

Centreline Testing
Highway Construction
km 1862.1 to km 1868.4
Alaska Highway #1
Yukon 1998-99

This Data Package prepared for project viewing:

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Geotechnical Services
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GR-01-146

GEOTECHNICAL INVESTIGATION
HIGHWAY CONSTRUCTION
KM 1862.1 TO KM 1868.4
ALASKA HIGHWAY #1
YUKON 1998-99
CENTRELINE TESTING

PLEASE NOTE

Portions of the design centreline were relocated after field testing was completed. Some of the test hole location descriptions will not agree with their locations on the project drawings. Test hole locations on the project drawings are the correct locations.

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HIGHWAY CONSTRUCTION
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CONTENTS

INTRODUCTION

Investigation notes, classification methods and legends.

CENTRELINE TESTING ALASKA HIGHWAY

Subsurface exploration and testing report sheets are provided. The reports for the centreline holes are arranged according to project location, starting at km 1862+185 and increasing to km 1868+350.

Backhoe Testing

1995	TEST HOLES 274 to 280	shown with prefix 369-
	TEST HOLES 281 to 293	shown with prefix 370-
	TEST HOLES 541 to 547	shown with prefix 382-
	TEST HOLES 548 to 556	shown with prefix 383-

Auger Testing

1993	TEST HOLES 432 to 441	shown with prefix 267-
	TEST HOLES 442 to 453	shown with prefix 268-
	TEST HOLES 457 to 460	shown with prefix 268-
	TEST HOLES 461 to 484	shown with prefix 269-
	TEST HOLES 485 to 493	shown with prefix 270-
1995	TEST HOLES 228 to 229	shown with prefix 366-

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INTRODUCTION

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YUKON 1998-99
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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.

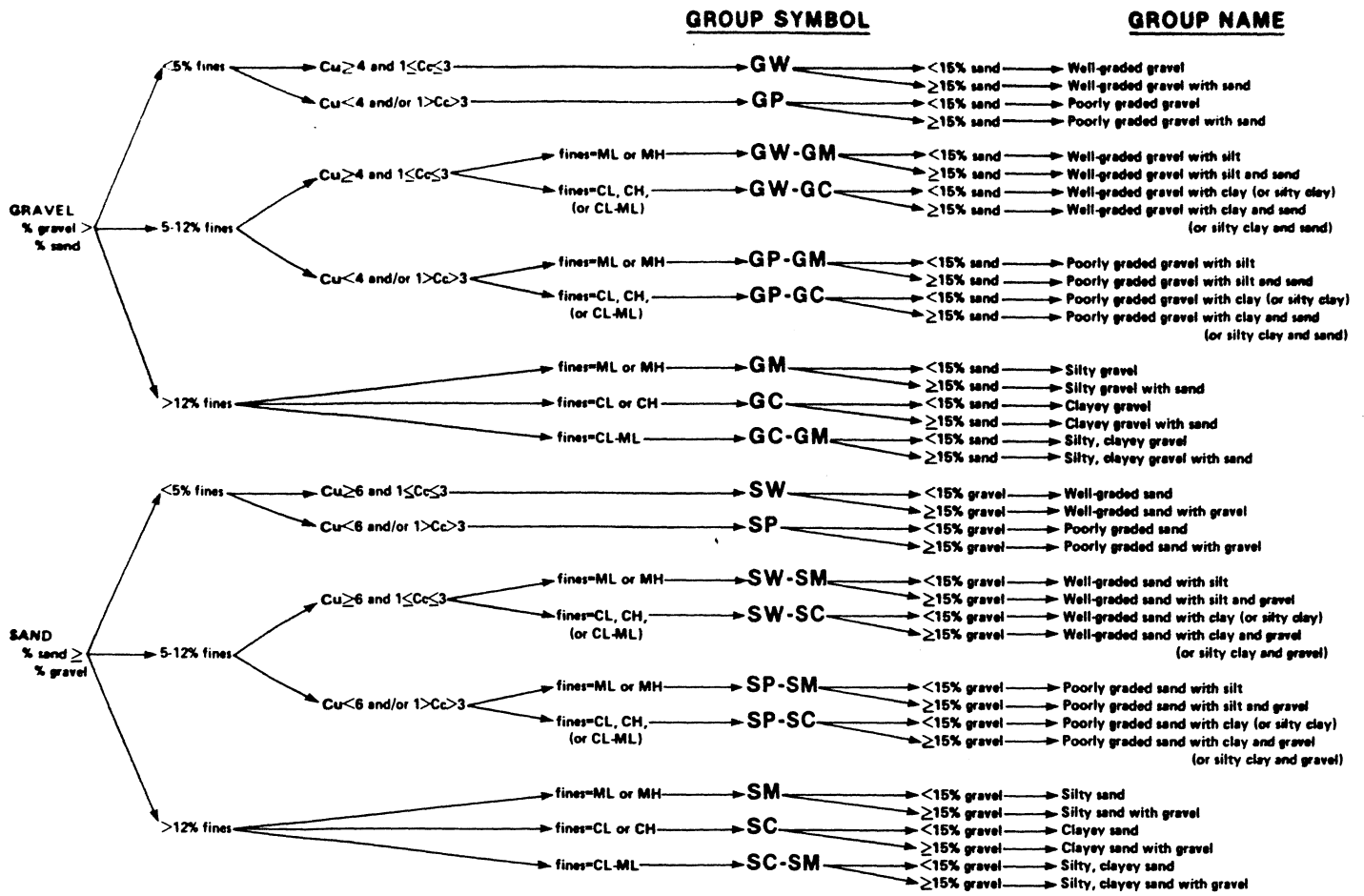
The description of material/soil description shown on the subsurface exploration and test reports is a textural description based on identification of retrieved material by the field drilling technician at the time of investigation. This description may be modified following laboratory testing and classification 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, excavation equipment used or testing preparation procedures.***

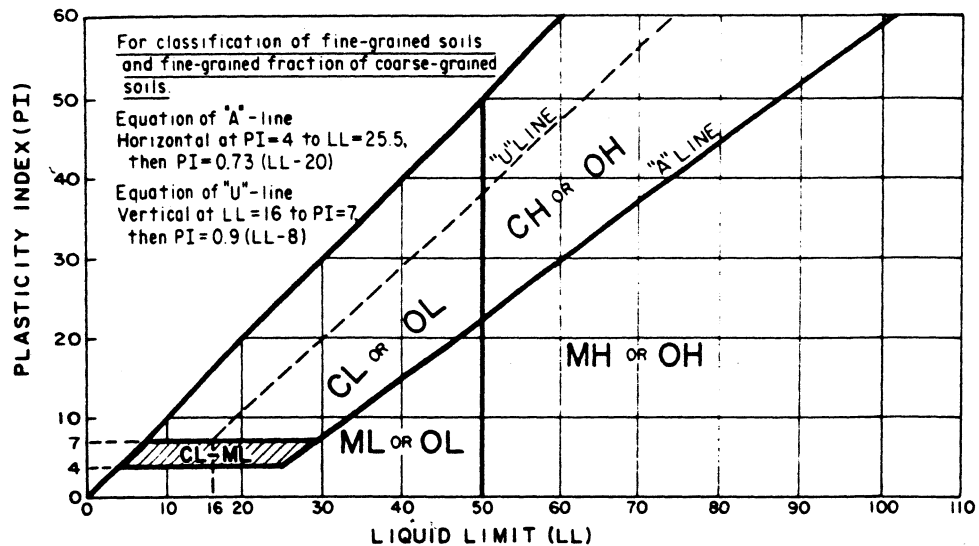
These descriptions are not intended to be conclusive as to the nature of any material encountered, or to conditions between or around the test borings/pits.

Portions of the design centreline were relocated after field testing was completed. Some of the test hole location descriptions will not agree with their locations on the project drawings. Test hole locations on the project drawings are the correct locations.

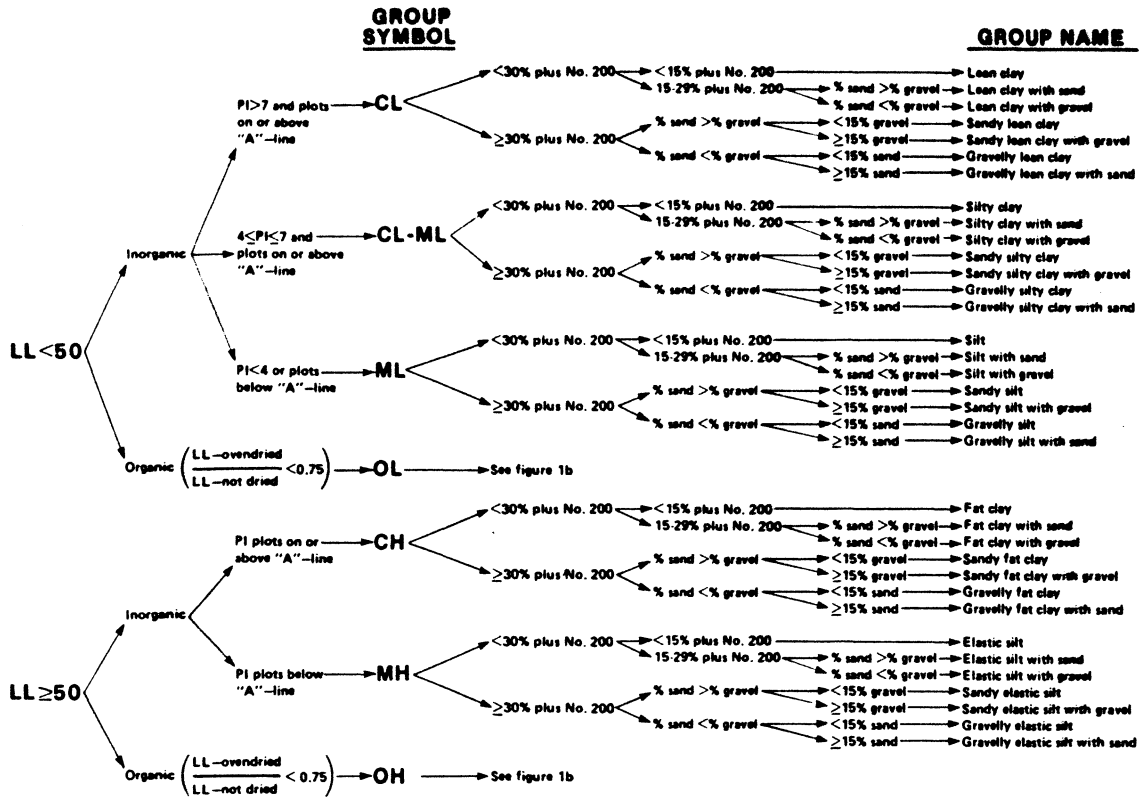
It is recommended that a site inspection, combined with consideration of the regional geology and climatic conditions be conducted. An evaluation of the investigation methods and development work done since the time of investigation should be done prior to interpreting the subsurface conditions at the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



Flow chart for classifying coarse-grained soil.



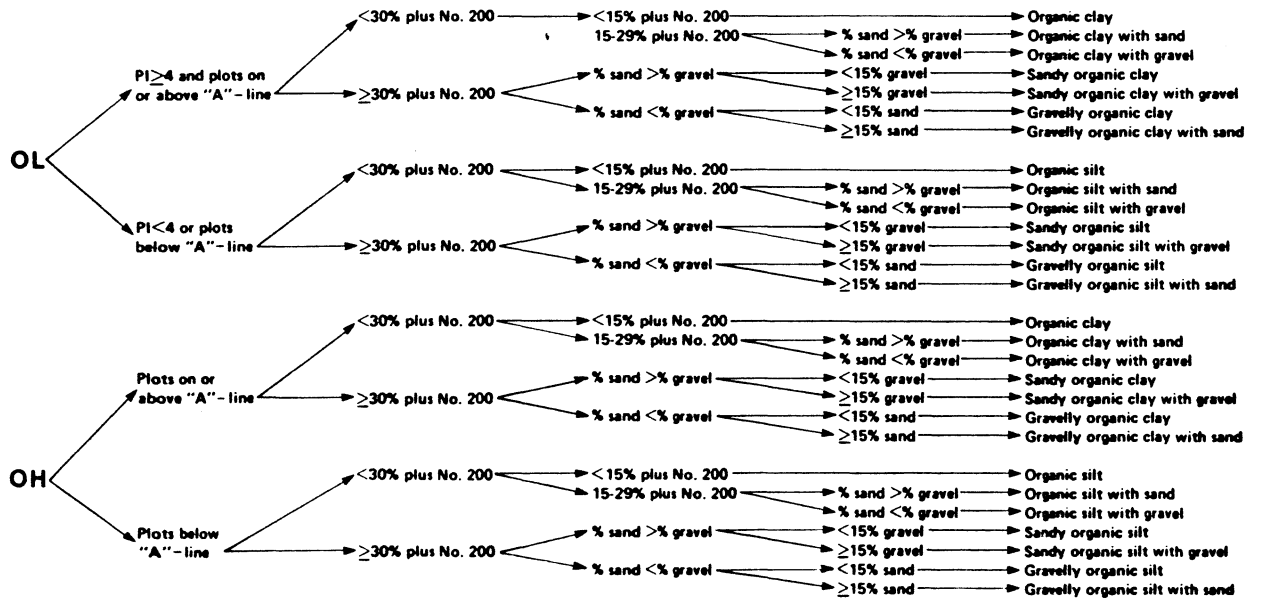
Plasticity chart.



Flow chart for classifying fine-grained soil.

GROUP SYMBOL

GROUP NAME



Flow chart for classifying organic soil.

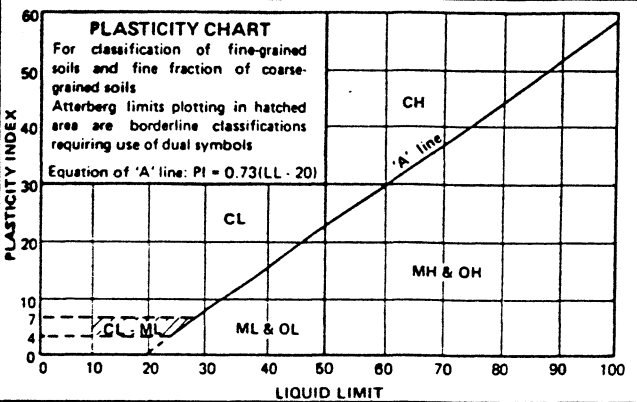
CRITERIA FOR ASSIGNING GROUP SYMBOLS AND GROUP NAMES USING LABORATORY TESTS ^a				SOIL CLASSIFICATION	
				GROUP SYMBOL	GROUP NAME ^b
COARSE-GRAINED SOILS more than 50% retained on No. 200 sieve	GRAVELS More than 50% of coarse fraction retained on No. 4 sieve	CLEAN GRAVELS Less than 5% fines ^c	$C_u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

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

Soil classification chart

UNIFIED SOIL CLASSIFICATION†

MAJOR DIVISIONS		GROUP SYMBOLS	TYPICAL NAMES	CLASSIFICATION CRITERIA	
COARSE-GRAINED SOILS	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
		GRAVELS WITH FINES	GP	Poorly-graded gravels and gravel-sand mixtures, little or no fines	
		GM	Silty gravels, gravel-sand-silt mixtures		
		GC	Clayey gravels, gravel-sand clay mixtures		
	SANDS More than 50% of coarse fraction passes No. 4 sieve	CLEAN SANDS	SW	Well-graded sands and gravelly sands, little or no fines	$C_u = D_{60}/D_{10}$ 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
		SANDS WITH FINES	SP	Poorly-graded sands and gravelly sands, little or no fines	
		SM	Silty sands, sand-silt mixtures		
		SC	Clayey sands, sand-clay mixtures		
		ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands		
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays		
OL	Organic silts and organic silty clays of low plasticity				
FINE-GRAINED SOILS 50% or more passes No. 200 sieve*	SILTS AND CLAYS Liquid limit 50% or less	MH	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts	<div style="text-align: center;"> PLASTICITY CHART For classification of fine-grained soils and fine fraction of coarse-grained soils Atterberg limits plotting in hatched area are borderline classifications requiring use of dual symbols Equation of 'A' line: $PI = 0.73(LL - 20)$ </div>	
	SILTS AND CLAYS Liquid limit greater than 50%	CH	Inorganic clay of high plasticity, fat clays		
	OH	Organic clays of medium to high plasticity			
	PT	Peat, muck and other highly organic soils			
	ML & OL	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts			
	MH & OH	Inorganic clay of high plasticity, fat clays			



*Based on the material passing the 3 in. (75 mm) sieve
 †ASTM Designation D 2487, for identification procedure see D 2488

GROUND ICE DESCRIPTION

ICE NOT VISIBLE

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

VISIBLE ICE LESS THAN 50% BY VOLUME

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

VISIBLE ICE GREATER THAN 50% BY VOLUME

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

NOTE:

1. Dual symbols are used to indicate borderline or mixed ice classifications
2. Visual estimates of ice contents indicated on borehole logs ± 5%
3. This system of ground ice description has been modified from NRC Technical Memo 79, Guide to the Field Description of Permafrost for Engineering Purposes

LEGEND

Soil Ice

		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 ▲	USC	SOIL SYMBOL	◆ PERCENT SAND ◆	DEPTH (m)
	20 40 60 80	PLASTIC M.C. LIQUID			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
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KM 1862.1 TO KM 1868.4
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CENTRELINE TESTING
km 1862.1 to km 1868.4
ALASKA HIGHWAY

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 382-541
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172	LOCATION: Sta. 1862+185 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			PERCENT GRAVEL ■			
0.0	ORGANIC MATERIAL -black -saturated -some ash -frozen (Vs) with visible ice below 0.7m											0.0
1.0												1.0
2.0	POORLY GRADED GRAVEL WITH SILT (GP-GM) -dark brown -frozen (Vx) with visible ice -some cobbles -angular		107	▲			GP-GM	◆		■		2.0
2.0	SILTY GRAVEL WITH SAND (GM) -brown -angular -frozen (Vx) with visible ice below 2.2m		108	▲			GM	◆		■		2.0
3.0	SILTY SANDY GRAVEL -dark brown -frozen -some cobbles											3.0
4.0	COBBLES AND BOULDERS -reddish to dark gray -maximum 700mm material -angular											4.0
4.0	END HOLE at 4.0m -refusal -boulders to 1000mm on surface											4.0
5.0												5.0
6.0												6.0

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REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.0 m
COMPLETE: 95/09/23

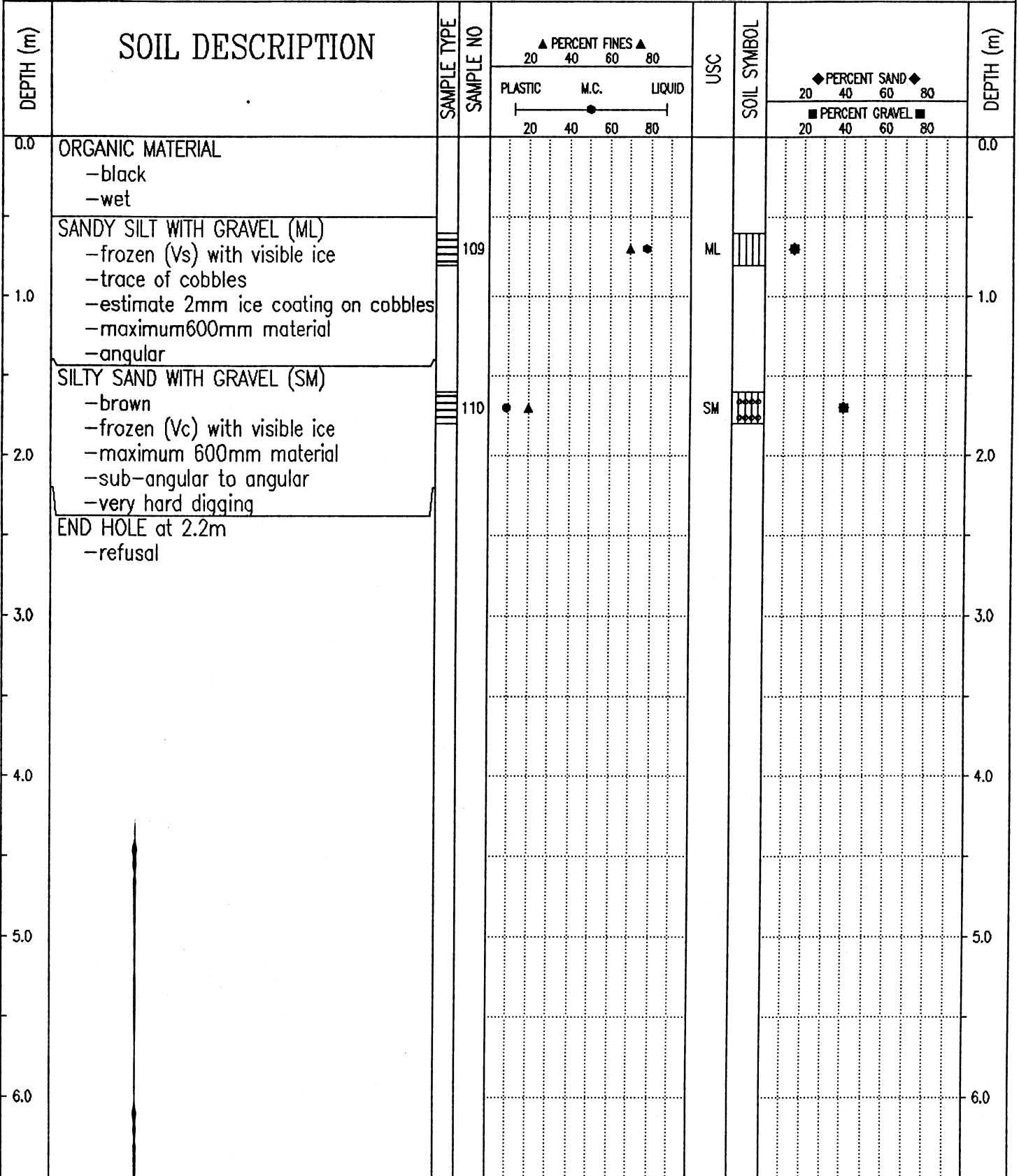
SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 267-432
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1862+200 o/s 5m Rt.	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" 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 ◆		PERCENT GRAVEL ■		DEPTH (m)
				20	40	60			80	20	40	60	
0.0	SILTY GRAVEL WITH SAND (GM) - brown - damp - angular											0.0	
1.0			620	●	▲		GM	◆	■			1.0	
1.2	END HOLE at 1.2m - refusal - in ditch											1.2	
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: 1.2 m
REVIEWED BY:	COMPLETE: 93/10/14
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 382-542
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172		LOCATION: Sta. 1862+300 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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Fig. No:

COMPLETION DEPTH: 2.2 m

COMPLETE: 95/09/23

Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 267-433
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1862+305 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)
				20	40	60			80	20		
0.0	SILTY ORGANIC MATERIAL -wet											0.0
0.0 - 1.0	SILTY GRAVEL WITH SAND (GM) -brown -damp											
1.0		<input checked="" type="checkbox"/>	620	●	▲		GM	◆		■		1.0
1.0 - 2.0												
2.0	SILTY SAND WITH GRAVEL (SM) -brown -damp -angular											
2.0 - 3.0												
3.0		<input checked="" type="checkbox"/>	621	●	▲		SM	◆	■			3.0
3.0 - 6.0	END HOLE at 3.0m -in ditch											

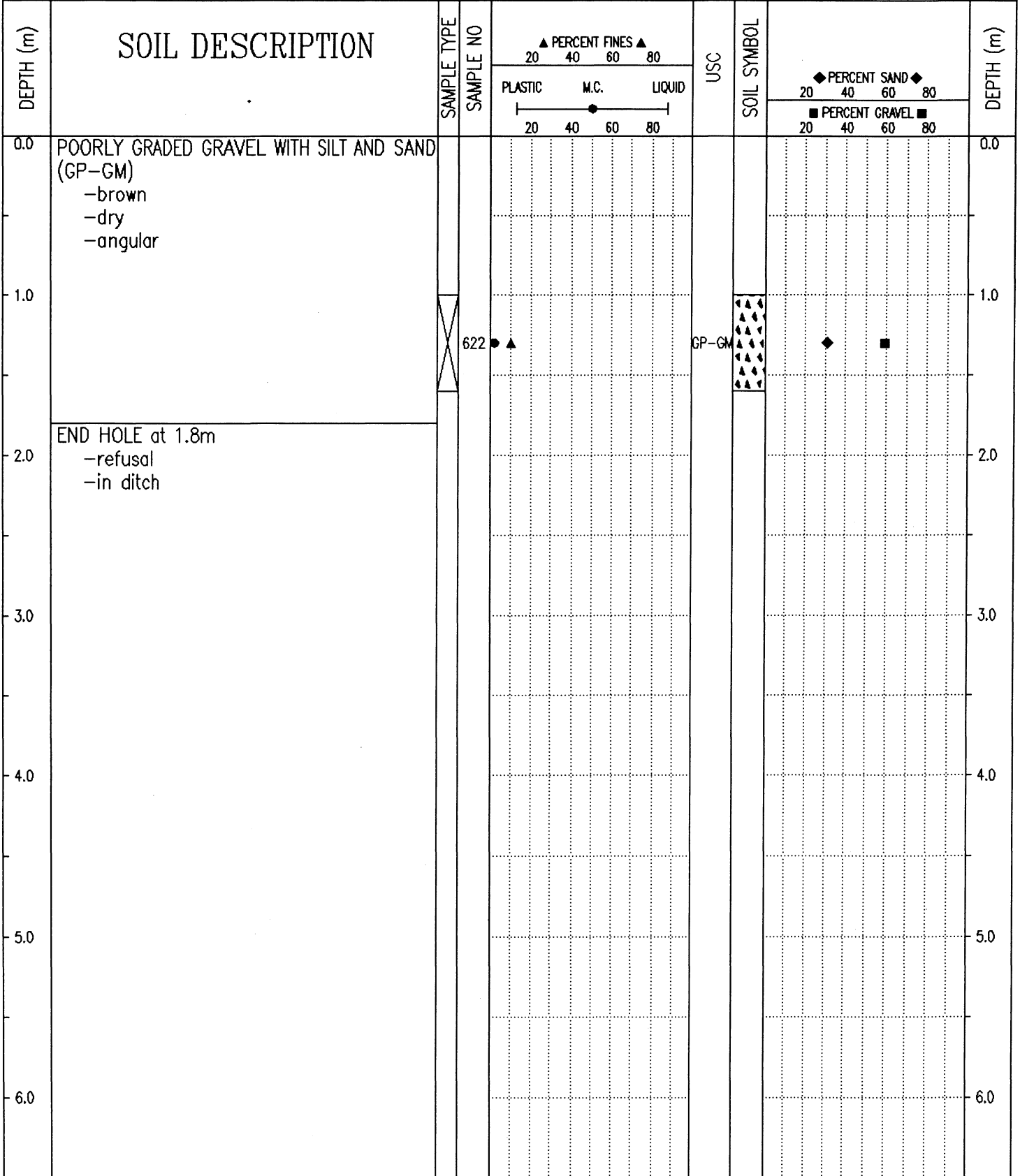
Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
	REVIEWED BY:	COMPLETE: 93/10/14
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 382-543
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172		LOCATION: Sta. 1862+400 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			PERCENT GRAVEL ■			
0.0	ORGANIC MATERIAL -black -wet -frozen (Vs) with visible ice below 0.5m										0.0	
1.0	SILTY GRAVEL WITH SAND (GM) -brown -frozen (Vc) with visible ice -maximum 500mm material -sub-angular to angular		111	●▲			GM	◆■			1.0	
2.0	WEATHERED ROCK -dark gray -trace of silt -angular										2.0	
3.0	END HOLE at 1.9m -refusal -rock outcrop in area										3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

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	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 267-434
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1862+420	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			



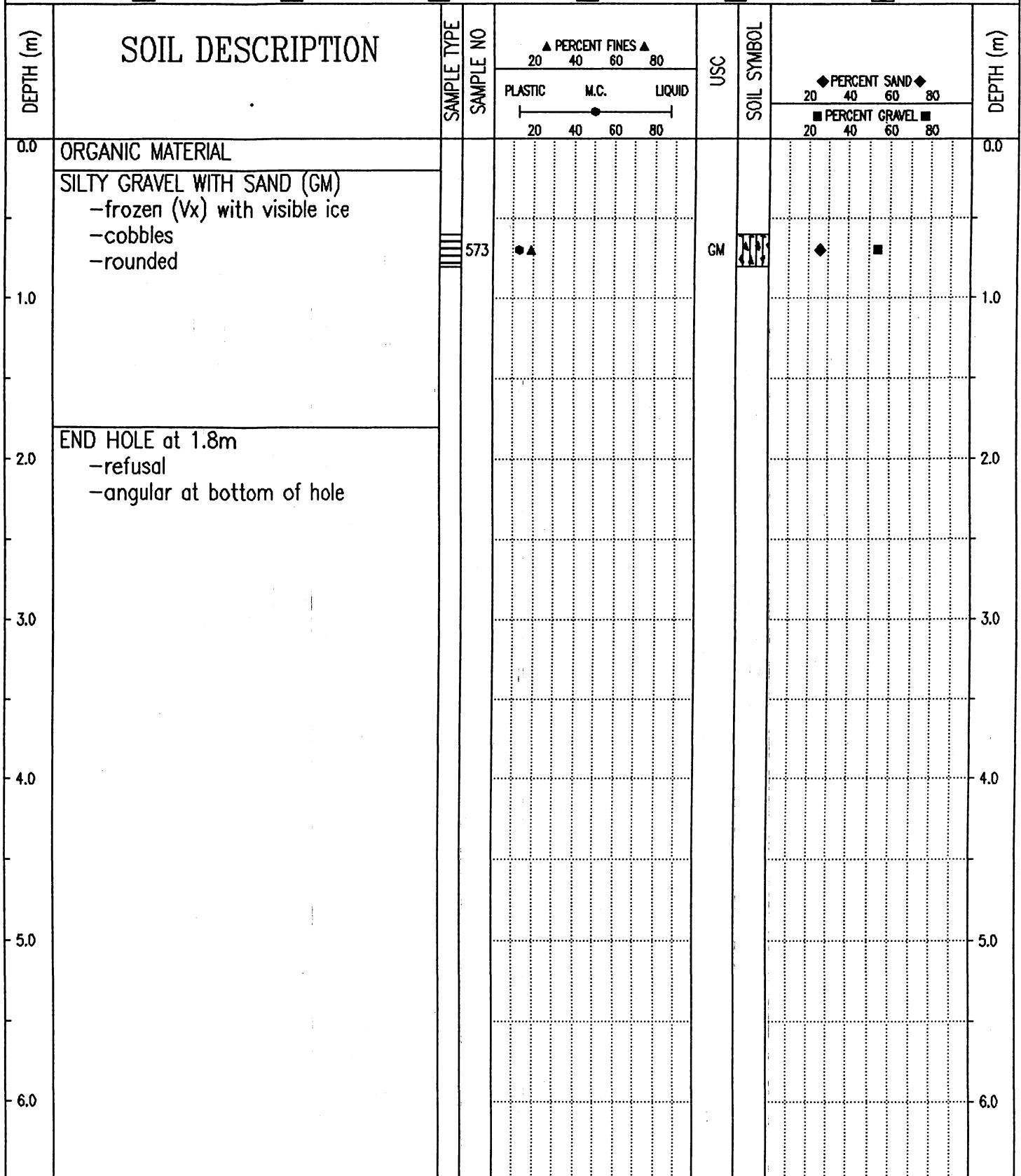
Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 1.8 m
	REVIEWED BY:	COMPLETE: 93/10/14
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 267-435
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1862+500 o/s 20m Lt.	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	SILTY GRAVEL WITH SAND (GM) -black -damp -organic											0.0
1.0		<input checked="" type="checkbox"/>	623	▲	●		GM	◆	■			1.0
2.0	END HOLE at 1.8m -refusal -in ditch											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: 93/10/14
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 369-274
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0314
BACKHOE: HITACHI EX 200 LC	LOCATION: Sta. 1862+550 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



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LOGGED BY: DT
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Fig. No:

COMPLETION DEPTH: 1.8 m
COMPLETE: 95/07/12

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 267-436
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1862+600 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		

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) -damp to moist -organic -angular										0.0	
1.0		<input checked="" type="checkbox"/>	624	●	▲		GM	◆	■		1.0	
2.0	END HOLE at 1.6m -refusal -in ditch										2.0	
3.0											3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

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COMPLETION DEPTH: 1.6 m

COMPLETE: 93/10/14

Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 369-275
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0314
BACKHOE: HITACHI EX 200 LC	LOCATION: Sta. 1862+700	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									0.0	
	ASH										
1.0	SILTY SAND WITH GRAVEL -frozen (Vx) with visible ice -cobbles -rounded									1.0	
2.0	END HOLE at 1.7m -refusal -angular at bottom of hole									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: 1.7 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: 267-437
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1862+755 o/s 20m Lt.	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				20	40	60			80	20	
0.0	-no sample taken										0.0
1.0	END HOLE at 0.5m -refusal -in ditch										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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Transportation Engineering

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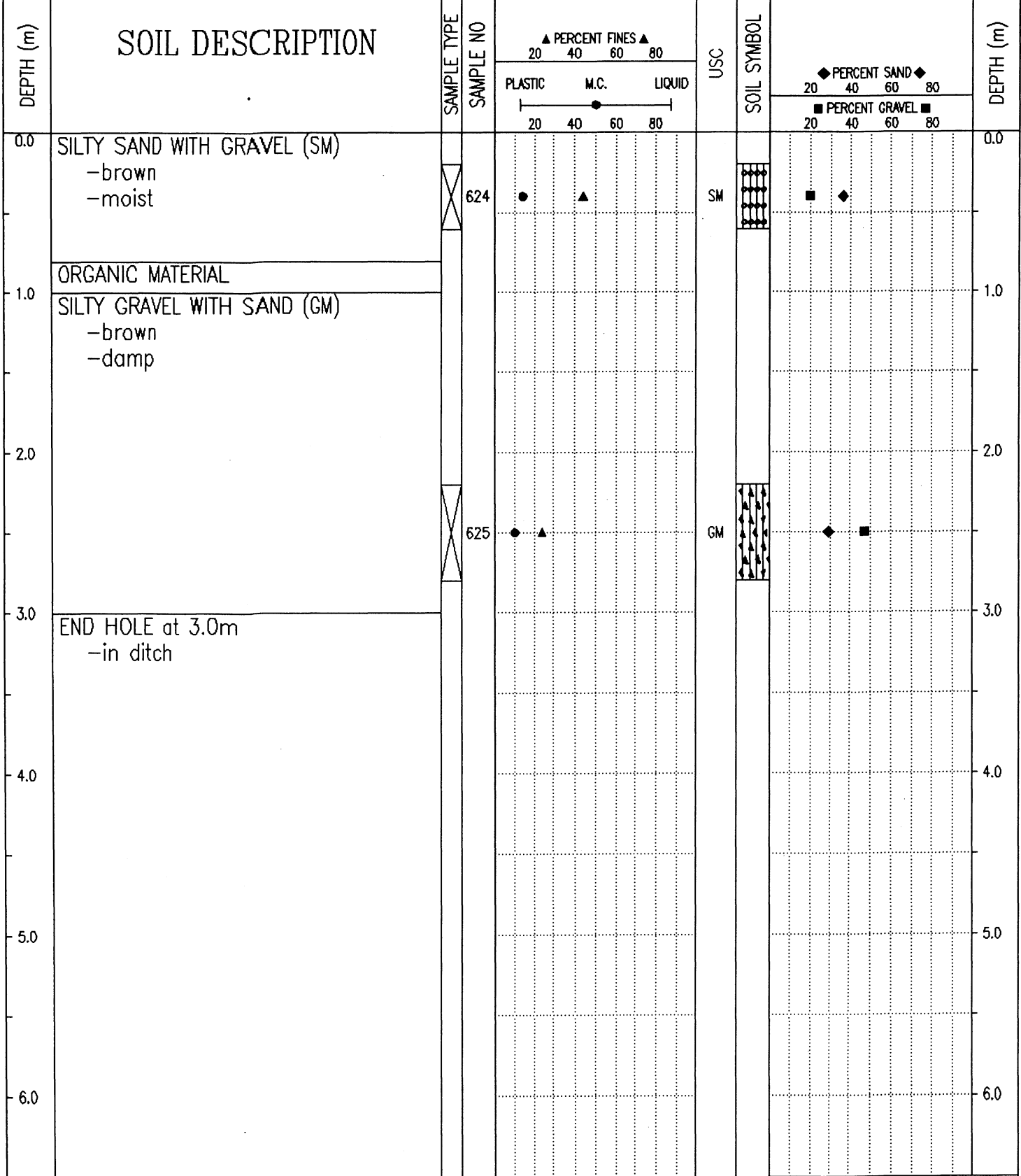
Fig. No:

COMPLETION DEPTH: 0.5 m

COMPLETE: 93/10/14

Page 1 of 1

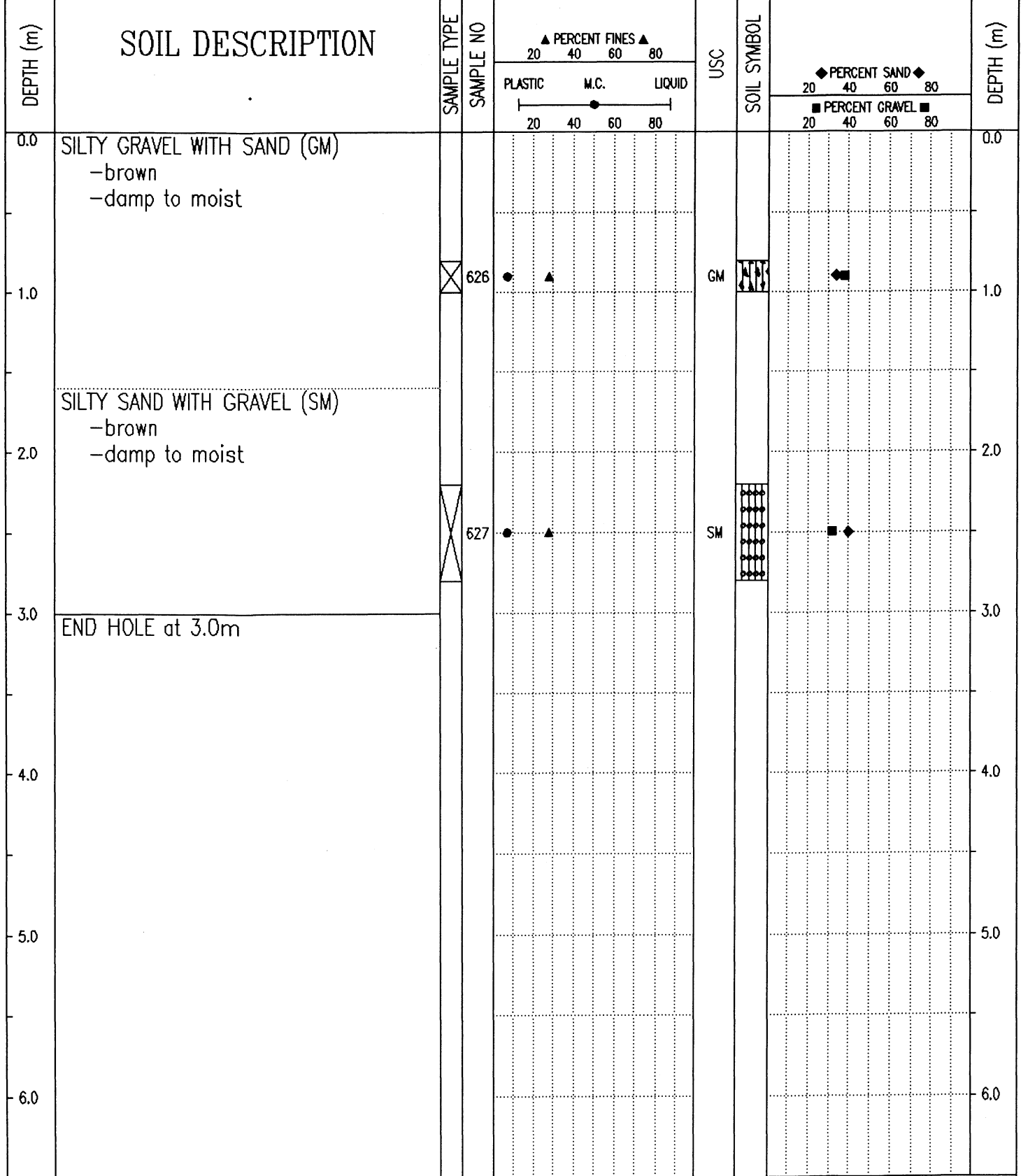
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 267-438
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1862+900 o/s 15m Lt.	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" 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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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	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 267-439
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1863+000 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: 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: 369-276
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0314
BACKHOE: HITACHI EX 200 LC	LOCATION: Sta. 1863+025 o/s 15m Rt.	ELEVATION: 0.00 (m)

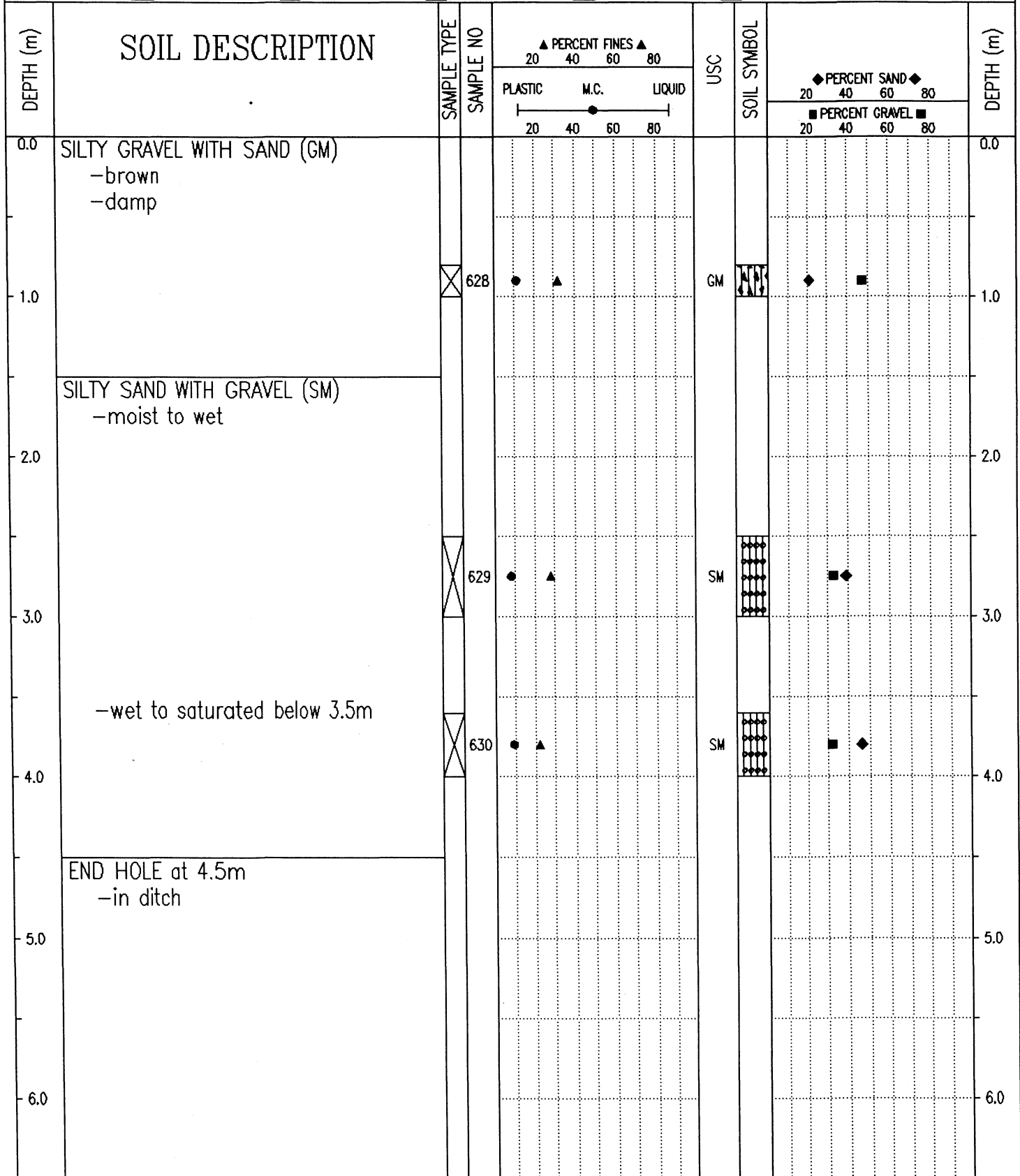
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				20	40	60			80	20	40	60	
0.0	ORGANIC MATERIAL -smooth easy digging											0.0	
1.0	SILTY GRAVEL WITH SAND (GM) -brown -moist -cobbles -sub-angular to rounded -noisy easy digging		574	▲	●		GM	◆	■			1.0	
2.0												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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LOGGED BY: DT	COMPLETION DEPTH: 2.5 m
REVIEWED BY:	COMPLETE: 95/07/13
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 267-440
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1863+100	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: 4.5 m
COMPLETE: 93/10/14

