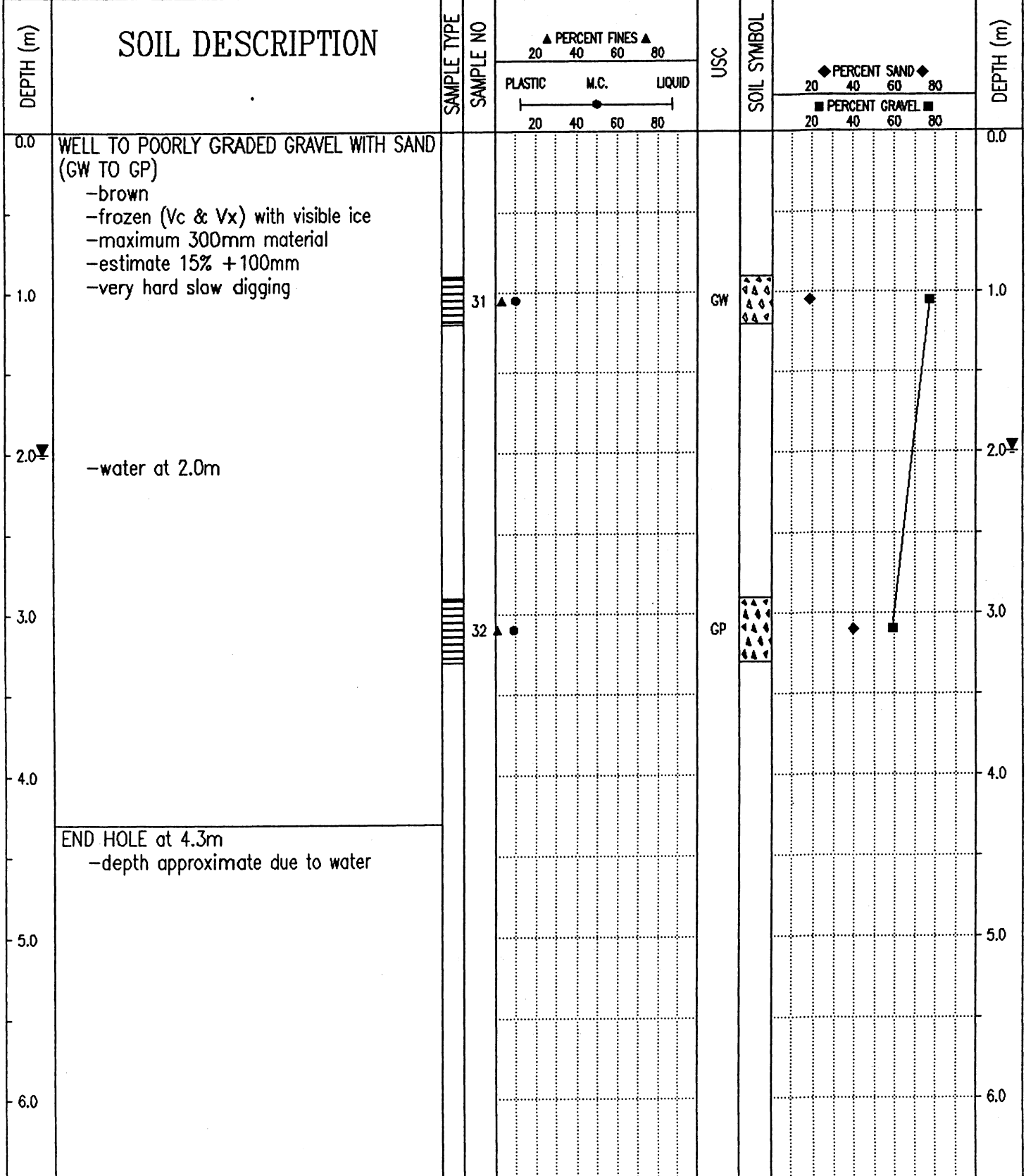


Government of Yukon  
Transportation Engineering

LOGGED BY: DT  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.6 m  
COMPLETE: 96/02/19

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST PIT NO: 397-16
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: CAT 245ME	LOCATION: SEE PLAN	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		

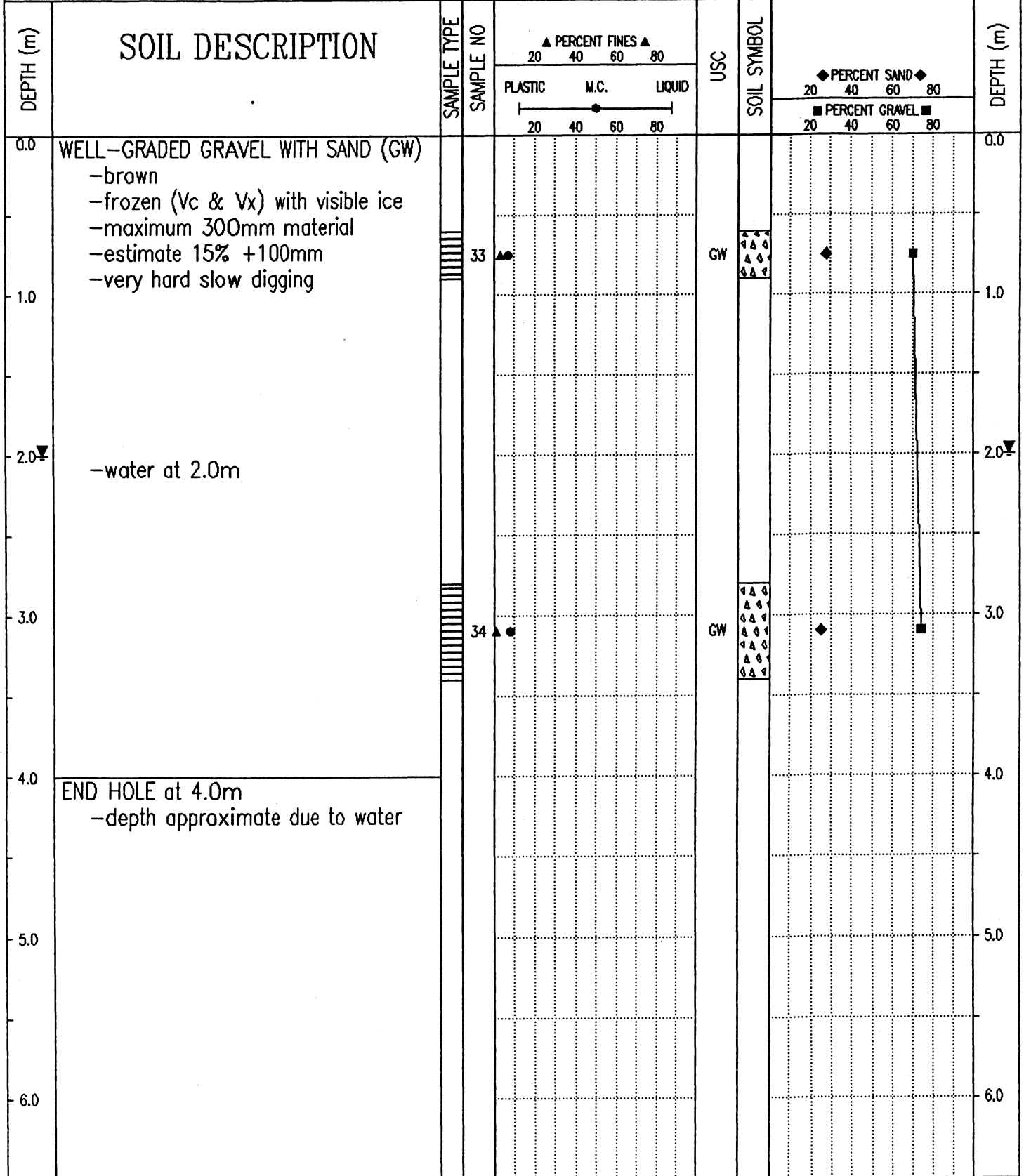


Government of Yukon  
Transportation Engineering

LOGGED BY: DT	COMPLETION DEPTH: 4.3 m
REVIEWED BY:	COMPLETE: 96/02/20
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST PIT NO: 397-17
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: CAT 245ME	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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



Government of Yukon  
Transportation Engineering

LOGGED BY: DT  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 4.0 m  
COMPLETE: 96/02/20

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST PIT NO: 397-18
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: CAT 245ME	LOCATION: SEE PLAN	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 ■		
				20	40	60		20	40	60	80
0.0	LAYERS OF GRAVELLY SAND AND SILT -frozen -hard digging										
1.0											
2.0	-saturated below 1.8m										
3.0	SANDY GRAVEL -water at 2.4m -organics										
4.0	END HOLE at 3.7m -depth approximate due to water										
5.0											
6.0											

Government of Yukon  
Transportation Engineering

LOGGED BY: DT  
REVIEWED BY:  
Fig. No:

COMPLETION DEPTH: 3.7 m  
COMPLETE: 96/02/20

Page 1 of 1

**HIGHWAY CONSTRUCTION**

**km 1852.1 to km 1862.1  
ALASKA HIGHWAY #1  
YUKON, 1996  
CENTRELINE AND  
GRANULAR TESTING**

This Data Package prepared for project viewing:

February, 1996

Transportation Engineering Branch  
Geotechnical Services  
201 Range Road  
Whitehorse, Yukon

GR-01-144

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 264-343  
CLIENT: ENGINEERING-CAPITAL  
PROJECT NAME: SHAKWAK PROJECT  
PROJECT LOCATION: SEGMENT 15  
DRILL UNIT: CME 750  
HOLE LOCATION: 1852+250 O/S 150M RT  
LOGGED BY: GC DATE COMPLETED: 93.10.08

FIELD NO: 468  
LAB NO: 1869  
DEPTH: 1.5-2.0  
TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	96
12.5	91
10.0	86
5.0	73
2.5	64
2.0	--
1.25	52
0.840	--
0.630	43
0.420	--
0.315	35
0.160	28
0.150	--
0.080	22

M.C. (%): 9

LIMITS

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

% GRAVEL: 27  
% SAND: 51  
% FINES: 22

CLASSIFICATION:  
SILTY SAND WITH  
GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 264-345  
CLIENT: ENGINEERING-CAPITAL  
PROJECT NAME: SHAKWAK PROJECT  
PROJECT LOCATION: SEGMENT 15  
DRILL UNIT: CME 750  
HOLE LOCATION: 1852+900 O/S 40M RT  
LOGGED BY: GC DATE COMPLETED: 93.10.08

FIELD NO: 469  
LAB NO: 1870  
DEPTH: 2.4-3.0  
TYPE: AUGER

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	90
20.0	82
12.5	68
10.0	62
5.0	48
2.5	38
2.0	--
1.25	30
0.840	--
0.630	26
0.420	--
0.315	22
0.160	20
0.150	--
0.080	17

M.C. (%): 9

LIMITS

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

% GRAVEL: 52  
% SAND: 31  
% FINES: 17

CLASSIFICATION:  
SILTY GRAVEL  
WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 264-346  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1853+000 O/S 50M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.08

FIELD NO: 470  
 LAB NO: 1871  
 DEPTH: 0.8-1.2  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 471  
 LAB NO: 1872  
 DEPTH: 2.8-3.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	99
2.0	--
1.25	98
0.840	--
0.630	92
0.420	--
0.315	82
0.160	73
0.150	--
0.080	63

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	98
12.5	94
10.0	90
5.0	68
2.5	52
2.0	--
1.25	40
0.840	--
0.630	33
0.420	--
0.315	28
0.160	24
0.150	--
0.080	20

M.C. (%): 74

M.C. (%): 11

LIMITS

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

LIMITS

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

% GRAVEL: 0  
 % SAND: 37  
 % FINES: 63

% GRAVEL: 32  
 % SAND: 48  
 % FINES: 20

CLASSIFICATION:  
 SANDY SILT (ML)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 264-348  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1853+225 O/S 50M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.08

FIELD NO: 472  
 LAB NO: 1873  
 DEPTH: 1.6-2.2  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 473  
 LAB NO: 1874  
 DEPTH: 4.0-4.5  
 TYPE: AUGER

FIELD NO: 474  
 LAB NO: 1875  
 DEPTH: 5.6-6.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	94
10.0	87
5.0	85
2.5	75
2.0	--
1.25	64
0.840	--
0.630	55
0.420	--
0.315	48
0.160	41
0.150	--
0.080	37

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	100
10.0	99
5.0	97
2.5	95
2.0	--
1.25	91
0.840	--
0.630	85
0.420	--
0.315	77
0.160	67
0.150	--
0.080	57

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	86
12.5	70
10.0	65
5.0	53
2.5	45
2.0	--
1.25	39
0.840	--
0.630	34
0.420	--
0.315	29
0.160	25
0.150	--
0.080	21

M.C. (%) : 35

M.C. (%) : 27

M.C. (%) : 14

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

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

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

% GRAVEL: 15  
 % SAND: 49  
 % FINES: 37

% GRAVEL: 3  
 % SAND: 41  
 % FINES: 57

% GRAVEL: 47  
 % SAND: 32  
 % FINES: 21

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:  
 SANDY SILT (ML)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: 092-202101-0311-193 HOLE NUMBER: 264-350  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1853+325 O/S 25M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.08

FIELD NO: 475  
 LAB NO: 1876  
 DEPTH: 2.5-3.2  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	65
31.5	--
25.0	48
20.0	39
12.5	38
10.0	35
5.0	29
2.5	25
2.0	--
1.25	22
0.840	--
0.630	20
0.420	--
0.315	17
0.160	15
0.150	--
0.080	13

M.C. (%) : 29

LIMITS

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

% GRAVEL: 71  
 % SAND: 16  
 % FINES: 13

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 264-351  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1853+450 O/S 50M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.10

FIELD NO: 476  
 LAB NO: 1877  
 DEPTH: 0.6-1.0  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 477  
 LAB NO: 1878  
 DEPTH: 1.5-2.2  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	88
10.0	84
5.0	74
2.5	69
2.0	--
1.25	62
0.840	--
0.630	56
0.420	--
0.315	50
0.160	45
0.150	--
0.080	39

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	82
20.0	73
12.5	67
10.0	64
5.0	57
2.5	51
2.0	--
1.25	46
0.840	--
0.630	42
0.420	--
0.315	37
0.160	31
0.150	--
0.080	26

M.C. (%): 47

M.C. (%): 14

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

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

% GRAVEL: 26  
 % SAND: 35  
 % FINES: 39

% GRAVEL: 43  
 % SAND: 31  
 % FINES: 26

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 264-352  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1853+550 O/S 50M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.10

FIELD NO: 478  
 LAB NO: 1879  
 DEPTH: 0.6-1.2  
 TYPE: AUGER

FIELD NO: 479  
 LAB NO: 1880  
 DEPTH: 1.4-2.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	99
12.5	94
10.0	90
5.0	77
2.5	64
2.0	--
1.25	53
0.840	--
0.630	44
0.420	--
0.315	37
0.160	30
0.150	--
0.080	24

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	95
10.0	92
5.0	83
2.5	74
2.0	--
1.25	65
0.840	--
0.630	57
0.420	--
0.315	50
0.160	43
0.150	--
0.080	35

M.C. (%) : 14

M.C. (%) : 13

LIMITS

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

LIMITS

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

% GRAVEL: 23  
 % SAND: 52  
 % FINES: 24

% GRAVEL: 17  
 % SAND: 48  
 % FINES: 35

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 264-353  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1853+640 O/S 50M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.10

FIELD NO: 480  
 LAB NO: 1881  
 DEPTH: 0.6-1.0  
 TYPE: AUGER

FIELD NO: 481  
 LAB NO: 1882  
 DEPTH: 2.2-3.0  
 TYPE: AUGER

FIELD NO: 482  
 LAB NO: 1883  
 DEPTH: 3.6-4.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	88
20.0	80
12.5	69
10.0	65
5.0	52
2.5	43
2.0	--
1.25	35
0.840	--
0.630	28
0.420	--
0.315	20
0.160	15
0.150	--
0.080	11

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	96
20.0	91
12.5	80
10.0	72
5.0	58
2.5	49
2.0	--
1.25	41
0.840	--
0.630	35
0.420	--
0.315	29
0.160	23
0.150	--
0.080	19

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	98
20.0	89
12.5	82
10.0	78
5.0	67
2.5	59
2.0	--
1.25	53
0.840	--
0.630	47
0.420	--
0.315	41
0.160	35
0.150	--
0.080	28

M.C. (%) : 6

M.C. (%) : 9

M.C. (%) : 11

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

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

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

% GRAVEL: 48  
 % SAND: 41  
 % FINES: 11

% GRAVEL: 42  
 % SAND: 39  
 % FINES: 19

% GRAVEL: 33  
 % SAND: 39  
 % FINES: 28

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

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 264-354  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1853+750 O/S 25M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.10

FIELD NO: 483  
 LAB NO: 1884  
 DEPTH: 0.5-1.0  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 484  
 LAB NO: 1885  
 DEPTH: 1.5-2.4  
 TYPE: AUGER

FIELD NO: 485  
 LAB NO: 1886  
 DEPTH: 3.0-3.6  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	93
12.5	85
10.0	80
5.0	78
2.5	73
2.0	--
1.25	69
0.840	--
0.630	64
0.420	--
0.315	58
0.160	53
0.150	--
0.080	48

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	93
12.5	82
10.0	71
5.0	59
2.5	40
2.0	--
1.25	32
0.840	--
0.630	26
0.420	--
0.315	20
0.160	15
0.150	--
0.080	12

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	92
12.5	85
10.0	82
5.0	78
2.5	75
2.0	--
1.25	72
0.840	--
0.630	68
0.420	--
0.315	64
0.160	57
0.150	--
0.080	50

M.C. (%) : 53

M.C. (%) : 9

M.C. (%) : 18

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

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

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

% GRAVEL: 22  
 % SAND: 29  
 % FINES: 48

% GRAVEL: 41  
 % SAND: 47  
 % FINES: 12

% GRAVEL: 22  
 % SAND: 28  
 % FINES: 50

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:  
 POORLY GRADED  
 SAND WITH SILT &  
 GRAVEL (SP-SM)

CLASSIFICATION:  
 SANDY SILT WITH  
 GRAVEL (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 264-355  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1853+900 0/S 20M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.10

FIELD NO: 486  
 LAB NO: 1887  
 DEPTH: 0.5-1.0  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 487  
 LAB NO: 1888  
 DEPTH: 2.4-3.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	100
10.0	97
5.0	94
2.5	93
2.0	--
1.25	91
0.840	--
0.630	88
0.420	--
0.315	83
0.160	77
0.150	--
0.080	69

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	95
20.0	83
12.5	73
10.0	66
5.0	53
2.5	47
2.0	--
1.25	42
0.840	--
0.630	37
0.420	--
0.315	32
0.160	27
0.150	--
0.080	23

M.C. (%): 64

M.C. (%): 28

LIMITS

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

LIMITS

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

% GRAVEL: 6  
 % SAND: 26  
 % FINES: 69

% GRAVEL: 47  
 % SAND: 30  
 % FINES: 23

CLASSIFICATION:  
 SANDY SILT (ML)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 264-356  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1854+000 O/S 20M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.10

FIELD NO: 488  
 LAB NO: 1889  
 DEPTH: 0.6-1.0  
 TYPE: AUGER

FIELD NO: 489  
 LAB NO: 1890  
 DEPTH: 2.0-2.4  
 TYPE: AUGER

FIELD NO: 490  
 LAB NO: 1891  
 DEPTH: 3.2-3.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	96
20.0	94
12.5	86
10.0	82
5.0	71
2.5	65
2.0	--
1.25	60
0.840	--
0.630	53
0.420	--
0.315	43
0.160	36
0.150	--
0.080	30

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	87
20.0	80
12.5	72
10.0	67
5.0	57
2.5	49
2.0	--
1.25	43
0.840	--
0.630	37
0.420	--
0.315	32
0.160	27
0.150	--
0.080	24

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	95
10.0	92
5.0	81
2.5	72
2.0	--
1.25	65
0.840	--
0.630	59
0.420	--
0.315	52
0.160	46
0.150	--
0.080	40

M.C. (%): 18

M.C. (%): 11

M.C. (%): 11

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

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

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

% GRAVEL: 29  
 % SAND: 41  
 % FINES: 30

% GRAVEL: 43  
 % SAND: 34  
 % FINES: 24

% GRAVEL: 19  
 % SAND: 42  
 % FINES: 40

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 092-202101-0311-193 HOLE NUMBER: 264-357  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1854+100 O/S 25M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.10

FIELD NO: 491  
 LAB NO: 1892  
 DEPTH: 0.6-1.0  
 TYPE: AUGER

FIELD NO: 492  
 LAB NO: 1893  
 DEPTH: 2.4-3.0  
 TYPE: AUGER

FIELD NO: 493  
 LAB NO: 1894  
 DEPTH: 3.8-4.2  
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	84
20.0	82
12.5	74
10.0	69
5.0	59
2.5	52
2.0	--
1.25	45
0.840	--
0.630	39
0.420	--
0.315	33
0.160	28
0.150	--
0.080	23

M.C. (%): 23

LIMITS

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

% GRAVEL: 41  
 % SAND: 37  
 % FINES: 23

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	98
12.5	86
10.0	80
5.0	70
2.5	62
2.0	--
1.25	56
0.840	--
0.630	51
0.420	--
0.315	45
0.160	40
0.150	--
0.080	34

M.C. (%): 12

LIMITS

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

% GRAVEL: 30  
 % SAND: 37  
 % FINES: 34

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	92
10.0	87
5.0	76
2.5	66
2.0	--
1.25	58
0.840	--
0.630	52
0.420	--
0.315	46
0.160	40
0.150	--
0.080	34

M.C. (%): 10

LIMITS

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

% GRAVEL: 24  
 % SAND: 41  
 % FINES: 34

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 092-202101-0311-193 HOLE NUMBER: 264-359  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1854+210 O/S 25M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.10

FIELD NO: 494  
 LAB NO: 1895  
 DEPTH: 0.1-0.5  
 TYPE: AUGER

FIELD NO: 495  
 LAB NO: 1896  
 DEPTH: 0.6-1.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	99
2.0	--
1.25	93
0.840	--
0.630	80
0.420	--
0.315	66
0.160	59
0.150	--
0.080	49

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	86
20.0	86
12.5	86
10.0	82
5.0	77
2.5	73
2.0	--
1.25	66
0.840	--
0.630	56
0.420	--
0.315	42
0.160	30
0.150	--
0.080	20

M.C. (%): 77

M.C. (%): 16

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

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

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

% GRAVEL: 23  
 % SAND: 57  
 % FINES: 20

CLASSIFICATION:  
 SILTY SAND (SM)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

*WEATHERED ROCK*

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 264-361  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1854+350 O/S 3M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.10

FIELD NO: 496  
 LAB NO: 1897  
 DEPTH: 0.4-0.9  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 497  
 LAB NO: 1898  
 DEPTH: 1.2-1.6  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 498  
 LAB NO: 1899  
 DEPTH: 2.4-2.7  
 TYPE: AUGER  
 ORGANIC

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	77
2.0	--
1.25	67
0.840	--
0.630	60
0.420	--
0.315	52
0.160	46
0.150	--
0.080	41

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	91
2.0	--
1.25	84
0.840	--
0.630	77
0.420	--
0.315	70
0.160	64
0.150	--
0.080	60

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	94
2.0	--
1.25	85
0.840	--
0.630	71
0.420	--
0.315	59
0.160	48
0.150	--
0.080	41

M.C. (%): 270

M.C. (%): 144

M.C. (%): 94

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

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

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

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

% GRAVEL: 0  
 % SAND: 40  
 % FINES: 60

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

CLASSIFICATION:  
 SILTY SAND (SM)

CLASSIFICATION:  
 SANDY SILT (ML)

CLASSIFICATION:  
 SILTY SAND (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 264-362  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1854+475 O/S 10M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.10

FIELD NO: 499  
 LAB NO: 1900  
 DEPTH: 1.2-1.6  
 TYPE: AUGER

FIELD NO: 500  
 LAB NO: 1901  
 DEPTH: 2.6-3.0  
 TYPE: AUGER  
 ORGANIC

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	100
5.0	100
2.5	99
2.0	--
1.25	96
0.840	--
0.630	87
0.420	--
0.315	60
0.160	40
0.150	--
0.080	26

M.C. (%): 25

LIMITS

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

% GRAVEL: 0  
 % SAND: 74  
 % FINES: 26

CLASSIFICATION:  
 SILTY SAND (SM)

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	--
0.840	--
0.630	--
0.420	--
0.315	--
0.160	100
0.150	--
0.080	20

M.C. (%): 321

LIMITS

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

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

CLASSIFICATION:  
 SILTY SAND (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 264-363  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1854+550 O/S 20M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.10

FIELD NO: 501  
 LAB NO: 1902  
 DEPTH: 0.6-1.2  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	97
20.0	93
12.5	87
10.0	82
5.0	65
2.5	52
2.0	--
1.25	42
0.840	--
0.630	34
0.420	--
0.315	28
0.160	23
0.150	--
0.080	18

M.C. (%): 12

LIMITS

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

% GRAVEL: 35  
 % SAND: 47  
 % FINES: 18

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 092-202101-0311-193 HOLE NUMBER: 264-365  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1854+600 O/S 20M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.10

FIELD NO: 502  
 LAB NO: 1903  
 DEPTH: 2.4-3.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	94
20.0	87
12.5	81
10.0	75
5.0	65
2.5	57
2.0	--
1.25	50
0.840	--
0.630	45
0.420	--
0.315	38
0.160	30
0.150	--
0.080	20

M.C. (%): 14

LIMITS

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

% GRAVEL: 35  
 % SAND: 44  
 % FINES: 20

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 264-366  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1854+750 O/S 25M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.10

FIELD NO: 503  
 LAB NO: 1904  
 DEPTH: 2.0-2.5  
 TYPE: AUGER  
 ORGANIC

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	85
2.0	--
1.25	73
0.840	--
0.630	64
0.420	--
0.315	56
0.160	50
0.150	--
0.080	44

M.C. (%) : 182

LIMITS

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

% GRAVEL: 0  
 % SAND: 56  
 % FINES: 44

CLASSIFICATION:  
 SILTY SAND (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 264-367  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1854+850 O/S 25M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.10

FIELD NO: 504  
 LAB NO: 1905  
 DEPTH: 0.7-1.0  
 TYPE: AUGER

FIELD NO: 505  
 LAB NO: 1906  
 DEPTH: 2.0-2.5  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	93
2.0	--
1.25	87
0.840	--
0.630	81
0.420	--
0.315	76
0.160	69
0.150	--
0.080	62

