

GEOTECHNICAL INVESTIGATIONS

**HIGHWAY CONSTRUCTION
km 1797.35 to km 1804.4
ALASKA HIGHWAY #1
Yukon, 2000-2001
Volume 1 of 2**



**Community and Transportation Services
Transportation Engineering Branch**

Geotechnical Services

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HIGHWAY CONSTRUCTION

GEOTECHNICAL INVESTIGATION

KM 1797.35 TO KM 1804.4
YUKON, 2000-2001

ALASKA HIGHWAY #1

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Yukon, 2000-2001

Volume 1 of 2

This Data Package prepared for project viewing:

February, 2000

Transportation Engineering Branch
Geotechnical Services
201 Range Road
Whitehorse, Yukon

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VOLUME 1 OF 2

INTRODUCTION

Investigation notes, classification methods and legends.

CENTRELINE TESTING

“Subsurface Exploration & Testing Report” sheets and laboratory sample test result sheets are provided. The “Subsurface Exploration & Testing Report” sheets for the centreline holes are arranged according to project location, starting at km 1797+350 and increasing to km 1804+400. The laboratory sample test result sheets are arranged according to hole number.

Auger Testing

1999	TEST HOLE 512	shown on logs with prefix 514-
	TEST HOLES 563 to 587	shown on logs with prefix 519-
	TEST HOLES 729 to 731	shown on logs with prefix 527-
	TEST HOLES 763 to 791	shown on logs with prefix 527-
	TEST HOLES 792 to 798	shown on logs with prefix 528-
	TEST HOLES 799 to 833	shown on logs with prefix 529-

CONTENTS (continued)**VOLUME 2 OF 2****GRANULAR TESTING - KM 1796 LHS**

"Subsurface Exploration & Testing Report" sheets, laboratory sample test result sheets, location plans and "History of Aggregate Deposit" are provided.

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

Auger Testing

1988	TEST HOLES 3 to 5 & 11	shown with prefix 017-
1999	TEST HOLES 850 to 853	shown with prefix 532-

Backhoe Testing

1988	TEST PITS 1 to 10	shown with prefix 034-
	TEST PITS 12 to 15	shown with prefix 034-

HIGHWAY CONSTRUCTION

GEOTECHNICAL INVESTIGATION
KM 1797.35 TO KM 1804.4
YUKON, 2000-2001

ALASKA HIGHWAY #1

INTRODUCTION

GEOTECHNICAL INVESTIGATION DATA

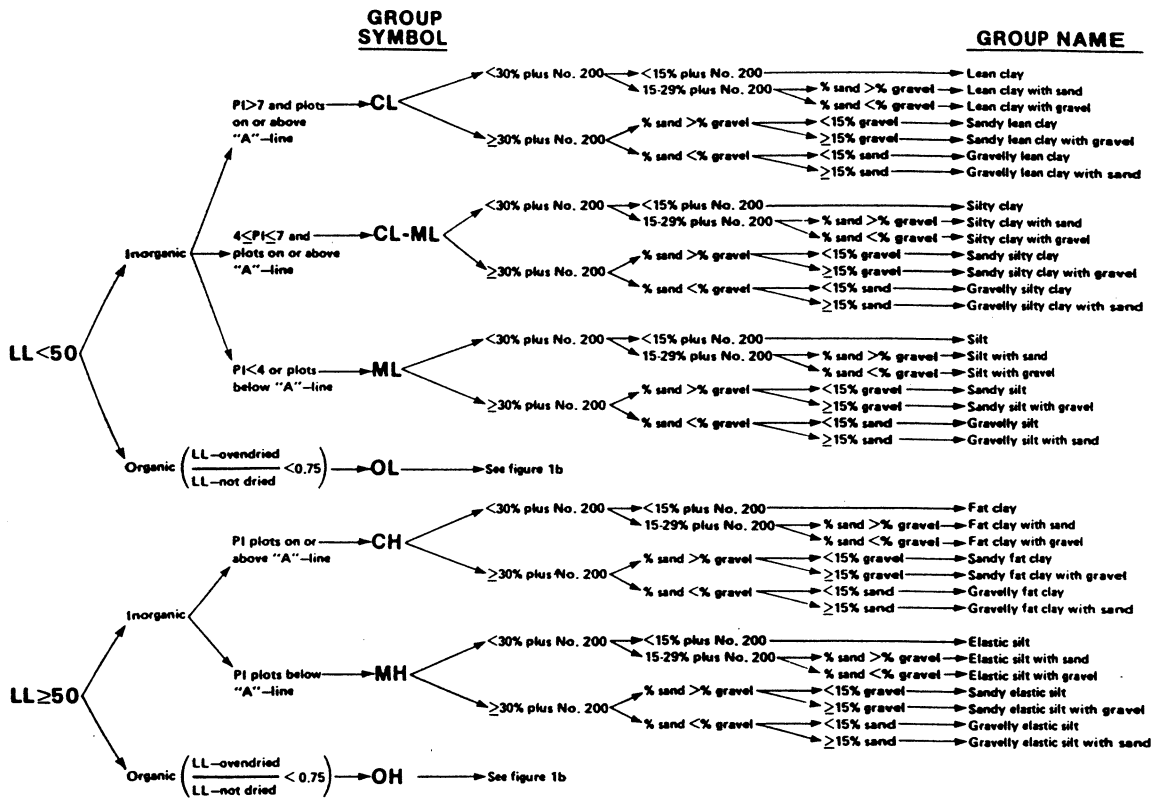
This geotechnical investigation data is provided to assist in the interpretation of soil conditions encountered within this project area. The data presented was prepared solely for Departmental designing and estimating purposes.

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

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

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

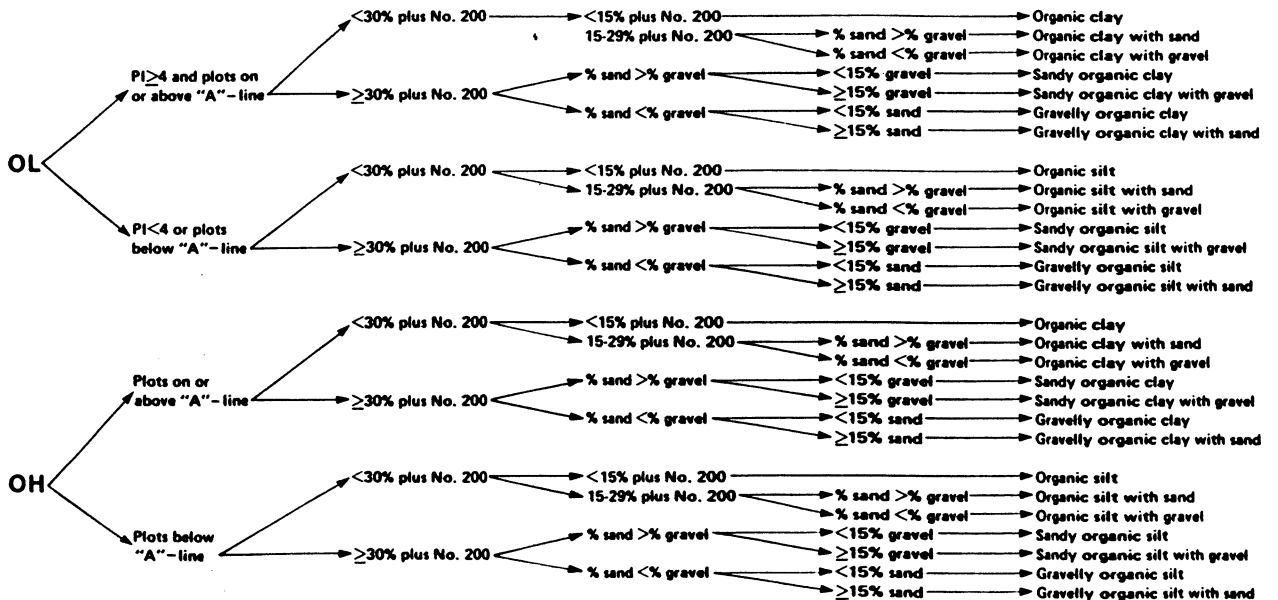
It is recommended that a site inspection, combined with consideration of the regional geology and climatic conditions be conducted. An evaluation of the investigation methods and development work done since the time of investigation should be done prior to interpreting the subsurface conditions for construction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



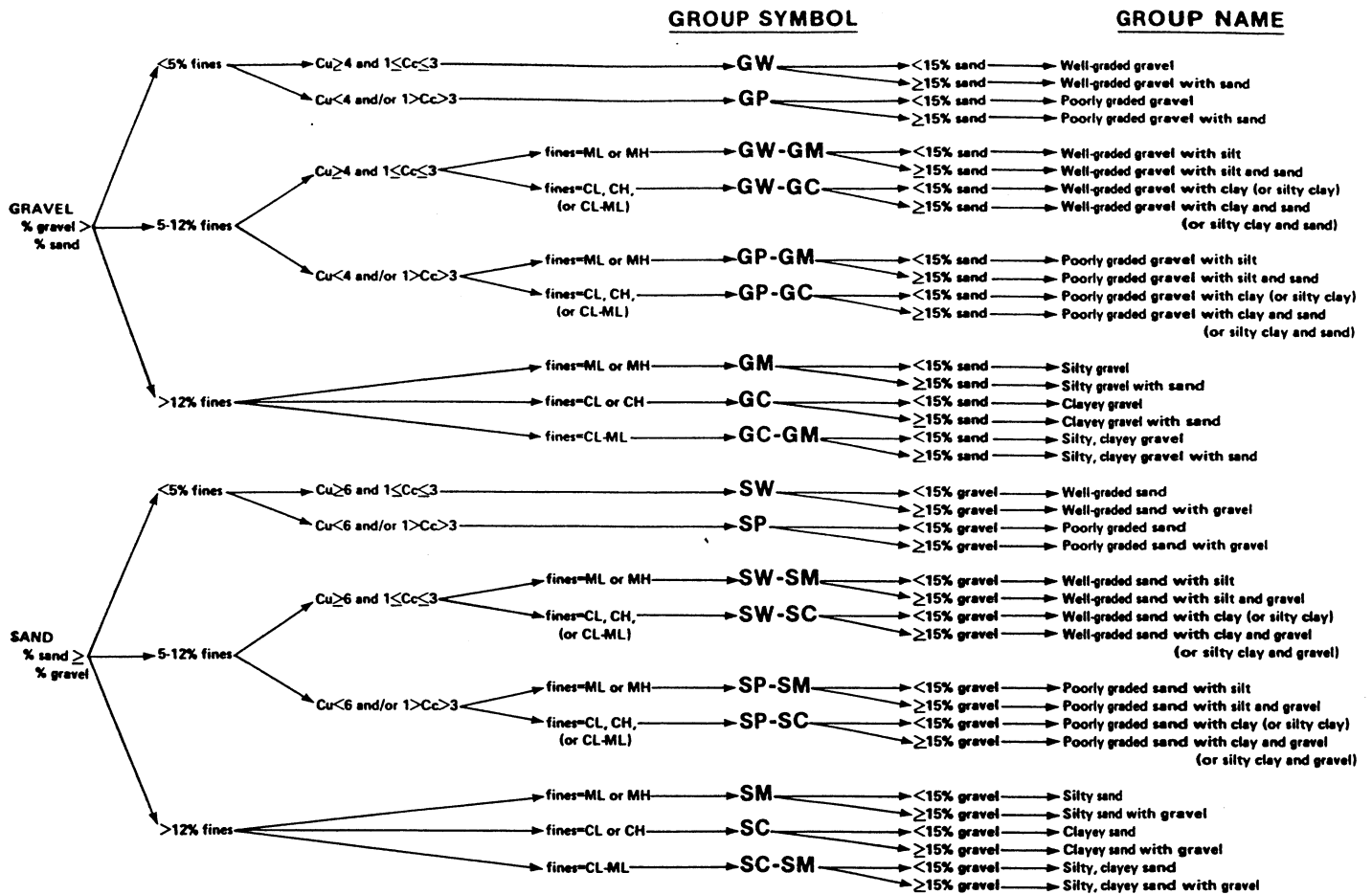
Flow chart for classifying fine-grained soil.

GROUP SYMBOL

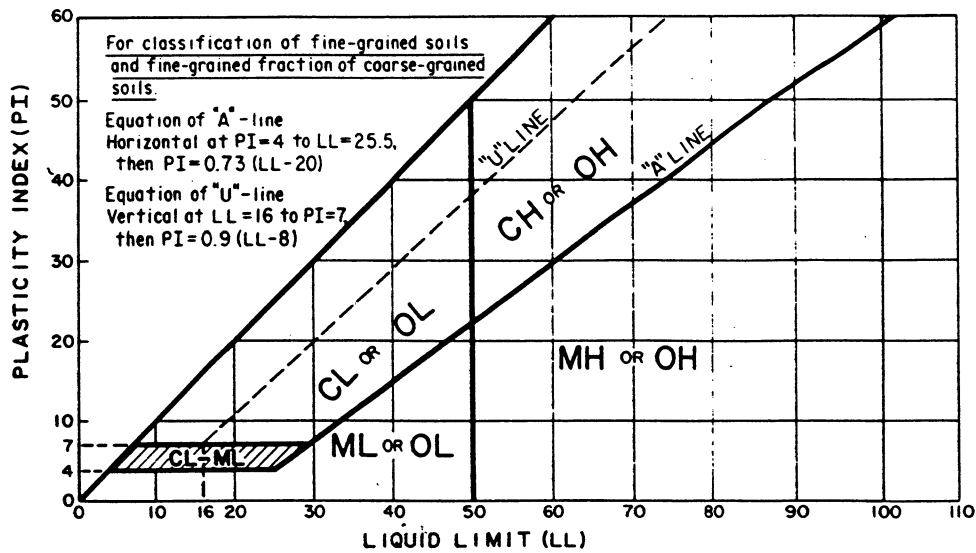
GROUP NAME



Flow chart for classifying organic soil.



Flow chart for classifying coarse-grained soil.



Plasticity chart.

CRITERIA FOR ASSIGNING GROUP SYMBOLS AND GROUP NAMES USING LABORATORY TESTS ^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	$\frac{\text{Liquid limit} - \text{oven dried}}{\text{Liquid limit} - \text{not dried}} < 0.75$	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	$\frac{\text{Liquid limit} - \text{oven dried}}{\text{Liquid limit} - \text{not dried}} < 0.75$	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	More than 50% retained on No. 200 sieve*	GRAVELS 50% or more of coarse fraction retained on No. 4 sieve	CLEAN GRAVELS	GW	Well-graded gravels and gravel-sand mixtures, little or no fines	Classification on basis of percentage of fines GW, GP, SW, SP More than 5% pass No. 200 sieve More than 12% pass No. 200 sieve 5% to 12% pass No. 200 sieve Borderline classification requiring use of dual symbols		
			GRAVELS WITH FINES	GP	Poorly-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	
			CLEAN SANDS	SW	Well-graded sands and gravelly sands, little or no fines		Not meeting both criteria for GW	
		SANDS More than 50% of coarse fraction passes No. 4 sieve	CLEAN SANDS	SP	Poorly-graded sands and gravelly sands, little or no fines		Atterberg limits plot below 'A' line or plasticity index less than 4	Atterberg limits plotting in hatched area are borderline classifications requiring use of dual symbols
			SANDS WITH FINES	SM	Silty sands, sand-silt mixtures		Atterberg limits plot above 'A' line and plasticity index greater than 7	
			SANDS WITH FINES	SC	Clayey sands, sand-clay mixtures		$C_u = D_{60}/D_{10}$ Greater than 6 $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between 1 and 3	
	FINE-GRAINED SOILS	50% or more passes No. 200 sieve*	SILTS AND CLAYS Liquid limit 50% or less	ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands	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: $PI = 0.73(LL - 20)$		
				CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays			
				OL	Organic silts and organic silty clays of low plasticity			
		SILTS AND CLAYS Liquid limit greater than 50%	MH	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts	PLASTICITY INDEX		LIQUID LIMIT	
CH			Inorganic clay of high plasticity, fat clays					
OH			Organic clays of medium to high plasticity					
PT			Peat, muck and other highly organic soils	*Based on the material passing the 3 in. (75 mm) sieve †ASTM Designation D 2487, for identification procedure see D 2488				
HIGHLY ORGANIC SOILS			PT	Peat, muck and other highly organic soils				

GROUND ICE DESCRIPTION

ICE NOT VISIBLE

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

VISIBLE ICE GREATER THAN 50% BY VOLUME

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

NOTE:

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

LEGEND

Soil Ice

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

HIGHWAY CONSTRUCTION

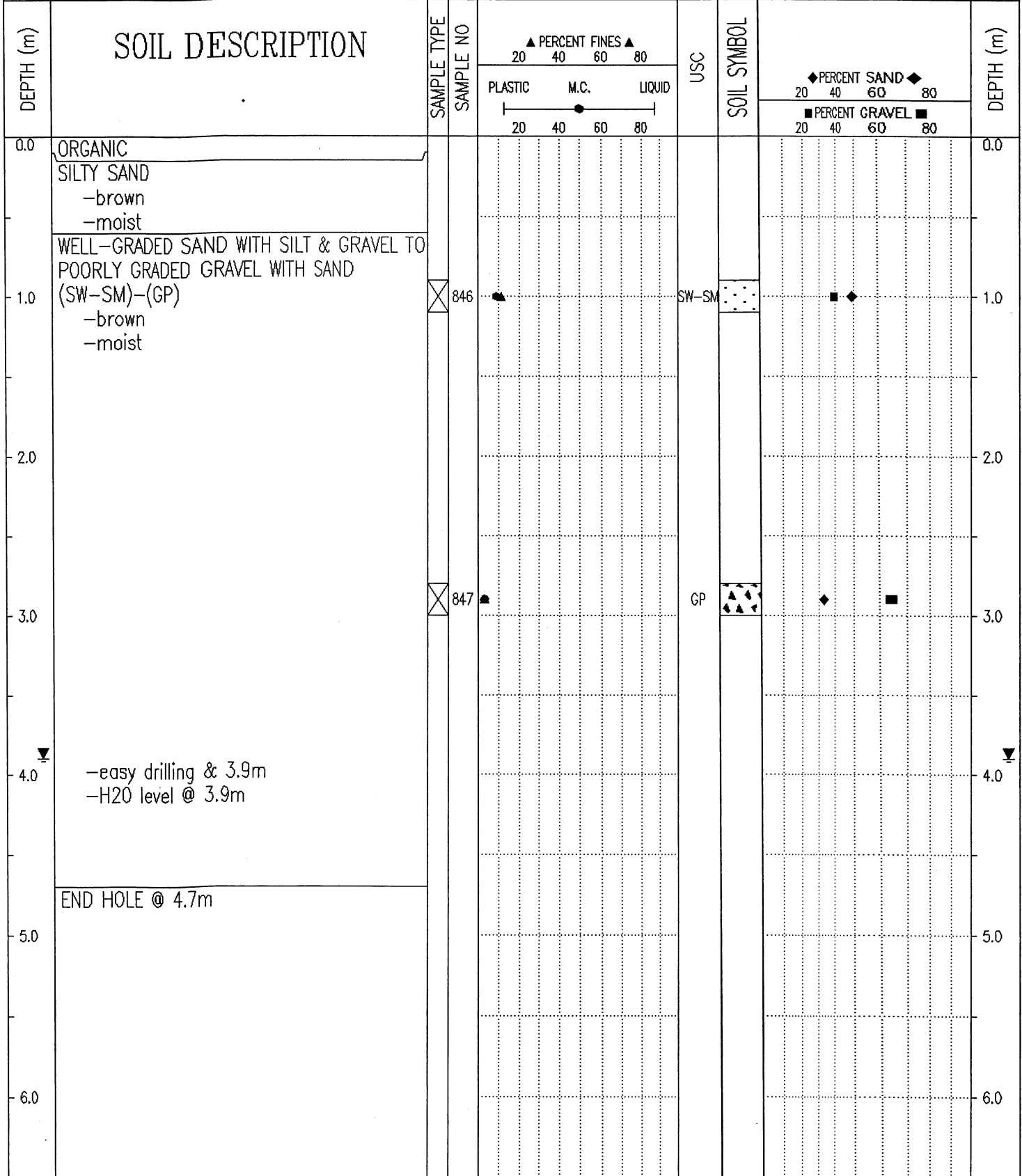
GEOTECHNICAL INVESTIGATION
KM 1797.35 TO KM 1804.4
YUKON, 2000-2001

ALASKA HIGHWAY #1

CENTRELINE TESTING

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-832
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: D92-202101-0329
MOBILE B40-L	LOCATION: 1797+625 20M RT	ELEVATION: 0.00 (m)

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

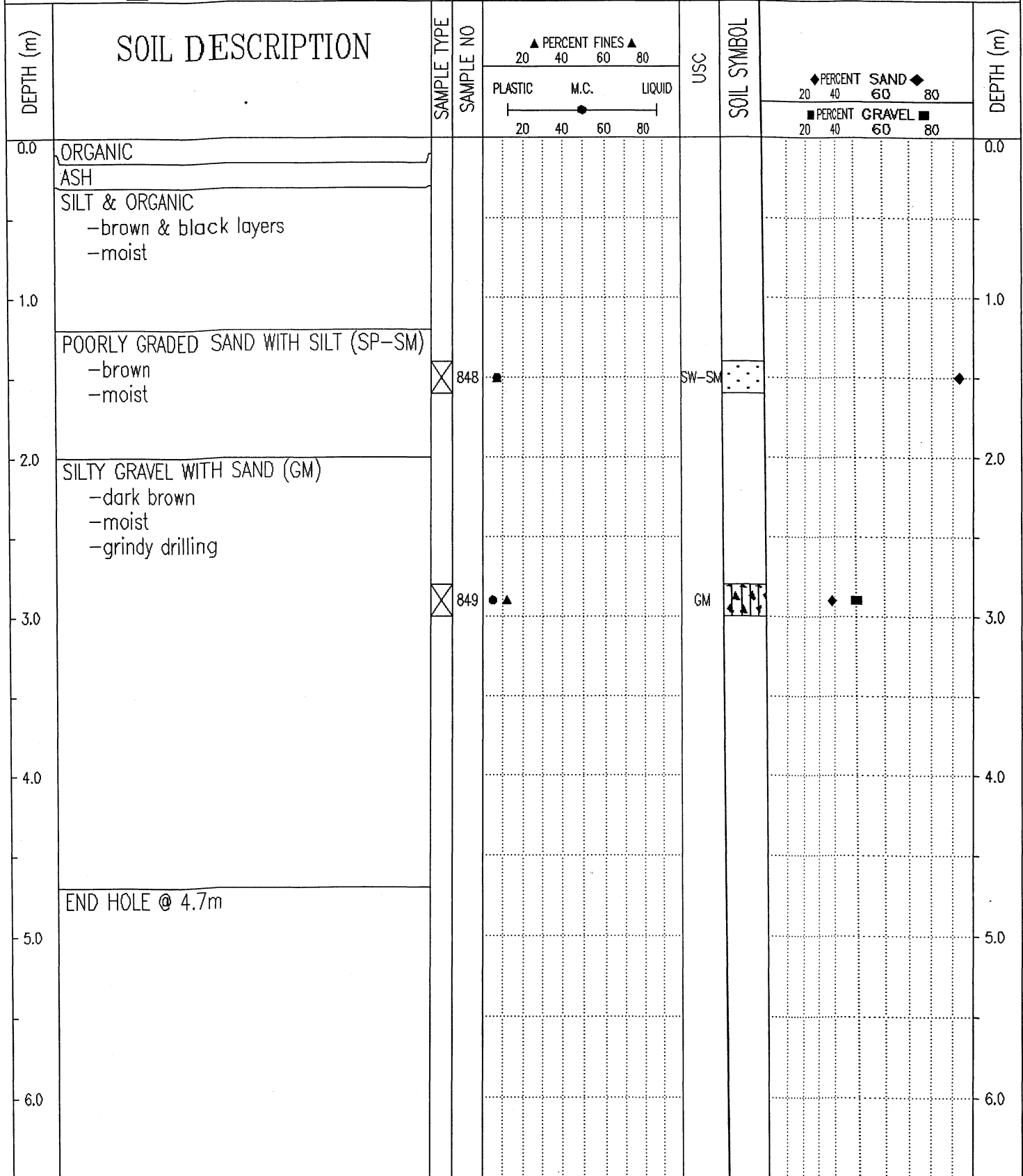


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LOGGED BY: D.T.
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.7 m
COMPLETE: 99/08/26

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-833
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: D92-202101-0329
MOBILE B40-L	LOCATION: 1797+625 20M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
	<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
		<input type="checkbox"/> CORE



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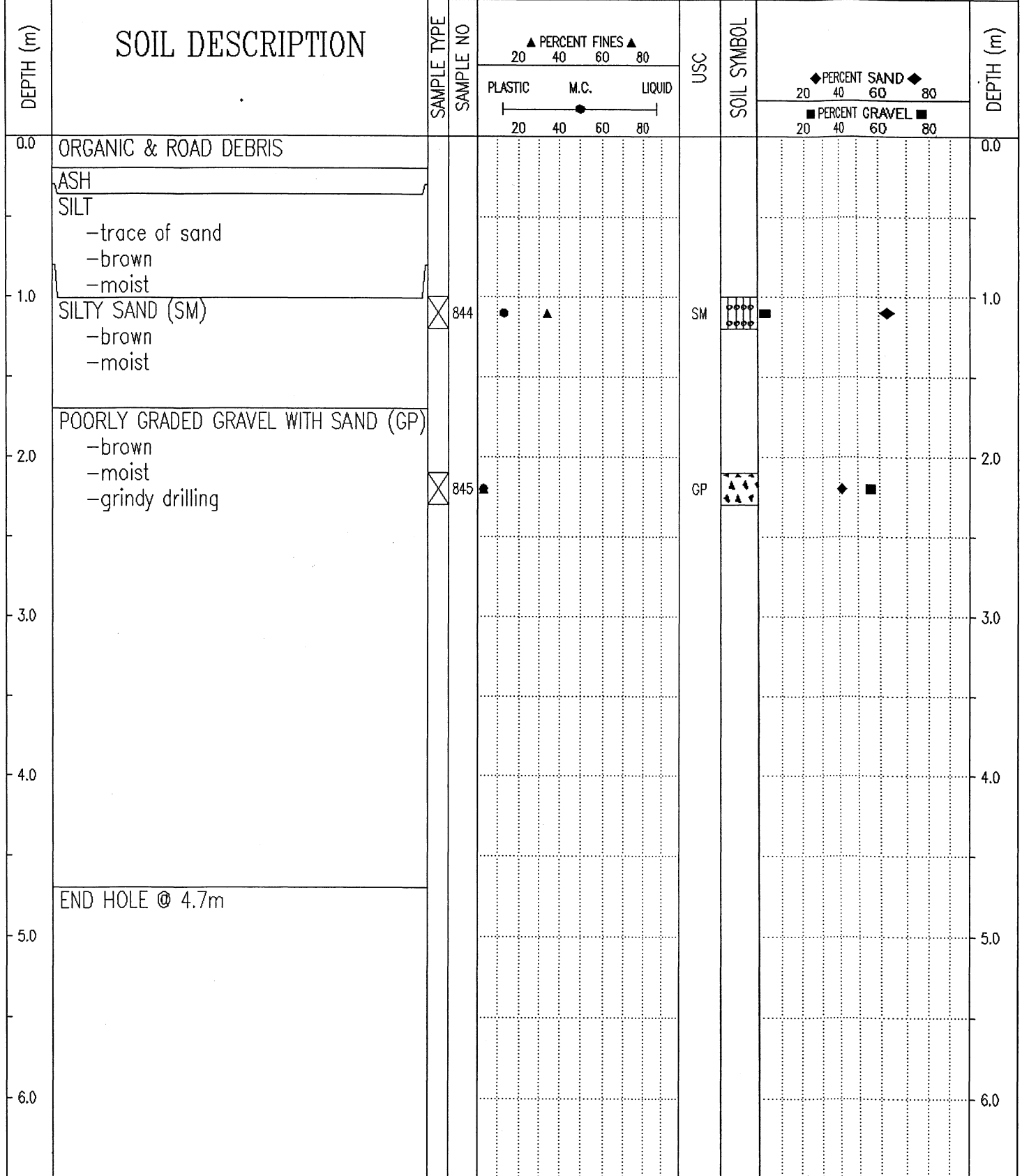
COMPLETION DEPTH: 4.7 m

COMPLETE: 99/08/26

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-831
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: D92-202101-0329
MOBILE B40-L	LOCATION:1797+650 10M RT	ELEVATION: 0.00 (m)

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

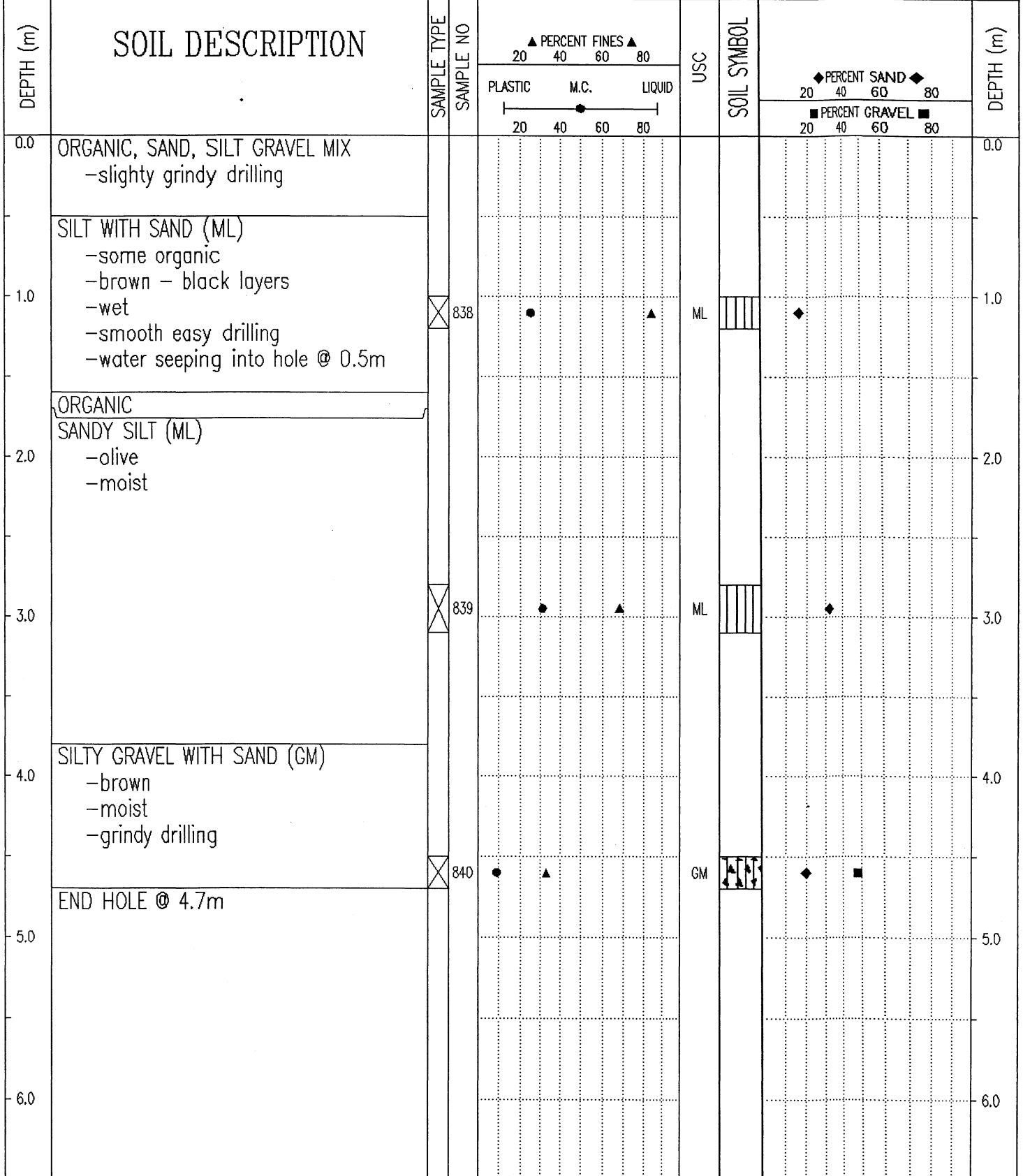


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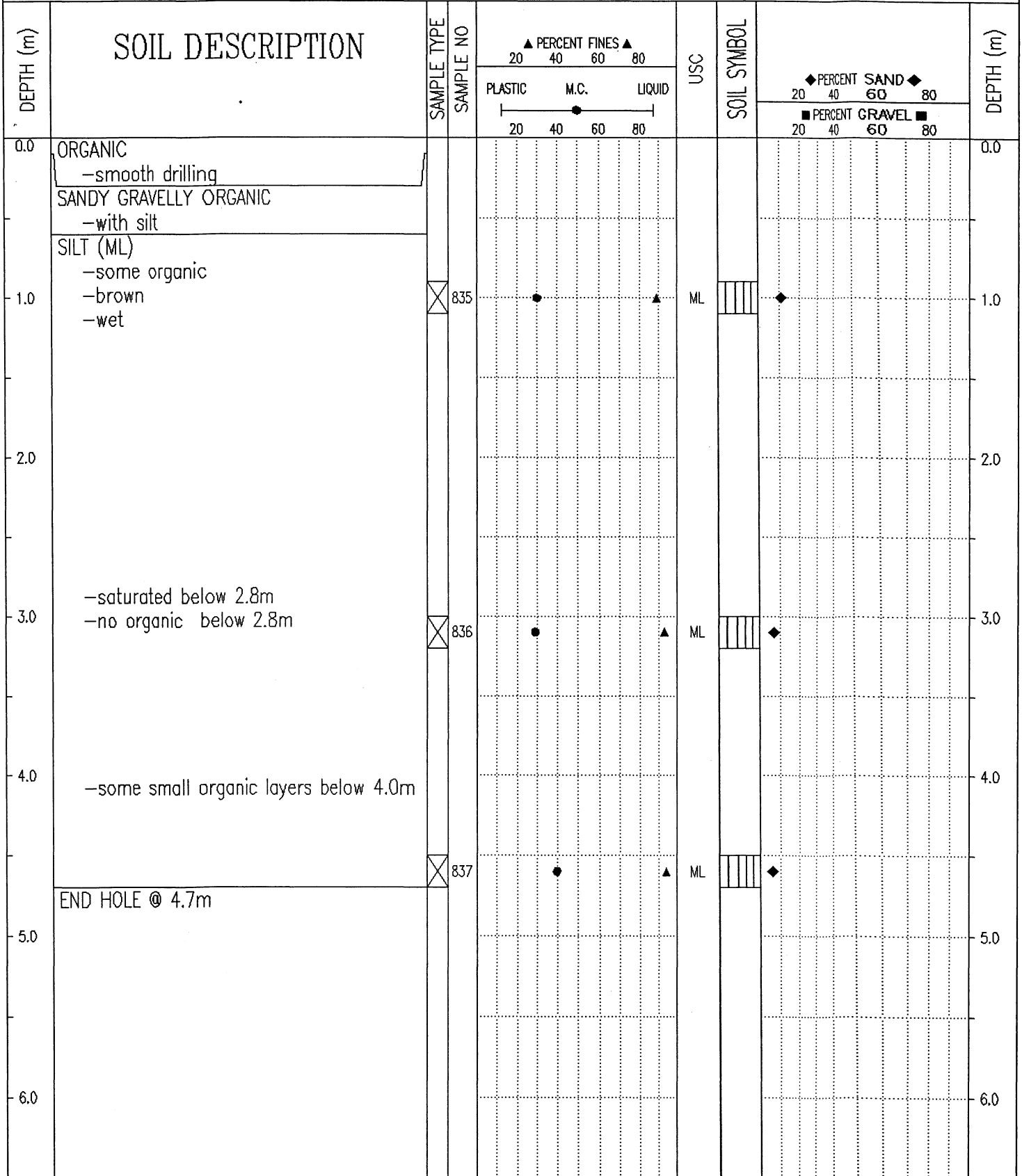
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Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 529-830								
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: D92-202101-0329								
MOBILE B40-L		LOCATION: 1797+750 5M RT		ELEVATION: 0.00 (m)								
SAMPLE TYPE		RETURN		S.P.T.								
		AUGER		BULK								
		TUBE		CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	SOIL SYMBOL	◆ PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC & GRAVELLY SAND											0.0
	ASH											
1.0	SILT WITH SAND TO SILT (ML)											1.0
	-brown											
	-wet											
	-thin organic layers											
2.0												2.0
3.0												3.0
4.0	SILTY GRAVEL WITH SAND (GM)											4.0
	-brown											
	-wet											
	-grindy drilling											
5.0	END HOLE @ 4.7m											5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: D.T.		COMPLETION DEPTH: 4.7 m						
				REVIEWED BY:		COMPLETE: 99/08/26						
				Fig. No:		Page 1 of 1						

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



SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-828
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION:1797+950 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		