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 267-441
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1863+185	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		
0.0	ROAD FILL												0.0
1.0	ORGANIC MATERIAL												1.0
2.0	SILT WITH SAND (ML) -black -wet	<input checked="" type="checkbox"/>	631				ML						2.0
3.0	END HOLE at 3.0m												3.0
4.0													4.0
5.0													5.0
6.0													6.0

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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: 369-277
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0314
BACKHOE: HITACHI EX 200 LC	LOCATION: Sta. 1863+225 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		

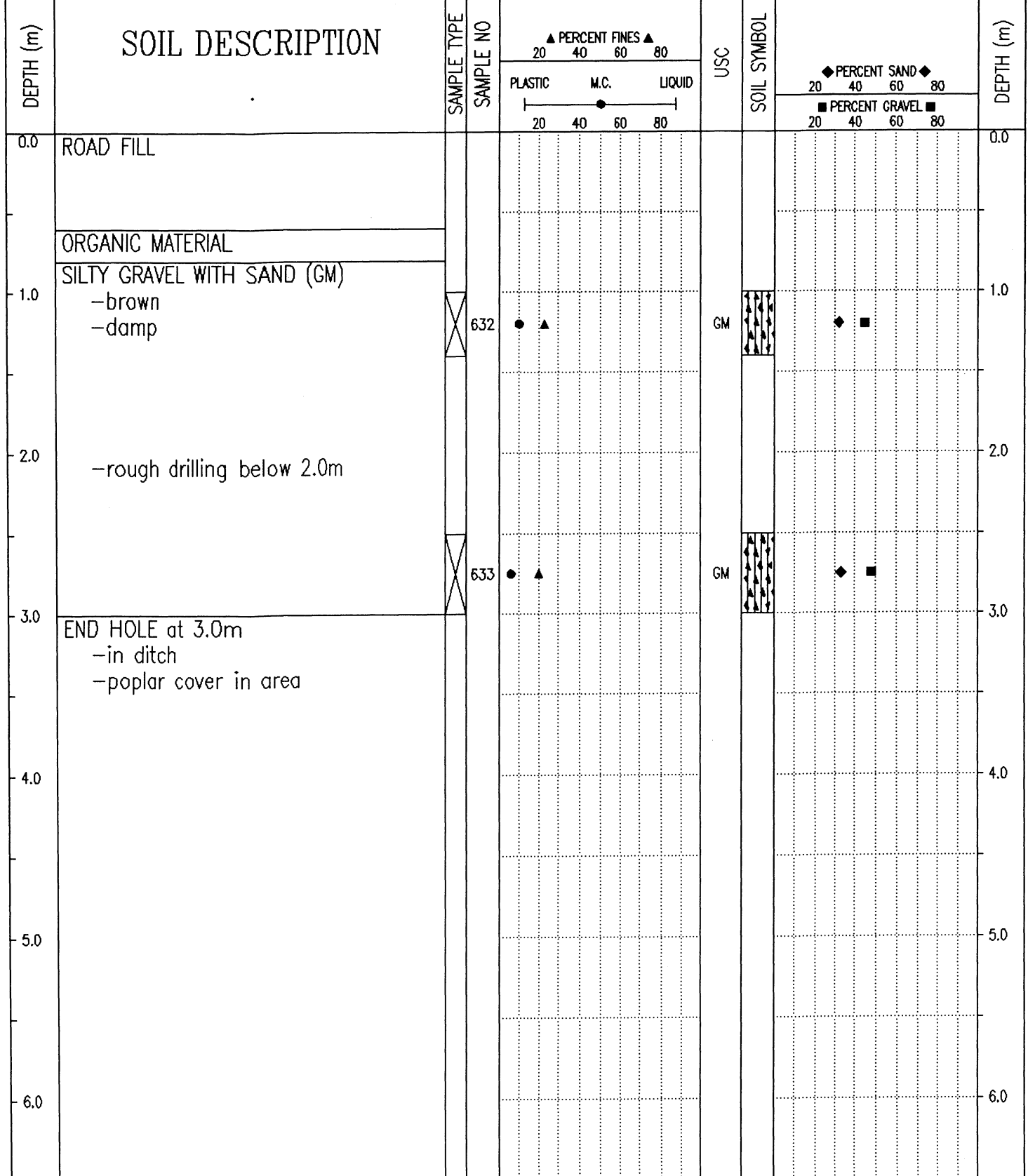
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)
				20	40	60			80	20		
0.0	ORGANIC MATERIAL -smooth easy digging											0.0
	ASH -brown -organics -smooth easy digging											
1.0	ORGANIC MATERIAL -black -frozen (Vx) with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

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Fig. No:

COMPLETION DEPTH: 3.0 m
COMPLETE: 95/07/13

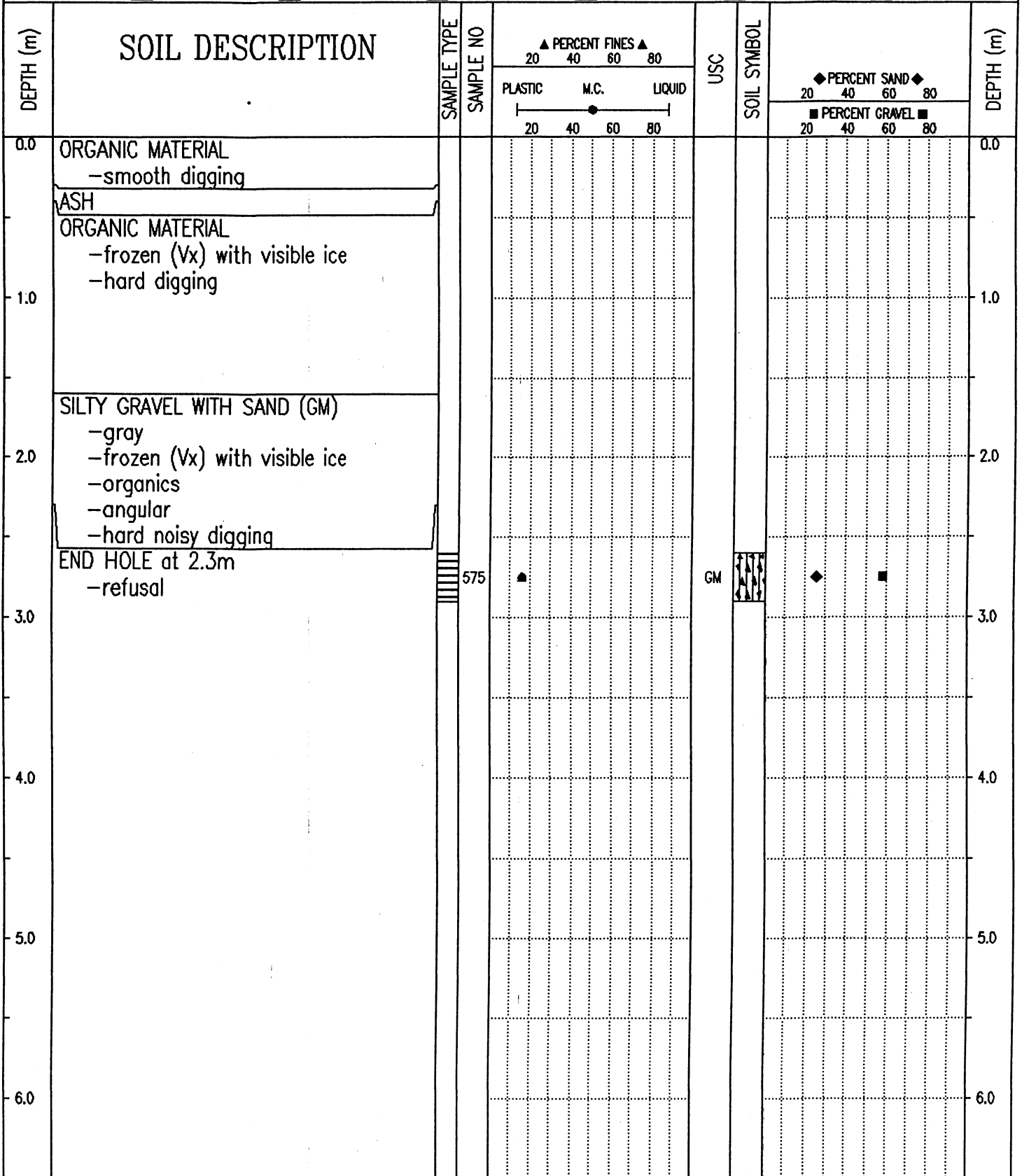
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 268-442
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1863+350 o/s 10m Lt.	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<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
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 369-278
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0314
BACKHOE: HITACHI EX 200 LC	LOCATION: Sta. 1863+350 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

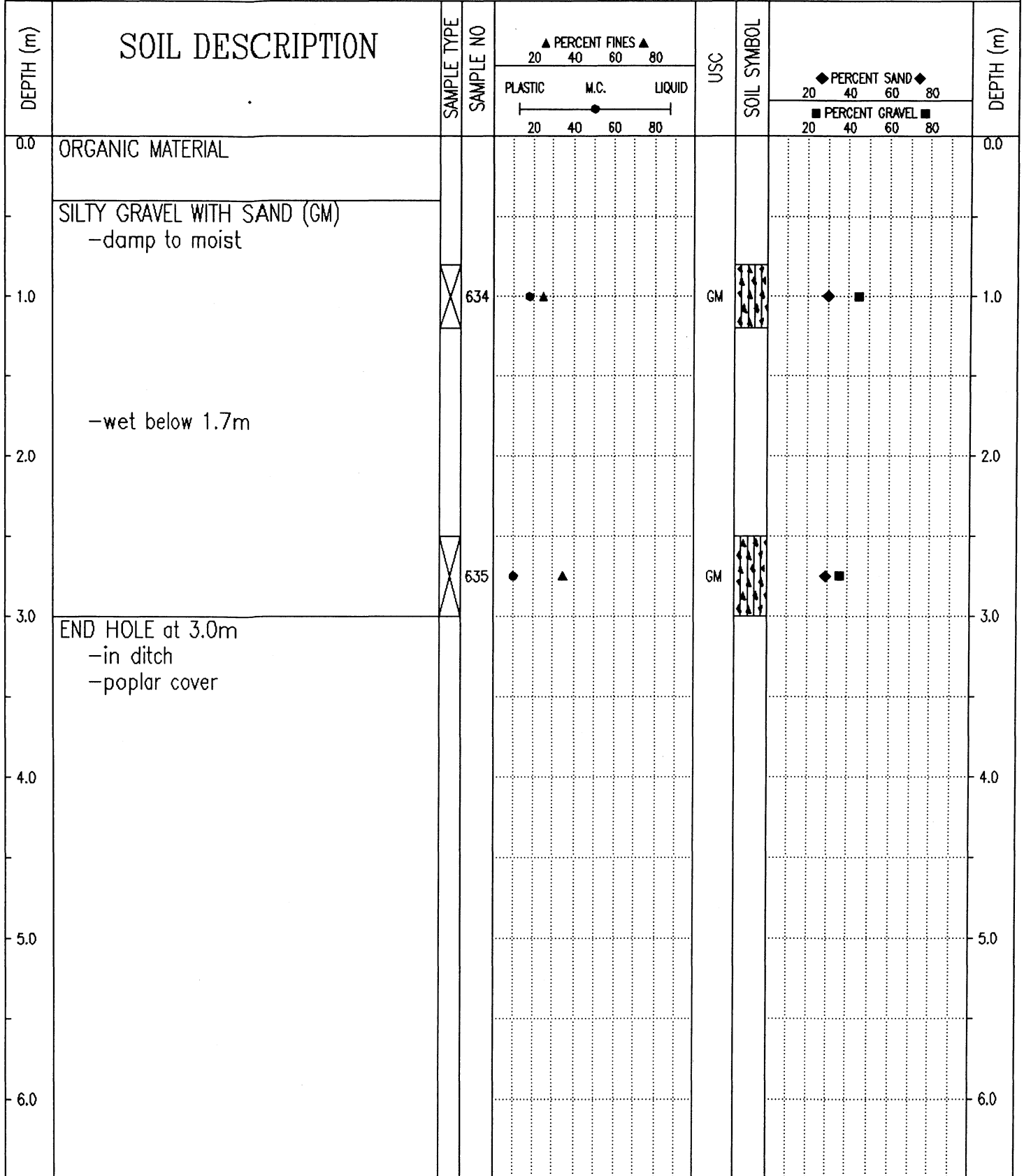


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Fig. No:

COMPLETION DEPTH: 2.3 m
COMPLETE: 95/07/13

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 268-443
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1863+450	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:

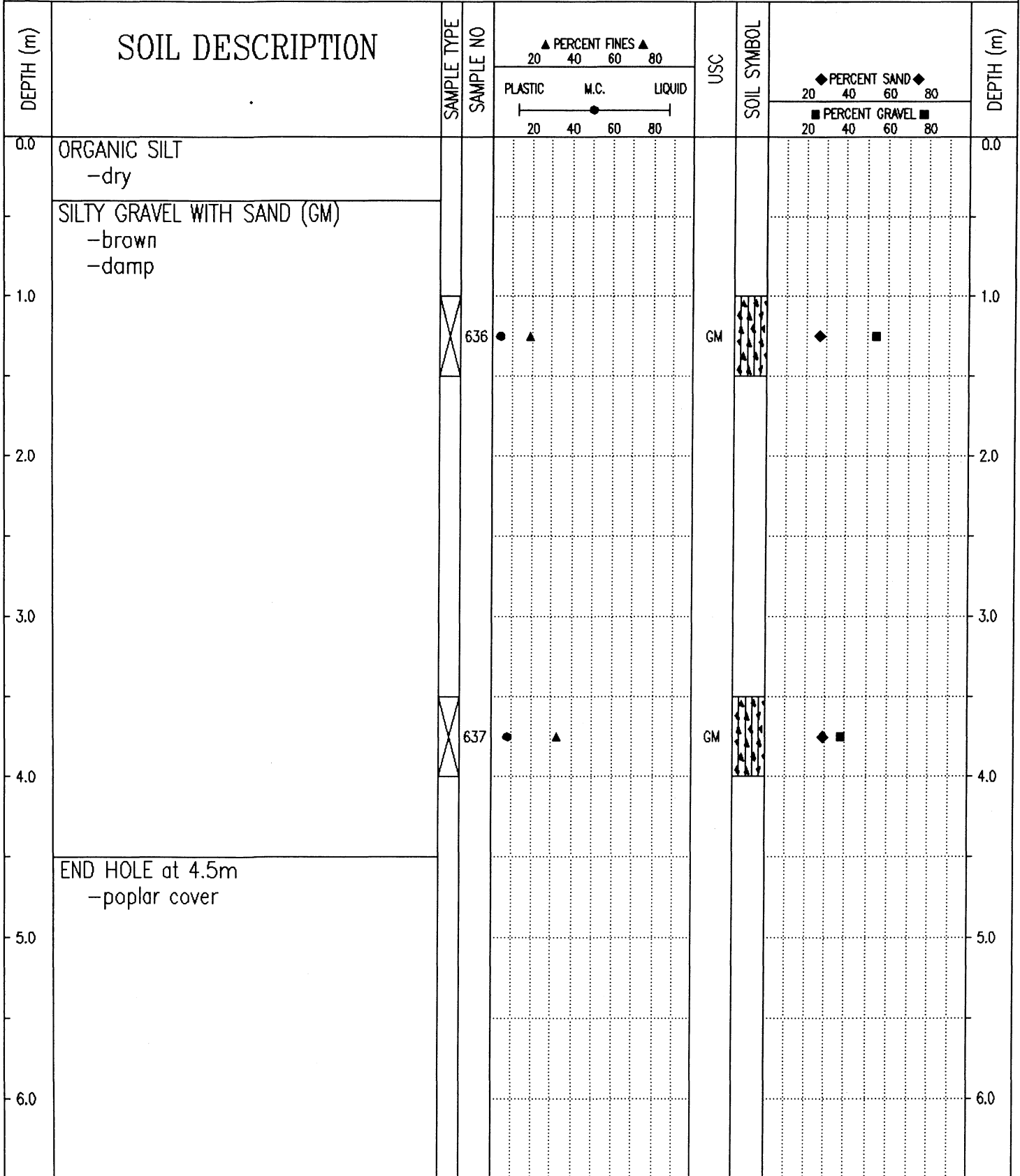
Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 93/10/14

Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 268-444
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1863+550 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			



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Fig. No:

COMPLETION DEPTH: 4.5 m
COMPLETE: 93/10/14

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 366-228
ENGINEERING-CAPITAL	SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: Sta. 1863+557 o/s 17m Rt.	ELEVATION: 0.00 (m)

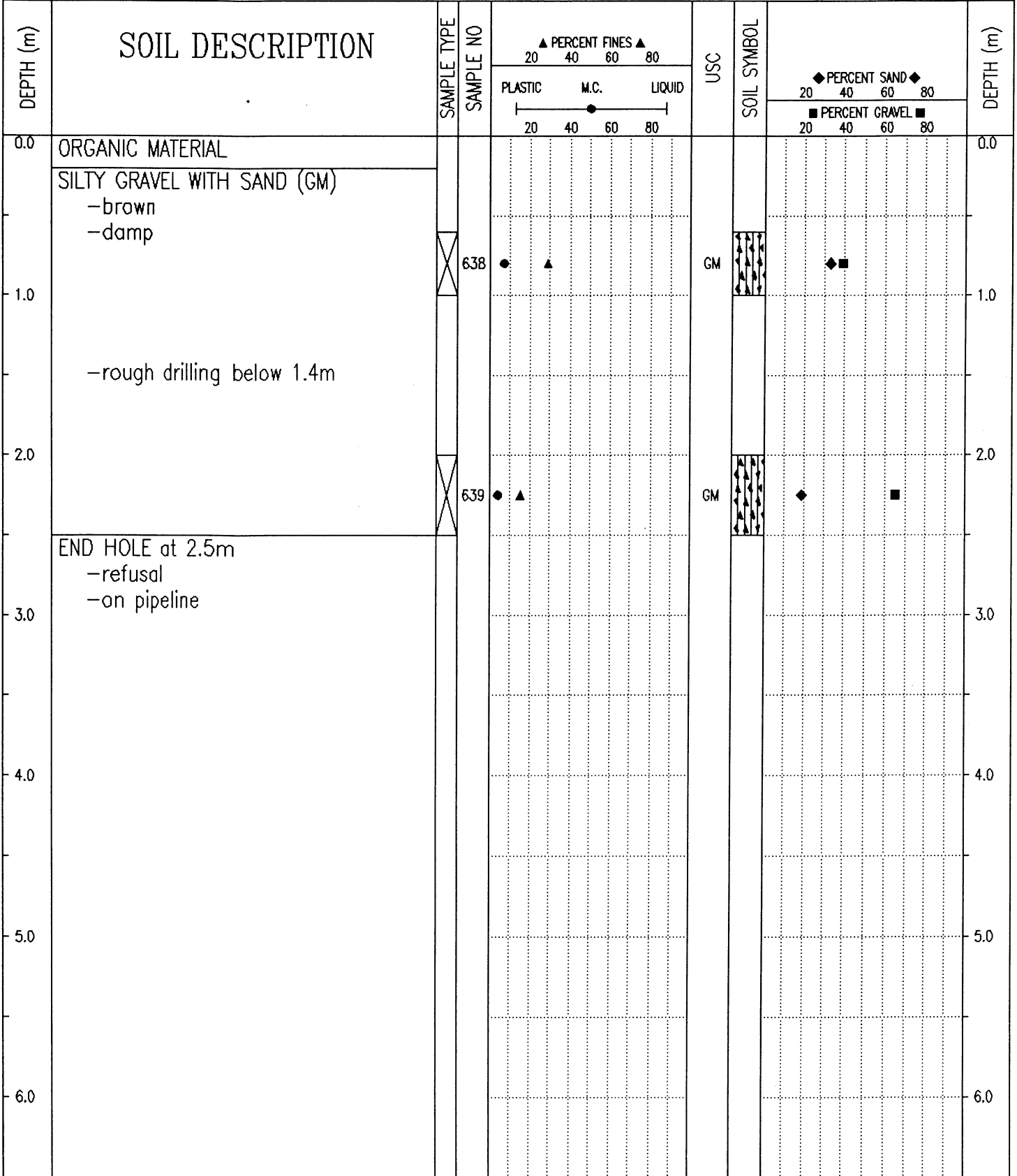
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE

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 -damp -smooth drilling										0.0
3.0	SILTY GRAVEL WITH SAND (GM) -gray -damp -grindy drilling	<input checked="" type="checkbox"/>	520	●	▲		GM		◆	■	3.0
4.0	SILTY SAND WITH GRAVEL (SM) -gray -wet -grindy drilling	<input checked="" type="checkbox"/>	521	●	▲		SM		◆		4.0
4.2	END HOLE at 4.2m										4.2

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LOGGED BY: CC	COMPLETION DEPTH: 4.2 m
REVIEWED BY:	COMPLETE: 95/06/20
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 268-445
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL:CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1863+600 o/s 200m 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: 2.5 m
COMPLETE: 93/10/15

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 268-447
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1863+700	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		

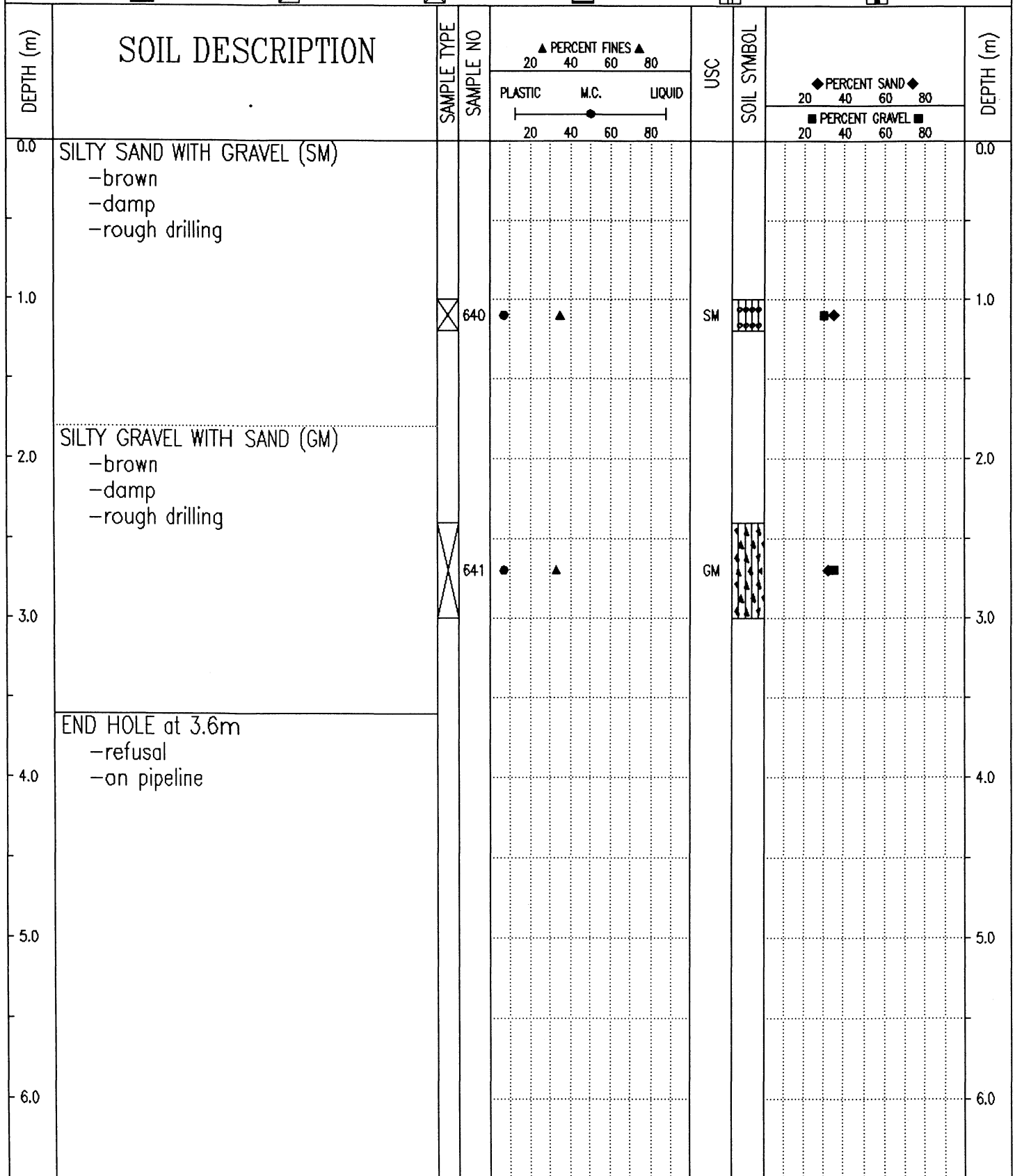
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)
				20	40	60			80	20		
0.0	ROAD FILL											0.0
1.0	ORGANIC MATERIAL -no sample taken											1.0
2.0	END HOLE at 1.2m -refusal -in ditch											2.0
3.0												3.0
4.0												4.0
5.0												5.0
6.0												6.0

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LOGGED BY: GC
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Fig. No:

COMPLETION DEPTH: 1.2 m
COMPLETE: 93/10/15

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 268-446
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1863+700 o/s 200m 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



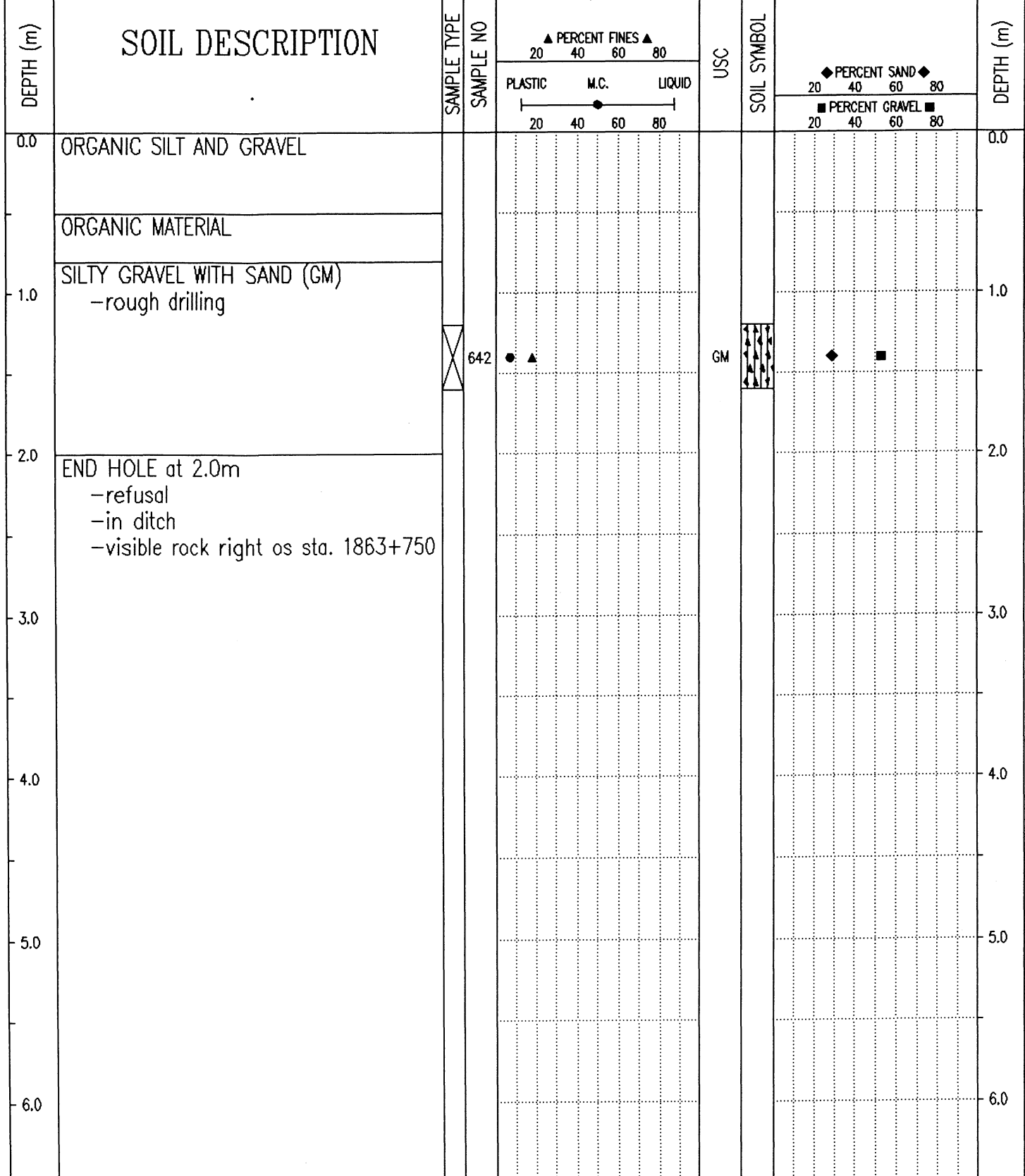
Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 3.6 m
	REVIEWED BY:	COMPLETE: 93/10/15
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 366-229
ENGINEERING-CAPITAL	SEGMENT 14	Project No: 092-202101-0314
DRILL: B40L 150mm Dia. SOLID STEM AUGER	LOCATION: Sta. 1863+775 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	ORGANIC MATERIAL -dark brown -damp -smooth drilling										0.0
1.0	END HOLE at 1.0m -refusal -rock dust on bit -boulders to 2000mm on surface										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: CC	COMPLETION DEPTH: 1.0 m
	REVIEWED BY:	COMPLETE: 95/06/20
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 268-448
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1863+800	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

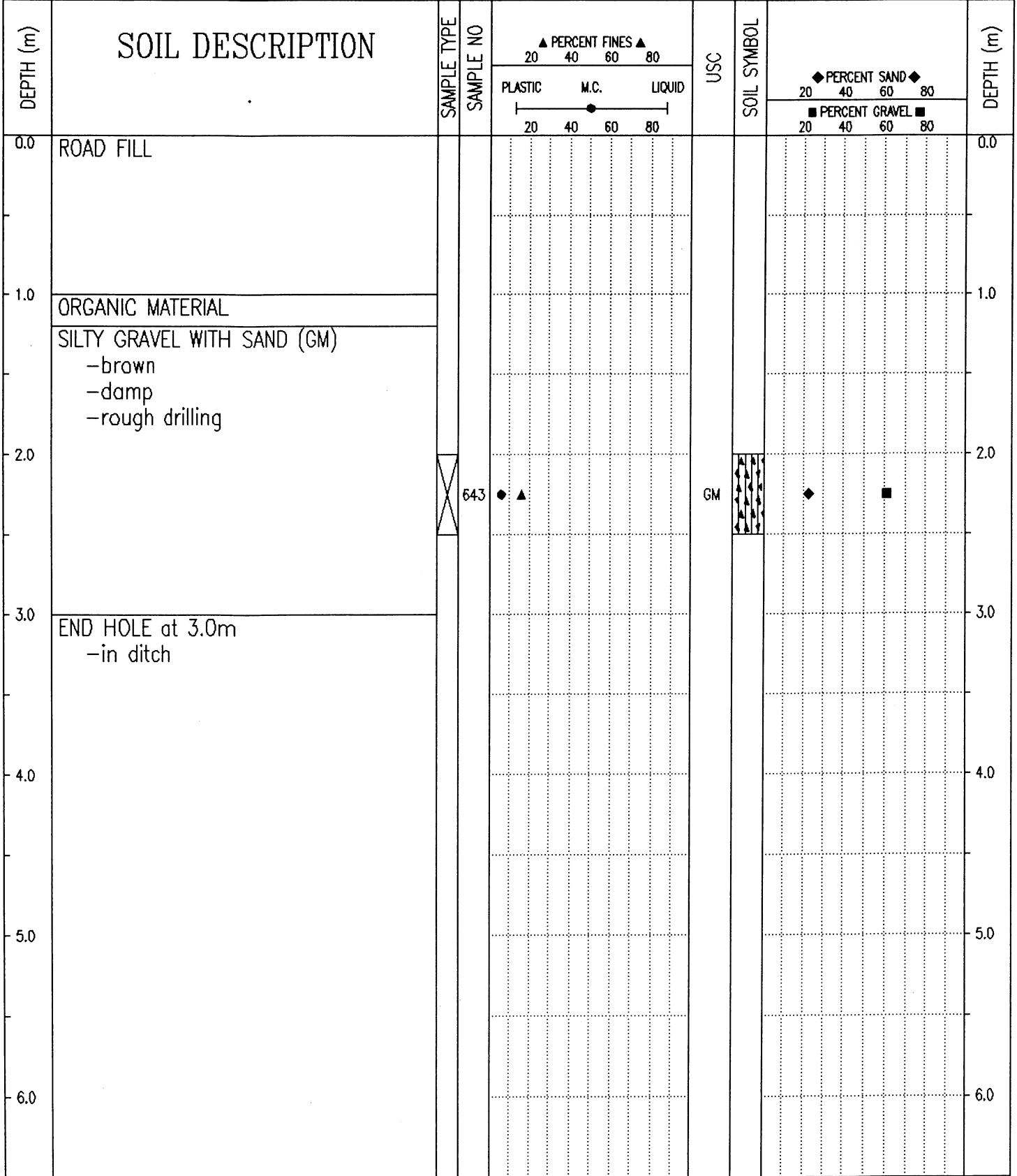


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LOGGED BY: GC	COMPLETION DEPTH: 2.0 m
REVIEWED BY:	COMPLETE: 93/10/15
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 268-449
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1863+900	ELEVATION: 0.00 (m)

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



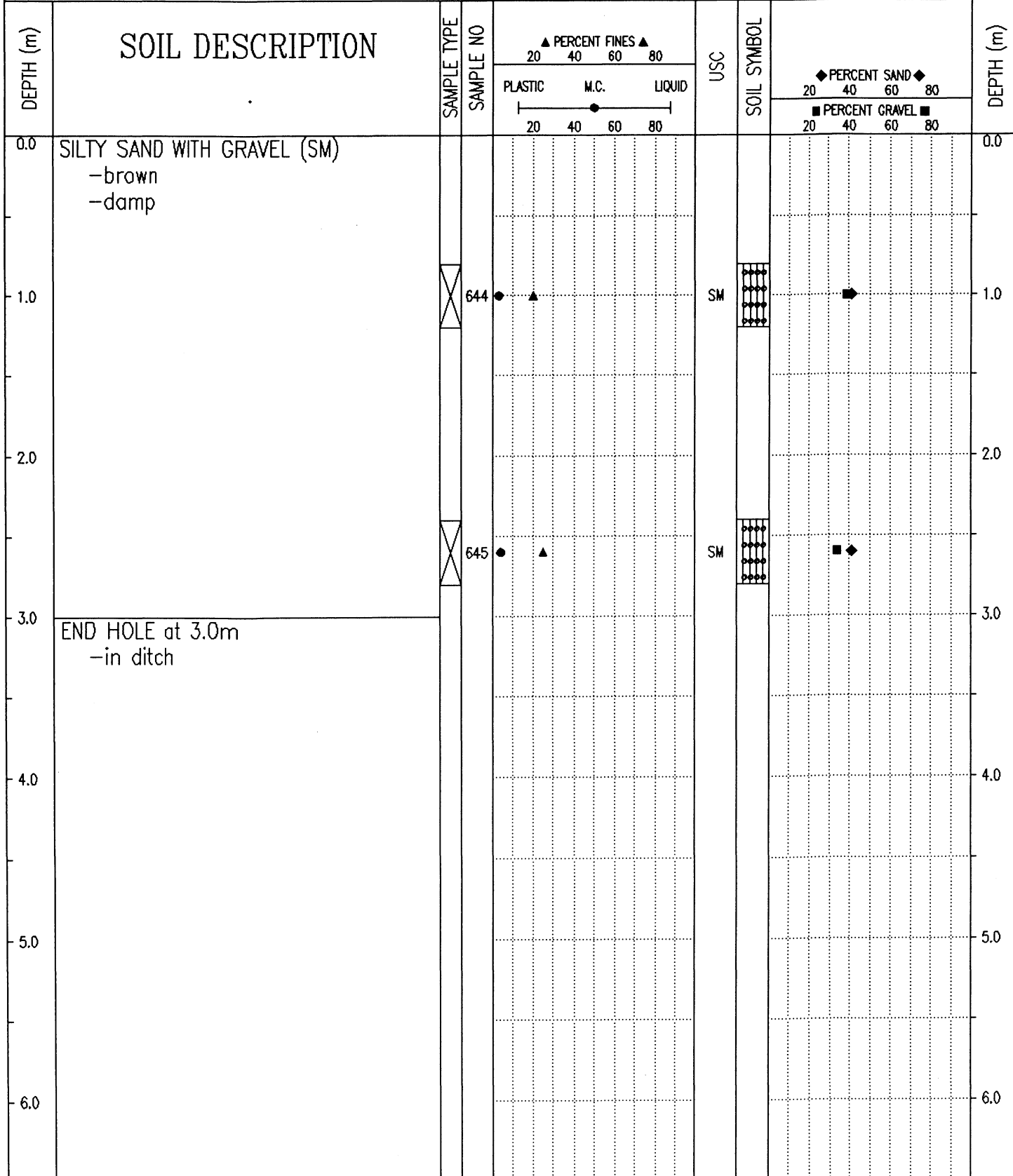
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LOGGED BY: GC
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 3.0 m
COMPLETE: 93/10/15
Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 268-450
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1864+000	ELEVATION: 0.00 (m)

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



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REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 93/10/15

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 369-279
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0314
BACKHOE: HITACHI EX 200 LC		LOCATION: Sta. 1864+050 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

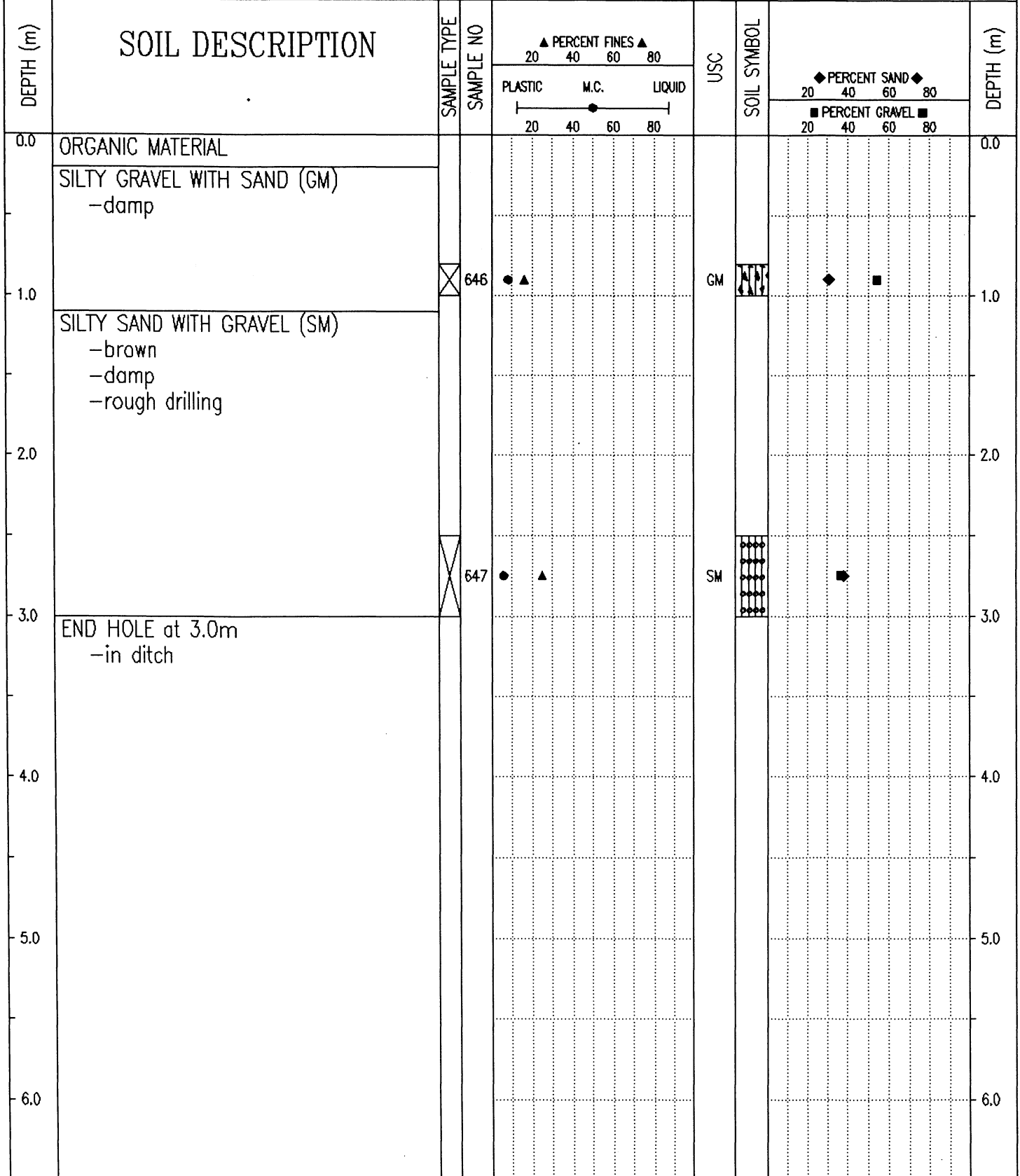
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND		PERCENT GRAVEL	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40		
0.0	ORGANIC MATERIAL -smooth digging -frozen (Vx) with visible ice below 0.3m -cobbles below 0.3m -angular -hard noisy digging below 0.3m										0.0	
2.0	SILTY GRAVEL WITH SAND (GM) -gray -frozen (Vx) with visible ice -harder noisy digging		576	●	▲		GM	◆	■		2.0	
2.4	END HOLE at 2.4m -refusal										2.4	
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: 2.4 m
REVIEWED BY:	COMPLETE: 95/07/13
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 268-451
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1864+100	ELEVATION: 0.00 (m)

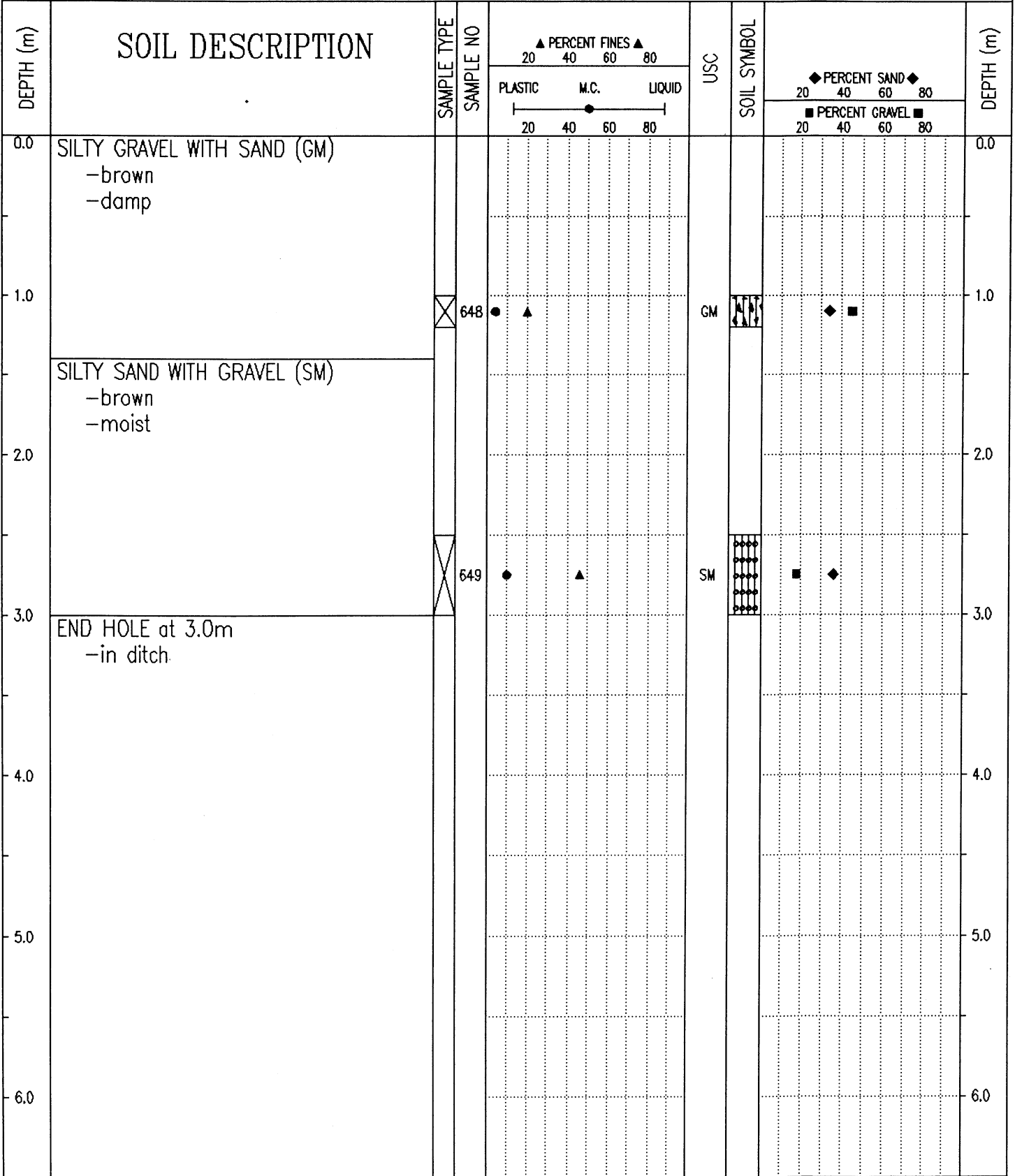
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