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	88
20.0	86
12.5	83
10.0	79
5.0	71
2.5	65
2.0	--
1.25	57
0.840	--
0.630	44
0.420	--
0.315	32
0.160	23
0.150	--
0.080	15

M.C. (%): 127

M.C. (%): 9

LIMITS

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

LIMITS

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

% GRAVEL: 0  
 % SAND: 38  
 % FINES: 62

% GRAVEL: 29  
 % SAND: 55  
 % FINES: 15

CLASSIFICATION:  
 SANDY SILT (ML)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 265-368  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1854+950 O/S 30M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.10

FIELD NO: 505  
 LAB NO: 1907  
 DEPTH: 0.5-1.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	91
10.0	85
5.0	73
2.5	89
2.0	--
1.25	80
0.840	--
0.630	73
0.420	--
0.315	66
0.160	60
0.150	--
0.080	54

M.C. (%) : 13

LIMITS

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

% GRAVEL: 27  
 % SAND: 19  
 % FINES: 54

CLASSIFICATION:  
 GRAVELLY SILT  
 WITH SAND (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 265-369  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1855+050 O/S 30M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.10

FIELD NO: 506  
 LAB NO: 1908  
 DEPTH: 0.5-1.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	96
20.0	90
12.5	78
10.0	74
5.0	62
2.5	56
2.0	--
1.25	50
0.840	--
0.630	46
0.420	--
0.315	41
0.160	37
0.150	--
0.080	32

M.C. (%): 16

LIMITS

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

% GRAVEL: 38  
 % SAND: 31  
 % FINES: 32

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 265-370  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1855+175 O/S 30M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.10

FIELD NO: 507  
 LAB NO: 1909  
 DEPTH: 1.0-1.4  
 TYPE: AUGER

FIELD NO: 508  
 LAB NO: 1910  
 DEPTH: 2.2-3.0  
 TYPE: AUGER

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

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	86
20.0	86
12.5	63
10.0	57
5.0	36
2.5	24
2.0	--
1.25	17
0.840	--
0.630	13
0.420	--
0.315	9
0.160	6
0.150	--
0.080	4

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	100
5.0	94
2.5	86
2.0	--
1.25	83
0.840	--
0.630	80
0.420	--
0.315	76
0.160	73
0.150	--
0.080	69

M.C. (%): 9

M.C. (%): 34

LIMITS

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

LIMITS

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

% GRAVEL: 64  
 % SAND: 32  
 % FINES: 4

% GRAVEL: 6  
 % SAND: 26  
 % FINES: 69

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

CLASSIFICATION:  
 SANDY SILT (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 265-371  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1855+325 O/S 30M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.10

FIELD NO: 509  
 LAB NO: 1911  
 DEPTH: 2.4-3.0  
 TYPE: AUGER  
 ORGANIC

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	99
2.0	--
1.25	86
0.840	--
0.630	75
0.420	--
0.315	64
0.160	54
0.150	--
0.080	50

M.C. (%) : 313

LIMITS

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

% GRAVEL: 0  
 % SAND: 50  
 % FINES: 50

CLASSIFICATION:  
 SANDY SILT (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 265-374  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1855+550 O/S 20M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.11

FIELD NO: 510  
 LAB NO: 1912  
 DEPTH: 0.6-1.0  
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	98
2.0	--
1.25	91
0.840	--
0.630	79
0.420	--
0.315	69
0.160	62
0.150	--
0.080	53

M.C. (%) : 104

LIMITS

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

% GRAVEL: 0  
 % SAND: 47  
 % FINES: 53

CLASSIFICATION:  
 SANDY SILT (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 265-375  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1855+640 O/S 30M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.11

FIELD NO: 511  
 LAB NO: 1913  
 DEPTH: 0.8-1.2  
 TYPE: AUGER

FIELD NO: 512  
 LAB NO: 1914  
 DEPTH: 2.5-3.0  
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	99
2.0	--
1.25	96
0.840	--
0.630	91
0.420	--
0.315	81
0.160	69
0.150	--
0.080	55

M.C. (%) : 71

LIMITS

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

% GRAVEL: 0  
 % SAND: 45  
 % FINES: 55

CLASSIFICATION:  
 SANDY SILT (ML)

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	96
2.0	--
1.25	91
0.840	--
0.630	87
0.420	--
0.315	81
0.160	71
0.150	--
0.080	48

M.C. (%) : 99

LIMITS

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

% GRAVEL: 0  
 % SAND: 52  
 % FINES: 48

CLASSIFICATION:  
 SILTY SAND (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 265-376  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1855+725 O/S 30M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.11

FIELD NO: 513  
 LAB NO: 1915  
 DEPTH: 0.8-1.2  
 TYPE: AUGER

FIELD NO: 514  
 LAB NO: 1916  
 DEPTH: 2.5-3.0  
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	99
2.0	--
1.25	99
0.840	--
0.630	97
0.420	--
0.315	95
0.160	84
0.150	--
0.080	49

M.C. (%) : 42

LIMITS

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

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

CLASSIFICATION:  
 SILTY SAND (SM)

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	98
2.0	--
1.25	90
0.840	--
0.630	78
0.420	--
0.315	66
0.160	51
0.150	--
0.080	30

M.C. (%) : 23

LIMITS

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

% GRAVEL: 0  
 % SAND: 70  
 % FINES: 30

CLASSIFICATION:  
 SILTY SAND (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 265-377  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1855+890 O/S 25M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.11

FIELD NO: 515  
 LAB NO: 1917  
 DEPTH: 0.6-1.0  
 TYPE: AUGER

FIELD NO: 516  
 LAB NO: 1918  
 DEPTH: 2.4-3.0  
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	97
12.5	88
10.0	76
5.0	56
2.5	41
2.0	--
1.25	30
0.840	--
0.630	23
0.420	--
0.315	18
0.160	13
0.150	--
0.080	8

M.C. (%): 9

LIMITS

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

% GRAVEL: 44  
 % SAND: 47  
 % FINES: 8

CLASSIFICATION:  
 WELL-GRADED SAND  
 WITH SILT &  
 GRAVEL (SW-SM)

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	96
10.0	83
5.0	71
2.5	62
2.0	--
1.25	54
0.840	--
0.630	48
0.420	--
0.315	42
0.160	37
0.150	--
0.080	32

M.C. (%): 29

LIMITS

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

% GRAVEL: 29  
 % SAND: 38  
 % FINES: 32

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 265-378  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1856+025 O/S 25M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.11

FIELD NO: 517  
 LAB NO: 1919  
 DEPTH: 0.6-1.0  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 518  
 LAB NO: 1920  
 DEPTH: 2.5-3.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	92
2.0	--
1.25	85
0.840	--
0.630	79
0.420	--
0.315	71
0.160	62
0.150	--
0.080	54

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	98
2.0	--
1.25	94
0.840	--
0.630	89
0.420	--
0.315	82
0.160	72
0.150	--
0.080	62

M.C. (%): 255

M.C. (%): 152

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

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

% GRAVEL: 0  
 % SAND: 46  
 % FINES: 54

% GRAVEL: 0  
 % SAND: 38  
 % FINES: 62

CLASSIFICATION:  
 SANDY SILT (ML)

CLASSIFICATION:  
 SANDY SILT (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 265-379  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1856+150 O/S 25M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.12

FIELD NO: 519  
 LAB NO: 1921  
 DEPTH: 0.6-1.0  
 TYPE: AUGER

FIELD NO: 520  
 LAB NO: 1922  
 DEPTH: 2.2-2.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	100
2.0	--
1.25	98
0.840	--
0.630	91
0.420	--
0.315	74
0.160	59
0.150	--
0.080	41

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	99
2.0	--
1.25	97
0.840	--
0.630	90
0.420	--
0.315	76
0.160	66
0.150	--
0.080	54

M.C. (%): 74

M.C. (%): 103

LIMITS

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

LIMITS

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

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

% GRAVEL: 0  
 % SAND: 46  
 % FINES: 54

CLASSIFICATION:  
 SILTY SAND (SM)

CLASSIFICATION:  
 SANDY SILT (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 265-380  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1856+300 O/S 40M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.12

FIELD NO: 521  
 LAB NO: 1923  
 DEPTH: 1.0-1.4  
 TYPE: AUGER

FIELD NO: 522  
 LAB NO: 1924  
 DEPTH: 2.5-3.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	98
2.0	--
1.25	95
0.840	--
0.630	91
0.420	--
0.315	85
0.160	79
0.150	--
0.080	72

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	87
2.0	--
1.25	80
0.840	--
0.630	73
0.420	--
0.315	65
0.160	56
0.150	--
0.080	43

M.C. (%): 100

M.C. (%): 131

LIMITS

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

LIMITS

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

% GRAVEL: 0  
 % SAND: 28  
 % FINES: 72

% GRAVEL: 0  
 % SAND: 57  
 % FINES: 43

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:  
 SILTY SAND (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 265-381  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1856+400 O/S 40M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.12

FIELD NO: 523  
 LAB NO: 1925  
 DEPTH: 0.6-1.0  
 TYPE: AUGER

FIELD NO: 524  
 LAB NO: 1926  
 DEPTH: 2.4-3.0  
 TYPE: AUGER

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

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	100
10.0	98
5.0	91
2.5	86
2.0	--
1.25	81
0.840	--
0.630	77
0.420	--
0.315	72
0.160	67
0.150	--
0.080	61

100.0	--
80.0	--
50.0	100
31.5	--
25.0	84
20.0	77
12.5	64
10.0	57
5.0	45
2.5	36
2.0	--
1.25	29
0.840	--
0.630	24
0.420	--
0.315	19
0.160	17
0.150	--
0.080	14

M.C. (%): 77

M.C. (%): 15

LIMITS

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

LIMITS

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

% GRAVEL: 9  
 % SAND: 29  
 % FINES: 61

% GRAVEL: 55  
 % SAND: 31  
 % FINES: 14

CLASSIFICATION:  
 SANDY SILT (ML)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 265-382  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1856+500 O/S 30M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.12

FIELD NO: 525  
 LAB NO: 1927  
 DEPTH: 0.6-1.0  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 526  
 LAB NO: 1928  
 DEPTH: 2.5-3.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	95
2.0	--
1.25	90
0.840	--
0.630	85
0.420	--
0.315	80
0.160	75
0.150	--
0.080	68

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	95
2.0	--
1.25	89
0.840	--
0.630	83
0.420	--
0.315	77
0.160	68
0.150	--
0.080	59

M.C. (%): 137

M.C. (%): 194

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

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

% GRAVEL: 0  
 % SAND: 32  
 % FINES: 68

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

CLASSIFICATION:  
 SANDY SILT (ML)

CLASSIFICATION:  
 SANDY SILT (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 265-383  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1856+600 O/S 10M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.12

FIELD NO: 527  
 LAB NO: 1929  
 DEPTH: 0.6-1.0  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 528  
 LAB NO: 1930  
 DEPTH: 2.4-3.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	98
2.0	--
1.25	92
0.840	--
0.630	85
0.420	--
0.315	78
0.160	67
0.150	--
0.080	59

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	88
20.0	80
12.5	71
10.0	68
5.0	58
2.5	47
2.0	--
1.25	36
0.840	--
0.630	27
0.420	--
0.315	21
0.160	17
0.150	--
0.080	13

M.C. (%): 226

M.C. (%): 18

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

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

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

% GRAVEL: 42  
 % SAND: 45  
 % FINES: 13

CLASSIFICATION:  
 SANDY SILT (ML)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 265-384  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1856+700 O/S 2M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.12

FIELD NO: 529  
 LAB NO: 1931  
 DEPTH: 1.0-1.4  
 TYPE: AUGER

FIELD NO: 530  
 LAB NO: 1932  
 DEPTH: 2.5-3.0  
 TYPE: AUGER  
 ORGANIC

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	99
2.0	--
1.25	94
0.840	--
0.630	80
0.420	--
0.315	59
0.160	50
0.150	--
0.080	40

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	98
2.0	--
1.25	93
0.840	--
0.630	88
0.420	--
0.315	82
0.160	72
0.150	--
0.080	59

M.C. (%): 110

M.C. (%): 153

LIMITS

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

LIMITS

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

% GRAVEL: 0  
 % SAND: 60  
 % FINES: 40

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

CLASSIFICATION:  
 SILTY SAND (SM)

CLASSIFICATION:  
 SANDY SILT (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 265-385  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1856+800 O/S 5M LT  
 LOGGED BY: GC DATE COMPLETED: 93.10.12

FIELD NO: 531  
 LAB NO: 1933  
 DEPTH: 0.8-1.2  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 532  
 LAB NO: 1934  
 DEPTH: 1.3-1.8  
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	93
10.0	90
5.0	87
2.5	77
2.0	--
1.25	70
0.840	--
0.630	62
0.420	--
0.315	53
0.160	44
0.150	--
0.080	40

M.C. (%) : 88

LIMITS

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

% GRAVEL: 13  
 % SAND: 47  
 % FINES: 40

CLASSIFICATION:  
 SILTY SAND (SM)

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	97
10.0	95
5.0	87
2.5	79
2.0	--
1.25	71
0.840	--
0.630	61
0.420	--
0.315	43
0.160	29
0.150	--
0.080	22

M.C. (%) : 16

LIMITS

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

% GRAVEL: 13  
 % SAND: 66  
 % FINES: 22

CLASSIFICATION:  
 SILTY SAND (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 265-386  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1856+900 O/S 10M LT  
 LOGGED BY: GC DATE COMPLETED: 93.10.12

FIELD NO: 533  
 LAB NO: 1935  
 DEPTH: 0.6-1.0  
 TYPE: AUGER

FIELD NO: 534  
 LAB NO: 1936  
 DEPTH: 2.0-2.5  
 TYPE: AUGER

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

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	93
20.0	91
12.5	84
10.0	80
5.0	72
2.5	67
2.0	--
1.25	63
0.840	--
0.630	59
0.420	--
0.315	55
0.160	50
0.150	--
0.080	46

100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	94
12.5	74
10.0	63
5.0	43
2.5	32
2.0	--
1.25	24
0.840	--
0.630	20
0.420	--
0.315	16
0.160	13
0.150	--
0.080	11

M.C. (%): 20

M.C. (%): 11

LIMITS

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

LIMITS

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

% GRAVEL: 28  
 % SAND: 26  
 % FINES: 46

% GRAVEL: 57  
 % SAND: 32  
 % FINES: 11

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

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

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 265-387  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1857+000 O/S 10M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.12

FIELD NO: 535  
 LAB NO: 1937  
 DEPTH: 0.8-1.2  
 TYPE: AUGER

FIELD NO: 536  
 LAB NO: 1938  
 DEPTH: 1.7-2.2  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	95
12.5	83
10.0	75
5.0	65
2.5	57
2.0	--
1.25	51
0.840	--
0.630	45
0.420	--
0.315	39
0.160	33
0.150	--
0.080	27

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	98
10.0	95
5.0	78
2.5	61
2.0	--
1.25	45
0.840	--
0.630	34
0.420	--
0.315	27
0.160	22
0.150	--
0.080	18

M.C. (%): 14

M.C. (%): 10

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

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

% GRAVEL: 35  
 % SAND: 38  
 % FINES: 27

% GRAVEL: 22  
 % SAND: 60  
 % FINES: 18

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 265-388  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1857+100 O/S 10M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.12

FIELD NO: 537  
 LAB NO: 1939  
 DEPTH: 0.7-1.0  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 538  
 LAB NO: 1940  
 DEPTH: 2.5-3.0  
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	94
2.0	--
1.25	86
0.840	--
0.630	78
0.420	--
0.315	71
0.160	60
0.150	--
0.080	57

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	99
2.0	--
1.25	97
0.840	--
0.630	94
0.420	--
0.315	91
0.160	87
0.150	--
0.080	81

M.C. (%): 195

M.C. (%): 77

LIMITS

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

LIMITS

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

% GRAVEL: 0  
 % SAND: 43  
 % FINES: 57

% GRAVEL: 0  
 % SAND: 19  
 % FINES: 81

CLASSIFICATION:  
 SANDY SILT (ML)

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 265-389  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1857+200 O/S 12M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.12

FIELD NO: 538  
 LAB NO: 1941  
 DEPTH: 0.4-0.7  
 TYPE: AUGER

FIELD NO: 539  
 LAB NO: 1942  
 DEPTH: 1.4-2.0  
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	71
20.0	69
12.5	63
10.0	58
5.0	48
2.5	42
2.0	--
1.25	36
0.840	--
0.630	30
0.420	--
0.315	22
0.160	17
0.150	--
0.080	14

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	93
12.5	78
10.0	69
5.0	53
2.5	43
2.0	--
1.25	35
0.840	--
0.630	29
0.420	--
0.315	23
0.160	18
0.150	--
0.080	14

M.C. (%): 12

M.C. (%): 15

LIMITS

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

LIMITS

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

% GRAVEL: 52  
 % SAND: 34  
 % FINES: 14

% GRAVEL: 47  
 % SAND: 39  
 % FINES: 14

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 265-390  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1857+300 O/S 20M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.12

FIELD NO: 540  
 LAB NO: 1943  
 DEPTH: 1.0-1.5  
 TYPE: AUGER

FIELD NO: 541  
 LAB NO: 1944  
 DEPTH: 2.5-2.8  
 TYPE: AUGER

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

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	98
12.5	81
10.0	75
5.0	62
2.5	53
2.0	--
1.25	44
0.840	--
0.630	38
0.420	--
0.315	32
0.160	27
0.150	--
0.080	22

100.0	--
80.0	--
50.0	100
31.5	--
25.0	87
20.0	73
12.5	64
10.0	60
5.0	53
2.5	48
2.0	--
1.25	45
0.840	--
0.630	41
0.420	--
0.315	37
0.160	33
0.150	--
0.080	29

M.C. (%): 9

M.C. (%): 13

LIMITS

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

LIMITS

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

% GRAVEL: 38  
 % SAND: 40  
 % FINES: 22

% GRAVEL: 47  
 % SAND: 24  
 % FINES: 29

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 265-391  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1857+310 O/S 2M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.12

FIELD NO: 542  
 LAB NO: 1945  
 DEPTH: 0.5-1.0  
 TYPE: AUGER

FIELD NO: 543  
 LAB NO: 1947  
 DEPTH: 1.5-2.0  
 TYPE: AUGER  
 ORGANIC

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	95
12.5	84
10.0	80
5.0	72
2.5	67
2.0	--
1.25	61
0.840	--
0.630	55
0.420	--
0.315	47
0.160	35
0.150	--
0.080	23

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	83
20.0	80
12.5	78
10.0	76
5.0	72
2.5	69
2.0	--
1.25	64
0.840	--
0.630	57
0.420	--
0.315	45
0.160	35
0.150	--
0.080	29

M.C. (%): 11

M.C. (%): 32

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

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

% GRAVEL: 28  
 % SAND: 49  
 % FINES: 23

% GRAVEL: 28  
 % SAND: 43  
 % FINES: 29

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 265-392  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1857+400 O/S 3M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.12

FIELD NO: 544  
 LAB NO: 1946  
 DEPTH: 0.5-1.0  
 TYPE: AUGER

FIELD NO: 545  
 LAB NO: 1948  
 DEPTH: 3.0-3.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	95
12.5	85
10.0	82
5.0	71
2.5	64
2.0	--
1.25	59
0.840	--
0.630	54
0.420	--
0.315	48
0.160	41
0.150	--
0.080	34

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	89
20.0	86
12.5	71
10.0	66
5.0	56
2.5	48
2.0	--
1.25	41
0.840	--
0.630	35
0.420	--
0.315	27
0.160	19
0.150	--
0.080	13

M.C. (%): 9

M.C. (%): 8

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

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

% GRAVEL: 29  
 % SAND: 38  
 % FINES: 34

% GRAVEL: 44  
 % SAND: 42  
 % FINES: 13

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-393  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1857+450 O/S 3M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.12

FIELD NO: 546  
 LAB NO: 1949  
 DEPTH: 0.6-1.0  
 TYPE: AUGER

FIELD NO: 547  
 LAB NO: 1950  
 DEPTH: 2.4-3.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	98
10.0	95
5.0	90
2.5	85
2.0	--
1.25	81
0.840	--
0.630	76
0.420	--
0.315	70
0.160	64
0.150	--
0.080	58

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	56
20.0	54
12.5	44
10.0	41
5.0	34
2.5	29
2.0	--
1.25	25
0.840	--
0.630	21
0.420	--
0.315	17
0.160	11
0.150	--
0.080	8

M.C. (%) : 19

M.C. (%) : 3

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

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

% GRAVEL: 10  
 % SAND: 31  
 % FINES: 58

% GRAVEL: 66  
 % SAND: 26  
 % FINES: 8

CLASSIFICATION:  
 SANDY SILT (ML)

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

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-394  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1857+550 O/S 50M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.12

FIELD NO: 548  
 LAB NO: 1951  
 DEPTH: 0.6-1.0  
 TYPE: AUGER

FIELD NO: 549  
 LAB NO: 1952  
 DEPTH: 2.4-3.0  
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	80
20.0	80
12.5	79
10.0	78
5.0	74
2.5	68
2.0	--
1.25	62
0.840	--
0.630	55
0.420	--
0.315	42
0.160	27
0.150	--
0.080	17

M.C. (%) : 5

LIMITS

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

% GRAVEL: 26  
 % SAND: 56  
 % FINES: 17

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	98
12.5	92
10.0	89
5.0	81
2.5	73
2.0	--
1.25	67
0.840	--
0.630	62
0.420	--
0.315	53
0.160	44
0.150	--
0.080	37

M.C. (%) : 8

LIMITS

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

% GRAVEL: 19  
 % SAND: 44  
 % FINES: 37

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-395  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1857+625 O/S 50M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.13

FIELD NO: 550  
 LAB NO: 1953  
 DEPTH: 0.8-1.2  
 TYPE: AUGER

FIELD NO: 551  
 LAB NO: 1954  
 DEPTH: 1.4-2.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	99
2.0	--
1.25	99
0.840	--
0.630	98
0.420	--
0.315	97
0.160	97
0.150	--
0.080	96

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	94
20.0	86
12.5	75
10.0	67
5.0	56
2.5	49
2.0	--
1.25	44
0.840	--
0.630	41
0.420	--
0.315	36
0.160	31
0.150	--
0.080	26

M.C. (%): 26

M.C. (%): 12

LIMITS

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

LIMITS

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

% GRAVEL: 0  
 % SAND: 4  
 % FINES: 96

% GRAVEL: 44  
 % SAND: 30  
 % FINES: 26

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-396  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1857+725 O/S 25M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.13

FIELD NO: 552  
 LAB NO: 1955  
 DEPTH: 0.6-1.0  
 TYPE: AUGER  
 SPILLED

FIELD NO: 553  
 LAB NO: 1956  
 DEPTH: 2.0-2.5  
 TYPE: AUGER

FIELD NO: 554  
 LAB NO: 1957  
 DEPTH: 3.5-4.0  
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	--
0.840	--
0.630	--
0.420	--
0.315	--
0.160	--
0.150	--
0.080	--

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	93
20.0	91
12.5	81
10.0	77
5.0	67
2.5	60
2.0	--
1.25	55
0.840	--
0.630	51
0.420	--
0.315	44
0.160	35
0.150	--
0.080	27

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	90
12.5	79
10.0	72
5.0	61
2.5	53
2.0	--
1.25	48
0.840	--
0.630	43
0.420	--
0.315	38
0.160	33
0.150	--
0.080	27

M.C. (%) : 102

M.C. (%) : 11

M.C. (%) : 11

LIMITS

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

LIMITS

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

LIMITS

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

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

% GRAVEL: 33  
 % SAND: 40  
 % FINES: 27

% GRAVEL: 39  
 % SAND: 34  
 % FINES: 27

CLASSIFICATION:

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-397  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1857+835 O/S 30M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.13

FIELD NO: 555  
 LAB NO: 1958  
 DEPTH: 0.6-1.0  
 TYPE: AUGER

FIELD NO: 556  
 LAB NO: 1959  
 DEPTH: 2.0-2.5  
 TYPE: AUGER

FIELD NO: 557  
 LAB NO: 1960  
 DEPTH: 3.8-4.2  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	91
10.0	90
5.0	87
2.5	84
2.0	--
1.25	82
0.840	--
0.630	80
0.420	--
0.315	77
0.160	75
0.150	--
0.080	72

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	97
20.0	91
12.5	84
10.0	75
5.0	58
2.5	47
2.0	--
1.25	39
0.840	--
0.630	34
0.420	--
0.315	28
0.160	23
0.150	--
0.080	19

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	86
20.0	77
12.5	68
10.0	63
5.0	53
2.5	47
2.0	--
1.25	42
0.840	--
0.630	38
0.420	--
0.315	33
0.160	29
0.150	--
0.080	24

M.C. (%) : 54

M.C. (%) : 9

M.C. (%) : 10

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

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

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

% GRAVEL: 13  
 % SAND: 15  
 % FINES: 72

% GRAVEL: 42  
 % SAND: 39  
 % FINES: 19

% GRAVEL: 47  
 % SAND: 29  
 % FINES: 24

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-398  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1857+950  
 LOGGED BY: GC DATE COMPLETED: 93.10.13

FIELD NO: 558  
 LAB NO: 1961  
 DEPTH: 0.6-1.0  
 TYPE: AUGER

FIELD NO: 559  
 LAB NO: 1962  
 DEPTH: 2.5-3.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	98
2.0	--
1.25	95
0.840	--
0.630	91
0.420	--
0.315	87
0.160	83
0.150	--
0.080	80

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	98
12.5	86
10.0	76
5.0	60
2.5	52
2.0	--
1.25	46
0.840	--
0.630	41
0.420	--
0.315	36
0.160	29
0.150	--
0.080	24

M.C. (%) : 92

M.C. (%) : 11

LIMITS

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

LIMITS

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

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

% GRAVEL: 40  
 % SAND: 36  
 % FINES: 24

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-399  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1858+050 O/S 25M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.13

FIELD NO: 560  
 LAB NO: 1963  
 DEPTH: 0.6-1.0  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 561  
 LAB NO: 1964  
 DEPTH: 2.5-3.0  
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	98
2.0	--
1.25	96
0.840	--
0.630	94
0.420	--
0.315	92
0.160	90
0.150	--
0.080	88

M.C. (%): 118

LIMITS

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

% GRAVEL: 0  
 % SAND: 12  
 % FINES: 88

CLASSIFICATION: SILT (ML)