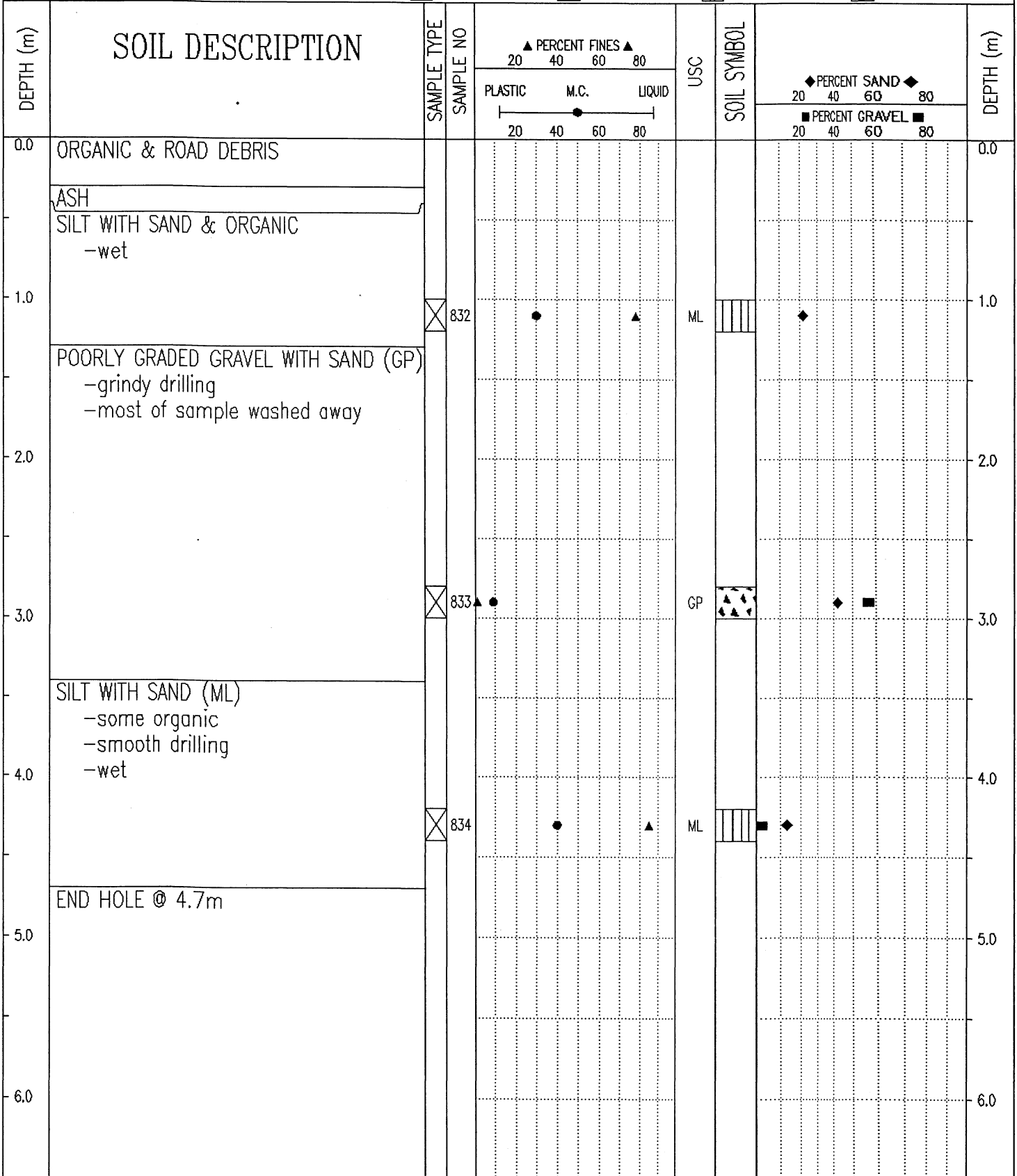
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COMPLETION DEPTH: 4.7 m
COMPLETE: 99/08/25

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-827
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1798+050 2M RT	ELEVATION: 0.00 (m)

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



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Fig. No:

COMPLETION DEPTH: 4.7 m
COMPLETE: 99/08/25

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-826
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1798+150 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 ◆		PERCENT GRAVEL ■	DEPTH (m)
				20	40	60			80	20		
0.0	ORGANIC & ROAD DEBRIS											0.0
	ASH											
	ORGANIC SAND & SILT LAYERS											
1.0	SANDY GRAVEL -some silt -grindy drilling -sample washed off auger -H2O level @ 1.1m											1.0
2.0												2.0
3.0												3.0
4.0												4.0
5.0	END HOLE @ 4.7m											5.0
6.0												6.0

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COMPLETION DEPTH: 4.7 m
COMPLETE: 99/08/25
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-824
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: Y92-202101-0329
MOBILE B40-L	LOCATION:1798+276 CENTRELINE	ELEVATION: 0.00 (m)

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

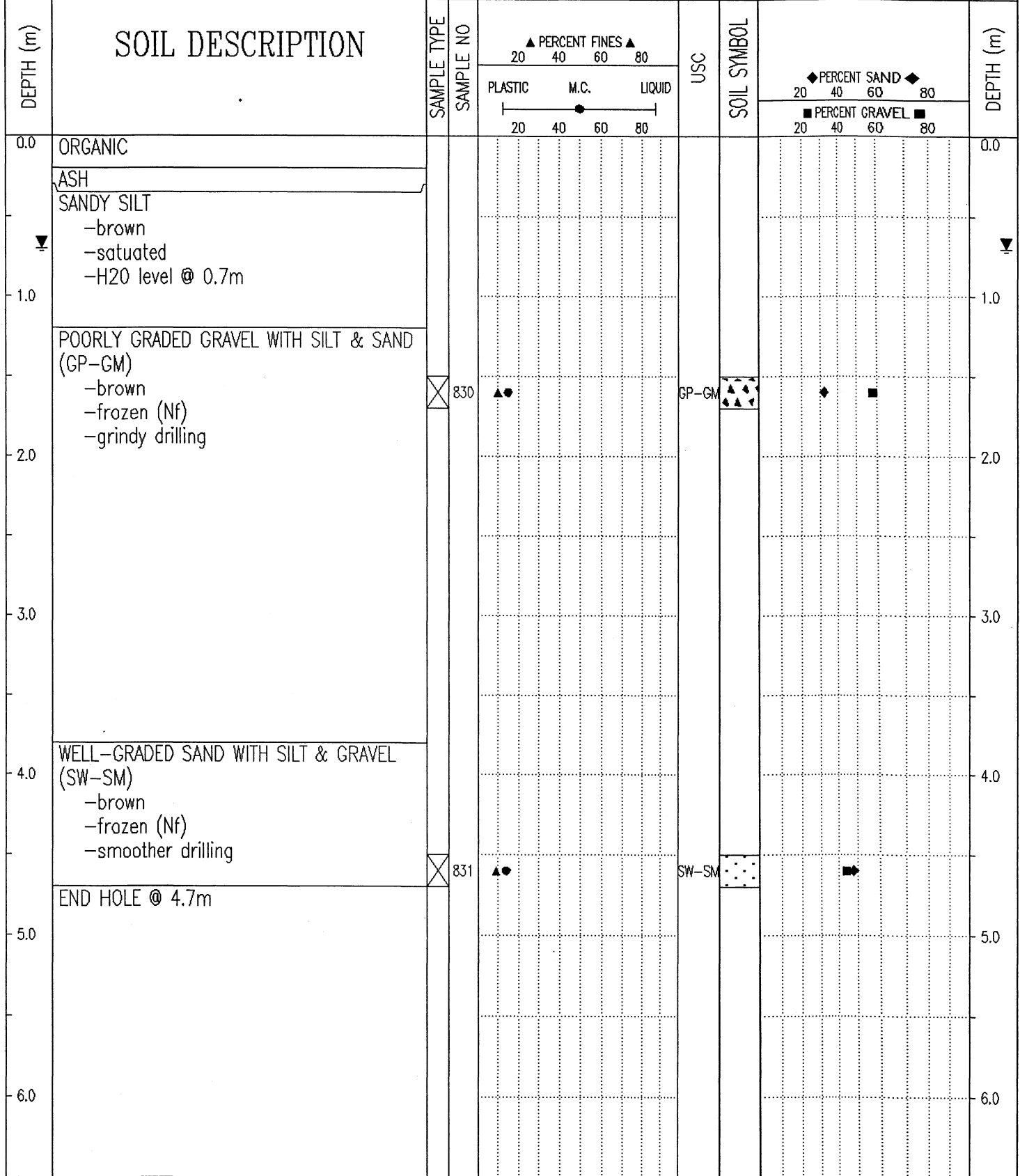
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)	
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
				20	40	60			20	40	60	80
0.0	ORGANIC SILTY SAND (SM) -some +5mm material -brown -wet											
1.0		<input checked="" type="checkbox"/>	829	●	▲		SM	◆	■			
2.0	SANDY GRAVEL -trace silt -brown -grindy drilling -sample washed off auger -H2O level @ 1.4m											
4.0	GRAVELLY SAND -trace silt -brown -smoother drilling											
5.0	END HOLE @ 4.7m											

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-825
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1798+285 20M RT	ELEVATION: 0.00 (m)

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

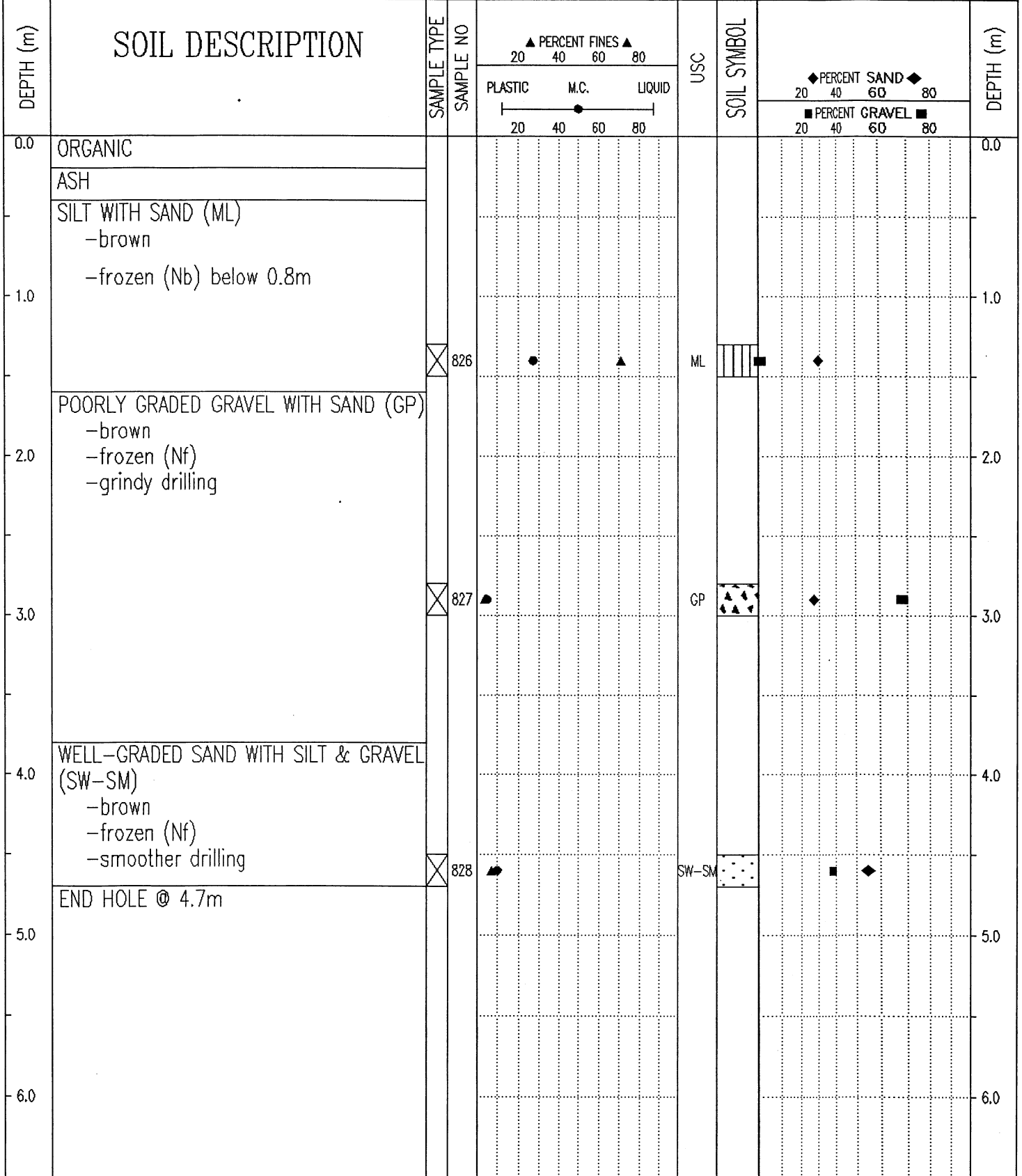


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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-823
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 892-202101-0329
MOBILE B40-L	LOCATION:1798+375 2M LT	ELEVATION: 0.00 (m)

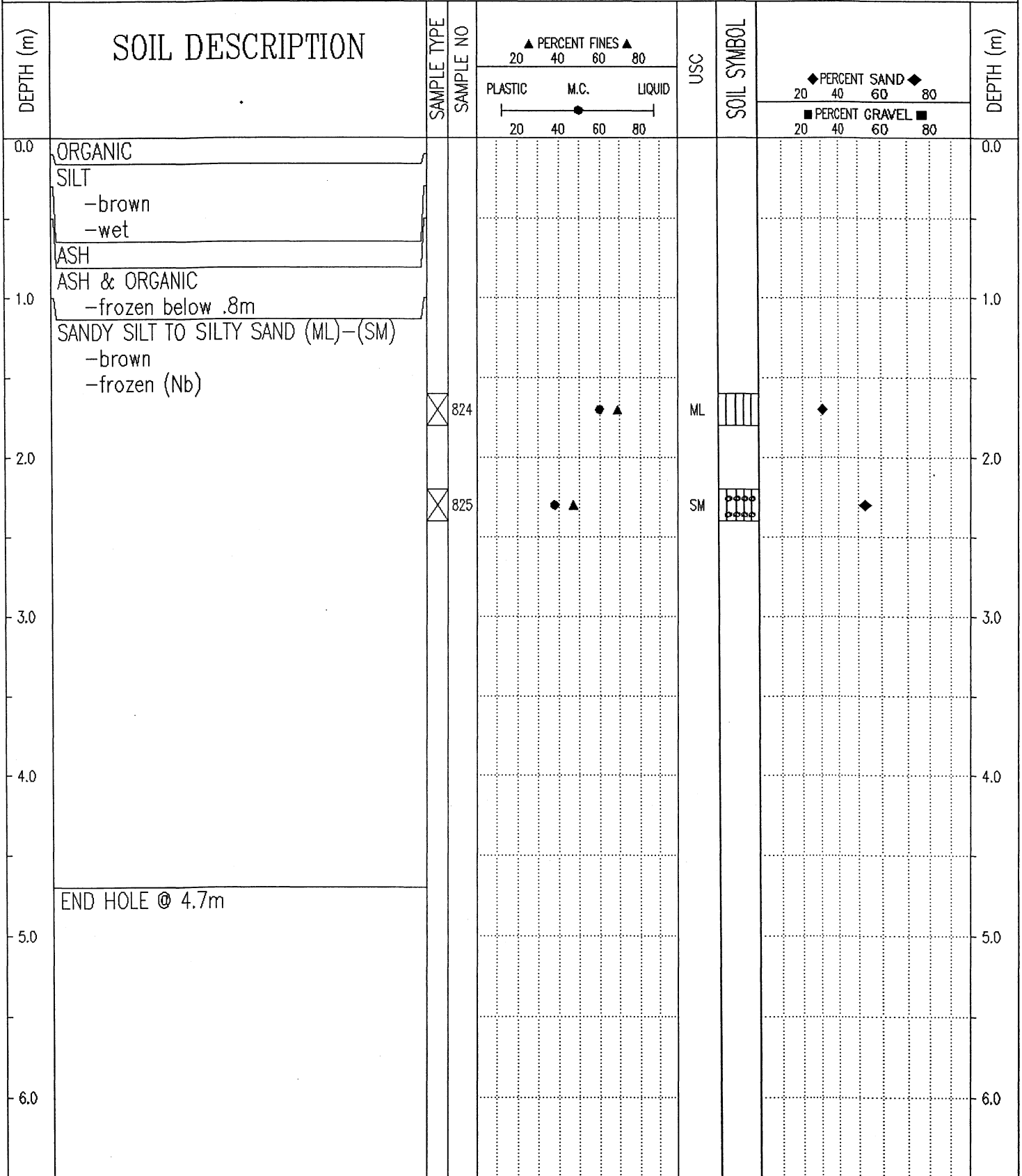
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-822
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 892-202101-0329
MOBILE B40-L	LOCATION:1798+475 2M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
	<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
		<input type="checkbox"/> CORE

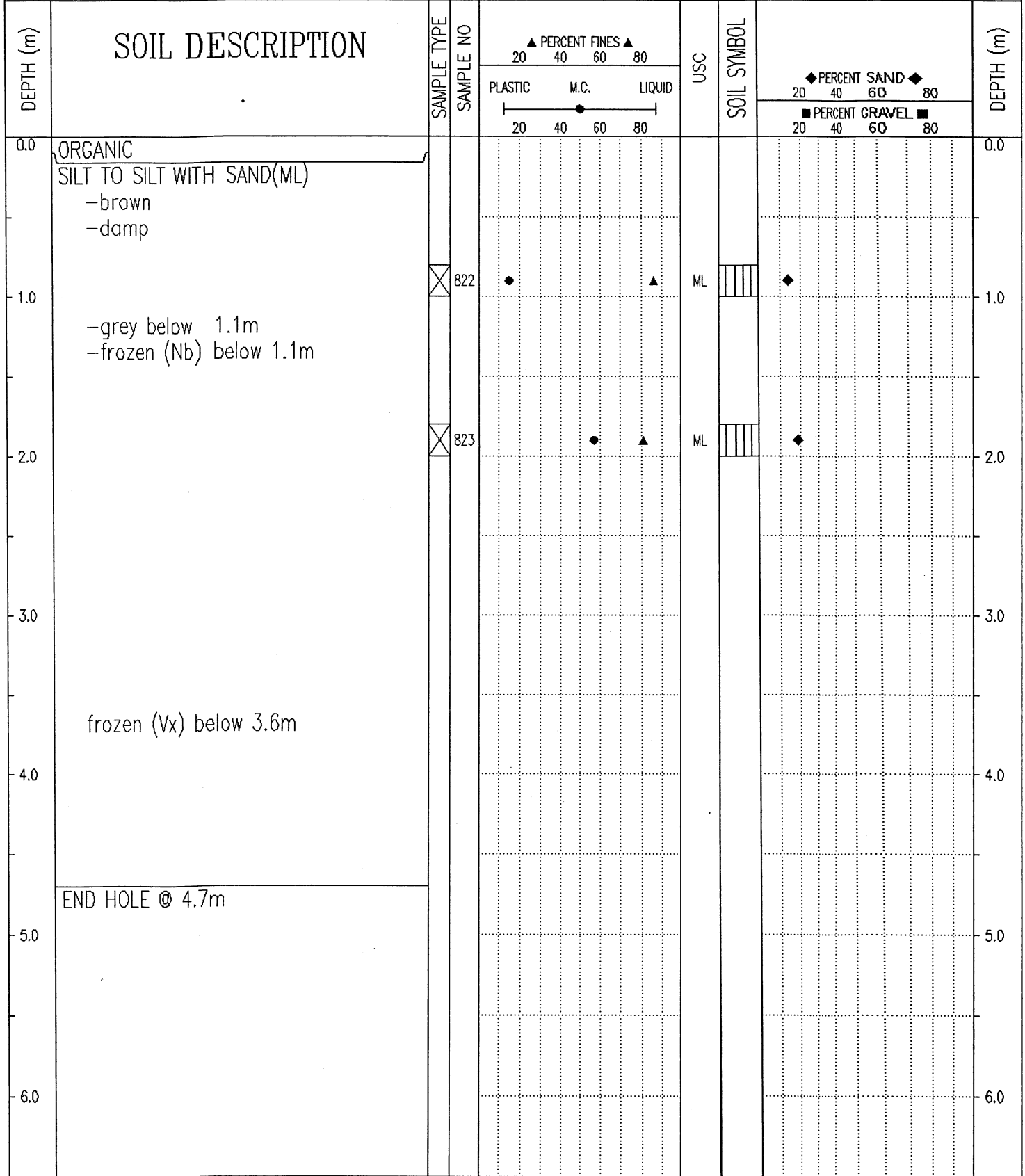


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REVIEWED BY:	COMPLETE: 99/08/25
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-821
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 892-202101-0329
MOBILE B40-L	LOCATION:1798+600 2M LT	ELEVATION: 0.00 (m)

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

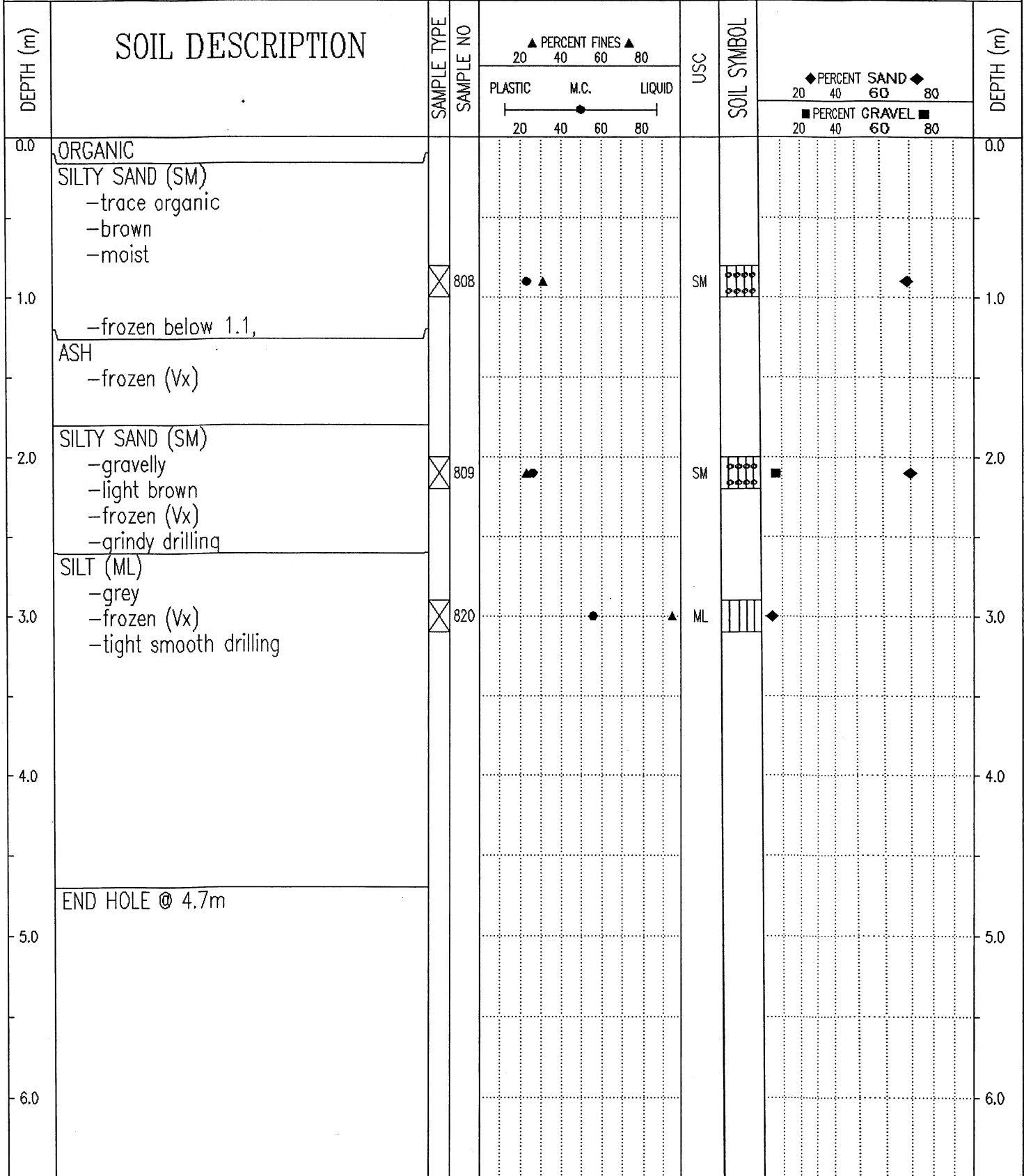


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REVIEWED BY:
Fig. No:
COMPLETION DEPTH: 4.7 m
COMPLETE: 99/08/25
Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-819
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 892-202101-0329
MOBILE B40-L	LOCATION: 1798+650 20M RT	ELEVATION: 0.00 (m)

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



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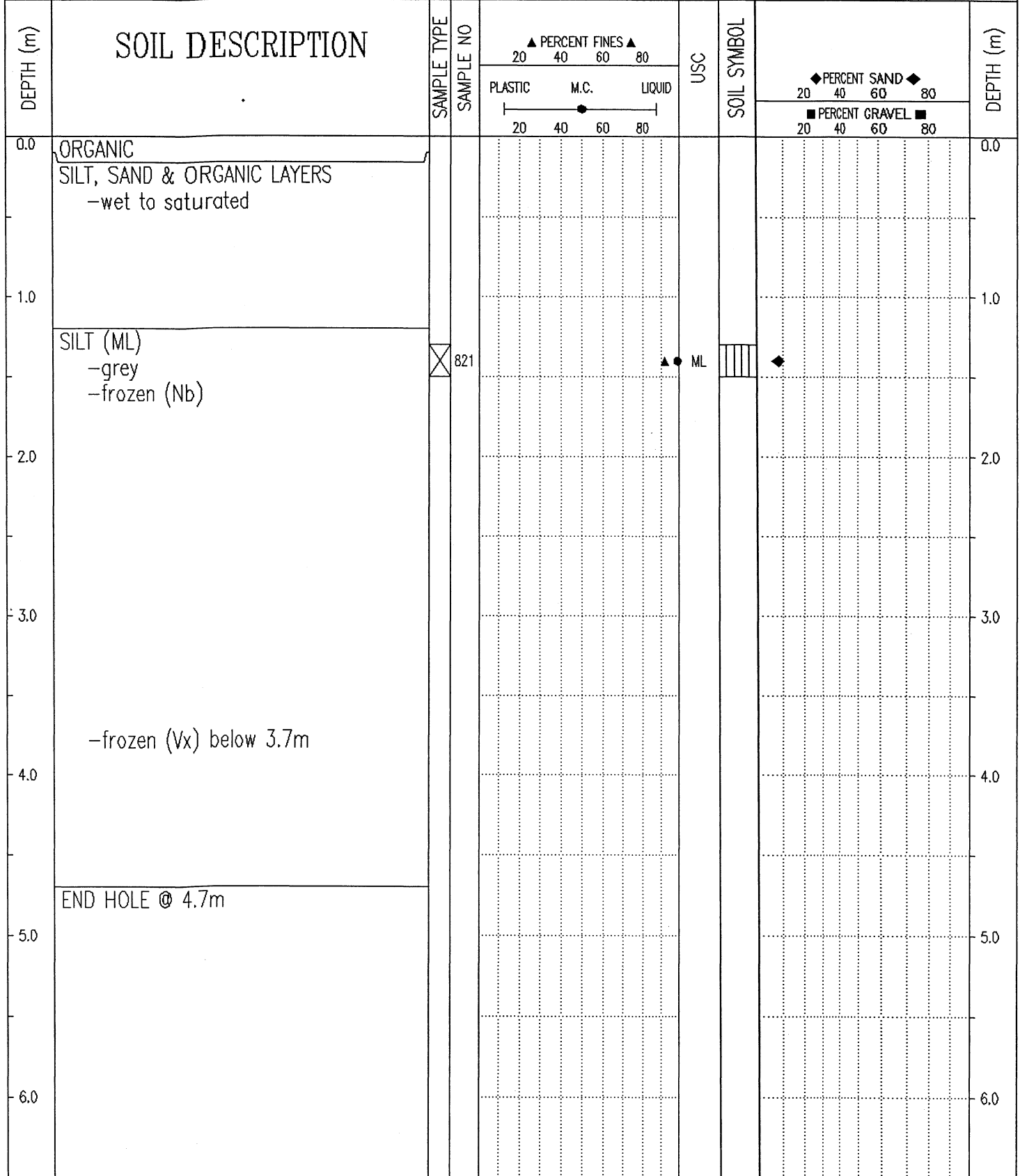
Fig. No:

COMPLETION DEPTH: 4.7 m

COMPLETE: 99/08/25

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-820
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 892-202101-0329
MOBILE B40-L	LOCATION: 1798+660 20M LT	ELEVATION: 0.00 (m)

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

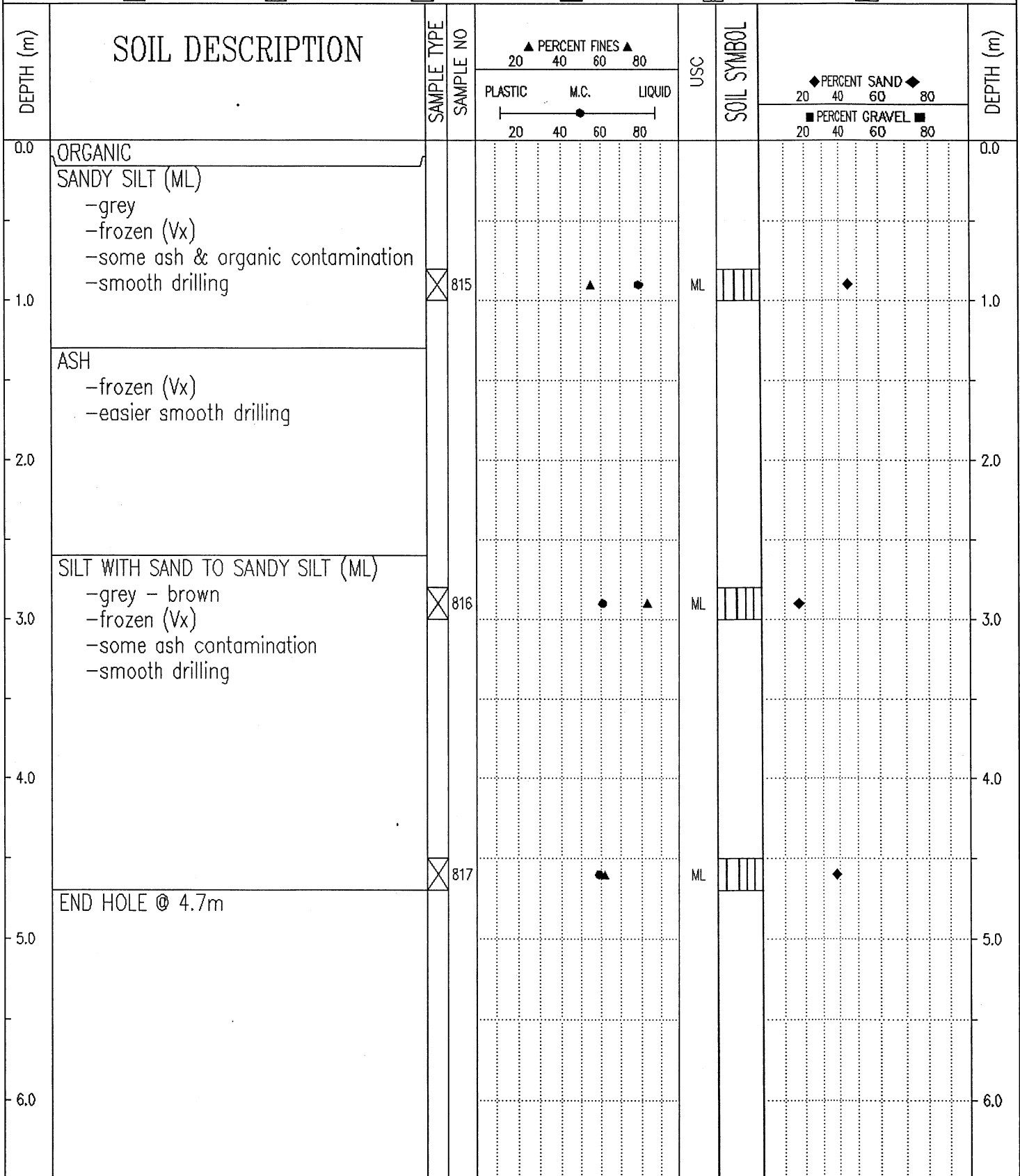


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LOGGED BY: D.T.
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.7 m
COMPLETE: 99/08/25

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-818
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 892-202101-0329
MOBILE B40-L	LOCATION:1798+800 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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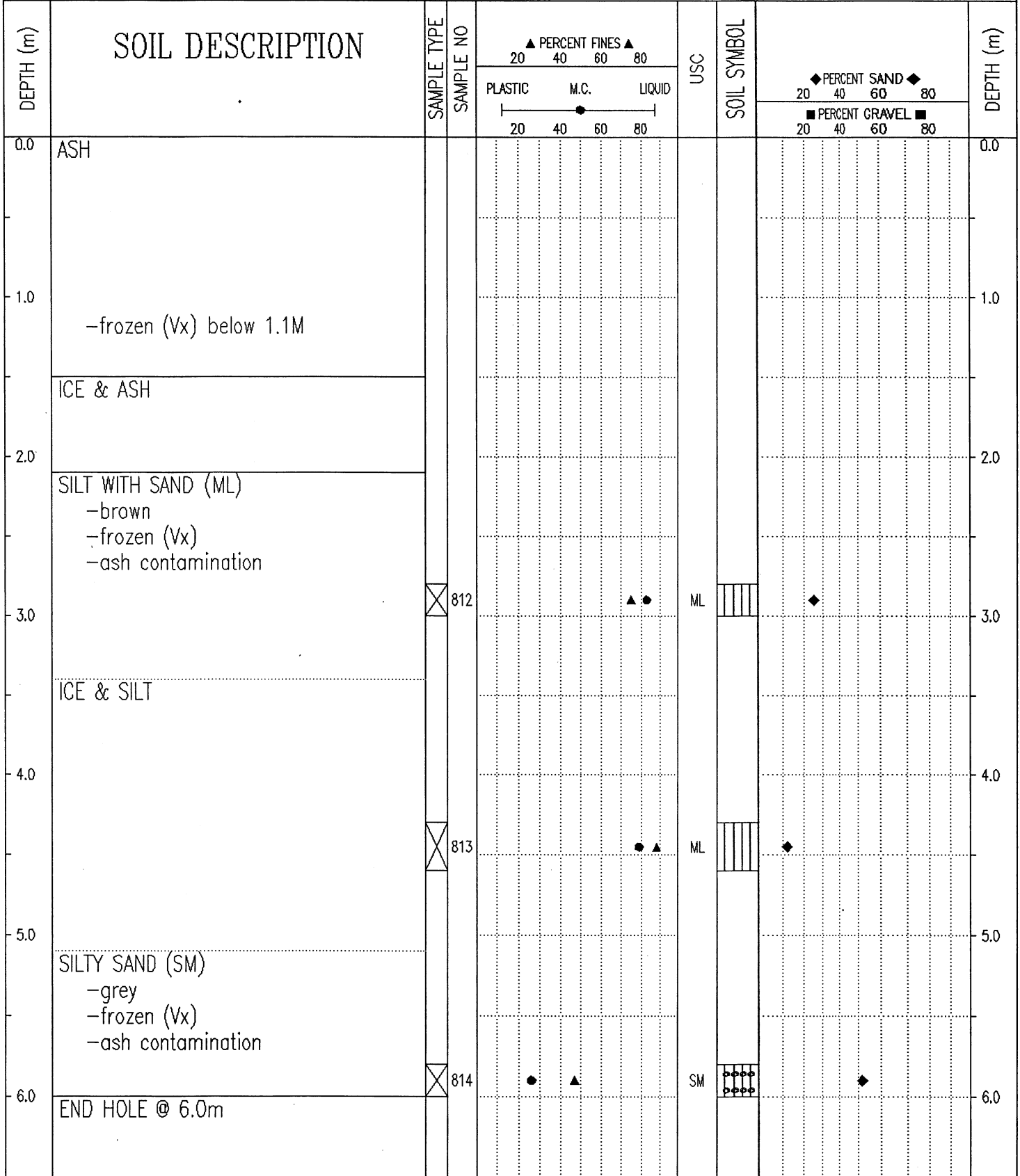
Fig. No:

COMPLETION DEPTH: 4.7 m

COMPLETE: 99/08/25

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-817
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 892-202101-0329
MOBILE B40-L	LOCATION:1798+936 20M RT	ELEVATION: 0.00 (m)

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



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Fig. No:

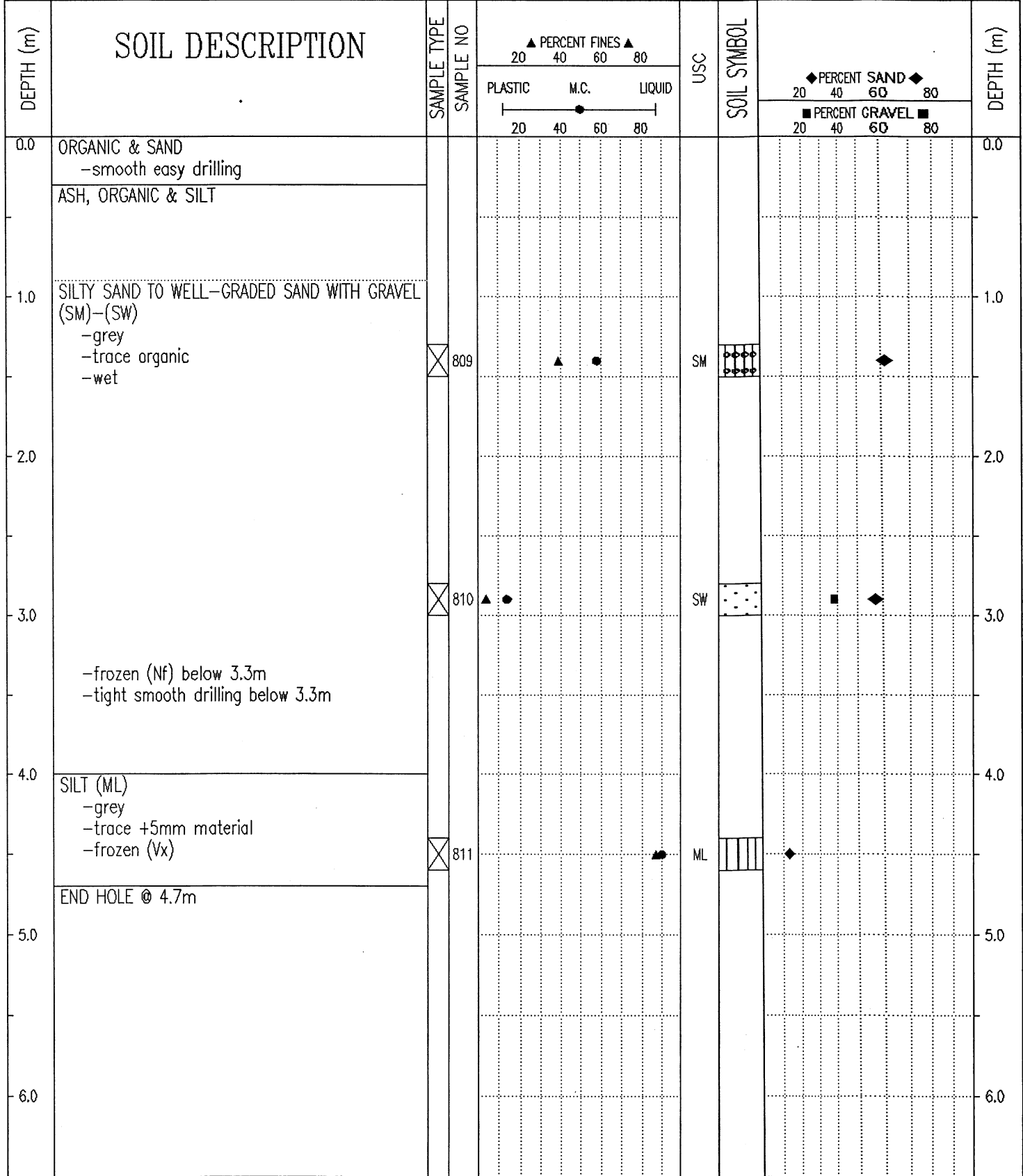
COMPLETION DEPTH: 6.0 m

COMPLETE: 99/08/25

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-816
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 892-202101-0329
MOBILE B40-L	LOCATION:1798+936 12M LT	ELEVATION: 0.00 (m)