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	REVIEWED BY:	COMPLETE: 93/10/15
	Fig. No:	Page 1 of 1

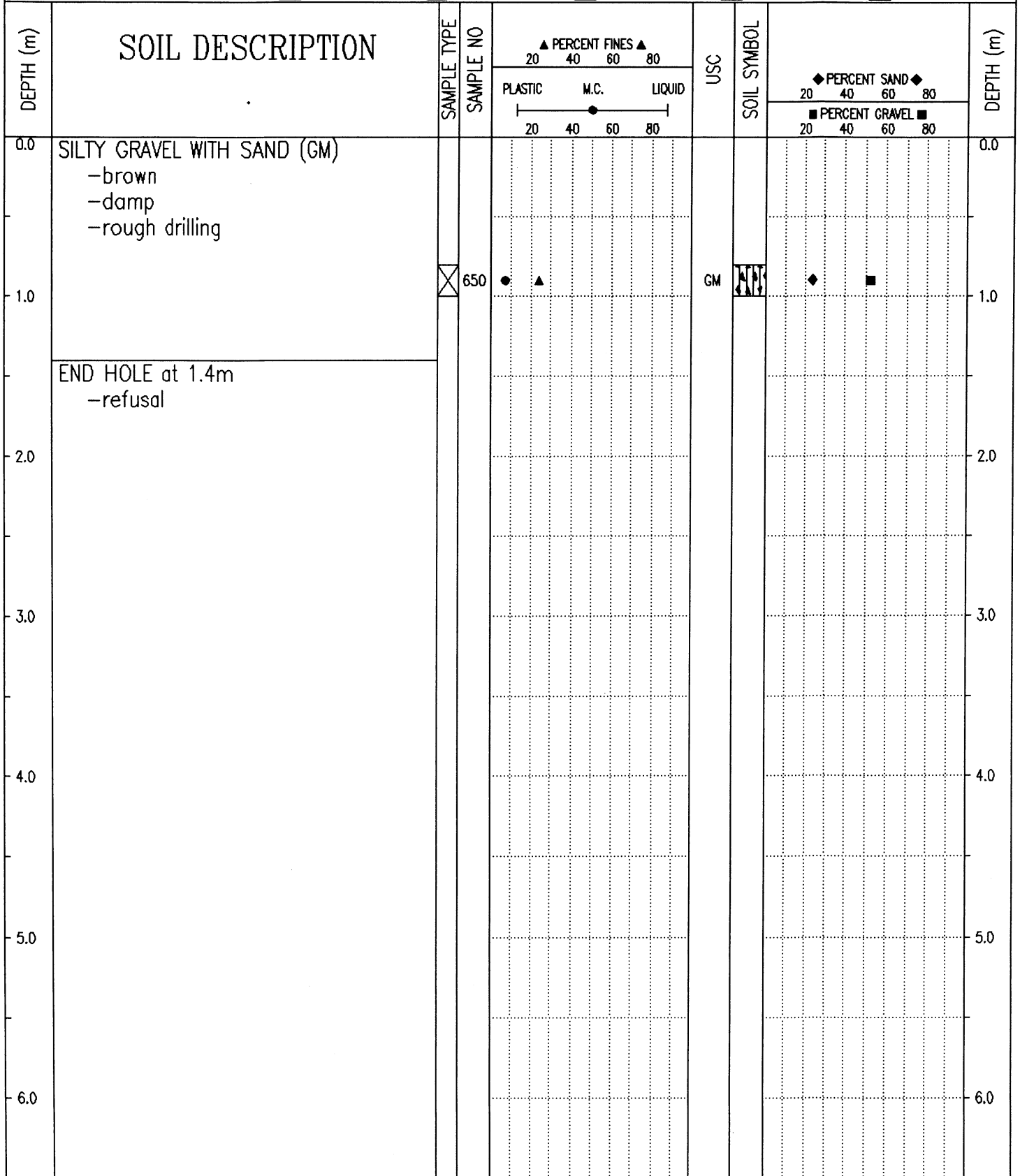
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 268-452
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1864+225	ELEVATION: 0.00 (m)

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: 93/10/15
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 268-453
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL:CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1864+320	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			



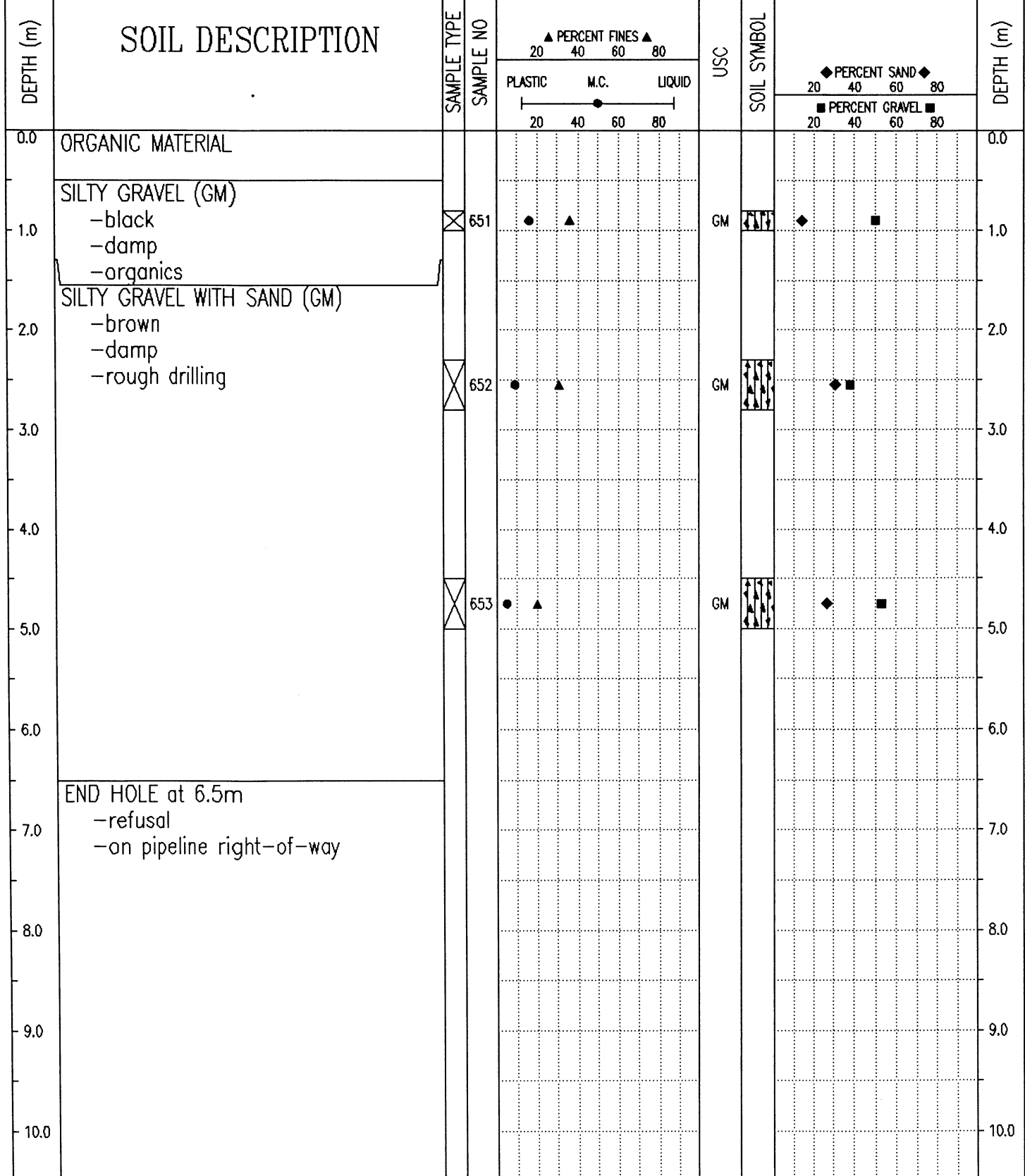
Government of Yukon
Transportation Engineering

LOGGED BY: GC
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 1.4 m
COMPLETE: 93/10/15

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 268-454
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1864+320 o/s 150m Rt.	ELEVATION: 0.00 (m)

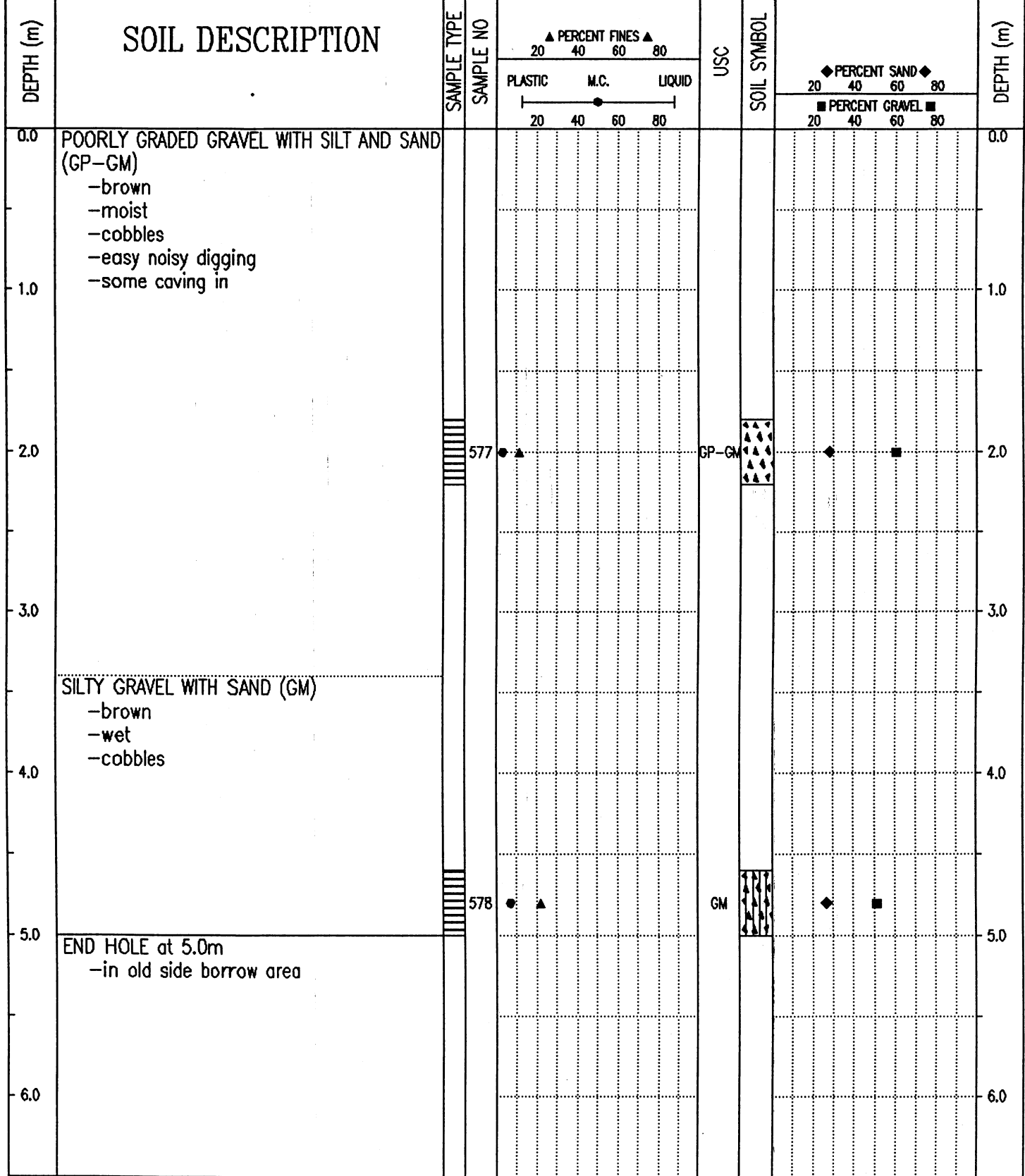
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
	REVIEWED BY:	COMPLETE: 93/10/15
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 369-280
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0314
BACKHOE: HITACHI EX 200 LC	LOCATION: Sta. 1864+325 o/s 5m Rt.	ELEVATION: 0.00 (m)

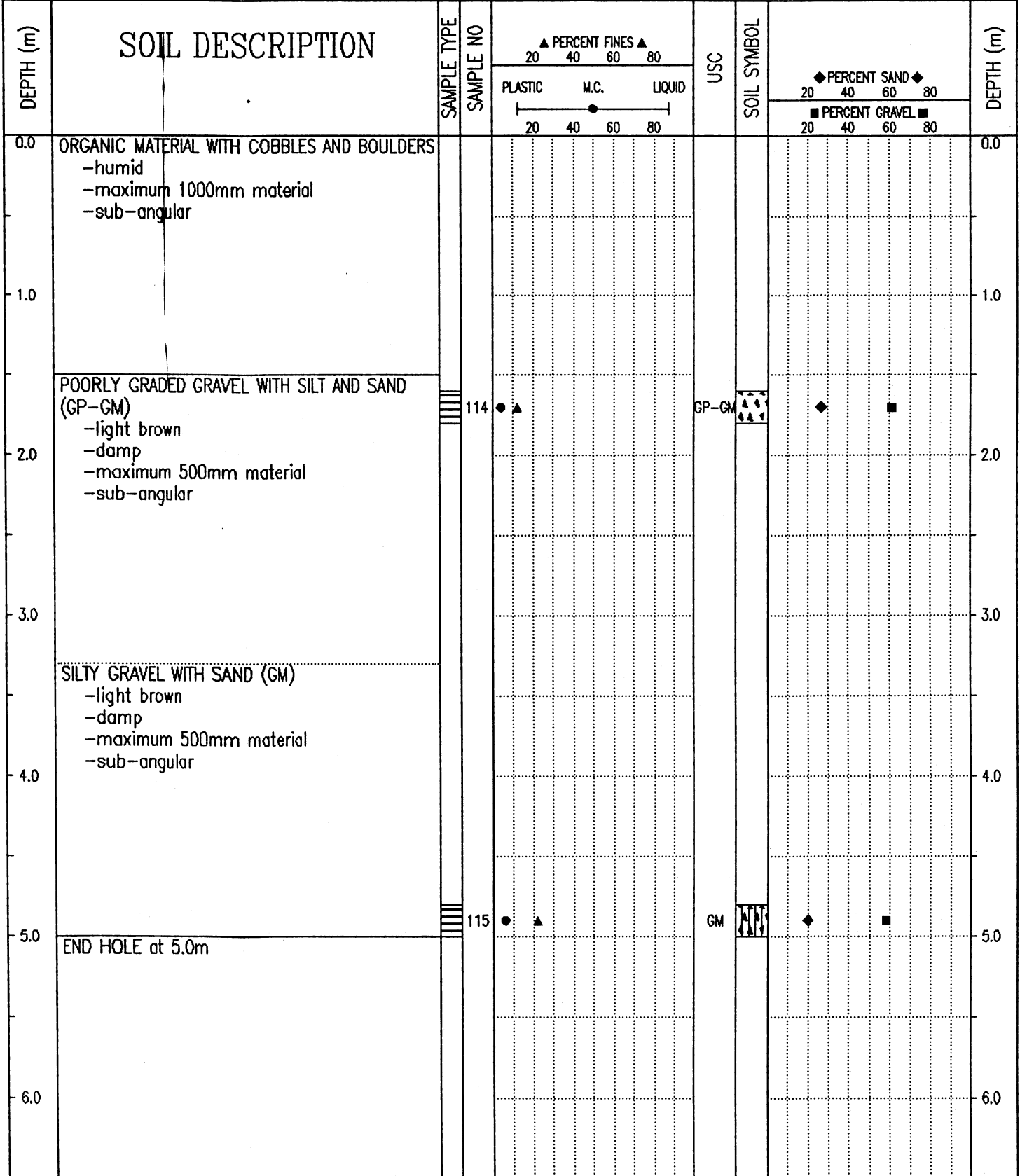
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



Government of Yukon Transportation Engineering	LOGGED BY: DT	COMPLETION DEPTH: 5.0 m
	REVIEWED BY:	COMPLETE: 95/07/13
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 382-545
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172	LOCATION: Sta. 1864+350 o/s 10m Lt.	ELEVATION: 0.00 (m)

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



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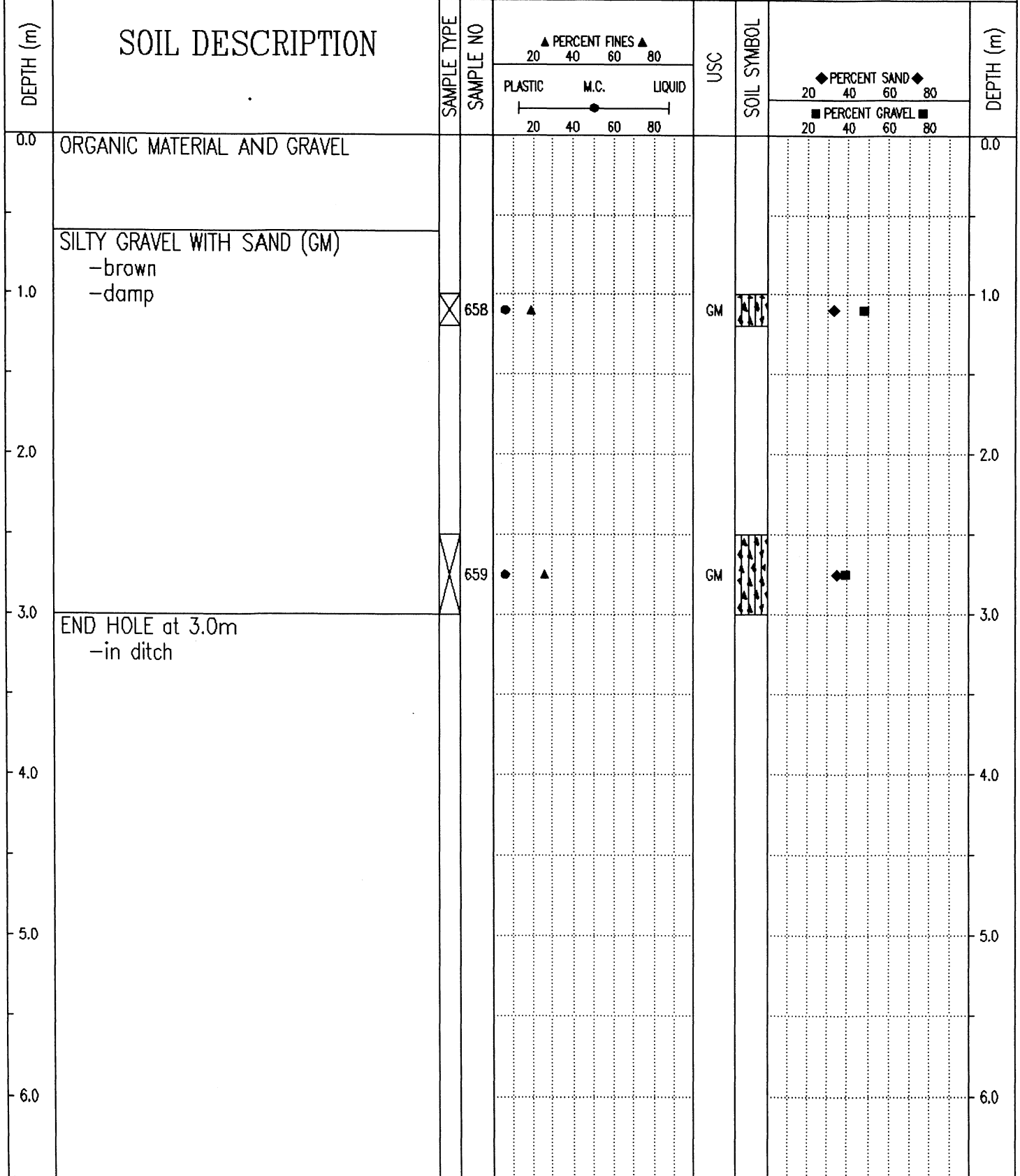
Fig. No:

COMPLETION DEPTH: 5.0 m

COMPLETE: 95/09/23

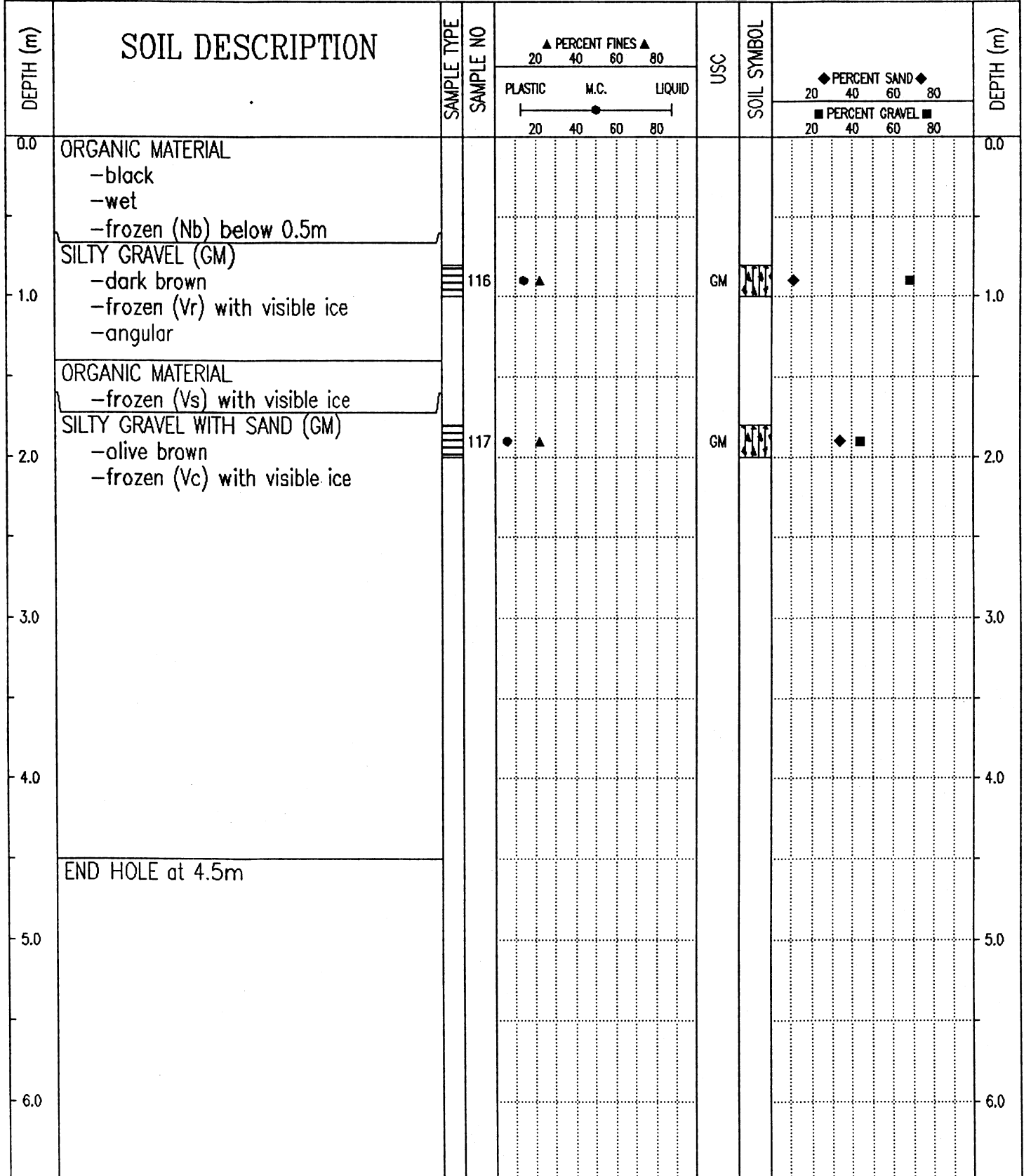
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 268-457
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1864+425	ELEVATION: 0.00 (m)

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: 93/10/15
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 382-546
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172		LOCATION: Sta. 1864+475 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
REVIEWED BY:
Fig. No:

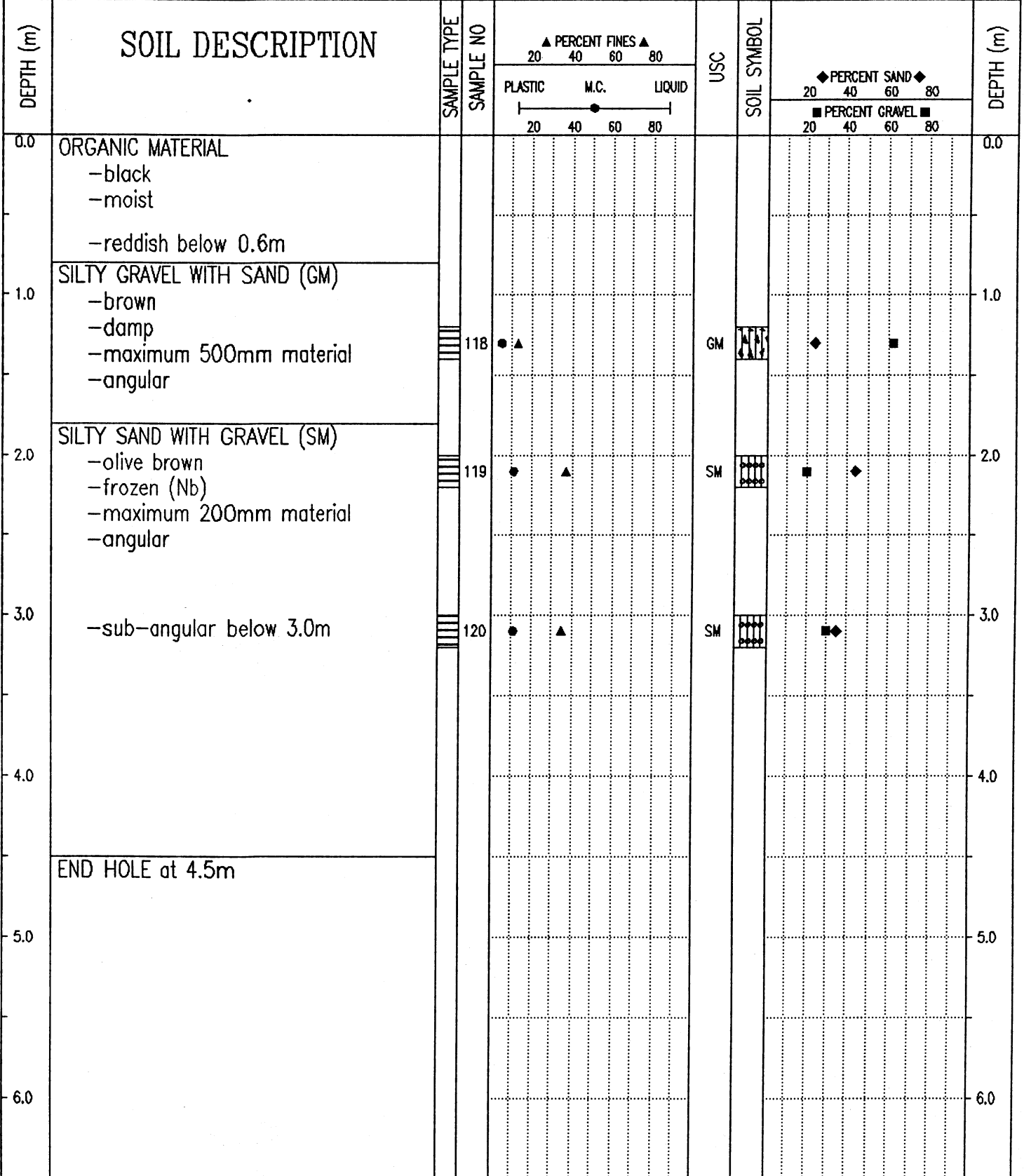
COMPLETION DEPTH: 4.5 m
COMPLETE: 95/09/24

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 268-458
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1864+525	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	80	20	
0.0	ORGANIC MATERIAL													0.0	
0.0 - 1.0	SILTY GRAVEL WITH SAND (GM) -brown -damp -rough drilling														
1.0		<input checked="" type="checkbox"/>	660	●	▲			GM	◆	■				1.0	
3.0		<input checked="" type="checkbox"/>	661	●	▲			GM	◆	■				3.0	
3.0 - 6.0	END HOLE at 3.0m -in ditch														

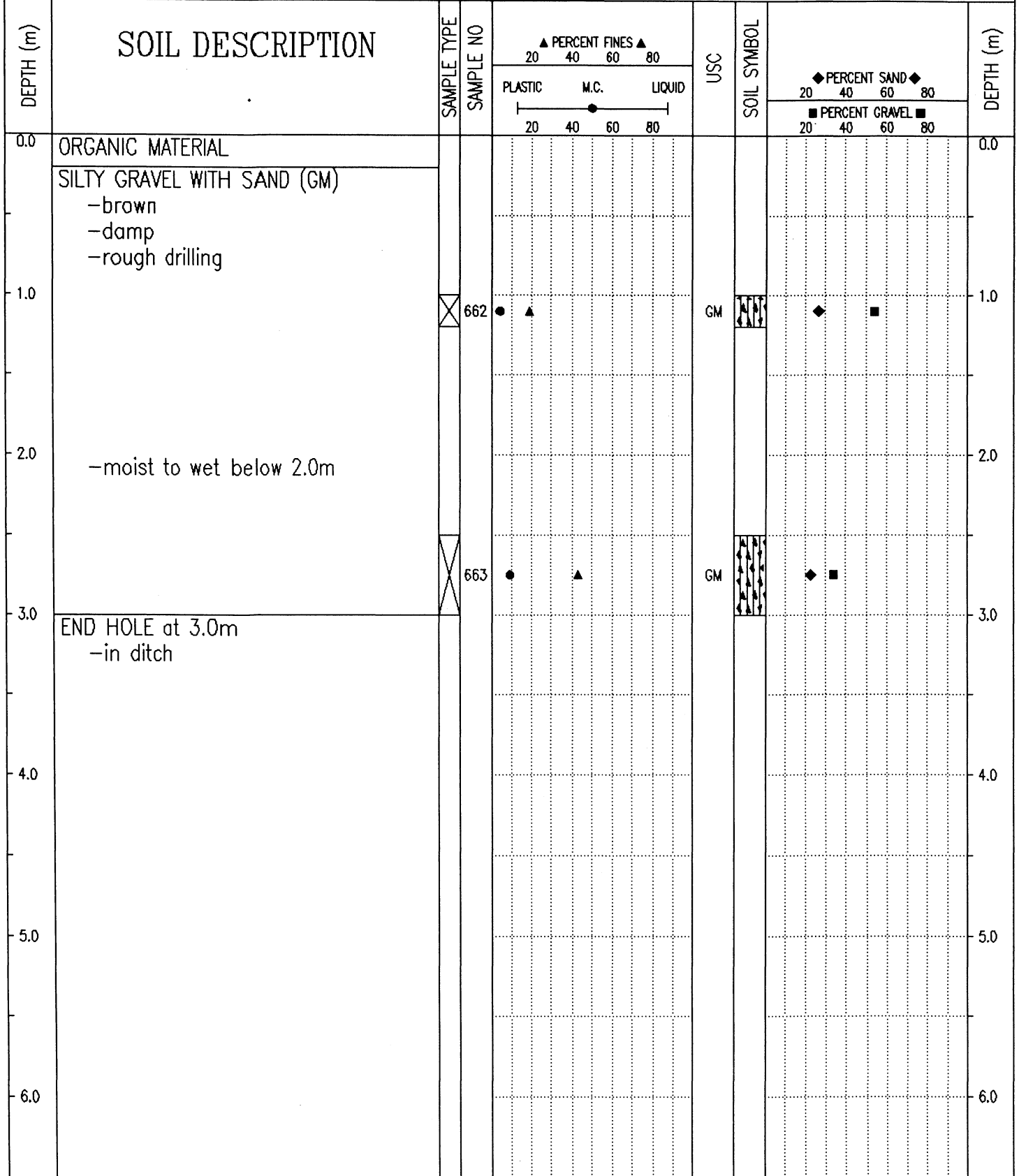
Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
	REVIEWED BY:	COMPLETE: 93/10/15
	Fig. No:	Page 1 of 1

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



96/01/23 11:07AM

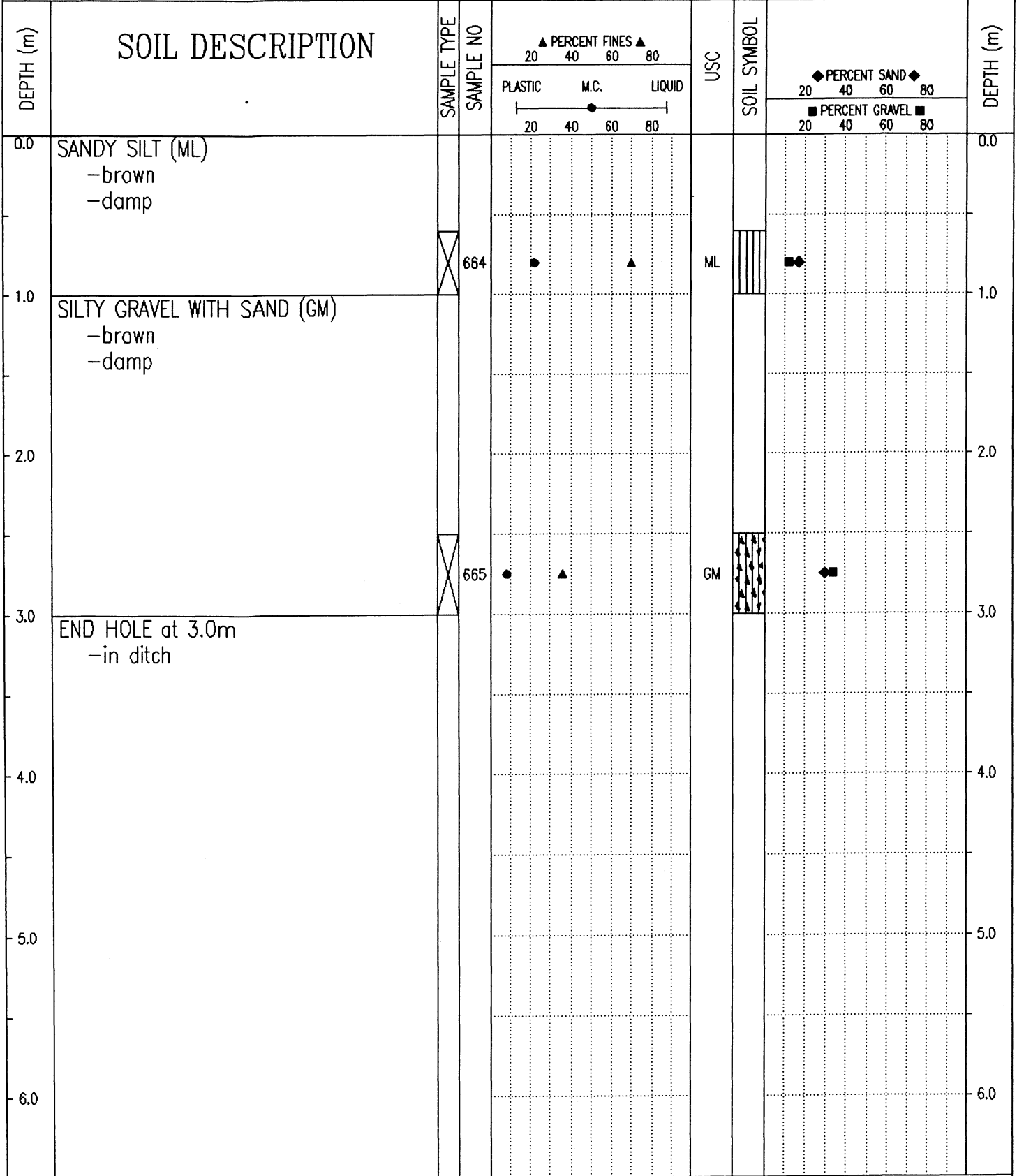
SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 268-459
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1864+625 o/s 3m Lt.	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE			



Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
	REVIEWED BY:	COMPLETE: 93/10/15
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 268-460
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1864+725 o/s 3m Lt.	ELEVATION: 0.00 (m)

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

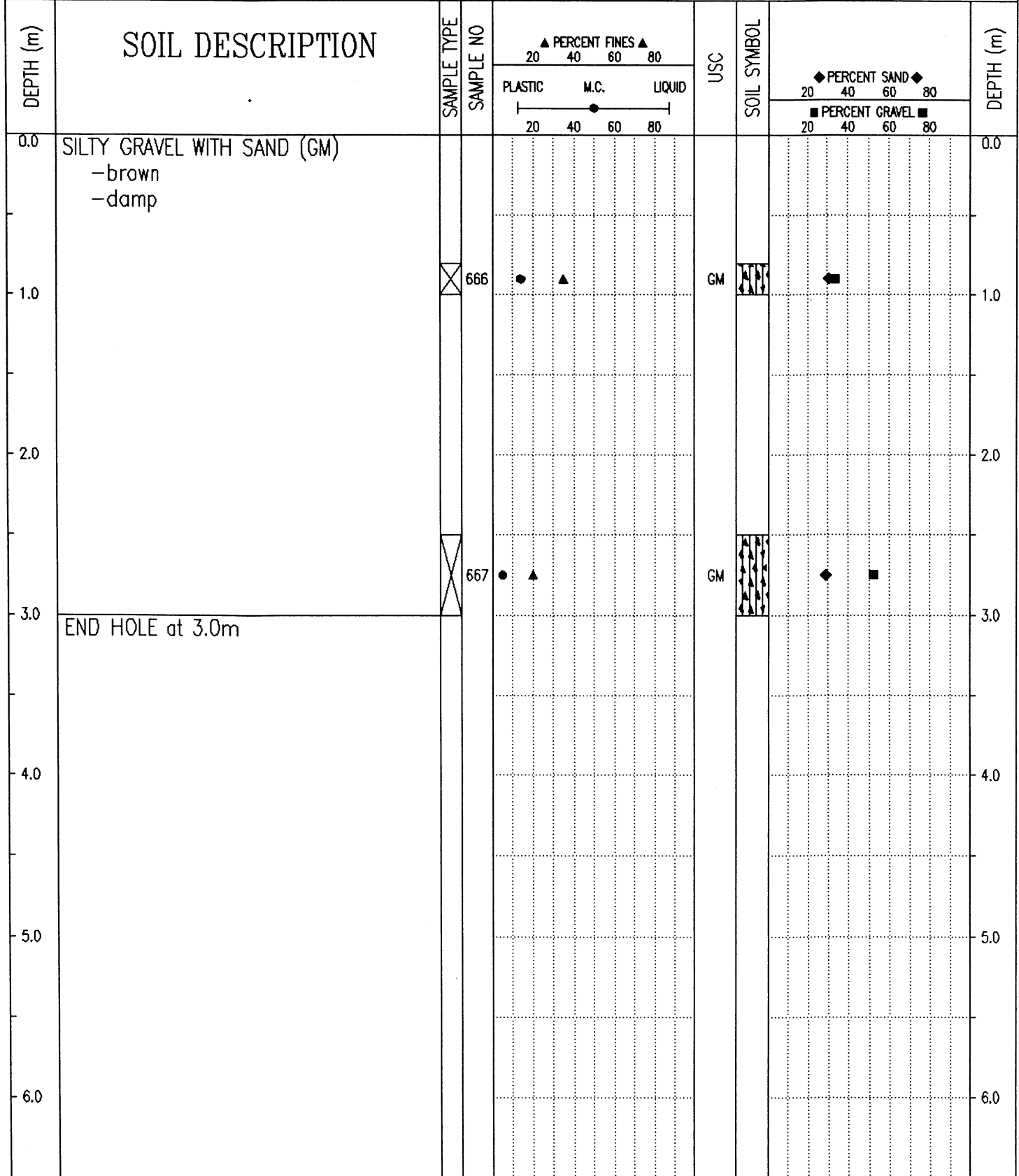


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LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 93/10/15
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 269-461
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1864+725 o/s 7m Lt.	ELEVATION: 0.00 (m)

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



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LOGGED BY: GC

REVIEWED BY:

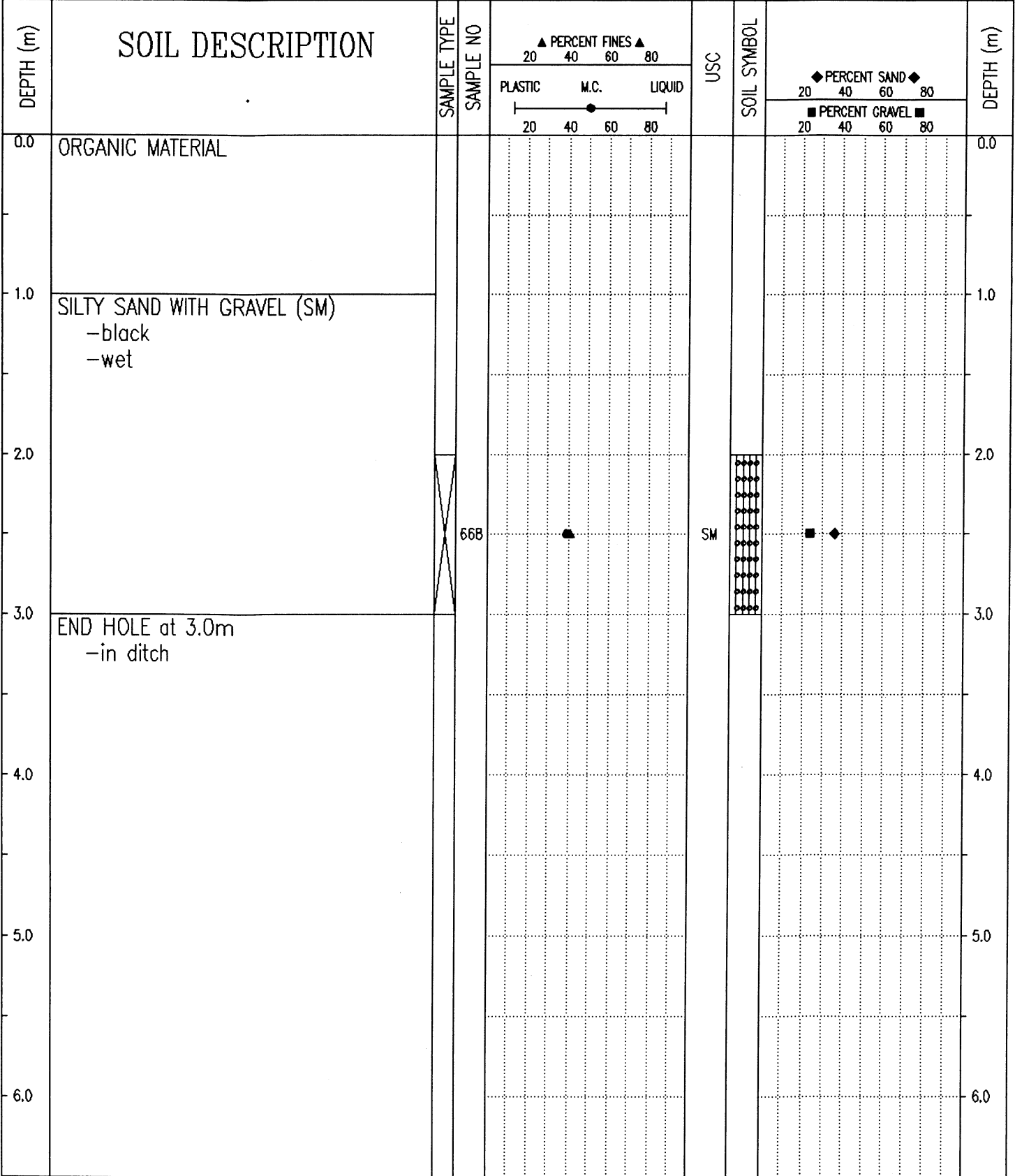
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COMPLETION DEPTH: 3.0 m