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	100
2.0	--
1.25	99
0.840	--
0.630	87
0.420	--
0.315	52
0.160	33
0.150	--
0.080	20

M.C. (%): 68

LIMITS

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

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

CLASSIFICATION: SILTY SAND (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-400  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1858+150 O/S 25M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.13

FIELD NO: 562  
 LAB NO: 1965  
 DEPTH: 0.6-1.0  
 TYPE: AUGER

FIELD NO: 563  
 LAB NO: 1966  
 DEPTH: 2.5-3.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	99
2.0	--
1.25	99
0.840	--
0.630	98
0.420	--
0.315	96
0.160	94
0.150	--
0.080	84

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	100
2.0	--
1.25	100
0.840	--
0.630	88
0.420	--
0.315	44
0.160	19
0.150	--
0.080	12

M.C. (%) : 98

M.C. (%) : 38

LIMITS

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

LIMITS

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

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

% GRAVEL: 0  
 % SAND: 88  
 % FINES: 12

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:  
 WELL-GRADED SAND  
 WITH SILT (SW-SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-401  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1858+350 O/S 25M LT  
 LOGGED BY: GC DATE COMPLETED: 93.10.13

FIELD NO: 564  
 LAB NO: 1967  
 DEPTH: 0.6-1.0  
 TYPE: AUGER

FIELD NO: 565  
 LAB NO: 1968  
 DEPTH: 2.5-3.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	100
2.0	--
1.25	98
0.840	--
0.630	93
0.420	--
0.315	86
0.160	80
0.150	--
0.080	74

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	100
2.0	--
1.25	97
0.840	--
0.630	73
0.420	--
0.315	42
0.160	31
0.150	--
0.080	23

M.C. (%): 75

M.C. (%): 91

LIMITS

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

LIMITS

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

% GRAVEL: 0  
 % SAND: 26  
 % FINES: 74

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

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:  
 SILTY SAND (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-402  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1858+450 O/S 25M LT  
 LOGGED BY: GC DATE COMPLETED: 93.10.13

FIELD NO: 566  
 LAB NO: 1969  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 567  
 LAB NO: 1970  
 DEPTH: 2.5-3.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	100
2.0	--
1.25	100
0.840	--
0.630	99
0.420	--
0.315	95
0.160	89
0.150	--
0.080	79

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	100
2.0	--
1.25	99
0.840	--
0.630	79
0.420	--
0.315	41
0.160	24
0.150	--
0.080	16

M.C. (%) : 73

M.C. (%) : 90

LIMITS

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

LIMITS

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

% GRAVEL: 0  
 % SAND: 21  
 % FINES: 79

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

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:  
 SILTY SAND (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-403  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1858+550 O/S 25M LT  
 LOGGED BY: GC DATE COMPLETED: 93.10.13

FIELD NO: 568  
 LAB NO: 1971  
 DEPTH: 2.5-3.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	100
2.0	--
1.25	98
0.840	--
0.630	81
0.420	--
0.315	51
0.160	26
0.150	--
0.080	16

M.C. (%) : 56

LIMITS

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

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

CLASSIFICATION:  
 SILTY SAND (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-404  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1858+625 O/S 10M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.13

FIELD NO: 569  
 LAB NO: 1972  
 DEPTH: 1.0-1.2  
 TYPE: AUGER  
 ORGANIC

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	94
10.0	92
5.0	88
2.5	81
2.0	--
1.25	74
0.840	--
0.630	67
0.420	--
0.315	54
0.160	46
0.150	--
0.080	42

M.C. (%) : 40

LIMITS

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

% GRAVEL: 12  
 % SAND: 46  
 % FINES: 42

CLASSIFICATION:  
 SILTY SAND (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-405  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1858+815 O/S 10M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.13

FIELD NO: 570  
 LAB NO: 1973  
 DEPTH: 0.8-1.0  
 TYPE: AUGER

FIELD NO: 571  
 LAB NO: 1974  
 DEPTH: 2.0-2.5  
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	92
20.0	85
12.5	76
10.0	71
5.0	60
2.5	52
2.0	--
1.25	43
0.840	--
0.630	36
0.420	--
0.315	27
0.160	20
0.150	--
0.080	16

M.C. (%) : 8

LIMITS

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

% GRAVEL: 40  
 % SAND: 44  
 % FINES: 16

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	95
2.0	--
1.25	84
0.840	--
0.630	63
0.420	--
0.315	14
0.160	3
0.150	--
0.080	2

M.C. (%) : 5

LIMITS

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

% GRAVEL: 0  
 % SAND: 98  
 % FINES: 2

CLASSIFICATION:  
 POORLY GRADED  
 SAND (SP)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-406  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1858+900 O/S 25M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.13

FIELD NO: 572  
 LAB NO: 1975  
 DEPTH: 0.7-1.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	99
2.0	--
1.25	98
0.840	--
0.630	97
0.420	--
0.315	95
0.160	92
0.150	--
0.080	84

M.C. (%) : 64

LIMITS

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

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

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-407  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1859+350 O/S 15M LT  
 LOGGED BY: GC DATE COMPLETED: 93.10.13

FIELD NO: 573  
 LAB NO: 1976  
 DEPTH: 0.6-1.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	99
2.0	--
1.25	98
0.840	--
0.630	98
0.420	--
0.315	97
0.160	96
0.150	--
0.080	93

M.C. (%) : 63

LIMITS

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

% GRAVEL: 0  
 % SAND: 7  
 % FINES: 93

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-408  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1859+500 O/S 10M LT  
 LOGGED BY: GC DATE COMPLETED: 93.10.13

FIELD NO: 574  
 LAB NO: 1977  
 DEPTH: 0.8-1.2  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 575  
 LAB NO: 1978  
 DEPTH: 2.2-2.6  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	100
2.0	--
1.25	100
0.840	--
0.630	99
0.420	--
0.315	97
0.160	95
0.150	--
0.080	81

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	100
2.0	--
1.25	100
0.840	--
0.630	99
0.420	--
0.315	96
0.160	92
0.150	--
0.080	85

M.C. (%) : 60

M.C. (%) : 93

LIMITS

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

LIMITS

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

% GRAVEL: 0  
 % SAND: 19  
 % FINES: 81

% GRAVEL: 0  
 % SAND: 15  
 % FINES: 85

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-409  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1859+600  
 LOGGED BY: GC DATE COMPLETED: 93.10.13

FIELD NO: 576  
 LAB NO: 1979  
 DEPTH: 0.8-1.2  
 TYPE: AUGER  
 ORGANIC

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	100
2.0	--
1.25	99
0.840	--
0.630	98
0.420	--
0.315	96
0.160	94
0.150	--
0.080	91

M.C. (%): 79

LIMITS

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

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

CLASSIFICATION:  
 SILT (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-410  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1859+700 O/S 5M LT  
 LOGGED BY: GC DATE COMPLETED: 93.10.13

FIELD NO: 577  
 LAB NO: 1980  
 DEPTH: 0.6-1.0  
 TYPE: AUGER

FIELD NO: 578  
 LAB NO: 1981  
 DEPTH: 2.8-3.0  
 TYPE: AUGER  
 ORGANIC

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	100
2.0	--
1.25	100
0.840	--
0.630	99
0.420	--
0.315	99
0.160	96
0.150	--
0.080	79

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	97
2.0	--
1.25	94
0.840	--
0.630	87
0.420	--
0.315	79
0.160	73
0.150	--
0.080	64

M.C. (%) : 55

M.C. (%) : 85

LIMITS

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

LIMITS

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

% GRAVEL: 0  
 % SAND: 21  
 % FINES: 79

% GRAVEL: 0  
 % SAND: 36  
 % FINES: 64

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:  
 SANDY SILT (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-411  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1860+025  
 LOGGED BY: GC DATE COMPLETED: 93.10.13

FIELD NO: 579  
 LAB NO: 1982  
 DEPTH: 1.0-1.4  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 580  
 LAB NO: 1983  
 DEPTH: 2.0-3.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	97
2.0	--
1.25	95
0.840	--
0.630	93
0.420	--
0.315	91
0.160	89
0.150	--
0.080	88

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	97
12.5	77
10.0	67
5.0	45
2.5	34
2.0	--
1.25	27
0.840	--
0.630	18
0.420	--
0.315	6
0.160	3
0.150	--
0.080	2

M.C. (%): 115

M.C. (%): 10

LIMITS

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

LIMITS

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

% GRAVEL: 0  
 % SAND: 12  
 % FINES: 88

% GRAVEL: 55  
 % SAND: 43  
 % FINES: 2

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 POORLY GRADED  
 GRAVEL WITH SAND  
 (GP)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-412  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1860+125 O/S 100M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.13

FIELD NO: 581  
 LAB NO: 1984  
 DEPTH: 0.8-1.2  
 TYPE: AUGER

FIELD NO: 582  
 LAB NO: 1985  
 DEPTH: 2.4-3.0  
 TYPE: AUGER

FIELD NO: 583  
 LAB NO: 1986  
 DEPTH: 3.1-3.5  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	85
20.0	85
12.5	74
10.0	71
5.0	66
2.5	61
2.0	--
1.25	57
0.840	--
0.630	53
0.420	--
0.315	49
0.160	43
0.150	--
0.080	37

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	95
20.0	92
12.5	79
10.0	73
5.0	59
2.5	49
2.0	--
1.25	42
0.840	--
0.630	37
0.420	--
0.315	32
0.160	27
0.150	--
0.080	23

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	94
20.0	79
12.5	59
10.0	50
5.0	36
2.5	27
2.0	--
1.25	23
0.840	--
0.630	20
0.420	--
0.315	17
0.160	15
0.150	--
0.080	12

M.C. (%) : 10

M.C. (%) : 9

M.C. (%) : 7

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

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

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

% GRAVEL: 34  
 % SAND: 28  
 % FINES: 37

% GRAVEL: 41  
 % SAND: 36  
 % FINES: 23

% GRAVEL: 64  
 % SAND: 24  
 % FINES: 12

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

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

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-413  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1860+250 O/S 100M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.13

FIELD NO: 583  
 LAB NO: 1987  
 DEPTH: 0.8-1.2  
 TYPE: AUGER

FIELD NO: 584  
 LAB NO: 1988  
 DEPTH: 2.5-3.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	96
12.5	81
10.0	79
5.0	71
2.5	66
2.0	--
1.25	61
0.840	--
0.630	57
0.420	--
0.315	52
0.160	46
0.150	--
0.080	39

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	92
20.0	78
12.5	69
10.0	67
5.0	57
2.5	51
2.0	--
1.25	46
0.840	--
0.630	43
0.420	--
0.315	39
0.160	34
0.150	--
0.080	29

M.C. (%): 20

M.C. (%): 12

LIMITS

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

LIMITS

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

% GRAVEL: 29  
 % SAND: 32  
 % FINES: 39

% GRAVEL: 43  
 % SAND: 28  
 % FINES: 29

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-414  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1860+125 O/S 2M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.13

FIELD NO: 585  
 LAB NO: 1989  
 DEPTH: 0.8-1.2  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 586  
 LAB NO: 1990  
 DEPTH: 2.5-3.0  
 TYPE: AUGER  
 ORGANIC

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	96
2.0	--
1.25	88
0.840	--
0.630	82
0.420	--
0.315	77
0.160	74
0.150	--
0.080	70

M.C. (%): 218

LIMITS

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

% GRAVEL: 0  
 % SAND: 30  
 % FINES: 70

CLASSIFICATION:  
 SANDY SILT (ML)

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	92
2.0	--
1.25	84
0.840	--
0.630	79
0.420	--
0.315	76
0.160	74
0.150	--
0.080	72

M.C. (%): 194

LIMITS

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

% GRAVEL: 0  
 % SAND: 28  
 % FINES: 72

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-415  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1860+225 O/S 5M LT  
 LOGGED BY: GC DATE COMPLETED: 93.10.13

FIELD NO: 587  
 LAB NO: 1991  
 DEPTH: 0.8-1.0  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 588  
 LAB NO: 1992  
 DEPTH: 2.5-2.8  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	100
2.0	--
1.25	100
0.840	--
0.630	99
0.420	--
0.315	98
0.160	97
0.150	--
0.080	96

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	100
2.0	--
1.25	100
0.840	--
0.630	99
0.420	--
0.315	98
0.160	95
0.150	--
0.080	83

M.C. (%): 104

M.C. (%): 67

LIMITS

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

LIMITS

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

% GRAVEL: 0  
 % SAND: 4  
 % FINES: 96

% GRAVEL: 0  
 % SAND: 17  
 % FINES: 83

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-416  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1860+350  
 LOGGED BY: GC DATE COMPLETED: 93.10.13

FIELD NO: 589  
 LAB NO: 1993  
 DEPTH: 0.8-1.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	93
20.0	82
12.5	74
10.0	68
5.0	58
2.5	51
2.0	--
1.25	45
0.840	--
0.630	41
0.420	--
0.315	37
0.160	32
0.150	--
0.080	28

M.C. (%) : 17

LIMITS

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

% GRAVEL: 42  
 % SAND: 29  
 % FINES: 28

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 266-417  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1860+475 O/S 40M LT  
 LOGGED BY: GC DATE COMPLETED: 93.10.13

FIELD NO: 590  
 LAB NO: 1994  
 DEPTH: 0.8-1.0  
 TYPE: AUGER

FIELD NO: 591  
 LAB NO: 1995  
 DEPTH: 2.0-2.5  
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	95
12.5	90
10.0	87
5.0	80
2.5	75
2.0	--
1.25	71
0.840	--
0.630	66
0.420	--
0.315	61
0.160	56
0.150	--
0.080	51

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	89
12.5	74
10.0	68
5.0	52
2.5	43
2.0	--
1.25	38
0.840	--
0.630	33
0.420	--
0.315	29
0.160	26
0.150	--
0.080	21

M.C. (%): 23

M.C. (%): 7

LIMITS

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

LIMITS

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

% GRAVEL: 20  
 % SAND: 29  
 % FINES: 51

% GRAVEL: 48  
 % SAND: 30  
 % FINES: 21

CLASSIFICATION:  
 SANDY SILT WITH  
 GRAVEL (ML)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 267-418  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1860+550 O/S 40M LT  
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 592  
 LAB NO: 1996  
 DEPTH: 0.8-1.2  
 TYPE: AUGER

FIELD NO: 593  
 LAB NO: 1997  
 DEPTH: 1.8-2.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	96
12.5	90
10.0	88
5.0	82
2.5	79
2.0	--
1.25	76
0.840	--
0.630	74
0.420	--
0.315	71
0.160	69
0.150	--
0.080	66

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	96
10.0	92
5.0	83
2.5	75
2.0	--
1.25	68
0.840	--
0.630	63
0.420	--
0.315	56
0.160	50
0.150	--
0.080	43

M.C. (%): 18

M.C. (%): 19

LIMITS

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

LIMITS

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

% GRAVEL: 18  
 % SAND: 16  
 % FINES: 66

% GRAVEL: 17  
 % SAND: 40  
 % FINES: 43

CLASSIFICATION:  
 GRAVELLY SILT  
 WITH SAND (ML)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 267-419  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1860+675 O/S 15M LT  
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 594  
 LAB NO: 1998  
 DEPTH: 0.6-1.0  
 TYPE: AUGER

FIELD NO: 595  
 LAB NO: 1999  
 DEPTH: 1.6-2.0  
 TYPE: AUGER

FIELD NO: 596  
 LAB NO: 2000  
 DEPTH: 3.4-4.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	92
12.5	83
10.0	81
5.0	72
2.5	66
2.0	--
1.25	61
0.840	--
0.630	56
0.420	--
0.315	51
0.160	45
0.150	--
0.080	38

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	90
20.0	84
12.5	77
10.0	74
5.0	63
2.5	56
2.0	--
1.25	50
0.840	--
0.630	45
0.420	--
0.315	40
0.160	34
0.150	--
0.080	29

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	93
10.0	92
5.0	81
2.5	69
2.0	--
1.25	59
0.840	--
0.630	51
0.420	--
0.315	45
0.160	38
0.150	--
0.080	33

M.C. (%): 8

M.C. (%): 10

M.C. (%): 12

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

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

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

% GRAVEL: 28  
 % SAND: 35  
 % FINES: 38

% GRAVEL: 37  
 % SAND: 34  
 % FINES: 29

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

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 267-420  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1860+750 O/S 15M LT  
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 597  
 LAB NO: 2001  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 598  
 LAB NO: 2002  
 DEPTH: 2.5-3.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	93
12.5	88
10.0	83
5.0	79
2.5	75
2.0	--
1.25	72
0.840	--
0.630	69
0.420	--
0.315	65
0.160	61
0.150	--
0.080	57

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	95
20.0	88
12.5	77
10.0	70
5.0	58
2.5	51
2.0	--
1.25	46
0.840	--
0.630	42
0.420	--
0.315	38
0.160	34
0.150	--
0.080	29

M.C. (%) : 56

M.C. (%) : 13

LIMITS

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

LIMITS

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

% GRAVEL: 21  
 % SAND: 22  
 % FINES: 57

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

CLASSIFICATION:  
 SANDY SILT WITH  
 GRAVEL (ML)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 267-421  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1860+850 O/S 10M LT  
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 599  
 LAB NO: 2003  
 DEPTH: 0.8-1.2  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 600  
 LAB NO: 2004  
 DEPTH: 2.5-3.0  
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	88
20.0	88
12.5	85
10.0	84
5.0	80
2.5	77
2.0	--
1.25	74
0.840	--
0.630	71
0.420	--
0.315	67
0.160	62
0.150	--
0.080	57

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	96
12.5	89
10.0	84
5.0	73
2.5	66
2.0	--
1.25	59
0.840	--
0.630	54
0.420	--
0.315	48
0.160	42
0.150	--
0.080	37

M.C. (%): 55

M.C. (%): 24

LIMITS

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

LIMITS

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

% GRAVEL: 20  
 % SAND: 24  
 % FINES: 57

% GRAVEL: 27  
 % SAND: 37  
 % FINES: 37

CLASSIFICATION:  
 SANDY SILT WITH  
 GRAVEL (ML)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 267-423A  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1861+165  
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 604  
 LAB NO: 2008  
 DEPTH: 0.8-1.0  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 605  
 LAB NO: 2009  
 DEPTH: 2.5-3.0  
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	95
2.0	--
1.25	87
0.840	--
0.630	83
0.420	--
0.315	79
0.160	75
0.150	--
0.080	72

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	100
10.0	99
5.0	95
2.5	84
2.0	--
1.25	68
0.840	--
0.630	53
0.420	--
0.315	42
0.160	33
0.150	--
0.080	26

M.C. (%): 196

M.C. (%): 8

LIMITS

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

LIMITS

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

% GRAVEL: 0  
 % SAND: 28  
 % FINES: 72

% GRAVEL: 5  
 % SAND: 69  
 % FINES: 26

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:  
 SILTY SAND (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 267-424  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1861+300 O/S 7M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 606  
 LAB NO: 2010  
 DEPTH: 0.8-1.0  
 TYPE: AUGER

FIELD NO: 607  
 LAB NO: 2011  
 DEPTH: 2.0-2.5  
 TYPE: AUGER

FIELD NO: 608  
 LAB NO: 2012  
 DEPTH: 3.3-3.7  
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	97
10.0	95
5.0	86
2.5	75
2.0	--
1.25	61
0.840	--
0.630	49
0.420	--
0.315	40
0.160	33
0.150	--
0.080	25

M.C. (%) : 4

LIMITS

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

% GRAVEL: 14  
 % SAND: 61  
 % FINES: 25

CLASSIFICATION: SILTY SAND (SM)

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	97
10.0	95
5.0	83
2.5	68
2.0	--
1.25	50
0.840	--
0.630	39
0.420	--
0.315	30
0.160	23
0.150	--
0.080	16

M.C. (%) : 10

LIMITS

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

% GRAVEL: 17  
 % SAND: 67  
 % FINES: 16

CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	100
10.0	99
5.0	91
2.5	77
2.0	--
1.25	59
0.840	--
0.630	46
0.420	--
0.315	36
0.160	28
0.150	--
0.080	21

M.C. (%) : 3

LIMITS

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

% GRAVEL: 9  
 % SAND: 70  
 % FINES: 21

CLASSIFICATION: SILTY SAND (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 267-425  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1861+460 O/S 10M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 609  
 LAB NO: 2013  
 DEPTH: 0.7-1.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	100
10.0	99
5.0	87
2.5	70
2.0	--
1.25	52
0.840	--
0.630	41
0.420	--
0.315	32
0.160	24
0.150	--
0.080	17

M.C. (%) : 3

LIMITS

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

% GRAVEL: 13  
 % SAND: 70  
 % FINES: 17

CLASSIFICATION:  
 SILTY SAND (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 267-426  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1861+480 O/S 12M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 610  
 LAB NO: 2014  
 DEPTH: 0.7-1.0  
 TYPE: AUGER

FIELD NO: 611  
 LAB NO: 2015  
 DEPTH: 2.5-3.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	93
20.0	81
12.5	69
10.0	63
5.0	50
2.5	39
2.0	--
1.25	29
0.840	--
0.630	22
0.420	--
0.315	17
0.160	13
0.150	--
0.080	10

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	95
10.0	90
5.0	69
2.5	52
2.0	--
1.25	35
0.840	--
0.630	24
0.420	--
0.315	17
0.160	13
0.150	--
0.080	9

M.C. (%): 3

M.C. (%): 4

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

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

% GRAVEL: 50  
 % SAND: 40  
 % FINES: 10

% GRAVEL: 31  
 % SAND: 60  
 % FINES: 9

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

CLASSIFICATION:  
 WELL-GRADED SAND  
 WITH SILT &  
 GRAVEL (SW-SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 267-427  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1861+600  
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 612  
 LAB NO: 2016  
 DEPTH: 0.6-1.2  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 613  
 LAB NO: 2017  
 DEPTH: 1.6-2.0  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 614  
 LAB NO: 2018  
 DEPTH: 3.0-3.6  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	99
2.0	--
1.25	97
0.840	--
0.630	95
0.420	--
0.315	93
0.160	90
0.150	--
0.080	86

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	93
20.0	91
12.5	78
10.0	75
5.0	70
2.5	68
2.0	--
1.25	67
0.840	--
0.630	65
0.420	--
0.315	64
0.160	63
0.150	--
0.080	61

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	93
12.5	89
10.0	82
5.0	61
2.5	45
2.0	--
1.25	33
0.840	--
0.630	26
0.420	--
0.315	21
0.160	17
0.150	--
0.080	13

M.C. (%) : 91

M.C. (%) : 46

M.C. (%) : 13

LIMITS

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

LIMITS

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

LIMITS

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

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

% GRAVEL: 30  
 % SAND: 9  
 % FINES: 61

% GRAVEL: 39  
 % SAND: 48  
 % FINES: 13

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 GRAVELLY SILT  
 (ML)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 267-428  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1861+705  
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 615  
 LAB NO: 2019  
 DEPTH: 0.6-1.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	96
12.5	87
10.0	78
5.0	58
2.5	42
2.0	--
1.25	29
0.840	--
0.630	22
0.420	--
0.315	17
0.160	13
0.150	--
0.080	9

M.C. (%) : 1

LIMITS

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

% GRAVEL: 42  
 % SAND: 49  
 % FINES: 9

CLASSIFICATION:  
 POORLY GRADED  
 SAND WITH SILT &  
 GRAVEL (SP-SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 267-430  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1862+000 O/S 5M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 616  
 LAB NO: 2020  
 DEPTH: 0.8-1.0  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 617  
 LAB NO: 2021  
 DEPTH: 2.5-3.0  
 TYPE: AUGER  
 ORGANIC

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	92
2.0	--
1.25	80
0.840	--
0.630	70
0.420	--
0.315	62
0.160	52
0.150	--
0.080	48

M.C.(%) : 208

LIMITS

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

% GRAVEL: 0  
 % SAND: 52  
 % FINES: 48

CLASSIFICATION:  
 SILTY SAND (SM)

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	95
2.0	--
1.25	89
0.840	--
0.630	83
0.420	--
0.315	78
0.160	72
0.150	--
0.080	63

M.C.(%) : 120

LIMITS

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

% GRAVEL: 0  
 % SAND: 37  
 % FINES: 63

CLASSIFICATION:  
 SANDY SILT (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 267-431  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1862+100 O/S 2M RT  
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 618  
 LAB NO: 2022  
 DEPTH: 1.0-1.2  
 TYPE: AUGER

FIELD NO: 619  
 LAB NO: 2023  
 DEPTH: 2.5-3.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	91
20.0	84
12.5	74
10.0	64
5.0	51
2.5	41
2.0	--
1.25	33
0.840	--
0.630	27
0.420	--
0.315	22
0.160	18
0.150	--
0.080	14

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	70
20.0	66
12.5	59
10.0	56
5.0	47
2.5	39
2.0	--
1.25	33
0.840	--
0.630	28
0.420	--
0.315	24
0.160	20
0.150	--
0.080	17

M.C. (%) : 7

M.C. (%) : 16

LIMITS

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

LIMITS

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

% GRAVEL: 49  
 % SAND: 37  
 % FINES: 14

% GRAVEL: 53  
 % SAND: 30  
 % FINES: 17

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)



PROJECT NUMBER: HOLE NUMBER: 365-178  
 CLIENT: SHAKWAK  
 PROJECT NAME: ALASKA HIGHWAY RE-CONSTRUCTION  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: 36-003  
 HOLE LOCATION: 1852+301 9M RT  
 LOGGED BY: CC DATE COMPLETED: 95-06-10

FIELD NO: 439  
 LAB NO: 627  
 DEPTH: 5.8-6.0  
 TYPE: AUGER  
 ASH

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	100
0.840	--
0.630	85
0.420	--
0.315	52
0.160	30
0.150	--
0.080	20

M.C. (%) : 51

LIMITS

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

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

CLASSIFICATION:  
 SILTY SAND (SM)

PROJECT NUMBER: HOLE NUMBER: 365-179  
CLIENT: SHAKWAK  
PROJECT NAME: ALASKA HIGHWAY RE-CONSTRUCTION  
PROJECT LOCATION: SEGMENT 15  
DRILL UNIT: 36-003  
HOLE LOCATION: 1852+402 4M RT  
LOGGED BY: CC DATE COMPLETED: 95-06-10

FIELD NO: 440  
LAB NO: 628  
DEPTH: 5.8-6.0  
TYPE: AUGER  
ASH

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	100
2.0	--
1.25	95
0.840	--
0.630	72
0.420	--
0.315	47
0.160	29
0.150	--
0.080	21