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



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Fig. No:
COMPLETION DEPTH: 4.7 m
COMPLETE: 99/08/24
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-815
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 892-202101-0329
MOBILE B40-L	LOCATION: 1799+050 12M RT	ELEVATION: 0.00 (m)

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

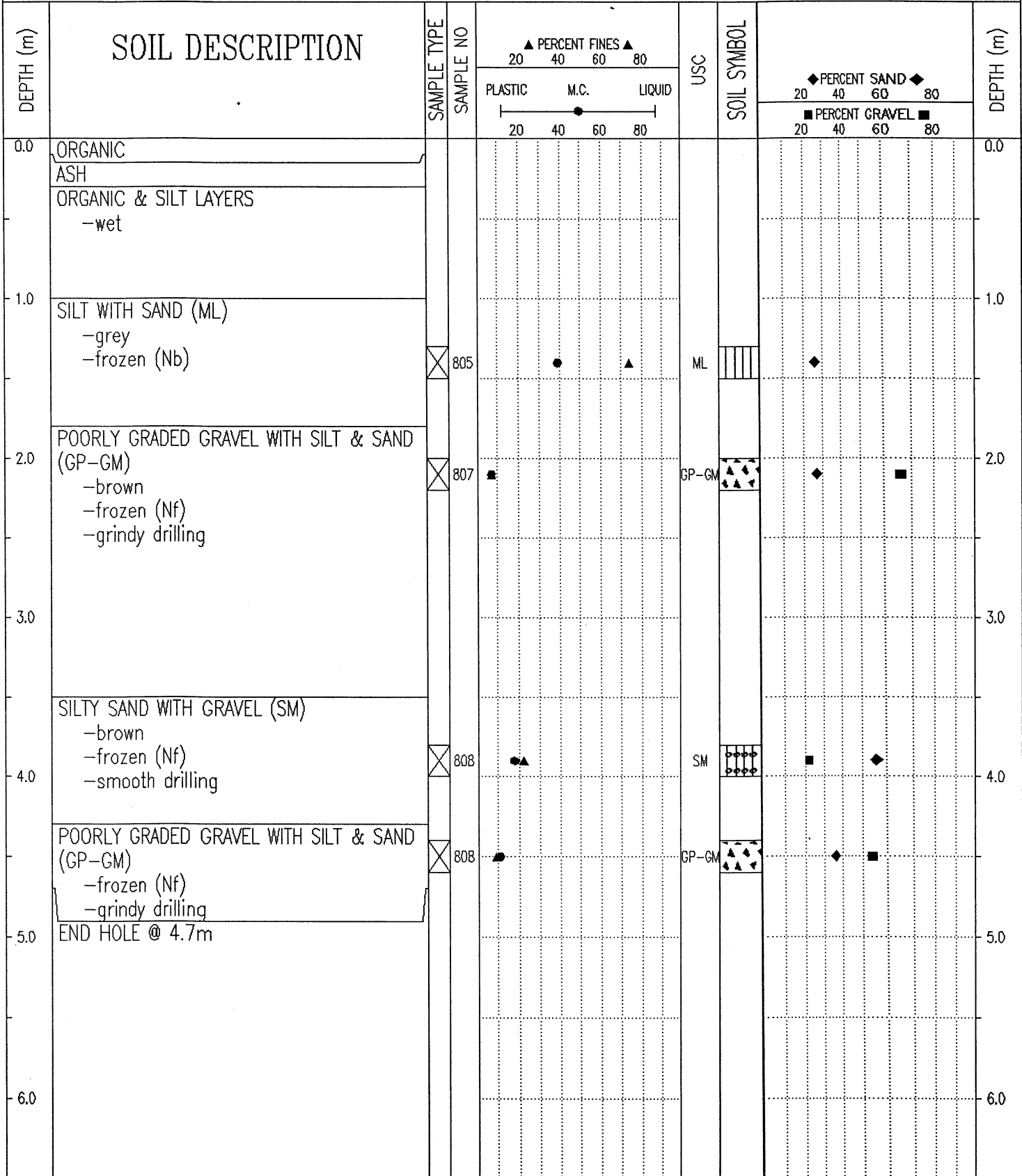
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)
				20	40	60			80	20		
0.0	WATER @ 0.0m										0.0	
	ROAD DEBRIS -grindy drilling											
	ORGANIC & SILTY LAYERS -smooth drilling -frozen below .9m											
2.0	SANDY GRAVELLY SILT -grey -frozen (Nb)										2.0	
3.0	SANDY SILTY GRAVEL -frozen (Vx)										3.0	
4.0											4.0	
5.0	END HOLE @ 4.7m Note: All samples lost in water -washed off										5.0	
6.0											6.0	

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REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.7 m
COMPLETE: 99/08/24

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-814
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 892-202101-0329
MOBILE B40-L	LOCATION: 1799+158 11M 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	

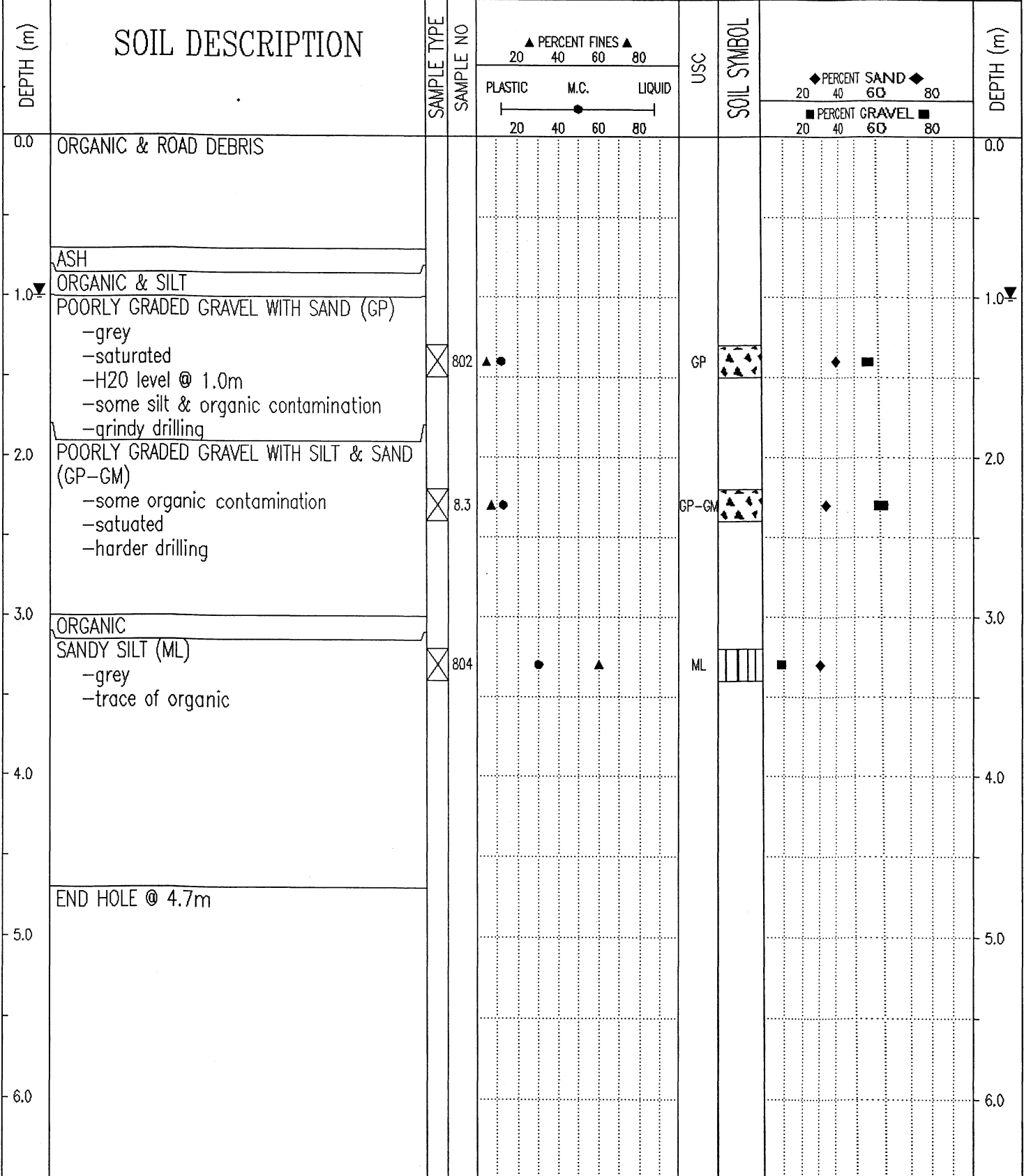


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LOGGED BY: D.T.
REVIEWED BY:
Fig. No:

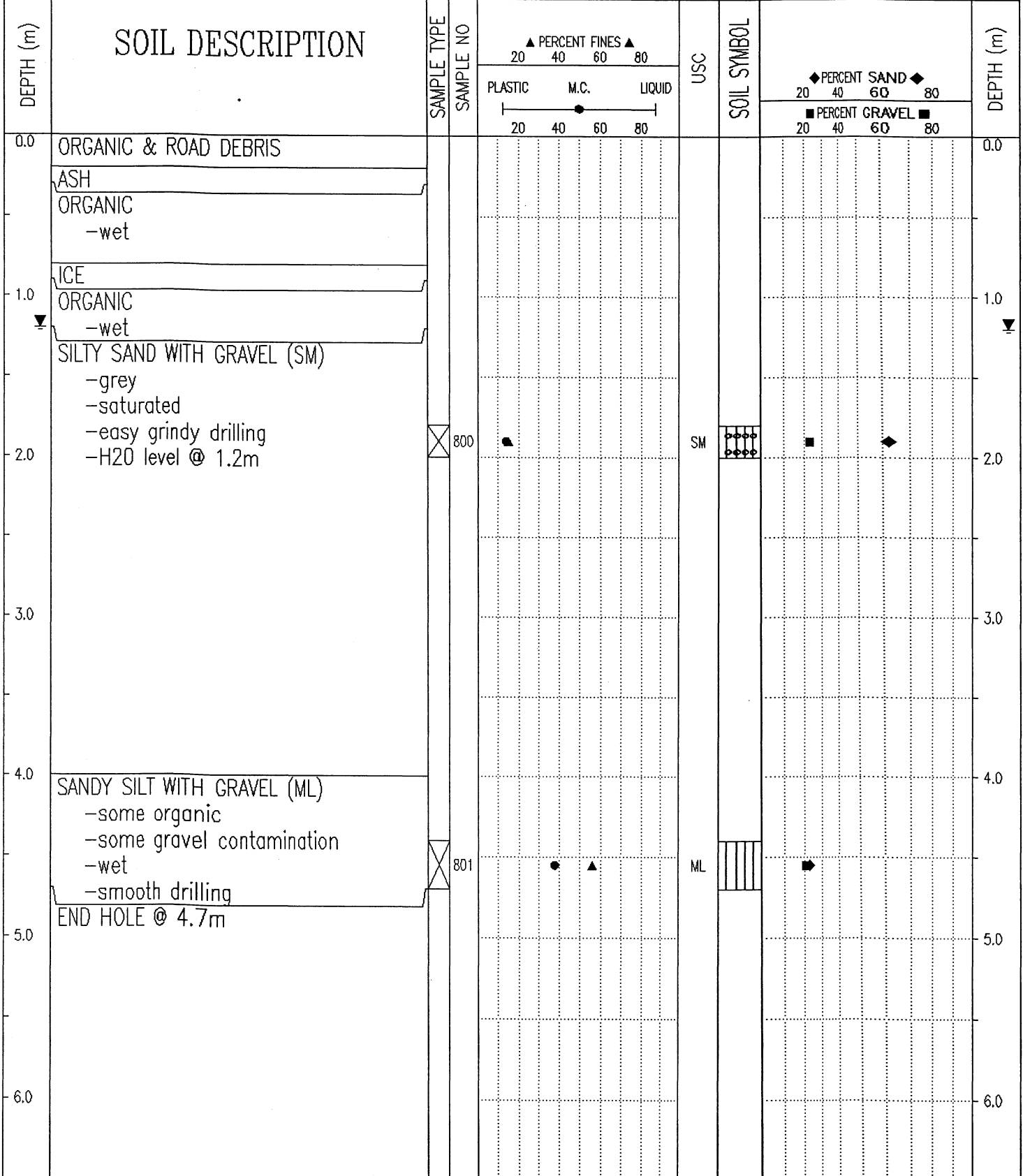
COMPLETION DEPTH: 4.7 m
COMPLETE: 99/08/24

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



SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-812
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 892-202101-0329
MOBILE B40-L	LOCATION: 1799+275 12M RT	ELEVATION: 0.00 (m)

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

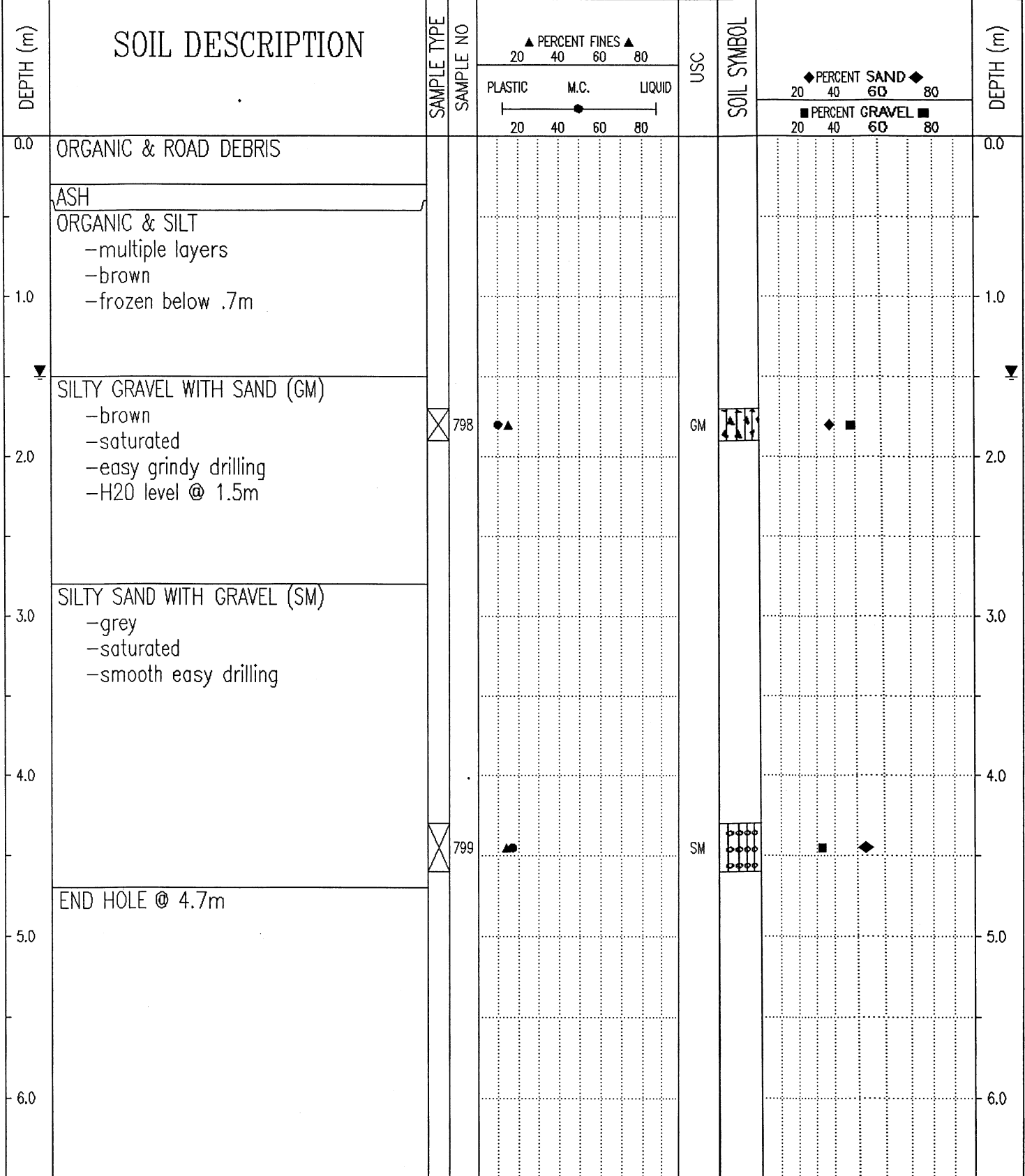


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REVIEWED BY:	COMPLETE: 99/08/24
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-811
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 892-202101-0329
MOBILE B40-L	LOCATION: 1799+400 4 M LT	ELEVATION: 0.00 (m)

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



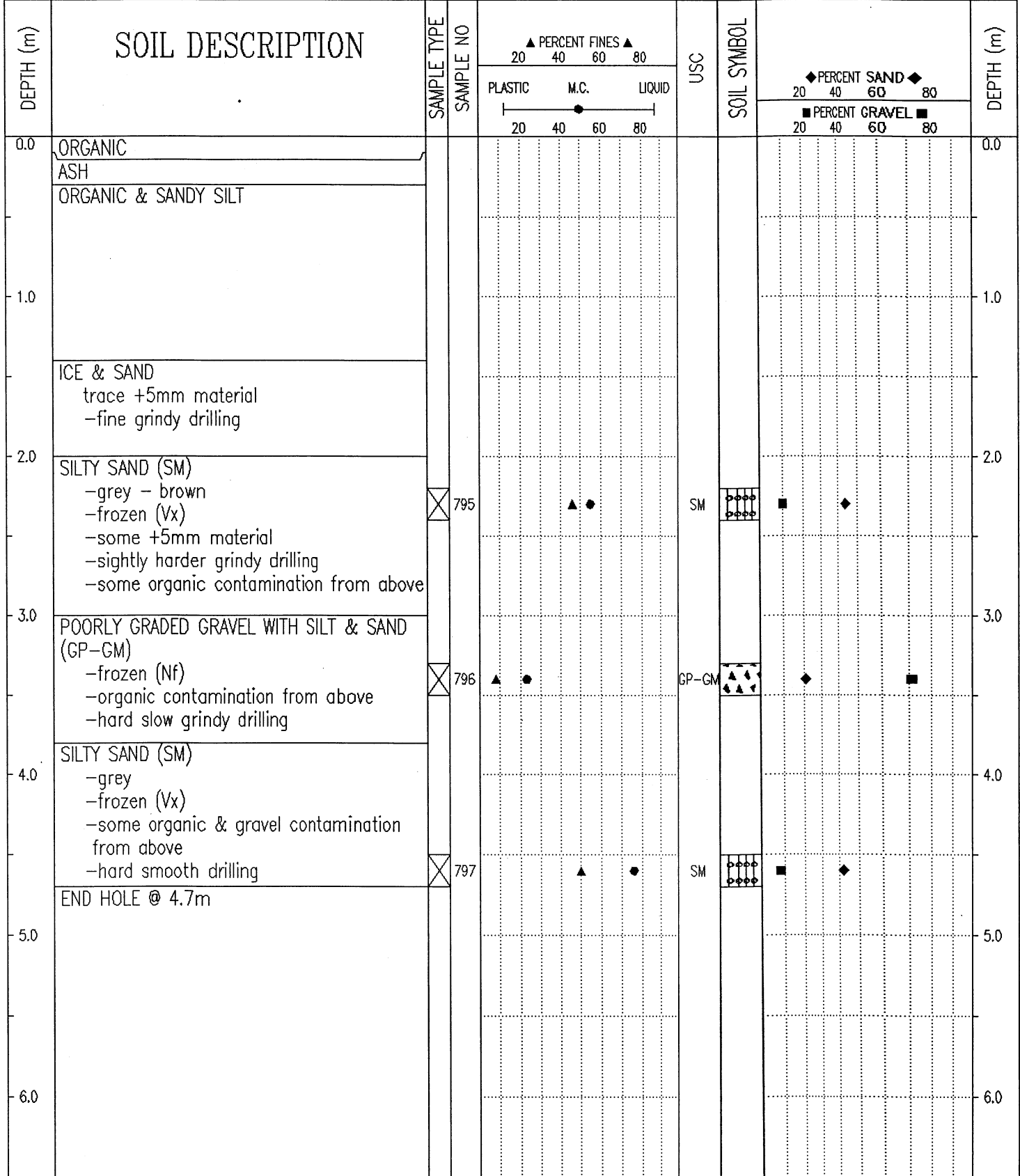
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REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.7 m
COMPLETE: 99/08/24

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-810
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 892-202101-0329
MOBILE B40-L	LOCATION: 1799+500 CENTRELINE	ELEVATION: 0.00 (m)

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

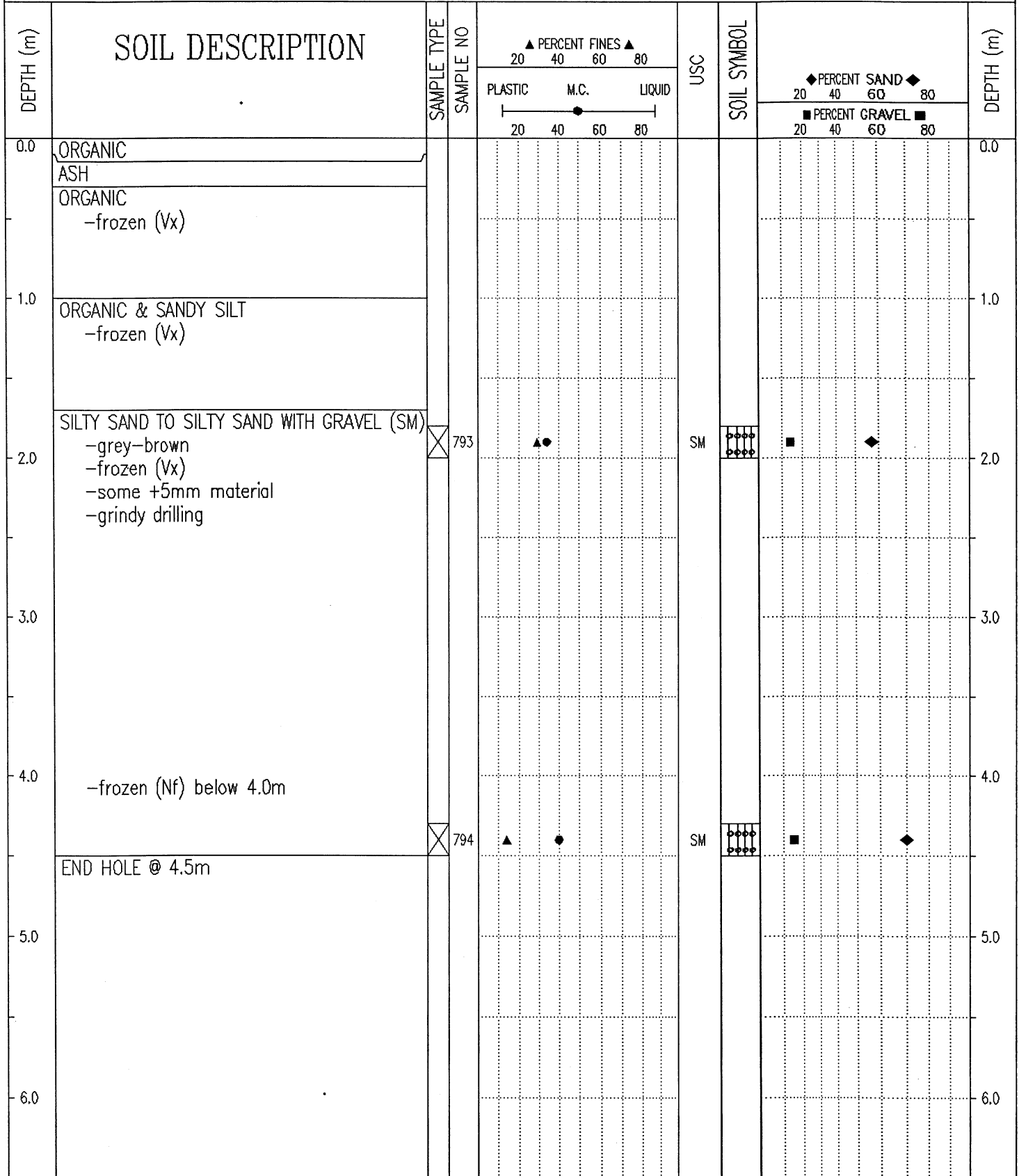


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LOGGED BY: D.T.	COMPLETION DEPTH: 4.7 m
REVIEWED BY:	COMPLETE: 99/08/23
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-809
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 892-202101-0329
MOBILE B40-L	LOCATION: 1799+600 CENTRELINE	ELEVATION: 0.00 (m)

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

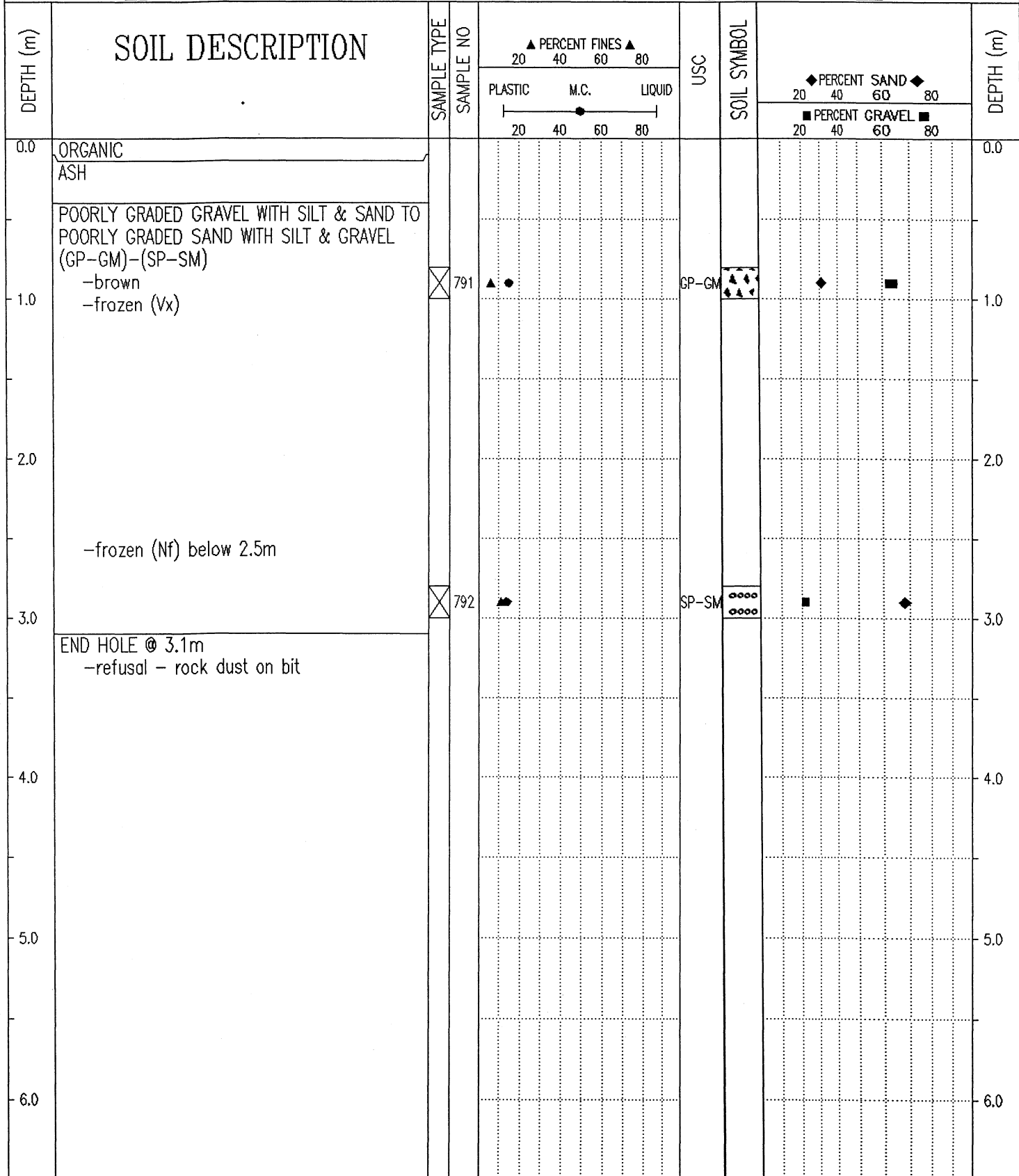


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LOGGED BY: D.T.
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.5 m
COMPLETE: 99/08/24

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-808
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 892-202101-0329
MOBILE B40-L	LOCATION: 1799+700 2 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	

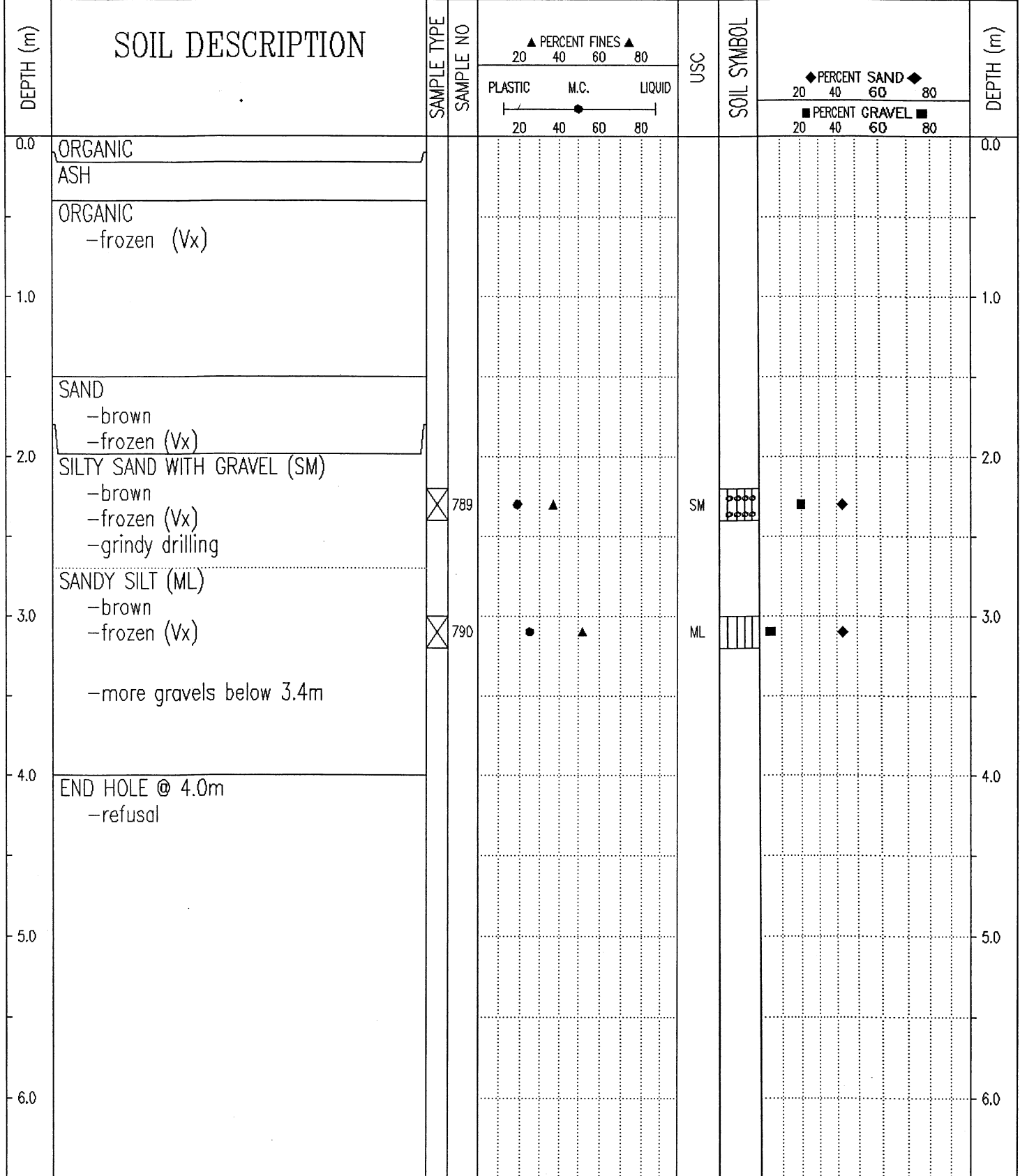


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LOGGED BY: D.T.	COMPLETION DEPTH: 3.1 m
REVIEWED BY:	COMPLETE: 99/08/23
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-807
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 892-202101-0329
MOBILE B40-L	LOCATION: 1799+800 20 LT	ELEVATION: 0.00 (m)

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



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REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 4.0 m

COMPLETE: 99/08/23

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-806
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 892-202101-0329
MOBILE B40-L	LOCATION: 1799+800 20 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 ■	PERCENT SAND ◆	
0.0	ORGANIC -flowing surface water									0.0	
	ASH										
	ASH & ICE -frozen										
1.0	SILTY SAND WITH GRAVEL (SM) -brown -frozen (Vx) -grindy drilling	<input checked="" type="checkbox"/>	787	●	▲		SM	◆	■	1.0	
2.0										2.0	
3.0	END HOLE @ 3.0m -refusal	<input checked="" type="checkbox"/>	788	●	▲		SM	◆	■	3.0	
4.0										4.0	
5.0										5.0	
6.0										6.0	

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Fig. No:

COMPLETION DEPTH: 3.0 m

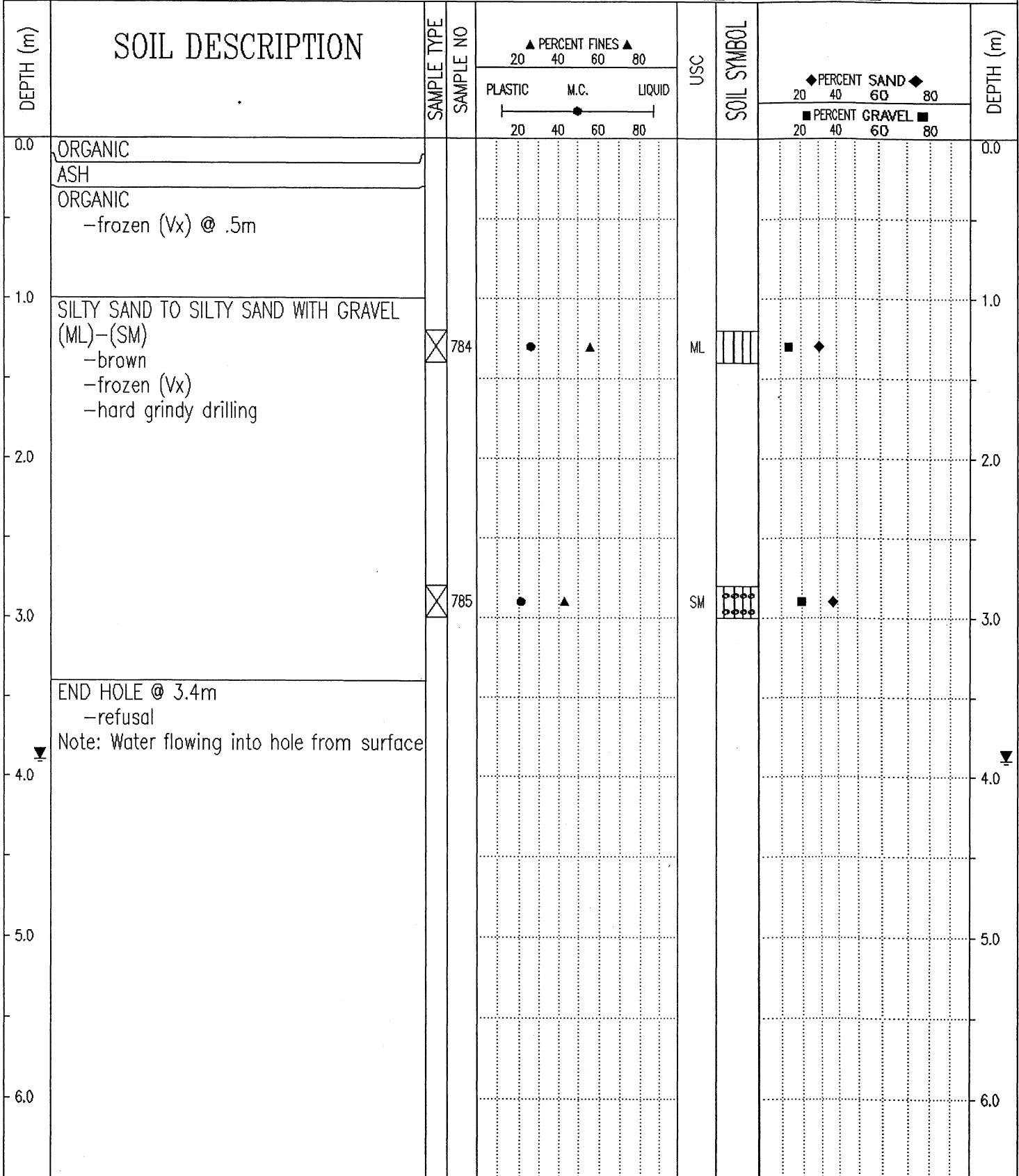
COMPLETE: 99/08/23

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)	
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
				20	40	60	80	20	40	60	80	
0.0	ORGANIC ASH -frozen @ .3m											0.0
0.0 - 1.0	ORGANIC -frozen (Vx)											1.0
1.0 - 2.0	SANDY SILT (ML) -brown -frozen (Vx) -grindy drilling -increasing gravel content below 2.0m	<input checked="" type="checkbox"/>	766	40	50	60	70	ML	■	◆		2.0
2.0 - 3.0	END HOLE @ 2.8m -refusal											3.0
3.0 - 4.0												4.0
4.0 - 5.0												5.0
5.0 - 6.0												6.0