COMPLETE: 93/10/15

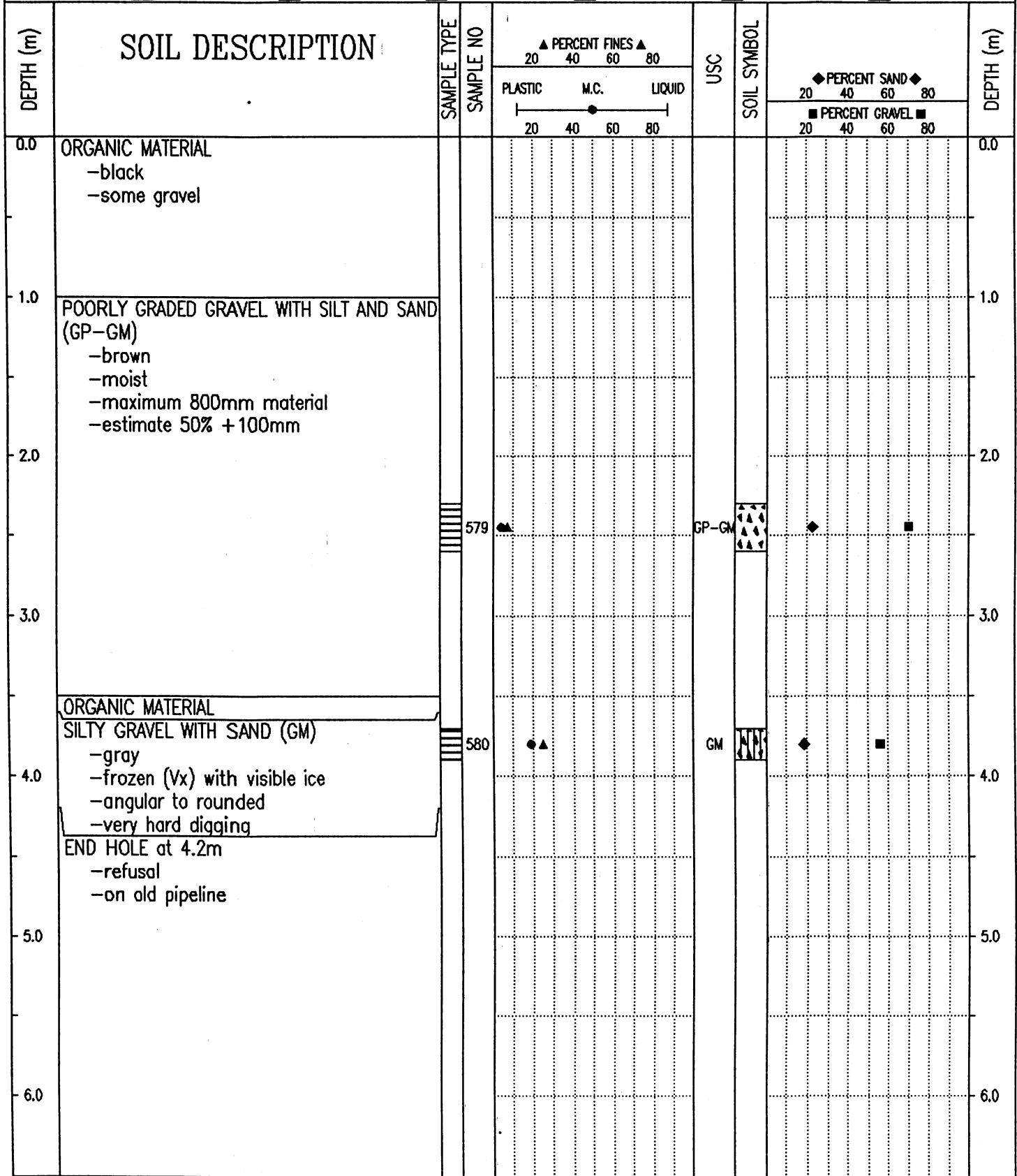
Page 1 of 1

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



94/02/07 01:56PM

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 370-282
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI EX 200 LC	LOCATION: Sta. 1865+025 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: DT	COMPLETION DEPTH: 4.2 m
REVIEWED BY:	COMPLETE: 95/07/13
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 269-463
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1865+100	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 SILT										0.0	
	ORGANIC MATERIAL											
	-no sample taken											
1.0	END HOLE at 1.0m -refusal -in ditch										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: 93/10/15
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 370-281
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI EX 200 LC	LOCATION: Sta. 1865+100	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 -black -frozen (Vx) with visible ice below 0.2m -cobbles -angular										0.0	
1.0	ORGANIC SILTY GRAVEL -gray -frozen (Vx) with visible ice -cobbles -angular										1.0	
2.0	END HOLE at 1.4m -refusal										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: DT	COMPLETION DEPTH: 1.4 m
	REVIEWED BY:	COMPLETE: 95/07/13
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT SHAKWAK PROJECT TEST HOLE NO: 383-548

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

BACKHOE: HITACHI UH-172 LOCATION: Sta. 1865+100 o/s 18m 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			PERCENT GRAVEL ■		
0.0	ORGANIC MATERIAL -black -damp -cobbles and boulders to 500mm -sub-angular									0.0	
1.0	SILTY GRAVEL WITH SAND (GM) -dark brown -trace of organics -maximum 500mm material -angular -frozen (Vx) with visible ice below 1.4m		121				GM			1.0	
3.0	ORGANIC MATERIAL -black -frozen (Vs) with visible ice									3.0	
4.0	WELL-GRADED GRAVEL WITH SILT AND SAND (GW-GM) -brown -frozen (Vc) with visible ice -maximum 400mm material -sub-angular		122				GW-GM			4.0	
5.0	END HOLE at 3.5m -refusal									5.0	
6.0										6.0	

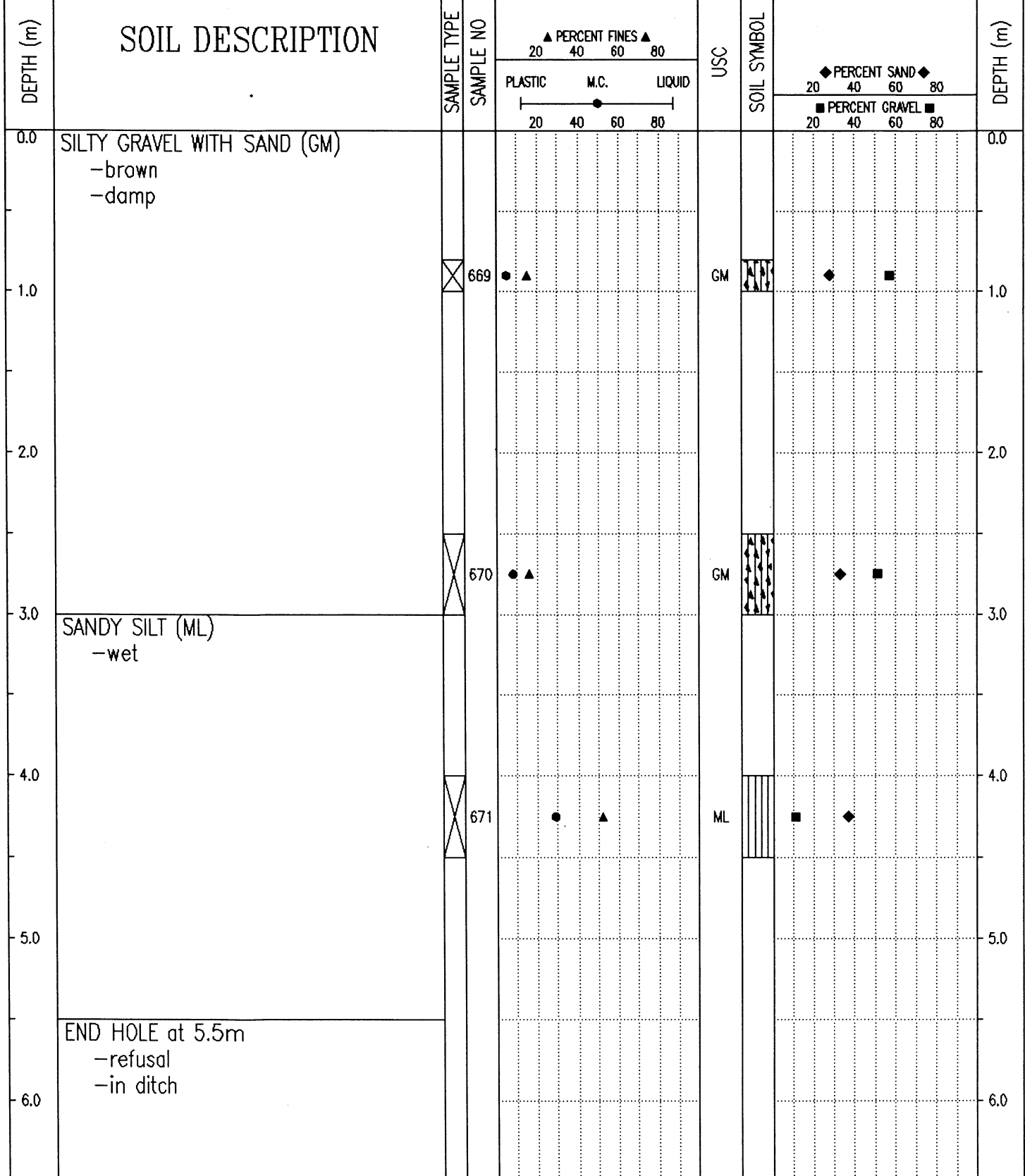
Government of Yukon
Transportation Engineering

LOGGED BY: KJ
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 3.5 m
COMPLETE: 95/09/24
Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 269-464
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1865+125	ELEVATION: 0.00 (m)

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



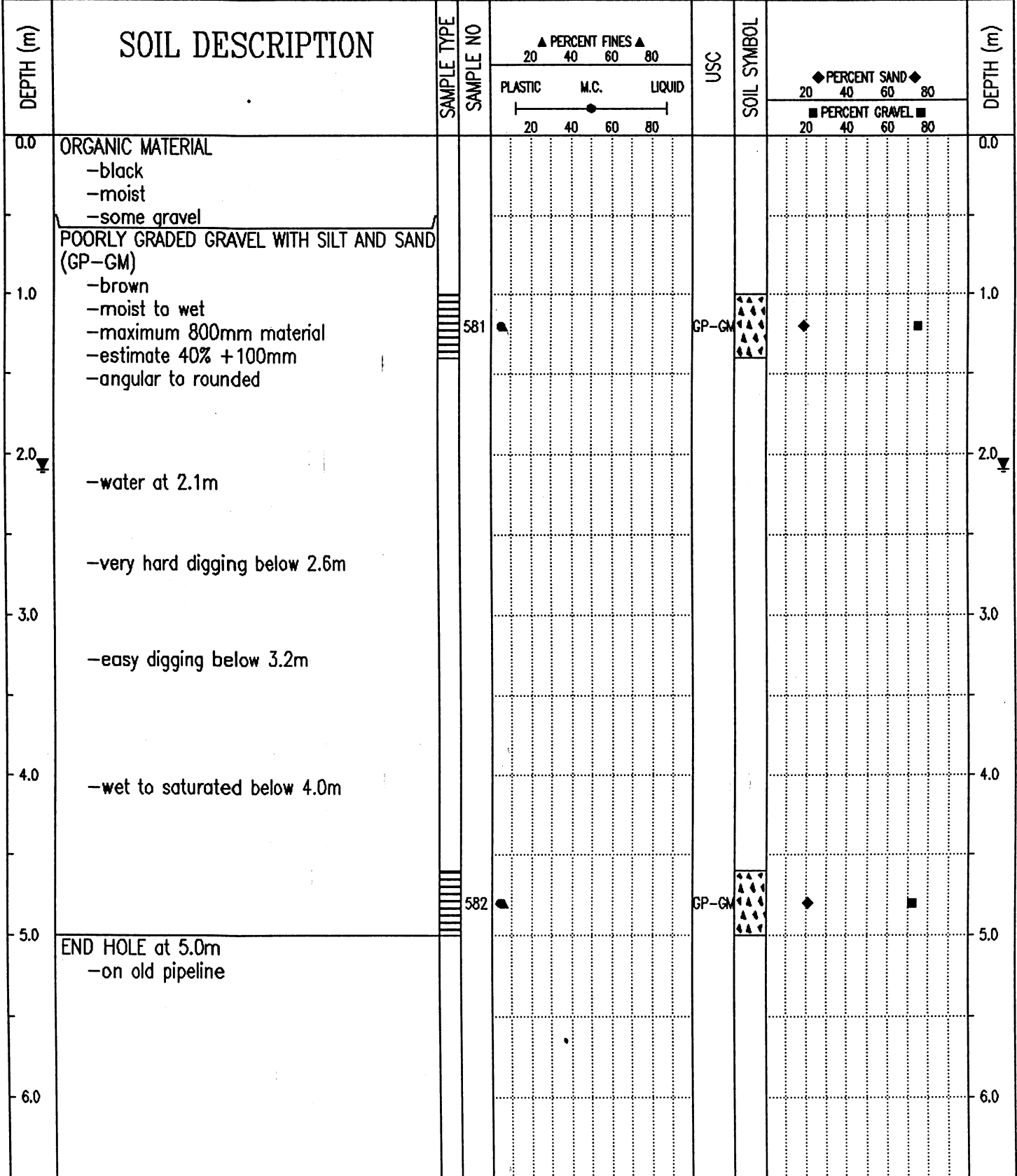
Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 5.5 m
	REVIEWED BY:	COMPLETE: 93/10/15
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT SHAKWAK PROJECT TEST HOLE NO: 370-283

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

BACKHOE: HITACHI EX 200 LC LOCATION: Sta. 1865+175 o/s 35m Rt. 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:

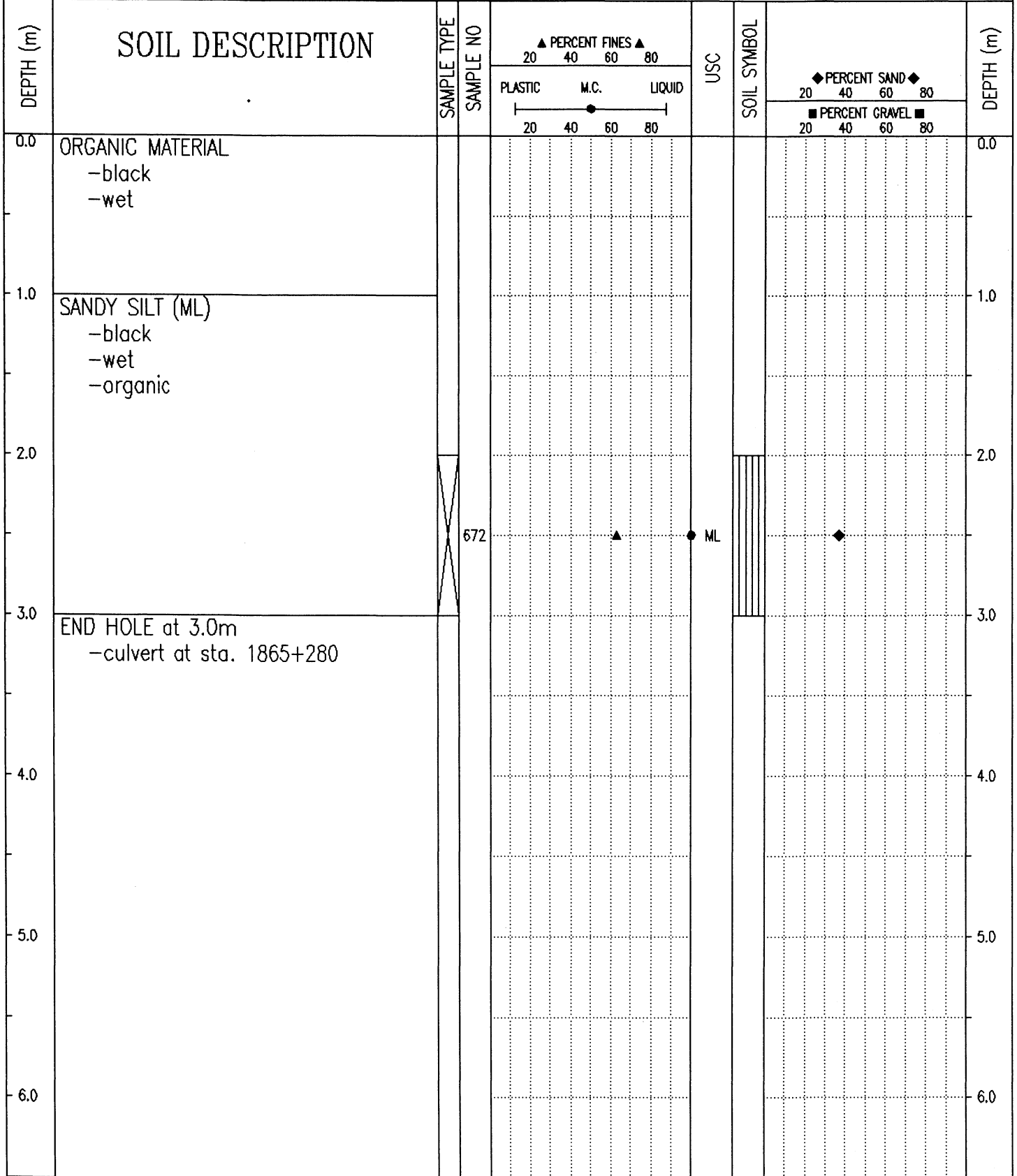
Fig. No:

COMPLETION DEPTH: 5.0 m

COMPLETE: 95/07/13

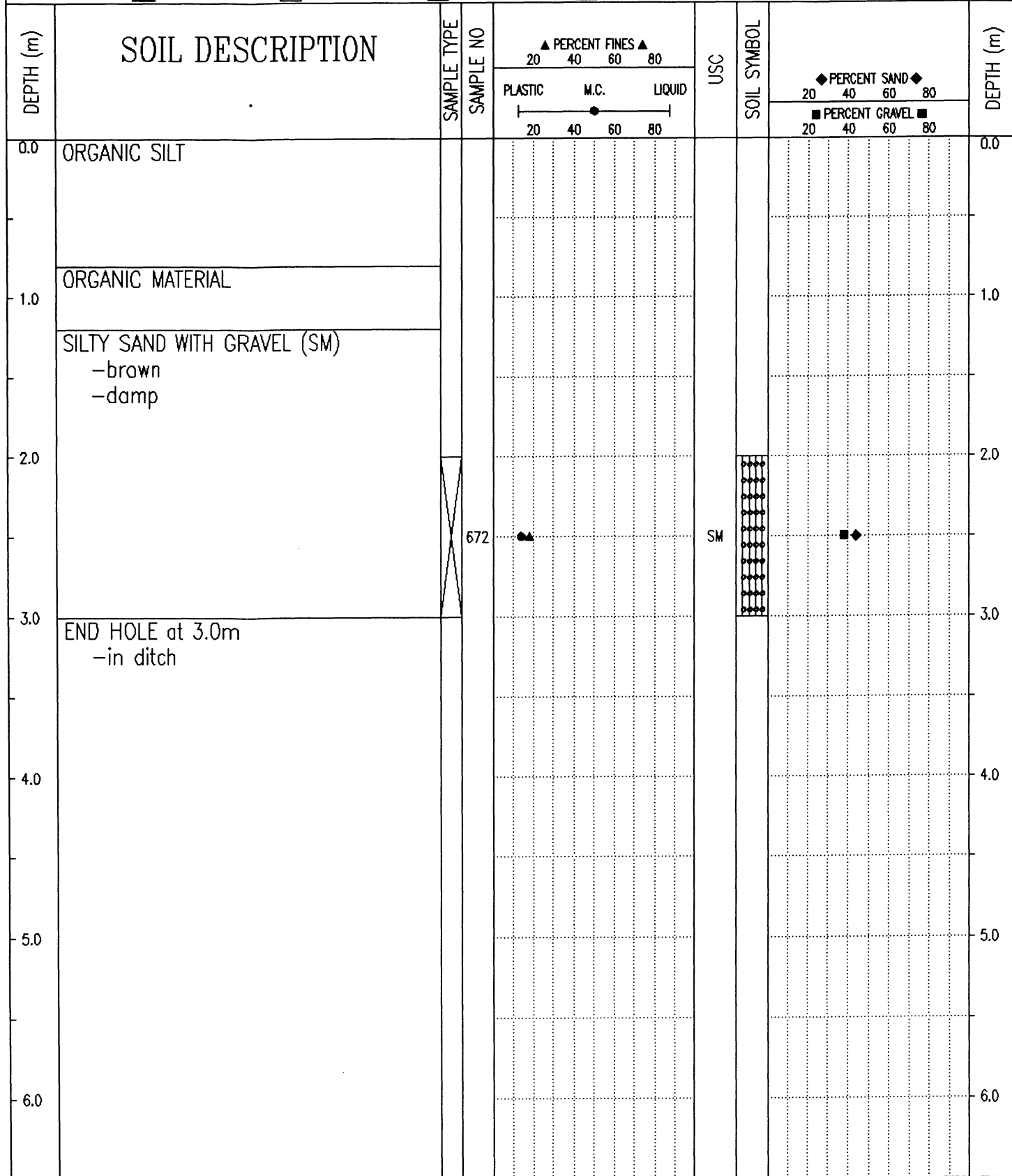
Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 269-465
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1865+275 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		



Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
	REVIEWED BY:	COMPLETE: 93/10/15
	Fig. No:	Page 1 of 1

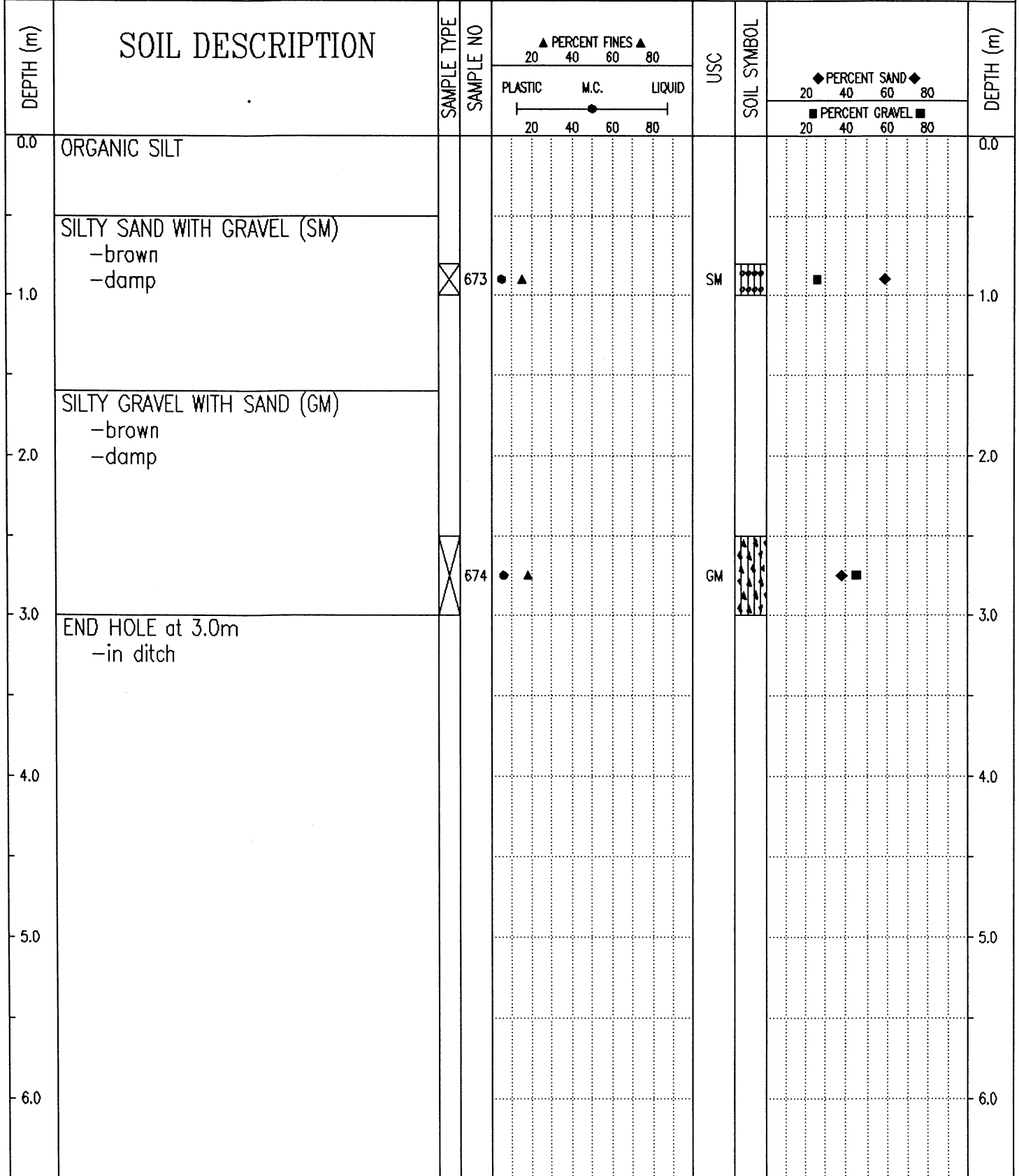
SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 269-465A
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1865+350 o/s 2m Rt.	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
			<input type="checkbox"/> BULK
			<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE



Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
	REVIEWED BY:	COMPLETE: 93/10/15
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 269-466
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1865+450 o/s 3m 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:

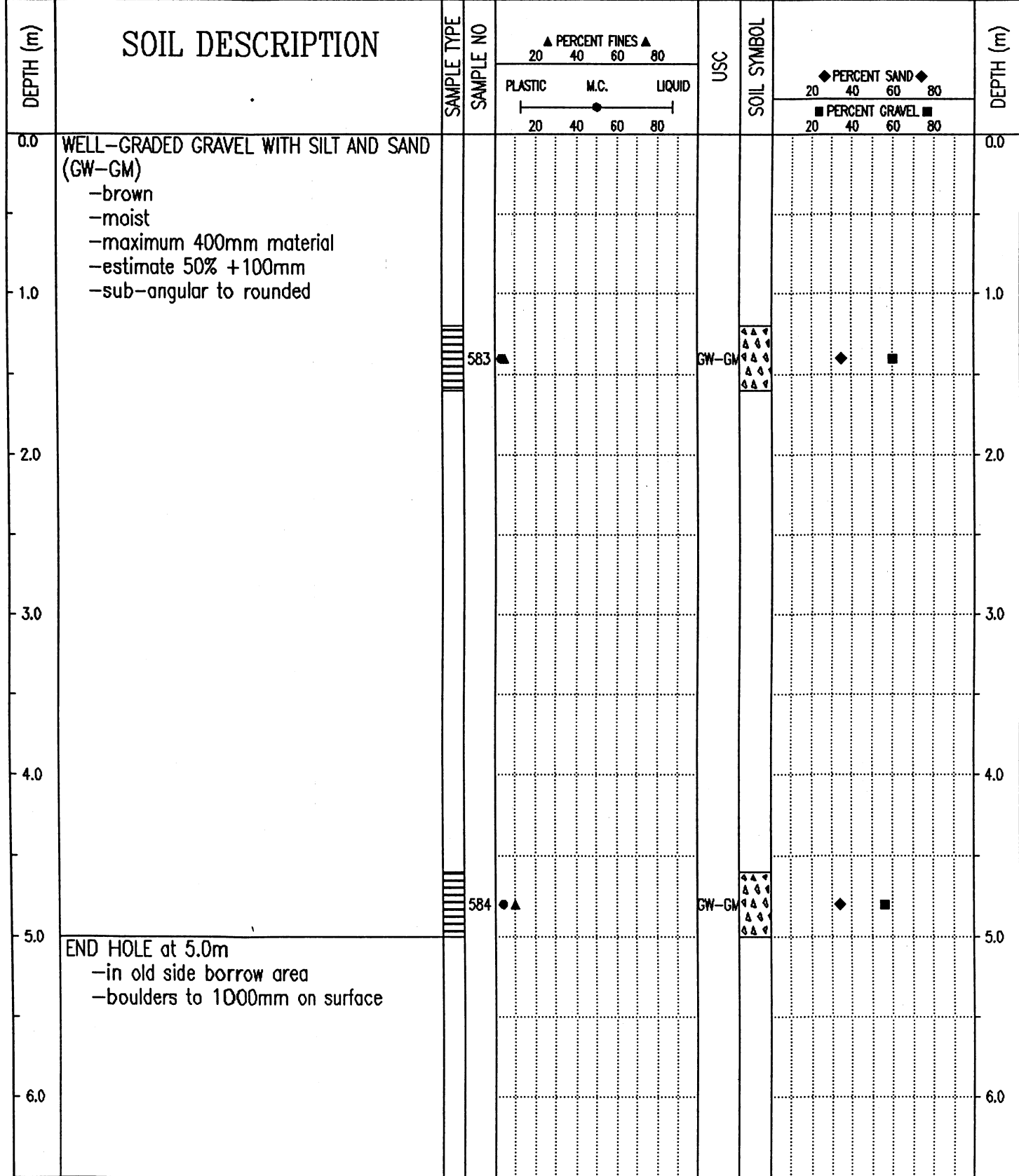
COMPLETION DEPTH: 3.0 m

COMPLETE: 93/10/15

Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 370-284
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI EX 200 LC	LOCATION: Sta. 1865+500 o/s 6m Rt.	ELEVATION: 0.00 (m)

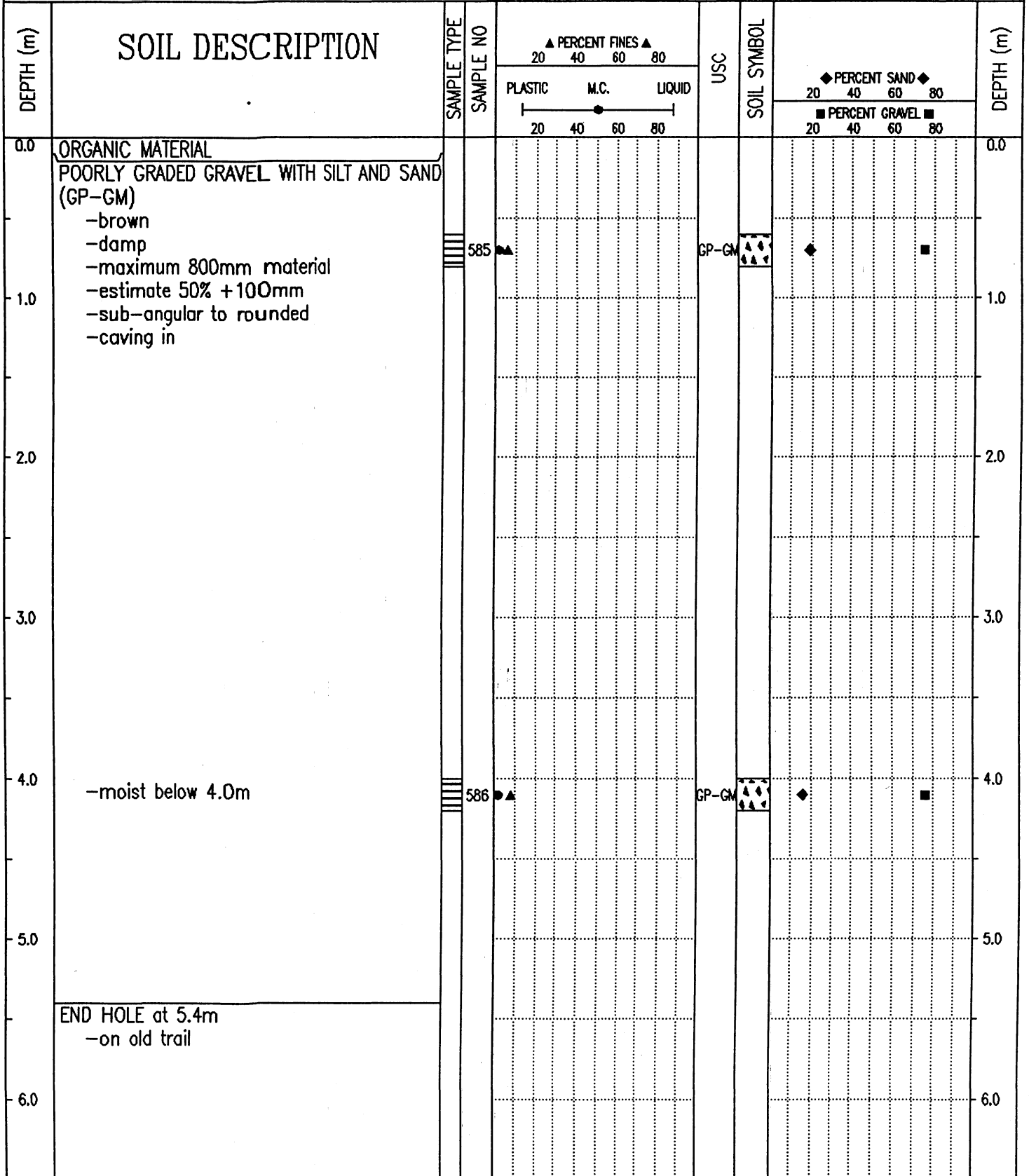
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



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LOGGED BY: DT A
REVIEWED BY:
Fig. No:
COMPLETION DEPTH: 5.0 m
COMPLETE: 95/07/13
Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 370-285
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI EX 200 LC	LOCATION: Sta. 1865+500 o/s 55m 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: DT A
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 5.4 m
COMPLETE: 95/07/14

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 ◆ ■ 20 40 60 80 ■	DEPTH (m)
0.0	ORGANIC MATERIAL SANDY SILTY GRAVEL -brown -moist -maximum 300mm material -estimate 25% +100mm							0.0
1.0	ORGANIC MATERIAL SANDY SILT -brown -moist -some gravel							1.0
2.0	POORLY GRADED GRAVEL WITH SAND (GP) -brown -moist -maximum 300mm material -estimate 15% +100mm		587			GP		2.0
3.0								3.0
4.0	-coarser material below 3.5m							4.0
5.0	END HOLE at 5.0m -water at 5.0m -on old pipeline							5.0
6.0								6.0

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 269-467
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1865+510	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	-no sample taken										0.0	
0.4	END HOLE at 0.4m -refusal twice at 0.4m -in ditch										0.4	
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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Transportation Engineering

LOGGED BY: GC

REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 0.4 m

COMPLETE: 93/10/15

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 383-549
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172	LOCATION: Sta. 1865+600 o/s 16m 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 -wet -frozen (Vs) with visible ice below 0.6m -pockets of frozen silty gravel below 0.6m -maximum 700mm material below 0.6m										0.0
2.0	WELL-GRADED GRAVEL WITH SILT AND SAND (GW-GM) -greenish brown -frozen (Vx) with visible ice -maximum 400mm material -very hard below 2.4m		123	▲	●		GW-GM	◆	■		2.0
3.0	ORGANIC MATERIAL -dark brown -frozen (Vs) with visible ice SILTY GRAVEL WITH SAND (GM) -dark brown -frozen (Vs) with visible ice -maximum 600mm material -angular		124	●	▲		GM	◆	■		3.0
4.0	END HOLE at 3.8m -refusal										4.0
5.0											5.0
6.0											6.0

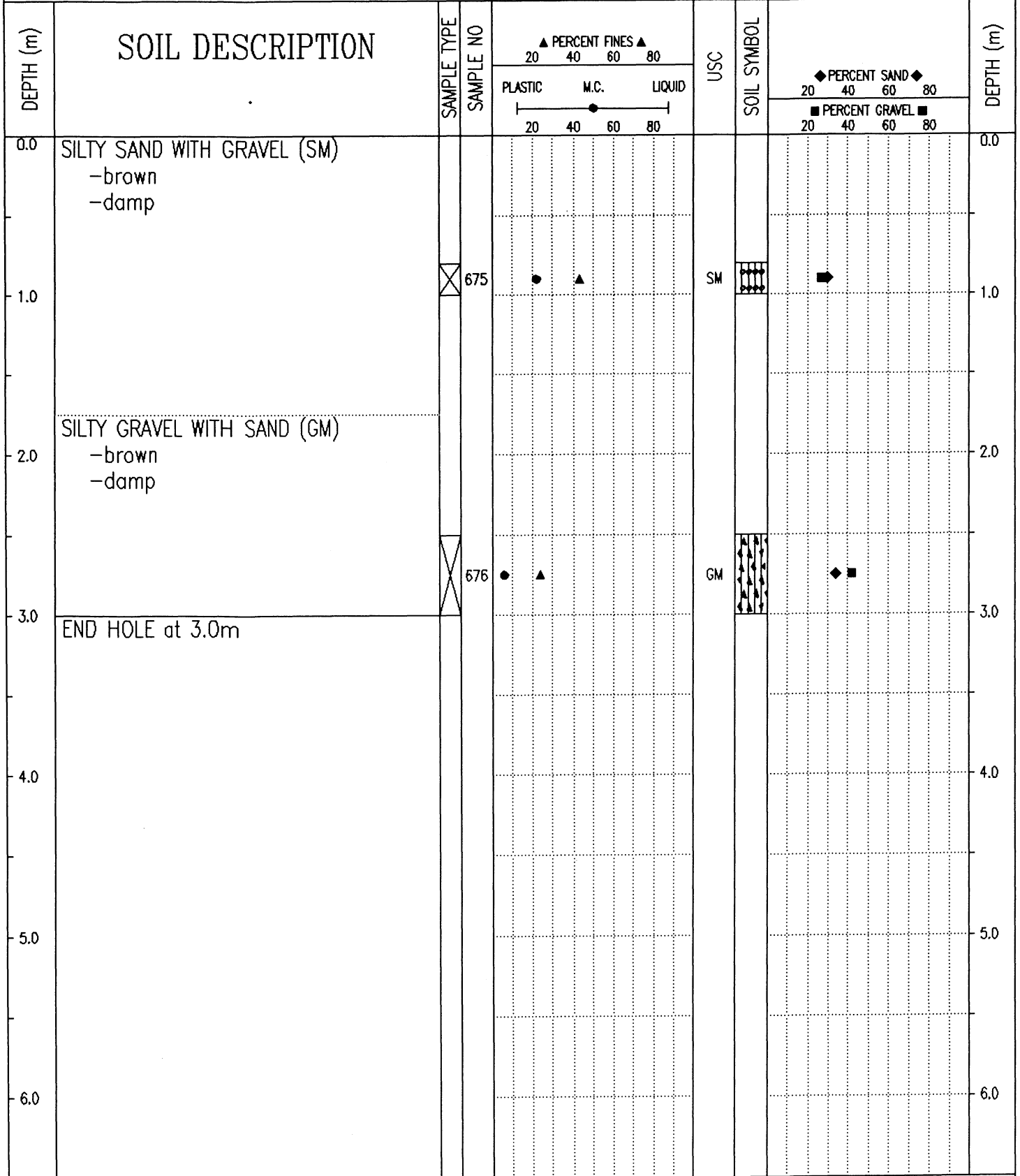
Government of Yukon Transportation Engineering	LOGGED BY: KJ	COMPLETION DEPTH: 3.8 m
	REVIEWED BY:	COMPLETE: 95/09/24
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 383-550
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172		LOCATION: Sta. 1865+800 o/s 17m 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 -black -damp -boulders to 1000mm -trace of silt -angular											0.0
1.0												1.0
2.0	SILTY SAND WITH GRAVEL (SM) -olive brown -wet -maximum 1000mm material -estimate 30% +75mm											2.0
3.0	-frozen (Vx) with visible ice below 2.7m -estimate 50% +75mm below 3.0m		125	●	▲		SM	◆	■			3.0
4.0												4.0
5.0	-frozen (Vc) with visible ice below 4.5m		126	●	▲		SM	◆	■			5.0
6.0	END HOLE at 5.0m -+1000mm material on surface in area											6.0

Government of Yukon Transportation Engineering	LOGGED BY: KJ	COMPLETION DEPTH: 5.0 m
	REVIEWED BY:	COMPLETE: 95/09/25
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 269-468
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1865+810	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		

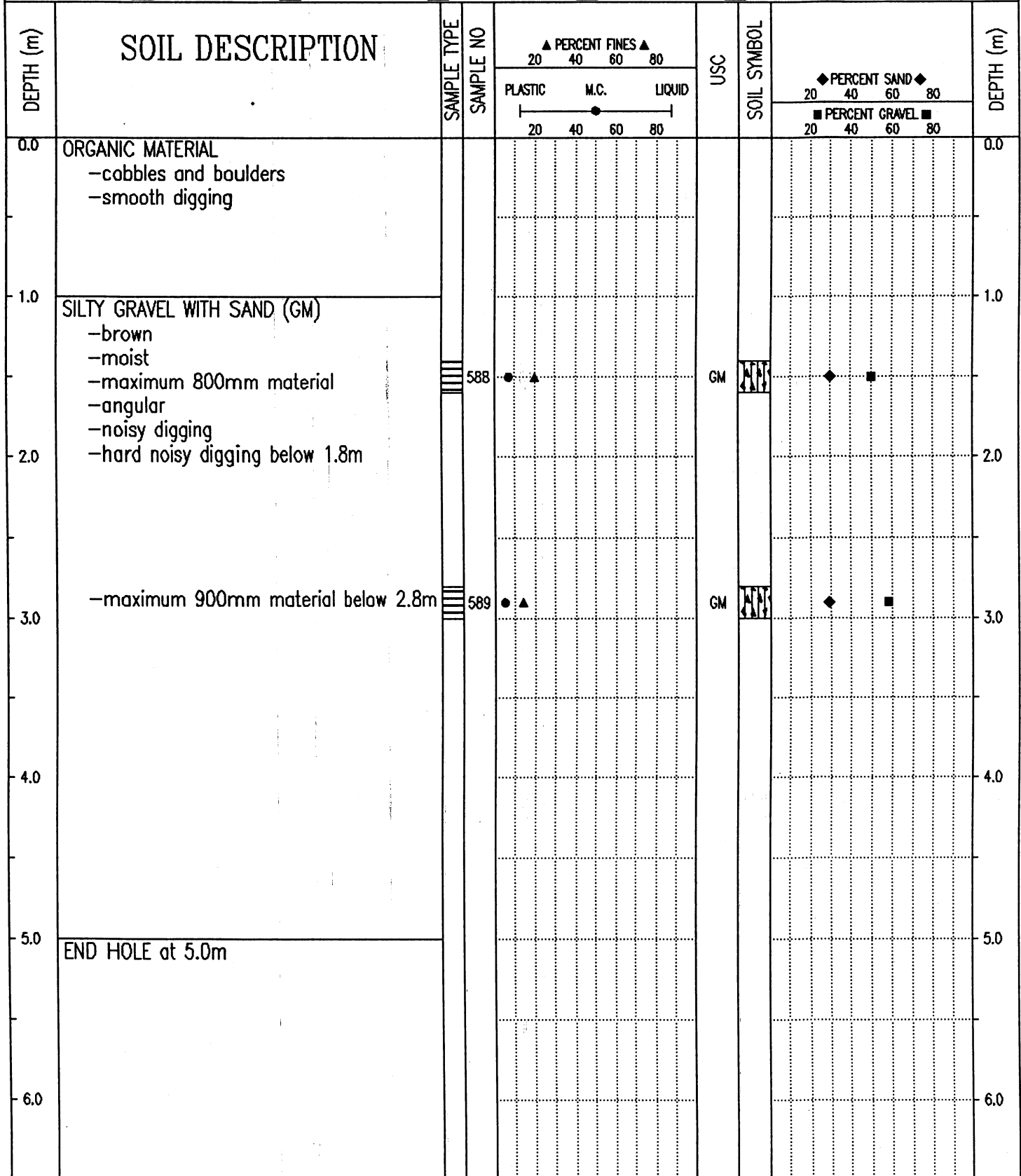


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LOGGED BY: GC
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 3.0 m
COMPLETE: 93/10/15

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 370-287
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI EX 200 LC	LOCATION: Sta. 1865+900 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