M.C. (%): 66

LIMITS

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

% GRAVEL: 0  
% SAND: 79  
% FINES: 21

CLASSIFICATION:  
SILTY SAND (SM)





PROJECT NUMBER: \_\_\_\_\_ HOLE NUMBER: 365-183  
 CLIENT: SHAKWAK  
 PROJECT NAME: ALASKA HIGHWAY RE-CONSTRUCTION  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: 36-003  
 HOLE LOCATION: 1852+851  
 LOGGED BY: CC DATE COMPLETED: 95-06-10

FIELD NO: 446  
 LAB NO: 634  
 DEPTH: 2.2-2.4  
 TYPE: AUGER  
 ANGULAR OXYDIZED

FIELD NO: 447  
 LAB NO: 635  
 DEPTH: 3.0-3.2  
 TYPE: AUGER  
 ANGULAR OXYDIZED

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	80
20.0	78
12.5	65
10.0	60
5.0	50
2.5	43
2.0	--
1.25	37
0.840	--
0.630	32
0.420	--
0.315	28
0.160	25
0.150	--
0.080	22

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	81
31.5	--
25.0	77
20.0	74
12.5	65
10.0	60
5.0	49
2.5	43
2.0	--
1.25	37
0.840	--
0.630	32
0.420	--
0.315	28
0.160	25
0.150	--
0.080	22

M.C. (%) : 11

M.C. (%) : 11

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

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

% GRAVEL: 50  
 % SAND: 28  
 % FINES: 22

% GRAVEL: 51  
 % SAND: 28  
 % FINES: 22

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: HOLE NUMBER: 365-184  
CLIENT: SHAKWAK  
PROJECT NAME: ALASKA HIGHWAY RE-CONSTRUCTION  
PROJECT LOCATION: SEGMENT 15  
DRILL UNIT: 36-003  
HOLE LOCATION: 1853+030 10M LT  
LOGGED BY: CC DATE COMPLETED: 95-06-10

FIELD NO: 448  
LAB NO: 636  
DEPTH: 4.4-4.6  
TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	63
20.0	56
12.5	52
10.0	49
5.0	42
2.5	38
2.0	--
1.25	35
0.840	--
0.630	30
0.420	--
0.315	23
0.160	18
0.150	--
0.080	16

M.C. (%): 17

LIMITS

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

% GRAVEL: 58  
% SAND: 27  
% FINES: 16

CLASSIFICATION:  
SILTY GRAVEL  
WITH SAND (GM)











PROJECT NUMBER:		HOLE NUMBER:	365-191
CLIENT:	SHAKWAK		
PROJECT NAME:	ALASKA HIGHWAY RE-CONSTRUCTION		
PROJECT LOCATION:	SEGMENT 15		
DRILL UNIT:	36-003		
HOLE LOCATION:	1853+850 7M RT		
LOGGED BY:	CC	DATE COMPLETED:	95-06-11

FIELD NO: 460  
LAB NO: 648  
DEPTH: 1.4-1.6  
TYPE: AUGER

FIELD NO: 461  
LAB NO: 649  
DEPTH: 2.8-3.0  
TYPE: AUGER

FIELD NO: 462  
LAB NO: 650  
DEPTH: 3.6-3.8  
TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	83
20.0	80
12.5	69
10.0	64
5.0	50
2.5	42
2.0	--
1.25	36
0.840	--
0.630	31
0.420	--
0.315	26
0.160	21
0.150	--
0.080	17

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	80
20.0	80
12.5	72
10.0	67
5.0	56
2.5	50
2.0	--
1.25	44
0.840	--
0.630	39
0.420	--
0.315	32
0.160	27
0.150	--
0.080	22

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	90
20.0	81
12.5	70
10.0	61
5.0	48
2.5	38
2.0	--
1.25	30
0.840	--
0.630	25
0.420	--
0.315	20
0.160	16
0.150	--
0.080	14

M.C. (%): 11

M.C. (%): 13

M.C. (%): 9

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

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

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

% GRAVEL: 50  
% SAND: 34  
% FINES: 17

% GRAVEL: 44  
% SAND: 34  
% FINES: 22

% GRAVEL: 52  
% SAND: 34  
% FINES: 14

CLASSIFICATION:  
SILTY GRAVEL  
WITH SAND (GM)

CLASSIFICATION:  
SILTY GRAVEL  
WITH SAND (GM)

CLASSIFICATION:  
SILTY GRAVEL  
WITH SAND (GM)

PROJECT NUMBER: HOLE NUMBER: 365-194  
 CLIENT: SHAKWAK  
 PROJECT NAME: ALASKA HIGHWAY RE-CONSTRUCTION  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: 36-003  
 HOLE LOCATION: 1854+551 3M RT  
 LOGGED BY: CC DATE COMPLETED: 95-06-11

FIELD NO: 463  
 LAB NO: 651  
 DEPTH: 1.8-2.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	81
20.0	75
12.5	67
10.0	63
5.0	54
2.5	48
2.0	--
1.25	44
0.840	--
0.630	39
0.420	--
0.315	34
0.160	29
0.150	--
0.080	24

M.C. (%): 9

LIMITS

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

% GRAVEL: 46  
 % SAND: 30  
 % FINES: 24

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

**PROJECT NUMBER:** \_\_\_\_\_ **HOLE NUMBER:** 365-195  
**CLIENT:** SHAKWAK  
**PROJECT NAME:** ALASKA HIGHWAY RE-CONSTRUCTION  
**PROJECT LOCATION:** SEGMENT 15  
**DRILL UNIT:** 36-003  
**HOLE LOCATION:** 1854+762 7M RT  
**LOGGED BY:** CC **DATE COMPLETED:** 95-06-11

**FIELD NO:** 464  
**LAB NO:** 652  
**DEPTH:** 1.0-1.2  
**TYPE:** AUGER  
 ANGULAR OXYDIZED

**FIELD NO:** 465  
**LAB NO:** 653  
**DEPTH:** 2.8-3.0  
**TYPE:** AUGER

**FIELD NO:** 466  
**LAB NO:** 654  
**DEPTH:** 4.2-4.4  
**TYPE:** AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	69
20.0	61
12.5	44
10.0	40
5.0	32
2.5	27
2.0	--
1.25	24
0.840	--
0.630	21
0.420	--
0.315	19
0.160	16
0.150	--
0.080	14

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	58
20.0	52
12.5	42
10.0	39
5.0	30
2.5	23
2.0	--
1.25	17
0.840	--
0.630	14
0.420	--
0.315	11
0.160	8
0.150	--
0.080	6

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	95
20.0	91
12.5	82
10.0	78
5.0	67
2.5	58
2.0	--
1.25	52
0.840	--
0.630	48
0.420	--
0.315	43
0.160	38
0.150	--
0.080	32

M.C. (%) : 15

M.C. (%) : 9

M.C. (%) : 10

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

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

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

% GRAVEL: 68  
 % SAND: 18  
 % FINES: 14

% GRAVEL: 70  
 % SAND: 23  
 % FINES: 6

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

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

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

**CLASSIFICATION:**  
 SILTY SAND WITH  
 GRAVEL (SM)







PROJECT NUMBER: HOLE NUMBER: 366-199  
CLIENT: SHAKWAK  
PROJECT NAME: ALASKA HIGHWAY RE-CONSTRUCTION  
PROJECT LOCATION: SEGMENT 15  
DRILL UNIT: 36-003  
HOLE LOCATION: 1855+145 8M LT  
LOGGED BY: CC DATE COMPLETED: 95-06-11

FIELD NO: 470  
LAB NO: 658  
DEPTH: 1.8-2.0  
TYPE: AUGER  
SOME WOOD & ORGS.

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	84
20.0	77
12.5	62
10.0	58
5.0	46
2.5	40
2.0	--
1.25	34
0.840	--
0.630	30
0.420	--
0.315	26
0.160	21
0.150	--
0.080	17

M.C. (%): 39

LIMITS

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

% GRAVEL: 54  
% SAND: 29  
% FINES: 17

CLASSIFICATION:  
SILTY GRAVEL  
WITH SAND (GM)



PROJECT NUMBER: HOLE NUMBER: 366-204  
CLIENT: SHAKWAK  
PROJECT NAME: ALASKA HIGHWAY RE-CONSTRUCTION  
PROJECT LOCATION: SEGMENT 15  
DRILL UNIT: 36-003  
HOLE LOCATION: 1855+900 10M LT  
LOGGED BY: CC DATE COMPLETED: 95-06-12

FIELD NO: 476  
LAB NO: 664  
DEPTH: 0.8-1.0  
TYPE: AUGER  
ANGULAR

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	97
12.5	87
10.0	81
5.0	65
2.5	52
2.0	--
1.25	43
0.840	--
0.630	37
0.420	--
0.315	28
0.160	21
0.150	--
0.080	15

M.C. (%) : 17

LIMITS

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

% GRAVEL: 35  
% SAND: 50  
% FINES: 15

CLASSIFICATION:  
SILTY SAND WITH  
GRAVEL (SM)

PROJECT NUMBER: HOLE NUMBER: 366-205  
 CLIENT: SHAKWAK  
 PROJECT NAME: ALASKA HIGHWAY RE-CONSTRUCTION  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: 36-003  
 HOLE LOCATION: 1856+030 10M LT  
 LOGGED BY: CC DATE COMPLETED: 95-06-12

FIELD NO: 477  
 LAB NO: 665  
 DEPTH: 1.3-1.5  
 TYPE: AUGER

FIELD NO: 478  
 LAB NO: 666  
 DEPTH: 2.8-3.0  
 TYPE: AUGER

FIELD NO: 479  
 LAB NO: 667  
 DEPTH: 4.2-4.4  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	77
20.0	74
12.5	62
10.0	55
5.0	39
2.5	28
2.0	--
1.25	22
0.840	--
0.630	18
0.420	--
0.315	15
0.160	13
0.150	--
0.080	11

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	95
20.0	90
12.5	84
10.0	81
5.0	72
2.5	65
2.0	--
1.25	59
0.840	--
0.630	53
0.420	--
0.315	48
0.160	44
0.150	--
0.080	41

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	93
20.0	80
12.5	66
10.0	58
5.0	40
2.5	31
2.0	--
1.25	24
0.840	--
0.630	19
0.420	--
0.315	15
0.160	11
0.150	--
0.080	9

M.C. (%): 11

M.C. (%): 22

M.C. (%): 9

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

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

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

% GRAVEL: 61  
 % SAND: 28  
 % FINES: 11

% GRAVEL: 28  
 % SAND: 30  
 % FINES: 41

% GRAVEL: 60  
 % SAND: 31  
 % FINES: 9

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

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

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

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 267-422  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1860+950 O/S 10M LT  
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 601  
 LAB NO: 2005  
 DEPTH: 0.8-1.0  
 TYPE: AUGER  
 ORGANIC

FIELD NO: 602  
 LAB NO: 2006  
 DEPTH: 2.5-3.0  
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	99
2.0	--
1.25	96
0.840	--
0.630	93
0.420	--
0.315	91
0.160	89
0.150	--
0.080	86

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	96
20.0	94
12.5	83
10.0	79
5.0	73
2.5	67
2.0	--
1.25	62
0.840	--
0.630	57
0.420	--
0.315	51
0.160	45
0.150	--
0.080	37

M.C. (%) : 85

M.C. (%) : 12

LIMITS

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

LIMITS

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

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

% GRAVEL: 27  
 % SAND: 36  
 % FINES: 37

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 267-423  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CME 750  
 HOLE LOCATION: 1861+050 %s 20m Lt  
 LOGGED BY: GC DATE COMPLETED: 94.10.14

FIELD NO: 603  
 LAB NO: 2007  
 DEPTH: 0.8-1.0  
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	98
12.5	85
10.0	79
5.0	64
2.5	53
2.0	--
1.25	43
0.840	--
0.630	36
0.420	--
0.315	28
0.160	18
0.150	--
0.080	12

M.C. (%) : 7

LIMITS

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

% GRAVEL: 36  
 % SAND: 51  
 % FINES: 12

CLASSIFICATION:  
 POORLY GRADED  
 SAND WITH SILT &  
 GRAVEL (SP-SM)







**PROJECT NUMBER:** \_\_\_\_\_ **HOLE NUMBER:** 366-221  
**CLIENT:** SHAKWAK  
**PROJECT NAME:** ALASKA HIGHWAY RE-CONSTRUCTION  
**PROJECT LOCATION:** SEGMENT 15  
**DRILL UNIT:** 36-003  
**HOLE LOCATION:** 1857+900 20M RT  
**LOGGED BY:** CC **DATE COMPLETED:** 95-06-13

<b>FIELD NO:</b> 507 <b>LAB NO:</b> 695 <b>DEPTH:</b> 1.2-1.4 <b>TYPE:</b> AUGER	<b>FIELD NO:</b> 508 <b>LAB NO:</b> 696 <b>DEPTH:</b> 1.8-2.0 <b>TYPE:</b> AUGER	<b>FIELD NO:</b> 509 <b>LAB NO:</b> 697 <b>DEPTH:</b> 2.8-3.0 <b>TYPE:</b> AUGER	<b>FIELD NO:</b> 510 <b>LAB NO:</b> 698 <b>DEPTH:</b> 4.2-4.4 <b>TYPE:</b> AUGER
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SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	--	100.0	--	100.0	--	100.0	--
80.0	--	80.0	--	80.0	--	80.0	--
50.0	100	50.0	--	50.0	100	50.0	100
31.5	--	31.5	--	31.5	--	31.5	--
25.0	68	25.0	--	25.0	95	25.0	94
20.0	68	20.0	100	20.0	95	20.0	94
12.5	59	12.5	96	12.5	87	12.5	87
10.0	57	10.0	91	10.0	81	10.0	84
5.0	52	5.0	78	5.0	67	5.0	69
2.5	49	2.5	70	2.5	58	2.5	60
2.0	--	2.0	--	2.0	--	2.0	--
1.25	46	1.25	62	1.25	51	1.25	53
0.840	--	0.840	--	0.840	--	0.840	--
0.630	43	0.630	56	0.630	42	0.630	47
0.420	--	0.420	--	0.420	--	0.420	--
0.315	39	0.315	50	0.315	33	0.315	42
0.160	36	0.160	45	0.160	26	0.160	36
0.150	--	0.150	--	0.150	--	0.150	--
0.080	32	0.080	41	0.080	20	0.080	30

<b>M.C. (%) :</b> 29	<b>M.C. (%) :</b> 23	<b>M.C. (%) :</b> 11	<b>M.C. (%) :</b> 17
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<b>LIMITS</b>	<b>LIMITS</b>	<b>LIMITS</b>	<b>LIMITS</b>
<b>LIQUID:</b> --	<b>LIQUID:</b> --	<b>LIQUID:</b> --	<b>LIQUID:</b> --
<b>PLASTIC:</b> --	<b>PLASTIC:</b> --	<b>PLASTIC:</b> --	<b>PLASTIC:</b> --
<b>P.I.:</b> N.P.	<b>P.I.:</b> N.P.	<b>P.I.:</b> N.P.	<b>P.I.:</b> N.P.

% GRAVEL: 48	% GRAVEL: 22	% GRAVEL: 33	% GRAVEL: 31
% SAND: 20	% SAND: 37	% SAND: 47	% SAND: 39
% FINES: 32	% FINES: 41	% FINES: 20	% FINES: 30

<b>CLASSIFICATION:</b> SILTY GRAVEL WITH SAND (GM)	<b>CLASSIFICATION:</b> SILTY SAND WITH GRAVEL (SM)	<b>CLASSIFICATION:</b> SILTY SAND WITH GRAVEL (SM)	<b>CLASSIFICATION:</b> SILTY SAND WITH GRAVEL (SM)
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**PROJECT NUMBER:** \_\_\_\_\_ **HOLE NUMBER:** 366-224  
**CLIENT:** SHAKWAK  
**PROJECT NAME:** ALASKA HIGHWAY RE-CONSTRUCTION  
**PROJECT LOCATION:** SEGMENT 15  
**DRILL UNIT:** 36-003  
**HOLE LOCATION:** 1859+775 7M LT  
**LOGGED BY:** CC **DATE COMPLETED:** 95-06-20

**FIELD NO:** 511  
**LAB NO:** 699  
**DEPTH:** 1.3-1.5  
**TYPE:** AUGER

**FIELD NO:** 512  
**LAB NO:** 700  
**DEPTH:** 2.8-3.0  
**TYPE:** AUGER  
 ORGANICS & ASH

**FIELD NO:** 513  
**LAB NO:** 701  
**DEPTH:** 4.2-4.4  
**TYPE:** AUGER  
 ORGANICS

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	100
2.0	--
1.25	100
0.840	--
0.630	100
0.420	--
0.315	99
0.160	96
0.150	--
0.080	89

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	--
0.840	--
0.630	--
0.420	--
0.315	--
0.160	--
0.150	--
0.080	--

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	--
0.840	--
0.630	--
0.420	--
0.315	--
0.160	--
0.150	--
0.080	--

**M.C. (%) :** 53

**M.C. (%) :** 75

**M.C. (%) :** 106

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

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

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

**% GRAVEL:** 0  
**% SAND:** 11  
**% FINES:** 89

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

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

**CLASSIFICATION:**  
 SILT (ML)

**CLASSIFICATION:**

**CLASSIFICATION:**

**PROJECT NUMBER:** \_\_\_\_\_ **HOLE NUMBER:** 366-225  
**CLIENT:** SHAKWAK  
**PROJECT NAME:** ALASKA HIGHWAY RE-CONSTRUCTION  
**PROJECT LOCATION:** SEGMENT 15  
**DRILL UNIT:** 36-003  
**HOLE LOCATION:** 1859+880 10M LT  
**LOGGED BY:** CC **DATE COMPLETED:** 95-06-13

**FIELD NO:** 514  
**LAB NO:** 702  
**DEPTH:** 1.2-1.4  
**TYPE:** AUGER  
**ORGANICS**

**FIELD NO:** 515  
**LAB NO:** 703  
**DEPTH:** 2.8-3.0  
**TYPE:** AUGER  
**SAND & ORGANICS**

**FIELD NO:** 516  
**LAB NO:** 704  
**DEPTH:** 4.2-4.4  
**TYPE:** AUGER  
**SOME WOOD**

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	--
0.840	--
0.630	--
0.420	--
0.315	--
0.160	--
0.150	--
0.080	--

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	--
0.840	--
0.630	100
0.420	--
0.315	96
0.160	92
0.150	--
0.080	76

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	--
0.840	--
0.630	100
0.420	--
0.315	93
0.160	73
0.150	--
0.080	49

**M.C. (%) :** 105

**M.C. (%) :** 56

**M.C. (%) :** 50

**LIMITS**

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

**LIMITS**

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

**LIMITS**

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

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

**% GRAVEL:** 0  
**% SAND:** 24  
**% FINES:** 76

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

**CLASSIFICATION:**

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

**CLASSIFICATION:**  
 SILTY SAND (SM)

PROJECT NUMBER: 092-202101-0311 HOLE NUMBER: 369-272  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI EX200LC  
 HOLE LOCATION: 1861+550 O/S 15M RT  
 LOGGED BY: DT DATE COMPLETED: 95.07.12

FIELD NO: 571  
 LAB NO: 759  
 DEPTH: 0.9-1.1  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	99
12.5	93
10.0	89
5.0	77
2.5	67
2.0	--
1.25	58
0.840	--
0.630	51
0.420	--
0.315	46
0.160	40
0.150	--
0.080	31

M.C. (%): 26

LIMITS

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

% GRAVEL: 23  
 % SAND: 46  
 % FINES: 31

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 092-202101-0311 HOLE NUMBER: 369-273  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI EX200LC  
 HOLE LOCATION: 1861+625 O/S 15M RT  
 LOGGED BY: DT DATE COMPLETED: 95.07.12

FIELD NO: 572  
 LAB NO: 760  
 DEPTH: 1.9-2.0  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	76
31.5	--
25.0	61
20.0	61
12.5	56
10.0	55
5.0	52
2.5	51
2.0	--
1.25	49
0.840	--
0.630	48
0.420	--
0.315	47
0.160	46
0.150	--
0.080	44

M.C. (%): 26

LIMITS

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

% GRAVEL: 48  
 % SAND: 8  
 % FINES: 44

CLASSIFICATION:  
 SILTY GRAVEL (GM)

**PROJECT NUMBER:** 092-202101-0311-1 **HOLE NUMBER:** 381-500  
**CLIENT:** ENGINEERING-CAPITAL  
**PROJECT NAME:** SHAKWAK PROJECT  
**PROJECT LOCATION:** SEGMENT 15  
**DRILL UNIT:** BACKHOE: HITACHI UH-172  
**HOLE LOCATION:** 1852+600 O/S 6M RT  
**LOGGED BY:** KJ **DATE COMPLETED:** 95.09.07

**FIELD NO:** 1  
**LAB NO:** 1458  
**DEPTH:** 0.0-0.4  
**TYPE:** BULK

**FIELD NO:** 2  
**LAB NO:** 1459  
**DEPTH:** 0.8-2.2  
**TYPE:** BULK  
 WOOD & ORGANICS

**FIELD NO:** 3  
**LAB NO:** 1460  
**DEPTH:** 2.8-3.2  
**TYPE:** BULK  
 ONE 100MM ROCK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	93
20.0	79
12.5	65
10.0	57
5.0	39
2.5	25
2.0	--
1.25	16
0.840	--
0.630	10
0.420	--
0.315	5
0.160	3
0.150	--
0.080	2

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	96
12.5	91
10.0	88
5.0	86
2.5	83
2.0	--
1.25	78
0.840	--
0.630	66
0.420	--
0.315	47
0.160	37
0.150	--
0.080	32

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	82
20.0	78
12.5	72
10.0	67
5.0	59
2.5	51
2.0	--
1.25	44
0.840	--
0.630	37
0.420	--
0.315	29
0.160	24
0.150	--
0.080	21

**M.C. (%) :** 2

**M.C. (%) :** 57

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

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

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

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

**% GRAVEL:** 61  
**% SAND:** 37  
**% FINES:** 2

**% GRAVEL:** 14  
**% SAND:** 53  
**% FINES:** 32

**% GRAVEL:** 41  
**% SAND:** 38  
**% FINES:** 21

**CLASSIFICATION:**  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

**CLASSIFICATION:**  
 SILTY SAND (SM)

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

**PROJECT NUMBER:** 092-202101-0311-1 **HOLE NUMBER:** 381-501  
**CLIENT:** ENGINEERING-CAPITAL  
**PROJECT NAME:** SHAKWAK PROJECT  
**PROJECT LOCATION:** SEGMENT 15  
**DRILL UNIT:** BACKHOE: HITACHI UH-172  
**HOLE LOCATION:** 1852+715 O/S 20M RT  
**LOGGED BY:** KJ **DATE COMPLETED:** 95.09.07

**FIELD NO:** 6  
**LAB NO:** 1461  
**DEPTH:** 0.8-1.2  
**TYPE:** BULK  
**ASH & ORGANICS**

**FIELD NO:** 7  
**LAB NO:** 1462  
**DEPTH:** 1.4-1.6  
**TYPE:** BULK  
**ONE 100MM ROCK**

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	100
2.0	--
1.25	97
0.840	--
0.630	80
0.420	--
0.315	55
0.160	43
0.150	--
0.080	39

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	45
31.5	--
25.0	45
20.0	45
12.5	43
10.0	41
5.0	37
2.5	35
2.0	--
1.25	32
0.840	--
0.630	30
0.420	--
0.315	26
0.160	22
0.150	--
0.080	19

**M.C. (%) :** 95

**M.C. (%) :** 13

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

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

**% GRAVEL:** 0  
**% SAND:** 61  
**% FINES:** 39

**% GRAVEL:** 63  
**% SAND:** 18  
**% FINES:** 19

**CLASSIFICATION:**  
**SILTY SAND (SM)**

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

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 381-502  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1852+825 O/S 30M RT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.07

FIELD NO: 8  
 LAB NO: 1463  
 DEPTH: 0.2-0.4  
 TYPE: BULK

FIELD NO: 9  
 LAB NO: 1464  
 DEPTH: 1.4-1.6  
 TYPE: BULK  
 ORGANICS

FIELD NO: 10  
 LAB NO: 1465  
 DEPTH: 1.8-2.0  
 TYPE: BULK  
 THREE ROCKS

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	100
0.840	--
0.630	97
0.420	--
0.315	94
0.160	90
0.150	--
0.080	81

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	--
0.840	--
0.630	--
0.420	--
0.315	--
0.160	--
0.150	--
0.080	--

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	--
0.840	--
0.630	--
0.420	--
0.315	--
0.160	--
0.150	--
0.080	--

M.C. (%): 67

M.C. (%): 114

M.C. (%): 1

LIMITS

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

LIMITS

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

LIMITS

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

% GRAVEL: 0  
 % SAND: 19  
 % FINES: 81

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

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

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:

CLASSIFICATION:

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 381-503  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1852+975 O/S 18M RT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.07

FIELD NO: 11  
 LAB NO: 1466  
 DEPTH: 0.6-0.8  
 TYPE: BULK  
 ORGANICS

FIELD NO: 12  
 LAB NO: 1467  
 DEPTH: 2.4-2.6  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	--
0.840	--
0.630	--
0.420	--
0.315	--
0.160	--
0.150	--
0.080	--

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	89
10.0	88
5.0	82
2.5	77
2.0	--
1.25	72
0.840	--
0.630	66
0.420	--
0.315	58
0.160	50
0.150	--
0.080	43

M.C. (%) : 94

M.C. (%) : 56

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

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

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

% GRAVEL: 18  
 % SAND: 39  
 % FINES: 43

CLASSIFICATION:

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 381-504  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1853+135 O/S 12M RT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.08

FIELD NO: 13  
 LAB NO: 1468  
 DEPTH: 1.2-1.4  
 TYPE: ERR  
 SOME WOOD

FIELD NO: 14  
 LAB NO: 1469  
 DEPTH: 1.8-2.0  
 TYPE: BULK

FIELD NO: 15  
 LAB NO: 1470  
 DEPTH: 2.4-2.6  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	49
31.5	--
25.0	41
20.0	41
12.5	40
10.0	40
5.0	37
2.5	36
2.0	--
1.25	34
0.840	--
0.630	32
0.420	--
0.315	30
0.160	26
0.150	--
0.080	24

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	93
20.0	92
12.5	83
10.0	79
5.0	72
2.5	67
2.0	--
1.25	62
0.840	--
0.630	57
0.420	--
0.315	51
0.160	45
0.150	--
0.080	40