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-804
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 892-202101-0329
MOBILE B40-L	LOCATION: 1799+950 2M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.
	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE



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REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 3.4 m
COMPLETE: 99/08/23

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-803
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 892-202101-0329
MOBILE B40-L	LOCATION: 1800+050 2M LT	ELEVATION: 0.00 (m)

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	60	
0.0	ORGANIC ASH -frozen (Vx) below .3m									0.0	
0.0 - 0.3	ICE & SANDY GRAVELLY SILT -grindy easy drilling										
0.3 - 1.0	SANDY GRAVELLY SILT -frozen (Vx) -grindy hard drilling										
1.0 - 1.8	ICE -easy drilling										
1.8 - 2.0	SILTY SAND WITH GRAVEL (SM) -brown -frozen (Vx) -hard grindy drilling	<input checked="" type="checkbox"/>	782	●	▲		SM	◆	■	2.0	
2.0 - 3.9	SILTY GRAVEL WITH SAND (GM) -brown -frozen (Vx) -very hard slow grindy drilling	<input checked="" type="checkbox"/>	783	●	▲		GM	◆	■	4.0	
3.9 - 4.0	END HOLE @ 3.9m -refusal - rock dust on bit									4.0	

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	REVIEWED BY:	COMPLETE: 99/08/23
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-802
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 892-202101-0329
MOBILE B40-L	LOCATION: 1800+150 29M LT	ELEVATION: 0.00 (m)

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND		PERCENT GRAVEL	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40		
0.0	STRIPPING DEPRIS -sand - silt - organic & ash -some +5mm material											0.0
1.0												1.0
2.0	-frozen below 1.5 ICE ICE & ORGANIC											2.0
3.0	ORGANIC -frozen (Vx)											3.0
4.0	SILTY GRAVEL WITH SAND (GM) -brown -frozen (Vx) -some organic contamination -grindy drilling	<input checked="" type="checkbox"/>	780	●	▲		GM	▲▲▲▲	■			4.0
5.0	-frozen (Nf) below 4.3 END HOLE @ 4.7m	<input checked="" type="checkbox"/>	781	●▲			GM	▲▲▲▲	◆■			5.0
6.0												6.0

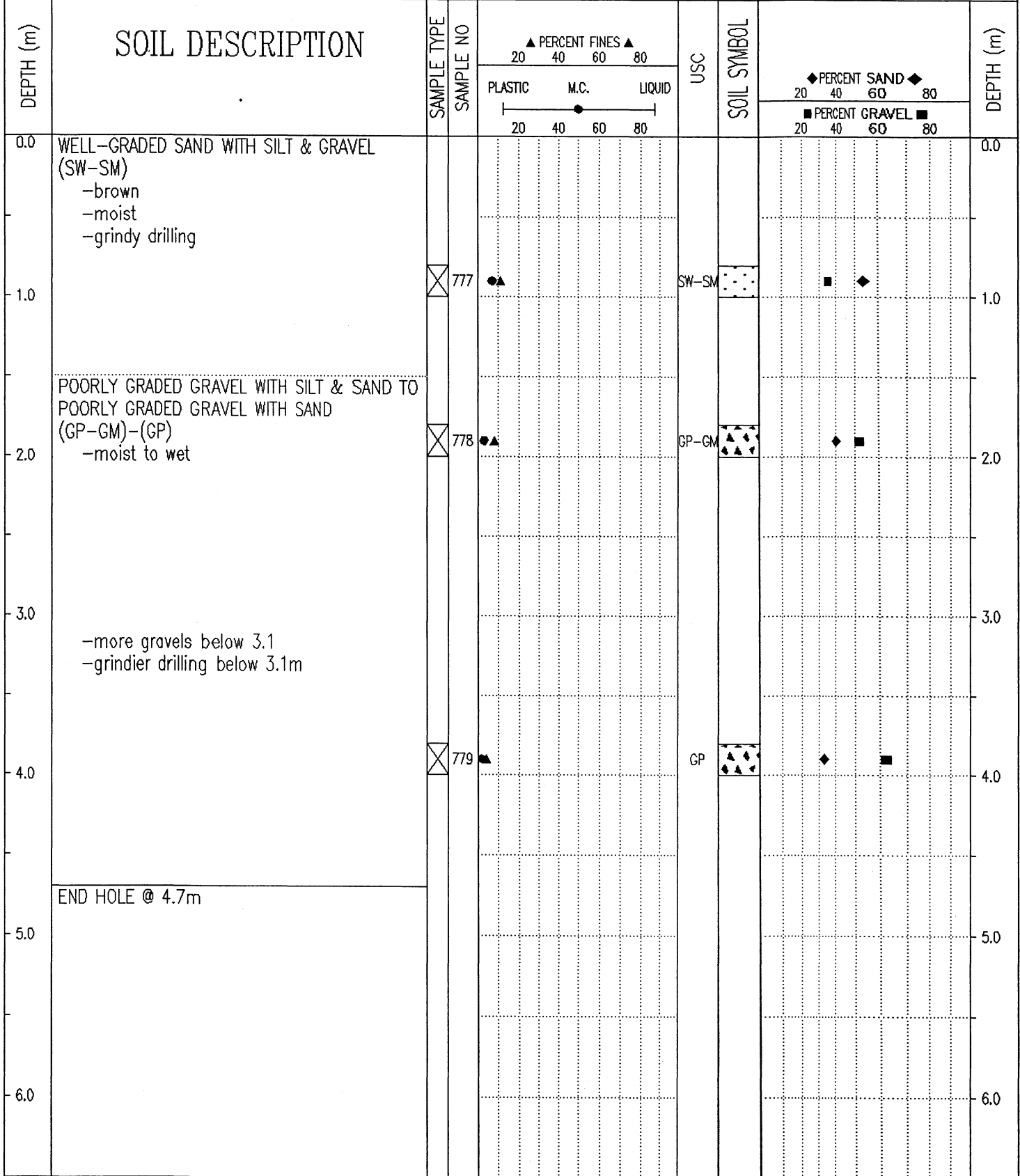
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Transportation Engineering

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REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.7 m
COMPLETE: 99/08/23

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-801
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 892-202101-0329
MOBILE B40-L	LOCATION:1800+225 2M LT	ELEVATION: 0.00 (m)

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



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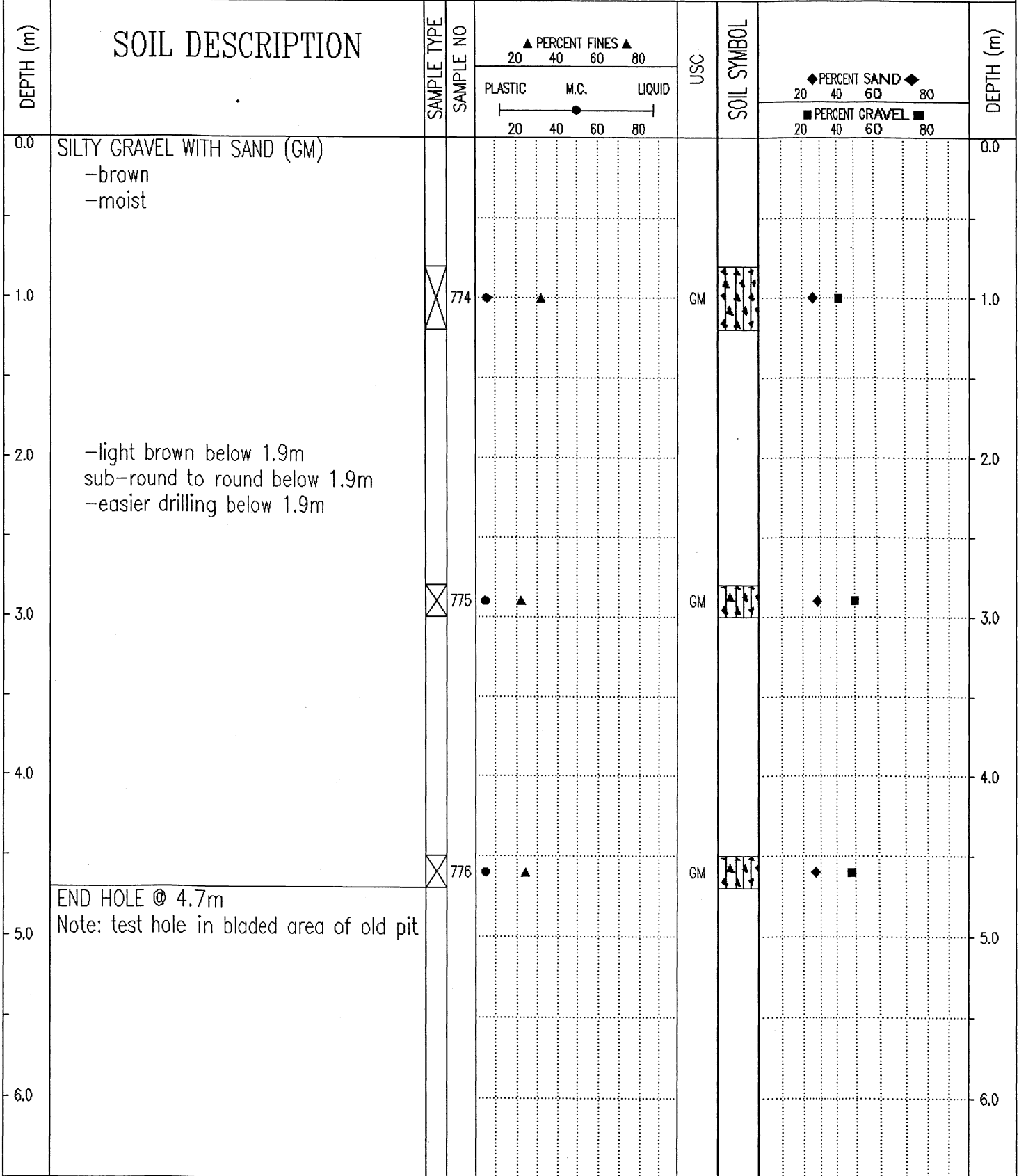
Fig. No:

COMPLETION DEPTH: 4.7 m

COMPLETE: 99/08/23

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-800
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 892-202101-0329
MOBILE B40-L	LOCATION:1800+300 3M RT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.
	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE



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Fig. No:

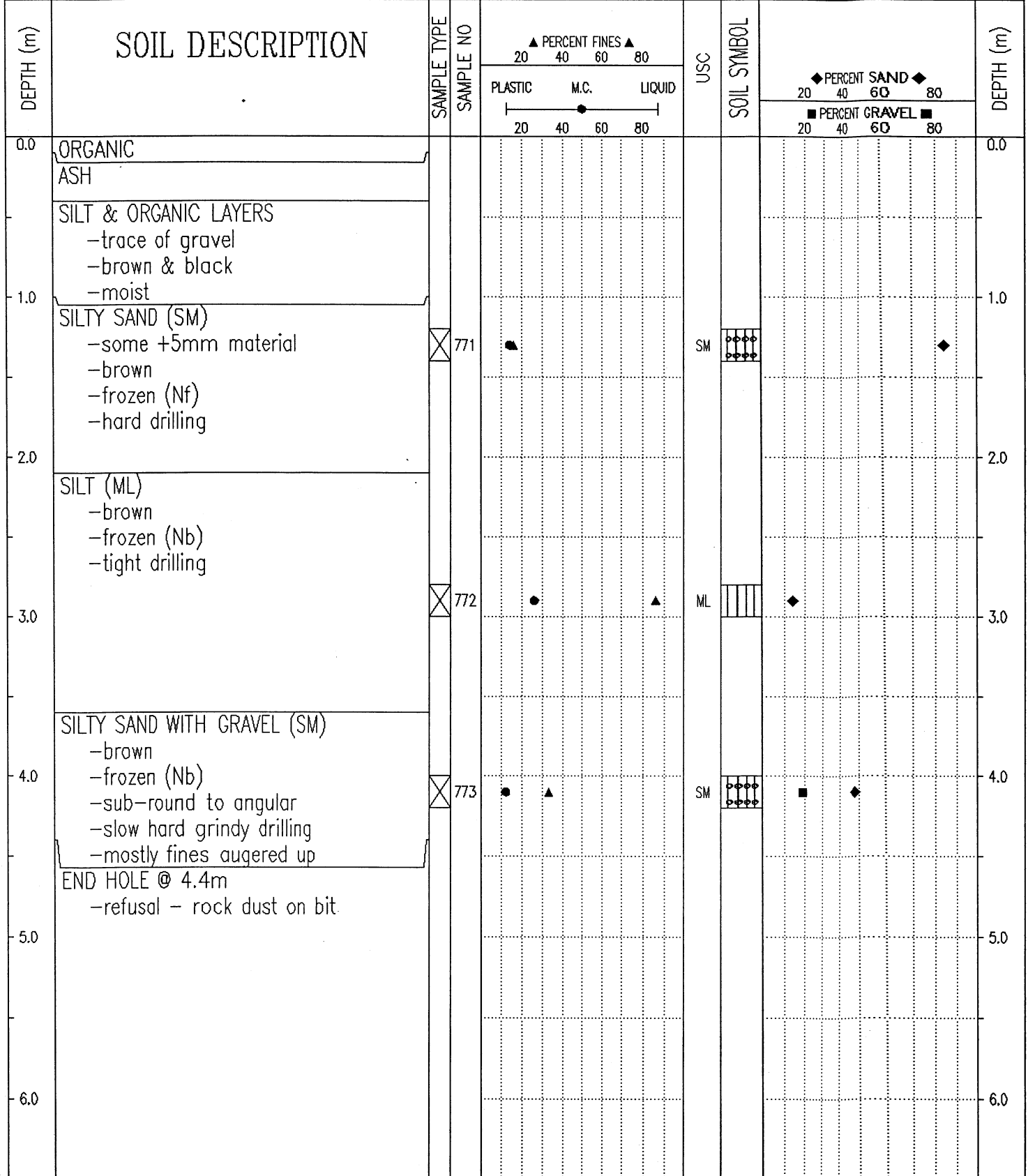
COMPLETION DEPTH: 4.7 m

COMPLETE: 99/08/23

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 529-799
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1800+375 33M RT	ELEVATION: 0.00 (m)

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

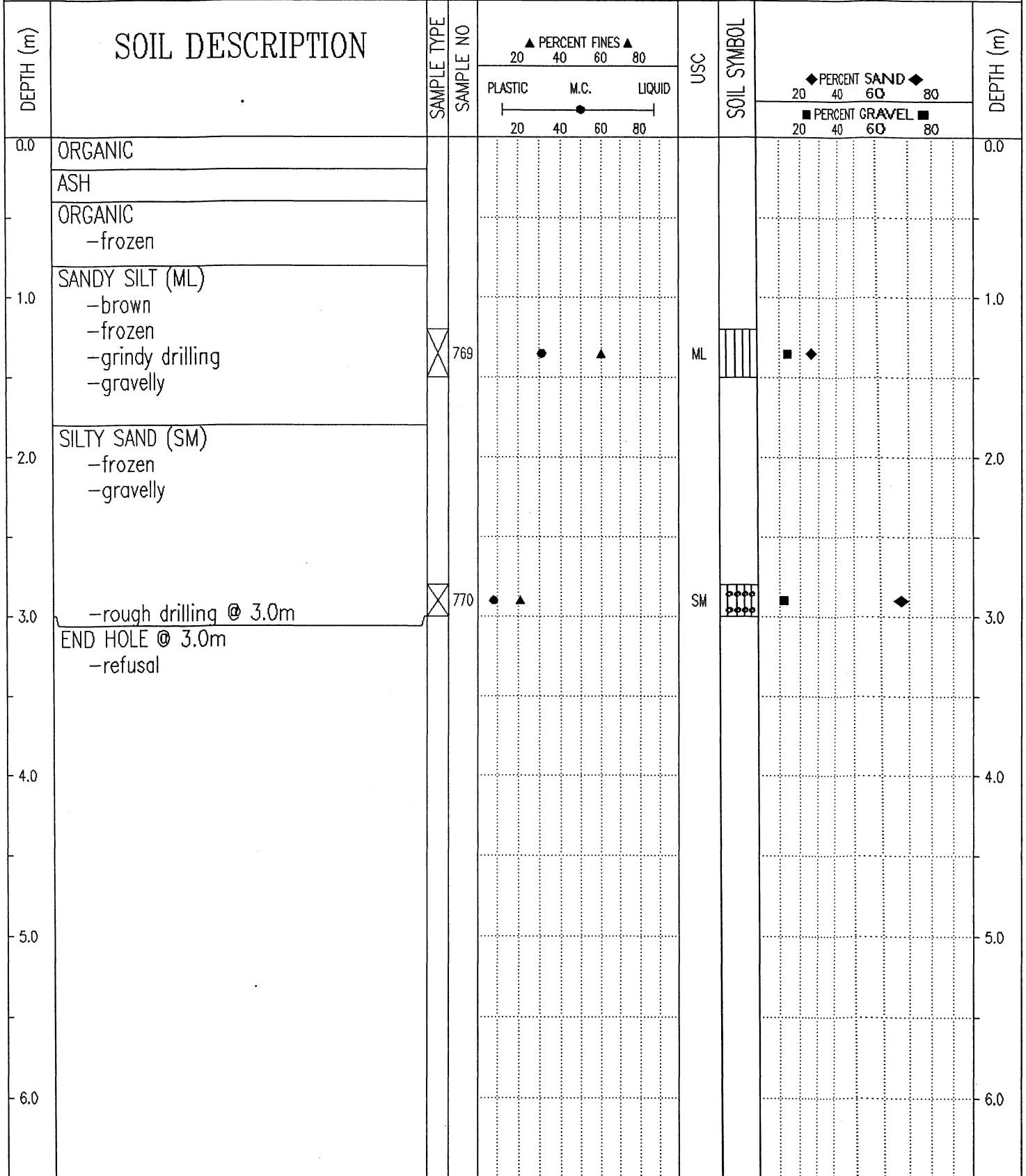


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REVIEWED BY:	COMPLETE: 99/08/23
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 528-798
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION:1800+425 3M RT	ELEVATION: 0.00 (m)

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

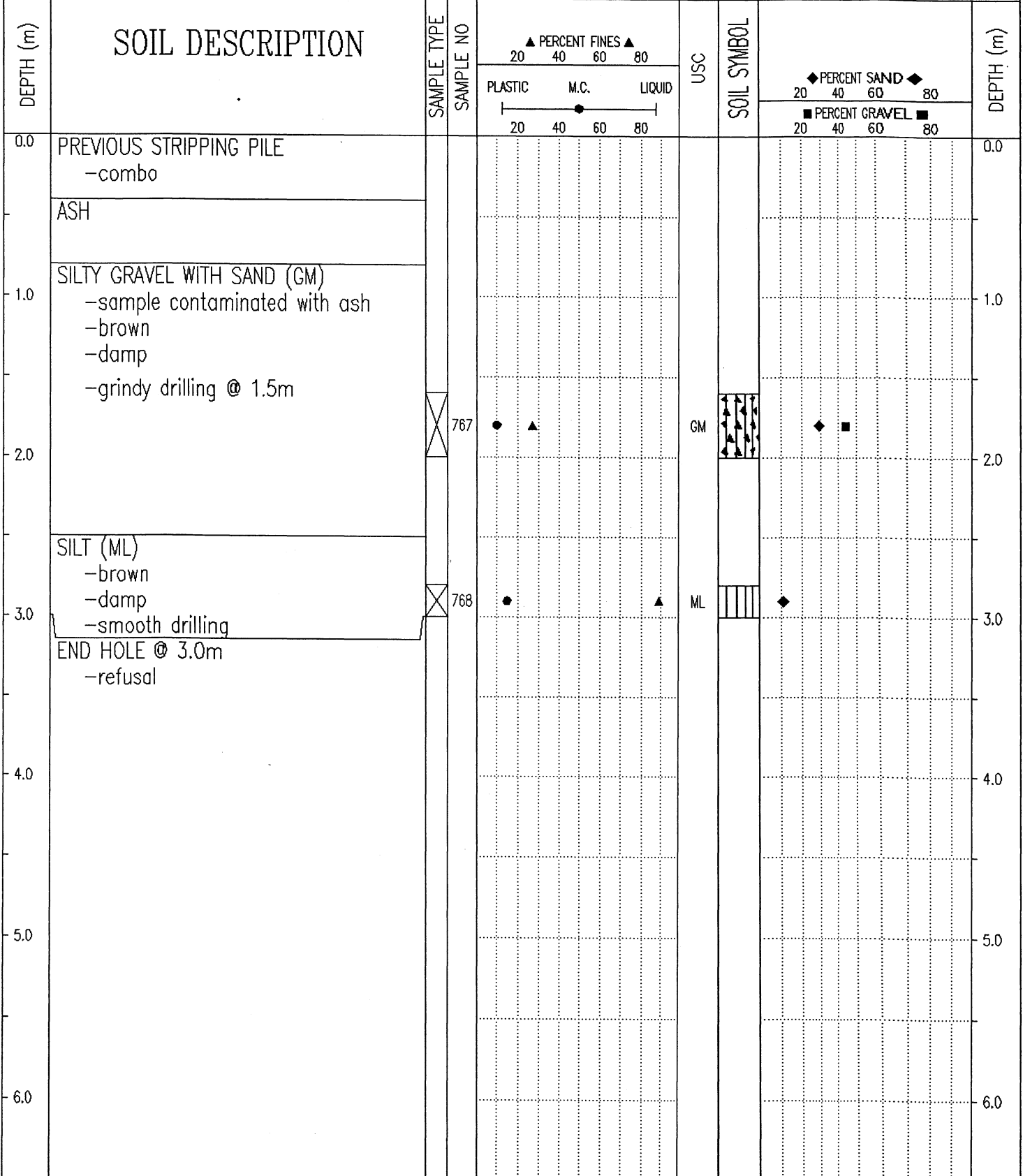


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REVIEWED BY:
Fig. No:
COMPLETION DEPTH: 3.0 m
COMPLETE: 99/08/20
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 528-797
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1800+525 3M RT	ELEVATION: 0.00 (m)

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



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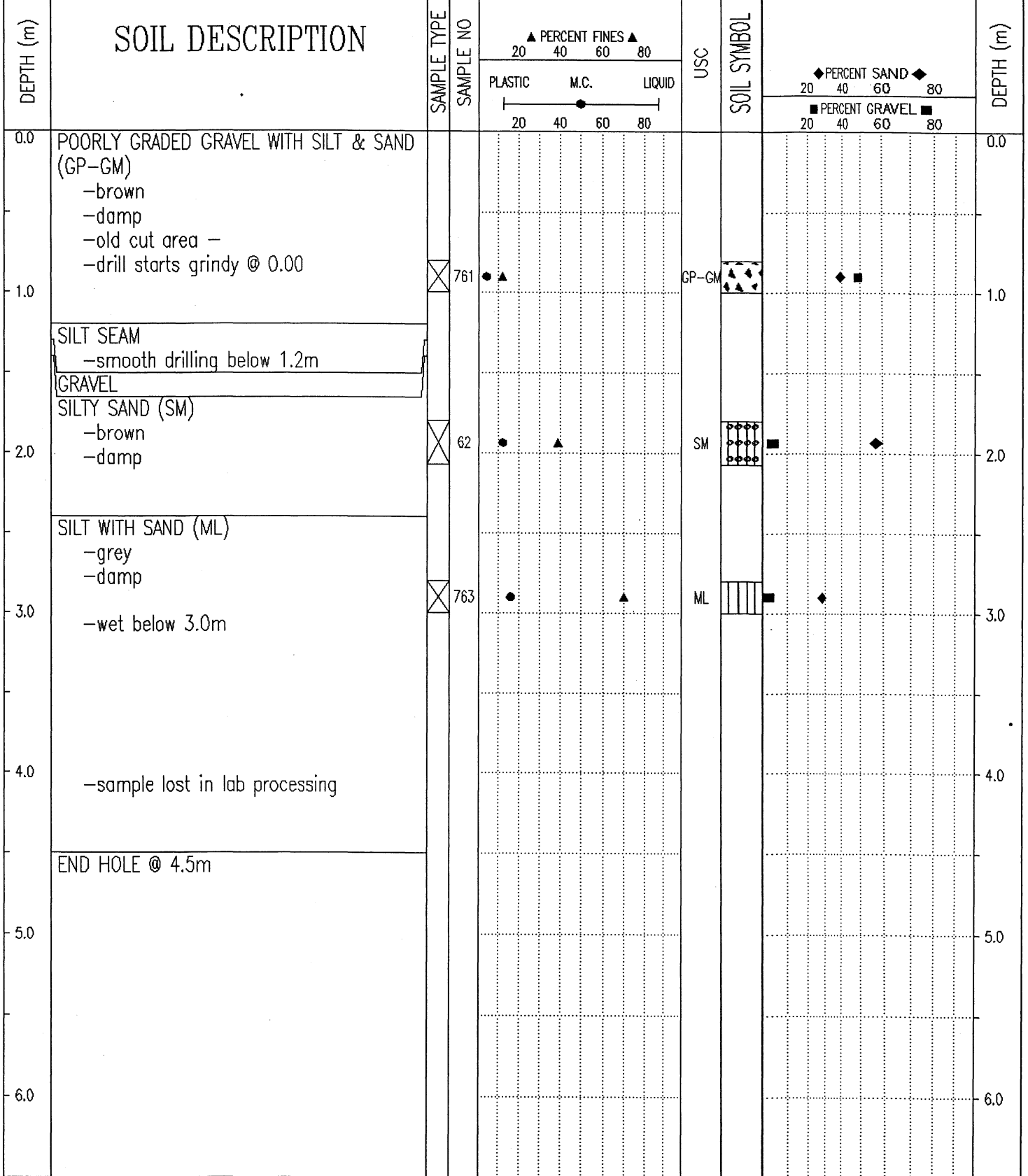
LOGGED BY: G.C.
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 3.0 m
COMPLETE: 99/08/20

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■		
0.0	ORGANIC									0.0	
	ASH										
	-wet										
	ORGANIC										
	-frozen										
1.0										1.0	
	SILTY GRAVEL WITH SAND (GM)										
	-frozen										
	-grindy drilling										
2.0		<input checked="" type="checkbox"/>	765	◆▲			GM	▲▲▲▲	◆	2.0	
	SILTY SAND (SM)										
	-brown										
	-frozen										
	-slow drilling										
3.0		<input checked="" type="checkbox"/>	766	●			SM	●●●●	◆	3.0	
	END HOLE @ 3.0m										
4.0										4.0	
5.0										5.0	
6.0										6.0	

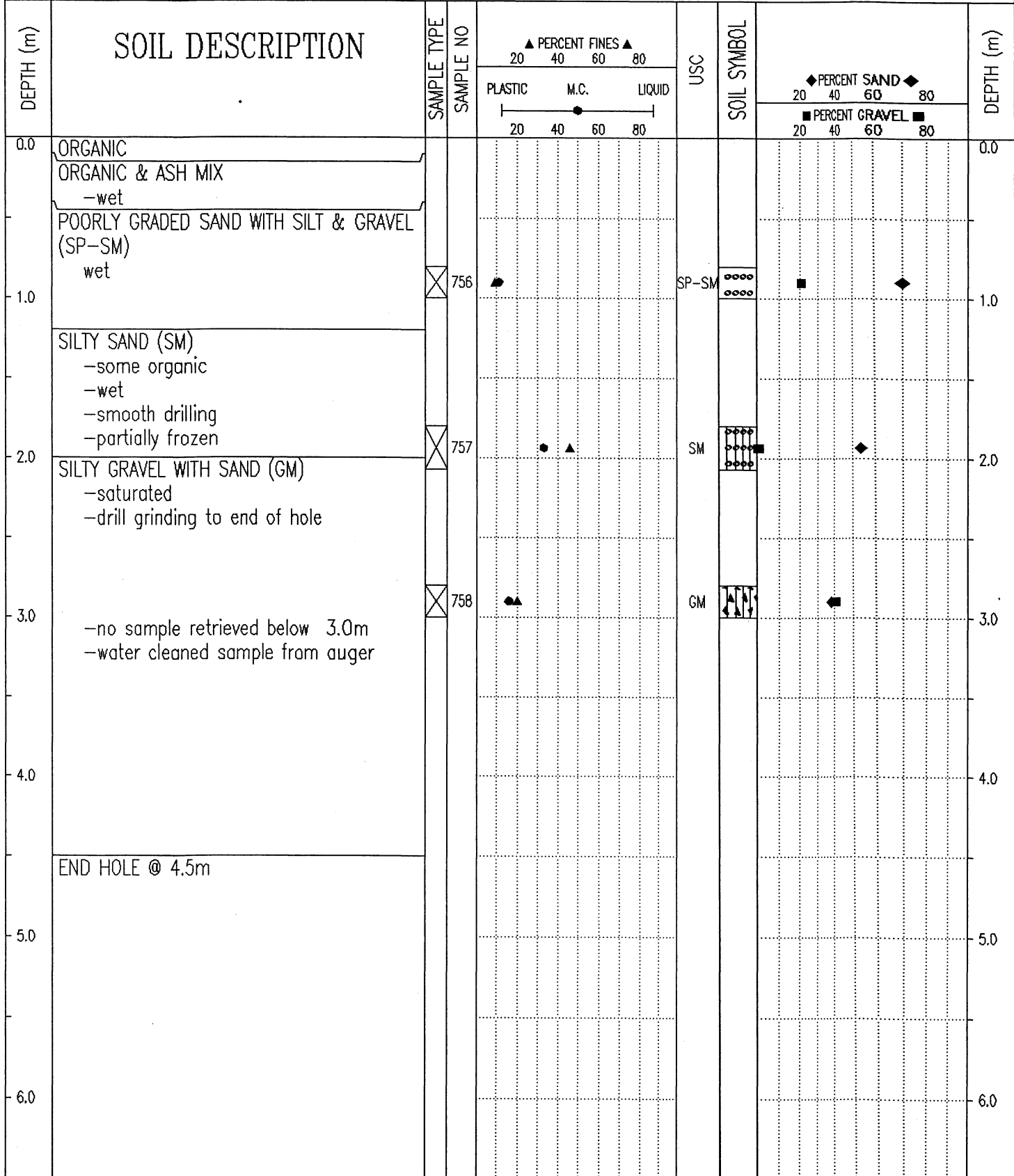
99/12/13 09:11AM

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



SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 528-794						
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329						
MOBILE B40-L		LOCATION: 1800+800 10M RT		ELEVATION: 0.00 (m)						
SAMPLE TYPE		<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE			
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲		USC	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.			LIQUID	20	
0.0	OLD ROAD MATERIAL -damp									0.0
1.0	ASH									1.0
2.0	SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND (SM)-(GM) -brown -damp -grindy drilling	<input checked="" type="checkbox"/>	759	●	▲		SM	◆	■	2.0
3.0	END HOLE @ 3.0m	<input checked="" type="checkbox"/>	780	●	▲		GM	◆	■	3.0
4.0										4.0
5.0										5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 3.0 m COMPLETE: 99/08/20				

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 528-793
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1800+905 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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Transportation Engineering

LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 99/08/20
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 528-792								
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329								
MOBILE B40-L		LOCATION:1800+905 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			20	40	60	
0.0	ORGANIC SANDY GRAVEL											0.0
	ORGANIC -wet											
1.0	VOLCANIC ASH -wet											1.0
	ORGANIC & ASH COMBO -saturated											
2.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -saturated - water -grindy drilling	<input checked="" type="checkbox"/>	755	▲			GP-GM	▲▲▲▲	◆	■		2.0
3.0	-smooth drilling 2.8 to 4.0 -no sample recovered below 2.8m due to water.											3.0
4.0	-rough drilling below 4.0m											4.0
5.0	END HOLE @ 4.5m											5.0
6.0												6.0

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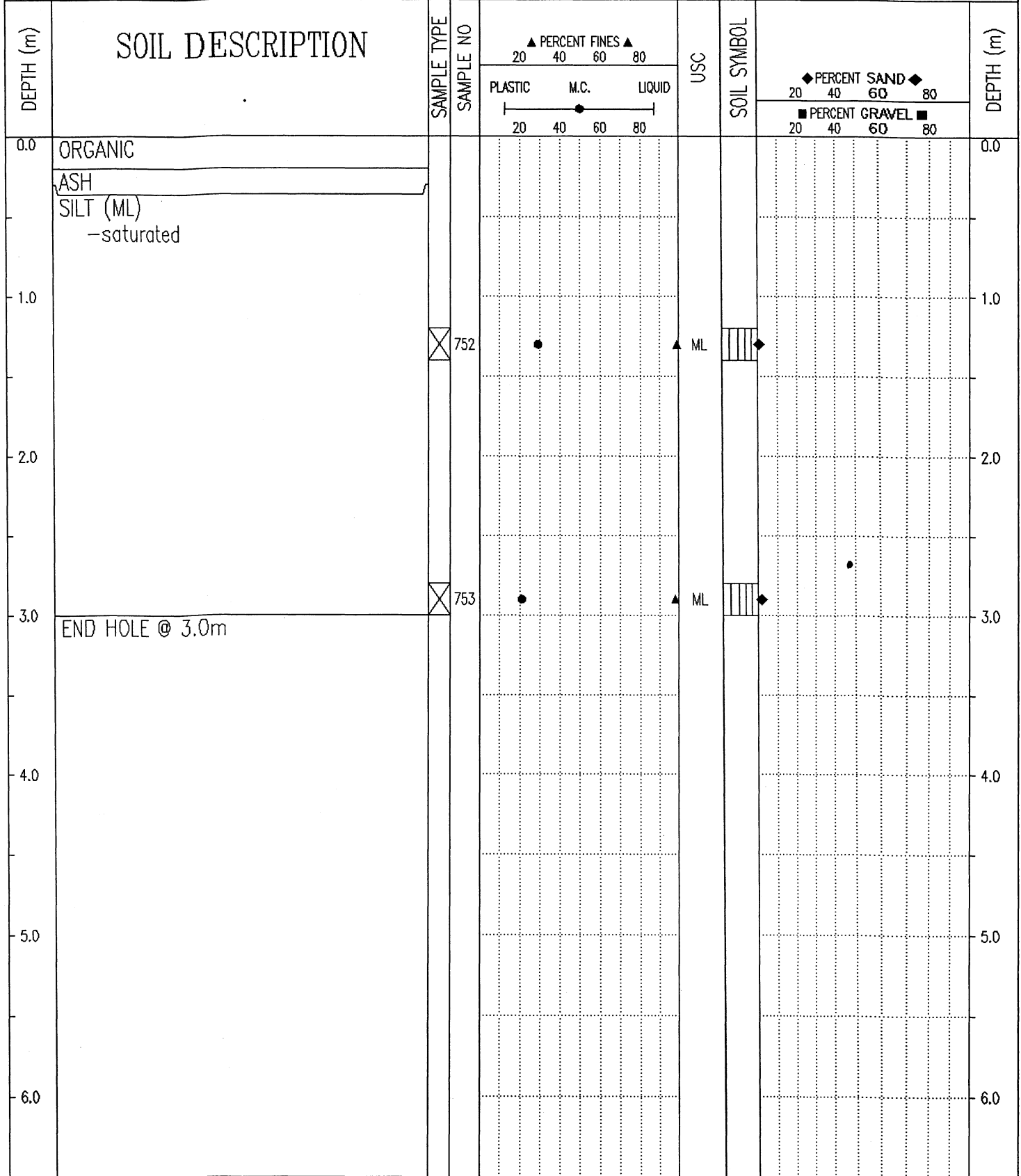
LOGGED BY: G.C.
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.5 m
COMPLETE: 99/08/20

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 527-791							
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329							
MOBILE B40-L		LOCATION:1800+975 10M LT		ELEVATION: 0.00 (m)							
SAMPLE TYPE <input type="checkbox"/> RETURN		<input checked="" type="checkbox"/> S.P.T.		<input checked="" type="checkbox"/> AUGER							
		<input type="checkbox"/> BULK		<input type="checkbox"/> TUBE							
				<input type="checkbox"/> CORE							
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■		
0.0	ORGANIC									0.0	
1.0										1.0	
2.0	SILTY SAND (SM) -gravelly -wet -grindy drilling	<input checked="" type="checkbox"/>	754				SM	◆	■	2.0	
3.0	ORGANIC -with silt & gravel -no sample taken									3.0	
3.0	END HOLE @ 3.0m									3.0	
4.0										4.0	
5.0										5.0	
6.0										6.0	
Government of Yukon Transportation Engineering				LOGGED BY: G.C. REVIEWED BY:		COMPLETION DEPTH: 3.0 m COMPLETE: 99/08/19		Fig. No:		Page 1 of 1	

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-790
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1801+075 CENTRELINE	ELEVATION: 0.00 (m)

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



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LOGGED BY: G.C.