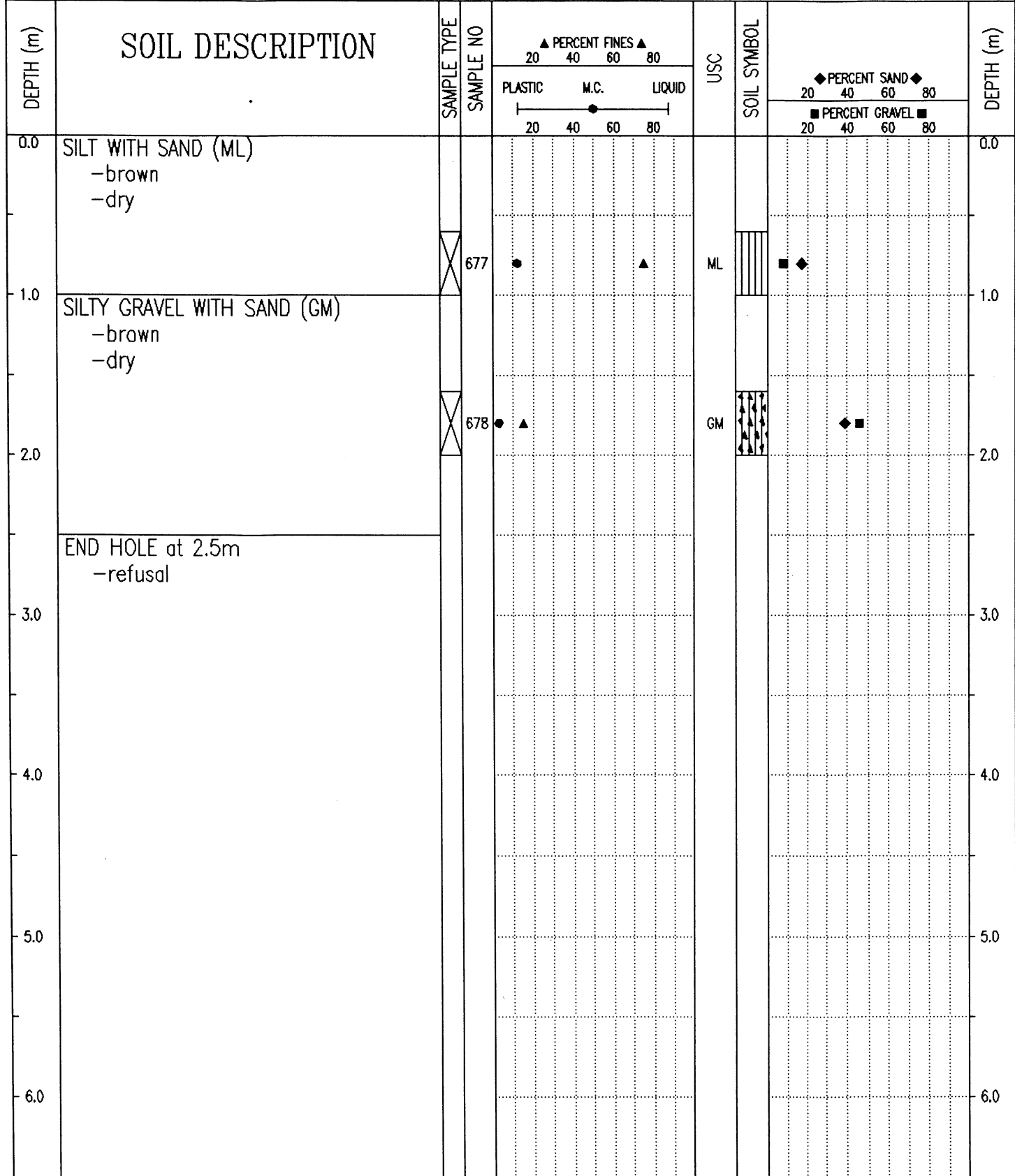


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LOGGED BY: DT	COMPLETION DEPTH: 5.0 m
REVIEWED BY:	COMPLETE: 95/07/18
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 269-469
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1865+950	ELEVATION: 0.00 (m)

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



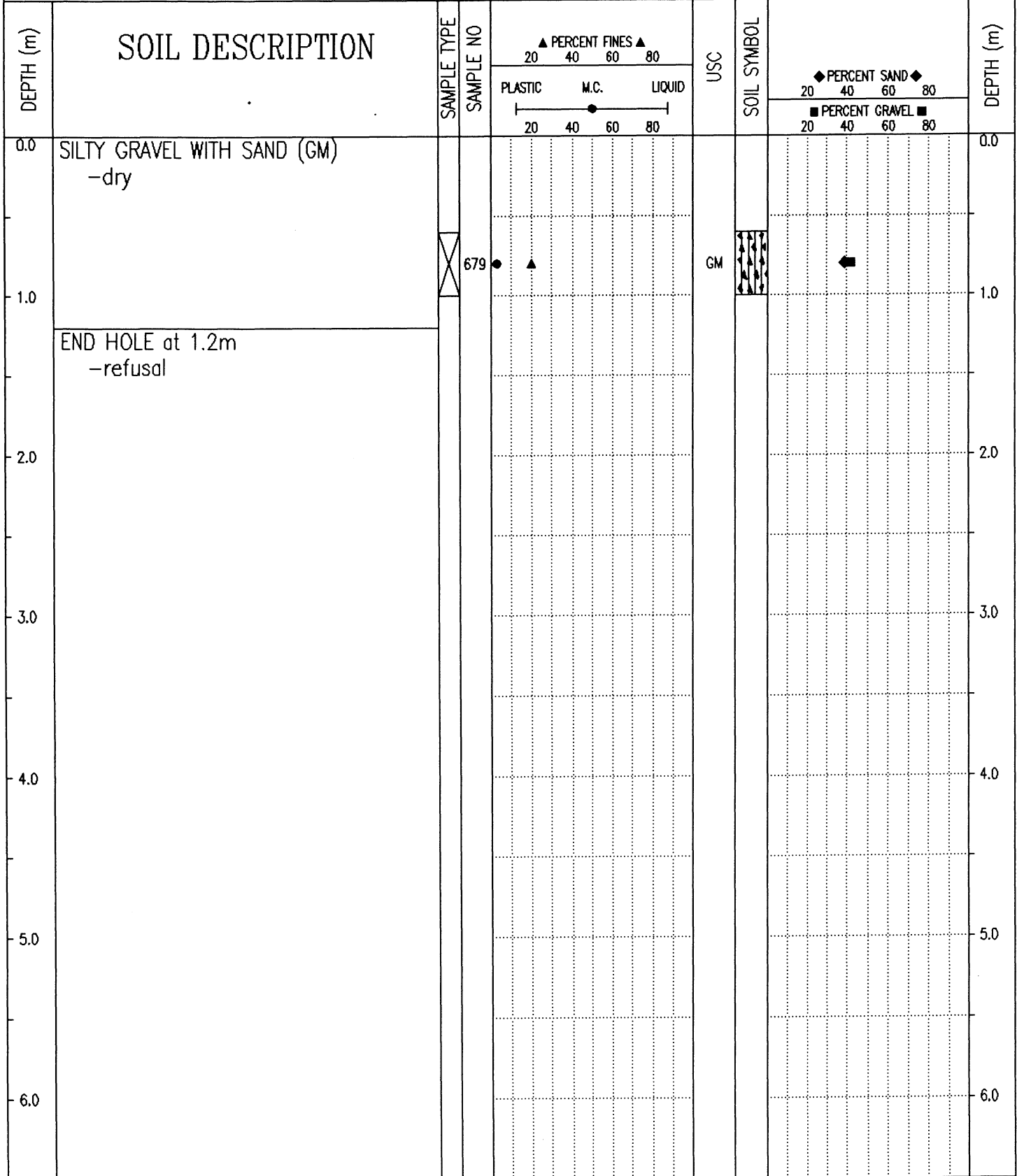
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LOGGED BY: GC
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 2.5 m
COMPLETE: 93/10/15

Page 1 of 1

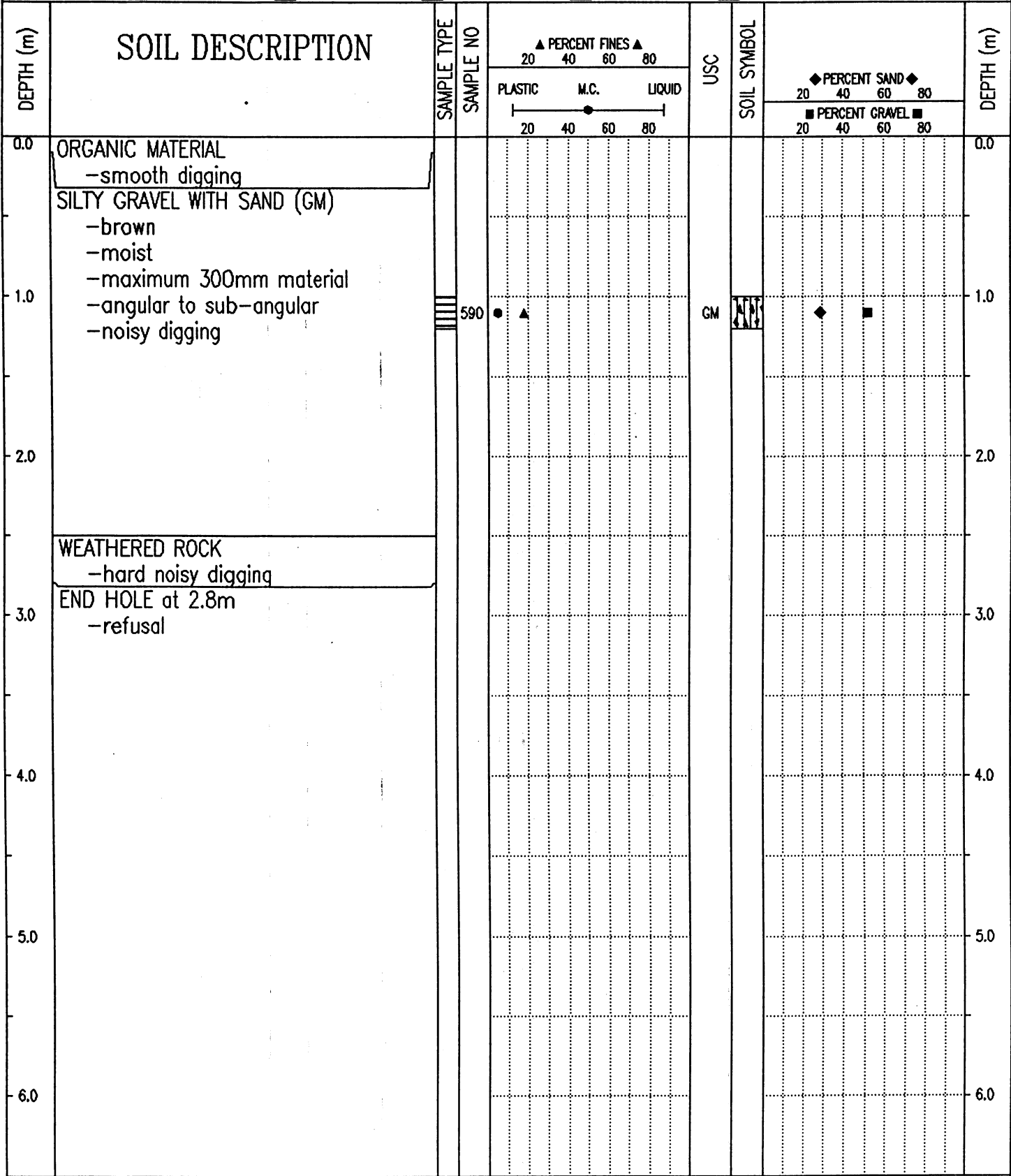
SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 269-470
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1866+025	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> 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: 1.2 m
REVIEWED BY:	COMPLETE: 93/10/15
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 370-288
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI EX 200 LC		LOCATION: Sta. 1866+040 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



Government of Yukon Transportation Engineering	LOGGED BY: CC	COMPLETION DEPTH: 2.8 m
	REVIEWED BY:	COMPLETE: 95/07/18
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 269-471
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1866+150 o/s 3m 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 & GRAVEL		DEPTH (m)		
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL			
0.0	SILTY GRAVEL WITH SAND (GM) -brown -damp	<input checked="" type="checkbox"/>	680	20	40	60	80	GM	20	40	60	80	0.0
1.0	END HOLE at 0.75m -refusal twice -in ditch												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: 93/10/16
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 269-472
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1866+250 o/s 3m 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	SILTY GRAVEL WITH SAND (GM) -brown -damp										0.0
1.0	END HOLE at 1.0m -refusal -in ditch		681	▲			GM	◆	■		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: 1.0 m
	REVIEWED BY:	COMPLETE: 93/10/16
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 383-551
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172	LOCATION: Sta. 1866+275 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		

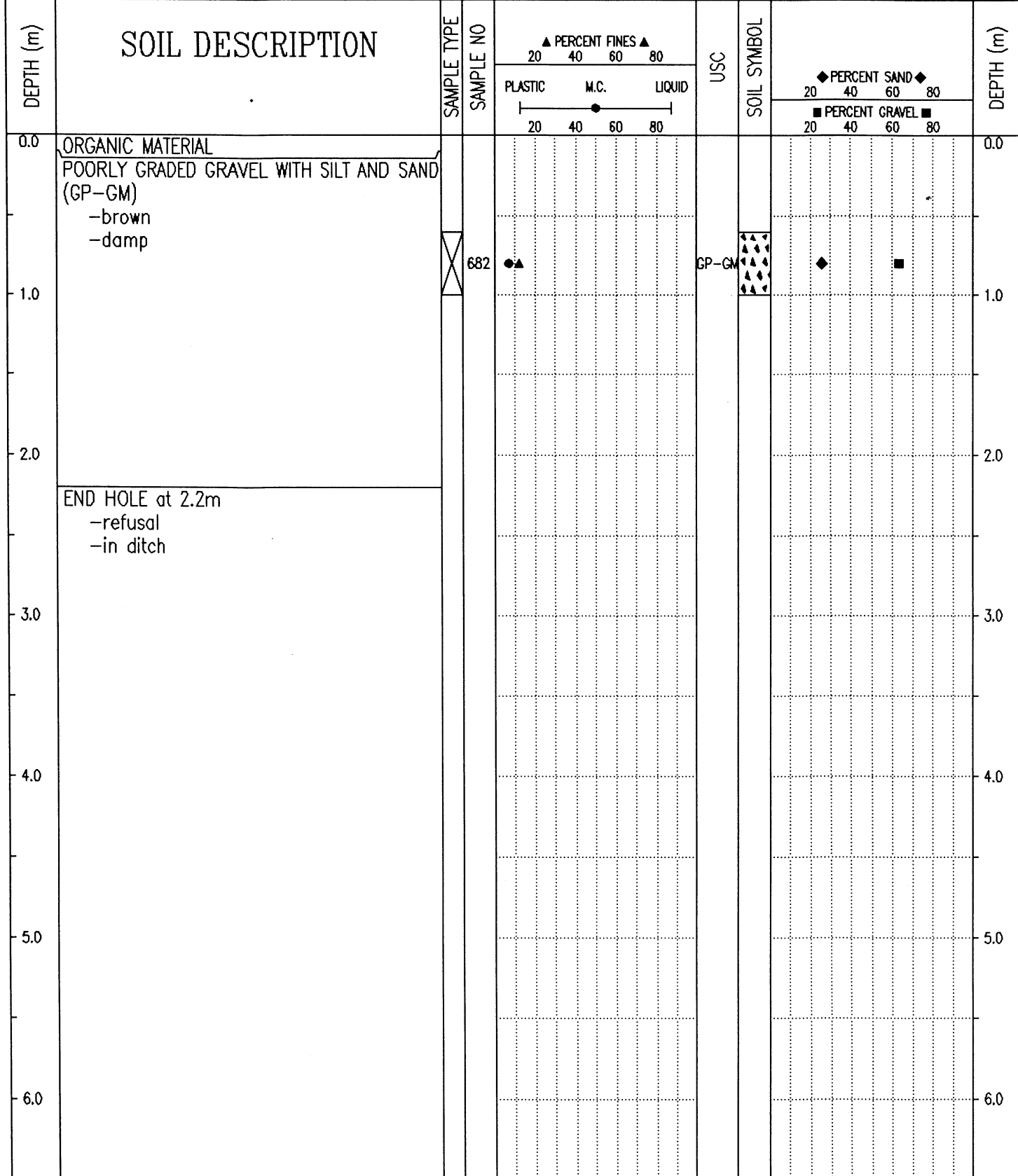
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				20	40	60			80	20	40	60	
0.0	ORGANIC MATERIAL -reddish black -damp												
1.0	SILTY GRAVEL WITH SAND (GM) -olive brown -damp -maximum 200mm material -sub-angular		127	●	▲		GM	◆		■			
2.0	ORGANIC MATERIAL AND COBBLES -frozen (Nb) -maximum 500mm material -sub-angular												
3.0	SILTY GRAVEL WITH SAND (GM) -olive brown -frozen (Vc) with visible ice -maximum 1000mm material -sub-angular		128	●	▲		GM	◆		■			
5.0	END HOLE at 4.8m -boulders on surface in area												

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LOGGED BY: KJ	COMPLETION DEPTH: 4.8 m
REVIEWED BY:	COMPLETE: 95/09/25
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 269-473
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1866+352	ELEVATION: 0.00 (m)

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



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LOGGED BY: GC	COMPLETION DEPTH: 2.2 m
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Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 383-552
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172		LOCATION: Sta. 1866+375 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 ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	
0.0	ORGANIC MATERIAL AND COBBLES -damp -some boulders										0.0
1.0	-frozen (Vx) with visible ice below 0.8m										1.0
2.0	WEATHERED ROCK -frozen (Vc) with visible ice -some silty gravel -angular to sub-angular										2.0
2.0	END HOLE at 2.0m -refusal -boulders on surface										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: 95/09/25
	Fig. No:	Page 1 of 1

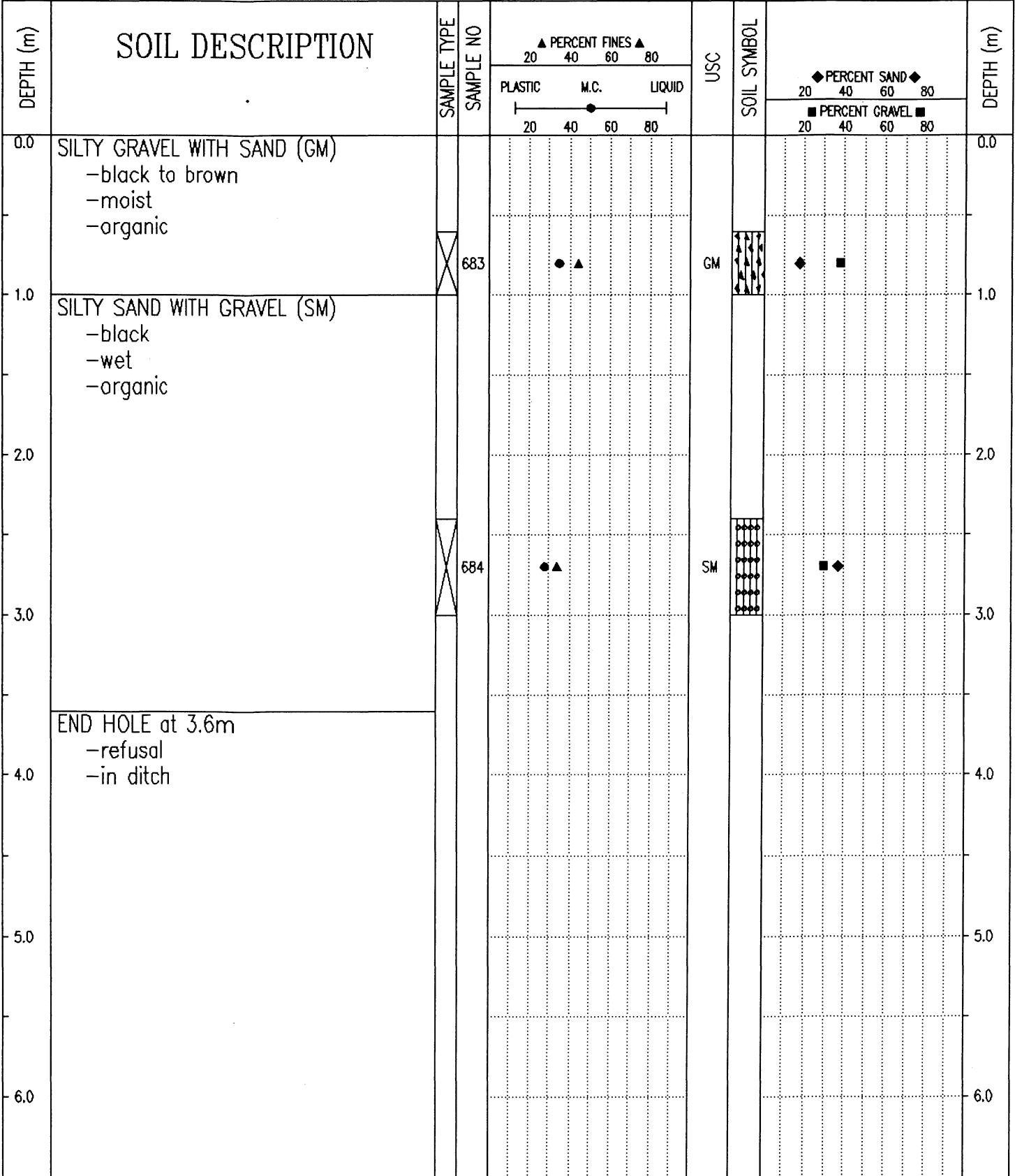
SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 370-289
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI EX 200 LC		LOCATION: Sta. 1866+375 o/s 15m Rt.	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN	<input checked="" type="checkbox"/> 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	60	80	
0.0	ORGANIC MATERIAL -odd cobble -smooth digging -frozen (Vx) with visible ice below 0.3m -hard smooth digging below 0.3m												0.0
2.0	SANDY SILTY GRAVEL -brown -frozen (Vx) with visible ice -hard noisy digging												2.0
3.0	SANDY SILT -frozen (Vx) with visible ice -boulders -angular												3.0
3.0	END HOLE at 2.4m -refusal -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: CC	COMPLETION DEPTH: 2.4 m
REVIEWED BY:	COMPLETE: 95/07/18
Fig. No:	Page 1 of 1

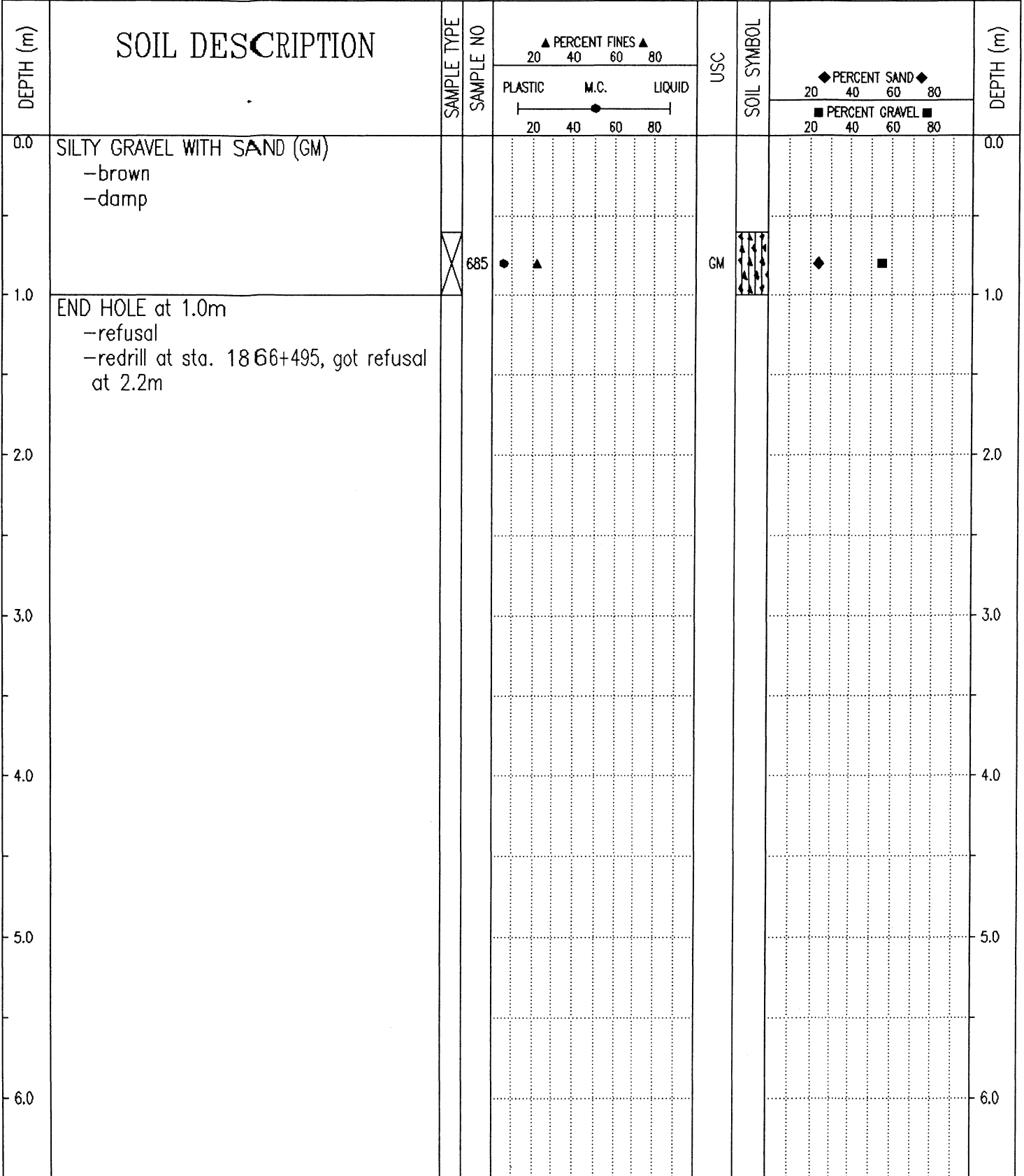
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



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LOGGED BY: GC	COMPLETION DEPTH: 3.6 m
REVIEWED BY:	COMPLETE: 93/10/16
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 269-475
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1866+490 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:	COMPLETE: 93/10/16
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 370-290
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI EX 200 LC		LOCATION: Sta. 1866+525 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

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 -smooth digging -hard smooth digging below 0.2m									0.0	
1.0	SILTY SANDY GRAVEL -brown -frozen (Vx) with visible ice -maximum 100mm material -hard noisy digging									1.0	
2.0	ORGANIC MATERIAL -frozen (Vx) with visible ice -cobbles to 200mm									2.0	
3.0	SILTY GRAVEL WITH SAND (GM) -brown -frozen (Vx) with visible ice -maximum 150mm material		591	●	▲		GM	◆	■	3.0	
4.0	WEATHERED ROCK									4.0	
4.0	END HOLE at 3.4m -refusal									4.0	
5.0										5.0	
6.0										6.0	

Government of Yukon Transportation Engineering	LOGGED BY: CC	COMPLETION DEPTH: 3.4 m
	REVIEWED BY:	COMPLETE: 95/07/18
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 269-476
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1866+600 o/s 20m Lt.	ELEVATION: 0.00 (m)

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				PLASTIC	.M.C.	LIQUID			20	40	60	80	
0.0	ORGANIC SILT -black to brown -wet											0.0	
1.0	SILTY SAND WITH GRAVEL (SM) -rough drilling below 1.8m	<input checked="" type="checkbox"/>	686	●	▲		SM	◆	■			1.0	
3.0	END HOLE at 3.0m	<input checked="" type="checkbox"/>	687	●	▲		SM	◆	■			3.0	

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LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 93/10/16
Fig. No:	Page 1 of 1

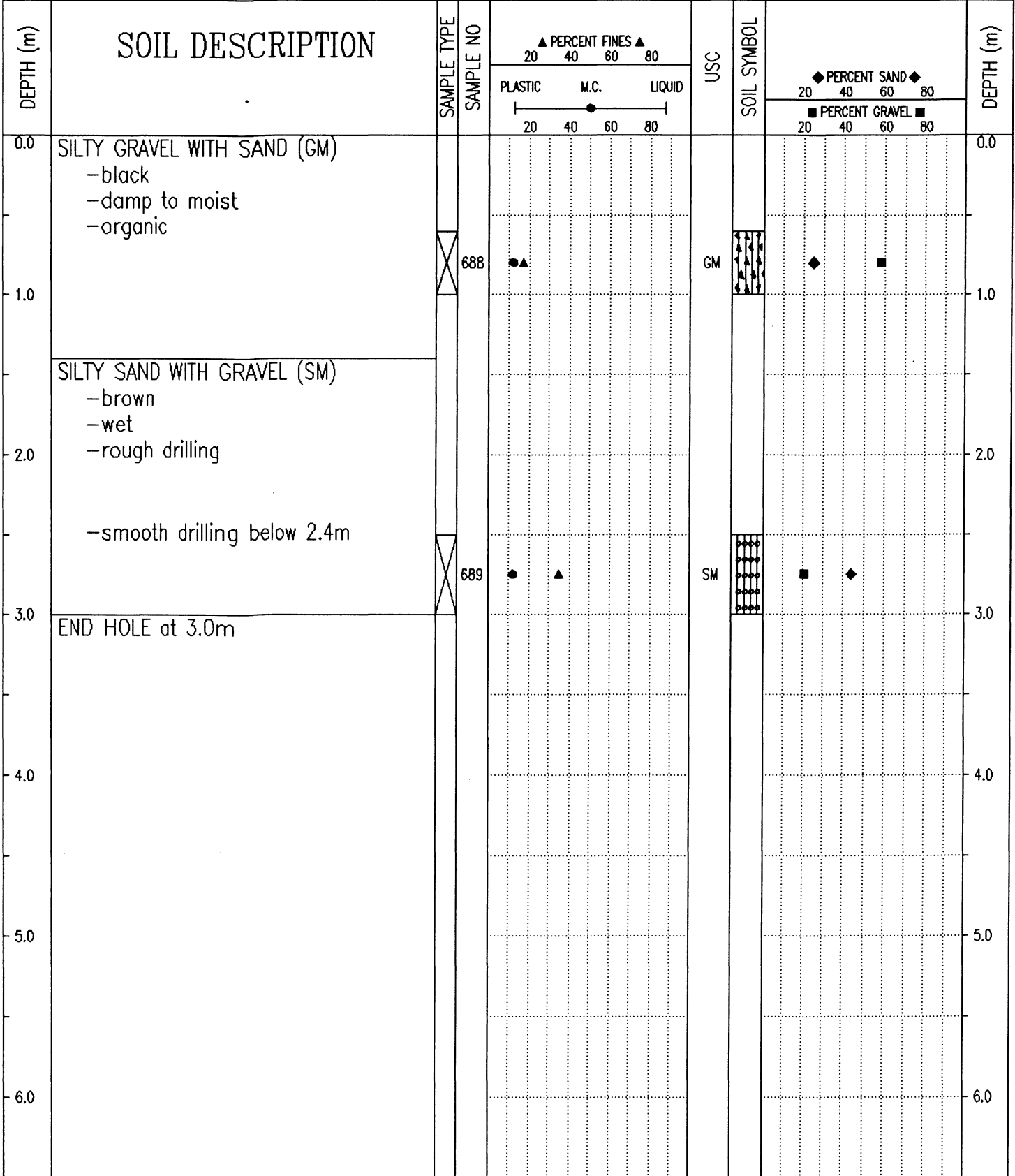
SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 370-291
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI EX 200 LC	LOCATION: Sta. 1866+700 o/s 1m Lt.	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40		
0.0	ORGANIC MATERIAL -smooth digging -frozen below 0.4m -harder digging below 0.4m										0.0	
1.0	SILT WITH SAND (ML) -brown -frozen (Vx) with visible ice -organics		592				ML				1.0	
2.0	SILTY SANDY GRAVEL -brown -frozen (Vx) with visible ice -maximum 200mm material -hard noisy digging										2.0	
3.0	ORGANIC MATERIAL -brown -frozen (Vx) with visible ice -smooth hard digging		593				SM				3.0	
4.0	SILTY SAND WITH GRAVEL (SM) -brown -frozen (Vx) with visible ice -maximum 100mm material										4.0	
4.0	END HOLE at 3.4m										4.0	
5.0											5.0	
6.0											6.0	

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LOGGED BY: CC	COMPLETION DEPTH: 3.4 m
REVIEWED BY:	COMPLETE: 95/07/18
Fig. No:	Page 1 of 1

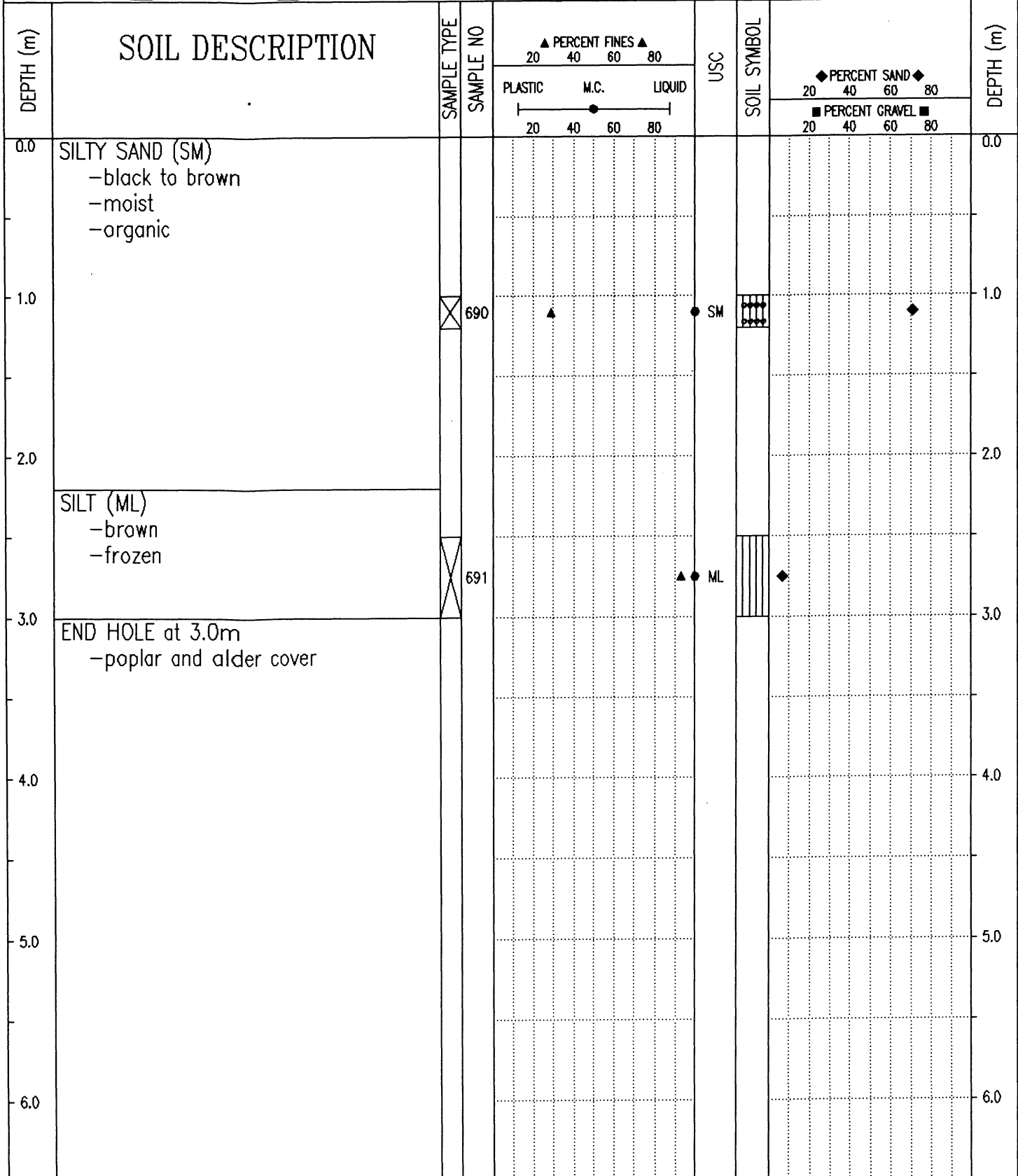
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



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LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 93/10/16
Fig. No:	Page 1 of 1

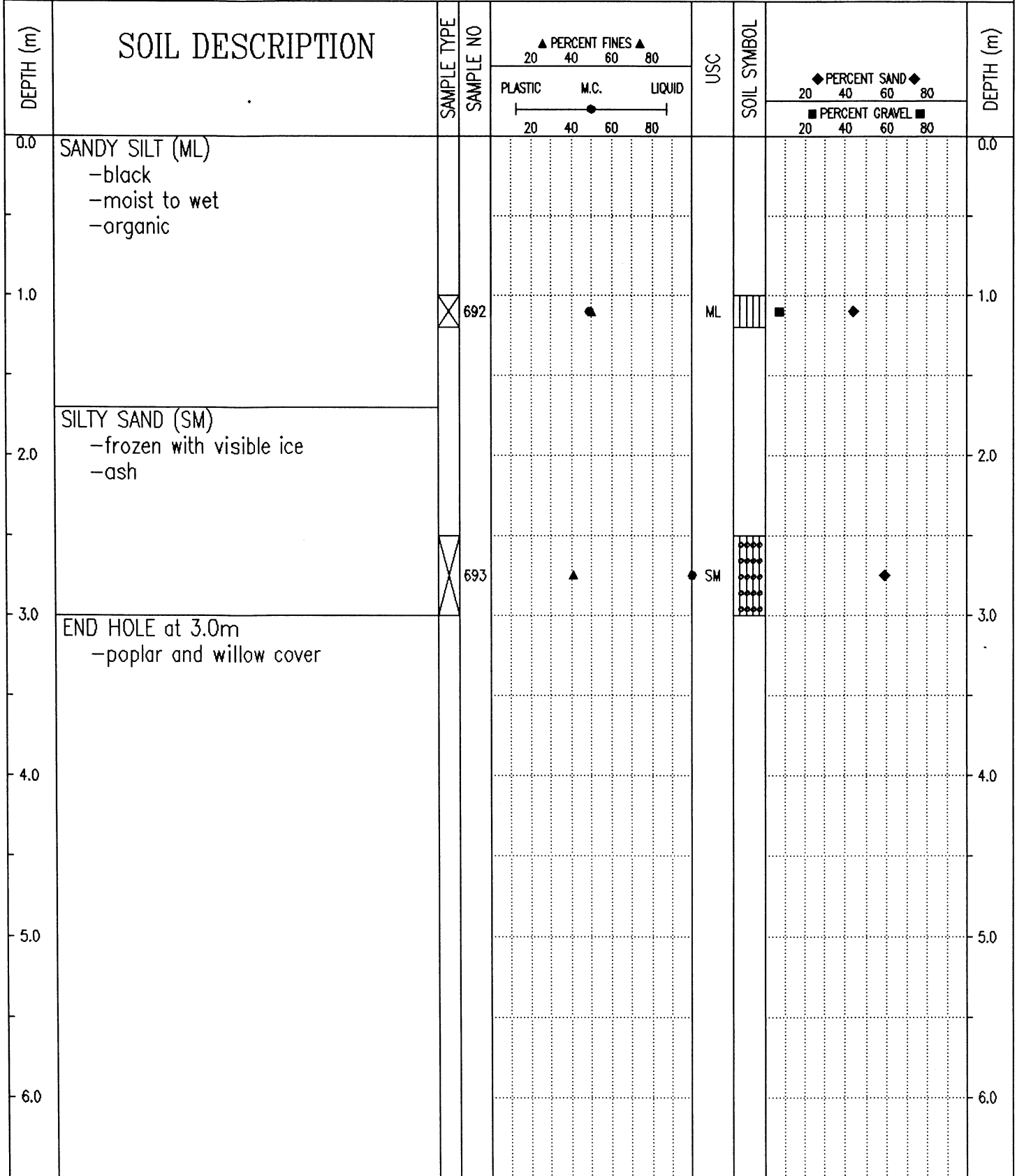
SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 269-478
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1866+875	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" 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: 93/10/16
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 269-479
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1867+000 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: GC	COMPLETION DEPTH: 3.0 m
	REVIEWED BY:	COMPLETE: 93/10/16
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 370-292
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI EX 200 LC		LOCATION: Sta. 1867+035 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)	
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
				20	40	60	80		20	40	60	80
0.0	ORGANIC MATERIAL -smooth digging -frozen below 0.3m											
1.0												
2.0												
3.0	SILTY SAND (SM) -frozen (Vx) with visible ice -harder digging		594	▲	●		SM	◆	■			
3.3	END HOLE at 3.3m											
4.0												
5.0												
6.0												

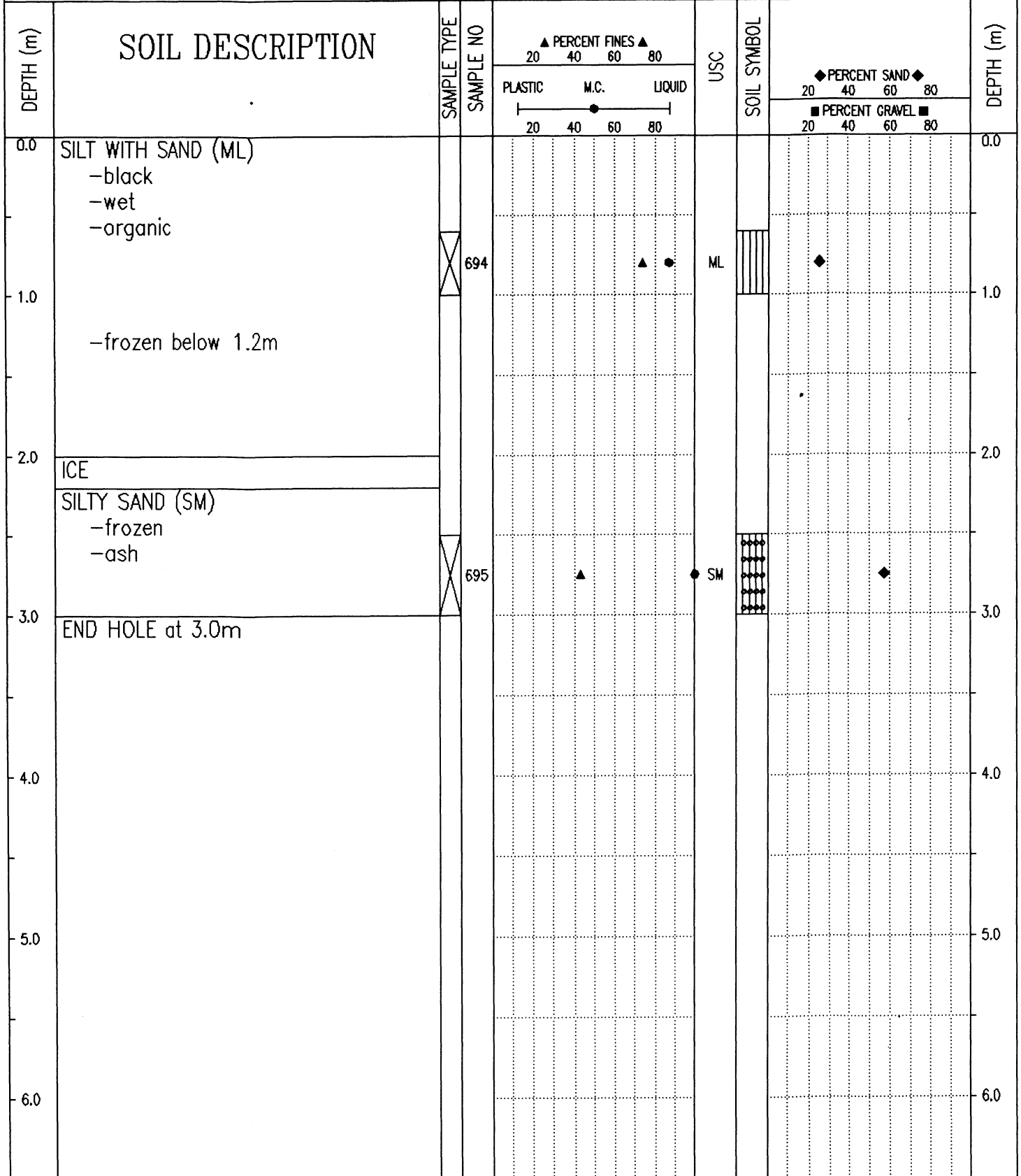
Government of Yukon Transportation Engineering	LOGGED BY: CC	COMPLETION DEPTH: 3.3 m
	REVIEWED BY:	COMPLETE: 95/07/18
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 383-553
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172	LOCATION: Sta. 1867+045 o/s 17m 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 -black -wet -few boulders to 750mm -angular										0.0	
1.0	ORGANIC MATERIAL -frozen (Nb)										1.0	
2.0	POORLY GRADED SAND WITH SILT (SP-SM) -green brown -frozen (Vc) with visible ice		129	▲	●		SP-SM	◆	■		2.0	
2.0	ORGANIC MATERIAL -black -frozen -trace of sand										2.0	
3.0											3.0	
4.0	END HOLE at 3.5m										4.0	
5.0											5.0	
6.0											6.0	

Government of Yukon Transportation Engineering	LOGGED BY: KJ	COMPLETION DEPTH: 3.5 m
	REVIEWED BY:	COMPLETE: 95/09/25
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 269-480
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1867+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



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Transportation Engineering

LOGGED BY: GC

REVIEWED BY:

Fig. No:

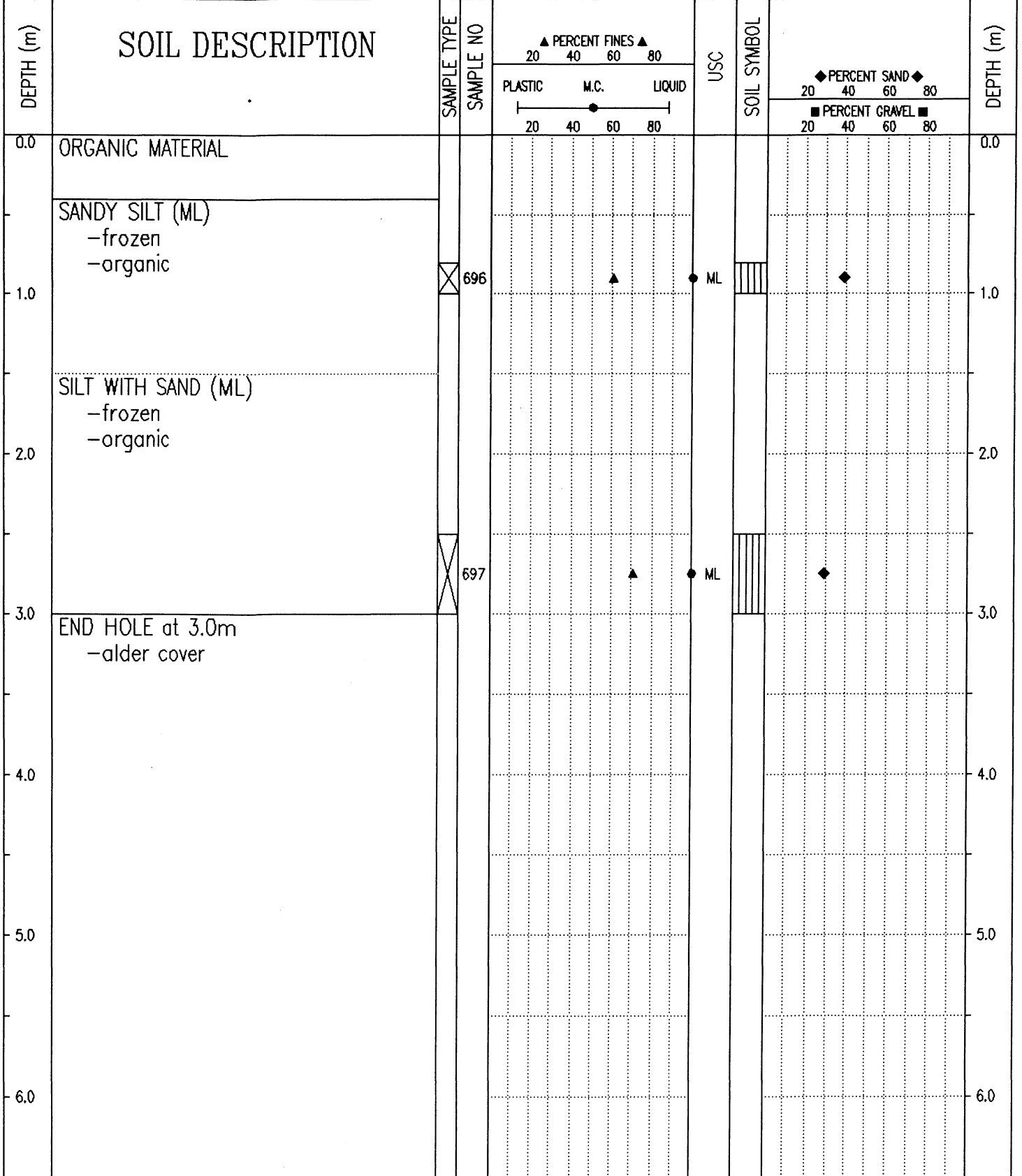
COMPLETION DEPTH: 3.0 m

COMPLETE: 93/10/16

Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 269-481
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1867+200 o/s 10m Rt.	ELEVATION: 0.00 (m)

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



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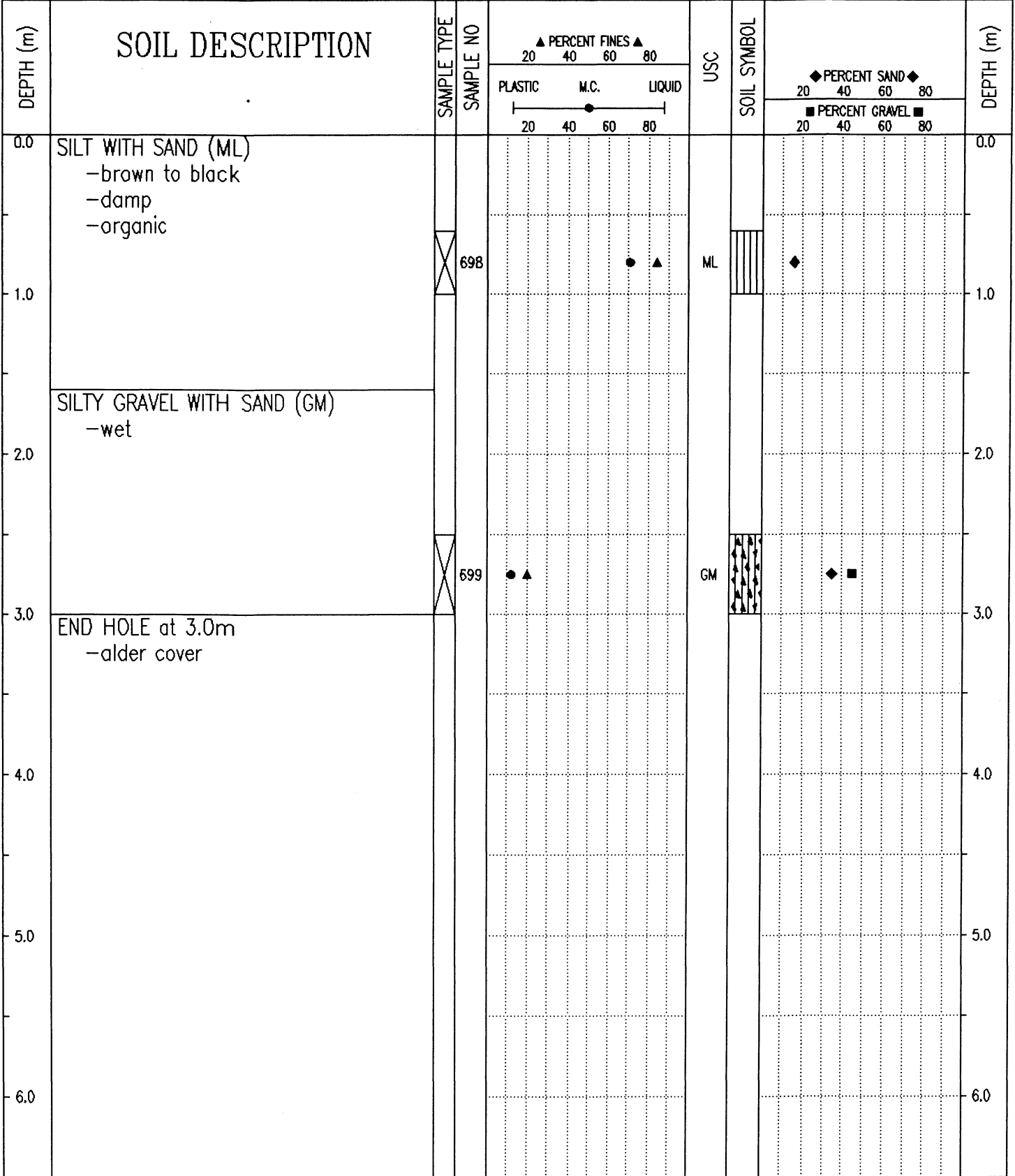
Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 93/10/16

Page 1 of 1

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

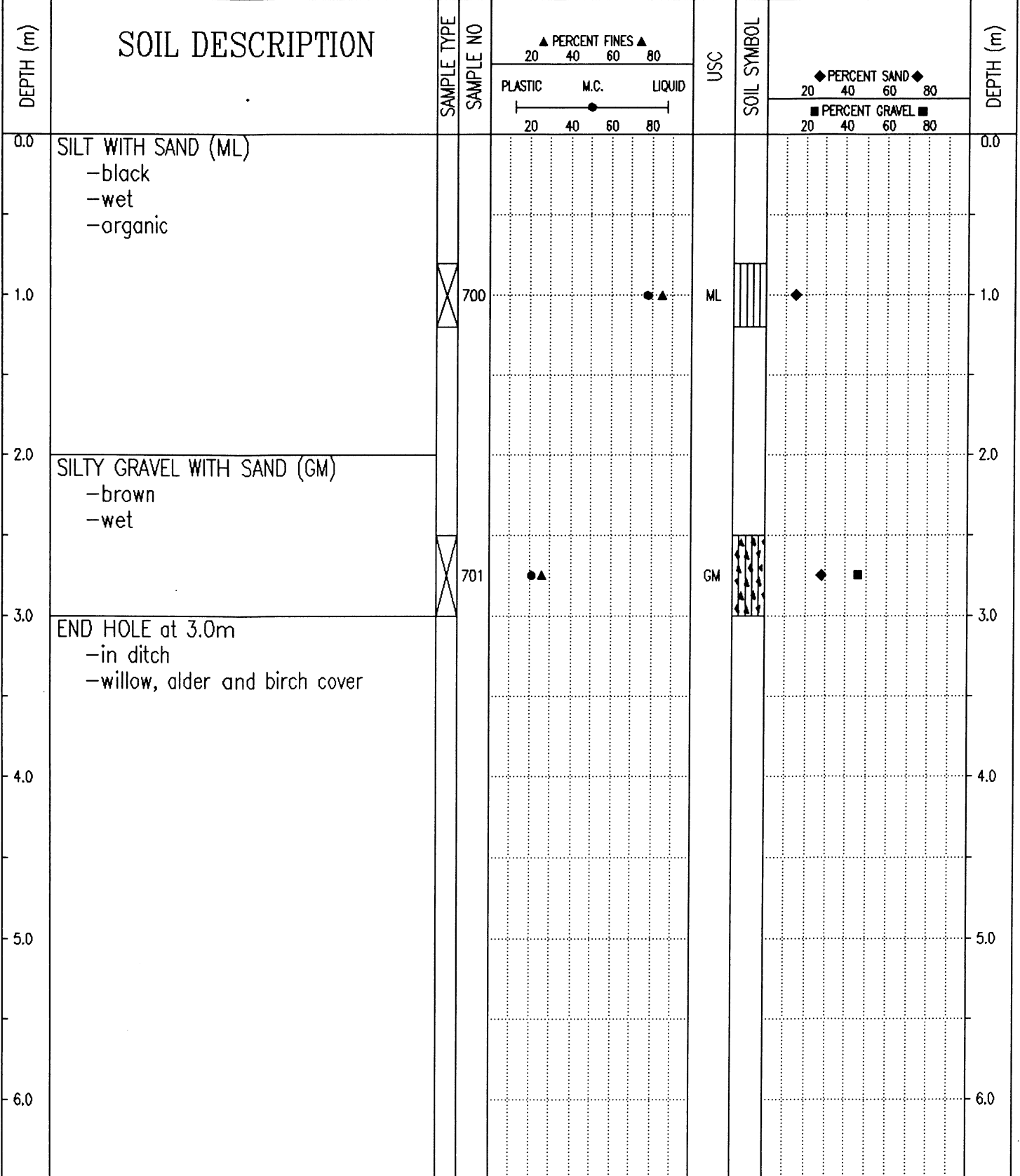


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LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 93/10/16
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 269-483
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL:CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1867+440	ELEVATION: 0.00 (m)

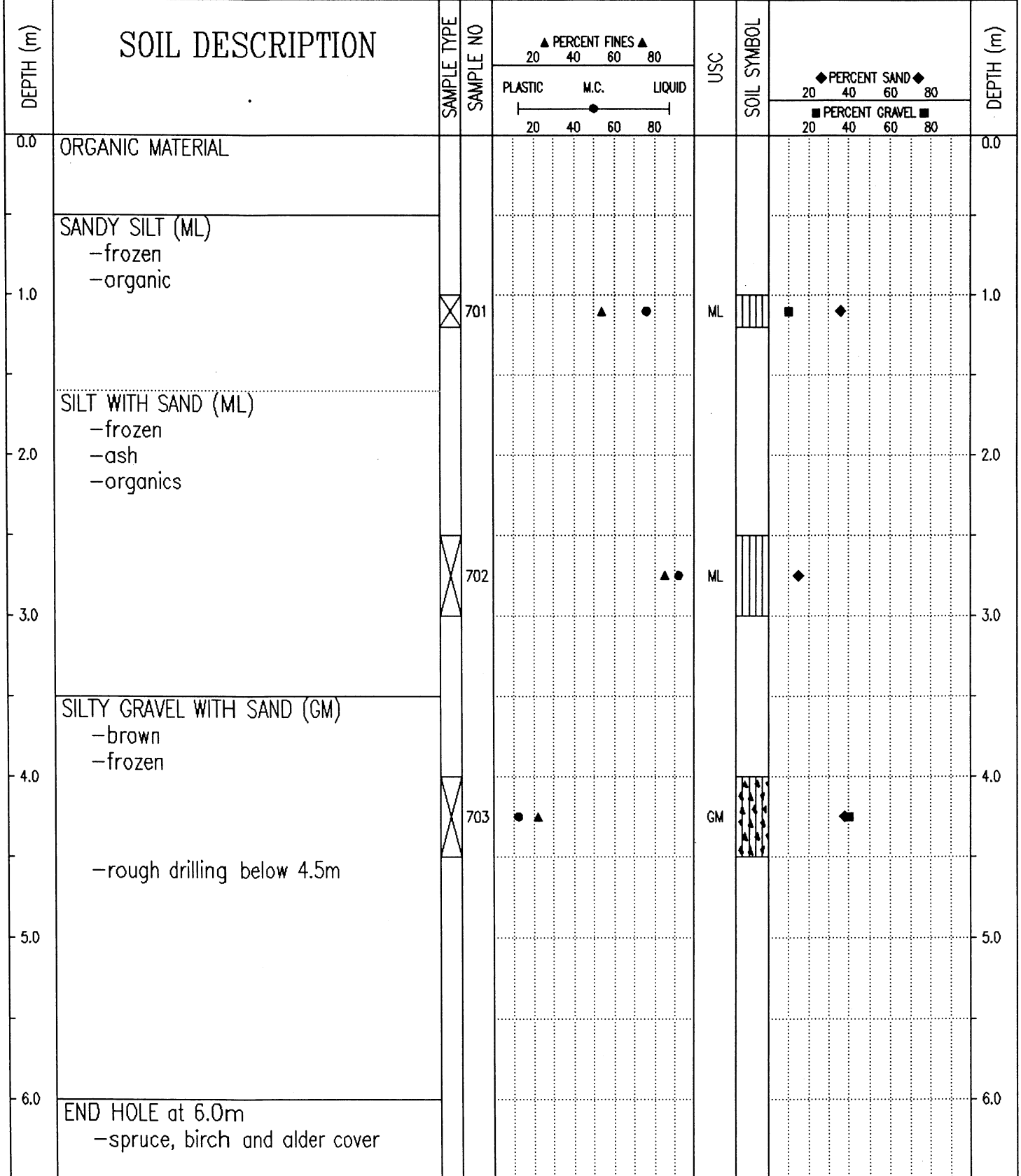
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



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	REVIEWED BY:	COMPLETE: 93/10/16
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 269-484
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1867+475 o/s 30m Rt.	ELEVATION: 0.00 (m)

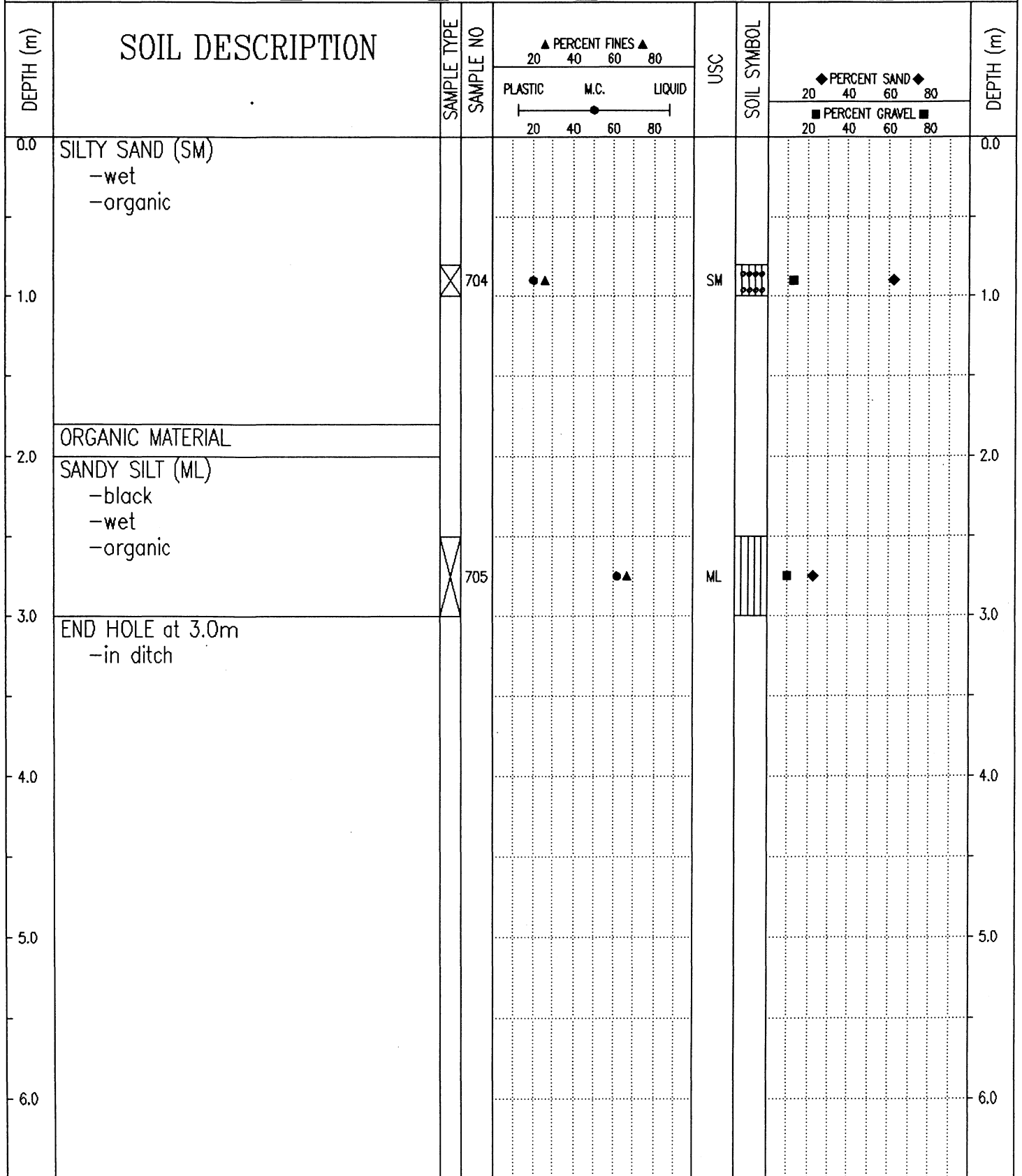
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



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LOGGED BY: GC	COMPLETION DEPTH: 6.0 m
REVIEWED BY:	COMPLETE: 93/10/16
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 270-485
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1867+575	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		

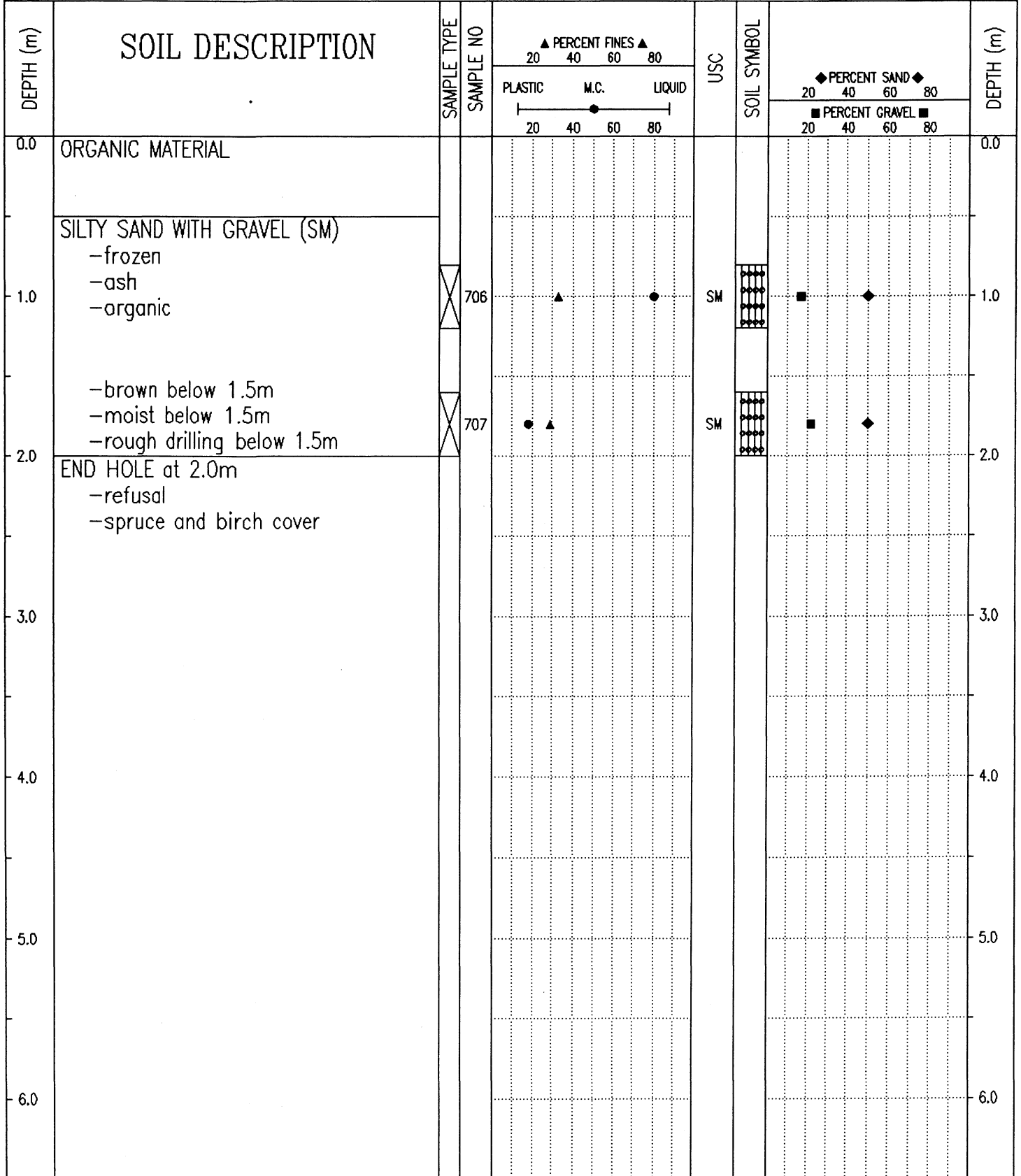


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LOGGED BY: GC
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 3.0 m
COMPLETE: 93/10/16

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 270-486
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1867+675 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			

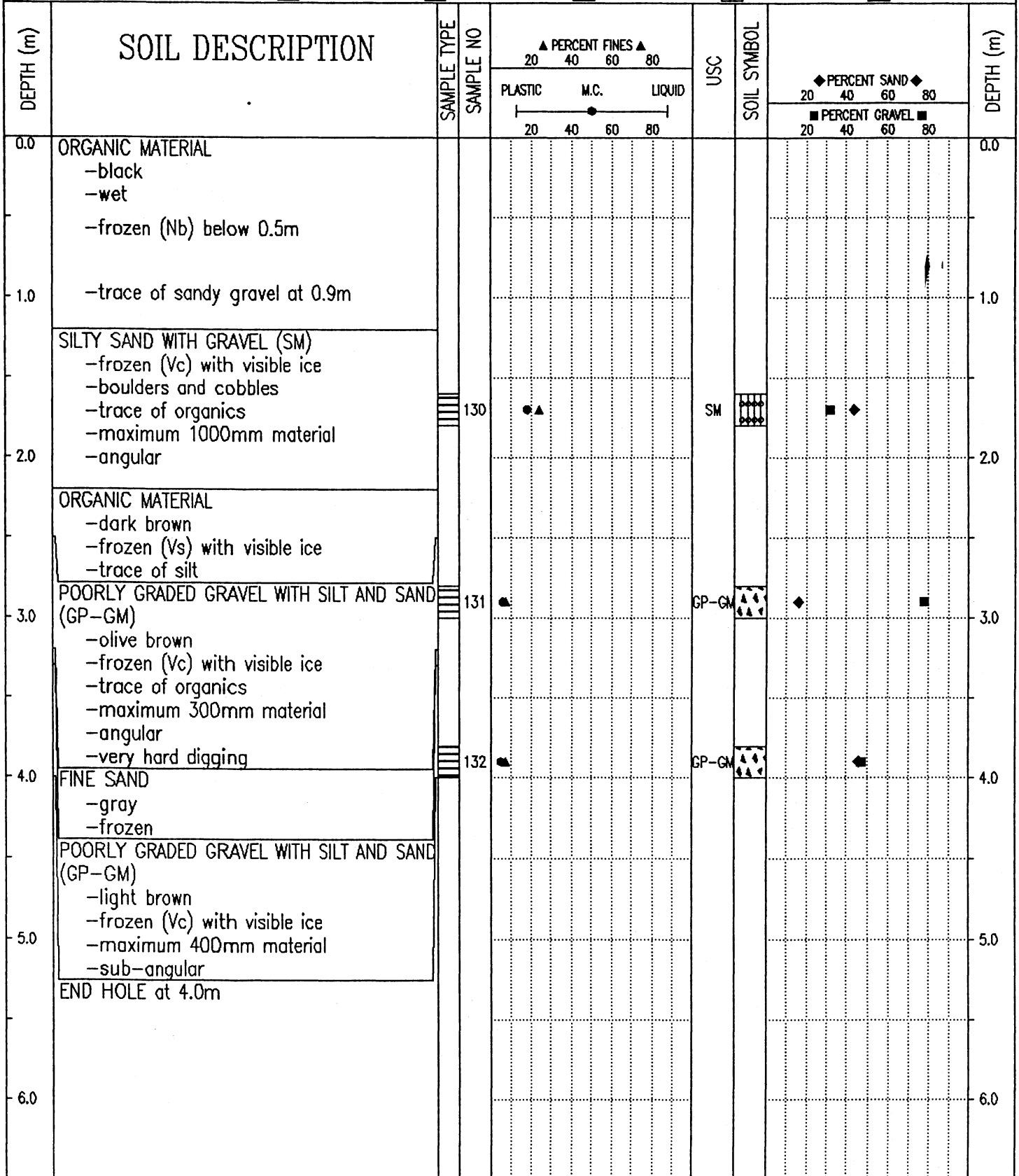


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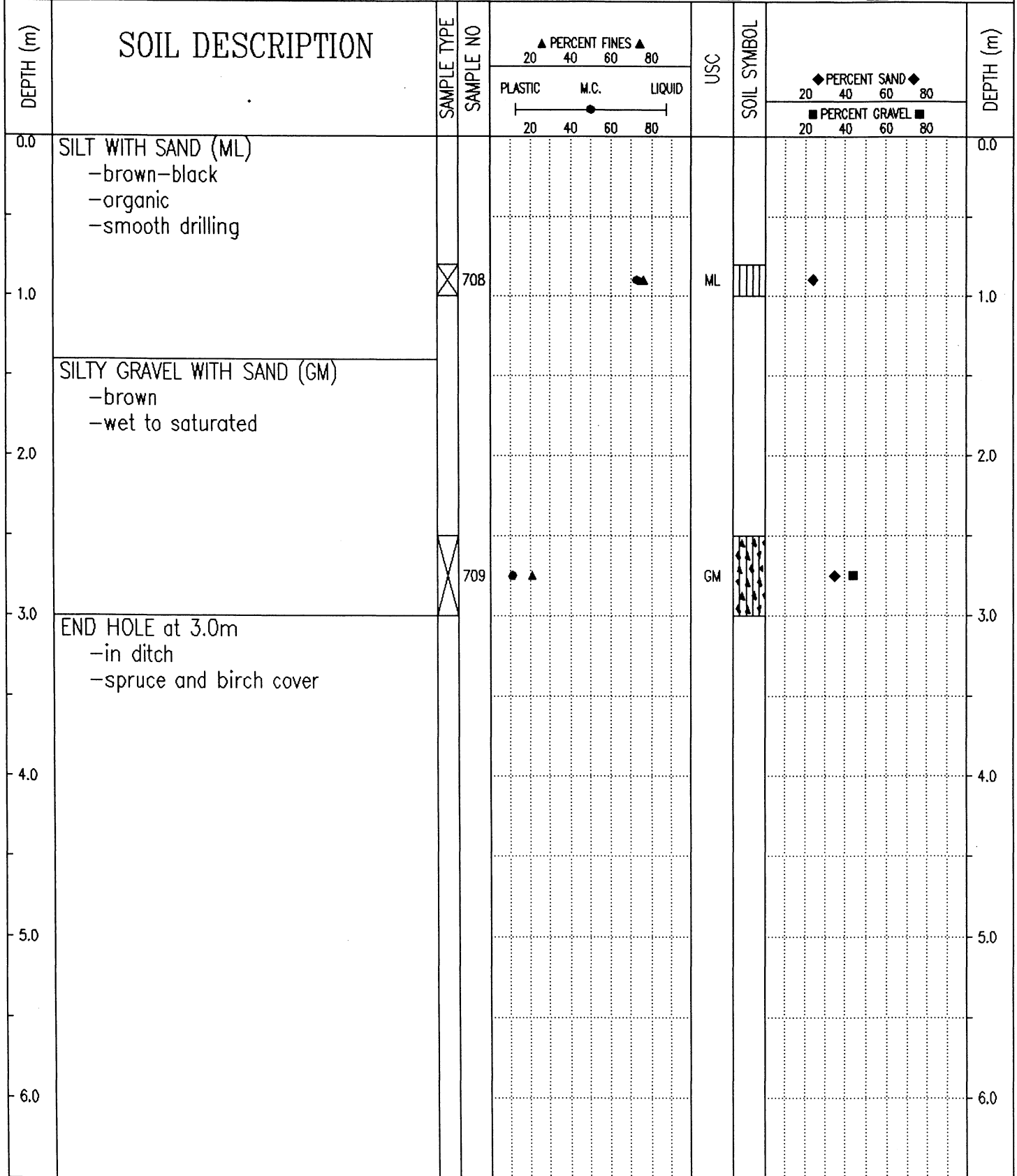
LOGGED BY: GC
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 2.0 m
COMPLETE: 93/10/16

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 383-554
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172		LOCATION: Sta. 1867+675 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

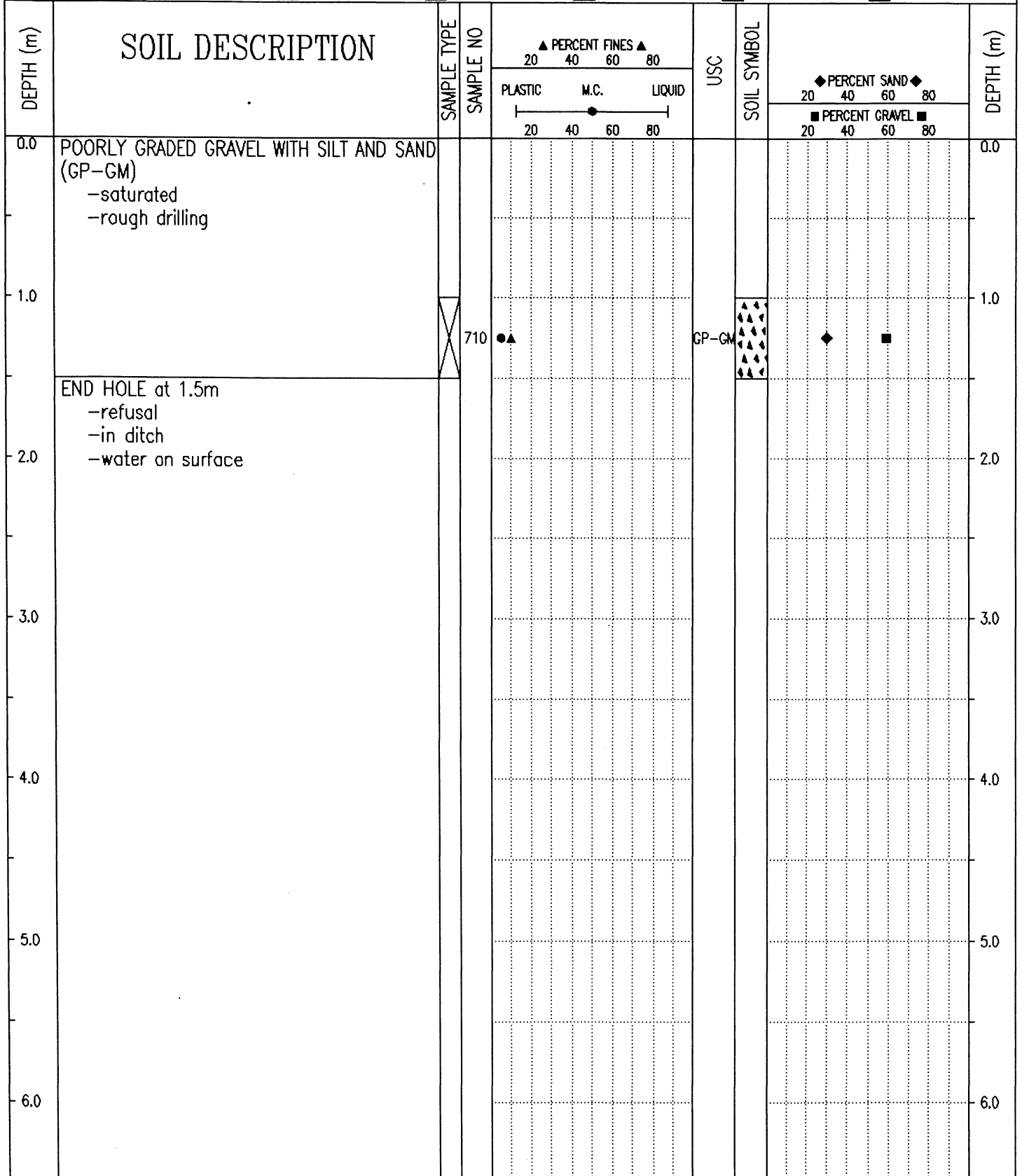


SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 270-487
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1867+750	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> 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: 93/10/16
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 270-488
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1867+850	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: 1.5 m
	REVIEWED BY:	COMPLETE: 93/10/16
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 270-489
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1867+950	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	SILTY GRAVEL WITH SAND (GM) -brown -wet											0.0	
1.0		<input checked="" type="checkbox"/>	711	●	▲		GM		◆		■	1.0	
2.0	END HOLE at 2.0m -refusal -in ditch											2.0	
3.0												3.0	
4.0												4.0	
5.0												5.0	
6.0												6.0	

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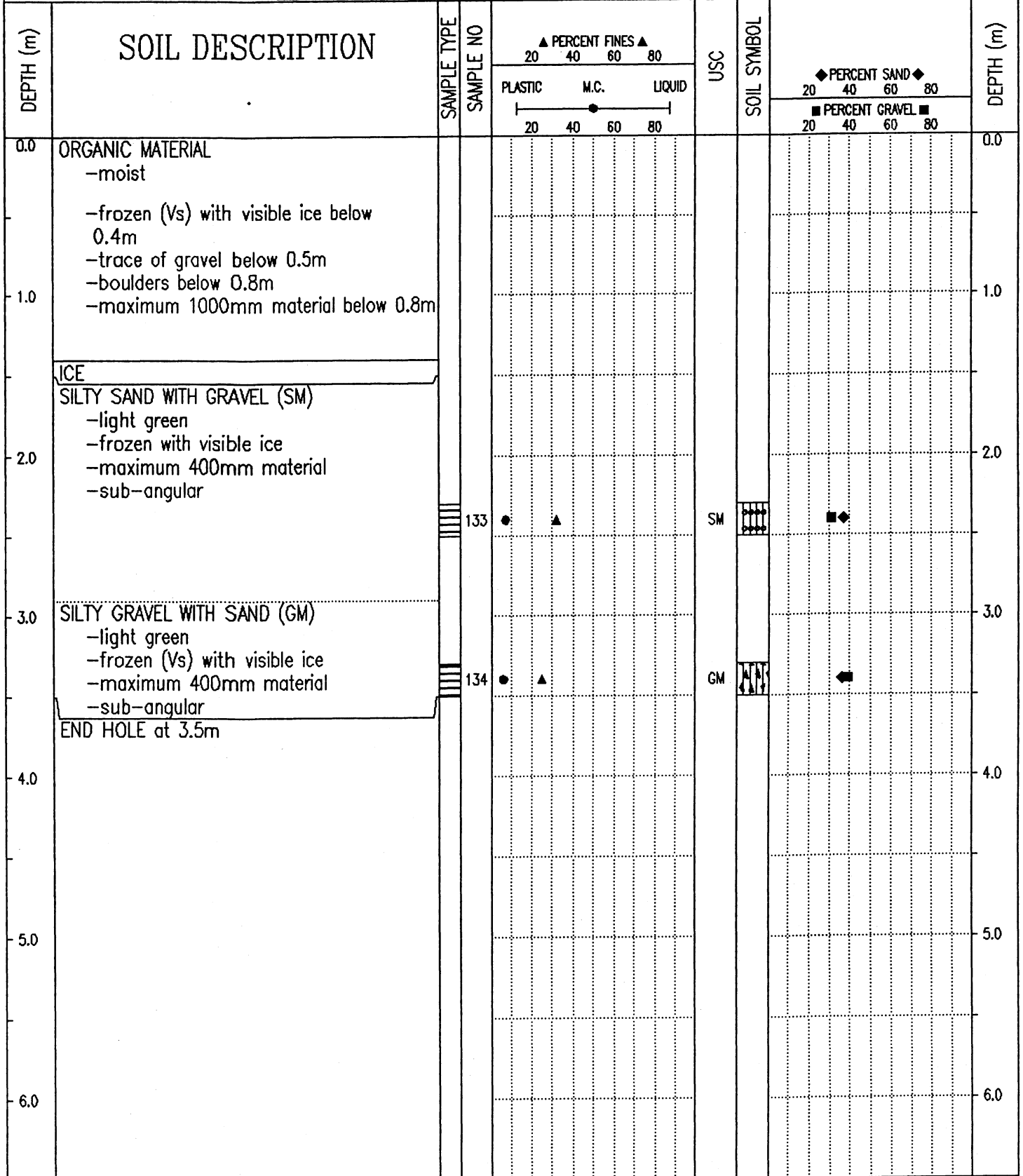
Fig. No:

COMPLETION DEPTH: 2.0 m

COMPLETE: 93/10/16

Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK PROJECT	TEST HOLE NO: 383-555
ENGINEERING-CAPITAL		SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172		LOCATION: Sta. 1868+025 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

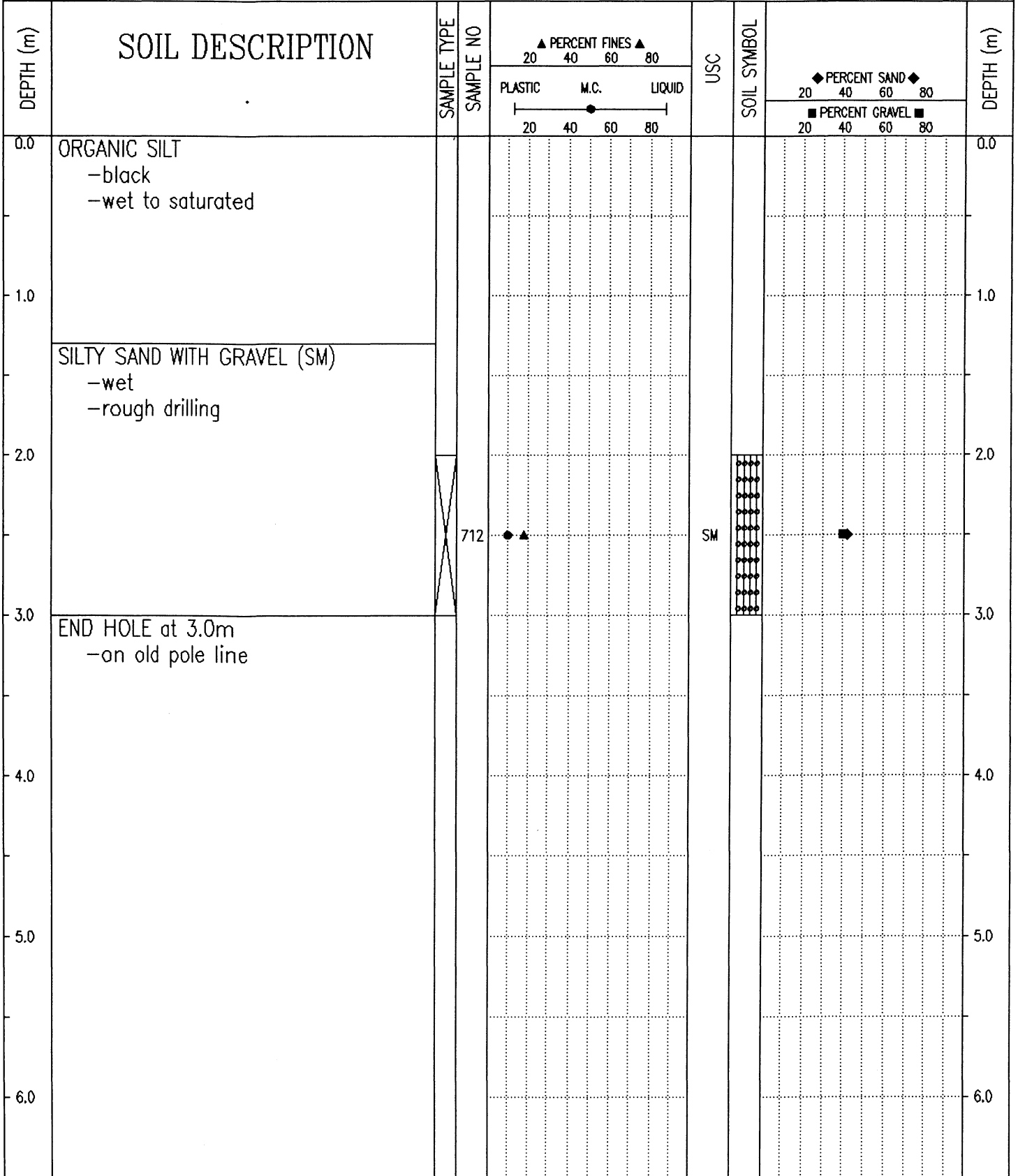


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Transportation Engineering

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REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 3.5 m
COMPLETE: 95/09/26

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 270-490
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1868+050 o/s 15m 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: 3.0 m
COMPLETE: 93/10/16

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 370-293
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI EX 200 LC	LOCATION: Sta. 1868+050 o/s 20m Rt.	ELEVATION: 0.00 (m)

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

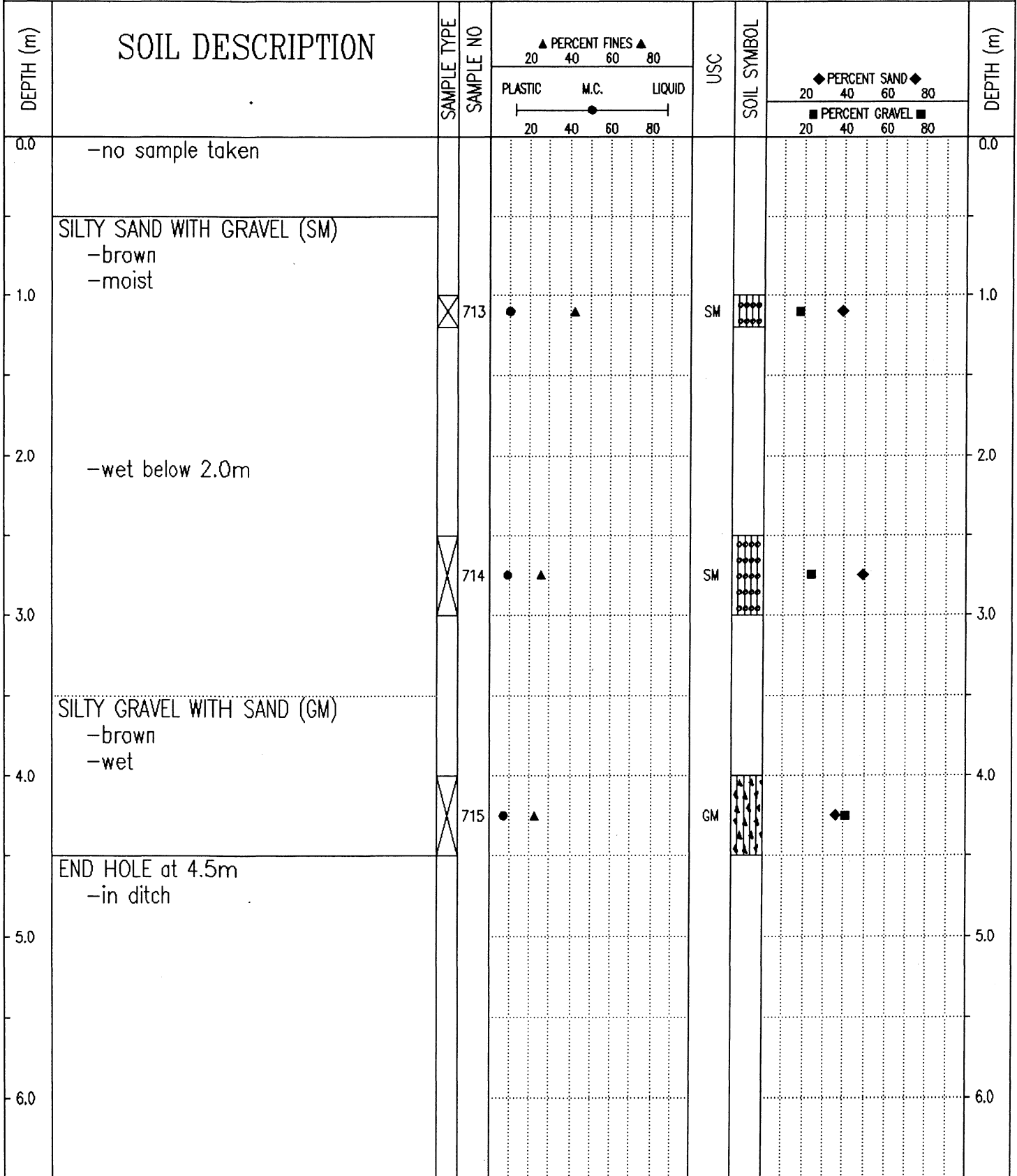
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				20	40	60			80	20	40	60	
0.0	ORGANIC MATERIAL -smooth digging -frozen below 0.3m											0.0	
2.0	POORLY GRADED GRAVEL WITH SILT AND SAND (GP-GM) -brown -frozen (Vx) with visible ice -trace of organics -maximum 200mm material -estimate 5% +100mm -hard noisy digging		595	▲	●		GP-GM	◆		■		2.0	
3.1	END HOLE at 3.1m											3.1	