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	77
20.0	74
12.5	63
10.0	58
5.0	50
2.5	44
2.0	--
1.25	39
0.840	--
0.630	35
0.420	--
0.315	30
0.160	26
0.150	--
0.080	21

M.C. (%): 43

M.C. (%): 15

M.C. (%): 6

LIMITS

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

LIMITS

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

LIMITS

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

% GRAVEL: 63  
 % SAND: 14  
 % FINES: 24

% GRAVEL: 28  
 % SAND: 32  
 % FINES: 40

% GRAVEL: 50  
 % SAND: 29  
 % FINES: 21

CLASSIFICATION:  
 SILTY GRAVEL (GM)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)



PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 381-506  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1853+400 O/S 10M RT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.08

FIELD NO: 20  
 LAB NO: 1475  
 DEPTH: 0.6-0.8  
 TYPE: BULK  
 ORGANICS

FIELD NO: 21  
 LAB NO: 1476  
 DEPTH: 1.6-1.8  
 TYPE: BULK

FIELD NO: 22  
 LAB NO: 1477  
 DEPTH: 2.4-2.6  
 TYPE: BULK

FIELD NO: 23  
 LAB NO: 1478  
 DEPTH: 3.4-3.6  
 TYPE: BULK  
 SEA SHELLS

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	--
0.840	--
0.630	--
0.420	--
0.315	--
0.160	--
0.150	--
0.080	--

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	94
20.0	86
12.5	79
10.0	77
5.0	70
2.5	64
2.0	--
1.25	58
0.840	--
0.630	53
0.420	--
0.315	47
0.160	40
0.150	--
0.080	32

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	81
20.0	72
12.5	63
10.0	59
5.0	52
2.5	47
2.0	--
1.25	41
0.840	--
0.630	35
0.420	--
0.315	28
0.160	21
0.150	--
0.080	16

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	94
20.0	94
12.5	91
10.0	90
5.0	87
2.5	84
2.0	--
1.25	82
0.840	--
0.630	79
0.420	--
0.315	75
0.160	69
0.150	--
0.080	60

M.C. (%) : 161

M.C. (%) : 23

M.C. (%) : 6

M.C. (%) : 23

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

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

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

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

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

% GRAVEL: 30  
 % SAND: 37  
 % FINES: 32

% GRAVEL: 48  
 % SAND: 36  
 % FINES: 16

% GRAVEL: 13  
 % SAND: 26  
 % FINES: 60

CLASSIFICATION:

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:  
 SANDY SILT (ML)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 381-507  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1853+600 O/S 10M RT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.09

FIELD NO: 24  
 LAB NO: 1479  
 DEPTH: 1.0-1.2  
 TYPE: BULK

FIELD NO: 25  
 LAB NO: 1480  
 DEPTH: 2.0-2.2  
 TYPE: BULK

FIELD NO: 26  
 LAB NO: 1481  
 DEPTH: 2.5-2.7  
 TYPE: BULK  
 ONE 75MM ROCK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	97
20.0	91
12.5	86
10.0	85
5.0	81
2.5	76
2.0	--
1.25	71
0.840	--
0.630	66
0.420	--
0.315	58
0.160	50
0.150	--
0.080	41

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	84
20.0	81
12.5	75
10.0	71
5.0	60
2.5	47
2.0	--
1.25	34
0.840	--
0.630	26
0.420	--
0.315	21
0.160	18
0.150	--
0.080	15

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	90
31.5	--
25.0	65
20.0	62
12.5	54
10.0	49
5.0	38
2.5	30
2.0	--
1.25	24
0.840	--
0.630	18
0.420	--
0.315	13
0.160	10
0.150	--
0.080	8

M.C. (%): 10

M.C. (%): 5

M.C. (%): 3

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

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

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

% GRAVEL: 19  
 % SAND: 40  
 % FINES: 41

% GRAVEL: 40  
 % SAND: 45  
 % FINES: 15

% GRAVEL: 62  
 % SAND: 30  
 % FINES: 8

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

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



PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 381-508  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1853+725 O/S 10M RT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.09

FIELD NO: 31  
 LAB NO: 1486  
 DEPTH: 4.3-4.5  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	96
10.0	92
5.0	70
2.5	56
2.0	--
1.25	48
0.840	--
0.630	40
0.420	--
0.315	28
0.160	17
0.150	--
0.080	11

M.C. (%): 10

LIMITS

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

% GRAVEL: 30  
 % SAND: 59  
 % FINES: 11

CLASSIFICATION:  
 POORLY GRADED  
 SAND WITH SILT &  
 GRAVEL (SP-SM)











PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 381-514  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1854+265 O/S 15M LT  
 LOGGED BY: KH DATE COMPLETED: 95.09.10

FIELD NO: 51  
 LAB NO: 1506  
 DEPTH: 0.4-0.6  
 TYPE: BULK  
 ORGANICS

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	--
0.840	--
0.630	--
0.420	--
0.315	--
0.160	--
0.150	--
0.080	--

M.C. (%): 121

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

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

CLASSIFICATION:

FIELD NO: 52  
 LAB NO: 1507  
 DEPTH: 1.8-2.0  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	86
20.0	85
12.5	74
10.0	70
5.0	65
2.5	61
2.0	--
1.25	59
0.840	--
0.630	57
0.420	--
0.315	54
0.160	50
0.150	--
0.080	46

M.C. (%): 55

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

% GRAVEL: 35  
 % SAND: 19  
 % FINES: 46

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

FIELD NO: 53  
 LAB NO: 1508  
 DEPTH: 2.4-2.6  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	95
20.0	86
12.5	78
10.0	72
5.0	63
2.5	56
2.0	--
1.25	49
0.840	--
0.630	41
0.420	--
0.315	32
0.160	25
0.150	--
0.080	18

M.C. (%): 7

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

% GRAVEL: 37  
 % SAND: 45  
 % FINES: 18

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 381-515  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1854+290 O/S 8M RT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.11

FIELD NO: 54  
 LAB NO: 1509  
 DEPTH: 1.0-1.2  
 TYPE: BULK

FIELD NO: 55  
 LAB NO: 1510  
 DEPTH: 3.0-3.2  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	97
12.5	86
10.0	81
5.0	70
2.5	63
2.0	--
1.25	60
0.840	--
0.630	55
0.420	--
0.315	50
0.160	44
0.150	--
0.080	38

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	86
20.0	84
12.5	72
10.0	69
5.0	61
2.5	55
2.0	--
1.25	51
0.840	--
0.630	46
0.420	--
0.315	41
0.160	36
0.150	--
0.080	30

M.C. (%) : 27

M.C. (%) : 8

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

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

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

% GRAVEL: 39  
 % SAND: 31  
 % FINES: 30

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 381-517  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1855+550 O/S 10M RT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.18

FIELD NO: 56  
 LAB NO: 1511  
 DEPTH: 0.6-0.8  
 TYPE: BULK  
 ASH

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	--
0.840	--
0.630	--
0.420	--
0.315	--
0.160	--
0.150	--
0.080	--

M.C. (%) : 103

LIMITS

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

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

CLASSIFICATION:

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 381-518  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1855+725 O/S 13M RT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.18

FIELD NO: 57  
 LAB NO: 1512  
 DEPTH: 0.8-1.0  
 TYPE: BULK

FIELD NO: 58  
 LAB NO: 1513  
 DEPTH: 1.3-1.5  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	100
0.840	--
0.630	99
0.420	--
0.315	98
0.160	95
0.150	--
0.080	82

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	83
31.5	--
25.0	48
20.0	45
12.5	37
10.0	34
5.0	28
2.5	25
2.0	--
1.25	23
0.840	--
0.630	21
0.420	--
0.315	20
0.160	18
0.150	--
0.080	16

M.C. (%): 49

M.C. (%): 12

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

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

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

% GRAVEL: 72  
 % SAND: 12  
 % FINES: 16

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:  
 SILTY GRAVEL (GM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 381-519  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1855+825 O/S 18M RT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.18

FIELD NO: 59  
 LAB NO: 1514  
 DEPTH: 0.6-0.8  
 TYPE: BULK

FIELD NO: 60  
 LAB NO: 1515  
 DEPTH: 1.2-1.4  
 TYPE: BULK

FIELD NO: 61  
 LAB NO: 1516  
 DEPTH: 2.4-2.6  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	--
0.840	--
0.630	--
0.420	--
0.315	--
0.160	100
0.150	--
0.080	94

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	84
20.0	84
12.5	73
10.0	68
5.0	58
2.5	48
2.0	--
1.25	37
0.840	--
0.630	27
0.420	--
0.315	19
0.160	14
0.150	--
0.080	11

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	90
20.0	82
12.5	65
10.0	59
5.0	47
2.5	39
2.0	--
1.25	32
0.840	--
0.630	24
0.420	--
0.315	18
0.160	13
0.150	--
0.080	10

M.C. (%) : 55

M.C. (%) : 5

M.C. (%) : 5

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

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

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

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

% GRAVEL: 42  
 % SAND: 47  
 % FINES: 11

% GRAVEL: 53  
 % SAND: 37  
 % FINES: 10

CLASSIFICATION:  
 SILT (ML)

CLASSIFICATION:  
 POORLY GRADED  
 SAND WITH SILT &  
 GRAVEL (SP-SM)

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

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 381-520  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1855+785 O/S 18M LT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.18

FIELD NO: 62  
 LAB NO: 1517  
 DEPTH: 0.6-0.8  
 TYPE: BULK

FIELD NO: 63  
 LAB NO: 1518  
 DEPTH: 2.0-2.2  
 TYPE: BULK  
 BROKEN ROCK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	57
31.5	--
25.0	39
20.0	35
12.5	30
10.0	27
5.0	23
2.5	21
2.0	--
1.25	18
0.840	--
0.630	16
0.420	--
0.315	13
0.160	11
0.150	--
0.080	9

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	--
0.840	--
0.630	--
0.420	--
0.315	--
0.160	--
0.150	--
0.080	--

M.C. (%): 3

M.C. (%): 2

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

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

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

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

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

CLASSIFICATION:

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 381-521  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1855+625 O/S 13M LT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.18

FIELD NO: 64  
 LAB NO: 1519  
 DEPTH: 0.0-0.2  
 TYPE: BULK  
 ORGANICS

FIELD NO: 65  
 LAB NO: 1520  
 DEPTH: 1.3-1.5  
 TYPE: BULK

FIELD NO: 66  
 LAB NO: 1521  
 DEPTH: 1.8-2.0  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	--
0.840	--
0.630	--
0.420	--
0.315	--
0.160	--
0.150	--
0.080	--

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	84
20.0	81
12.5	70
10.0	65
5.0	59
2.5	57
2.0	--
1.25	56
0.840	--
0.630	55
0.420	--
0.315	53
0.160	51
0.150	--
0.080	49

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	80
20.0	73
12.5	61
10.0	56
5.0	45
2.5	40
2.0	--
1.25	35
0.840	--
0.630	32
0.420	--
0.315	28
0.160	22
0.150	--
0.080	16

M.C. (%): 211

M.C. (%): 20

M.C. (%): 8

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

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

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

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

% GRAVEL: 41  
 % SAND: 11  
 % FINES: 49

% GRAVEL: 55  
 % SAND: 29  
 % FINES: 16

CLASSIFICATION:

CLASSIFICATION:  
 SILTY GRAVEL (GM)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 381-522  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1855+480 O/S 12M LT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.19

FIELD NO: 67  
 LAB NO: 1522  
 DEPTH: 1.0-1.2  
 TYPE: BULK

FIELD NO: 67  
 LAB NO: 1523  
 DEPTH: 2.8-3.0  
 TYPE: BULK  
 BROKEN ROCK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	66
20.0	62
12.5	57
10.0	56
5.0	53
2.5	52
2.0	--
1.25	50
0.840	--
0.630	48
0.420	--
0.315	46
0.160	44
0.150	--
0.080	41

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	--
0.840	--
0.630	--
0.420	--
0.315	--
0.160	--
0.150	--
0.080	--

M.C. (%): 8

M.C. (%): 2

LIMITS

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

LIMITS

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

% GRAVEL: 47  
 % SAND: 12  
 % FINES: 41

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

CLASSIFICATION:  
 SILTY GRAVEL (GM)

CLASSIFICATION:

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 381-523  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1857+025 O/S 8M RT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.19

FIELD NO: 69  
 LAB NO: 1524  
 DEPTH: 0.4-0.6  
 TYPE: BULK

FIELD NO: 70  
 LAB NO: 1525  
 DEPTH: 0.9-1.0  
 TYPE: BULK

FIELD NO: 71  
 LAB NO: 1526  
 DEPTH: 1.3-1.5  
 TYPE: BULK

FIELD NO: 72  
 LAB NO: 1527  
 DEPTH: 2.8-3.2  
 TYPE: BULK  
 NOT WEIGHED

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	--
0.840	--
0.630	--
0.420	--
0.315	--
0.160	100
0.150	--
0.080	81

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	97
10.0	96
5.0	93
2.5	89
2.0	--
1.25	85
0.840	--
0.630	81
0.420	--
0.315	76
0.160	70
0.150	--
0.080	63

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	90
20.0	88
12.5	79
10.0	76
5.0	69
2.5	63
2.0	--
1.25	56
0.840	--
0.630	50
0.420	--
0.315	44
0.160	39
0.150	--
0.080	34

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	--
0.840	--
0.630	--
0.420	--
0.315	--
0.160	--
0.150	--
0.080	--

M.C. (%) : 97

M.C. (%) : 33

M.C. (%) : 10

M.C. (%) : 4

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

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

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

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

% GRAVEL: 0  
 % SAND: 19  
 % FINES: 81

% GRAVEL: 7  
 % SAND: 30  
 % FINES: 63

% GRAVEL: 31  
 % SAND: 34  
 % FINES: 34

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

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:  
 SANDY SILT (ML)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 381-524  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1857+400 O/S 12M LT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.19

FIELD NO: 73  
 LAB NO: 1528  
 DEPTH: 1.2-1.4  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	83
20.0	81
12.5	78
10.0	76
5.0	70
2.5	66
2.0	--
1.25	63
0.840	--
0.630	60
0.420	--
0.315	56
0.160	49
0.150	--
0.080	37

M.C. (%): 6

LIMITS

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

% GRAVEL: 30  
 % SAND: 32  
 % FINES: 37

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 382-524A  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1857+500 O/S 12M LT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.19

FIELD NO: 74  
 LAB NO: 1529  
 DEPTH: 0.6-0.8  
 TYPE: BULK

FIELD NO: 75  
 LAB NO: 1530  
 DEPTH: 2.2-2.4  
 TYPE: BULK

FIELD NO: 76  
 LAB NO: 1531  
 DEPTH: 2.6-2.8  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	--
0.840	--
0.630	--
0.420	--
0.315	--
0.160	100
0.150	--
0.080	82

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	94
10.0	92
5.0	89
2.5	86
2.0	--
1.25	83
0.840	--
0.630	78
0.420	--
0.315	67
0.160	53
0.150	--
0.080	38

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	78
31.5	--
25.0	68
20.0	61
12.5	53
10.0	48
5.0	39
2.5	32
2.0	--
1.25	26
0.840	--
0.630	20
0.420	--
0.315	13
0.160	8
0.150	--
0.080	4

M.C. (%) : 167

M.C. (%) : 19

M.C. (%) : 6

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

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

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

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

% GRAVEL: 11  
 % SAND: 50  
 % FINES: 38

% GRAVEL: 61  
 % SAND: 35  
 % FINES: 4

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:  
 SILTY SAND (SM)

CLASSIFICATION:  
 POORLY GRADED  
 GRAVEL WITH SAND  
 (GP)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 382-525  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1857+800 O/S 15M RT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.20

FIELD NO: 77  
 LAB NO: 1532  
 DEPTH: 1.2-1.4  
 TYPE: BULK

FIELD NO: 78.00  
 LAB NO: 1533  
 DEPTH: 2.2-2.4  
 TYPE: BULK

FIELD NO: 79.00  
 LAB NO: 1534  
 DEPTH: 3.3-3.5  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	92
20.0	89
12.5	82
10.0	80
5.0	73
2.5	67
2.0	--
1.25	62
0.840	--
0.630	55
0.420	--
0.315	42
0.160	27
0.150	--
0.080	18

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	74
31.5	--
25.0	66
20.0	59
12.5	46
10.0	42
5.0	29
2.5	22
2.0	--
1.25	16
0.840	--
0.630	12
0.420	--
0.315	9
0.160	7
0.150	--
0.080	5

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	69
20.0	68
12.5	59
10.0	56
5.0	46
2.5	40
2.0	--
1.25	36
0.840	--
0.630	32
0.420	--
0.315	27
0.160	23
0.150	--
0.080	19

M.C. (%): 10

M.C. (%): 3.00

M.C. (%): 7.00

LIMITS

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

LIMITS

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

LIMITS

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

% GRAVEL: 27  
 % SAND: 55  
 % FINES: 18

% GRAVEL: 71.00  
 % SAND: 24.00  
 % FINES: 5.00

% GRAVEL: 54.00  
 % SAND: 27.00  
 % FINES: 19.00

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

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

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 382-526  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1860+400 O/S 18M RT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.20

FIELD NO: 80  
 LAB NO: 1535  
 DEPTH: 1.2-1.4  
 TYPE: BULK

FIELD NO: 81  
 LAB NO: 1536  
 DEPTH: 2.6-2.8  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	85
20.0	79
12.5	73
10.0	69
5.0	61
2.5	56
2.0	--
1.25	51
0.840	--
0.630	48
0.420	--
0.315	43
0.160	37
0.150	--
0.080	32

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	86
20.0	84
12.5	76
10.0	74
5.0	68
2.5	63
2.0	--
1.25	59
0.840	--
0.630	56
0.420	--
0.315	51
0.160	45
0.150	--
0.080	38

M.C. (%) : 6

M.C. (%) : 8

LIMITS

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

LIMITS

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

% GRAVEL: 39  
 % SAND: 29  
 % FINES: 32

% GRAVEL: 32  
 % SAND: 29  
 % FINES: 38

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 382-527  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1860+485 O/S 20M RT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.20

FIELD NO: 82  
 LAB NO: 1537  
 DEPTH: 1.4-1.6  
 TYPE: BULK

FIELD NO: 83  
 LAB NO: 1538  
 DEPTH: 3.4-3.6  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	78
31.5	--
25.0	64
20.0	59
12.5	54
10.0	52
5.0	46
2.5	41
2.0	--
1.25	38
0.840	--
0.630	34
0.420	--
0.315	31
0.160	26
0.150	--
0.080	21

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	77
31.5	--
25.0	45
20.0	41
12.5	34
10.0	29
5.0	22
2.5	17
2.0	--
1.25	14
0.840	--
0.630	13
0.420	--
0.315	11
0.160	10
0.150	--
0.080	8

M.C. (%) : 4

M.C. (%) : 3

LIMITS

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

LIMITS

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

% GRAVEL: 54  
 % SAND: 25  
 % FINES: 21

% GRAVEL: 78  
 % SAND: 13  
 % FINES: 8

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

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

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 382-529  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1860+800 O/S 2M LT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.20

FIELD NO: 84  
 LAB NO: 1539  
 DEPTH: 0.8-1.0  
 TYPE: BULK

FIELD NO: 85  
 LAB NO: 1540  
 DEPTH: 1.6-1.8  
 TYPE: BULK

FIELD NO: 86  
 LAB NO: 1541  
 DEPTH: 2.8-3.0  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	91
10.0	90
5.0	88
2.5	86
2.0	--
1.25	84
0.840	--
0.630	82
0.420	--
0.315	79
0.160	76
0.150	--
0.080	72

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	81
20.0	74
12.5	68
10.0	65
5.0	58
2.5	53
2.0	--
1.25	48
0.840	--
0.630	45
0.420	--
0.315	41
0.160	37
0.150	--
0.080	32

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	85
20.0	76
12.5	70
10.0	66
5.0	58
2.5	52
2.0	--
1.25	48
0.840	--
0.630	44
0.420	--
0.315	40
0.160	35
0.150	--
0.080	29

M.C. (%) : 32

M.C. (%) : 11

M.C. (%) : 6

LIMITS

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

LIMITS

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

LIMITS

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

% GRAVEL: 12  
 % SAND: 16  
 % FINES: 72

% GRAVEL: 42  
 % SAND: 26  
 % FINES: 32

% GRAVEL: 42  
 % SAND: 28  
 % FINES: 29

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 382-530  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1860+850 O/S 20M RT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.21

FIELD NO: 87  
 LAB NO: 1542  
 DEPTH: 1.0-1.2  
 TYPE: BULK

FIELD NO: 88  
 LAB NO: 1543  
 DEPTH: 2.2-2.4  
 TYPE: BULK

FIELD NO: 89  
 LAB NO: 1544  
 DEPTH: 3.4-3.6  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	95
20.0	88
12.5	82
10.0	79
5.0	72
2.5	67
2.0	--
1.25	62
0.840	--
0.630	58
0.420	--
0.315	52
0.160	46
0.150	--
0.080	39

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	93
12.5	79
10.0	76
5.0	66
2.5	60
2.0	--
1.25	54
0.840	--
0.630	47
0.420	--
0.315	34
0.160	18
0.150	--
0.080	10

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	95
20.0	86
12.5	81
10.0	79
5.0	68
2.5	58
2.0	--
1.25	49
0.840	--
0.630	41
0.420	--
0.315	35
0.160	30
0.150	--
0.080	25

M.C. (%) : 7

M.C. (%) : 8

M.C. (%) : 9

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

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

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

% GRAVEL: 28  
 % SAND: 33  
 % FINES: 39

% GRAVEL: 34  
 % SAND: 56  
 % FINES: 10

% GRAVEL: 32  
 % SAND: 43  
 % FINES: 25

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:  
 POORLY GRADED  
 SAND WITH SILT &  
 GRAVEL (SP-SM)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 382-531  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1860+975 O/S 15M RT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.21

FIELD NO: 90  
 LAB NO: 1545  
 DEPTH: 0.3-0.5  
 TYPE: BULK  
 ORGANIC

FIELD NO: 91  
 LAB NO: 1546  
 DEPTH: 1.6-1.8  
 TYPE: BULK

FIELD NO: 92  
 LAB NO: 1547  
 DEPTH: 2.2-2.4  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	100
2.5	100
2.0	--
1.25	98
0.840	--
0.630	97
0.420	--
0.315	93
0.160	86
0.150	--
0.080	77

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	83
31.5	--
25.0	78
20.0	75
12.5	68
10.0	64
5.0	56
2.5	50
2.0	--
1.25	45
0.840	--
0.630	41
0.420	--
0.315	37
0.160	32
0.150	--
0.080	26

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	91
20.0	88
12.5	78
10.0	73
5.0	63
2.5	56
2.0	--
1.25	51
0.840	--
0.630	45
0.420	--
0.315	39
0.160	32
0.150	--
0.080	26

M.C. (%): 172

M.C. (%): 7

M.C. (%): 7

LIMITS

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

LIMITS

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

LIMITS

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

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

% GRAVEL: 44  
 % SAND: 30  
 % FINES: 26

% GRAVEL: 37  
 % SAND: 38  
 % FINES: 26

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 382-533  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1861+200 O/S 16M RT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.21

FIELD NO: 93  
 LAB NO: 1548  
 DEPTH: 1.2-1.4  
 TYPE: BULK

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

100.0	--
80.0	100
50.0	84
31.5	--
25.0	51
20.0	44
12.5	36
10.0	32
5.0	23
2.5	17
2.0	--
1.25	13
0.840	--
0.630	10
0.420	--
0.315	7
0.160	5
0.150	--
0.080	4

M.C. (%) : 5

LIMITS

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

% GRAVEL: 77  
 % SAND: 20  
 % FINES: 4

CLASSIFICATION:  
 POORLY GRADED  
 GRAVEL WITH SAND  
 (GP)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 382-534  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1861+375 O/S 10M RT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.21

FIELD NO: 94  
 LAB NO: 1549  
 DEPTH: 1.2-1.4  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	56
31.5	--
25.0	56
20.0	56
12.5	54
10.0	53
5.0	52
2.5	51
2.0	--
1.25	50
0.840	--
0.630	50
0.420	--
0.315	49
0.160	49
0.150	--
0.080	47

M.C. (%) : 17

LIMITS

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

% GRAVEL: 48  
 % SAND: 4  
 % FINES: 47

CLASSIFICATION:  
 SILTY GRAVEL (GM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 382-535  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1861+395 O/S 25M RT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.21

FIELD NO: 95  
 LAB NO: 1550  
 DEPTH: 0.6-0.8  
 TYPE: BULK

FIELD NO: 96  
 LAB NO: 1551  
 DEPTH: 1.0-1.2  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	86
10.0	79
5.0	65
2.5	54
2.0	--
1.25	44
0.840	--
0.630	38
0.420	--
0.315	32
0.160	28
0.150	--
0.080	23

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	91
12.5	84
10.0	82
5.0	73
2.5	63
2.0	--
1.25	53
0.840	--
0.630	45
0.420	--
0.315	39
0.160	34
0.150	--
0.080	27

M.C. (%) : 13

M.C. (%) : 15

LIMITS

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

LIMITS

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

% GRAVEL: 35  
 % SAND: 42  
 % FINES: 23

% GRAVEL: 27  
 % SAND: 46  
 % FINES: 27

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 382-536  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1861+600 O/S 15M LT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.22

FIELD NO: 97  
 LAB NO: 1552  
 DEPTH: 0.8-1.0  
 TYPE: BULK

FIELD NO: 98  
 LAB NO: 1553  
 DEPTH: 1.4-1.6  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	98
10.0	98
5.0	94
2.5	91
2.0	--
1.25	88
0.840	--
0.630	87
0.420	--
0.315	85
0.160	84
0.150	--
0.080	80

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	48
31.5	--
25.0	34
20.0	34
12.5	29
10.0	27
5.0	20
2.5	17
2.0	--
1.25	14
0.840	--
0.630	13
0.420	--
0.315	12
0.160	11
0.150	--
0.080	10

M.C. (%) : 38

M.C. (%) : 6

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

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

% GRAVEL: 6  
 % SAND: 14  
 % FINES: 80

% GRAVEL: 80  
 % SAND: 10  
 % FINES: 10

CLASSIFICATION:  
 SILT WITH SAND  
 (ML)

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

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 382+537  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1861+750 O/S 10M LT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.22

FIELD NO: 99  
 LAB NO: 1554  
 DEPTH: 0.8-1.0  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	81
31.5	--
25.0	65
20.0	57
12.5	52
10.0	46
5.0	33
2.5	24
2.0	--
1.25	17
0.840	--
0.630	13
0.420	--
0.315	8
0.160	6
0.150	--
0.080	5