REVIEWED BY:

Fig. No:

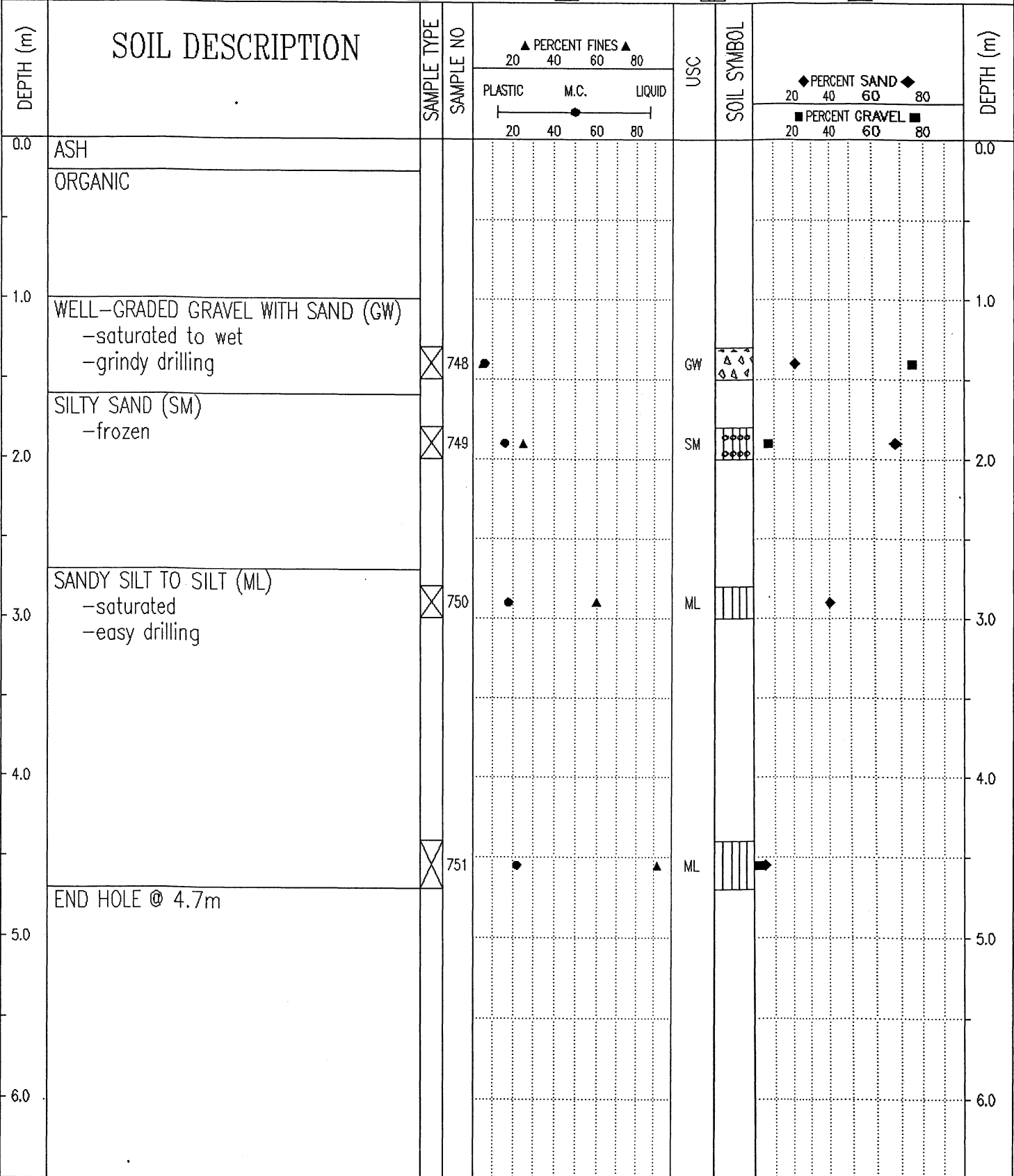
COMPLETION DEPTH: 3.0 m

COMPLETE: 99/08/19

Page 1 of 1

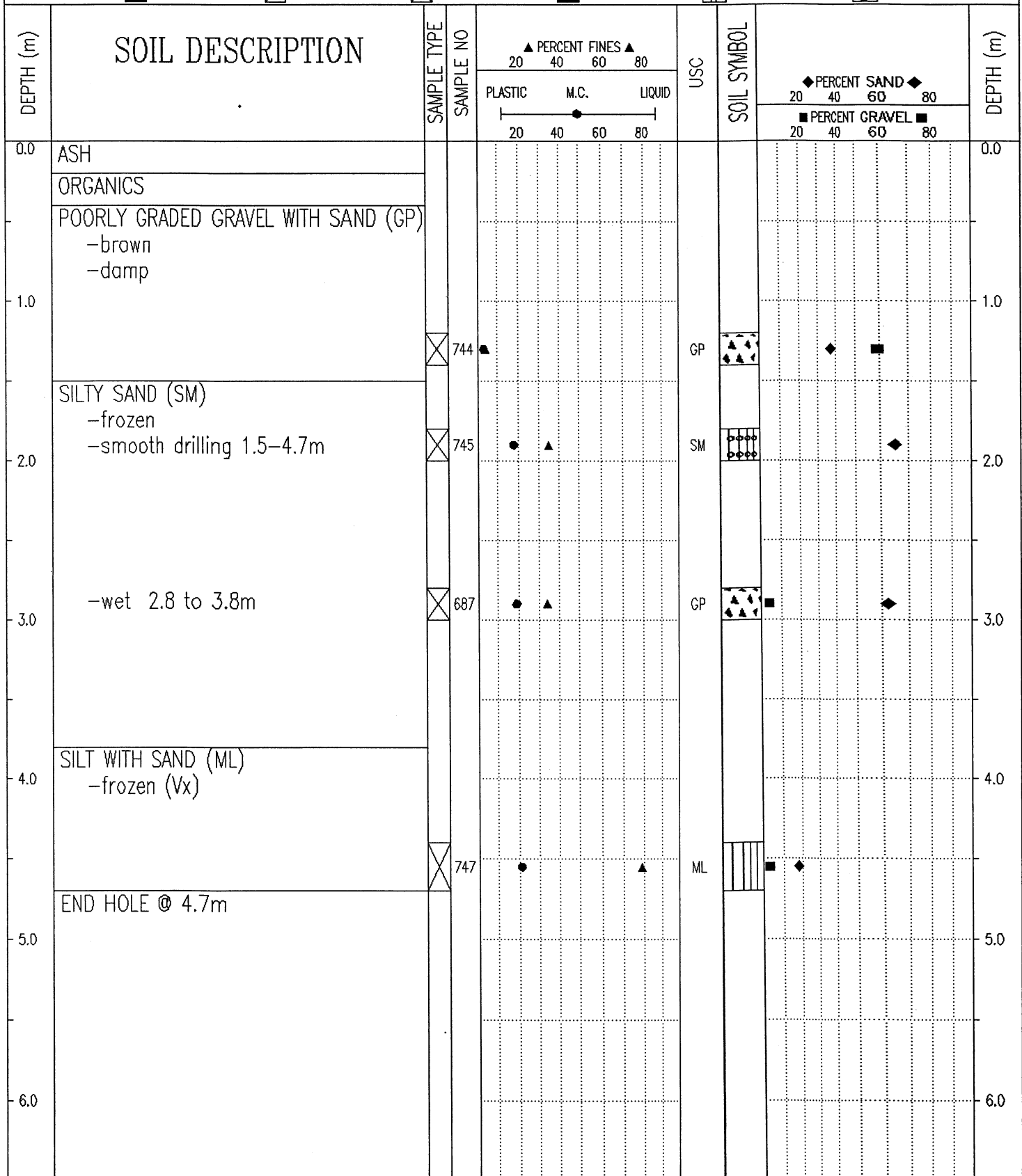
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-789
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION:1801+175 7M LT	ELEVATION: 0.00 (m)

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



Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.7 m
	REVIEWED BY:	COMPLETE: 99/08/19
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-788
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1801+275 5M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



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

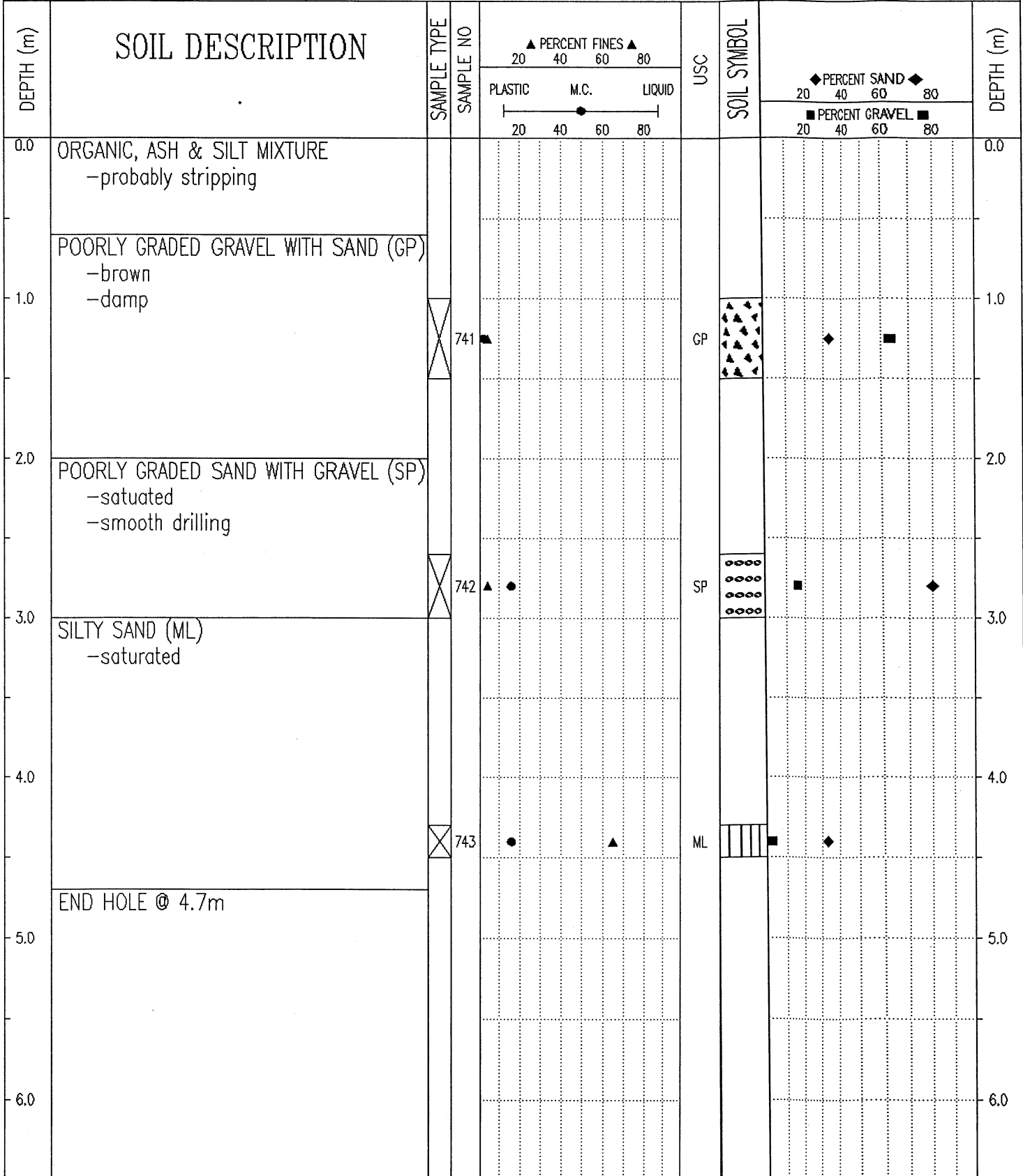
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COMPLETE: 99/08/19

SUBSURFACE EXPLORATION & TESTING REPORT SHAKWAK SEG 13 TEST HOLE NO: 527-787

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

MOBILE B40-L LOCATION: 1801+375 CENTRELINE ELEVATION: 0.00 (m)

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



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LOGGED BY: G.C.

REVIEWED BY:

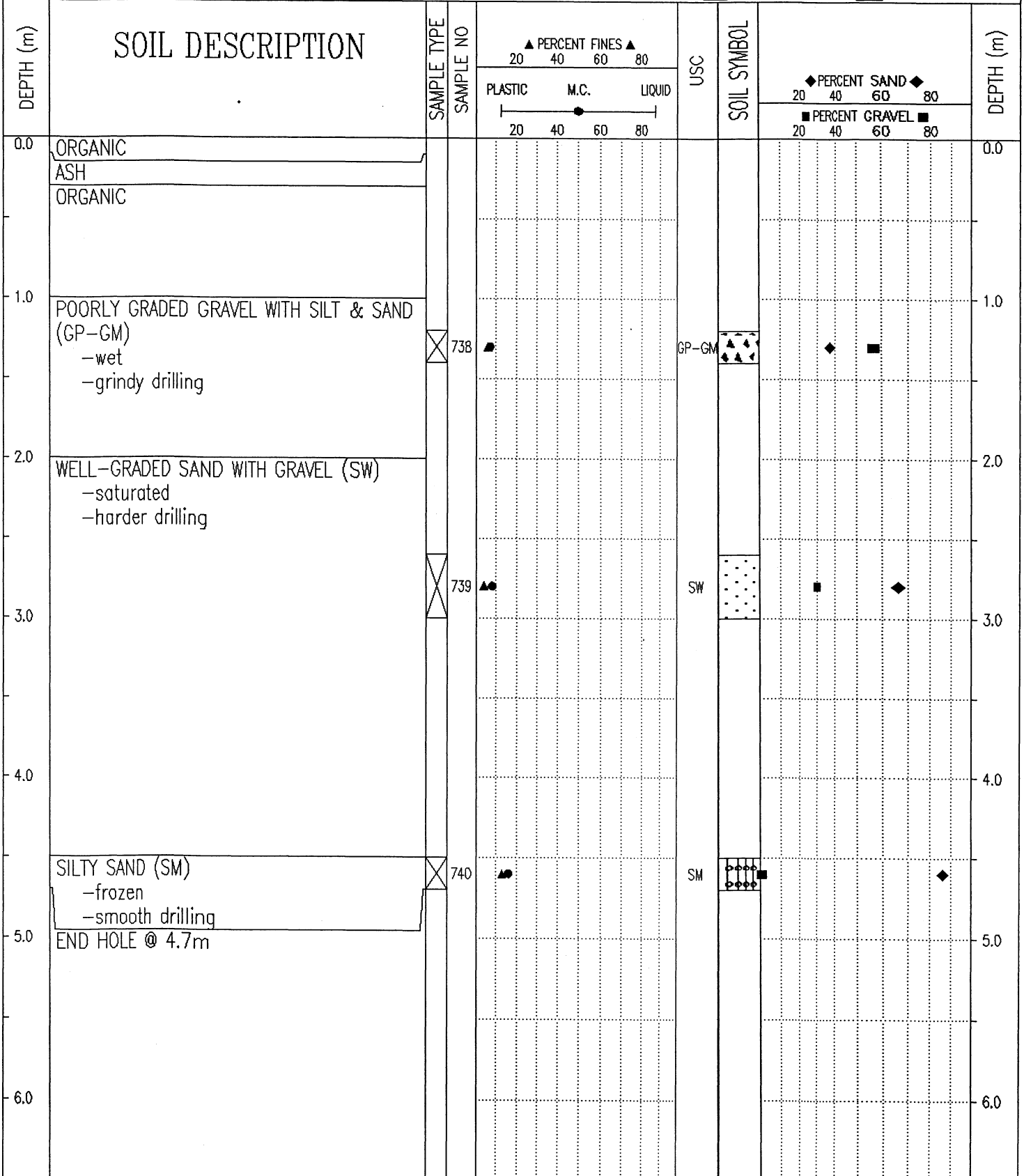
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COMPLETION DEPTH: 4.7 m

COMPLETE: 99/08/19

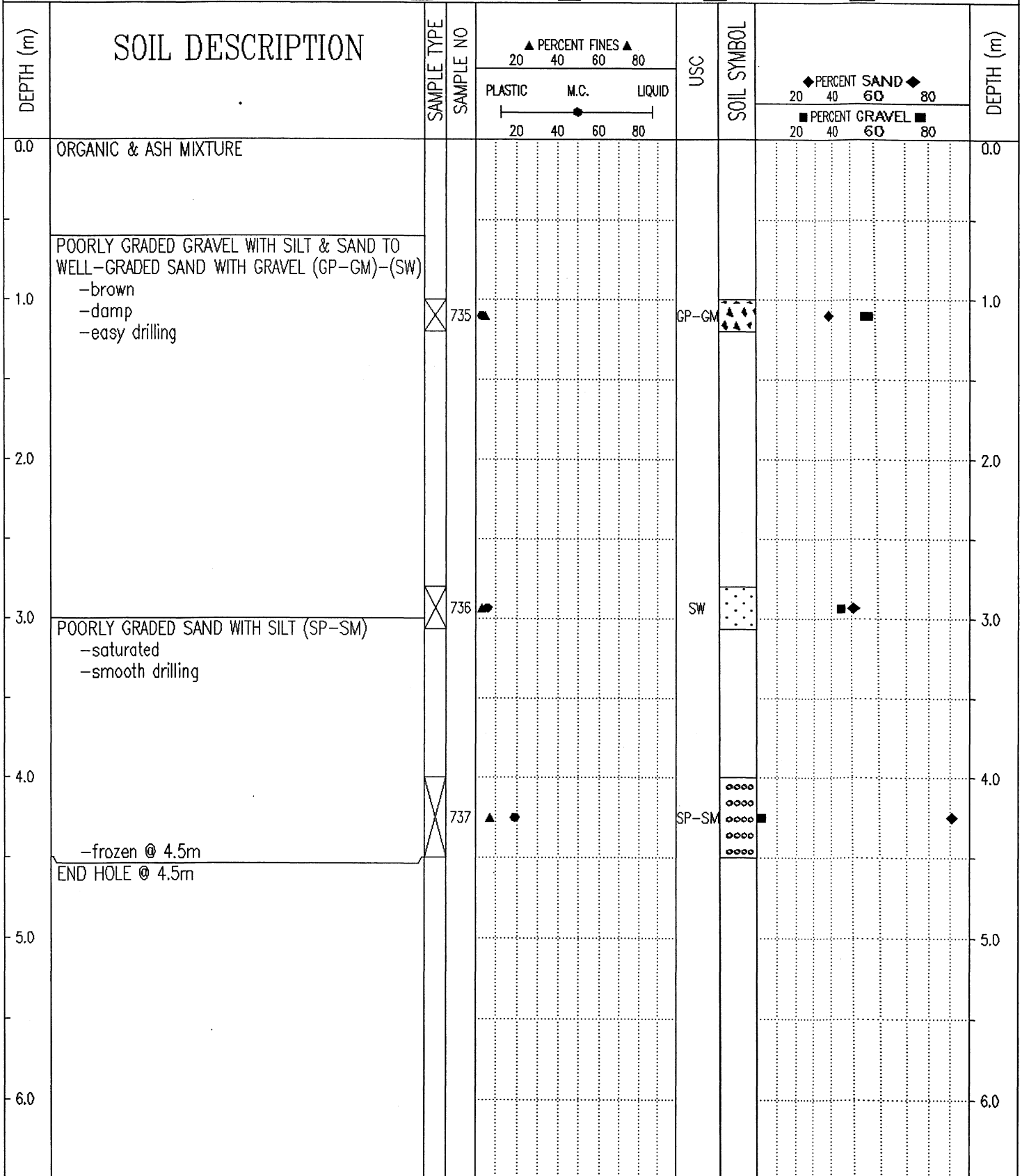
Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-786
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1801+475 12M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



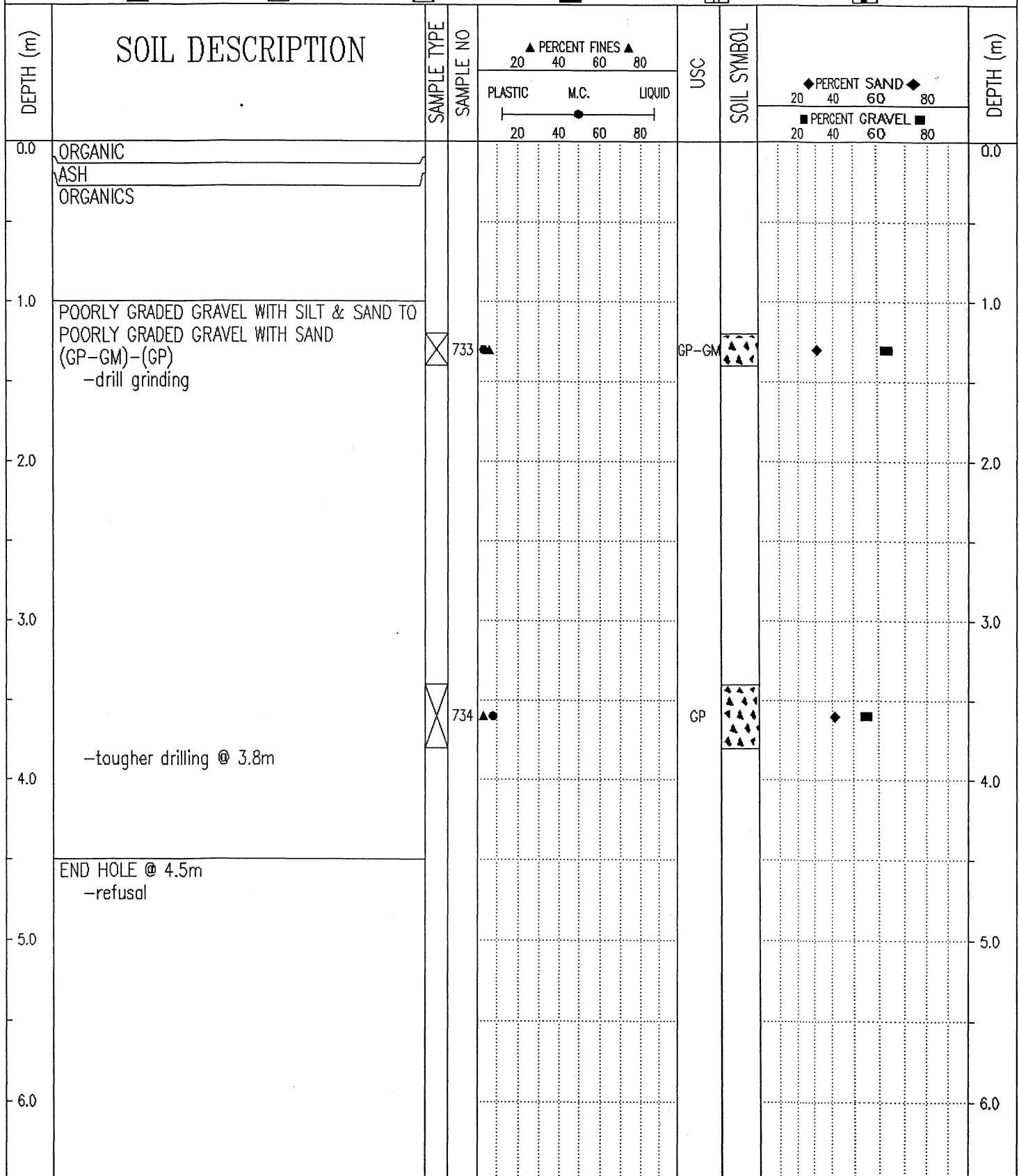
Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.7 m
	REVIEWED BY:	COMPLETE: 99/08/19
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-785
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION:1801+575 13M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	



Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 99/08/19
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-784
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1801+650 14M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	



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LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 99/08/19
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-783
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION:1801+750 20M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.
	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	
0.0	ORGANIC											0.0	
	ASH												
	ORGANIC -frozen												
1.0	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -frozen -grindy drilling	<input checked="" type="checkbox"/>	732	▲	●		SW-SM	◆	◆	■	■	1.0	
	END HOLE @ 1.5m -refusal -move 5m downchain -2nd refusal @ 1.5m												
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: G.C.

COMPLETION DEPTH: 1.5 m

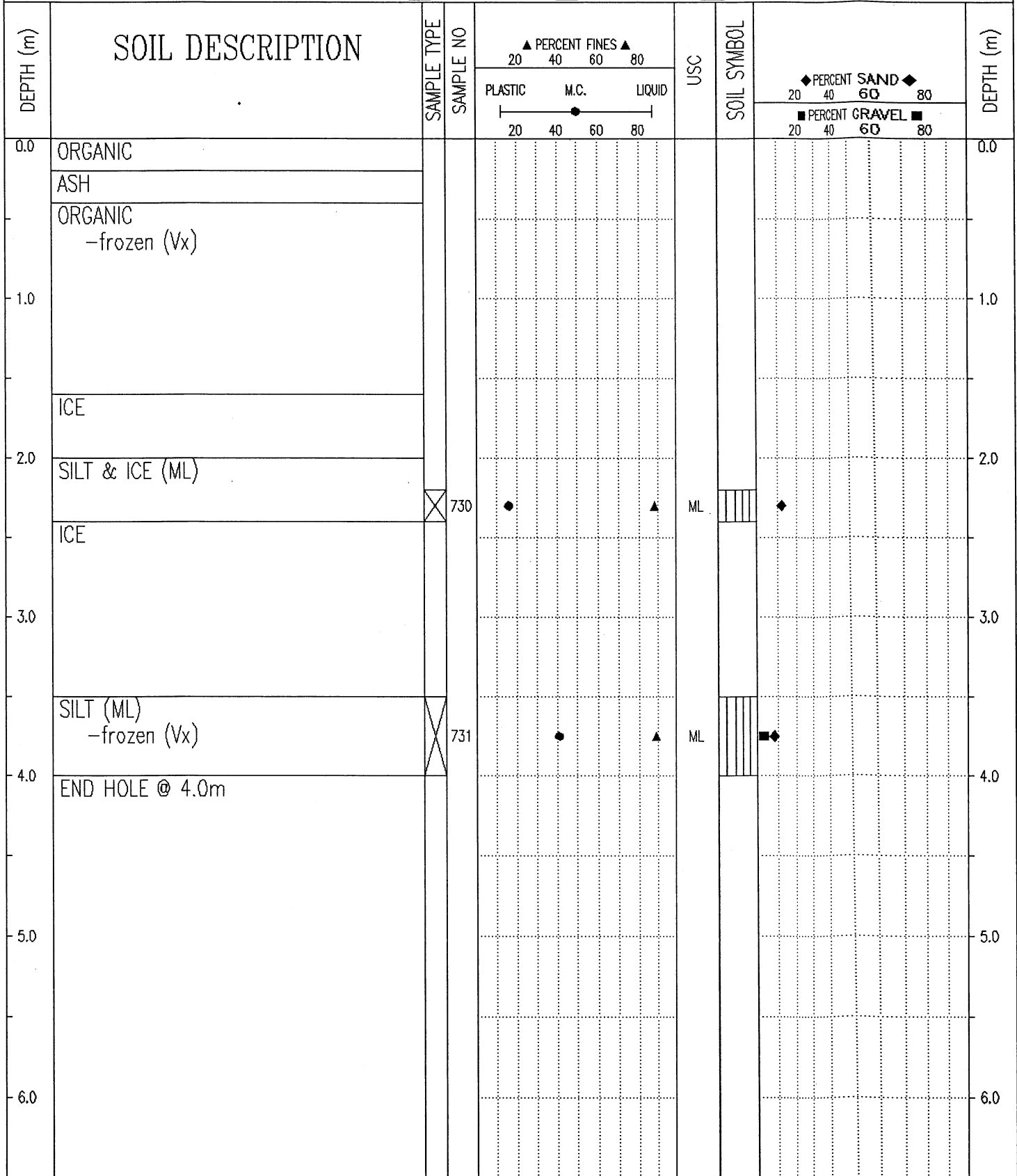
REVIEWED BY:

COMPLETE: 99/08/19

Fig. No:

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-782
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1801+815 20M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	



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LOGGED BY: G.C.

REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 4.0 m

COMPLETE: 99/08/19

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SUBSURFACE EXPLORATION & TESTING REPORT SHAKWAK SEG 13 TEST HOLE NO.: 527-781

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

MOBILE B40-L LOCATION:1801+910 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	60	20	60	
0.0	ORGANIC											0.0	
	ASH												
	ORGANIC -frozen												
1.0	SILTY GRAVEL (GM) -frozen -grindy drilling	<input checked="" type="checkbox"/>	727	▲	●		GM	▲▲▲	◆		■	1.0	
2.0	SILT WITH SAND (ML) -frozen -smoother drilling 1.8 to 2.4m	<input checked="" type="checkbox"/>	728		●	▲	ML		◆			2.0	
3.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -frozen	<input checked="" type="checkbox"/>	729	▲			GP-GM	▲▲▲	◆	■		3.0	
3.0	END HOLE @ 3.0m												
4.0												4.0	
5.0												5.0	
6.0												6.0	

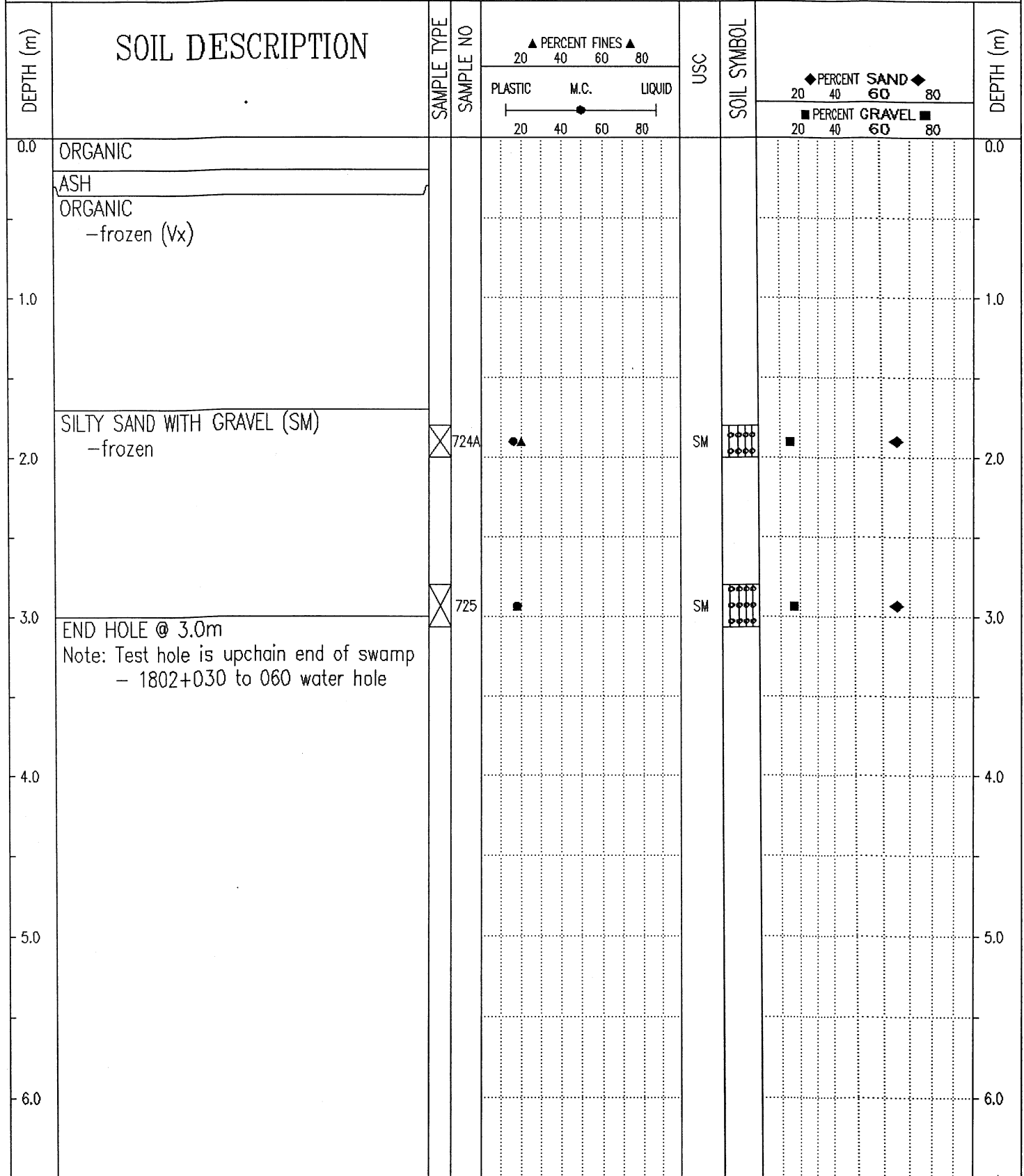
Government of Yukon
Transportation Engineering

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

COMPLETION DEPTH: 3.0 m
COMPLETE: 99/08/19
Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 527-780								
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329								
MOBILE B40-L		LOCATION: 1801+975 40M LT		ELEVATION: 0.00 (m)								
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE												
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲		USC	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)		
				PLASTIC	M.C.			LIQUID	PERCENT GRAVEL ■			
0.0	ORGANIC			20	40	60	80	20	40	60	80	0.0
	ASH											
	ORGANIC -frozen (Vx)											
1.0	ORGANIC -frozen											1.0
2.0	SILTY GRAVEL WITH SAND (GM) -frozen -grindy drilling	<input checked="" type="checkbox"/>	726									2.0
3.0	END HOLE @ 2.6m -refusal											3.0
4.0												4.0
5.0												5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C.		COMPLETION DEPTH: 2.6 m						
				REVIEWED BY:		COMPLETE: 99/08/19						
				Fig. No:		Page 1 of 1						

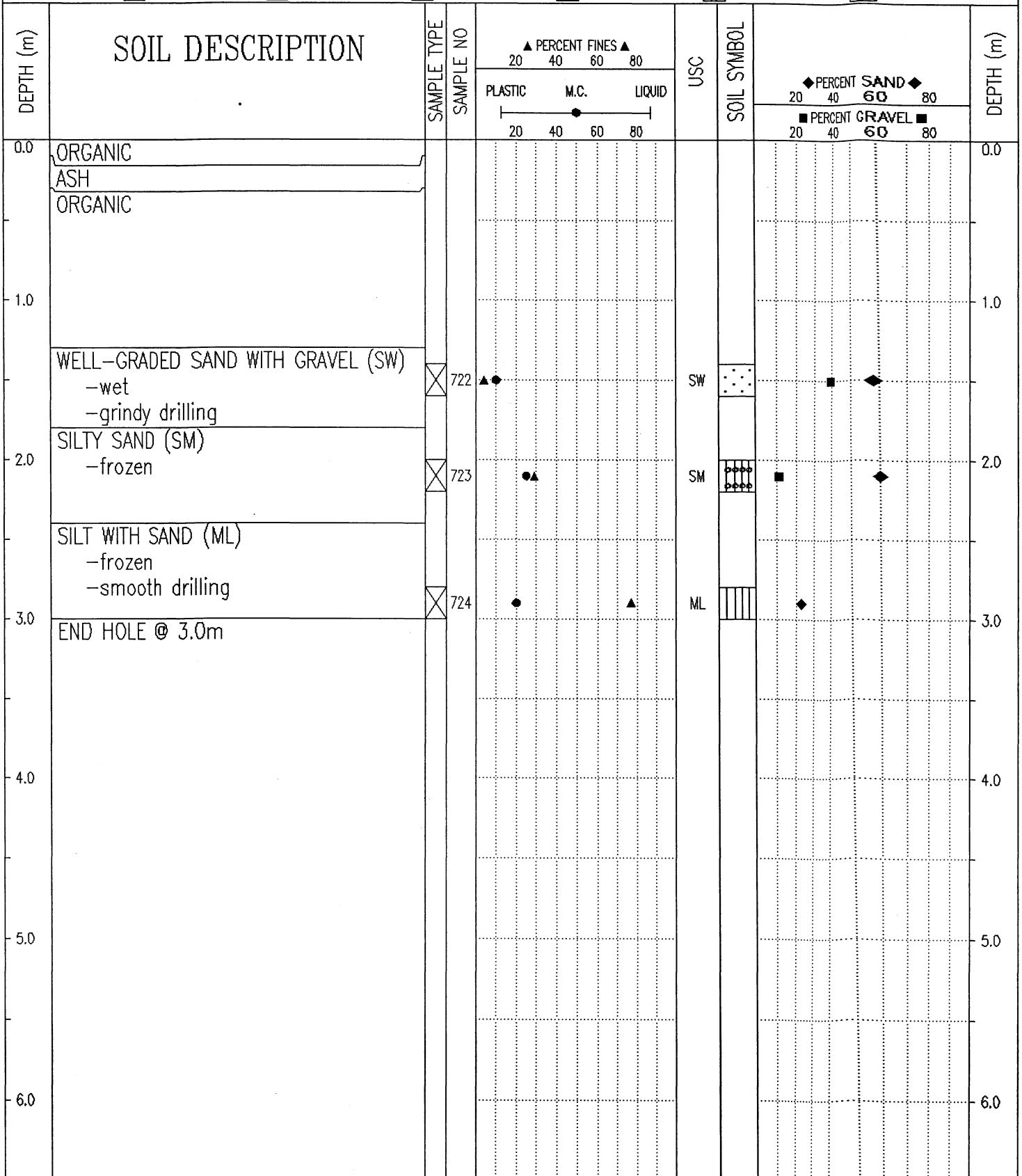
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-779
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1802+075 30M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



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LOGGED BY: G.C.	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 99/08/19
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-778
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION:1802+180 30M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 3.0 m
	REVIEWED BY:	COMPLETE: 99/08/19
	Fig. No:	

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-777
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION:1802+300 30M LT	ELEVATION: 0.00 (m)