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LOGGED BY: CC	COMPLETION DEPTH: 3.1 m
REVIEWED BY:	COMPLETE: 95/07/18
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT	ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 270-491
SHAKWAK PROJECT	SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER	LOCATION: Sta. 1868+150	ELEVATION: 0.00 (m)

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



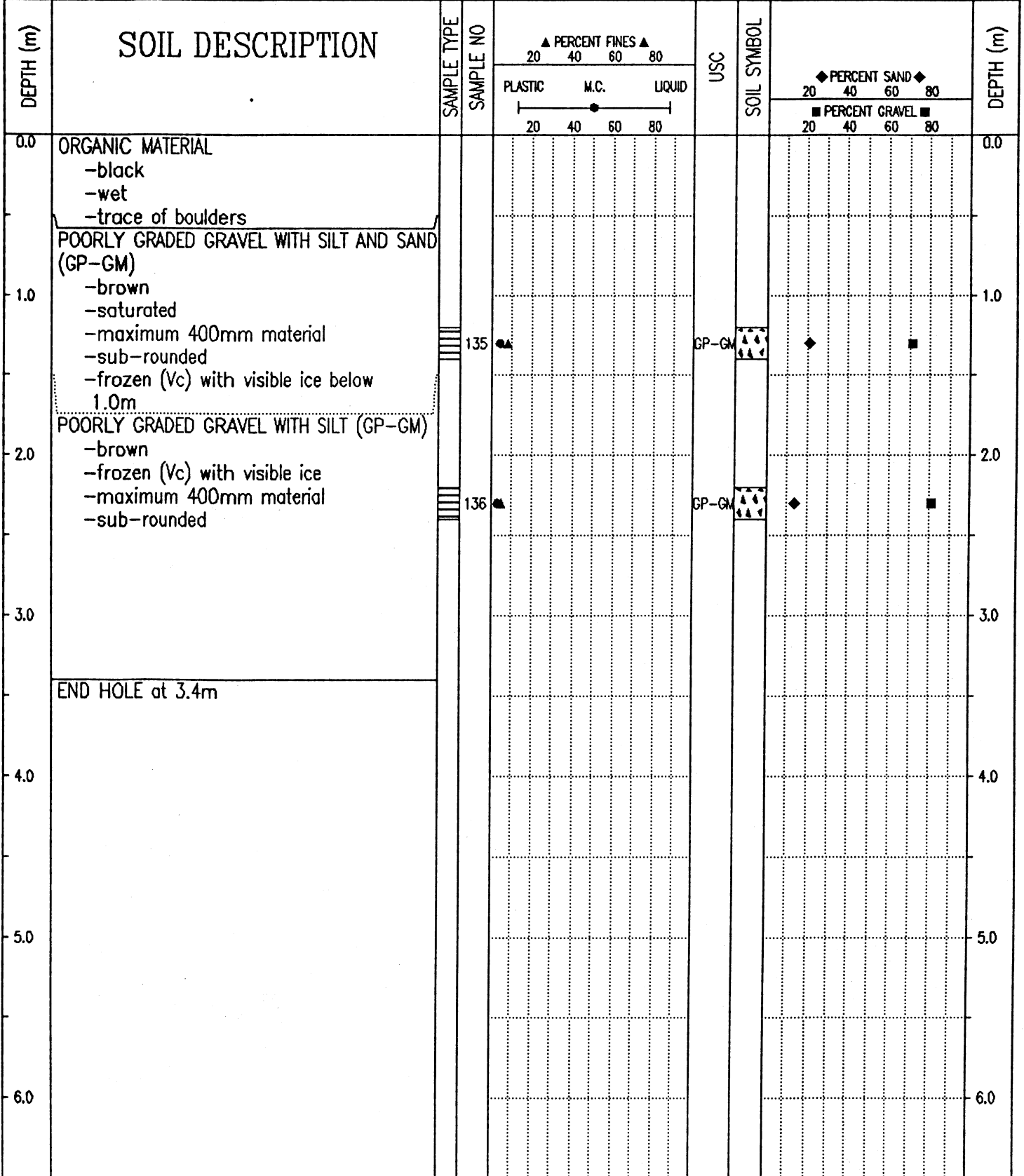
Government of Yukon
Transportation Engineering

LOGGED BY: GC
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.5 m
COMPLETE: 93/10/16

SUBSURFACE EXPLORATION AND TEST REPORT	SHAKWAK PROJECT	TEST HOLE NO: 383-556
ENGINEERING-CAPITAL	SEGMENT 15	Project No: 092-202101-0311
BACKHOE: HITACHI UH-172	LOCATION: Sta. 1868+150 o/s 16m Rt.	ELEVATION: 0.00 (m)

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



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LOGGED BY: KJ

REVIEWED BY:

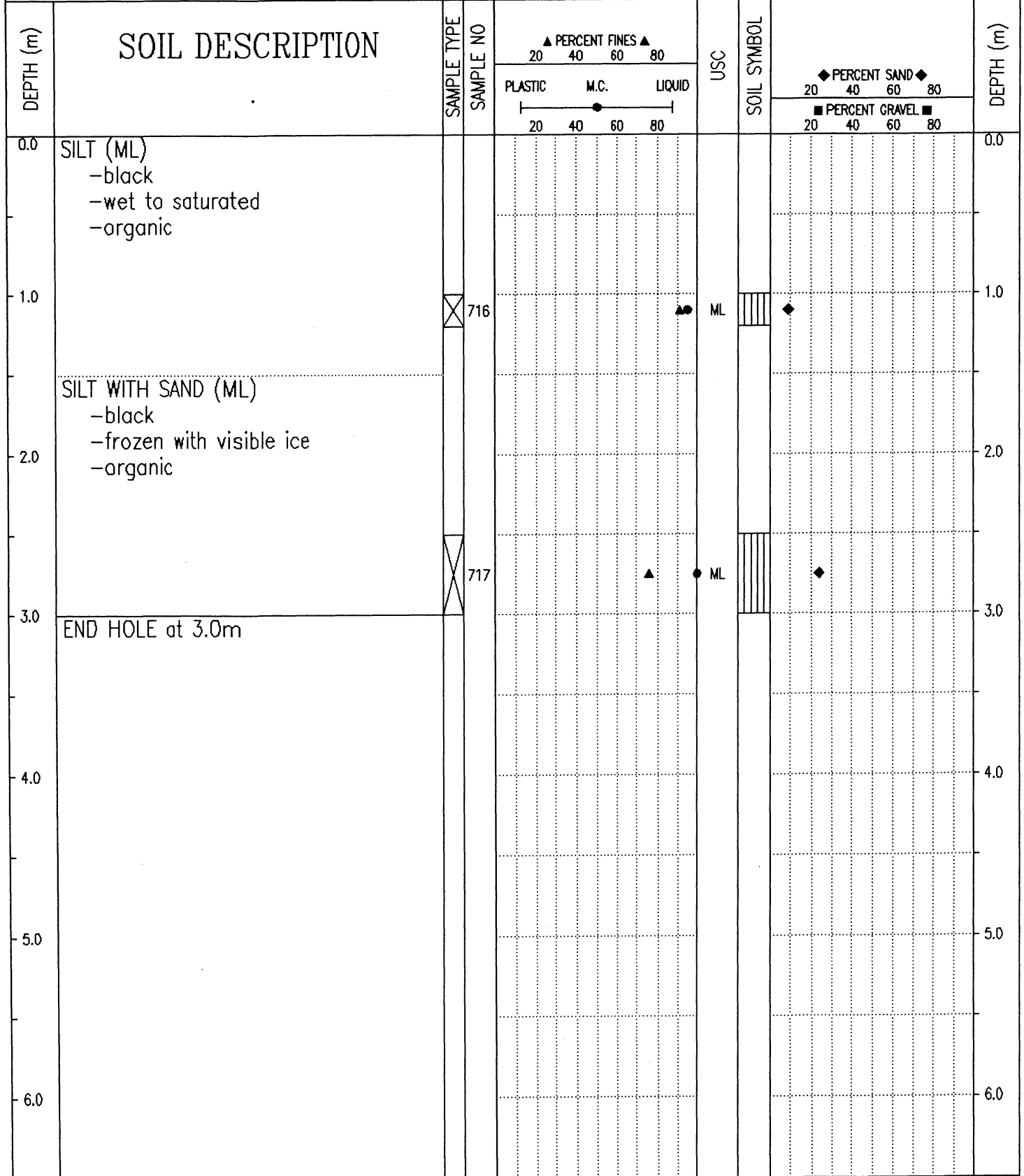
Fig. No:

COMPLETION DEPTH: 3.4 m

COMPLETE: 95/09/26

Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 270-492
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1868+250	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

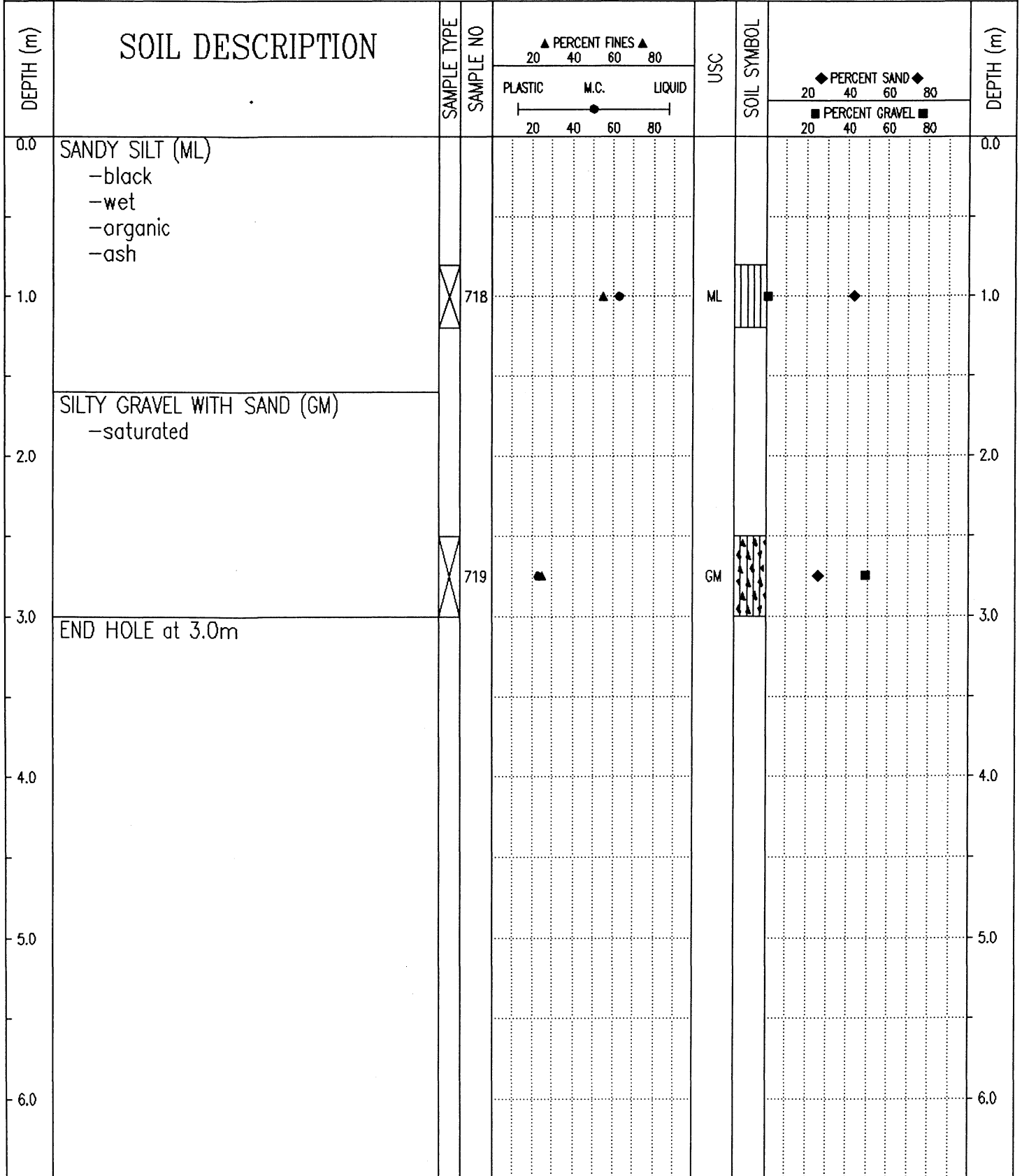


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Transportation Engineering

LOGGED BY: GC
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 3.0 m
COMPLETE: 93/10/16

SUBSURFACE EXPLORATION AND TEST REPORT		ALASKA HIGHWAY PRE-ENGINEERING	TEST HOLE NO: 270-493
SHAKWAK PROJECT		SEGMENT 15	Project No: 202101-0311-193
DRILL: CME 750 150mm Dia SOLID STEM AUGER		LOCATION: Sta. 1868+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: 93/10/16

Page 1 of 1

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 267-432
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1862+200 O/S 5M RT
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 620
 LAB NO: 2024
 DEPTH: 0.8-1.2
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	84
20.0	74
12.5	59
10.0	51
5.0	36
2.5	28
2.0	--
1.25	23
0.840	--
0.630	19
0.420	--
0.315	17
0.160	15
0.150	--
0.080	14

M.C. (%) : 7

LIMITS

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

% GRAVEL: 64
 % SAND: 22
 % FINES: 14

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 267-433
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1862+305 O/S 2M RT
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 620
 LAB NO: 2025
 DEPTH: 1.0-1.2
 TYPE: AUGER

FIELD NO: 621
 LAB NO: 2026
 DEPTH: 2.5-3.0
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	96
20.0	89
12.5	78
10.0	71
5.0	58
2.5	46
2.0	--
1.25	35
0.840	--
0.630	29
0.420	--
0.315	25
0.160	21
0.150	--
0.080	17

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	98
10.0	94
5.0	78
2.5	62
2.0	--
1.25	48
0.840	--
0.630	38
0.420	--
0.315	30
0.160	24
0.150	--
0.080	18

M.C. (%) : 9

M.C. (%) : 7

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

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

% GRAVEL: 42
 % SAND: 41
 % FINES: 17

% GRAVEL: 22
 % SAND: 59
 % FINES: 18

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 267-434
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1862+420
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 622
 LAB NO: 2027
 DEPTH: 1.0-1.6
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	88
20.0	86
12.5	67
10.0	60
5.0	41
2.5	30
2.0	--
1.25	23
0.840	--
0.630	18
0.420	--
0.315	14
0.160	12
0.150	--
0.080	10

M.C. (%) : 2

LIMITS

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

% GRAVEL: 59
 % SAND: 31
 % FINES: 10

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

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 267-435
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1862+500 O/S 20M LT
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 623
 LAB NO: 2028
 DEPTH: 0.8-1.0
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	88
20.0	79
12.5	62
10.0	57
5.0	47
2.5	40
2.0	--
1.25	34
0.840	--
0.630	29
0.420	--
0.315	24
0.160	20
0.150	--
0.080	16

M.C. (%) : 18

LIMITS

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

% GRAVEL: 53
 % SAND: 30
 % FINES: 16

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 267-436
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1862+600 O/S 25M LT
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 624
 LAB NO: 2029
 DEPTH: 0.8-1.0
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	85
20.0	77
12.5	63
10.0	57
5.0	51
2.5	46
2.0	--
1.25	43
0.840	--
0.630	40
0.420	--
0.315	38
0.160	35
0.150	--
0.080	32

M.C. (%): 20

LIMITS

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

% GRAVEL: 49
 % SAND: 19
 % FINES: 32

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 267-438
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1862+900 O/S 15M LT
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 624
 LAB NO: 2031
 DEPTH: 0.2-0.6
 TYPE: AUGER

FIELD NO: 625
 LAB NO: 2030
 DEPTH: 2.2-2.8
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	95
10.0	89
5.0	80
2.5	74
2.0	--
1.25	70
0.840	--
0.630	64
0.420	--
0.315	57
0.160	50
0.150	--
0.080	44

M.C. (%) : 14

LIMITS

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

% GRAVEL: 20
 % SAND: 36
 % FINES: 44

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	89
20.0	85
12.5	70
10.0	65
5.0	53
2.5	46
2.0	--
1.25	41
0.840	--
0.630	37
0.420	--
0.315	33
0.160	28
0.150	--
0.080	24

M.C. (%) : 10

LIMITS

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

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

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 267-439
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1863+000 O/S 12M LT
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 626
 LAB NO: 2032
 DEPTH: 0.8-1.0
 TYPE: AUGER

FIELD NO: 627
 LAB NO: 2033
 DEPTH: 2.2-2.8
 TYPE: AUGER

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

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	96
20.0	88
12.5	77
10.0	72
5.0	62
2.5	54
2.0	--
1.25	48
0.840	--
0.630	44
0.420	--
0.315	38
0.160	33
0.150	--
0.080	28

100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	94
12.5	85
10.0	80
5.0	68
2.5	59
2.0	--
1.25	51
0.840	--
0.630	45
0.420	--
0.315	39
0.160	34
0.150	--
0.080	28

M.C. (%) : 7

M.C. (%) : 7

LIMITS

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

LIMITS

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

% GRAVEL: 38
 % SAND: 34
 % FINES: 28

% GRAVEL: 32
 % SAND: 40
 % FINES: 28

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 267-440
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1863+000
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 628
 LAB NO: 2034
 DEPTH: 0.8-1.0
 TYPE: AUGER

FIELD NO: 629
 LAB NO: 2035
 DEPTH: 2.5-3.0
 TYPE: AUGER

FIELD NO: 630
 LAB NO: 2036
 DEPTH: 3.6-4.0
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	82
20.0	71
12.5	65
10.0	62
5.0	53
2.5	48
2.0	--
1.25	44
0.840	--
0.630	41
0.420	--
0.315	39
0.160	36
0.150	--
0.080	32

M.C. (%) : 11

LIMITS

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

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

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	97
12.5	88
10.0	82
5.0	67
2.5	58
2.0	--
1.25	50
0.840	--
0.630	44
0.420	--
0.315	39
0.160	33
0.150	--
0.080	28

M.C. (%) : 8

LIMITS

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

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

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	85
5.0	68
2.5	56
2.0	--
1.25	46
0.840	--
0.630	39
0.420	--
0.315	33
0.160	28
0.150	--
0.080	22

M.C. (%) : 9

LIMITS

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

% GRAVEL: 32
 % SAND: 46
 % FINES: 22

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 267-441
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1863+185
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 631
 LAB NO: 2037
 DEPTH: 1.8-2.2
 TYPE: AUGER
 ORGANIC

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	100
10.0	99
5.0	98
2.5	96
2.0	--
1.25	94
0.840	--
0.630	91
0.420	--
0.315	88
0.160	84
0.150	--
0.080	80

M.C. (%) : 74

LIMITS

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

% GRAVEL: 2
 % SAND: 18
 % FINES: 80

CLASSIFICATION:
 SILT WITH SAND
 (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 268-442
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1863+350 O/S 10M LT
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 632
 LAB NO: 2038
 DEPTH: 1.0-1.4
 TYPE: AUGER

FIELD NO: 633
 LAB NO: 2039
 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	78
12.5	67
10.0	62
5.0	55
2.5	50
2.0	--
1.25	44
0.840	--
0.630	39
0.420	--
0.315	34
0.160	28
0.150	--
0.080	23

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	83
20.0	76
12.5	65
10.0	62
5.0	52
2.5	46
2.0	--
1.25	41
0.840	--
0.630	37
0.420	--
0.315	32
0.160	26
0.150	--
0.080	20

M.C. (%) : 10

M.C. (%) : 6

LIMITS

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

LIMITS

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

% GRAVEL: 45
 % SAND: 32
 % FINES: 23

% GRAVEL: 48
 % SAND: 33
 % FINES: 20

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 268-443
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1863+450
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 634
 LAB NO: 2040
 DEPTH: 0.8-1.2
 TYPE: AUGER

FIELD NO: 635
 LAB NO: 2041
 DEPTH: 2.5-3.0
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	79
20.0	73
12.5	66
10.0	62
5.0	55
2.5	48
2.0	--
1.25	43
0.840	--
0.630	39
0.420	--
0.315	34
0.160	29
0.150	--
0.080	25

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	85
20.0	81
12.5	72
10.0	70
5.0	64
2.5	58
2.0	--
1.25	54
0.840	--
0.630	49
0.420	--
0.315	45
0.160	40
0.150	--
0.080	35

M.C. (%) : 18

M.C. (%) : 10

LIMITS

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

LIMITS

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

% GRAVEL: 45
 % SAND: 30
 % FINES: 25

% GRAVEL: 36
 % SAND: 29
 % FINES: 35

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 268-444
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1863+550 O/S 2M RT
 LOGGED BY: GC DATE COMPLETED: 93.10.14

FIELD NO: 636
 LAB NO: 2042
 DEPTH: 1.0-1.5
 TYPE: AUGER

FIELD NO: 637
 LAB NO: 2043
 DEPTH: 3.5-4.0
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	74
20.0	70
12.5	57
10.0	53
5.0	46
2.5	40
2.0	--
1.25	36
0.840	--
0.630	32
0.420	--
0.315	28
0.160	24
0.150	--
0.080	19

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	84
20.0	80
12.5	71
10.0	68
5.0	62
2.5	57
2.0	--
1.25	52
0.840	--
0.630	48
0.420	--
0.315	44
0.160	38
0.150	--
0.080	33

M.C. (%) : 4

M.C. (%) : 8

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

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

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

% GRAVEL: 38
 % SAND: 29
 % FINES: 33

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 268-445
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1863+600 O/S 200M RT
 LOGGED BY: GC DATE COMPLETED: 93.10.15

FIELD NO: 638
 LAB NO: 2044
 DEPTH: 0.6-1.0
 TYPE: AUGER

FIELD NO: 639
 LAB NO: 2045
 DEPTH: 2.0-2.5
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	82
20.0	78
12.5	72
10.0	69
5.0	61
2.5	55
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	100
31.5	--
25.0	75
20.0	67
12.5	53
10.0	46
5.0	35
2.5	30
2.0	--
1.25	26
0.840	--
0.630	24
0.420	--
0.315	21
0.160	18
0.150	--
0.080	15

M.C. (%) : 7

M.C. (%) : 4

LIMITS

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

LIMITS

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

% GRAVEL: 39
 % SAND: 33
 % FINES: 29

% GRAVEL: 65
 % SAND: 19
 % FINES: 15

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 268-446
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1863+700 O/S 200M RT
 LOGGED BY: GC DATE COMPLETED: 93.10.15

FIELD NO: 640
 LAB NO: 2046
 DEPTH: 1.0-1.2
 TYPE: AUGER

FIELD NO: 641
 LAB NO: 2047
 DEPTH: 2.4-3.0
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	92
20.0	87
12.5	82
10.0	78
5.0	70
2.5	64
2.0	--
1.25	59
0.840	--
0.630	55
0.420	--
0.315	49
0.160	42
0.150	--
0.080	35

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	86
20.0	79
12.5	76
10.0	74
5.0	65
2.5	59
2.0	--
1.25	54
0.840	--
0.630	50
0.420	--
0.315	45
0.160	39
0.150	--
0.080	33

M.C. (%) : 7

M.C. (%) : 7

LIMITS

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

LIMITS

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

% GRAVEL: 30
 % SAND: 35
 % FINES: 35

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

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 268-448
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1863+800
 LOGGED BY: GC DATE COMPLETED: 93.10.15

FIELD NO: 642
 LAB NO: 2048
 DEPTH: 1.2-1.6
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	78
20.0	72
12.5	60
10.0	55
5.0	47
2.5	40
2.0	--
1.25	35
0.840	--
0.630	30
0.420	--
0.315	26
0.160	22
0.150	--
0.080	18

M.C. (%) : 7

LIMITS

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

% GRAVEL: 53
 % SAND: 29
 % FINES: 18

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 268-449
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1863+900
 LOGGED BY: GC DATE COMPLETED: 93.10.15

FIELD NO: 643
 LAB NO: 2049
 DEPTH: 2.0-2.5
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	72
20.0	60
12.5	53
10.0	47
5.0	39
2.5	33
2.0	--
1.25	29
0.840	--
0.630	25
0.420	--
0.315	22
0.160	19
0.150	--
0.080	16

M.C. (%) : 6

LIMITS

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

% GRAVEL: 61
 % SAND: 23
 % FINES: 16

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 268-450
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1864+000
 LOGGED BY: GC DATE COMPLETED: 93.10.15

FIELD NO: 644
 LAB NO: 2050
 DEPTH: 0.8-1.2
 TYPE: AUGER

FIELD NO: 645
 LAB NO: 2051
 DEPTH: 2.4-2.8
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	93
20.0	86
12.5	75
10.0	71
5.0	61
2.5	53
2.0	--
1.25	46
0.840	--
0.630	41
0.420	--
0.315	35
0.160	28
0.150	--
0.080	20

M.C. (%) : 3

LIMITS

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

% GRAVEL: 39
 % SAND: 41
 % FINES: 20

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	92
20.0	88
12.5	79
10.0	75
5.0	66
2.5	59
2.0	--
1.25	53
0.840	--
0.630	48
0.420	--
0.315	42
0.160	35
0.150	--
0.080	25

M.C. (%) : 4

LIMITS

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

% GRAVEL: 34
 % SAND: 41
 % FINES: 25

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 268-451
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1864+100
 LOGGED BY: GC DATE COMPLETED: 93.10.15

FIELD NO: 646
 LAB NO: 2052
 DEPTH: 0.8-1.0
 TYPE: AUGER

FIELD NO: 647
 LAB NO: 2053
 DEPTH: 2.5-3.0
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	87
20.0	73
12.5	61
10.0	57
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	16

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	90
20.0	85
12.5	76
10.0	72
5.0	63
2.5	56
2.0	--
1.25	50
0.840	--
0.630	44
0.420	--
0.315	38
0.160	32
0.150	--
0.080	25

M.C. (%) : 8

M.C. (%) : 6

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

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

% GRAVEL: 54
 % SAND: 31
 % FINES: 16

% GRAVEL: 37
 % SAND: 38
 % FINES: 25

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 268-452
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1864+225
 LOGGED BY: GC DATE COMPLETED: 93.10.15

FIELD NO: 648
 LAB NO: 2054
 DEPTH: 1.0-1.2
 TYPE: AUGER

FIELD NO: 649
 LAB NO: 2055
 DEPTH: 2.5-3.0
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	83
20.0	76
12.5	68
10.0	64
5.0	55
2.5	48
2.0	--
1.25	42
0.840	--
0.630	36
0.420	--
0.315	31
0.160	26
0.150	--
0.080	20

M.C. (%) : 4

LIMITS

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

% GRAVEL: 45
 % SAND: 34
 % FINES: 20

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	97
20.0	97
12.5	92
10.0	89
5.0	82
2.5	76
2.0	--
1.25	71
0.840	--
0.630	66
0.420	--
0.315	61
0.160	54
0.150	--
0.080	46

M.C. (%) : 10

LIMITS

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

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

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 268-453
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1864+320
 LOGGED BY: GC DATE COMPLETED: 93.10.15

FIELD NO: 650
 LAB NO: 2056
 DEPTH: 0.8-1.0
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	83
20.0	76
12.5	63
10.0	57
5.0	48
2.5	43
2.0	--
1.25	38
0.840	--
0.630	34
0.420	--
0.315	31
0.160	27
0.150	--
0.080	24

M.C. (%) : 7

LIMITS

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

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

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 268-457
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1864+425
 LOGGED BY: GC DATE COMPLETED: 93.10.15

FIELD NO: 658
 LAB NO: 2064
 DEPTH: 1.0-1.2
 TYPE: AUGER

FIELD NO: 659
 LAB NO: 2065
 DEPTH: 2.5-3.0
 TYPE: AUGER

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

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	87
20.0	79
12.5	66
10.0	62
5.0	52
2.5	44
2.0	--
1.25	38
0.840	--
0.630	33
0.420	--
0.315	28
0.160	24
0.150	--
0.080	19

100.0	--
80.0	--
50.0	100
31.5	--
25.0	92
20.0	88
12.5	77
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	32
0.150	--
0.080	26

M.C. (%) : 6

M.C. (%) : 6

LIMITS

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

LIMITS

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

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

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

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 268-458
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1864+525
 LOGGED BY: GC DATE COMPLETED: 93.10.15

FIELD NO: 660
 LAB NO: 2066
 DEPTH: 0.8-1.0
 TYPE: AUGER

FIELD NO: 661
 LAB NO: 2067
 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	82
12.5	74
10.0	70
5.0	60
2.5	54
2.0	--
1.25	47
0.840	--
0.630	43
0.420	--
0.315	38
0.160	33
0.150	--
0.080	29

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	81
20.0	80
12.5	73
10.0	68
5.0	61
2.5	56
2.0	--
1.25	51
0.840	--
0.630	47
0.420	--
0.315	42
0.160	37
0.150	--
0.080	31

M.C. (%) : 6

M.C. (%) : 6

LIMITS

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

LIMITS

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

% GRAVEL: 40
 % SAND: 31
 % FINES: 29

% GRAVEL: 39
 % SAND: 31
 % FINES: 31

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 268-459
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1864+625 O/S 3M LT
 LOGGED BY: GC DATE COMPLETED: 93.10.15

FIELD NO: 662
 LAB NO: 2068
 DEPTH: 1.0-1.2
 TYPE: AUGER

FIELD NO: 663
 LAB NO: 2069
 DEPTH: 2.5-3.0
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	84
20.0	74
12.5	61
10.0	54
5.0	46
2.5	40
2.0	--
1.25	35
0.840	--
0.630	31
0.420	--
0.315	27
0.160	23
0.150	--
0.080	19

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	82
20.0	78
12.5	73
10.0	72
5.0	66
2.5	62
2.0	--
1.25	58
0.840	--
0.630	56
0.420	--
0.315	52
0.160	48
0.150	--
0.080	43

M.C. (%) : 4

M.C. (%) : 9

LIMITS

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

LIMITS

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

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

% GRAVEL: 34
 % SAND: 23
 % FINES: 43

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 268-460
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1864+725 O/S 3M LT
 LOGGED BY: GC DATE COMPLETED: 93.10.15

FIELD NO: 664
 LAB NO: 2070
 DEPTH: 0.6-1.0
 TYPE: AUGER

FIELD NO: 665
 LAB NO: 2071
 DEPTH: 2.5-3.0
 TYPE: AUGER

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

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	95
12.5	93
10.0	92
5.0	88
2.5	85
2.0	--
1.25	81
0.840	--
0.630	79
0.420	--
0.315	76
0.160	74
0.150	--
0.080	70

100.0	--
80.0	--
50.0	100
31.5	--
25.0	93
20.0	86
12.5	79
10.0	74
5.0	66
2.5	60
2.0	--
1.25	56
0.840	--
0.630	52
0.420	--
0.315	47
0.160	42
0.150	--
0.080	36

M.C. (%) : 22

M.C. (%) : 8

LIMITS

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

LIMITS

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

% GRAVEL: 12
 % SAND: 17
 % FINES: 70

% GRAVEL: 34
 % SAND: 30
 % FINES: 36

CLASSIFICATION:
 SANDY SILT (ML)

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 269-461
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1864+725 O/S 7M LT
 LOGGED BY: GC DATE COMPLETED: 93.10.15

FIELD NO: 666
 LAB NO: 2072
 DEPTH: 0.8-1.0
 TYPE: AUGER

FIELD NO: 667
 LAB NO: 2073
 DEPTH: 2.5-3.0
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	88
12.5	81
10.0	76
5.0	66
2.5	59
2.0	--
1.25	53
0.840	--
0.630	49
0.420	--
0.315	44
0.160	40
0.150	--
0.080	35

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	93
20.0	84
12.5	69
10.0	62
5.0	48
2.5	41
2.0	--
1.25	35
0.840	--
0.630	31
0.420	--
0.315	27
0.160	23
0.150	--
0.080	20

M.C. (%) : 14

M.C. (%) : 5

LIMITS

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

LIMITS

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

% GRAVEL: 34
 % SAND: 31
 % FINES: 35

% GRAVEL: 52
 % SAND: 29
 % FINES: 20

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 269-462
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1864+825
 LOGGED BY: GC DATE COMPLETED: 93.10.15

FIELD NO: 668
 LAB NO: 2074
 DEPTH: 2.0-3.0
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	93
20.0	91
12.5	88
10.0	84
5.0	76
2.5	70
2.0	--
1.25	63
0.840	--
0.630	58
0.420	--
0.315	52
0.160	47
0.150	--
0.080	41

M.C. (%) : 39

LIMITS

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

% GRAVEL: 24
 % SAND: 36
 % FINES: 41

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 269-464
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1865+125
 LOGGED BY: GC DATE COMPLETED: 93.10.15

FIELD NO: 669
 LAB NO: 2075
 DEPTH: 0.8-1.0
 TYPE: AUGER

FIELD NO: 670
 LAB NO: 2076
 DEPTH: 2.5-3.0
 TYPE: AUGER

FIELD NO: 671
 LAB NO: 2077
 DEPTH: 4.0-4.5
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	89
20.0	69
12.5	56
10.0	52
5.0	43
2.5	37
2.0	--
1.25	31
0.840	--
0.630	27
0.420	--
0.315	23
0.160	19
0.150	--
0.080	15

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	81
20.0	80
12.5	73
10.0	66
5.0	49
2.5	39
2.0	--
1.25	32
0.840	--
0.630	27
0.420	--
0.315	23
0.160	19
0.150	--
0.080	16

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	89
2.5	83
2.0	--
1.25	76
0.840	--
0.630	70
0.420	--
0.315	64
0.160	58
0.150	--
0.080	52

M.C. (%) : 5

M.C. (%) : 8

M.C. (%) : 29

LIMITS

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

LIMITS

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

LIMITS

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

% GRAVEL: 57
 % SAND: 28
 % FINES: 15

% GRAVEL: 51
 % SAND: 33
 % FINES: 16

% GRAVEL: 11
 % SAND: 37
 % FINES: 52

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

CLASSIFICATION:
 SANDY SILT (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 269-465
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1865+275 O/S 15M RT
 LOGGED BY: GC DATE COMPLETED: 93.10.15

FIELD NO: 672
 LAB NO: 2078
 DEPTH: 2.0-3.0
 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	97
2.0	--
1.25	88
0.840	--
0.630	83
0.420	--
0.315	77
0.160	70
0.150	--
0.080	63

M.C. (%) : 143

LIMITS

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

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

CLASSIFICATION:
 SANDY SILT (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 269-465A
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1865+350 O/S 2M RT
 LOGGED BY: GC DATE COMPLETED: 93.10.15

FIELD NO: 672
 LAB NO: 2079
 DEPTH: 2.0-3.0
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	94
20.0	87
12.5	76
10.0	73
5.0	62
2.5	53
2.0	--
1.25	45
0.840	--
0.630	38
0.420	--
0.315	31
0.160	25
0.150	--
0.080	18

M.C. (%) : 14

LIMITS

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

% GRAVEL: 38
 % SAND: 44
 % FINES: 18

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 269-466
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1865+450 O/S 3M RT
 LOGGED BY: GC DATE COMPLETED: 93.10.15

FIELD NO: 673
 LAB NO: 2080
 DEPTH: 0.8-1.0
 TYPE: AUGER

FIELD NO: 674
 LAB NO: 2081
 DEPTH: 2.5-3.0
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	94
12.5	87
10.0	83
5.0	74
2.5	67
2.0	--
1.25	58
0.840	--
0.630	49
0.420	--
0.315	36
0.160	23
0.150	--
0.080	15

M.C. (%) : 5

LIMITS

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

% GRAVEL: 26
 % SAND: 59
 % FINES: 15

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	87
12.5	74
10.0	69
5.0	55
2.5	47
2.0	--
1.25	39
0.840	--
0.630	33
0.420	--
0.315	28
0.160	23
0.150	--
0.080	18

M.C. (%) : 6

LIMITS

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

% GRAVEL: 45
 % SAND: 38
 % FINES: 18

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 269-468
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1865+810
 LOGGED BY: GC DATE COMPLETED: 93.10.15

FIELD NO: 675
 LAB NO: 2082
 DEPTH: 0.8-1.0
 TYPE: AUGER

FIELD NO: 676
 LAB NO: 2083
 DEPTH: 2.5-3.0
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	97
20.0	92
12.5	84
10.0	81
5.0	73
2.5	67
2.0	--
1.25	62
0.840	--
0.630	58
0.420	--
0.315	53
0.160	49
0.150	--
0.080	43

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	92
20.0	85
12.5	75
10.0	71
5.0	58
2.5	50
2.0	--
1.25	43
0.840	--
0.630	38
0.420	--
0.315	33
0.160	28
0.150	--
0.080	24

M.C. (%) : 22

M.C. (%) : 6

LIMITS

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

LIMITS

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

% GRAVEL: 27
 % SAND: 30
 % FINES: 43

% GRAVEL: 42
 % SAND: 34
 % FINES: 24

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 269-469
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1865+950
 LOGGED BY: GC DATE COMPLETED: 93.10.15

FIELD NO: 677
 LAB NO: 2084
 DEPTH: 0.6-1.0
 TYPE: AUGER

FIELD NO: 678
 LAB NO: 2085
 DEPTH: 1.6-2.0
 TYPE: AUGER

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	92
2.5	89
2.0	--
1.25	86
0.840	--
0.630	84
0.420	--
0.315	82
0.160	80
0.150	--
0.080	75

M.C. (%) : 12

LIMITS

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

% GRAVEL: 8
 % SAND: 17
 % FINES: 75

CLASSIFICATION:
 SILT WITH SAND
 (ML)

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	91
20.0	85
12.5	76
10.0	70
5.0	54
2.5	41
2.0	--
1.25	31
0.840	--
0.630	25
0.420	--
0.315	21
0.160	18
0.150	--
0.080	15

M.C. (%) : 3

LIMITS

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

% GRAVEL: 46
 % SAND: 39
 % FINES: 15

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 269-470
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1866+025
 LOGGED BY: GC DATE COMPLETED: 93.10.15

FIELD NO: 679
 LAB NO: 2086
 DEPTH: 0.6-1.0
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	98
20.0	92
12.5	78
10.0	73
5.0	58
2.5	50
2.0	--
1.25	42
0.840	--
0.630	36
0.420	--
0.315	30
0.160	25
0.150	--
0.080	20

M.C. (%) : 3

LIMITS

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

% GRAVEL: 42
 % SAND: 39
 % FINES: 20

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 269-471
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1866+150 O/S 3M RT
 LOGGED BY: GC DATE COMPLETED: 93.10.16

FIELD NO: 680
 LAB NO: 2104
 DEPTH: 0.0-0.3
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	82
20.0	73
12.5	60
10.0	52
5.0	36
2.5	30
2.0	--
1.25	27
0.840	--
0.630	24
0.420	--
0.315	22
0.160	19
0.150	--
0.080	16

M.C. (%) : 10

LIMITS

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

% GRAVEL: 64
 % SAND: 20
 % FINES: 16

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 269-472
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1866+250 O/S 3M RT
 LOGGED BY: GC DATE COMPLETED: 93.10.16

FIELD NO: 681
 LAB NO: 2087
 DEPTH: 0.5-1.0
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	79
20.0	75
12.5	60
10.0	53
5.0	40
2.5	34
2.0	--
1.25	30
0.840	--
0.630	26
0.420	--
0.315	23
0.160	19
0.150	--
0.080	15

M.C. (%) : 4

LIMITS

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

% GRAVEL: 60
 % SAND: 25
 % FINES: 15

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 269-473
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1866+352
 LOGGED BY: GC DATE COMPLETED: 93.10.16

FIELD NO: 682
 LAB NO: 2088
 DEPTH: 0.6-1.0
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	86
20.0	76
12.5	58
10.0	49
5.0	37
2.5	31
2.0	--
1.25	26
0.840	--
0.630	22
0.420	--
0.315	18
0.160	15
0.150	--
0.080	12

M.C. (%) : 7

LIMITS

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

% GRAVEL: 63
 % SAND: 26
 % FINES: 12

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

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 269-474
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1866+375 O/S 3M RT
 LOGGED BY: GC DATE COMPLETED: 93.10.16

FIELD NO: 683
 LAB NO: 2089
 DEPTH: 0.6-1.0
 TYPE: AUGER
 ORGANIC

FIELD NO: 684
 LAB NO: 2090
 DEPTH: 2.4-3.0
 TYPE: AUGER
 ORGANIC

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	88
20.0	82
12.5	71
10.0	65
5.0	62
2.5	59
2.0	--
1.25	57
0.840	--
0.630	55
0.420	--
0.315	51
0.160	48
0.150	--
0.080	44

M.C. (%) : 35

LIMITS

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

% GRAVEL: 38
 % SAND: 18
 % FINES: 44

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	91
20.0	90
12.5	81
10.0	78
5.0	70
2.5	64
2.0	--
1.25	57
0.840	--
0.630	51
0.420	--
0.315	45
0.160	39
0.150	--
0.080	34

M.C. (%) : 28

LIMITS

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

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

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 269-475
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1866+490 O/S 10M LT
 LOGGED BY: GC DATE COMPLETED: 93.10.16

FIELD NO: 685
 LAB NO: 2091
 DEPTH: 0.6-1.0
 TYPE: AUGER

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	85
20.0	79
12.5	62
10.0	55
5.0	45
2.5	39
2.0	--
1.25	35
0.840	--
0.630	32
0.420	--
0.315	28
0.160	25
0.150	--
0.080	22

M.C. (%) : 6

LIMITS

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

% GRAVEL: 55
 % SAND: 24
 % FINES: 22

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 269-476
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1866+600 O/S 20M LT
 LOGGED BY: GC DATE COMPLETED: 93.10.16

FIELD NO: 686
 LAB NO: 2092
 DEPTH: 1.0-1.2
 TYPE: AUGER

FIELD NO: 687
 LAB NO: 2093
 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	91
12.5	83
10.0	80
5.0	73
2.5	66
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	98
20.0	97
12.5	93
10.0	91
5.0	85
2.5	78
2.0	--
1.25	72
0.840	--
0.630	67
0.420	--
0.315	61
0.160	54
0.150	--
0.080	46

M.C. (%) : 12

M.C. (%) : 11

LIMITS

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

LIMITS

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

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

% GRAVEL: 15
 % SAND: 39
 % FINES: 46

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 269-477
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1866+775
 LOGGED BY: GC DATE COMPLETED: 93.10.16

FIELD NO: 688
 LAB NO: 2094
 DEPTH: 0.6-1.0
 TYPE: AUGER

FIELD NO: 689
 LAB NO: 2095
 DEPTH: 2.5-3.0
 TYPE: AUGER

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

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	77
20.0	62
12.5	58
10.0	54
5.0	42
2.5	34
2.0	--
1.25	27
0.840	--
0.630	24
0.420	--
0.315	21
0.160	19
0.150	--
0.080	17

100.0	--
80.0	--
50.0	100
31.5	--
25.0	97
20.0	94
12.5	91
10.0	88
5.0	79
2.5	72
2.0	--
1.25	65
0.840	--
0.630	59
0.420	--
0.315	53
0.160	46
0.150	--
0.080	35

M.C. (%) : 12

M.C. (%) : 12

LIMITS

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

LIMITS

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

% GRAVEL: 58
 % SAND: 25
 % FINES: 17

% GRAVEL: 21
 % SAND: 44
 % FINES: 35

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 269-478
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1866+875
 LOGGED BY: GC DATE COMPLETED: 93.10.16