M.C. (%): 9

LIMITS

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

% GRAVEL: 67  
 % SAND: 28  
 % FINES: 5

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

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 382-538  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1861+785 O/S 15M RT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.22

FIELD NO: 100  
 LAB NO: 1555  
 DEPTH: 0.2-0.4  
 TYPE: BULK

FIELD NO: 101  
 LAB NO: 1556  
 DEPTH: 1.2-1.4  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	70
20.0	67
12.5	60
10.0	57
5.0	48
2.5	40
2.0	--
1.25	34
0.840	--
0.630	28
0.420	--
0.315	23
0.160	19
0.150	--
0.080	14

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	83
20.0	83
12.5	78
10.0	76
5.0	65
2.5	51
2.0	--
1.25	40
0.840	--
0.630	34
0.420	--
0.315	29
0.160	23
0.150	--
0.080	14

M.C. (%) : 13

M.C. (%) : 7

LIMITS

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

LIMITS

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

% GRAVEL: 52  
 % SAND: 34  
 % FINES: 14

% GRAVEL: 35  
 % SAND: 51  
 % FINES: 14

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)

CLASSIFICATION:  
 SILTY SAND WITH  
 GRAVEL (SM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 382-539  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: HITACHI UH-172  
 HOLE LOCATION: 1861+970 O/S 12M RT  
 LOGGED BY: KJ DATE COMPLETED: 95.09.22

FIELD NO: 102  
 LAB NO: 1557  
 DEPTH: 1.4-1.6  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	78
20.0	74
12.5	66
10.0	63
5.0	52
2.5	43
2.0	--
1.25	35
0.840	--
0.630	29
0.420	--
0.315	24
0.160	18
0.150	--
0.080	13

M.C. (%) : 16

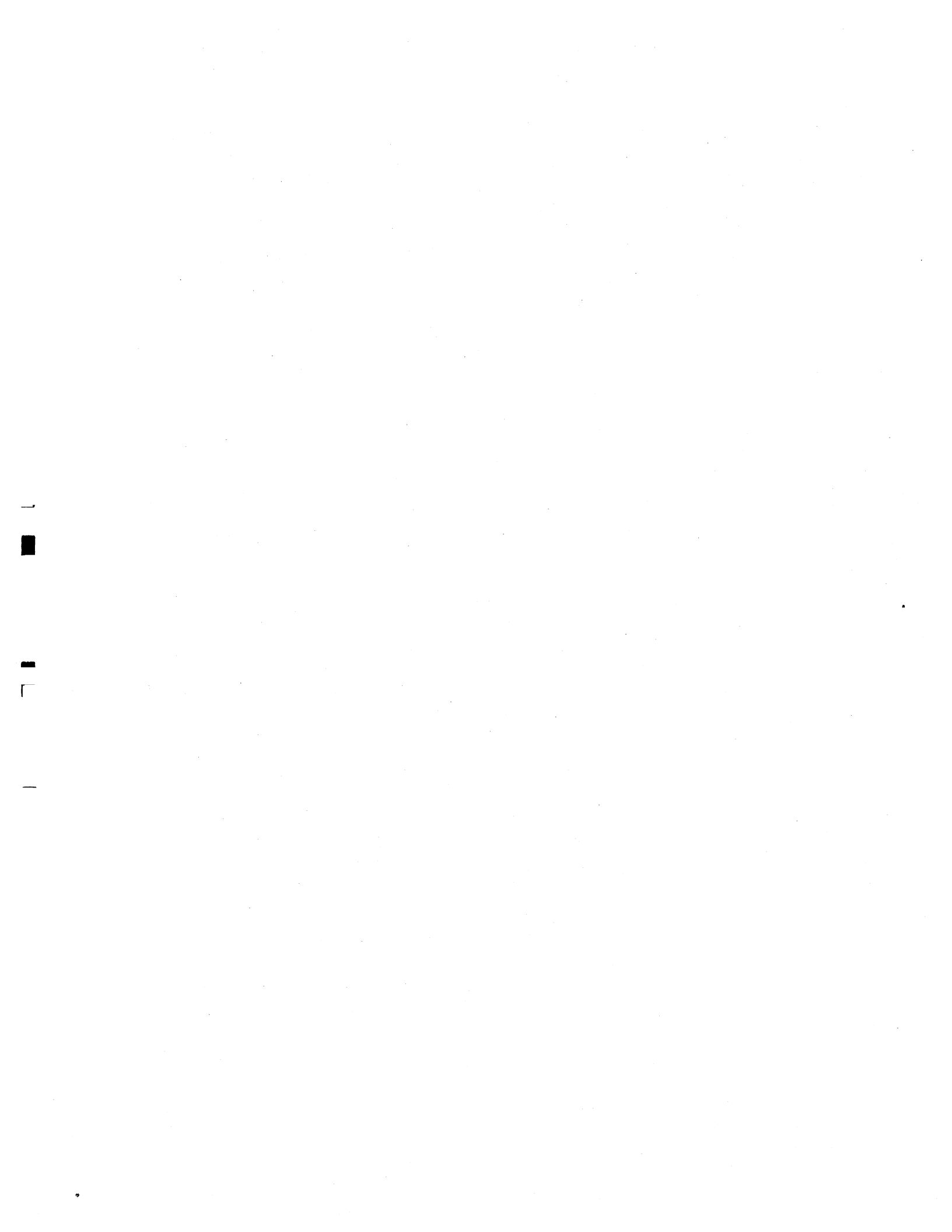
LIMITS

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

% GRAVEL: 48  
 % SAND: 39  
 % FINES: 13

CLASSIFICATION:  
 SILTY GRAVEL  
 WITH SAND (GM)





PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 260-79  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK  
 PROJECT LOCATION: A/H KM 1845 LHS  
 DRILL UNIT: BACKHOE: CAT 235  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: DT DATE COMPLETED: 93.10.09

FIELD NO: 138  
 LAB NO: 1868  
 DEPTH: 1.8-2.2  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	84
31.5	--
25.0	42
20.0	33
12.5	26
10.0	22
5.0	17
2.5	13
2.0	--
1.25	10
0.840	--
0.630	7
0.420	--
0.315	4
0.160	2
0.150	--
0.080	2

M.C. (%) : 4

LIMITS

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

% GRAVEL: 83  
 % SAND: 16  
 % FINES: 2

CLASSIFICATION:  
 POORLY GRADED  
 GRAVEL WITH SAND  
 (GP)

PROJECT NUMBER: 092-202101-0311 HOLE NUMBER: 345-102  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: CAT 245  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: DT DATE COMPLETED: 94.12.09

FIELD NO: 5  
 LAB NO: 2473  
 DEPTH: 3.2-3.5  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	83
20.0	77
12.5	68
10.0	62
5.0	48
2.5	38
2.0	--
1.25	28
0.840	--
0.630	21
0.420	--
0.315	15
0.160	11
0.150	--
0.080	8

M.C. (%) : --

LIMITS

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

% GRAVEL: 52  
 % SAND: 40  
 % FINES: 8

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

PROJECT NUMBER: 092-202101-0311 HOLE NUMBER: 345-104  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: CAT 245  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: DT DATE COMPLETED: 94.12.11

FIELD NO: 7  
 LAB NO: 2475  
 DEPTH: 1.4-1.8  
 TYPE: BULK

FIELD NO: 8  
 LAB NO: 2476  
 DEPTH: 4.6-5.0  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	83
31.5	--
25.0	75
20.0	68
12.5	58
10.0	50
5.0	38
2.5	29
2.0	--
1.25	21
0.840	--
0.630	12
0.420	--
0.315	4
0.160	2
0.150	--
0.080	2

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	66
20.0	56
12.5	49
10.0	43
5.0	31
2.5	23
2.0	--
1.25	15
0.840	--
0.630	9
0.420	--
0.315	4
0.160	2
0.150	--
0.080	2

M.C. (%): --

M.C. (%): --

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

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

% GRAVEL: 62  
 % SAND: 36  
 % FINES: 2

% GRAVEL: 69  
 % SAND: 30  
 % FINES: 2

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

PROJECT NUMBER: 092-202101-0311 HOLE NUMBER: 345-106  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: CAT 245  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: DT DATE COMPLETED: 94.12.11

FIELD NO: 11  
 LAB NO: 2479  
 DEPTH: 1.9-2.2  
 TYPE: BULK

FIELD NO: 12  
 LAB NO: 2480  
 DEPTH: 4.5-4.8  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	79
31.5	--
25.0	60
20.0	50
12.5	43
10.0	39
5.0	31
2.5	25
2.0	--
1.25	20
0.840	--
0.630	15
0.420	--
0.315	10
0.160	6
0.150	--
0.080	4

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	62
31.5	--
25.0	44
20.0	40
12.5	32
10.0	29
5.0	22
2.5	16
2.0	--
1.25	11
0.840	--
0.630	6
0.420	--
0.315	3
0.160	2
0.150	--
0.080	1

M.C. (%): --

M.C. (%): --

LIMITS

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

LIMITS

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

% GRAVEL: 69  
 % SAND: 27  
 % FINES: 4

% GRAVEL: 78  
 % SAND: 21  
 % FINES: 1

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

PROJECT NUMBER: 092-202101-0311 HOLE NUMBER: 345-108  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: BACKHOE: CAT 245  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: DT DATE COMPLETED: 94.12.11

FIELD NO: 13  
 LAB NO: 2481  
 DEPTH: 2.1-2.4  
 TYPE: BULK

FIELD NO: 14  
 LAB NO: 2482  
 DEPTH: 4.2-4.5  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	80
31.5	--
25.0	68
20.0	58
12.5	49
10.0	45
5.0	36
2.5	29
2.0	--
1.25	24
0.840	--
0.630	17
0.420	--
0.315	9
0.160	5
0.150	--
0.080	3

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	69
20.0	64
12.5	51
10.0	45
5.0	32
2.5	24
2.0	--
1.25	17
0.840	--
0.630	12
0.420	--
0.315	6
0.160	3
0.150	--
0.080	2

M.C. (%): --

M.C. (%): --

LIMITS

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

LIMITS

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

% GRAVEL: 64  
 % SAND: 33  
 % FINES: 3

% GRAVEL: 68  
 % SAND: 30  
 % FINES: 2

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 396-01  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CAT 245ME  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: DT DATE COMPLETED: 96.02.16

FIELD NO: 1  
 LAB NO: 1  
 DEPTH: 1.1-1.3  
 TYPE: BULK

FIELD NO: 2  
 LAB NO: 2  
 DEPTH: 2.5-2.9  
 TYPE: BULK

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

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

100.0	--
80.0	100
50.0	83
31.5	--
25.0	62
20.0	55
12.5	43
10.0	39
5.0	26
2.5	20
2.0	--
1.25	13
0.840	--
0.630	8
0.420	--
0.315	4
0.160	3
0.150	--
0.080	2

100.0	--
80.0	100
50.0	95
31.5	--
25.0	67
20.0	61
12.5	53
10.0	48
5.0	36
2.5	28
2.0	--
1.25	19
0.840	--
0.630	11
0.420	--
0.315	5
0.160	3
0.150	--
0.080	2

M.C. (%): 8

M.C. (%): 12

LIMITS

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

LIMITS

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

% GRAVEL: 74  
 % SAND: 24  
 % FINES: 2

% GRAVEL: 64  
 % SAND: 34  
 % FINES: 2

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

CLASSIFICATION:  
 POORLY GRADED  
 GRAVEL WITH SAND  
 (GP)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 396-02  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CAT 245ME  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: DT DATE COMPLETED: 96.02.16

FIELD NO: 3  
 LAB NO: 3  
 DEPTH: 1.0-1.2  
 TYPE: BULK

FIELD NO: 4  
 LAB NO: 4  
 DEPTH: 2.3-2.7  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	90
20.0	82
12.5	73
10.0	65
5.0	46
2.5	36
2.0	--
1.25	25
0.840	--
0.630	12
0.420	--
0.315	5
0.160	3
0.150	--
0.080	3

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	90
31.5	--
25.0	61
20.0	54
12.5	40
10.0	35
5.0	24
2.5	18
2.0	--
1.25	12
0.840	--
0.630	8
0.420	--
0.315	4
0.160	2
0.150	--
0.080	2

M.C. (%): 12

M.C. (%): 12

LIMITS

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

LIMITS

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

% GRAVEL: 54  
 % SAND: 43  
 % FINES: 3

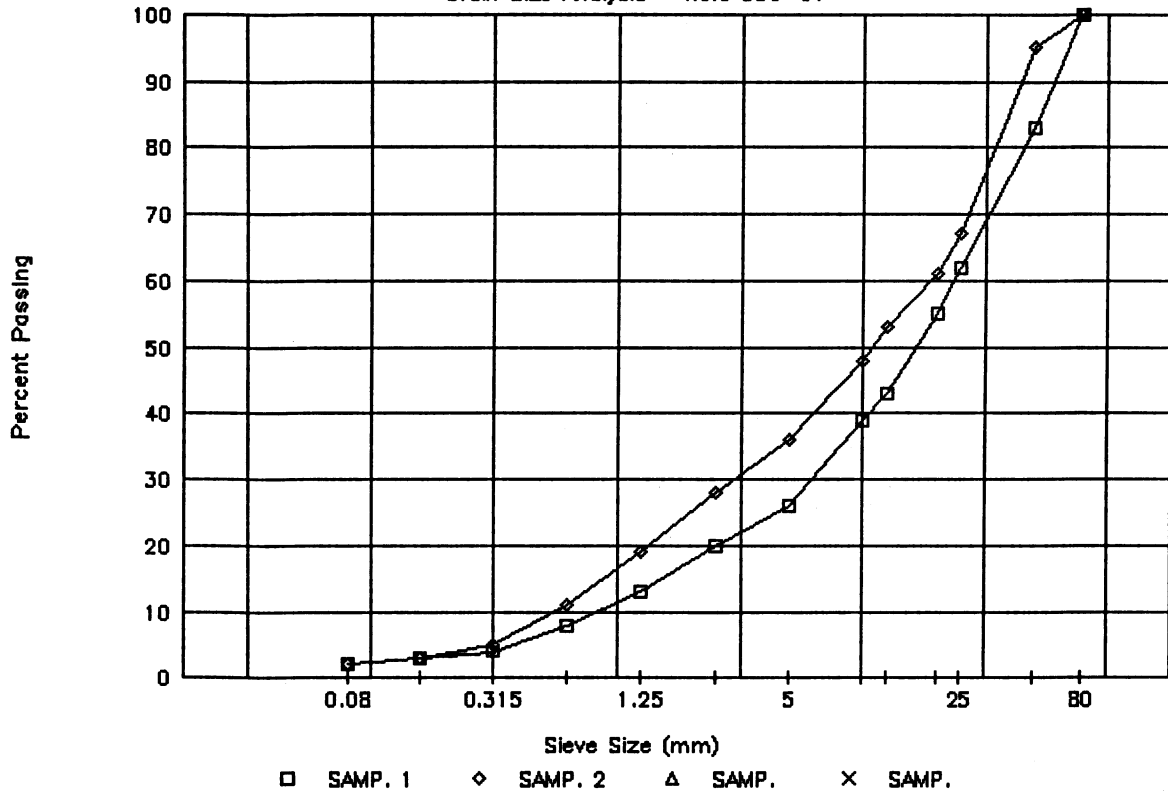
% GRAVEL: 76  
 % SAND: 23  
 % FINES: 2

CLASSIFICATION:  
 POORLY GRADED  
 GRAVEL WITH SAND  
 (GP)

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

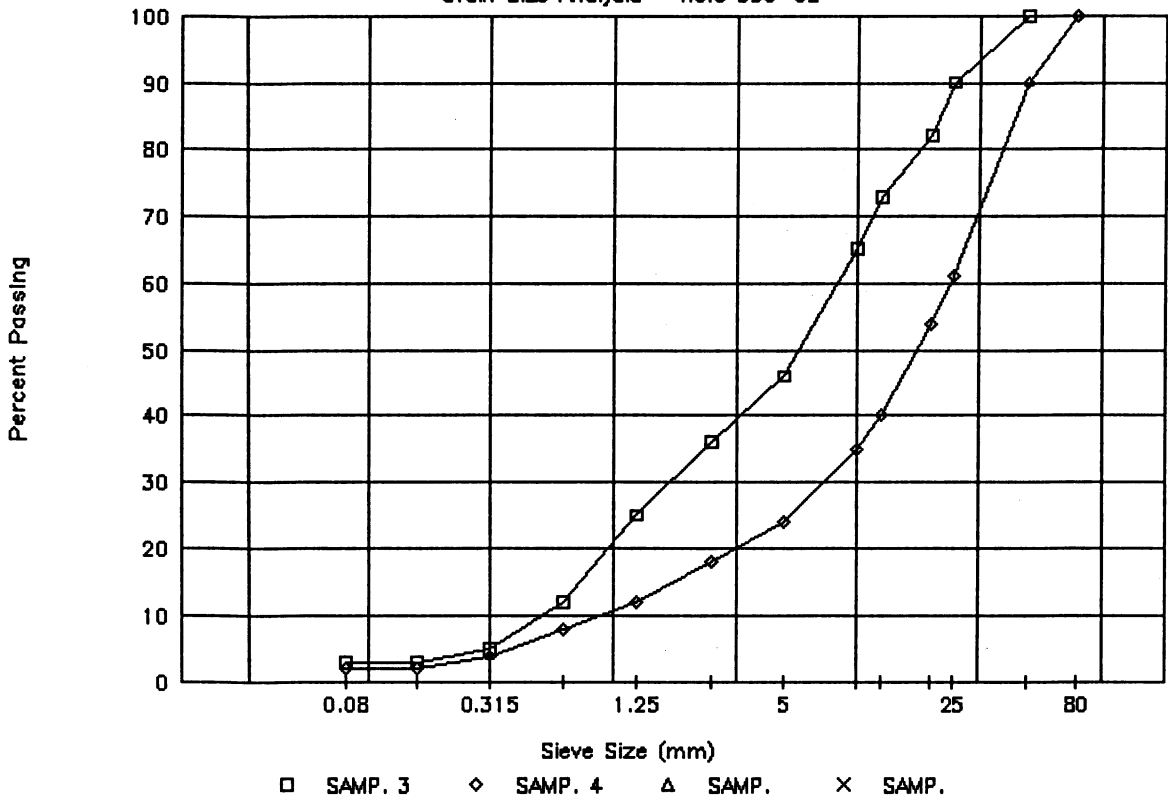
# Y.T.G. TRANSPORTATION ENGINEERING

## Grain Size Analysis - Hole 396-01



# Y.T.G. TRANSPORTATION ENGINEERING

## Grain Size Analysis - Hole 396-02



PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 396-03  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CAT 245ME  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: DT DATE COMPLETED: 96.02.16

FIELD NO: 5  
 LAB NO: 5  
 DEPTH: 0.8-1.2  
 TYPE: BULK

FIELD NO: 6  
 LAB NO: 6  
 DEPTH: 2.8-3.1  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	70
31.5	--
25.0	61
20.0	57
12.5	51
10.0	47
5.0	38
2.5	31
2.0	--
1.25	23
0.840	--
0.630	15
0.420	--
0.315	6
0.160	3
0.150	--
0.080	2

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	92
31.5	--
25.0	57
20.0	55
12.5	48
10.0	43
5.0	30
2.5	21
2.0	--
1.25	14
0.840	--
0.630	8
0.420	--
0.315	4
0.160	3
0.150	--
0.080	2

M.C. (%): 3

M.C. (%): 10

LIMITS

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

LIMITS

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

% GRAVEL: 62  
 % SAND: 36  
 % FINES: 2

% GRAVEL: 70  
 % SAND: 28  
 % FINES: 2

CLASSIFICATION:  
 POORLY GRADED  
 GRAVEL WITH SAND  
 (GP)

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 396-04  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CAT 245ME  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: DT DATE COMPLETED: 96.02.16

FIELD NO: 7  
 LAB NO: 7  
 DEPTH: 1.0-1.4  
 TYPE: BULK

FIELD NO: 8  
 LAB NO: 8  
 DEPTH: 3.4-3.6  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	77
31.5	--
25.0	59
20.0	53
12.5	44
10.0	39
5.0	26
2.5	18
2.0	--
1.25	12
0.840	--
0.630	8
0.420	--
0.315	4
0.160	2
0.150	--
0.080	1

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	76
20.0	71
12.5	62
10.0	57
5.0	43
2.5	31
2.0	--
1.25	20
0.840	--
0.630	13
0.420	--
0.315	9
0.160	6
0.150	--
0.080	4

M.C. (%) : 4

M.C. (%) : 11

LIMITS

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

LIMITS

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

% GRAVEL: 74  
 % SAND: 25  
 % FINES: 1

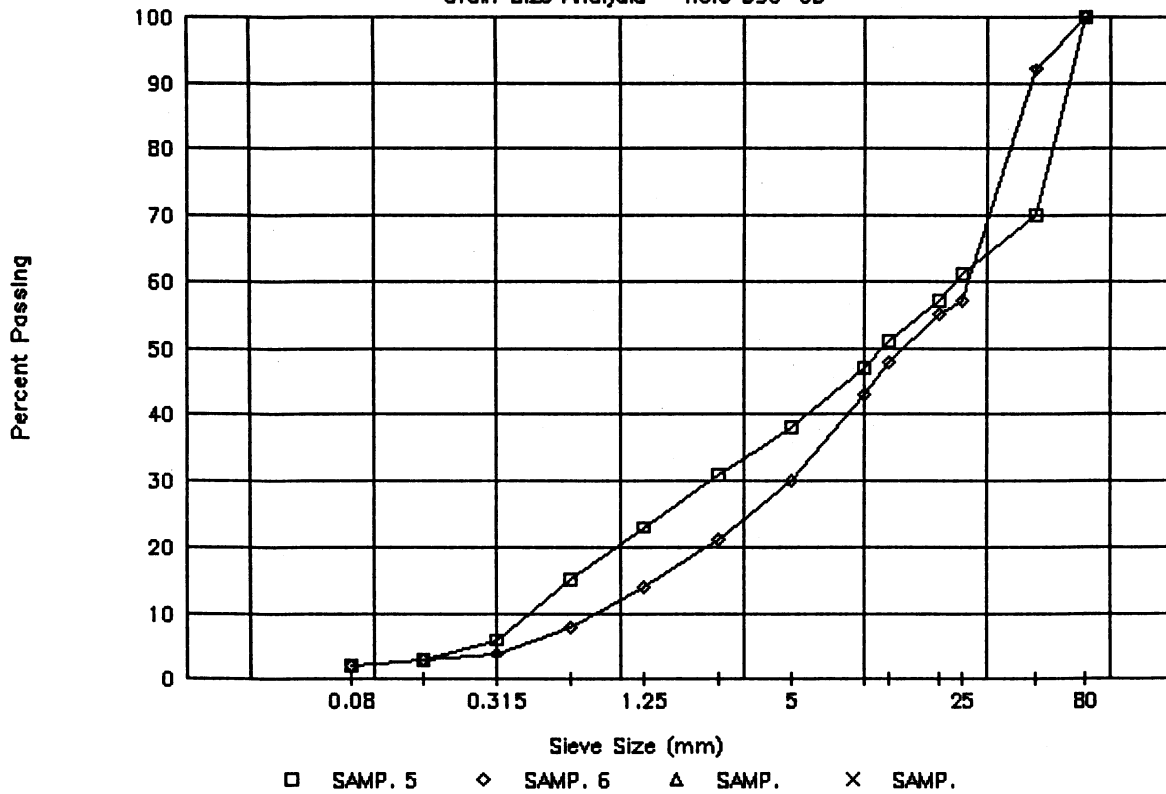
% GRAVEL: 57  
 % SAND: 38  
 % FINES: 4

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

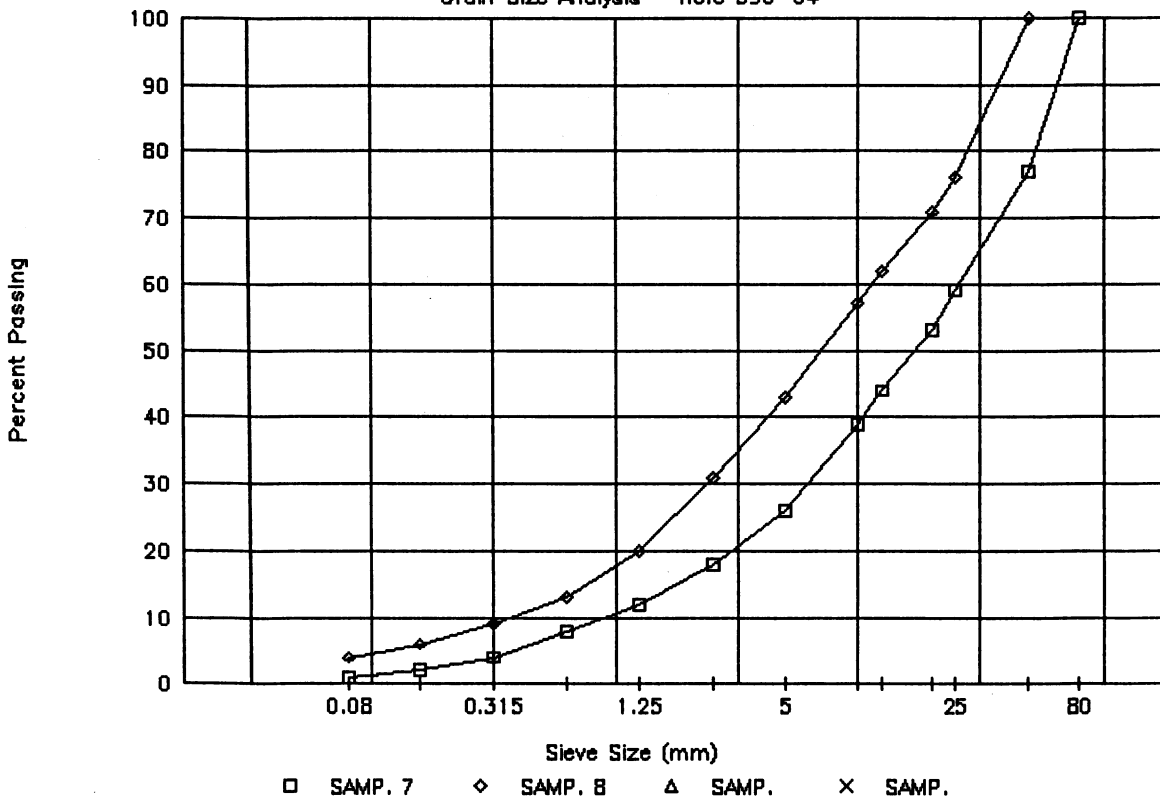
# Y.T.G. TRANSPORTATION ENGINEERING

## Grain Size Analysis - Hole 396-03



# Y.T.G. TRANSPORTATION ENGINEERING

## Grain Size Analysis - Hole 396-04



PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 396-05  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CAT 245ME  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: DT DATE COMPLETED: 96.02.16