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

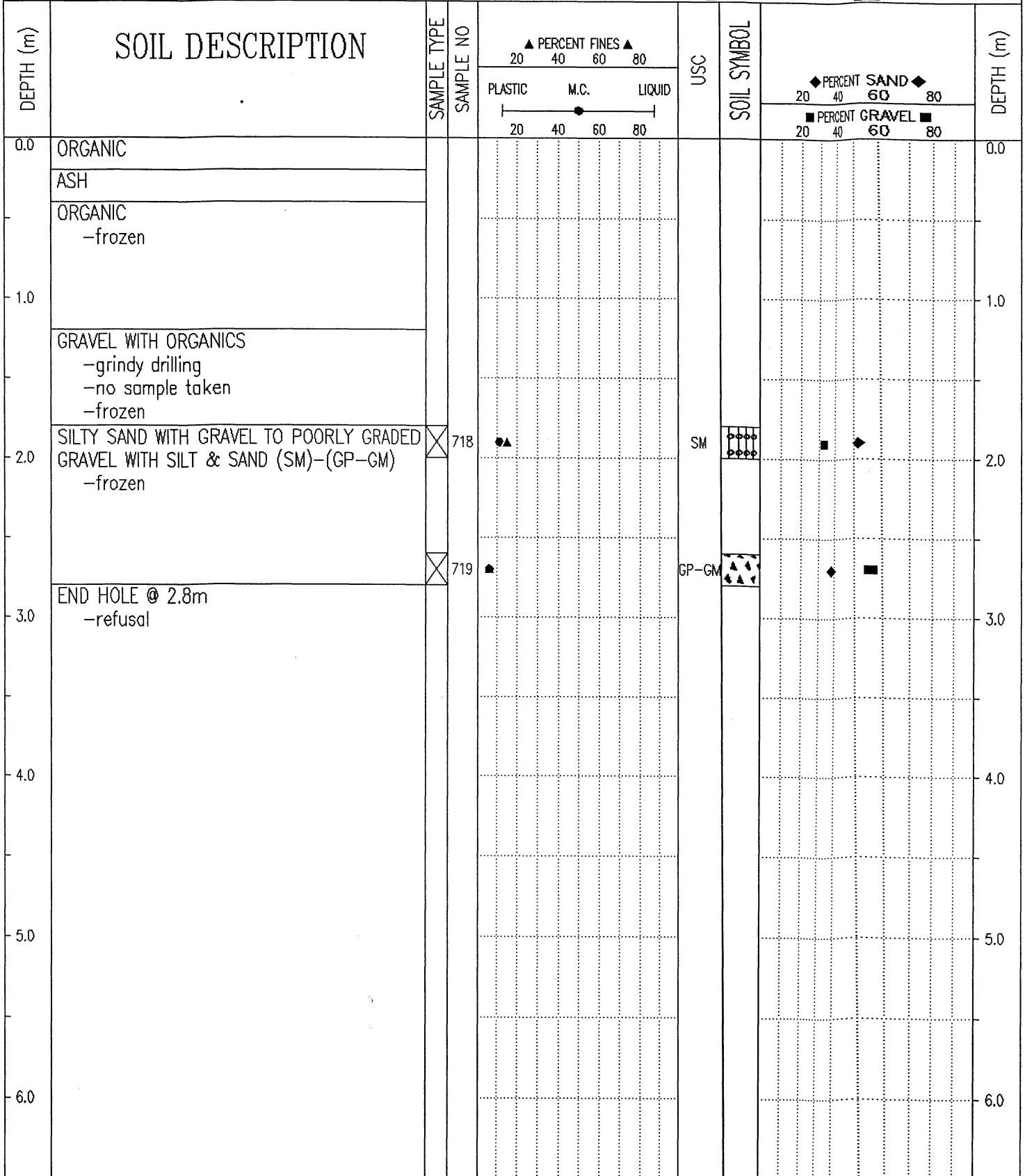
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	
0.0	ORGANIC										0.0
	ASH										
	-frozen										
	ORGANIC										
	-frozen (Vx)										
1.0	SILTY SAND WITH GRAVEL (SM)										1.0
	-frozen										
	-rough grindy drilling										
			720				SM				
2.0											2.0
3.0	SILTY SAND (SM)										3.0
	-frozen (Vc)										
	-easier drilling - slow & smooth										
	END HOLE @ 3.0m										
			721				SM				
4.0											4.0
5.0											5.0
6.0											6.0

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

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

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-776
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION:1802+400 30M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



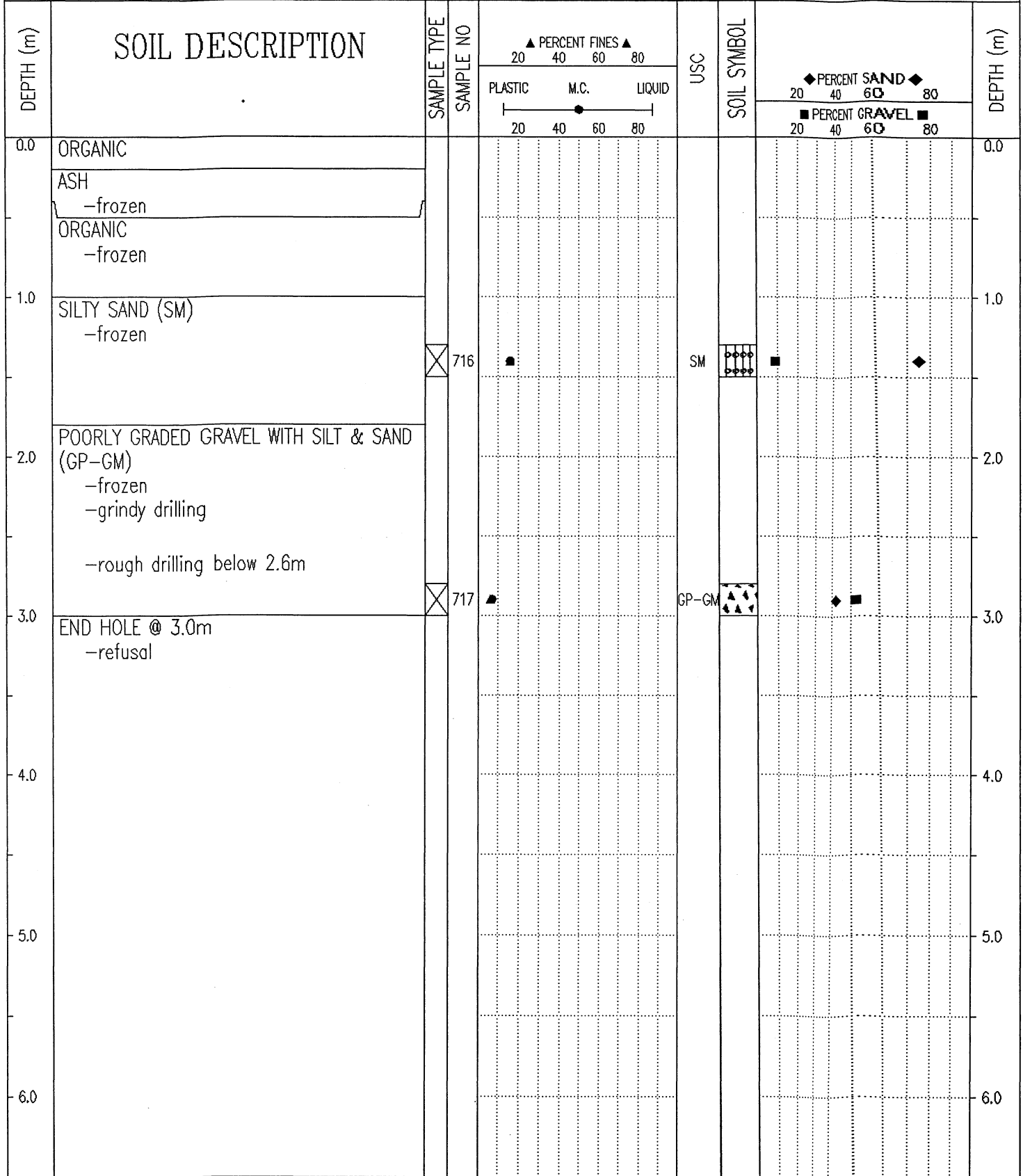
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	REVIEWED BY:	COMPLETE: 99/08/18
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT SHAKWAK SEG 13 TEST HOLE NO: 527-775

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

MOBILE B40-L LOCATION: 1802+500 30M LT ELEVATION: 0.00 (m)

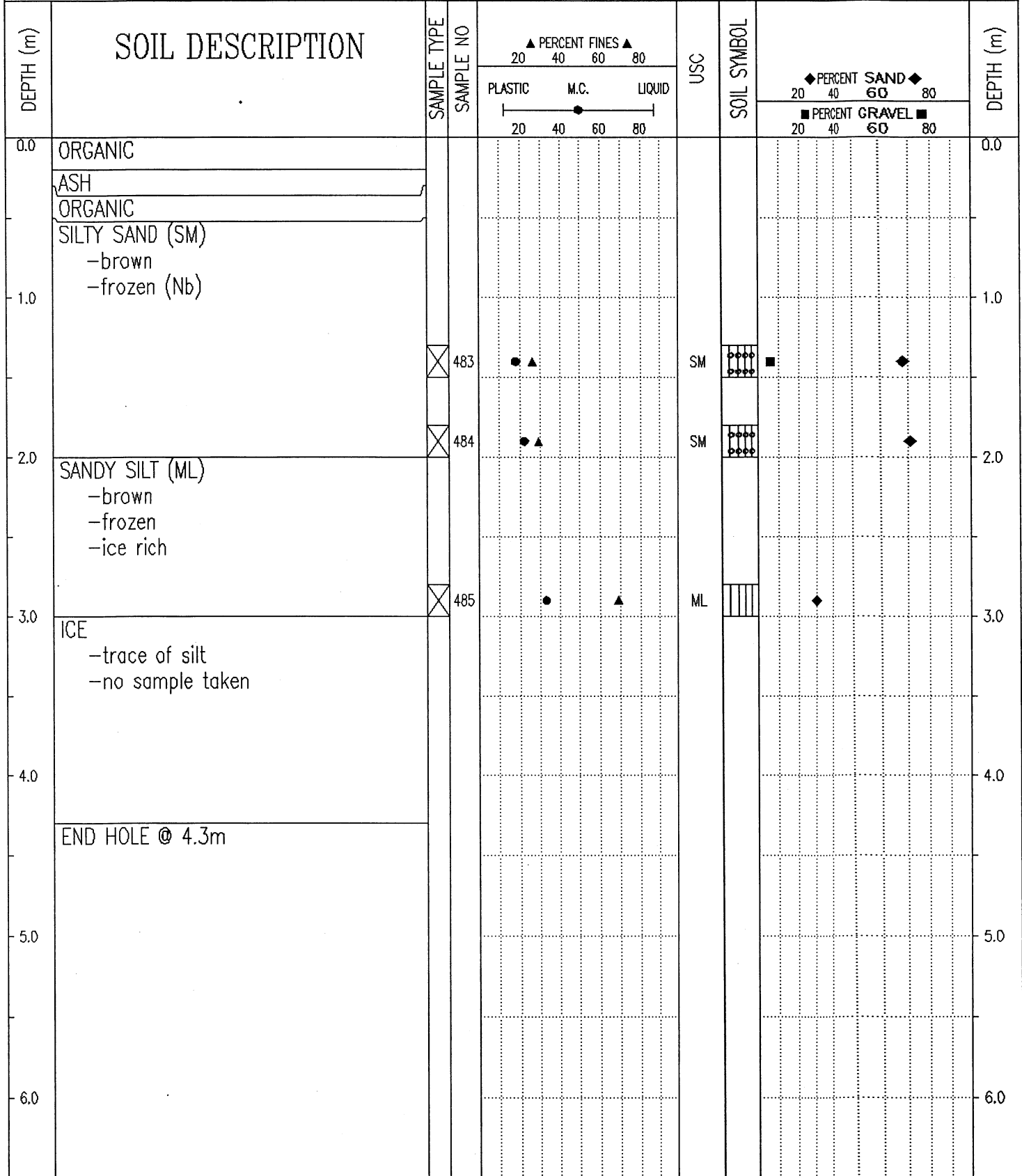
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 3.0 m
	REVIEWED BY:	COMPLETE: 99/08/18
	Fig. No:	Page 1 of 1

SUB-SURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RE-CONSTRUCTION	TEST HOLE NO: 519-587
SHAKWAK SEG 13	KM 1796-1822 A/H	Project No: 092-202101-0329
MOBILE B-40L	LOCATION: 1802+519 3M RHS	ELEVATION: 0.00 (m)

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



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Transportation Engineering

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

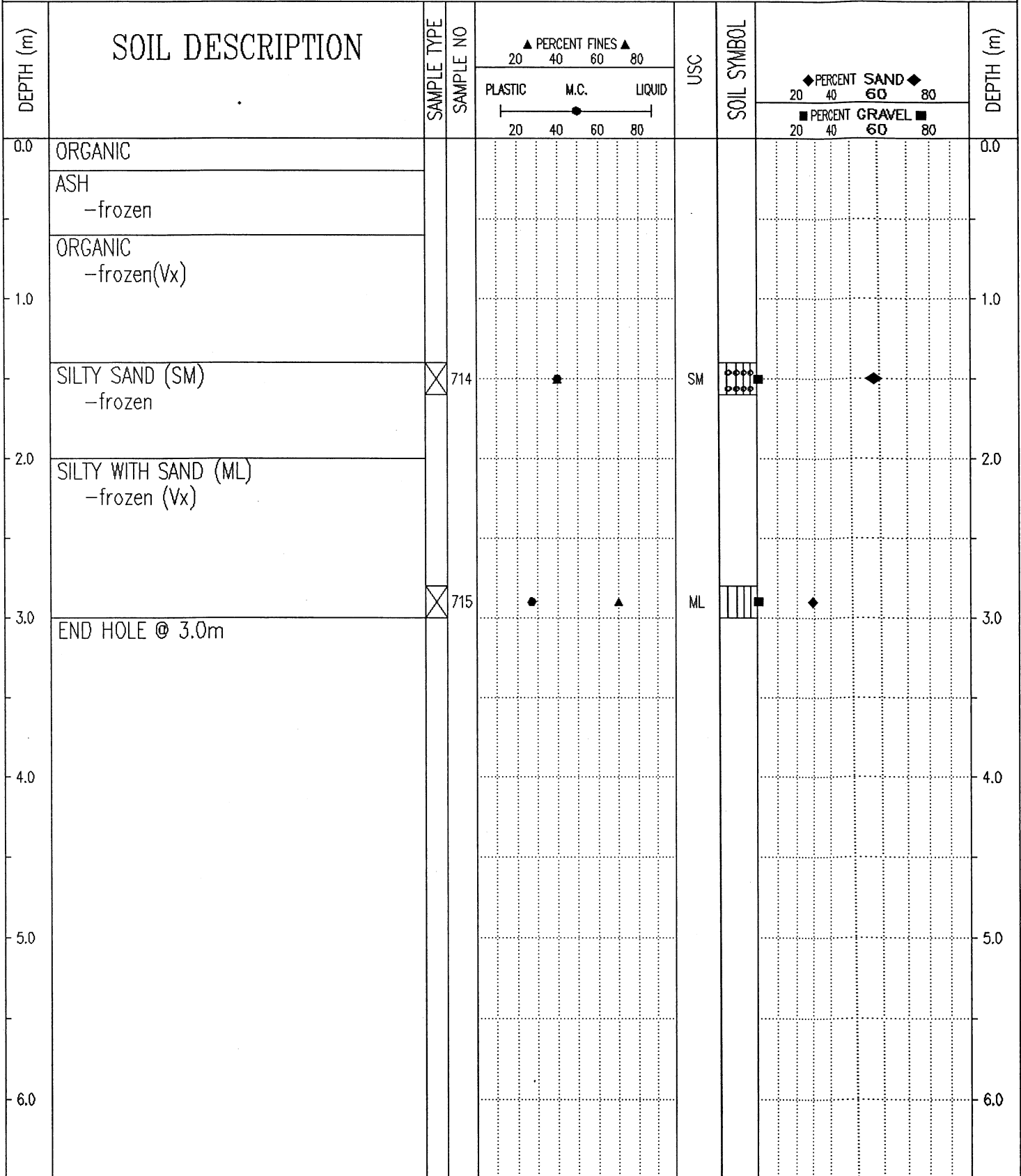
COMPLETION DEPTH: 4.3 m
COMPLETE: 99/07/06

SUBSURFACE EXPLORATION & TESTING REPORT SHAKWAK SEG 13 TEST HOLE NO: 527-774

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

MOBILE B40-L LOCATION: 1802+600 20M RT ELEVATION: 0.00 (m)

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



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LOGGED BY: G.C.

REVIEWED BY:

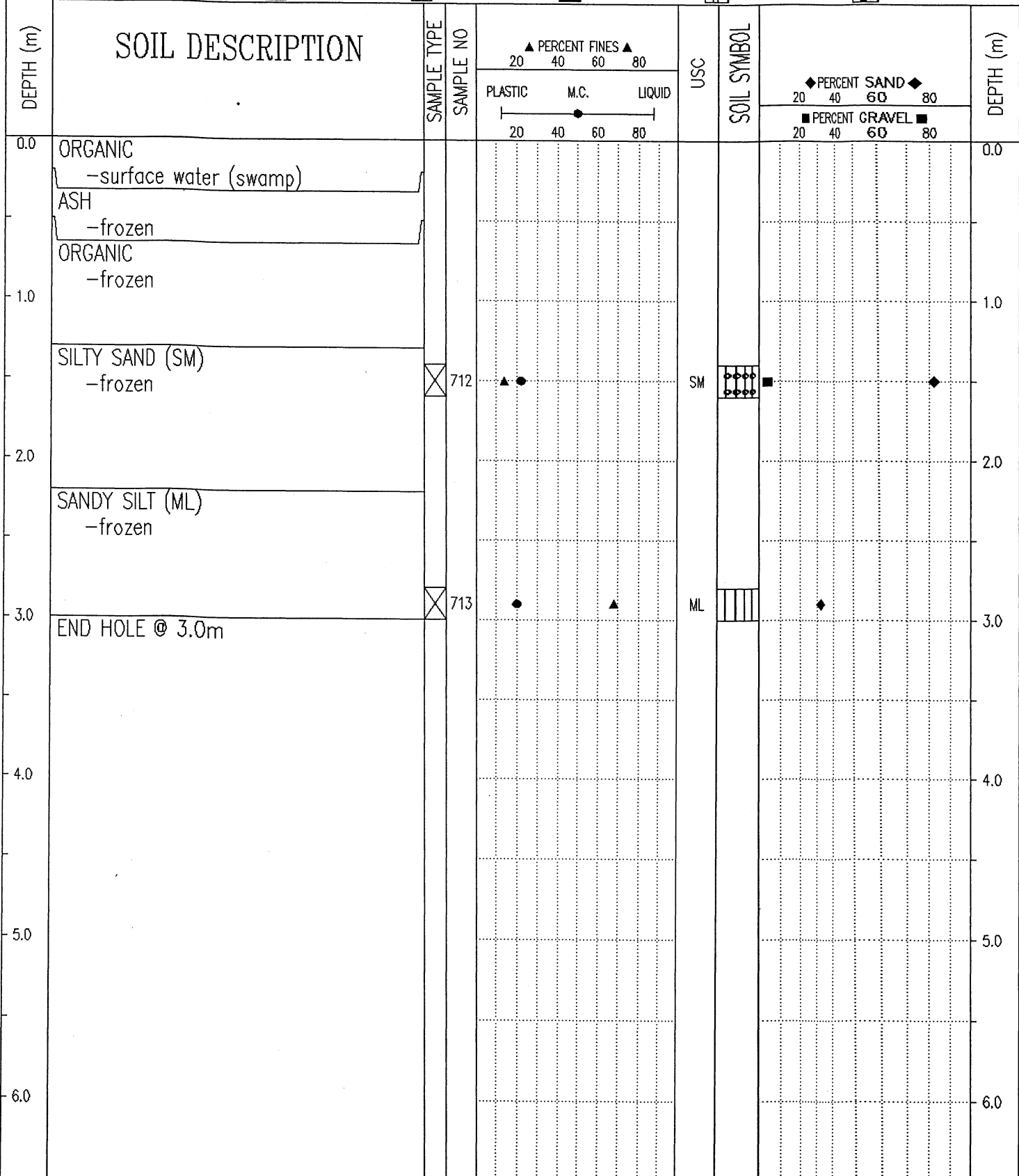
Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 99/08/18

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-773
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1802+600 20M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 3.0 m
	REVIEWED BY:	COMPLETE: 99/08/18
	Fig. No:	Page 1 of 1

SUB-SURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RE-CONSTRUCTION	TEST HOLE NO: 519-586
SHAKWAK SEG 13	KM 1796-1822 A/H	Project No: 092-202101-0329
MOBILE B-40L	LOCATION: 1802+618 2M RHS	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL		DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL	
0.0	ORGANIC									0.0	
	ASH										
	ICE & ORGANIC										
1.0	SILTY SAND (SM) -light brown -frozen									1.0	
	-grindy drilling @ 1.4m		481				SM				
2.0	-more rock @ 1.9m									2.0	
3.0	ICE & SILT -change bits to cut better									3.0	
	ICE -trace of silt		482				ML				
4.0										4.0	
5.0	END HOLE @ 4.4m									5.0	
6.0										6.0	

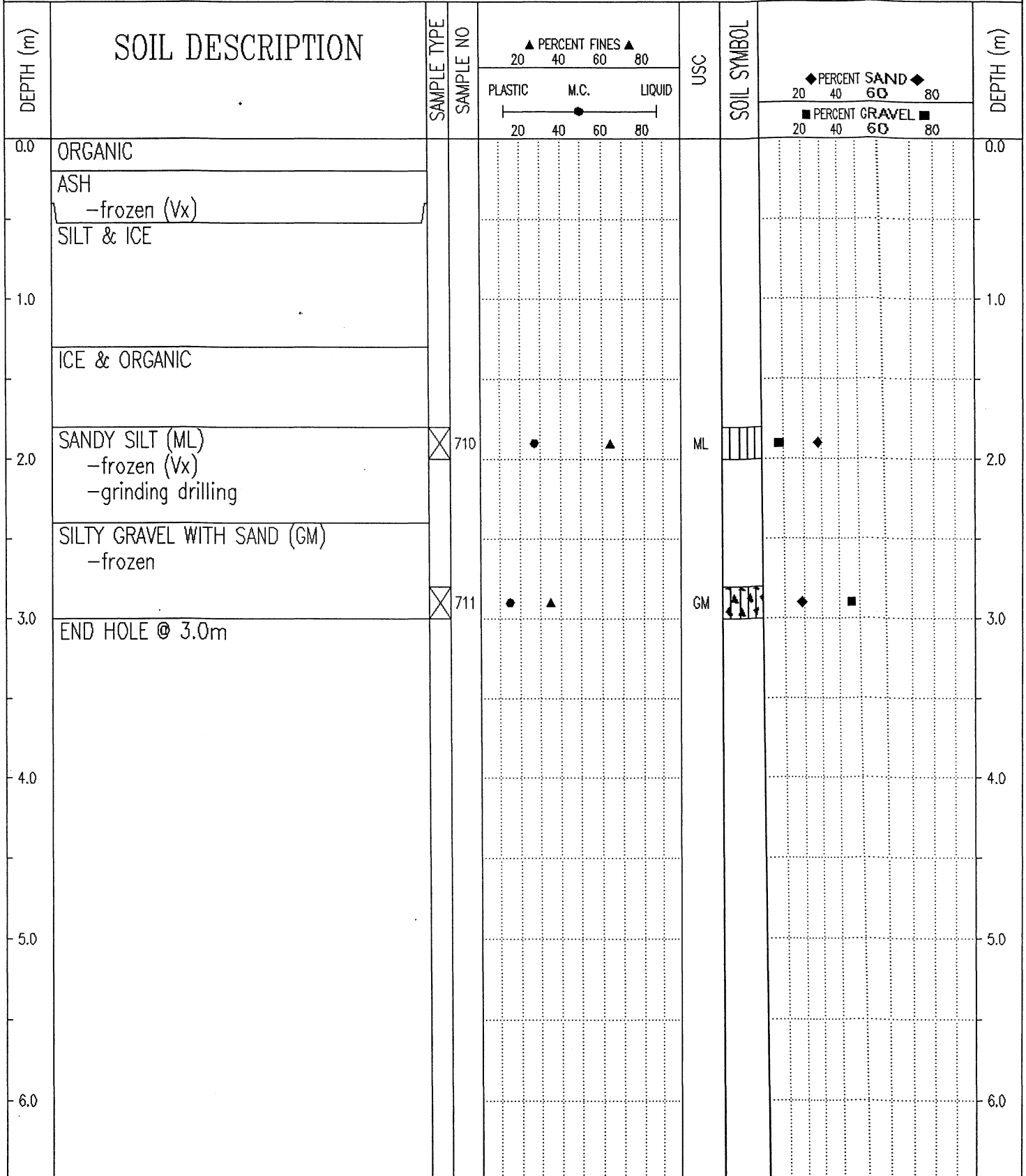
Government of Yukon Transportation Engineering	LOGGED BY: S.H.	COMPLETION DEPTH: 4.4 m
	REVIEWED BY:	COMPLETE: 99/07/06
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT SHAKWAK SEG 13 TEST HOLE NO: 527-772

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

MOBILE B40-L LOCATION:1802+675 30M LT ELEVATION: 0.00 (m)

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



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LOGGED BY: G.C. COMPLETION DEPTH: 3.0 m
 REVIEWED BY: COMPLETE: 99/08/18
 Fig. No: Page 1 of 1

SUB-SURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RE-CONSTRUCTION	TEST HOLE NO: 519-585
SHAKWAK SEG 13	KM 1796-1822 A/H	Project No: 092-202101-0329
MOBILE B-40L	LOCATION: 1802+725 2M RHS	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.
	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40		
0.0	ORGANIC ASH ICE -trace of silt -frozen											0.0
2.0	SILT (ML) -grey -frozen (Vx) -grindy drilling @ 2.5m	<input checked="" type="checkbox"/>	480				ML					2.0
3.0	END HOLE @ 2.8m -refusal											3.0
4.0												4.0
5.0												5.0
6.0												6.0

Government of Yukon Transportation Engineering	LOGGED BY: S.H.	COMPLETION DEPTH: 2.5 m
	REVIEWED BY:	COMPLETE: 99/07/06
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-771
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION:1802+775 30M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	
0.0	ORGANIC											0.0	
	ASH												
	-frozen												
	ORGANIC												
	-frozen												
1.0	ICE											1.0	
2.0	SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND (SM)-(GM)	<input checked="" type="checkbox"/>	708	●	▲		SM	◻◻◻◻◻◻◻◻	◆	■		2.0	
	-frozen												
	-grindy drilling												
3.0	END HOLE @ 3.0m	<input checked="" type="checkbox"/>	709	●	▲		GM	◻◻◻◻◻◻◻◻	◆	■		3.0	
4.0												4.0	
5.0												5.0	
6.0												6.0	

SUB-SURFACE EXPLORATION & TESTING REPORT ALASKA HWY RE-CONSTRUCTION TEST HOLE NO: 519-584

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

MOBILE B-40L LOCATION: 1802+825 2M RHS ELEVATION: 0.00 (m)

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

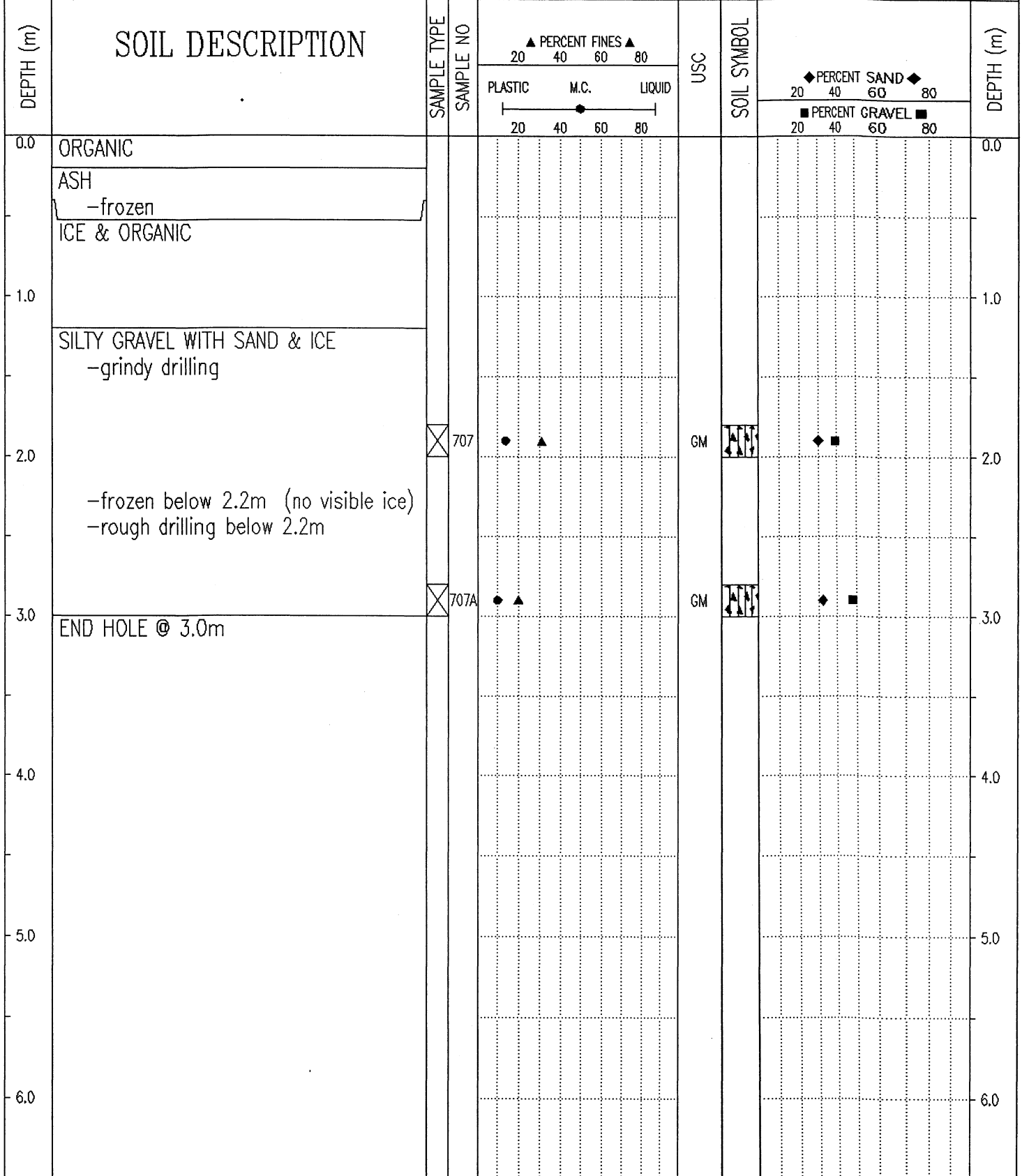
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND		PERCENT GRAVEL		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	
0.0	ORGANIC											0.0	
	ASH												
	ICE												
2.0	SILT WITH SAND (ML) -frozen (Vx) -grindy drilling @ 1.85 to 1.9m	<input checked="" type="checkbox"/>	478				ML						
3.0	SILTY SAND WITH GRAVEL (SM) -frozen -real grindy drilling - large rocks	<input checked="" type="checkbox"/>	479				SM						
4.0	END HOLE @ 4.0m -refusal - rock dust on the bit												

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LOGGED BY: S.H. COMPLETION DEPTH: 4.0 m
 REVIEWED BY: COMPLETE: 99/07/06
 Fig. No: Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-770
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1802+875 30M LT	ELEVATION: 0.00 (m)

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



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REVIEWED BY:
Fig. No:

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

SUB-SURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RE-CONSTRUCTION	TEST HOLE NO: 519-583
SHAKWAK SEG 13	KM 1796-1822 A/H	Project No: 092-202101-0329
MOBILE B-40L	LOCATION: 1802+925 2M RHS	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									0.0	
	ASH -frozen @ .3m										
	ICE & SOIL										
1.0	ORGANIC -free surface water in hole @ .8m									1.0	
2.0	SILT WITH GRAVEL TO POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -brown -frozen (Vx) -grindy drilling	<input checked="" type="checkbox"/>	476	●	▲		SM	○	◆	2.0	
3.0		<input checked="" type="checkbox"/>	477	▲			GP-GM	▲	◆	3.0	
4.0	END HOLE @ 4.0m -refusal -no recoverable sample (water & churning)									4.0	
5.0										5.0	
6.0										6.0	

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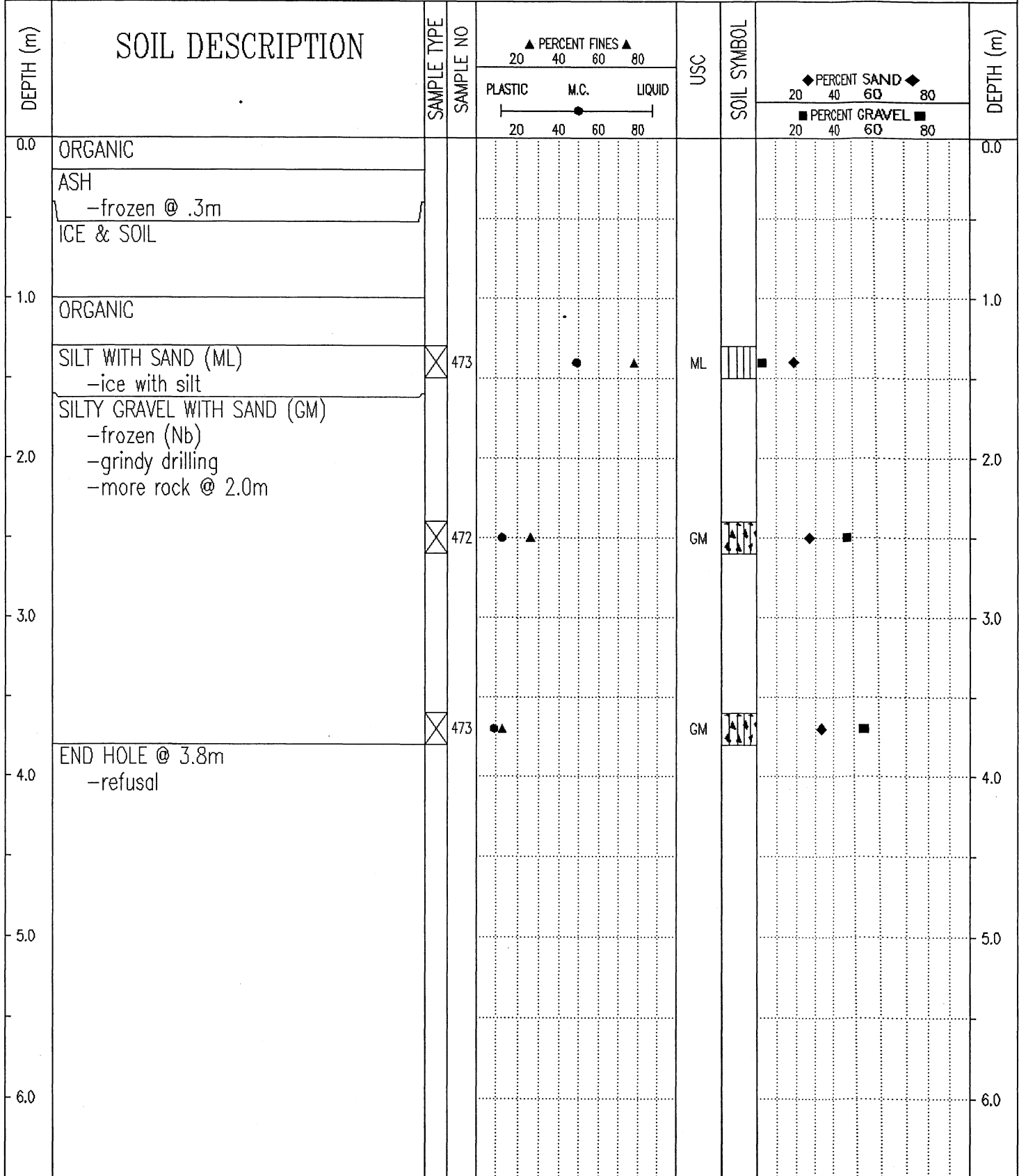
LOGGED BY: S.H.
REVIEWED BY:
Fig. No:
COMPLETION DEPTH: 1.7 m
COMPLETE: 99/07/06
Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13	TEST HOLE NO: 527-769
ENGINEERING CAPITAL		KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L		LOCATION:1802+975 30M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
			<input type="checkbox"/> BULK
			<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)
				20	40	60			80	20		
0.0	ORGANIC										0.0	
	ASH -frozen											
1.0	ORGANIC -frozen										1.0	
2.0	SILTY GRAVEL WITH SAND (GM) -frozen -grindy drilling										2.0	
3.0	END HOLE @ 3.0m		706				GM	▲▲▲▲▲▲▲▲	◆	■	3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 3.0 m
	REVIEWED BY:	COMPLETE: 99/08/18
	Fig. No:	Page 1 of 1

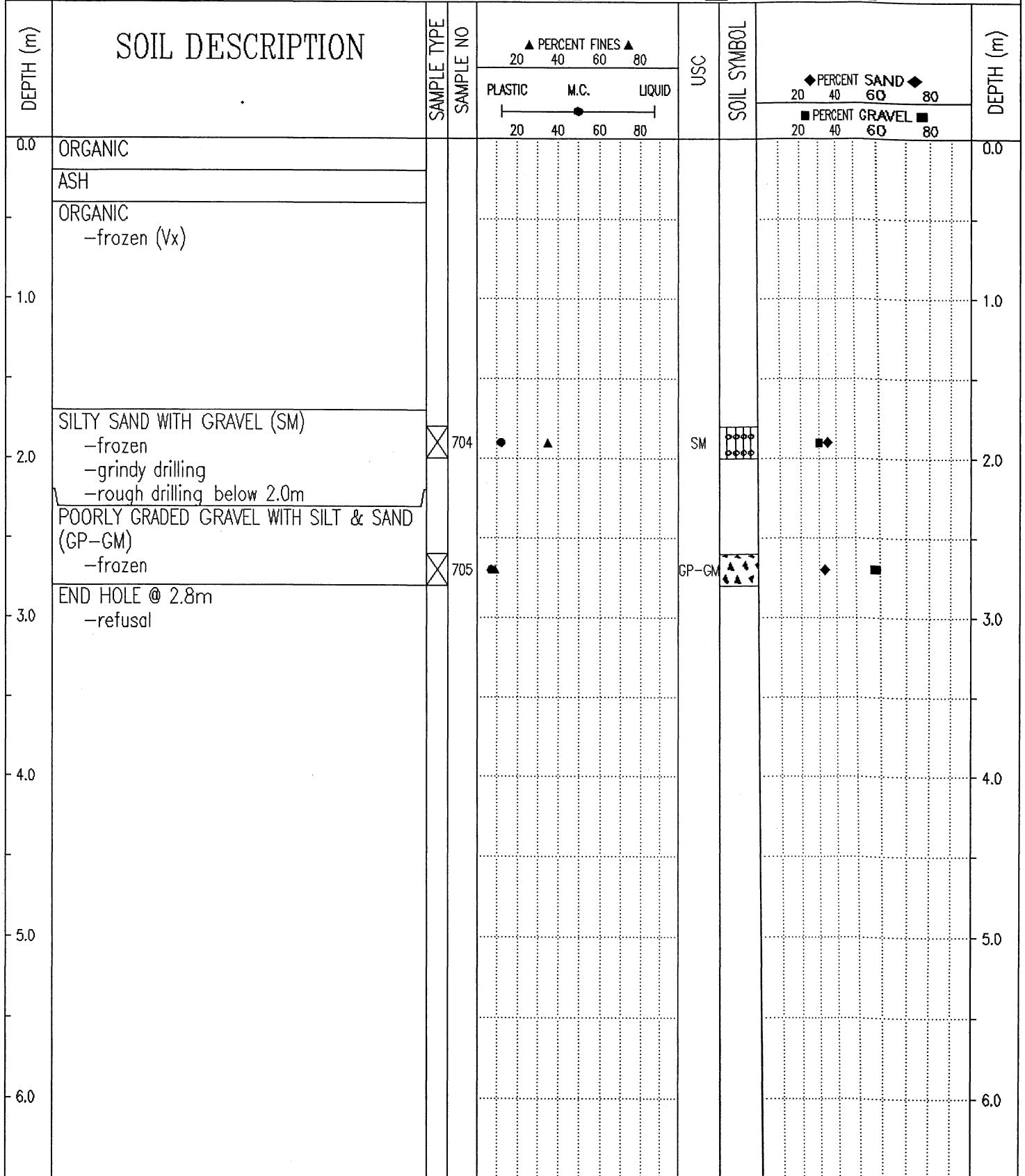
SUB-SURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RE-CONSTRUCTION	TEST HOLE NO: 519-582
SHAKWAK SEG 13	KM 1796-1822 A/H	Project No: 092-202101-0329
MOBILE B-40L	LOCATION: 1803+025 2M RHS	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.
	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE



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LOGGED BY: S.H.	COMPLETION DEPTH: 3.8 m
REVIEWED BY:	COMPLETE: 99/07/06
Fig. No:	Page 1 of 1

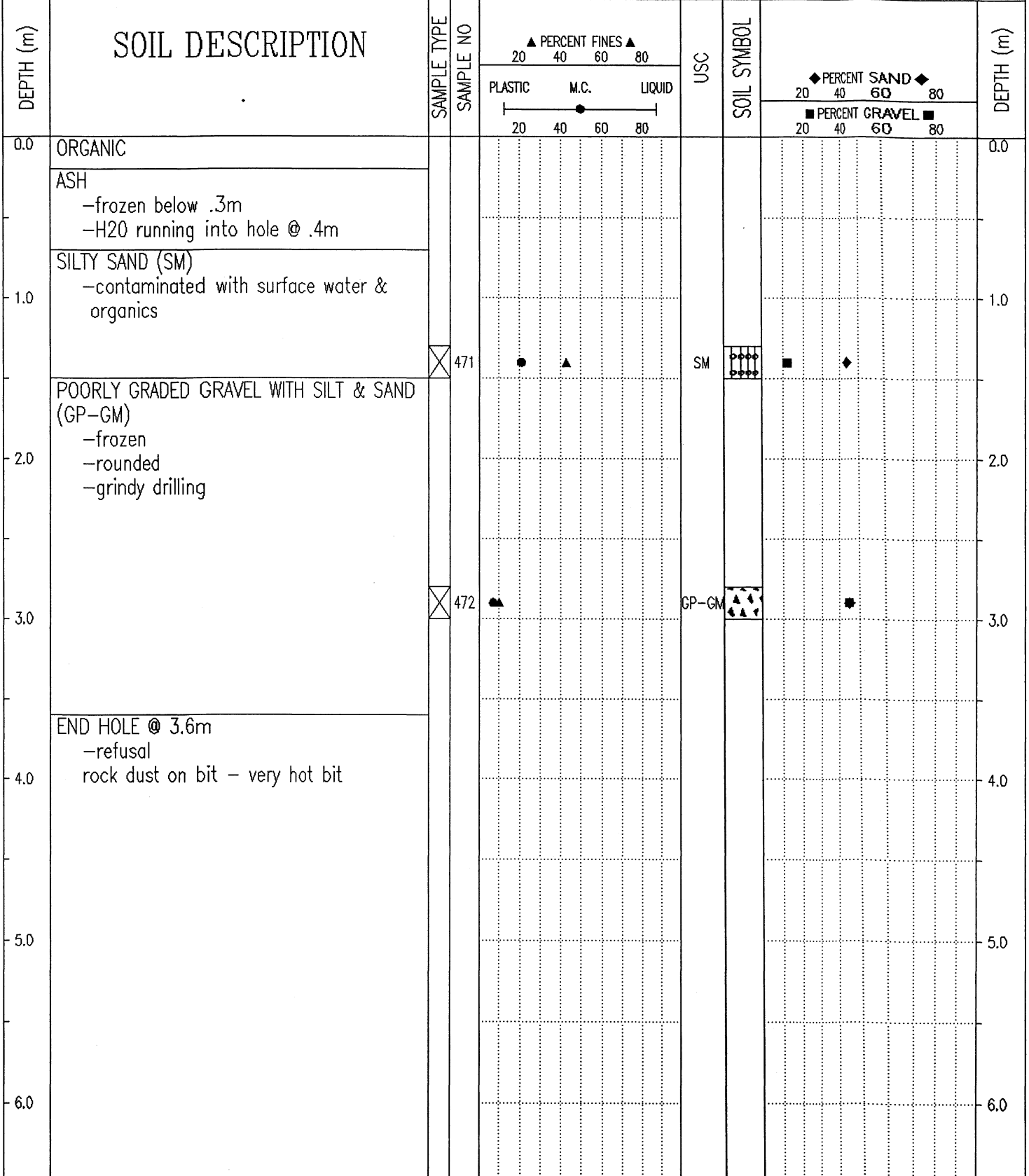
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-768
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION:1803+075 30M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
	<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
		<input type="checkbox"/> CORE



Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 2.8 m
	REVIEWED BY:	COMPLETE: 99/08/18
	Fig. No:	Page 1 of 1

SUB-SURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RE-CONSTRUCTION	TEST HOLE NO: 519-581
SHAKWAK SEG 13	KM 1796-1822 A/H	Project No: 092-202101-0329
MOBILE B-40L	LOCATION: 1803+125 2M RHS	ELEVATION: 0.00 (m)

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



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LOGGED BY: S.H.	COMPLETION DEPTH: 3.6 m
REVIEWED BY:	COMPLETE: 99/07/06
Fig. No:	Page 1 of 1

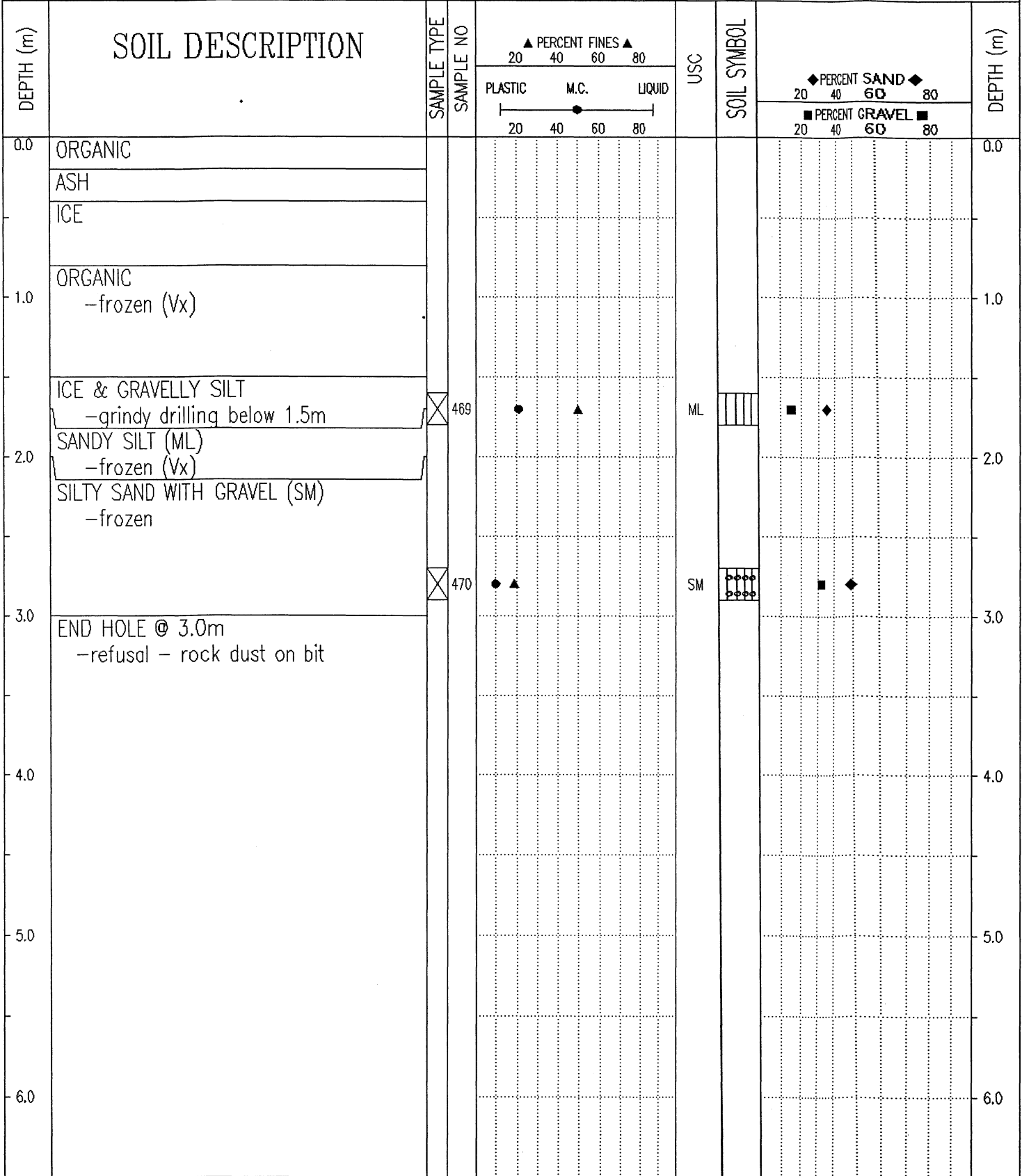
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-767
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION:1803+175 30M LT	ELEVATION: 0.00 (m)

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									0.0	
	ASH										
	ICE										
1.0	ICE									1.0	
	-estimate 50% with silt										
2.0	SILTY GRAVEL WITH SILT (GM)	<input checked="" type="checkbox"/>	703	●	▲		GM	◆	■	2.0	
	-frozen										
	-grindy drilling										
	-rough drilling below 2.0m										
3.0	END HOLE @ 2.5m									3.0	
	-refusal - no sample retrieved										
4.0										4.0	
5.0										5.0	
6.0										6.0	

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 2.5 m
	REVIEWED BY:	COMPLETE: 99/08/18
	Fig. No:	Page 1 of 1

SUB-SURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RE-CONSTRUCTION	TEST HOLE NO: 519-580
SHAKWAK SEG 13	KM 1796-1822 A/H	Project No: 092-202101-0329
MOBILE B-40L	LOCATION: 1803+225 2M RHS	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
	<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
		<input type="checkbox"/> CORE

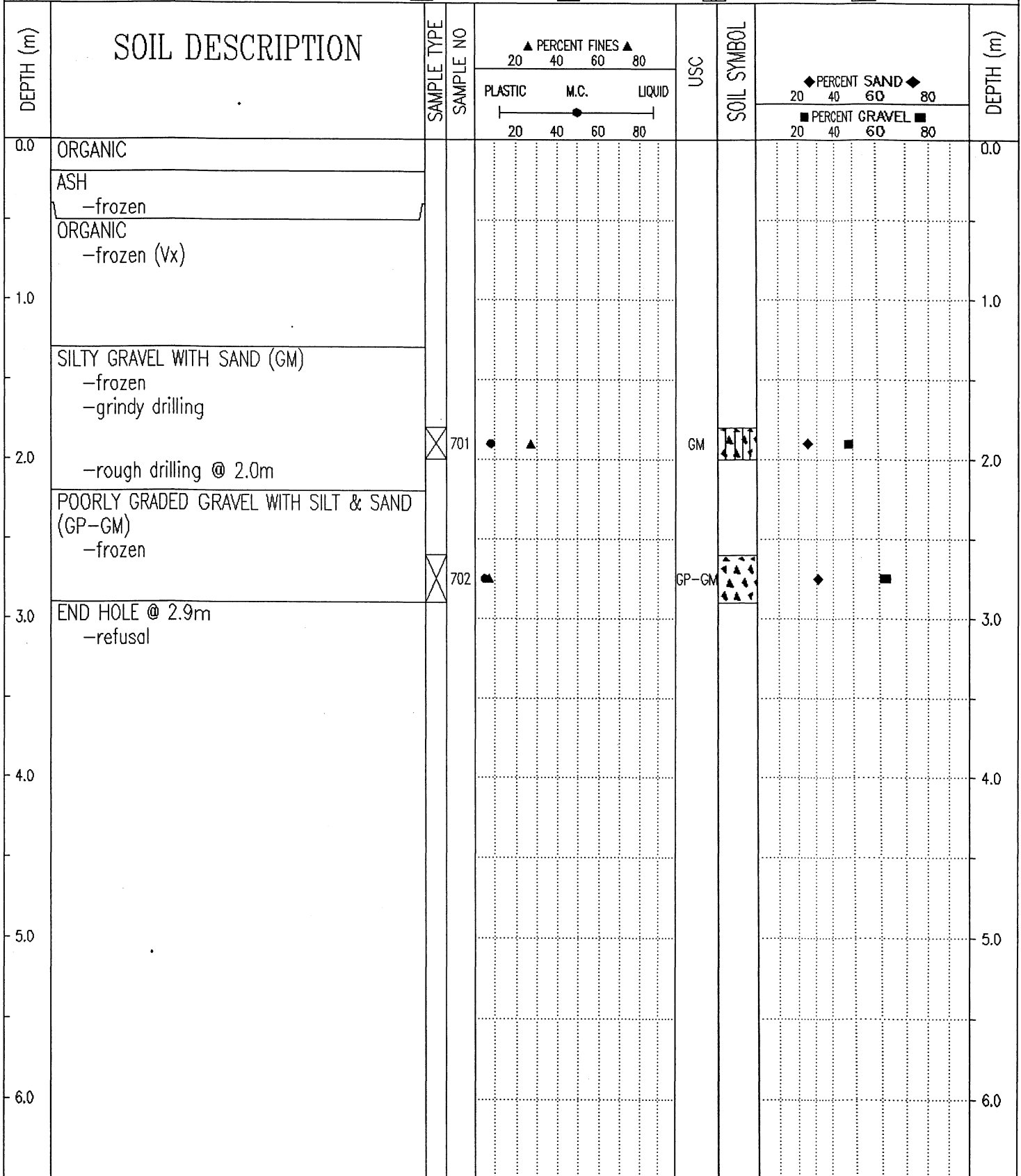


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LOGGED BY: S.H.
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 3.0 m
COMPLETE: 99/07/06

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-766
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION:1803+270 30M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
	<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
		<input type="checkbox"/> CORE



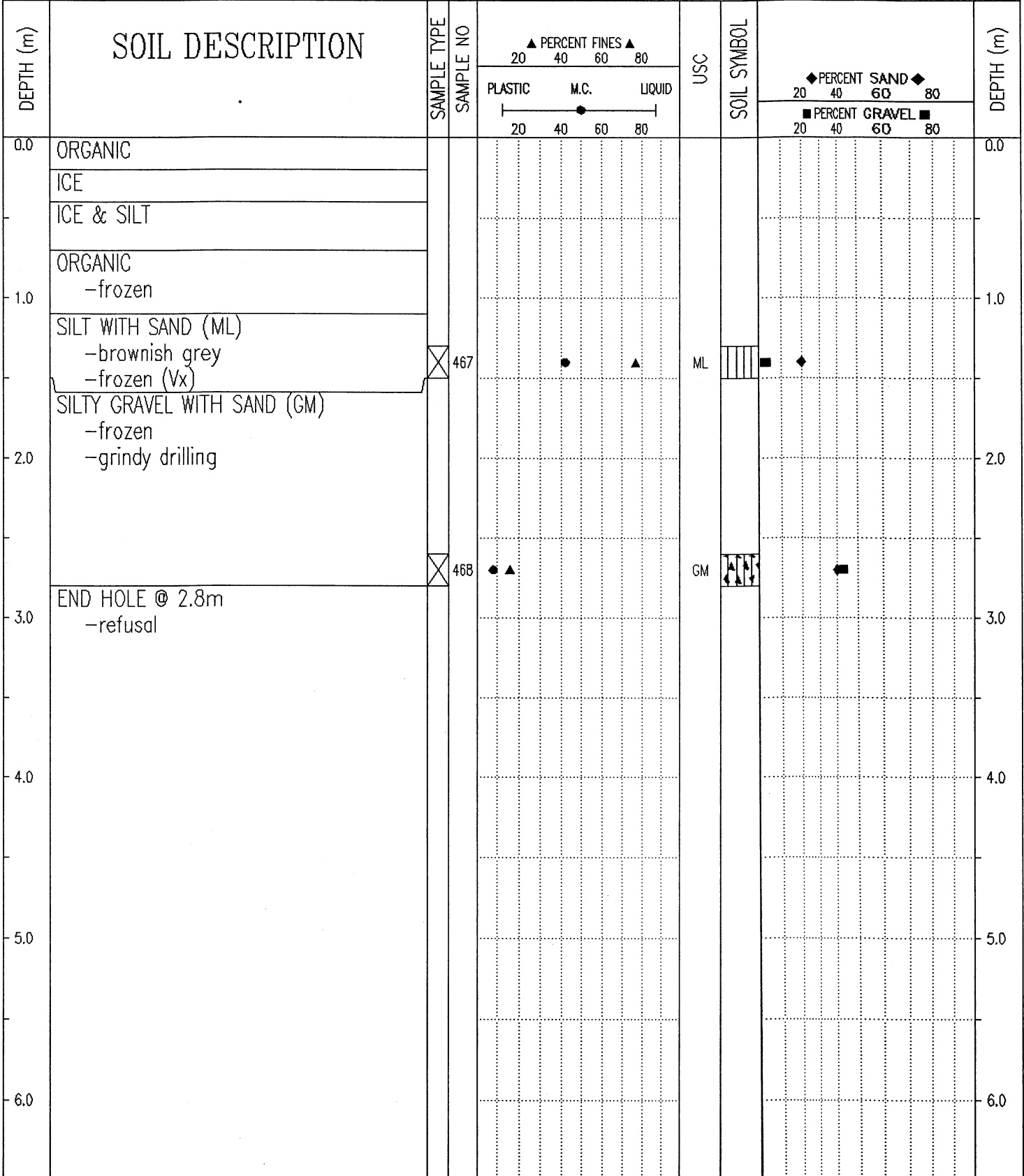
Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 2.9 m
	REVIEWED BY:	COMPLETE: 99/08/18
	Fig. No:	Page 1 of 1

SUB-SURFACE EXPLORATION & TESTING REPORT ALASKA HWY RE-CONSTRUCTION TEST HOLE NO: 519-579

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

MOBILE B-40L LOCATION: 1803+325 2M RHS ELEVATION: 0.00 (m)

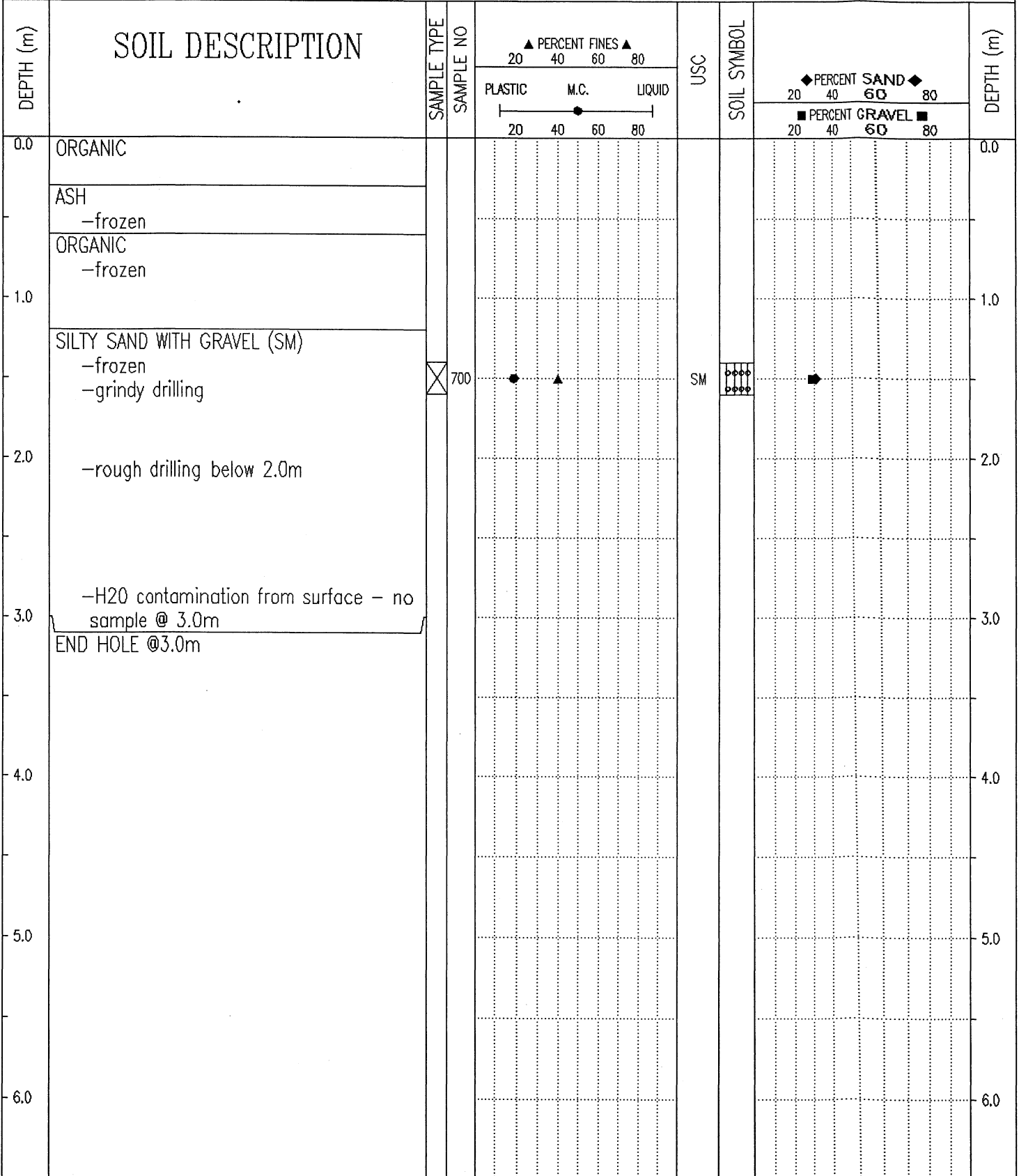
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



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Transportation Engineering

LOGGED BY: S.H. COMPLETION DEPTH: 2.8 m
 REVIEWED BY: COMPLETE: 99/07/05
 Fig. No: Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-765
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION:1803+370 30M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	



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REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 99/08/18

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SUB-SURFACE EXPLORATION & TESTING REPORT ALASKA HWY RE-CONSTRUCTION TEST HOLE NO: 519-578

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

MOBILE B-40L LOCATION: 1803+415 CENTRELINE ELEVATION: 0.00 (m)

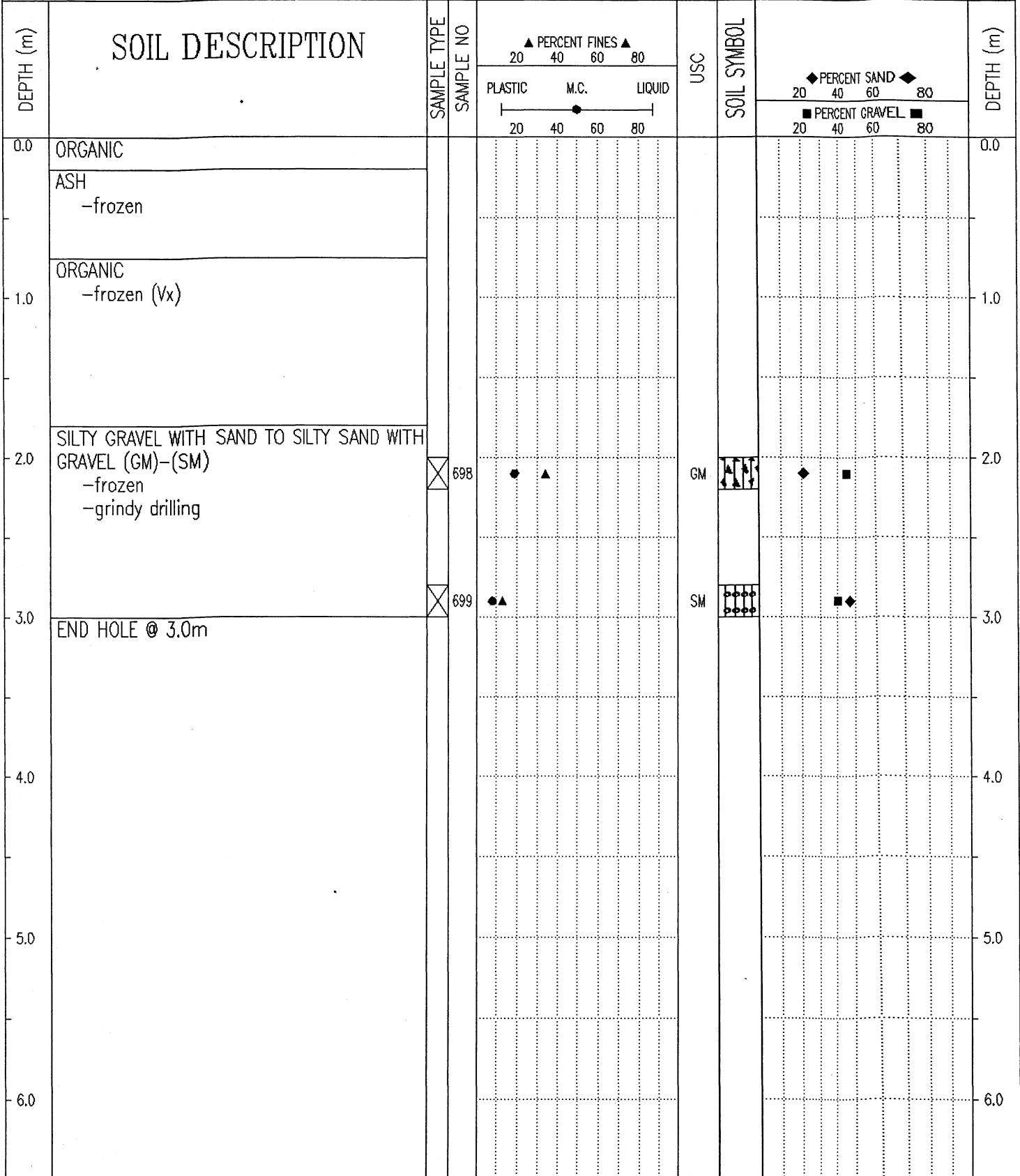
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)	
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
				20	40	60			20	40	60	80
0.0	ORGANIC ASH ORGANIC -free water @ .3m -frozen below .4m											
2.0	SILTY GRAVEL WITH SAND (GM) -greyish brown -frozen (Vx) -grindy drilling -first refusal @ 2.5m -moved 5m downchain	<input checked="" type="checkbox"/>	465	●	▲		GM	▲▲▲	◆	■		
4.0	SILTY SAND WITH GRAVEL (SM) -frozen -larger rocks (150mm) END HOLE @ 4.0m	<input checked="" type="checkbox"/>	466	●	▲		SM	●●●●	■	◆		

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LOGGED BY: S.H. COMPLETION DEPTH: 3.9 m
 REVIEWED BY: COMPLETE: 99/07/05
 Fig. No: Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 13	TEST HOLE NO: 527-764
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
MOBILE B40-L	LOCATION: 1803+475 30M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 3.0 m
	REVIEWED BY:	COMPLETE: 99/08/18
	Fig. No:	Page 1 of 1

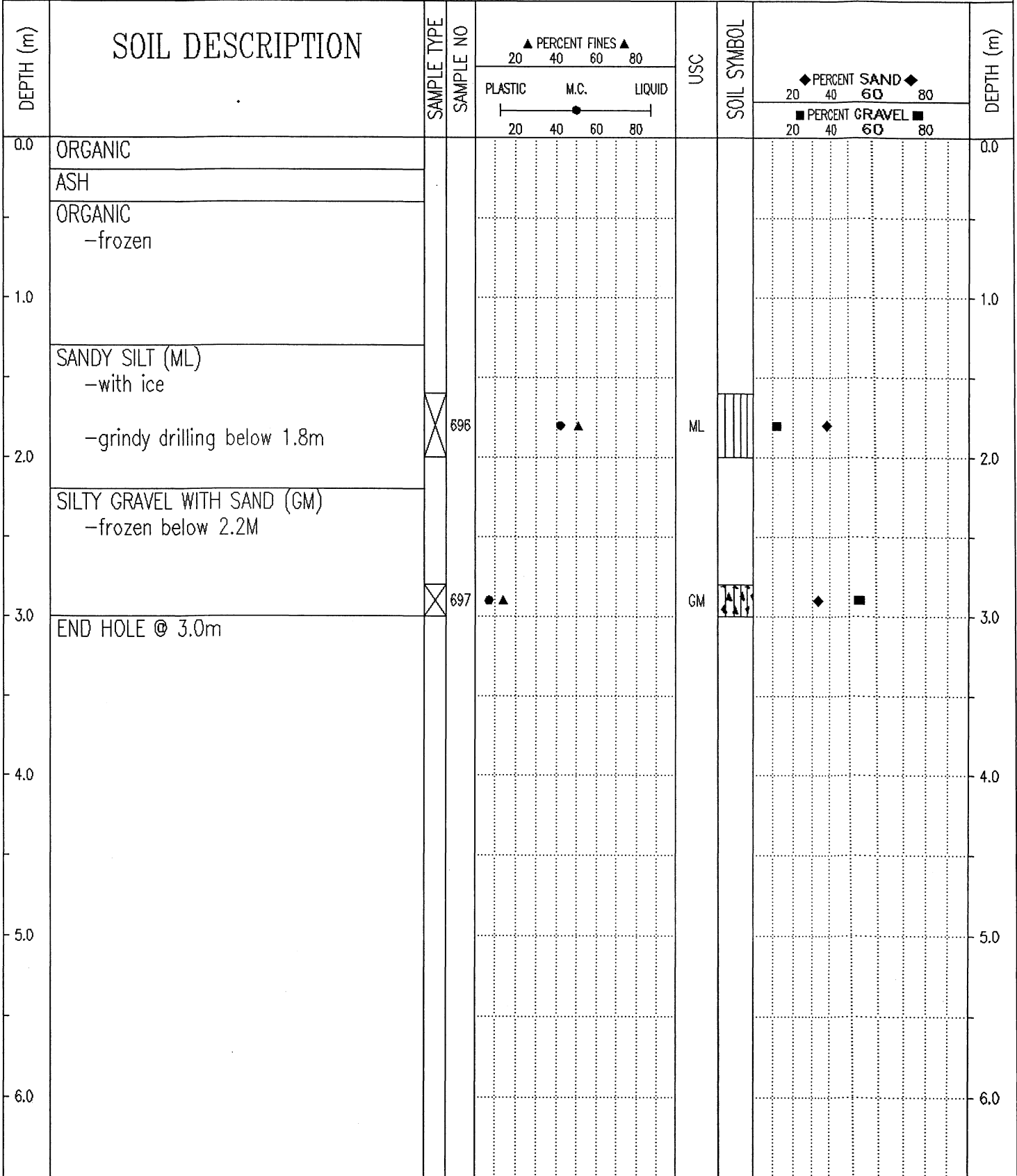
SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION		TEST HOLE NO: 519-577					
SHAKWAK SEG 13		KM 1796-1822 A/H		Project No: 092-202101-0329					
MOBILE B-40L		LOCATION: 1803+525 2M RHS		ELEVATION: 0.00 (m)					
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE									
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80		USC SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80		DEPTH (m)
				PLASTIC	M.C.		LIQUID	■ PERCENT GRAVEL ■ 20 40 60 80	
0.0	ORGANIC ASH SILT & ICE -frozen								0.0
1.0	SANDY SILT (SM) -brown -frozen (Vx)	<input checked="" type="checkbox"/>	462	●	▲	SM	■	◆	1.0
2.0	SILTY GRAVEL WITH SAND (GM) -frozen -sub-angular to angular -maximum 25mm material -estimate 10% -grindy drilling -first refusal @ 1.7m	<input checked="" type="checkbox"/>	464	▲	●	GM	■	◆	2.0
3.0	END HOLE @ 2.7M -refusal Note: surface water entering hole saturating sample								3.0
4.0									4.0
5.0									5.0
6.0									6.0
Government of Yukon Transportation Engineering				LOGGED BY: S.H. REVIEWED BY:		COMPLETION DEPTH: 2.7 m COMPLETE: 99/07/05			
				Fig. No:		Page 1 of 1			

SUBSURFACE EXPLORATION & TESTING REPORT SHAKWAK SEG 13 TEST HOLE NO: 527-763

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

MOBILE B40-L LOCATION:1803+575 30M LT ELEVATION: 0.00 (m)

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



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LOGGED BY: G.C.