FIELD NO: 690
 LAB NO: 2096
 DEPTH: 1.0-1.2
 TYPE: AUGER
 ORGANIC

FIELD NO: 691.00
 LAB NO: 2097
 DEPTH: 2.5-3.0
 TYPE: AUGER
 ORGANIC

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

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	89
2.0	--
1.25	73
0.840	--
0.630	60
0.420	--
0.315	48
0.160	33
0.150	--
0.080	29

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	97
0.160	96
0.150	--
0.080	93

M.C.(%) : 184

M.C.(%) : 150.00

LIMITS

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

LIMITS

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

% GRAVEL: 0
 % SAND: 71
 % FINES: 29

% GRAVEL: 0.00
 % SAND: 7.00
 % FINES: 93.00

CLASSIFICATION:
 SILTY SAND (SM)

CLASSIFICATION:
 SILT (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 269-479
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1867+000 O/S 10M RT
 LOGGED BY: GC DATE COMPLETED: 93.10.16

FIELD NO: 692
 LAB NO: 2098
 DEPTH: 1.0-1.2
 TYPE: AUGER
 ORGANIC

FIELD NO: 693
 LAB NO: 2099
 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	100
10.0	100
5.0	93
2.5	84
2.0	--
1.25	74
0.840	--
0.630	66
0.420	--
0.315	60
0.160	55
0.150	--
0.080	50

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	92
0.840	--
0.630	83
0.420	--
0.315	69
0.160	53
0.150	--
0.080	41

M.C. (%) : 49

M.C. (%) : 103

LIMITS

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

LIMITS

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

% GRAVEL: 7
 % SAND: 44
 % FINES: 50

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

CLASSIFICATION:
 SANDY SILT (ML)

CLASSIFICATION:
 SILTY SAND (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 269-480
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1867+100 O/S 10M RT
 LOGGED BY: GC DATE COMPLETED: 93.10.16

FIELD NO: 694
 LAB NO: 2100
 DEPTH: 0.6-1.0
 TYPE: AUGER
 ORGANIC

FIELD NO: 695
 LAB NO: 2101
 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	94
2.0	--
1.25	92
0.840	--
0.630	88
0.420	--
0.315	85
0.160	81
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	100
2.5	99
2.0	--
1.25	94
0.840	--
0.630	83
0.420	--
0.315	72
0.160	57
0.150	--
0.080	43

M.C. (%) : 87

M.C. (%) : 111

LIMITS

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

LIMITS

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

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

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

CLASSIFICATION:
 SILT WITH SAND
 (ML)

CLASSIFICATION:
 SILTY SAND (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 269-481
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1867+200 O/S 10M RT
 LOGGED BY: GC DATE COMPLETED: 93.10.16

FIELD NO: 696
 LAB NO: 2102
 DEPTH: 0.8-1.0
 TYPE: AUGER
 ORGANIC

FIELD NO: 697
 LAB NO: 2103
 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	71
0.420	--
0.315	65
0.160	63
0.150	--
0.080	61

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	91
0.420	--
0.315	86
0.160	81
0.150	--
0.080	71

M.C. (%): 310

M.C. (%): 172

LIMITS

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

LIMITS

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

% GRAVEL: 0
 % SAND: 39
 % FINES: 61

% GRAVEL: 0
 % SAND: 29
 % FINES: 71

CLASSIFICATION:
 SANDY SILT (ML)

CLASSIFICATION:
 SILT WITH SAND
 (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 269-482
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1867+300 O/S 3M RT
 LOGGED BY: GC DATE COMPLETED: 93.10.16

FIELD NO: 698
 LAB NO: 2105
 DEPTH: 0.6-1.0
 TYPE: AUGER
 ORGANIC

FIELD NO: 699
 LAB NO: 2106
 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	98
0.840	--
0.630	96
0.420	--
0.315	94
0.160	90
0.150	--
0.080	84

M.C. (%): 71

LIMITS

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

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

CLASSIFICATION:
 SILT WITH SAND
 (ML)

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

100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	87
12.5	79
10.0	72
5.0	55
2.5	47
2.0	--
1.25	41
0.840	--
0.630	36
0.420	--
0.315	31
0.160	26
0.150	--
0.080	20

M.C. (%): 12

LIMITS

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

% GRAVEL: 45
 % SAND: 35
 % FINES: 20

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 269-483
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1867+440
 LOGGED BY: GC DATE COMPLETED: 93.10.16

FIELD NO: 700
 LAB NO: 2107
 DEPTH: 0.8-1.2
 TYPE: AUGER
 ORGANIC

FIELD NO: 701
 LAB NO: 2108
 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	99
0.840	--
0.630	98
0.420	--
0.315	96
0.160	92
0.150	--
0.080	85

M.C. (%) : 78

LIMITS

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

% GRAVEL: 0
 % SAND: 15
 % FINES: 85

CLASSIFICATION:
 SILT WITH SAND
 (ML)

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	96
20.0	86
12.5	73
10.0	67
5.0	54
2.5	47
2.0	--
1.25	42
0.840	--
0.630	38
0.420	--
0.315	34
0.160	31
0.150	--
0.080	26

M.C. (%) : 21

LIMITS

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

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

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 269-484
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1867+475 O/S 30M RT
 LOGGED BY: GC DATE COMPLETED: 93.10.16

FIELD NO: 701
 LAB NO: 2109
 DEPTH: 1.0-1.2
 TYPE: AUGER
 ORGANIC

FIELD NO: 702
 LAB NO: 2110
 DEPTH: 2.5-3.0
 TYPE: AUGER
 ORGANIC

FIELD NO: 703
 LAB NO: 2111
 DEPTH: 4.0-4.5
 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	90
2.5	83
2.0	--
1.25	76
0.840	--
0.630	70
0.420	--
0.315	65
0.160	60
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	100
2.0	--
1.25	99
0.840	--
0.630	97
0.420	--
0.315	95
0.160	91
0.150	--
0.080	85

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	95
12.5	84
10.0	75
5.0	60
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	22

M.C. (%) : 76

M.C. (%) : 92

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: 10
 % SAND: 36
 % FINES: 54

% GRAVEL: 0
 % SAND: 15
 % FINES: 85

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

CLASSIFICATION:
 SANDY SILT (ML)

CLASSIFICATION:
 SILT WITH SAND
 (ML)

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 270-485
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1867+575
 LOGGED BY: GC DATE COMPLETED: 93.10.16

FIELD NO: 704
 LAB NO: 2112
 DEPTH: 0.8-1.0
 TYPE: AUGER

FIELD NO: 705
 LAB NO: 2113
 DEPTH: 2.5-3.0
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	99
10.0	97
5.0	87
2.5	74
2.0	--
1.25	60
0.840	--
0.630	51
0.420	--
0.315	43
0.160	33
0.150	--
0.080	26

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	100
10.0	94
5.0	90
2.5	86
2.0	--
1.25	82
0.840	--
0.630	79
0.420	--
0.315	75
0.160	71
0.150	--
0.080	67

M.C. (%): 20

M.C. (%): 62

LIMITS

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

LIMITS

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

% GRAVEL: 13
 % SAND: 62
 % FINES: 26

% GRAVEL: 10
 % SAND: 23
 % FINES: 67

CLASSIFICATION:
 SILTY SAND (SM)

CLASSIFICATION:
 SANDY SILT (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 270-486
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1867+675 O/S 5M RT
 LOGGED BY: GC DATE COMPLETED: 93.10.16

FIELD NO: 706
 LAB NO: 2114
 DEPTH: 0.8-1.2
 TYPE: AUGER
 ORGANIC

FIELD NO: 707
 LAB NO: 2115
 DEPTH: 1.6-2.0
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	--
12.5	100
10.0	91
5.0	83
2.5	75
2.0	--
1.25	63
0.840	--
0.630	54
0.420	--
0.315	46
0.160	38
0.150	--
0.080	33

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	98
10.0	94
5.0	78
2.5	66
2.0	--
1.25	56
0.840	--
0.630	48
0.420	--
0.315	41
0.160	34
0.150	--
0.080	29

M.C. (%): 80

M.C. (%): 18

LIMITS

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

LIMITS

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

% GRAVEL: 17
 % SAND: 50
 % FINES: 33

% GRAVEL: 22
 % SAND: 50
 % FINES: 29

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 270-487
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1867+750
 LOGGED BY: GC DATE COMPLETED: 93.10.16

FIELD NO: 708
 LAB NO: 2116
 DEPTH: 0.8-1.0
 TYPE: AUGER
 ORGANIC

FIELD NO: 709
 LAB NO: 2117
 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	97
0.840	--
0.630	93
0.420	--
0.315	88
0.160	82
0.150	--
0.080	76

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	89
12.5	75
10.0	69
5.0	56
2.5	47
2.0	--
1.25	41
0.840	--
0.630	36
0.420	--
0.315	31
0.160	26
0.150	--
0.080	21

M.C. (%): 73

M.C. (%): 11

LIMITS

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

LIMITS

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

% GRAVEL: 0
 % SAND: 24
 % FINES: 76

% GRAVEL: 44
 % SAND: 35
 % FINES: 21

CLASSIFICATION:
 SILT WITH SAND
 (ML)

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 270-488
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1867+850
 LOGGED BY: GC DATE COMPLETED: 93.10.16

FIELD NO: 710
 LAB NO: 2118
 DEPTH: 1.0-1.5
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	80
20.0	74
12.5	61
10.0	55
5.0	41
2.5	31
2.0	--
1.25	25
0.840	--
0.630	21
0.420	--
0.315	17
0.160	14
0.150	--
0.080	10

M.C. (%) : 5

LIMITS

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

% GRAVEL: 59
 % SAND: 30
 % FINES: 10

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

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 270-489
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1867+950
 LOGGED BY: GC DATE COMPLETED: 93.10.16

FIELD NO: 711
 LAB NO: 2119
 DEPTH: 1.0-1.2
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	90
20.0	84
12.5	75
10.0	70
5.0	58
2.5	47
2.0	--
1.25	40
0.840	--
0.630	34
0.420	--
0.315	29
0.160	23
0.150	--
0.080	18

M.C. (%) : 9

LIMITS

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

% GRAVEL: 42
 % SAND: 40
 % FINES: 18

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 270-490
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1868+050 O/S 15M RT
 LOGGED BY: GC DATE COMPLETED: 93.10.16

FIELD NO: 712
 LAB NO: 2120
 DEPTH: 2.0-3.0
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	98
20.0	93
12.5	83
10.0	77
5.0	60
2.5	48
2.0	--
1.25	39
0.840	--
0.630	33
0.420	--
0.315	27
0.160	22
0.150	--
0.080	18

M.C. (%) : 10

LIMITS

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

% GRAVEL: 40
 % SAND: 42
 % FINES: 18

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 270-491
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1868+150
 LOGGED BY: GC DATE COMPLETED: 93.10.16

FIELD NO: 713
 LAB NO: 2121
 DEPTH: 1.0-1.2
 TYPE: AUGER

FIELD NO: 714
 LAB NO: 2122
 DEPTH: 2.5-3.0
 TYPE: AUGER

FIELD NO: 715
 LAB NO: 2123
 DEPTH: 4.0-4.5
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	89
20.0	87
12.5	86
10.0	86
5.0	82
2.5	77
2.0	--
1.25	71
0.840	--
0.630	67
0.420	--
0.315	61
0.160	54
0.150	--
0.080	42

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	98
20.0	92
12.5	87
10.0	85
5.0	76
2.5	68
2.0	--
1.25	58
0.840	--
0.630	50
0.420	--
0.315	42
0.160	34
0.150	--
0.080	26

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	93
20.0	82
12.5	72
10.0	68
5.0	59
2.5	52
2.0	--
1.25	46
0.840	--
0.630	41
0.420	--
0.315	35
0.160	29
0.150	--
0.080	23

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: 18
 % SAND: 39
 % FINES: 42

% GRAVEL: 24
 % SAND: 49
 % FINES: 26

% GRAVEL: 41
 % SAND: 36
 % FINES: 23

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 270-492
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1868+250
 LOGGED BY: GC DATE COMPLETED: 93.10.16

FIELD NO: 716
 LAB NO: 2124
 DEPTH: 1.0-1.2
 TYPE: AUGER
 ORGANIC

FIELD NO: 717
 LAB NO: 2125
 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	99
0.840	--
0.630	98
0.420	--
0.315	97
0.160	93
0.150	--
0.080	91

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	86
0.150	--
0.080	76

M.C. (%) : 95

M.C. (%) : 342

LIMITS

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

LIMITS

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

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

% GRAVEL: 0
 % SAND: 24
 % FINES: 76

CLASSIFICATION:
 SILT (ML)

CLASSIFICATION:
 SILT WITH SAND
 (ML)

PROJECT NUMBER: 202101-0311-193 HOLE NUMBER: 270-493
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: CME 750
 HOLE LOCATION: 1868+350 O/S 3M RT
 LOGGED BY: GC DATE COMPLETED: 93.10.16

FIELD NO: 718
 LAB NO: 2126
 DEPTH: 0.8-1.2
 TYPE: AUGER
 ORGANIC

FIELD NO: 719
 LAB NO: 2127
 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	100
5.0	99
2.5	92
2.0	--
1.25	84
0.840	--
0.630	74
0.420	--
0.315	66
0.160	60
0.150	--
0.080	55

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	83
20.0	76
12.5	64
10.0	59
5.0	51
2.5	46
2.0	--
1.25	42
0.840	--
0.630	38
0.420	--
0.315	34
0.160	29
0.150	--
0.080	25

M.C. (%) : 63

M.C. (%) : 23

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

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

% GRAVEL: 1
 % SAND: 43
 % FINES: 55

% GRAVEL: 49
 % SAND: 26
 % FINES: 25

CLASSIFICATION:
 SANDY SILT (ML)

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER:		HOLE NUMBER:	366-228
CLIENT:	SHAKWAK		
PROJECT NAME:	ALASKA HIGHWAY RE-CONSTRUCTION		
PROJECT LOCATION:	SEGMENT 15		
DRILL UNIT:	36-003		
HOLE LOCATION:	1863+557 17M RT		
LOGGED BY:	CC	DATE COMPLETED:	95-06-13

FIELD NO: 520
 LAB NO: 708
 DEPTH: 2.8-3.0
 TYPE: AUGER

FIELD NO: 521
 LAB NO: 709
 DEPTH: 4.0-4.2
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	73
20.0	56
12.5	48
10.0	45
5.0	40
2.5	37
2.0	--
1.25	35
0.840	--
0.630	33
0.420	--
0.315	30
0.160	28
0.150	--
0.080	25

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	96
12.5	81
10.0	77
5.0	69
2.5	64
2.0	--
1.25	60
0.840	--
0.630	55
0.420	--
0.315	50
0.160	44
0.150	--
0.080	38

M.C. (%): 8

M.C. (%): 10

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

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

% GRAVEL: 60
 % SAND: 15
 % FINES: 25

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

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

PROJECT NUMBER: 092-202101-0311 HOLE NUMBER: 369-274
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI EX200LC
 HOLE LOCATION: 1862+550 O/S 5M RT
 LOGGED BY: DT DATE COMPLETED: 95.07.12

FIELD NO: 573
 LAB NO: 761
 DEPTH: 0.6-0.8
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	70
31.5	--
25.0	67
20.0	63
12.5	57
10.0	54
5.0	46
2.5	40
2.0	--
1.25	36
0.840	--
0.630	32
0.420	--
0.315	28
0.160	23
0.150	--
0.080	19

M.C. (%): 13

LIMITS

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

% GRAVEL: 54
 % SAND: 26
 % FINES: 19

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 092-202101-0311 HOLE NUMBER: 369-276
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI EX200LC
 HOLE LOCATION: 1863+025 O/S 15M RT
 LOGGED BY: DT DATE COMPLETED: 95.07.13

FIELD NO: 574
 LAB NO: 762
 DEPTH: 0.8-1.2
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	81
31.5	--
25.0	67
20.0	61
12.5	56
10.0	51
5.0	43
2.5	38
2.0	--
1.25	34
0.840	--
0.630	30
0.420	--
0.315	26
0.160	23
0.150	--
0.080	19

M.C. (%) : 5

LIMITS

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

% GRAVEL: 57
 % SAND: 24
 % FINES: 19

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 092-202101-0311 HOLE NUMBER: 369-278
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI EX200LC
 HOLE LOCATION: 1863+350 O/S 10M RT
 LOGGED BY: DT DATE COMPLETED: 95.07.13

FIELD NO: 575
 LAB NO: 763
 DEPTH: 2.6-2.9
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	84
20.0	72
12.5	59
10.0	55
5.0	42
2.5	35
2.0	--
1.25	30
0.840	--
0.630	26
0.420	--
0.315	22
0.160	19
0.150	--
0.080	16

M.C. (%): 16

LIMITS

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

% GRAVEL: 58
 % SAND: 26
 % FINES: 16

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 092-202101-0311 HOLE NUMBER: 369-279
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI EX200LC
 HOLE LOCATION: 1864+050 O/S 15M RT
 LOGGED BY: DT DATE COMPLETED: 95.07.13

FIELD NO: 576
 LAB NO: 764
 DEPTH: 1.7-1.9
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	85
31.5	--
25.0	54
20.0	49
12.5	45
10.0	43
5.0	38
2.5	34
2.0	--
1.25	31
0.840	--
0.630	29
0.420	--
0.315	26
0.160	24
0.150	--
0.080	21

M.C. (%): 10

LIMITS

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

% GRAVEL: 62
 % SAND: 17
 % FINES: 21

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 092-202101-0311 HOLE NUMBER: 369-280
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI EX200LC
 HOLE LOCATION: 1864+325 O/S 5M RT
 LOGGED BY: DT DATE COMPLETED: 95.07.13

FIELD NO: 577
 LAB NO: 765
 DEPTH: 1.8-2.2
 TYPE: BULK

FIELD NO: 578
 LAB NO: 766
 DEPTH: 4.6-5.0
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	82
31.5	--
25.0	70
20.0	62
12.5	53
10.0	48
5.0	40
2.5	33
2.0	--
1.25	28
0.840	--
0.630	24
0.420	--
0.315	19
0.160	15
0.150	--
0.080	11

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	78
31.5	--
25.0	68
20.0	65
12.5	59
10.0	55
5.0	49
2.5	44
2.0	--
1.25	40
0.840	--
0.630	37
0.420	--
0.315	32
0.160	27
0.150	--
0.080	22

M.C. (%) : 3

M.C. (%) : 7

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

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

% GRAVEL: 60
 % SAND: 28
 % FINES: 11

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

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

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 092-202101-0311 **HOLE NUMBER:** 370-282
CLIENT: ENGINEERING-CAPITAL
PROJECT NAME: SHAKWAK PROJECT
PROJECT LOCATION: SEGMENT 15
DRILL UNIT: BACKHOE: HITACHI EX200
HOLE LOCATION: 1865+025 O/S 50M RT
LOGGED BY: DT **DATE COMPLETED:** 95.07.13

FIELD NO: 579
LAB NO: 767
DEPTH: 2.3-2.6
TYPE: BULK

FIELD NO: 580
LAB NO: 768
DEPTH: 3.7-3.9
TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	64
31.5	--
25.0	64
20.0	54
12.5	45
10.0	41
5.0	30
2.5	24
2.0	--
1.25	18
0.840	--
0.630	14
0.420	--
0.315	11
0.160	9
0.150	--
0.080	7

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	75
31.5	--
25.0	57
20.0	57
12.5	51
10.0	49
5.0	44
2.5	40
2.0	--
1.25	37
0.840	--
0.630	34
0.420	--
0.315	31
0.160	28
0.150	--
0.080	25

M.C. (%) : 4

M.C. (%) : 19

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

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

% GRAVEL: 70
% SAND: 23
% FINES: 7

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

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

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 092-202101-0311 HOLE NUMBER: 370-283
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI EX200
 HOLE LOCATION: 1865+175 O/S 35M RT
 LOGGED BY: DT DATE COMPLETED: 95.07.13

FIELD NO: 581
 LAB NO: 769
 DEPTH: 1.0-1.4
 TYPE: BULK

FIELD NO: 582
 LAB NO: 770
 DEPTH: 4.6-5.0
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	71
31.5	--
25.0	47
20.0	44
12.5	36
10.0	32
5.0	25
2.5	20
2.0	--
1.25	16
0.840	--
0.630	14
0.420	--
0.315	11
0.160	9
0.150	--
0.080	6

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	70
31.5	--
25.0	57
20.0	49
12.5	39
10.0	35
5.0	28
2.5	23
2.0	--
1.25	18
0.840	--
0.630	14
0.420	--
0.315	11
0.160	8
0.150	--
0.080	6

M.C. (%) : 5

M.C. (%) : 4

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

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

% GRAVEL: 75
 % SAND: 19
 % FINES: 6

% GRAVEL: 72
 % SAND: 21
 % FINES: 6

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

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

PROJECT NUMBER: 092-202101-0311 **HOLE NUMBER:** 370-284
CLIENT: ENGINEERING-CAPITAL
PROJECT NAME: SHAKWAK PROJECT
PROJECT LOCATION: SEGMENT 15
DRILL UNIT: BACKHOE: HITACHI EX200
HOLE LOCATION: 1865+500 O/S 6M RT
LOGGED BY: DT **DATE COMPLETED:** 95.07.13

FIELD NO: 583
LAB NO: 771
DEPTH: 1.2-1.6
TYPE: BULK

FIELD NO: 584
LAB NO: 772
DEPTH: 4.6-5.0
TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	73
20.0	70
12.5	61
10.0	52
5.0	40
2.5	31
2.0	--
1.25	24
0.840	--
0.630	17
0.420	--
0.315	11
0.160	7
0.150	--
0.080	5

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	84
20.0	76
12.5	62
10.0	58
5.0	44
2.5	35
2.0	--
1.25	28
0.840	--
0.630	22
0.420	--
0.315	17
0.160	13
0.150	--
0.080	10

M.C. (%) : 3

M.C. (%) : 4

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

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

% GRAVEL: 60
% SAND: 35
% FINES: 5

% GRAVEL: 56
% SAND: 34
% FINES: 10

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

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

PROJECT NUMBER: 092-202101-0311 HOLE NUMBER: 370-285
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI EX200
 HOLE LOCATION: 1865+500 O/S 55M RT
 LOGGED BY: DT DATE COMPLETED: 95.07.14

FIELD NO: 585
 LAB NO: 773
 DEPTH: 0.6-0.8
 TYPE: BULK

FIELD NO: 586
 LAB NO: 774
 DEPTH: 4.0-4.2
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	50
31.5	--
25.0	42
20.0	37
12.5	32
10.0	29
5.0	25
2.5	20
2.0	--
1.25	16
0.840	--
0.630	12
0.420	--
0.315	9
0.160	7
0.150	--
0.080	6

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	63
31.5	--
25.0	38
20.0	37
12.5	31
10.0	29
5.0	24
2.5	21
2.0	--
1.25	17
0.840	--
0.630	15
0.420	--
0.315	12
0.160	10
0.150	--
0.080	8

M.C. (%) : 2

M.C. (%) : 2

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

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

% GRAVEL: 75
 % SAND: 19
 % FINES: 6

% GRAVEL: 76
 % SAND: 16
 % FINES: 8

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

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

PROJECT NUMBER: 092-202101-0311 HOLE NUMBER: 370-286
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI EX200
 HOLE LOCATION: 1865+500 O/S 55M LT
 LOGGED BY: DT DATE COMPLETED: 95.07.14

FIELD NO: 587
 LAB NO: 775
 DEPTH: 2.3-2.5
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	62
31.5	--
25.0	55
20.0	54
12.5	48
10.0	45
5.0	35
2.5	27
2.0	--
1.25	19
0.840	--
0.630	13
0.420	--
0.315	8
0.160	6
0.150	--
0.080	4

M.C. (%): 2

LIMITS

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

% GRAVEL: 65
 % SAND: 31
 % FINES: 4

CLASSIFICATION:
 POORLY GRADED
 GRAVEL WITH SAND
 (GP)

PROJECT NUMBER: 092-202101-0311 HOLE NUMBER: 370-287
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI EX200
 HOLE LOCATION: 1865+900 O/S 20M RT
 LOGGED BY: DT DATE COMPLETED: 95.07.18

FIELD NO: 588
 LAB NO: 776
 DEPTH: 1.4-1.6
 TYPE: BULK

FIELD NO: 589
 LAB NO: 777
 DEPTH: 2.8-3.0
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	72
20.0	69
12.5	61
10.0	58
5.0	50
2.5	44
2.0	--
1.25	39
0.840	--
0.630	34
0.420	--
0.315	29
0.160	25
0.150	--
0.080	20

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	68
31.5	--
25.0	64
20.0	60
12.5	55
10.0	51
5.0	42
2.5	35
2.0	--
1.25	30
0.840	--
0.630	25
0.420	--
0.315	21
0.160	17
0.150	--
0.080	14

M.C. (%) : 7

M.C. (%) : 5

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

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

% GRAVEL: 50
 % SAND: 30
 % FINES: 20

% GRAVEL: 58
 % SAND: 29
 % FINES: 14

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 092-202101-0311 HOLE NUMBER: 370-288
CLIENT: ENGINEERING-CAPITAL
PROJECT NAME: SHAKWAK PROJECT
PROJECT LOCATION: SEGMENT 15
DRILL UNIT: BACKHOE: HITACHI EX200
HOLE LOCATION: 1866+060 O/S 20M RT
LOGGED BY: CC DATE COMPLETED: 95.07.18

FIELD NO: 590
LAB NO: 778
DEPTH: 1.0-1.2
TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	79
31.5	--
25.0	66
20.0	63
12.5	58
10.0	55
5.0	48
2.5	42
2.0	--
1.25	35
0.840	--
0.630	31
0.420	--
0.315	26
0.160	22
0.150	--
0.080	18

M.C. (%): 5

LIMITS

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

% GRAVEL: 52
% SAND: 29
% FINES: 18

CLASSIFICATION:
SILTY GRAVEL
WITH SAND (GM)

PROJECT NUMBER: 092-202101-0311 HOLE NUMBER: 370-290
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI EX200
 HOLE LOCATION: 1866+525 O/S 2M RT
 LOGGED BY: CC DATE COMPLETED: 95.07.18

FIELD NO: 591
 LAB NO: 779
 DEPTH: 2.4-2.6
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	70
31.5	--
25.0	60
20.0	55
12.5	49
10.0	46
5.0	41
2.5	37
2.0	--
1.25	32
0.840	--
0.630	29
0.420	--
0.315	25
0.160	21
0.150	--
0.080	17

M.C. (%): 5

LIMITS

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

% GRAVEL: 59
 % SAND: 23
 % FINES: 17

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 092-202101-0311 HOLE NUMBER: 370-291
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI EX200
 HOLE LOCATION: 1866+700 O/S 1M LT
 LOGGED BY: CC DATE COMPLETED: 95.07.18

FIELD NO: 592
 LAB NO: 780
 DEPTH: 1.0-1.2
 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	100
0.840	--
0.630	97
0.420	--
0.315	93
0.160	85
0.150	--
0.080	77

M.C. (%): 77

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

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

CLASSIFICATION:
 SILT WITH SAND
 (ML)

FIELD NO: 593
 LAB NO: 781
 DEPTH: 3.1-3.3
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	96
20.0	90
12.5	88
10.0	80
5.0	69
2.5	61
2.0	--
1.25	55
0.840	--
0.630	49
0.420	--
0.315	44
0.160	38
0.150	--
0.080	32

M.C. (%): 11

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

% GRAVEL: 31
 % SAND: 37
 % FINES: 32

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

PROJECT NUMBER: 092-202101-0311 HOLE NUMBER: 370-292
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI EX200
 HOLE LOCATION: 1867+025 O/S 25M RT
 LOGGED BY: CC DATE COMPLETED: 95.07.18

FIELD NO: 594
 LAB NO: 782
 DEPTH: 3.0-3.2
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	--
20.0	100
12.5	98
10.0	96
5.0	86
2.5	72
2.0	--
1.25	61
0.840	--
0.630	54
0.420	--
0.315	41
0.160	22
0.150	--
0.080	13

M.C.(%): 17

LIMITS

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

% GRAVEL: 14
 % SAND: 73
 % FINES: 13

CLASSIFICATION:
 SILTY SAND (SM)

PROJECT NUMBER: 092-202101-0311 HOLE NUMBER: 370-293
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI EX200
 HOLE LOCATION: 1868+050 O/S 20M RT
 LOGGED BY: CC DATE COMPLETED: 95.07.18

FIELD NO: 595
 LAB NO: 783
 DEPTH: 2.0-2.2
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	75
31.5	--
25.0	38
20.0	37
12.5	31
10.0	27
5.0	21
2.5	19
2.0	--
1.25	15
0.840	--
0.630	12
0.420	--
0.315	9
0.160	6
0.150	--
0.080	5

M.C. (%): 12

LIMITS

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

% GRAVEL: 79
 % SAND: 17
 % FINES: 5

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

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 382-541
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI UH-172
 HOLE LOCATION: 1862+185 O/S 13M RT
 LOGGED BY: KJ DATE COMPLETED: 95.09.23

FIELD NO: 107
 LAB NO: 1562
 DEPTH: 1.3-1.5
 TYPE: BULK

FIELD NO: 108
 LAB NO: 1563
 DEPTH: 2.2-2.4
 TYPE: BULK

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

100.0	--
80.0	100
50.0	79
31.5	--
25.0	46
20.0	42
12.5	24
10.0	21
5.0	15
2.5	11
2.0	--
1.25	9
0.840	--
0.630	8
0.420	--
0.315	8
0.160	7
0.150	--
0.080	6

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	87
20.0	82
12.5	72
10.0	67
5.0	56
2.5	47
2.0	--
1.25	39
0.840	--
0.630	33
0.420	--
0.315	28
0.160	24
0.150	--
0.080	20

M.C. (%): 9

M.C. (%): 10

LIMITS

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

LIMITS

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

% GRAVEL: 85
 % SAND: 9
 % FINES: 6

% GRAVEL: 44
 % SAND: 37
 % FINES: 20

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

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 382-542
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI UH-172
 HOLE LOCATION: 1862+300 O/S 15M RT
 LOGGED BY: KJ DATE COMPLETED: 95.09.23

FIELD NO: 109
 LAB NO: 1564
 DEPTH: 0.6-0.8
 TYPE: BULK

FIELD NO: 110
 LAB NO: 1565
 DEPTH: 1.6-1.8
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	95
12.5	88
10.0	88
5.0	85
2.5	83
2.0	--
1.25	82
0.840	--
0.630	80
0.420	--
0.315	78
0.160	75
0.150	--
0.080	70

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	89
20.0	84
12.5	74
10.0	70
5.0	60
2.5	52
2.0	--
1.25	46
0.840	--
0.630	40
0.420	--
0.315	33
0.160	26
0.150	--
0.080	20

M.C. (%): 78

M.C. (%): 9

LIMITS

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

LIMITS

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

% GRAVEL: 15
 % SAND: 15
 % FINES: 70

% GRAVEL: 40
 % SAND: 40
 % FINES: 20

CLASSIFICATION:
 SANDY SILT WITH
 GRAVEL (ML)

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 382-543
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI UH-172
 HOLE LOCATION: 1862+400 O/S 16M RT
 LOGGED BY: KJ DATE COMPLETED: 95.09.23

FIELD NO: 111
 LAB NO: 1566
 DEPTH: 1.2-1.4
 TYPE: BULK

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	78
20.0	76
12.5	64
10.0	60
5.0	52
2.5	45
2.0	--
1.25	40
0.840	--
0.630	35
0.420	--
0.315	30
0.160	24
0.150	--
0.080	19

M.C. (%): 11

LIMITS

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

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

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 382-544
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI UH-172
 HOLE LOCATION: 1864+215 O/S 10M RT
 LOGGED BY: KJ DATE COMPLETED: 95.09.23

FIELD NO: 112
 LAB NO: 1567
 DEPTH: 1.0-1.2
 TYPE: BULK

FIELD NO: 113
 LAB NO: 1568
 DEPTH: 2.4-2.6
 TYPE: BULK

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

100.0	--
80.0	100
50.0	65
31.5	--
25.0	56
20.0	52
12.5	45
10.0	42
5.0	37
2.5	33
2.0	--
1.25	29
0.840	--
0.630	25
0.420	--
0.315	22
0.160	18
0.150	--
0.080	15

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	97
20.0	90
12.5	82
10.0	79
5.0	71
2.5	65
2.0	--
1.25	61
0.840	--
0.630	57
0.420	--
0.315	52
0.160	46
0.150	--
0.080	40

M.C. (%) : 4

M.C. (%) : 8

LIMITS

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

LIMITS

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

% GRAVEL: 63
 % SAND: 22
 % FINES: 15

% GRAVEL: 29
 % SAND: 31
 % FINES: 40

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 382-545
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI UH-172
 HOLE LOCATION: 1864+350 O/S 10M LT
 LOGGED BY: KJ DATE COMPLETED: 95.09.23

FIELD NO: 114
 LAB NO: 1569
 DEPTH: 1.6-1.8
 TYPE: BULK

FIELD NO: 115
 LAB NO: 1570
 DEPTH: 4.8-5.0
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	60
20.0	57
12.5	53
10.0	49
5.0	39
2.5	32
2.0	--
1.25	27
0.840	--
0.630	23
0.420	--
0.315	19
0.160	15
0.150	--
0.080	12

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	62
20.0	58
12.5	53
10.0	49
5.0	42
2.5	38
2.0	--
1.25	35
0.840	--
0.630	32
0.420	--
0.315	29
0.160	26
0.150	--
0.080	22

M.C. (%) : 4

M.C. (%) : 6

LIMITS

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

LIMITS

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

% GRAVEL: 61
 % SAND: 27
 % FINES: 12

% GRAVEL: 58
 % SAND: 20
 % FINES: 22

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

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 382-546
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI UH-172
 HOLE LOCATION: 1864+475 O/S 12M RT
 LOGGED BY: KJ DATE COMPLETED: 95.09.23

FIELD NO: 116
 LAB NO: 1571
 DEPTH: 0.8-1.0
 TYPE: BULK

FIELD NO: 117
 LAB NO: 1572
 DEPTH: 1.8-2.0
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	47
31.5	--
25.0	47
20.0	43
12.5	37
10.0	35
5.0	32
2.5	30
2.0	--
1.25	28
0.840	--
0.630	26
0.420	--
0.315	25
0.160	23
0.150	--
0.080	22

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	89
20.0	82
12.5	74
10.0	69
5.0	56
2.5	48
2.0	--
1.25	42
0.840	--
0.630	38
0.420	--
0.315	32
0.160	27
0.150	--
0.080	22

M.C. (%) : 14

M.C. (%) : 6

LIMITS

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

LIMITS

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

% GRAVEL: 68
 % SAND: 11
 % FINES: 22

% GRAVEL: 44
 % SAND: 34
 % FINES: 22

CLASSIFICATION:
 SILTY GRAVEL (GM)

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 382-547
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI UH-172
 HOLE LOCATION: 1864+575 O/S 15M RT
 LOGGED BY: KJ DATE COMPLETED: 95.09.24

FIELD NO: 118
 LAB NO: 1573
 DEPTH: 1.2-1.4
 TYPE: BULK

FIELD NO: 119
 LAB NO: 1574
 DEPTH: 2.0-2.2
 TYPE: BULK

FIELD NO: 120
 LAB NO: 1575
 DEPTH: 3.0-3.2
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	85
31.5	--
25.0	63
20.0	60
12.5	51
10.0	47
5.0	38
2.5	31
2.0	--
1.25	27
0.840	--
0.630	24
0.420	--
0.315	20
0.160	17
0.150	--
0.080	13

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	95
12.5	93
10.0	85
5.0	80
2.5	69
2.0	--
1.25	65
0.840	--
0.630	62
0.420	--
0.315	58
0.160	50
0.150	--
0.080	37

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	92
20.0	88
12.5	85
10.0	81
5.0	70
2.5	63
2.0	--
1.25	57
0.840	--
0.630	52
0.420	--
0.315	47
0.160	41
0.150	--
0.080	35

M.C. (%) : 5

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: 62
 % SAND: 24
 % FINES: 13

% GRAVEL: 20
 % SAND: 44
 % FINES: 37

% GRAVEL: 30
 % SAND: 35
 % FINES: 35

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 383-548
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI UH-172
 HOLE LOCATION: 1865+100 O/S 18M LT
 LOGGED BY: KJ DATE COMPLETED: 95.09.24

FIELD NO: 121
 LAB NO: 1576
 DEPTH: 1.4-1.6
 TYPE: BULK

FIELD NO: 122.00
 LAB NO: 1577
 DEPTH: 3.3-3.5
 TYPE: BULK

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	76
20.0	73
12.5	64
10.0	59
5.0	49
2.5	41
2.0	--
1.25	34
0.840	--
0.630	29
0.420	--
0.315	24
0.160	20
0.150	--
0.080	17

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

100.0	--
80.0	100
50.0	77
31.5	--
25.0	75
20.0	72
12.5	65
10.0	61
5.0	46
2.5	33
2.0	--
1.25	23
0.840	--
0.630	17
0.420	--
0.315	12
0.160	10
0.150	--
0.080	8

M.C. (%): 17

M.C. (%): 7.00

LIMITS

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

LIMITS

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

% GRAVEL: 51
 % SAND: 32
 % FINES: 17

% GRAVEL: 54.00
 % SAND: 38.00
 % FINES: 8.00

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

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

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 383-549
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI UH-172
 HOLE LOCATION: 1865+600 O/S 16M RT
 LOGGED BY: KJ DATE COMPLETED: 95.09.24

FIELD NO: 123
 LAB NO: 1578
 DEPTH: 2.2-2.4
 TYPE: BULK

FIELD NO: 124
 LAB NO: 1579
 DEPTH: 3.2-3.4
 TYPE: BULK

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	75
20.0	65
12.5	51
10.0	44
5.0	33
2.5	24
2.0	--
1.25	18
0.840	--
0.630	13
0.420	--
0.315	9
0.160	7
0.150	--
0.080	5

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

100.0	--
80.0	100
50.0	83
31.5	--
25.0	72
20.0	70
12.5	61
10.0	58
5.0	49
2.5	41
2.0	--
1.25	35
0.840	--
0.630	31
0.420	--
0.315	27
0.160	23
0.150	--
0.080	19

M.C. (%) : 15

M.C. (%) : 10

LIMITS

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

LIMITS

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

% GRAVEL: 67
 % SAND: 27
 % FINES: 5

% GRAVEL: 51
 % SAND: 30
 % FINES: 19

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

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 383-550
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI UH-172
 HOLE LOCATION: 1865+800 O/S 17M RT
 LOGGED BY: KJ DATE COMPLETED: 95.09.25

FIELD NO: 125
 LAB NO: 1580
 DEPTH: 2.2-2.4
 TYPE: BULK

FIELD NO: 126
 LAB NO: 1581
 DEPTH: 4.8-5.0
 TYPE: BULK

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

100.0	--
80.0	--
50.0	100
31.5	--
25.0	95
20.0	91
12.5	82
10.0	76
5.0	68
2.5	61
2.0	--
1.25	54
0.840	--
0.630	49
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	89
20.0	88
12.5	77
10.0	72
5.0	59
2.5	48
2.0	--
1.25	39
0.840	--
0.630	32
0.420	--
0.315	25
0.160	20
0.150	--
0.080	16

M.C. (%): 8

M.C. (%): 6

LIMITS

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

LIMITS

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

% GRAVEL: 32
 % SAND: 36
 % FINES: 32

% GRAVEL: 41
 % SAND: 43
 % FINES: 16

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 383-551
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI UH-172
 HOLE LOCATION: 1866+275 O/S 12M RT
 LOGGED BY: KJ DATE COMPLETED: 95.09.25

FIELD NO: 127
 LAB NO: 1582
 DEPTH: 1.2-1.4
 TYPE: BULK

FIELD NO: 128
 LAB NO: 1583
 DEPTH: 2.2-2.4
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	60
20.0	51
12.5	42
10.0	40
5.0	34
2.5	30
2.0	--
1.25	27
0.840	--
0.630	24
0.420	--
0.315	21
0.160	18
0.150	--
0.080	15

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	64
20.0	58
12.5	51
10.0	49
5.0	44
2.5	40
2.0	--
1.25	37
0.840	--
0.630	34
0.420	--
0.315	30
0.160	26
0.150	--
0.080	22

M.C. (%): 5

M.C. (%): 9

LIMITS

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

LIMITS

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

% GRAVEL: 66
 % SAND: 20
 % FINES: 15

% GRAVEL: 56
 % SAND: 22
 % FINES: 22

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 383-553
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI UH-172
 HOLE LOCATION: 1867+045 O/S 17M LT
 LOGGED BY: KJ DATE COMPLETED: 95.09.25

FIELD NO: 129
 LAB NO: 1584
 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	97
5.0	91
2.5	76
2.0	--
1.25	55
0.840	--
0.630	35
0.420	--
0.315	16
0.160	8
0.150	--
0.080	5

M.C. (%): 14

LIMITS

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

% GRAVEL: 9
 % SAND: 86
 % FINES: 5

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

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 383-554
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI UH-172
 HOLE LOCATION: 1867+675 O/S 16M RT
 LOGGED BY: KJ DATE COMPLETED: 95.09.26

FIELD NO: 130
 LAB NO: 1585
 DEPTH: 1.6-1.8
 TYPE: BULK

FIELD NO: 131
 LAB NO: 1586
 DEPTH: 2.8-3.0
 TYPE: BULK

FIELD NO: 132
 LAB NO: 1587
 DEPTH: 3.8-4.0
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	91
12.5	84
10.0	80
5.0	68
2.5	58
2.0	--
1.25	49
0.840	--
0.630	42
0.420	--
0.315	35
0.160	29
0.150	--
0.080	24

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	54
31.5	--
25.0	40
20.0	38
12.5	31
10.0	28
5.0	22
2.5	18
2.0	--
1.25	15
0.840	--
0.630	13
0.420	--
0.315	10
0.160	9
0.150	--
0.080	7

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	96
12.5	88
10.0	79
5.0	53
2.5	30
2.0	--
1.25	17
0.840	--
0.630	12
0.420	--
0.315	10
0.160	8
0.150	--
0.080	7

M.C. (%) : 18

M.C. (%) : 6

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: 32
 % SAND: 44
 % FINES: 24

% GRAVEL: 78
 % SAND: 16
 % FINES: 7

% GRAVEL: 47
 % SAND: 46
 % FINES: 7

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

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

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

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 383-555
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI UH-172
 HOLE LOCATION: 1868+025 O/S 15M LT
 LOGGED BY: KJ DATE COMPLETED: 95.09.26

FIELD NO: 133
 LAB NO: 1588
 DEPTH: 2.3-2.5
 TYPE: BULK

FIELD NO: 134
 LAB NO: 1589
 DEPTH: 3.3-3.5
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	--
31.5	--
25.0	100
20.0	88
12.5	82
10.0	78
5.0	69
2.5	62
2.0	--
1.25	56
0.840	--
0.630	51
0.420	--
0.315	46
0.160	39
0.150	--
0.080	32

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	--
50.0	100
31.5	--
25.0	95
20.0	91
12.5	76
10.0	72
5.0	61
2.5	53
2.0	--
1.25	47
0.840	--
0.630	42
0.420	--
0.315	36
0.160	31
0.150	--
0.080	25

M.C. (%) : 7

M.C. (%) : 6

LIMITS

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

LIMITS

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

% GRAVEL: 31
 % SAND: 37
 % FINES: 32

% GRAVEL: 39
 % SAND: 36
 % FINES: 25

CLASSIFICATION:
 SILTY SAND WITH
 GRAVEL (SM)

CLASSIFICATION:
 SILTY GRAVEL
 WITH SAND (GM)

PROJECT NUMBER: 092-202101-0311-1 HOLE NUMBER: 383-556
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEGMENT 15
 DRILL UNIT: BACKHOE: HITACHI UH-172
 HOLE LOCATION: 1868+150 O/S 16M RT
 LOGGED BY: KJ DATE COMPLETED: 95.09.26

FIELD NO: 135
 LAB NO: 1590
 DEPTH: 1.2-1.4
 TYPE: BULK

FIELD NO: 136
 LAB NO: 1591
 DEPTH: 2.2-2.4
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	66
31.5	--
25.0	51
20.0	46
12.5	39
10.0	36
5.0	29
2.5	24
2.0	--
1.25	21
0.840	--
0.630	18
0.420	--
0.315	14
0.160	11
0.150	--
0.080	8

SIEVE SIZE	PERCENT PASSING
100.0	--
80.0	100
50.0	70
31.5	--
25.0	35
20.0	30
12.5	27
10.0	25
5.0	19
2.5	15
2.0	--
1.25	13
0.840	--
0.630	10
0.420	--
0.315	8
0.160	7
0.150	--
0.080	5

M.C. (%) : 4

M.C. (%) : 3

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

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

% GRAVEL: 71
 % SAND: 21
 % FINES: 8

% GRAVEL: 81
 % SAND: 14
 % FINES: 5

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

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