FIELD NO: 9  
 LAB NO: 9  
 DEPTH: 1.1-1.3  
 TYPE: BULK

FIELD NO: 10  
 LAB NO: 10  
 DEPTH: 3.4-3.7  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	100
80.0	70
50.0	64
31.5	--
25.0	45
20.0	40
12.5	33
10.0	31
5.0	23
2.5	18
2.0	--
1.25	11
0.840	--
0.630	6
0.420	--
0.315	3
0.160	2
0.150	--
0.080	1

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	76
31.5	--
25.0	59
20.0	53
12.5	40
10.0	35
5.0	25
2.5	20
2.0	--
1.25	14
0.840	--
0.630	9
0.420	--
0.315	5
0.160	3
0.150	--
0.080	2

M.C. (%): 2

M.C. (%): 10

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

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

% GRAVEL: 77  
 % SAND: 22  
 % FINES: 1

% GRAVEL: 75  
 % SAND: 23  
 % FINES: 2

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 396-06  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CAT 245ME  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: DT DATE COMPLETED: 96.02.17

FIELD NO: 11  
 LAB NO: 11  
 DEPTH: 1.1-1.4  
 TYPE: BULK

FIELD NO: 12  
 LAB NO: 12  
 DEPTH: 3.3-3.5  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	93
31.5	--
25.0	72
20.0	66
12.5	58
10.0	53
5.0	40
2.5	31
2.0	--
1.25	20
0.840	--
0.630	12
0.420	--
0.315	7
0.160	5
0.150	--
0.080	4

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	78
31.5	--
25.0	53
20.0	48
12.5	39
10.0	35
5.0	25
2.5	19
2.0	--
1.25	13
0.840	--
0.630	9
0.420	--
0.315	5
0.160	3
0.150	--
0.080	2

M.C. (%): 3

M.C. (%): 7

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

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

% GRAVEL: 60  
 % SAND: 37  
 % FINES: 4

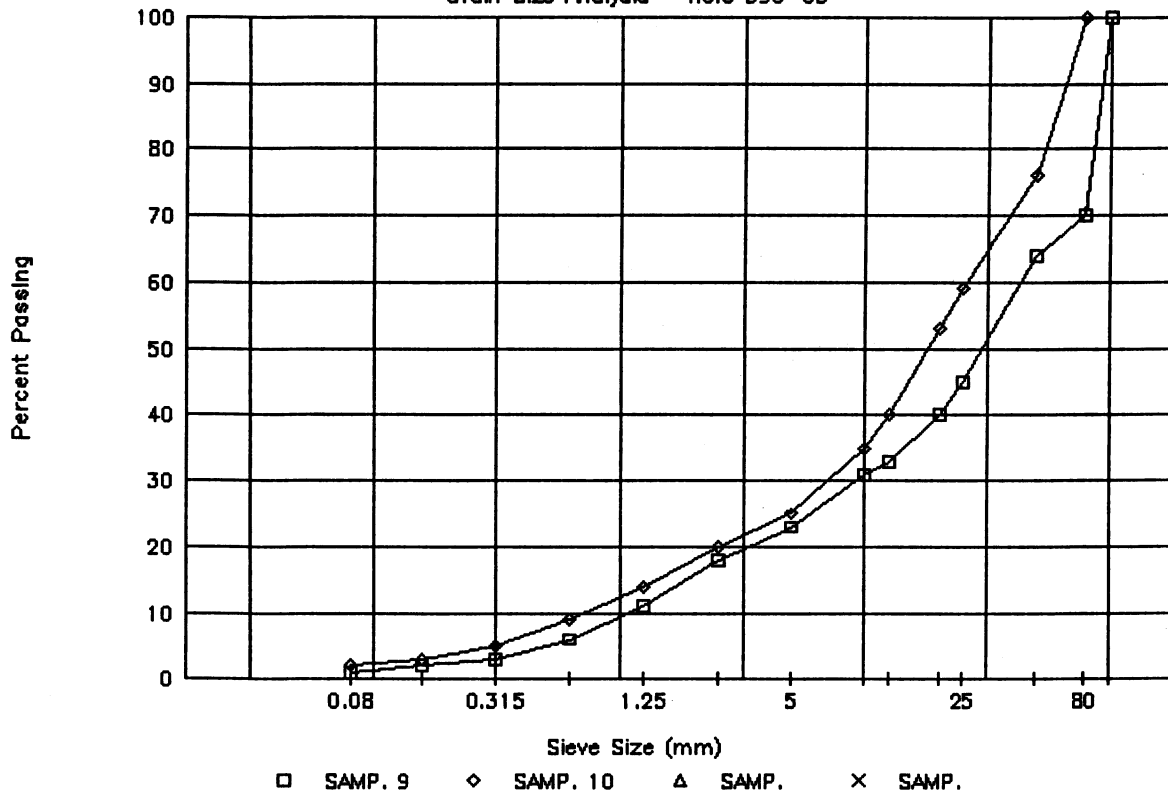
% GRAVEL: 75  
 % SAND: 23  
 % FINES: 2

CLASSIFICATION:  
 POORLY GRADED  
 GRAVEL WITH SAND  
 (GP)

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

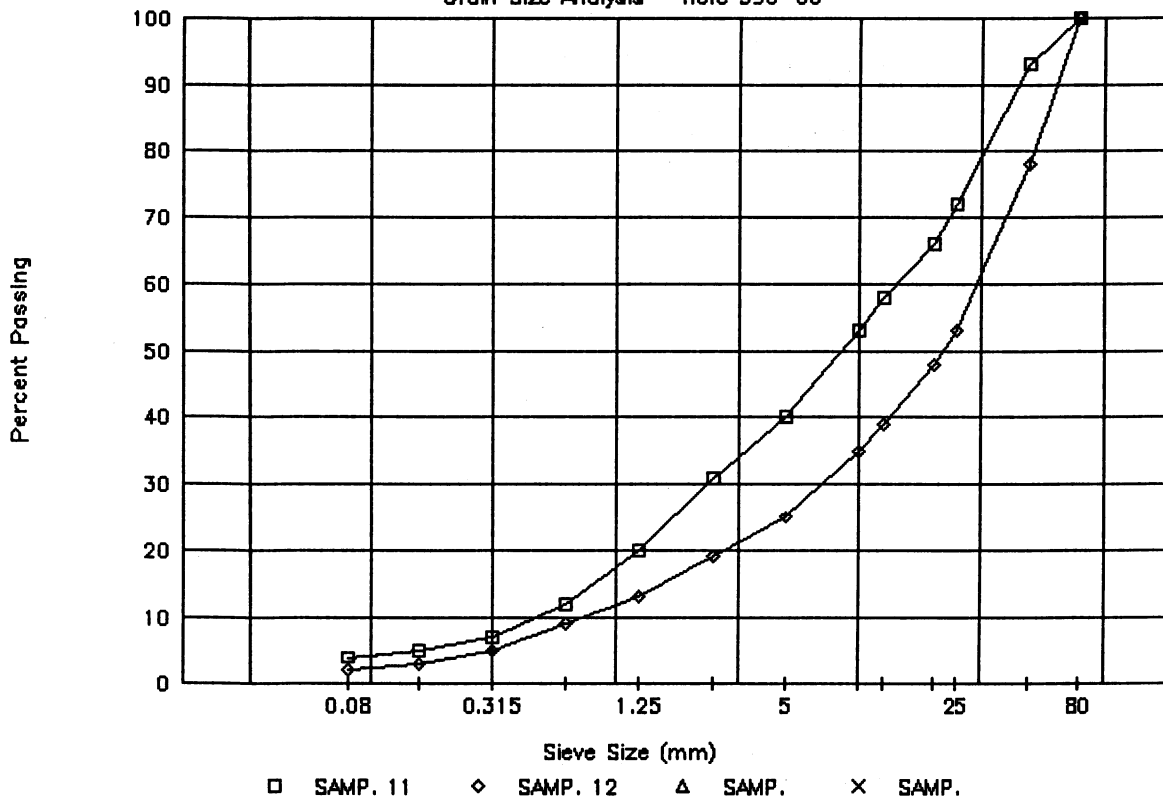
# Y.T.G. TRANSPORTATION ENGINEERING

## Grain Size Analysis - Hole 396-05



# Y.T.G. TRANSPORTATION ENGINEERING

## Grain Size Analysis - Hole 396-06



PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 396-07  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CAT 245ME  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: DT DATE COMPLETED: 96.02.17

FIELD NO: 13  
 LAB NO: 13  
 DEPTH: 0.9-1.2  
 TYPE: BULK

FIELD NO: 14  
 LAB NO: 14  
 DEPTH: 3.2-3.4  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	84
31.5	--
25.0	67
20.0	63
12.5	56
10.0	53
5.0	42
2.5	33
2.0	--
1.25	21
0.840	--
0.630	11
0.420	--
0.315	5
0.160	3
0.150	--
0.080	3

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	84
31.5	--
25.0	65
20.0	59
12.5	47
10.0	40
5.0	26
2.5	19
2.0	--
1.25	13
0.840	--
0.630	9
0.420	--
0.315	6
0.160	4
0.150	--
0.080	3

M.C. (%): 3

M.C. (%): 9

LIMITS

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

LIMITS

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

% GRAVEL: 58  
 % SAND: 39  
 % FINES: 3

% GRAVEL: 74  
 % SAND: 23  
 % FINES: 3

CLASSIFICATION:  
 POORLY GRADED  
 GRAVEL WITH SAND  
 (GP)

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 396-08  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: SEGMENT 15  
 DRILL UNIT: CAT 245ME  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: DT DATE COMPLETED: 96.02.17

FIELD NO: 15  
 LAB NO: 15  
 DEPTH: 1.1-1.3  
 TYPE: BULK

FIELD NO: 16  
 LAB NO: 16  
 DEPTH: 3.4-3.6  
 TYPE: BULK

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

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

100.0	--
80.0	100
50.0	92
31.5	--
25.0	71
20.0	60
12.5	52
10.0	48
5.0	37
2.5	30
2.0	--
1.25	22
0.840	--
0.630	15
0.420	--
0.315	8
0.160	5
0.150	--
0.080	3

100.0	--
80.0	100
50.0	91
31.5	--
25.0	75
20.0	69
12.5	59
10.0	52
5.0	39
2.5	29
2.0	--
1.25	20
0.840	--
0.630	13
0.420	--
0.315	8
0.160	5
0.150	--
0.080	4

M.C. (%): 4

M.C. (%): 9

LIMITS

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

LIMITS

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

% GRAVEL: 63  
 % SAND: 34  
 % FINES: 3

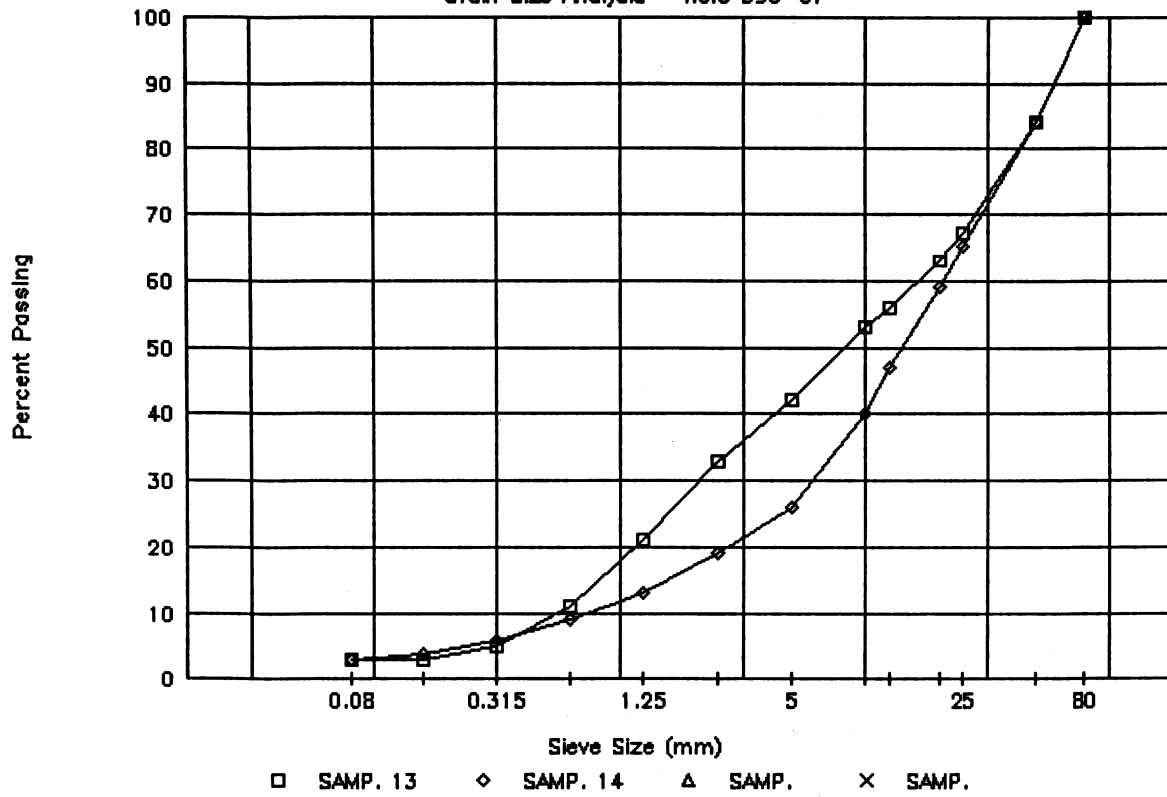
% GRAVEL: 61  
 % SAND: 35  
 % FINES: 4

CLASSIFICATION:  
 POORLY GRADED  
 GRAVEL WITH SAND  
 (GP)

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

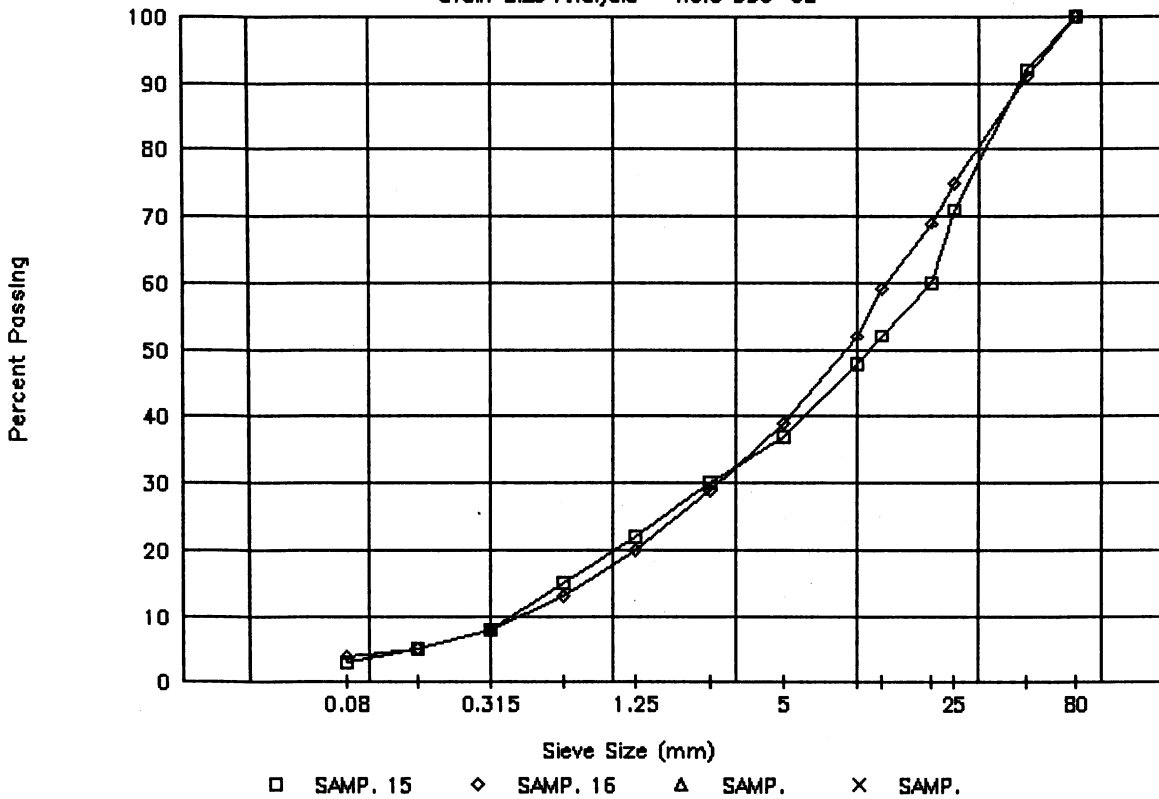
# Y.T.G. TRANSPORTATION ENGINEERING

## Grain Size Analysis - Hole 396-07



# Y.T.G. TRANSPORTATION ENGINEERING

## Grain Size Analysis - Hole 396-08



PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 396-09  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: KM 1847 LHS  
 DRILL UNIT: CAT 245ME  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: DT DATE COMPLETED: 99.02.17

FIELD NO: 17  
 LAB NO: 17  
 DEPTH: 1.3-1.5  
 TYPE: BULK

FIELD NO: 18  
 LAB NO: 18  
 DEPTH: 3.4-3.6  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	86
31.5	--
25.0	68
20.0	64
12.5	56
10.0	50
5.0	38
2.5	29
2.0	--
1.25	20
0.840	--
0.630	12
0.420	--
0.315	5
0.160	3
0.150	--
0.080	2

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	79
20.0	74
12.5	59
10.0	53
5.0	42
2.5	33
2.0	--
1.25	26
0.840	--
0.630	19
0.420	--
0.315	11
0.160	7
0.150	--
0.080	5

M.C. (%) : 7

M.C. (%) : 8

LIMITS

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

LIMITS

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

% GRAVEL: 62  
 % SAND: 36  
 % FINES: 2

% GRAVEL: 58  
 % SAND: 37  
 % FINES: 5

CLASSIFICATION:  
 POORLY GRADED  
 GRAVEL WITH SAND  
 (GP)

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

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 396-10  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: KM 1847 LHS  
 DRILL UNIT: CAT 245ME  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: DT DATE COMPLETED: 96.02.18

FIELD NO: 19  
 LAB NO: 19  
 DEPTH: 0.9-1.1  
 TYPE: BULK

FIELD NO: 20  
 LAB NO: 20  
 DEPTH: 2.6-3.6  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	93
31.5	--
25.0	60
20.0	53
12.5	44
10.0	40
5.0	30
2.5	23
2.0	--
1.25	16
0.840	--
0.630	11
0.420	--
0.315	6
0.160	4
0.150	--
0.080	2

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	83
31.5	--
25.0	68
20.0	60
12.5	51
10.0	45
5.0	35
2.5	26
2.0	--
1.25	18
0.840	--
0.630	11
0.420	--
0.315	4
0.160	1
0.150	--
0.080	1

M.C. (%) : 8

M.C. (%) : 7

LIMITS

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

LIMITS

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

% GRAVEL: 70  
 % SAND: 28  
 % FINES: 2

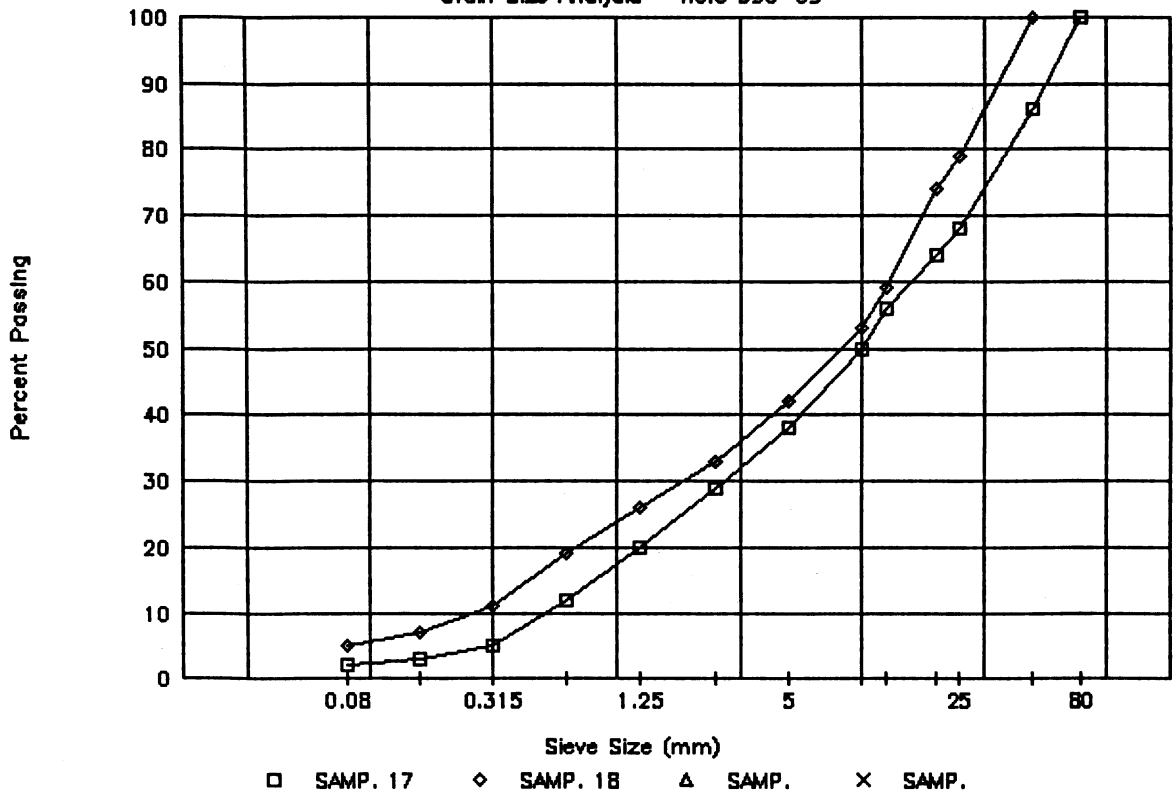
% GRAVEL: 65  
 % SAND: 34  
 % FINES: 1

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

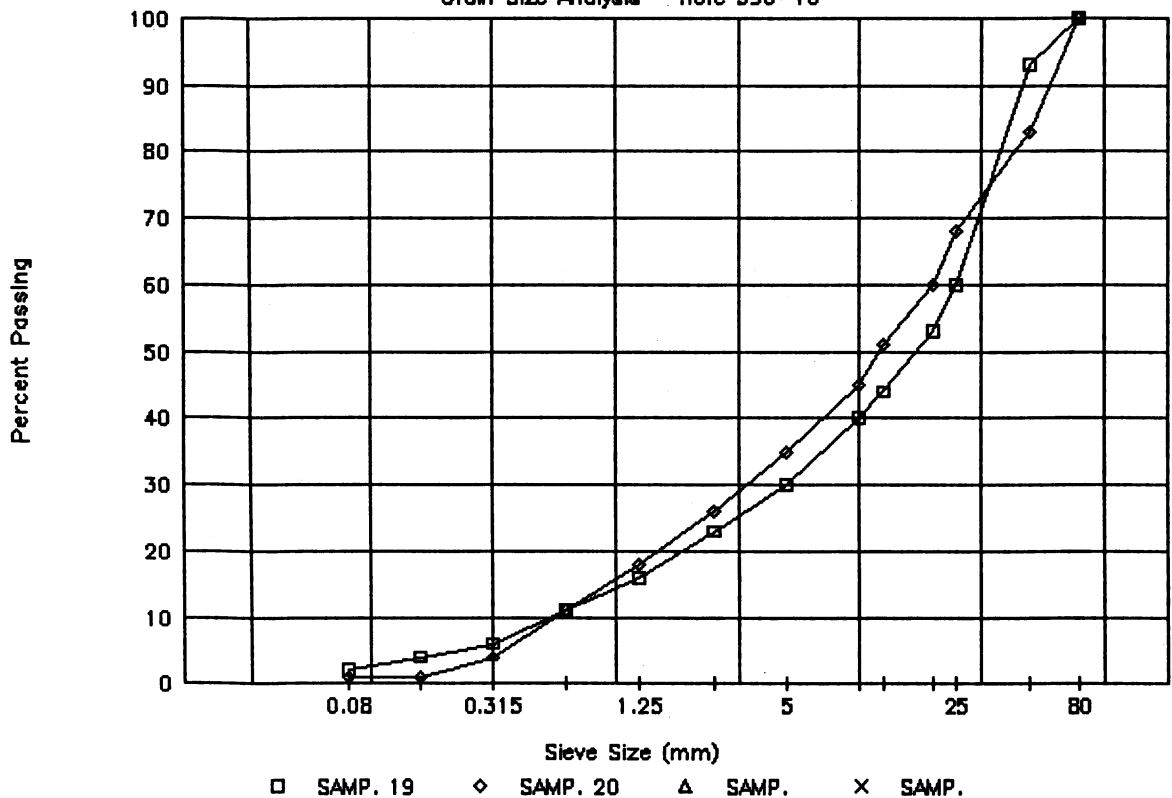
# Y.T.G. TRANSPORTATION ENGINEERING

## Grain Size Analysis - Hole 396-09



# Y.T.G. TRANSPORTATION ENGINEERING

## Grain Size Analysis - Hole 396-10



PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 397-11  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: KM 1847 LHS  
 DRILL UNIT: CAT 245ME  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: DT DATE COMPLETED: 96.02.19

FIELD NO: 21  
 LAB NO: 21  
 DEPTH: 0.9-1.1  
 TYPE: BULK

FIELD NO: 22  
 LAB NO: 22  
 DEPTH: 3.7-4.2  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	85
31.5	--
25.0	63
20.0	57
12.5	47
10.0	42
5.0	32
2.5	24
2.0	--
1.25	18
0.840	--
0.630	12
0.420	--
0.315	7
0.160	4
0.150	--
0.080	3

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	90
31.5	--
25.0	68
20.0	62
12.5	53
10.0	49
5.0	37
2.5	28
2.0	--
1.25	20
0.840	--
0.630	11
0.420	--
0.315	4
0.160	1
0.150	--
0.080	1

M.C. (%): 8

M.C. (%): 4

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

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

% GRAVEL: 68  
 % SAND: 29  
 % FINES: 3

% GRAVEL: 63  
 % SAND: 36  
 % FINES: 1

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

CLASSIFICATION:  
 POORLY GRADED  
 GRAVEL WITH SAND  
 (GP)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 397-12  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: KM 1847 LHS  
 DRILL UNIT: CAT 245ME  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: DT DATE COMPLETED: 96.02.19

FIELD NO: 23  
 LAB NO: 23  
 DEPTH: 1.1-1.4  
 TYPE: BULK

FIELD NO: 24  
 LAB NO: 24  
 DEPTH: 4.1-4.7  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	78
31.5	--
25.0	67
20.0	61
12.5	53
10.0	48
5.0	38
2.5	29
2.0	--
1.25	20
0.840	--
0.630	11
0.420	--
0.315	4
0.160	2
0.150	--
0.080	1

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	86
31.5	--
25.0	51
20.0	44
12.5	39
10.0	35
5.0	29
2.5	24
2.0	--
1.25	18
0.840	--
0.630	11
0.420	--
0.315	5
0.160	2
0.150	--
0.080	1

M.C. (%): 2

M.C. (%): 6

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

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

% GRAVEL: 62  
 % SAND: 36  
 % FINES: 1

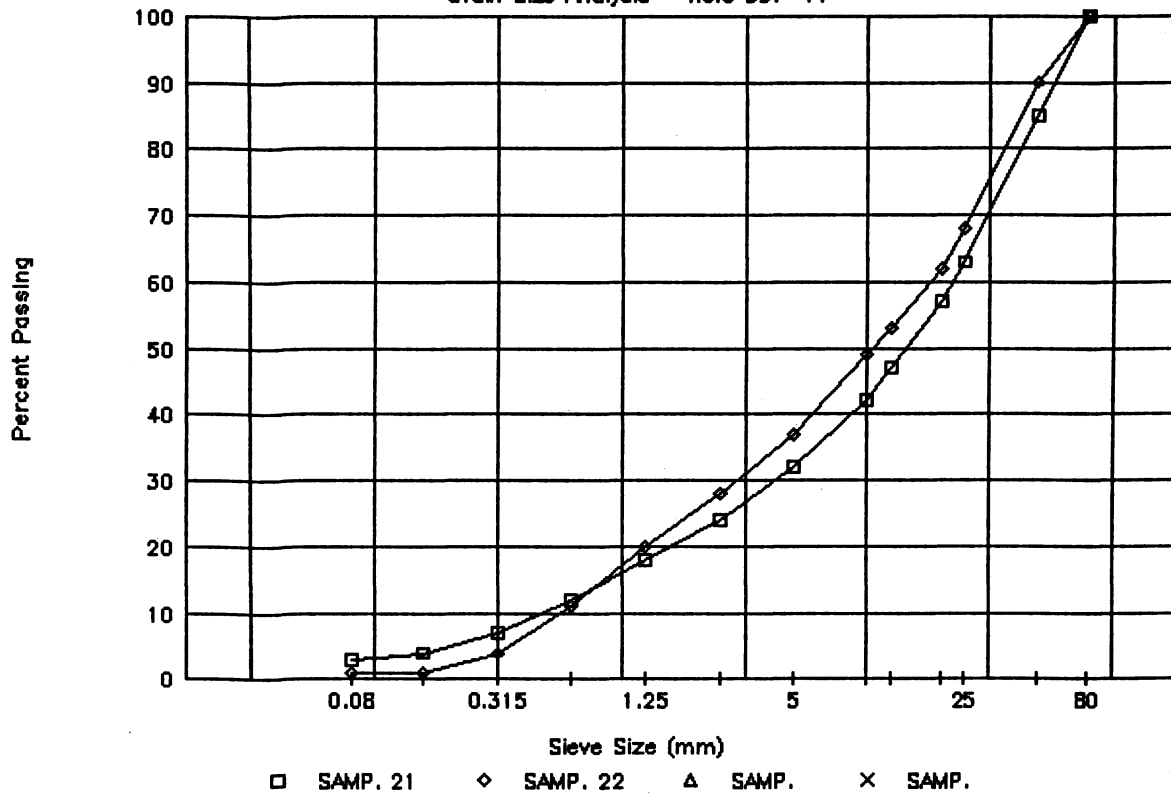
% GRAVEL: 71  
 % SAND: 28  
 % FINES: 1

CLASSIFICATION:  
 POORLY GRADED  
 GRAVEL WITH SAND  
 (GP)

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

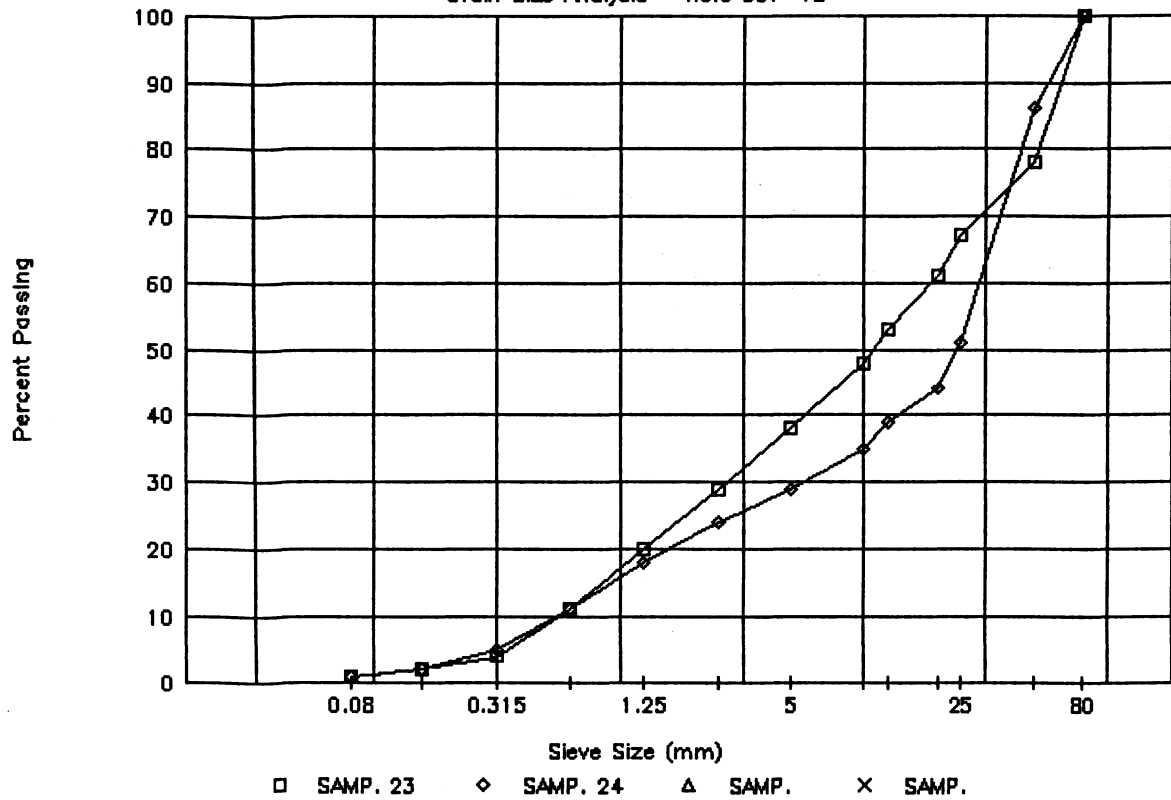
# Y.T.G. TRANSPORTATION ENGINEERING

## Grain Size Analysis - Hole 397-11



# Y.T.G. TRANSPORTATION ENGINEERING

## Grain Size Analysis - Hole 397-12



PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 397-13  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: KM 1847 LHS  
 DRILL UNIT: CAT 245ME  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: DT DATE COMPLETED: 96.02.19

FIELD NO: 25  
 LAB NO: 25  
 DEPTH: 1.2-1.5  
 TYPE: BULK

FIELD NO: 26  
 LAB NO: 26  
 DEPTH: 4.0-4.4  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	73
20.0	67
12.5	55
10.0	50
5.0	38
2.5	29
2.0	--
1.25	22
0.840	--
0.630	15
0.420	--
0.315	8
0.160	4
0.150	--
0.080	3

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	83
31.5	--
25.0	58
20.0	52
12.5	44
10.0	38
5.0	27
2.5	19
2.0	--
1.25	13
0.840	--
0.630	8
0.420	--
0.315	5
0.160	2
0.150	--
0.080	1

M.C. (%) : 9

M.C. (%) : 5

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

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

% GRAVEL: 62  
 % SAND: 35  
 % FINES: 3

% GRAVEL: 73  
 % SAND: 26  
 % FINES: 1

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 397-14  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: KM 1847 LHS  
 DRILL UNIT: CAT 245ME  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: DT DATE COMPLETED: 96.02.19

FIELD NO: 27  
 LAB NO: 27  
 DEPTH: 0.4-0.8  
 TYPE: BULK

FIELD NO: 28  
 LAB NO: 28  
 DEPTH: 3.1-3.5  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	85
31.5	--
25.0	67
20.0	62
12.5	51
10.0	47
5.0	36
2.5	26
2.0	--
1.25	18
0.840	--
0.630	11
0.420	--
0.315	5
0.160	3
0.150	--
0.080	2

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	93
31.5	--
25.0	80
20.0	73
12.5	63
10.0	57
5.0	44
2.5	33
2.0	--
1.25	23
0.840	--
0.630	15
0.420	--
0.315	6
0.160	3
0.150	--
0.080	2

M.C. (%): 7

M.C. (%): 11

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

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

% GRAVEL: 64  
 % SAND: 34  
 % FINES: 2

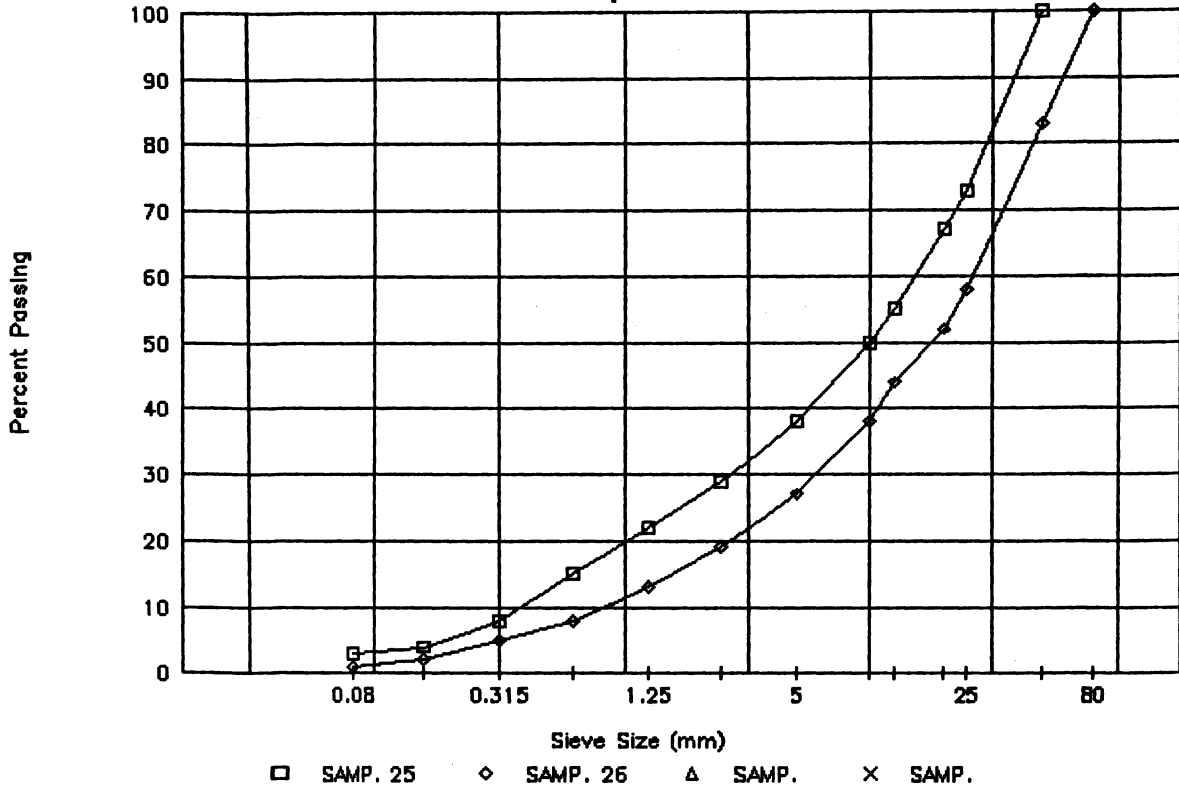
% GRAVEL: 56  
 % SAND: 42  
 % FINES: 2

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

CLASSIFICATION:  
 POORLY GRADED  
 GRAVEL WITH SAND  
 (GP)

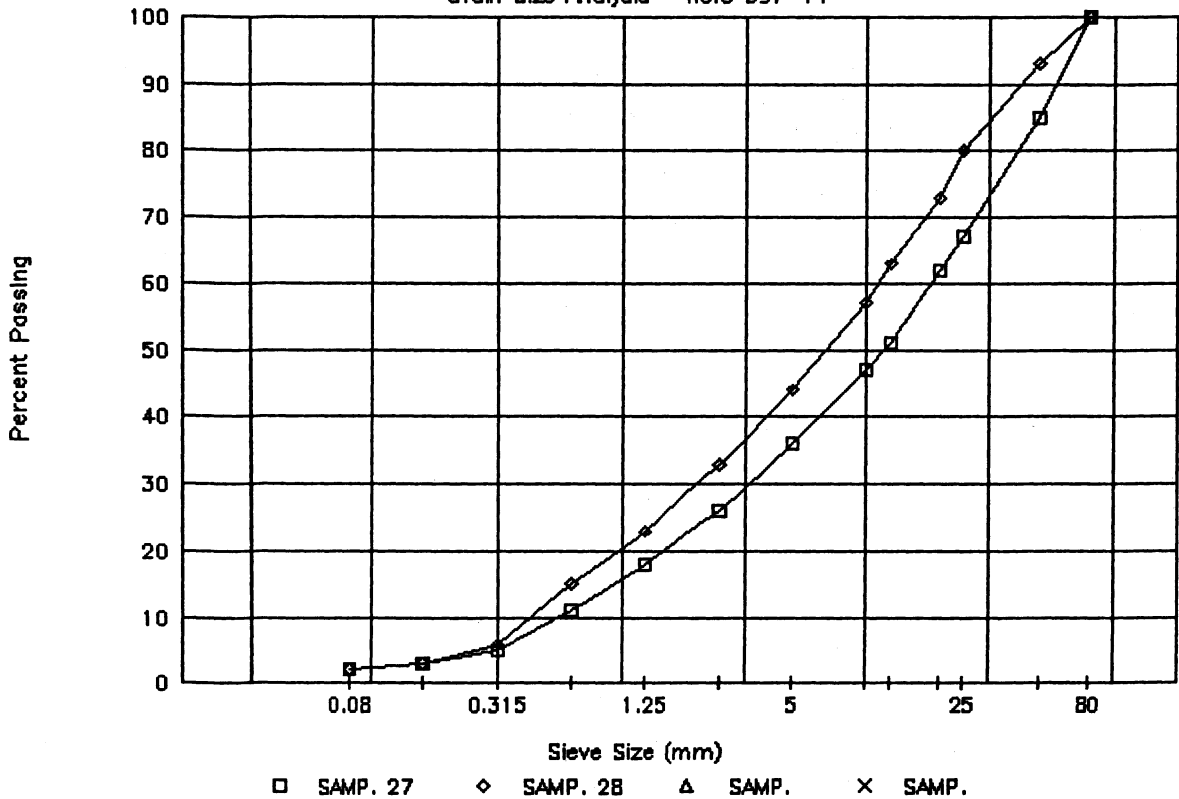
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## Grain Size Analysis - Hole 397-13



# Y.T.G. TRANSPORTATION ENGINEERING

## Grain Size Analysis - Hole 397-14



PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 397-15  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: KM 1847 LHS  
 DRILL UNIT: CAT 245ME  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: DT DATE COMPLETED: 96.02.19

FIELD NO: 29  
 LAB NO: 29  
 DEPTH: 1.1  
 TYPE: BULK

FIELD NO: 29  
 LAB NO: 29  
 DEPTH: 0  
 TYPE: BULK

FIELD NO: 29  
 LAB NO: 29  
 DEPTH: 1.1-1.3  
 TYPE: BULK

FIELD NO: 30  
 LAB NO: 30  
 DEPTH: 2.9-3.3  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	--
0.840	--
0.630	--
0.420	--
0.315	--
0.160	--
0.150	--
0.080	--

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	--
10.0	--
5.0	--
2.5	--
2.0	--
1.25	--
0.840	--
0.630	--
0.420	--
0.315	--
0.160	--
0.150	--
0.080	--

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	82
31.5	--
25.0	59
20.0	54
12.5	45
10.0	40
5.0	30
2.5	23
2.0	--
1.25	17
0.840	--
0.630	10
0.420	--
0.315	4
0.160	2
0.150	--
0.080	1

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	78
20.0	67
12.5	54
10.0	48
5.0	36
2.5	27
2.0	--
1.25	19
0.840	--
0.630	13
0.420	--
0.315	7
0.160	4
0.150	--
0.080	2

M.C. (%): 0

M.C. (%): 0

M.C. (%): 7

M.C. (%): 6

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

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

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

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

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

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

% GRAVEL: 70  
 % SAND: 29  
 % FINES: 1

% GRAVEL: 64  
 % SAND: 34  
 % FINES: 2

CLASSIFICATION:

CLASSIFICATION:

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 397-16  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: KM 1847 LHS  
 DRILL UNIT: CAT 245ME  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: DT DATE COMPLETED: 96.02.20

FIELD NO: 31  
 LAB NO: 31  
 DEPTH: 0.9-1.2  
 TYPE: BULK

FIELD NO: 32  
 LAB NO: 32  
 DEPTH: 2.9-3.3  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	81
31.5	--
25.0	62
20.0	54
12.5	40
10.0	34
5.0	23
2.5	16
2.0	--
1.25	11
0.840	--
0.630	8
0.420	--
0.315	6
0.160	4
0.150	--
0.080	3

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	78
31.5	--
25.0	64
20.0	61
12.5	54
10.0	51
5.0	41
2.5	34
2.0	--
1.25	24
0.840	--
0.630	13
0.420	--
0.315	4
0.160	2
0.150	--
0.080	1

M.C. (%) : 10

M.C. (%) : 9

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

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

% GRAVEL: 77  
 % SAND: 19  
 % FINES: 3

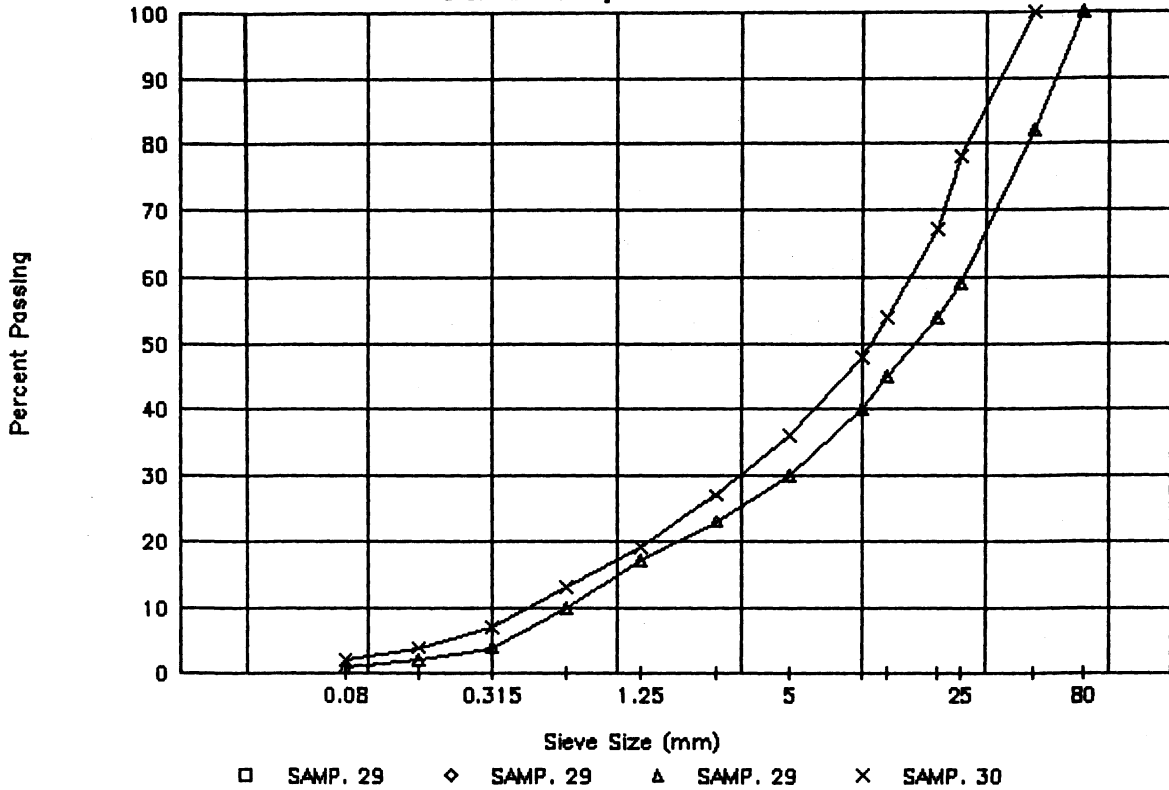
% GRAVEL: 59  
 % SAND: 40  
 % FINES: 1

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

CLASSIFICATION:  
 POORLY GRADED  
 GRAVEL WITH SAND  
 (GP)

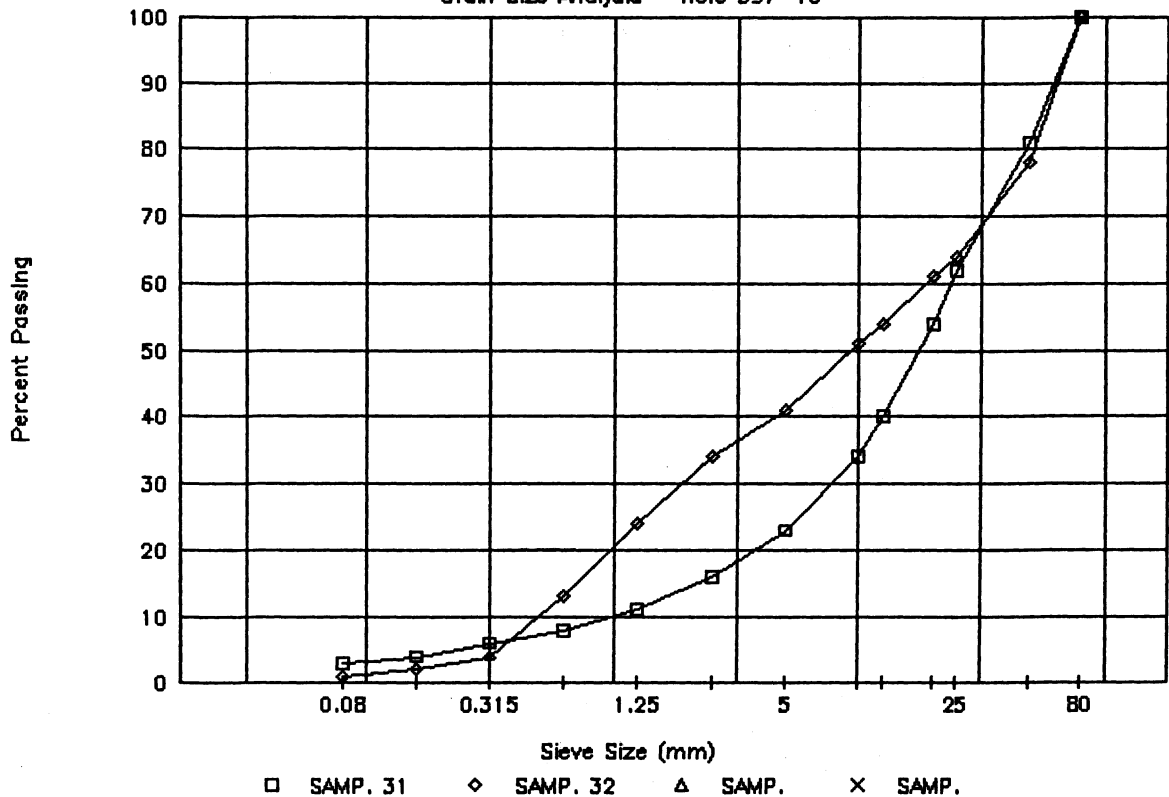
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Grain Size Analysis - Hole 397-15



# Y.T.G. TRANSPORTATION ENGINEERING

Grain Size Analysis - Hole 397-16



PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 397-17  
 CLIENT: ENGINEERING-CAPITAL  
 PROJECT NAME: SHAKWAK PROJECT  
 PROJECT LOCATION: KM 1847 LHS  
 DRILL UNIT: CAT 245ME  
 HOLE LOCATION: SEE PLAN  
 LOGGED BY: DT DATE COMPLETED: 96.02.20

FIELD NO: 33  
 LAB NO: 33  
 DEPTH: 0.6-0.9  
 TYPE: BULK

FIELD NO: 34  
 LAB NO: 34  
 DEPTH: 2.8-3.4  
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	63
20.0	57
12.5	46
10.0	41
5.0	30
2.5	23
2.0	--
1.25	16
0.840	--
0.630	11
0.420	--
0.315	7
0.160	4
0.150	--
0.080	3

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	73
31.5	--
25.0	48
20.0	45
12.5	37
10.0	34
5.0	26
2.5	21
2.0	--
1.25	16
0.840	--
0.630	12
0.420	--
0.315	5
0.160	2
0.150	--
0.080	1

M.C. (%): 7

M.C. (%): 8

LIMITS

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

LIMITS

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

% GRAVEL: 70  
 % SAND: 28  
 % FINES: 3

% GRAVEL: 74  
 % SAND: 25  
 % FINES: 1

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

CLASSIFICATION:  
 WELL-GRADED  
 GRAVEL WITH SAND  
 (GW)

# Y.T.G. TRANSPORTATION ENGINEERING

Grain Size Analysis - Hole 397-17