REVIEWED BY:

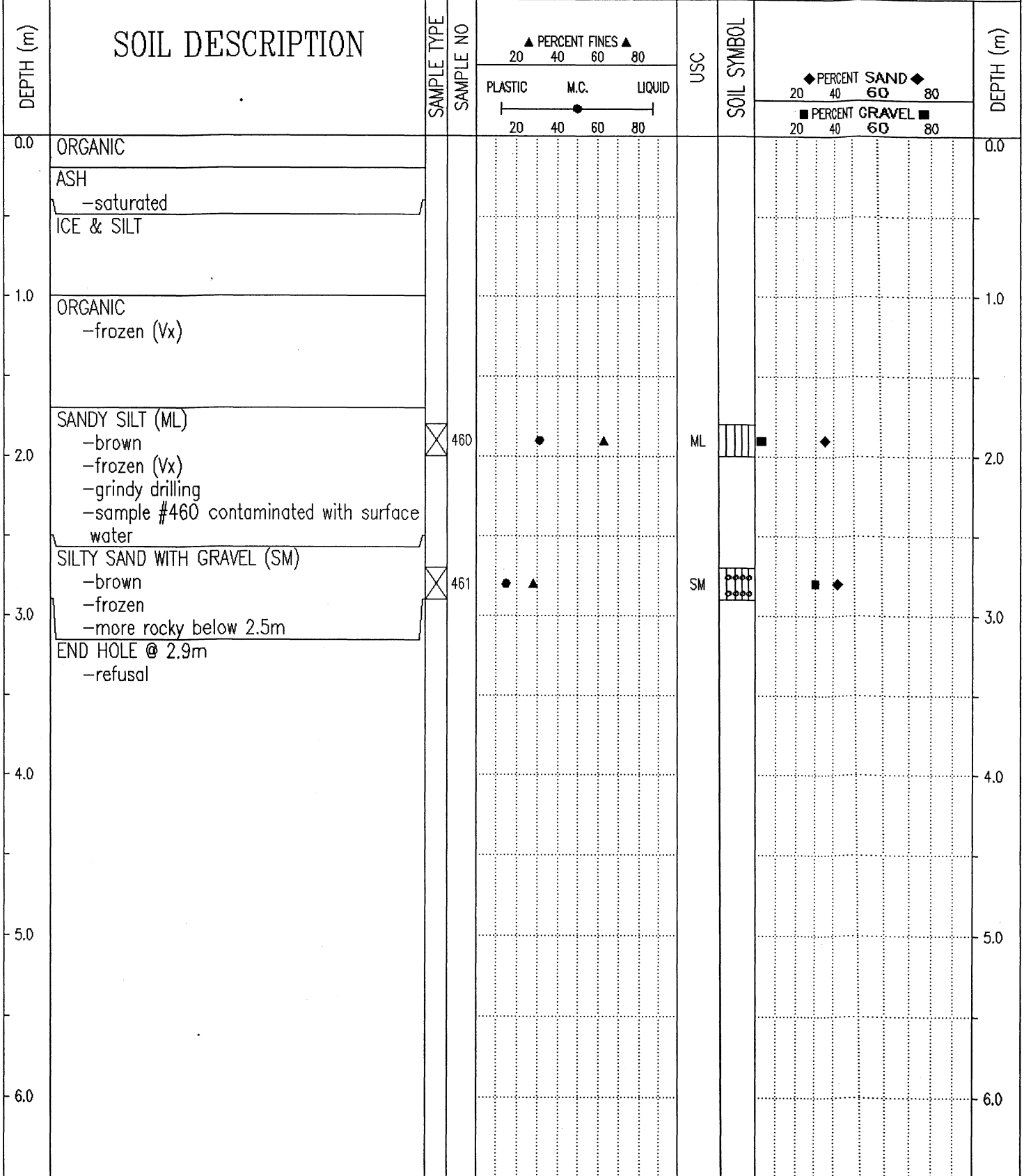
Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 99/08/18

SUB-SURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RE-CONSTRUCTION	TEST HOLE NO: 519-576
SHAKWAK SEG 13	KM 1796-1822 A/H	Project No: 092-202101-0329
MOBILE B-40L	LOCATION: 1803+625 2M RHS	ELEVATION: 0.00 (m)

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



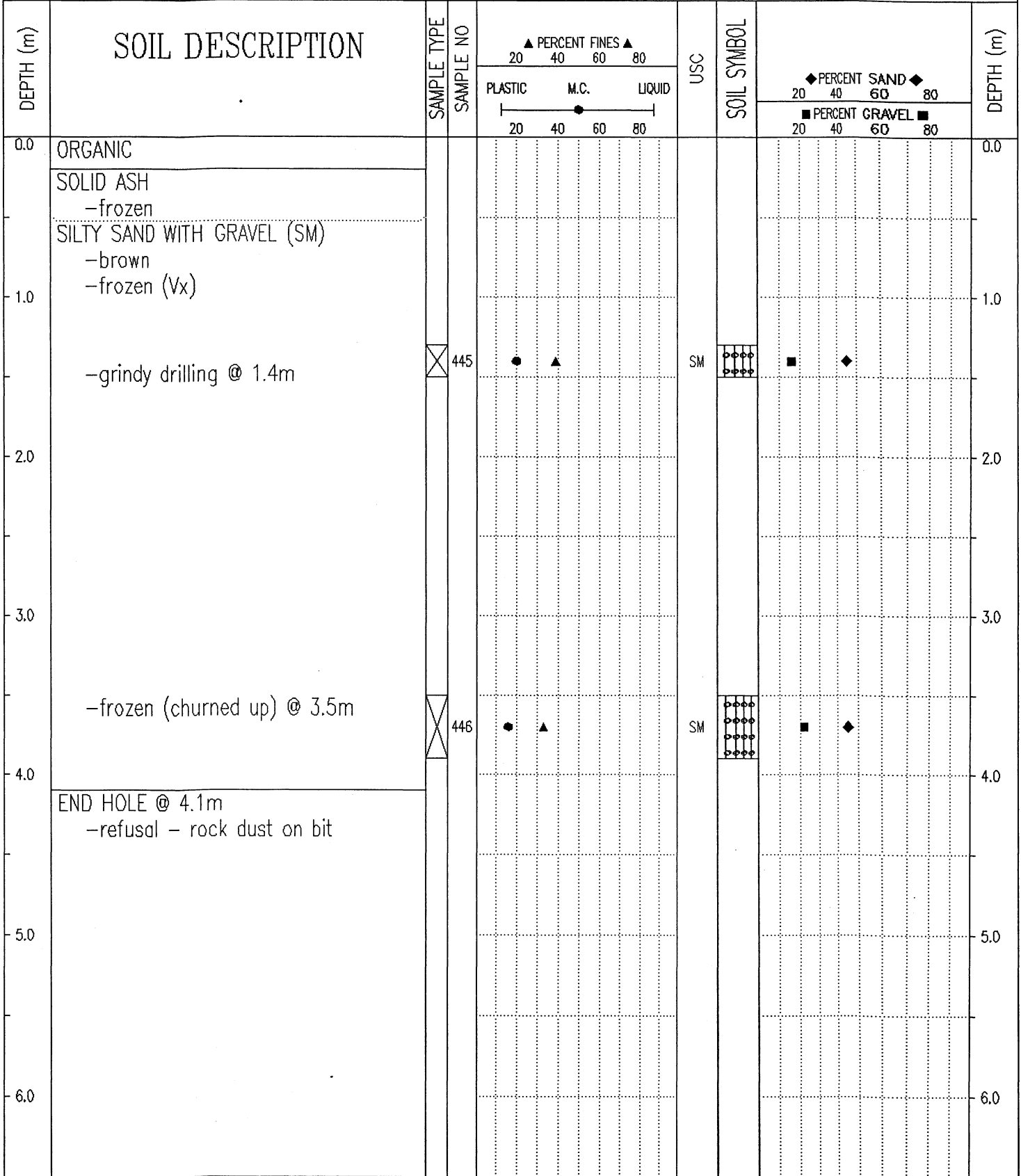
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LOGGED BY: S.H.
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 2.9 m
COMPLETE: 99/07/05

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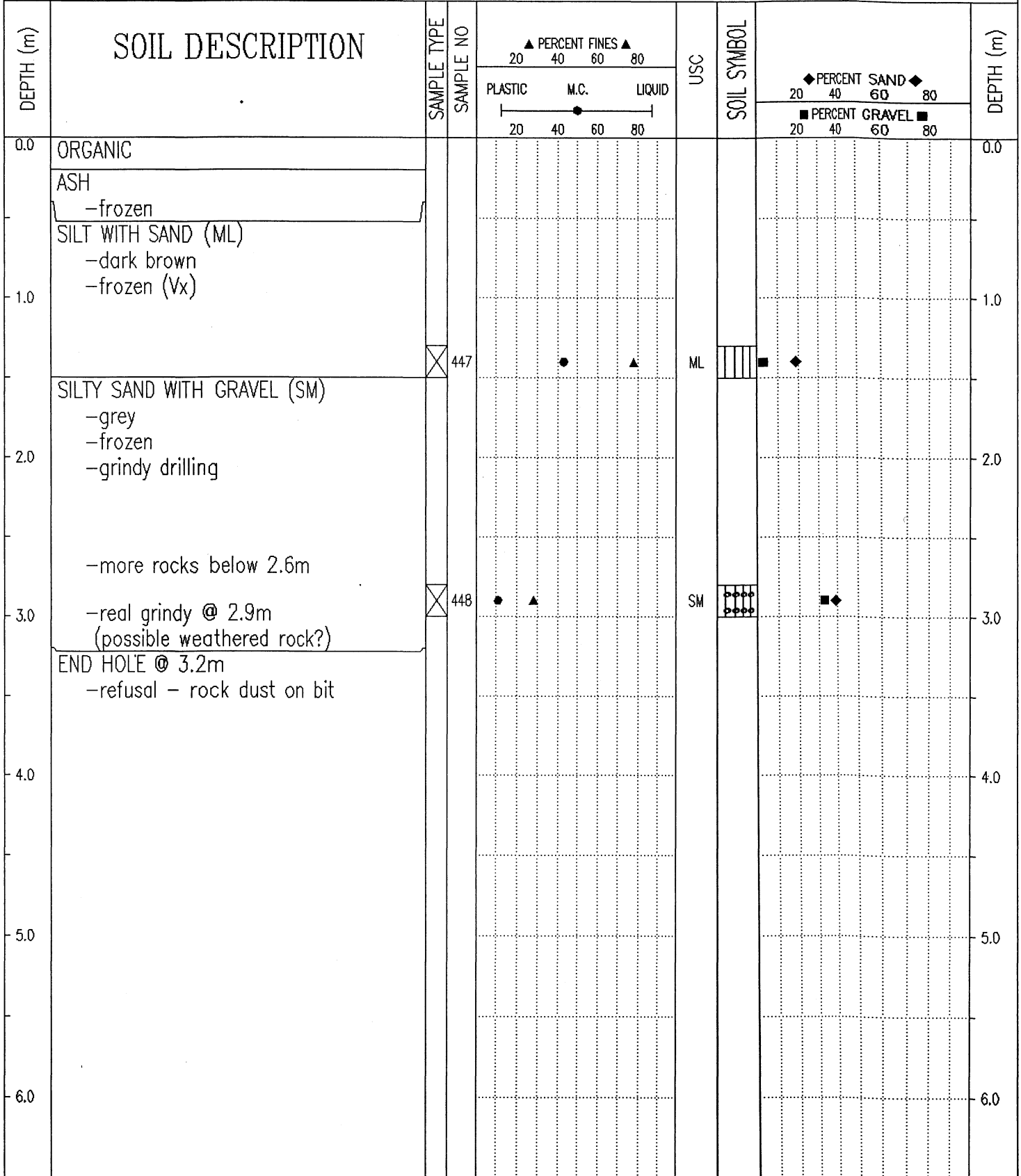
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SHAKWAK SEG 13	KM 1796-1822 A/H	Project No: 092-202101-0329
MOBILE B-40L	LOCATION: 1803+675 30M LHS	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



Government of Yukon Transportation Engineering	LOGGED BY: S.H.	COMPLETION DEPTH: 4.1 m
	REVIEWED BY:	COMPLETE: 99/07/05
	Fig. No:	Page 1 of 1

SUB-SURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RE-CONSTRUCTION	TEST HOLE NO: 519-570
SHAKWAK SEG 13	KM 1796-1822 A/H	Project No: 092-202101-0329
MOBILE B-40L	LOCATION: 1803+728 2M RHS	ELEVATION: 0.00 (m)

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



Government of Yukon
Transportation Engineering

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

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

SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION		TEST HOLE NO: 519-568								
SHAKWAK SEG 13		KM 1796-1822 A/H		Project No: 092-202101-0329								
MOBILE B-40L		LOCATION: 1803+775 30M LHS		ELEVATION: 0.00 (m)								
SAMPLE TYPE		RETURN		S.P.T.								
		AUGER		BULK								
		TUBE		CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL			
0.0	ORGANIC ASH ORGANIC										0.0	
1.0	SILTY SAND WITH GRAVEL (SM) -brown -frozen (Vx) -grindy drilling		442				SM				1.0	
3.0	SILTY GRAVEL WITH SAND (GM) -grey brown -frozen		443				GM				3.0	
4.0	SILTY SAND WITH GRAVEL (SM) -frozen -real grindy drilling		444				SM				4.0	
4.0	END HOLE @ 4.0m -refusal - rock dust on bit										4.0	

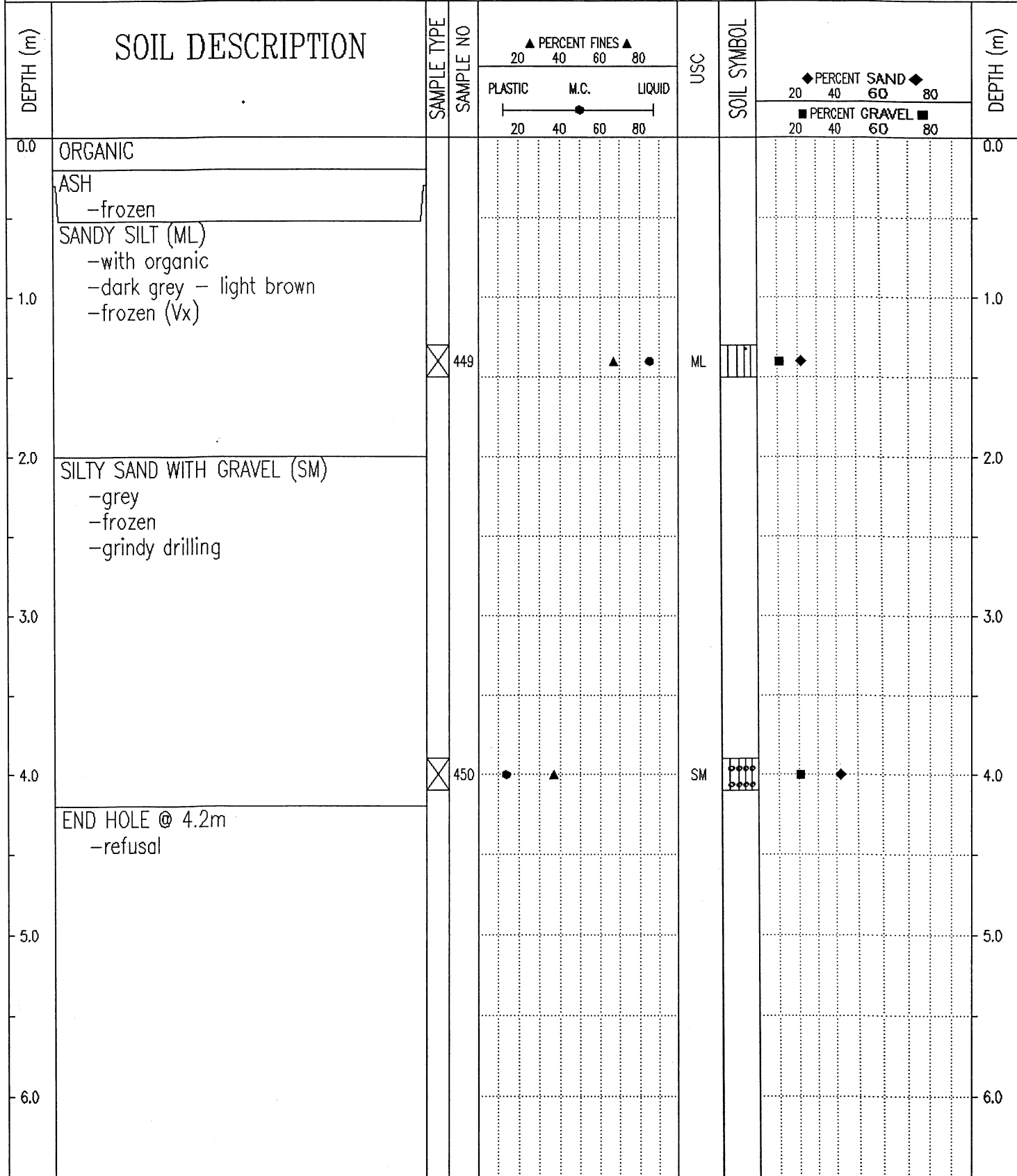
Government of Yukon
Transportation Engineering

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

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

SUB-SURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RE-CONSTRUCTION	TEST HOLE NO: 519-571
SHAKWAK SEG 13	KM 1796-1822 A/H	Project No: 092-202101-0329
MOBILE B-40L	LOCATION: 1803+825 2M RHS	ELEVATION: 0.00 (m)

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



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Transportation Engineering

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REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 4.2 m

COMPLETE: 99/07/05

Page 1 of 1

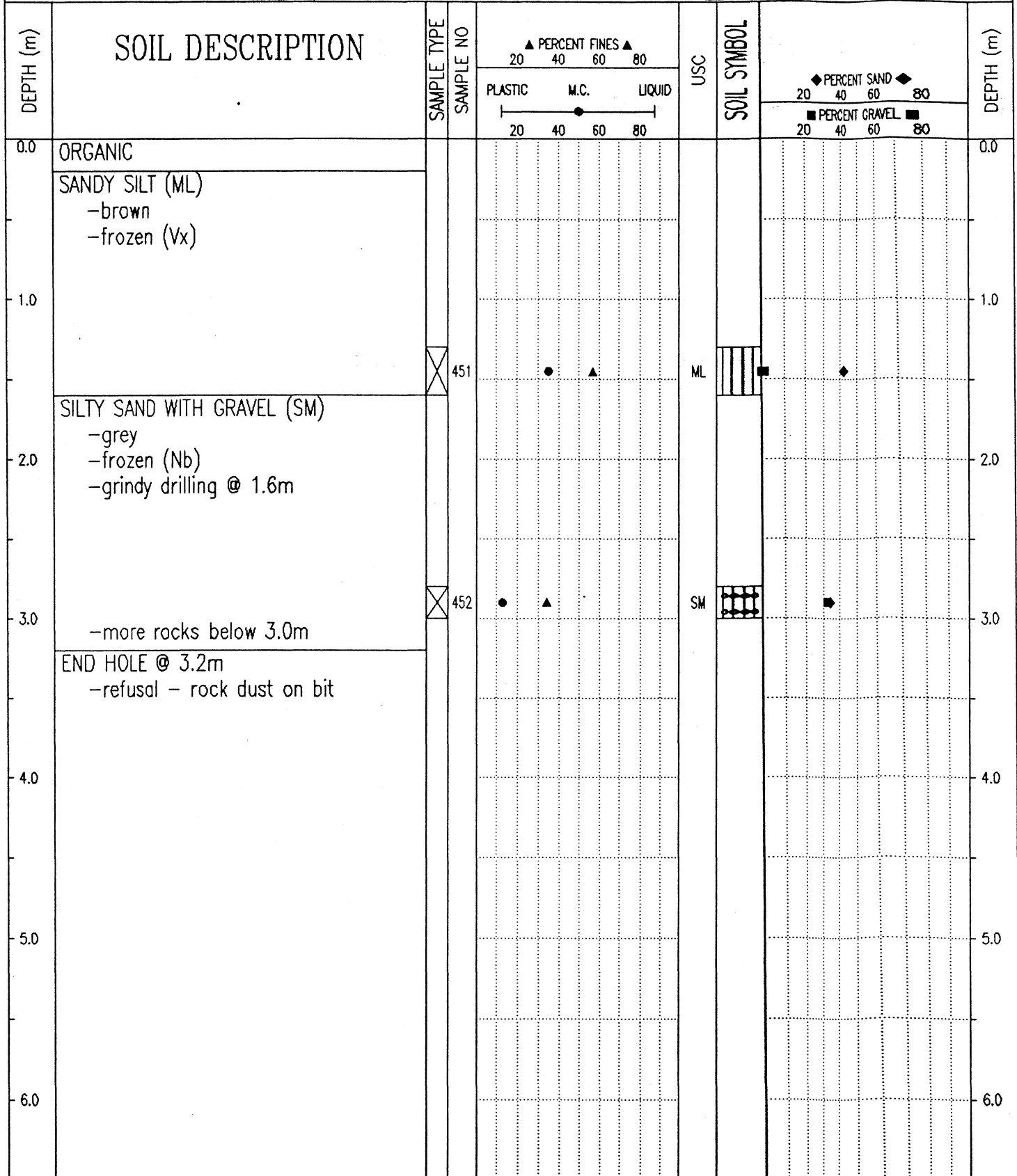
SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION		TEST HOLE NO: 519-567									
SHAKWAK SEG 13		KM 1796-1822 A/H		Project No: 092-202101-0329									
MOBILE B-40L		LOCATION: 1803+875 30M LHS		ELEVATION: 0.00 (m)									
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE													
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)	
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL			
				20	40	60	80		20	40	60	80	
0.0	ORGANIC												0.0
	ASH												
	ORGANIC												
1.0													1.0
	SANDY SILT (ML) -grey -frozen (Vx)	<input checked="" type="checkbox"/>	439					ML					
2.0													2.0
	SILTY GRAVEL WITH SAND (GM) -brown -frozen -grindy drilling	<input checked="" type="checkbox"/>	440					GM					
3.0													3.0
	-real grindy @ 3.0m												
4.0													4.0
	-brownish grey below 3.5m -frozen (Nb) below 3.5m	<input checked="" type="checkbox"/>	441					GM					
5.0													5.0
	END HOLE @ 4.5m												
6.0													6.0

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REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.5 m
COMPLETE: 99/07/05

SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION	TEST HOLE NO: 519-572
SHAKWAK SEG 13		KM 1796-1822 A/H	Project No: 092-202101-0329
MOBILE B-40L		LOCATION: 1803+925 2M RHS	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE			



Government of Yukon Transportation Engineering	LOGGED BY: S.H.	COMPLETION DEPTH: 3.2 m
	REVIEWED BY:	COMPLETE: 99/07/05
	Fig. No:	Page 1 of 1

SUB-SURFACE EXPLORATION & TESTING REPORT ALASKA HWY RE-CONSTRUCTION TEST HOLE NO: 519-566

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

MOBILE B-40L LOCATION: 1803+975 30M LHS ELEVATION: 0.00 (m)

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC										0.0	
	ASH											
	SILTY GRAVEL WITH SAND (GM)											
	-grey brown											
	-frozen (Vx)											
1.0											1.0	
	-grindy drilling @ 1.3m	<input checked="" type="checkbox"/>	437	●	▲		GM	■				
2.0											2.0	
3.0											3.0	
	-grey below 2.8m	<input checked="" type="checkbox"/>	438	●	▲		GM	■				
4.0											4.0	
	END HOLE @ 3.2m											
	-refusal											
5.0											5.0	
6.0											6.0	

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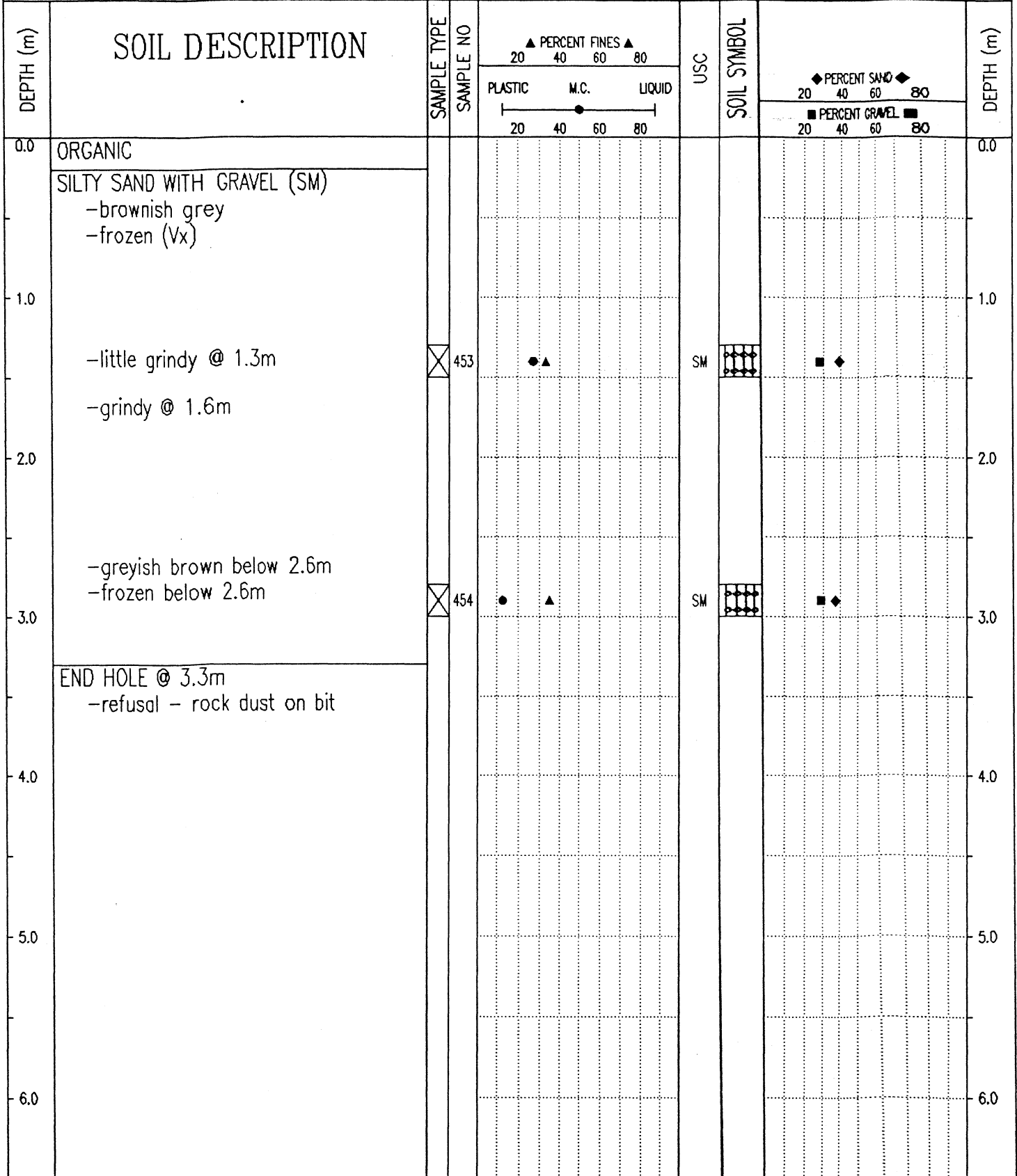
Fig. No:

COMPLETION DEPTH: 3.2 m

COMPLETE: 99/07/05

Page 1 of 1

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

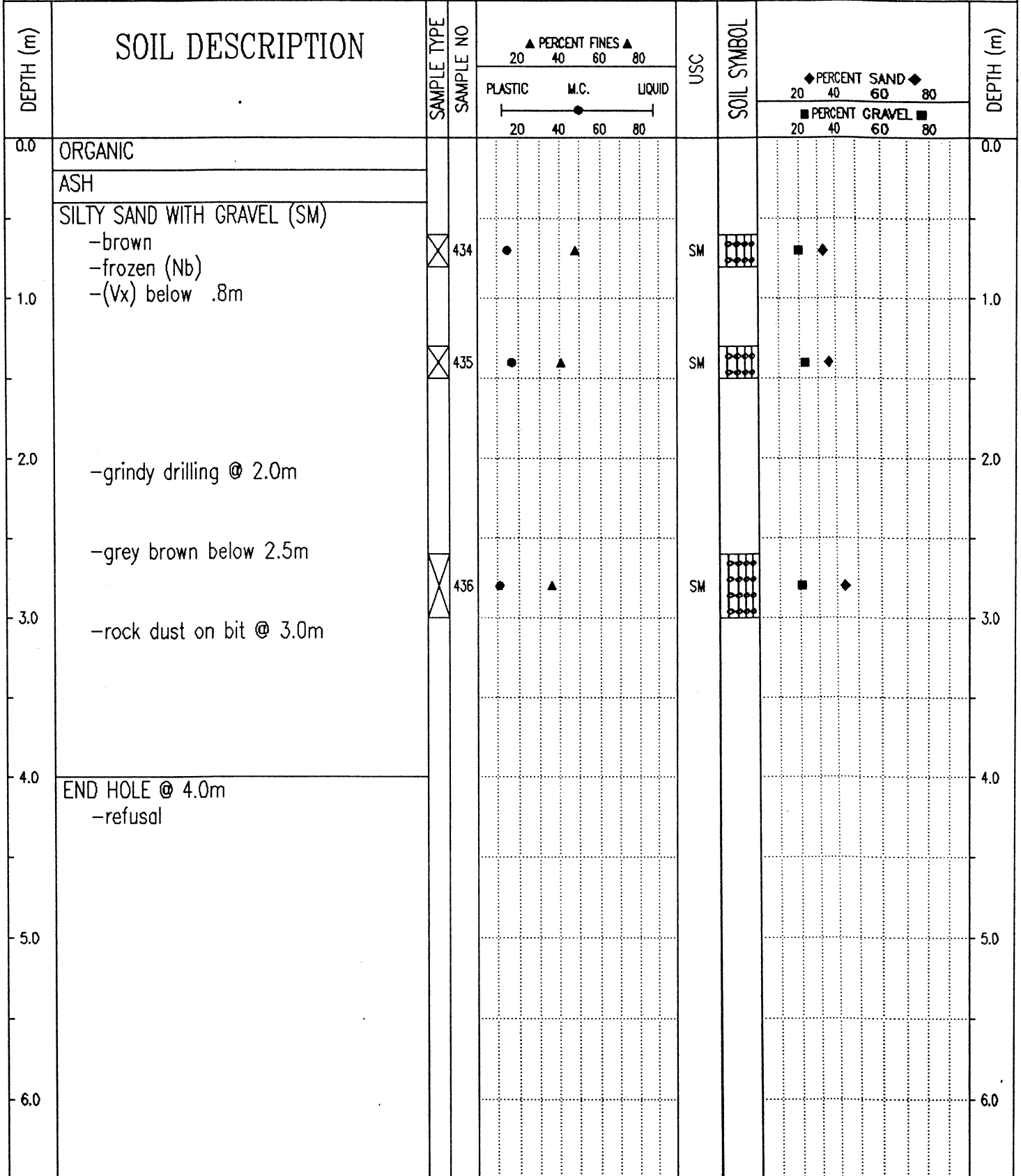
COMPLETION DEPTH: 3.3 m
COMPLETE: 99/07/05

SUB-SURFACE EXPLORATION & TESTING REPORT ALASKA HWY RE-CONSTRUCTION TEST HOLE NO: 519-565

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

MOBILE B-40L LOCATION: 1804+050 30M LHS ELEVATION: 0.00 (m)

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



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Transportation Engineering

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REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 4.0 m

COMPLETE: 99/07/05

Page 1 of 1

SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION		TEST HOLE NO: 519-574						
SHAKWAK SEG 13		KM 1796-1822 A/H		Project No: 092-202101-0329						
MOBILE B-40L		LOCATION: 1804+125 2M RHS		ELEVATION: 0.00 (m)						
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE										
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80		USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80		DEPTH (m)
				PLASTIC	M.C.			LIQUID	■ PERCENT GRAVEL ■ 20 40 60 80	
0.0	ORGANIC									0.0
	SILT WITH SAND (ML) - brown - frozen (Vx)									
1.0		<input checked="" type="checkbox"/>	455				ML			1.0
	-some organic @ 1.5m									
2.0	SILTY SAND WITH GRAVEL (SM) - frozen - slow hard grindy drilling									2.0
		<input checked="" type="checkbox"/>	456				SM			
3.0	END HOLE @ 2.8m - refusal - rock dust on bit									3.0
4.0										4.0
5.0										5.0
6.0										6.0

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

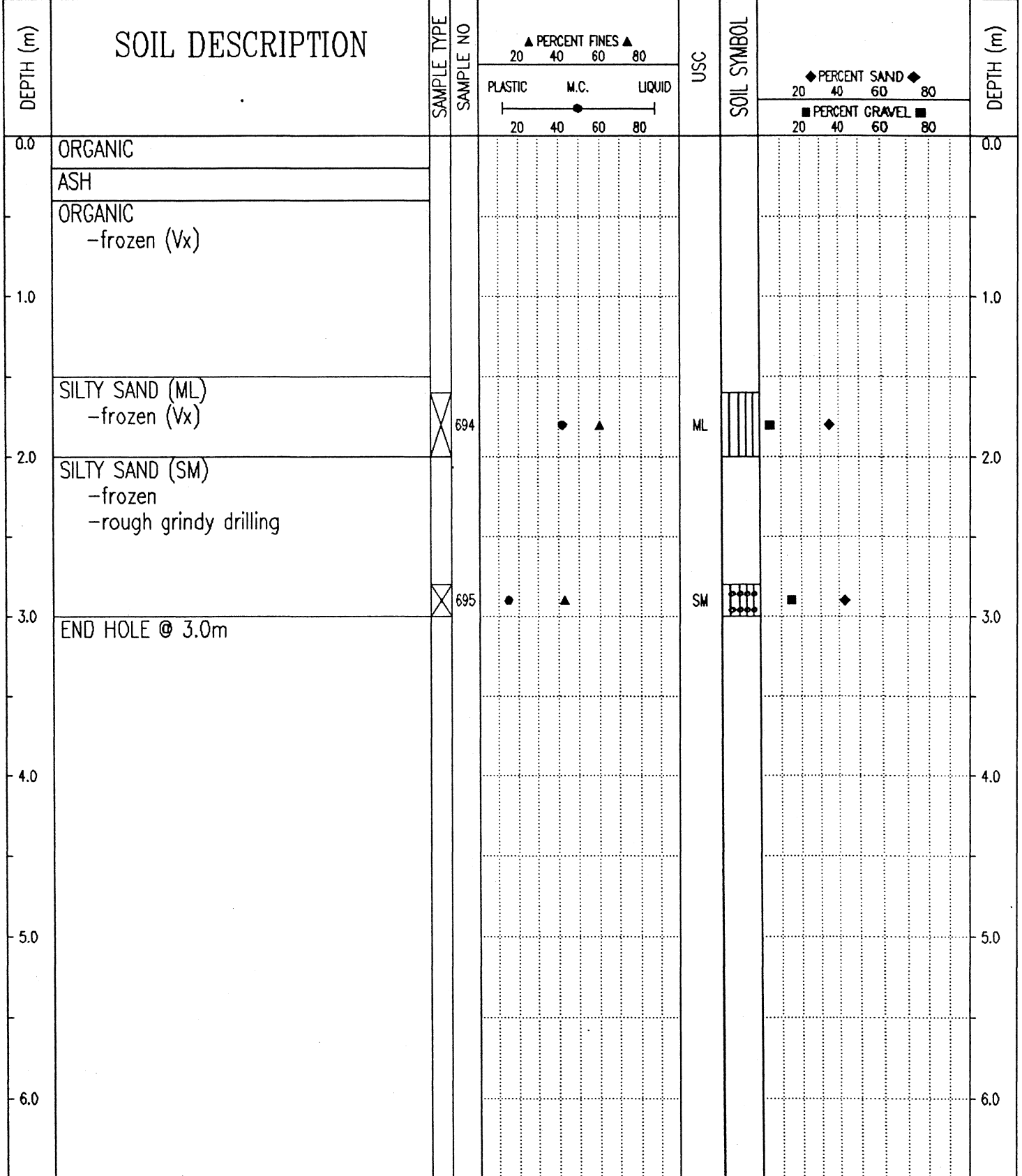
COMPLETION DEPTH: 2.8 m
COMPLETE: 99/07/05

SUBSURFACE EXPLORATION & TESTING REPORT SHAKWAK SEG 13 TEST HOLE NO: 527-731

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

MOBILE B40-L LOCATION: 1804+125 20M RT ELEVATION: 0.00 (m)

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



Government of Yukon
Transportation Engineering

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REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 99/08/18

Page 1 of 1

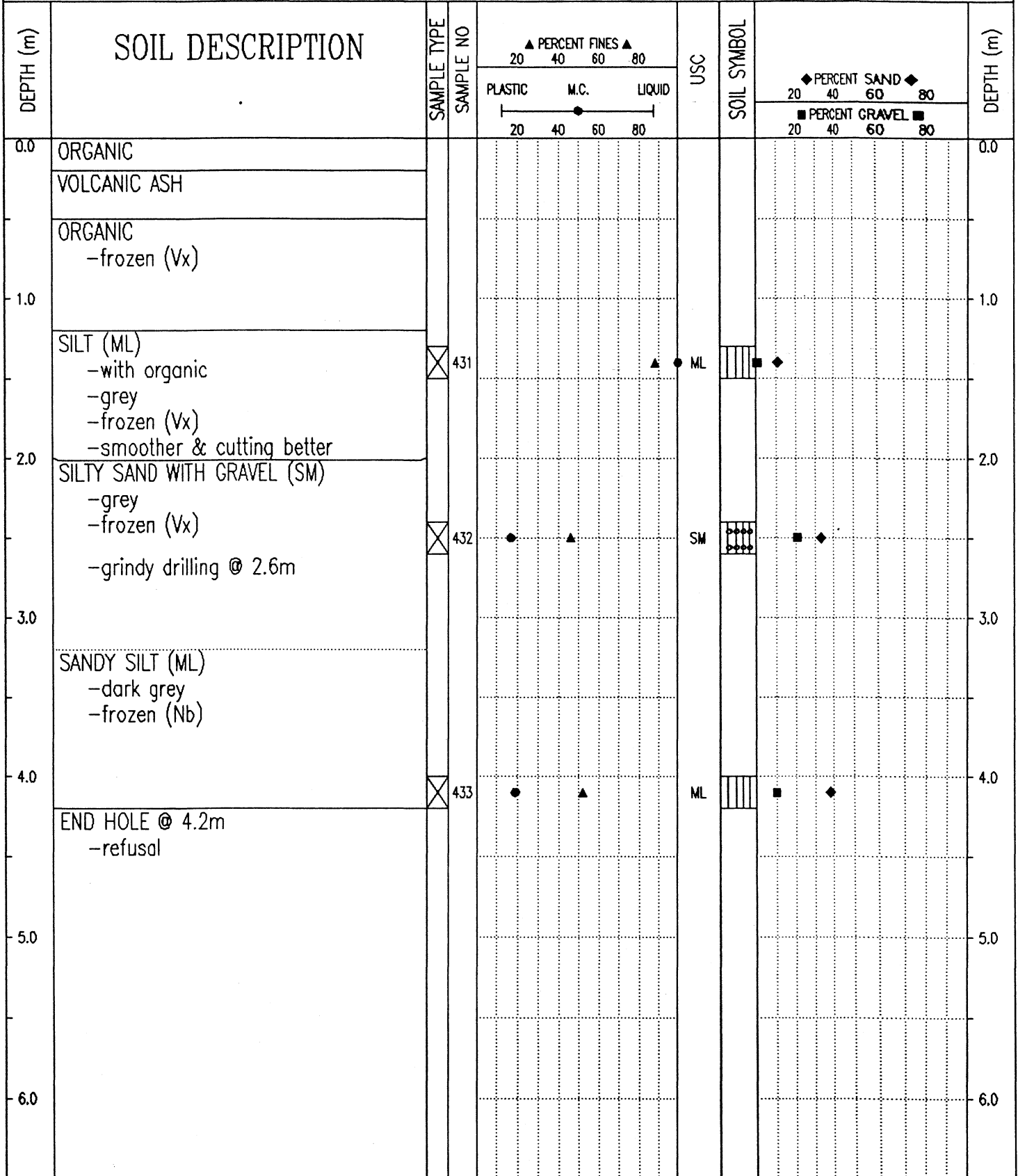
SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 527-730							
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329							
MOBILE B40-L		LOCATION: 1804+125 20M LT		ELEVATION: 0.00 (m)							
SAMPLE TYPE		RETURN <input type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input checked="" type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE <input type="checkbox"/>									
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	
0.0	ORGANIC ASH ORGANIC -frozen (Vx)										0.0
1.0											1.0
2.0	SILTY SAND (ML) -frozen (Vx) -grindy drilling	X	692	●	▲		ML	■	◆		2.0
3.0	SILTY SAND WITH GRAVEL (SM) -frozen - no visible ice	X	693	●	▲		SM	■	◆		3.0
4.0	END HOLE @ 3.0m										4.0
5.0											5.0
6.0											6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 3.0 m COMPLETE: 99/08/18		Page 1 of 1			

SUB-SURFACE EXPLORATION & TESTING REPORT ALASKA HWY RE-CONSTRUCTION TEST HOLE NO: 519-564

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

MOBILE B-40L LOCATION: 1804+150 30M LHS ELEVATION: 0.00 (m)

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



Government of Yukon
Transportation Engineering

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

COMPLETION DEPTH: 4.2 m
COMPLETE: 99/07/05

99/11/25 11:54AM

SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION		TEST HOLE NO: 519-575							
SHAKWAK SEG 13		KM 1796-1822 A/H		Project No: 092-202101-0329							
MOBILE B-40L		LOCATION: 1804+225 2M RHS		ELEVATION: 0.00 (m)							
SAMPLE TYPE		S.P.T.		AUGER		BULK		TUBE		CORE	
SOIL DESCRIPTION		SAMPLE TYPE		SAMPLE NO		USC		SOIL SYMBOL		DEPTH (m)	
DEPTH (m)				▲ PERCENT FINES ▲				◆ PERCENT SAND ◆		DEPTH (m)	
				20 40 60 80				20 40 60 80			
				PLASTIC M.C. LIQUID				■ PERCENT GRAVEL ■			
				20 40 60 80				20 40 60 80			
0.0	ORGANIC										0.0
	ICE & ORGANIC										
1.0	SANDY SILT (ML) -with ice	⊗	457				ML				1.0
2.0											2.0
3.0	SILTY SAND WITH GRAVEL (SM) -brownish grey -frozen -grindy drilling @ 2.5m	⊗	458				SM				3.0
4.0	-greyish brown below 3.5m										
4.0	END HOLE @ 3.9 -refusal - rock dust on bit	⊗	459				SM				4.0
5.0											5.0
6.0											6.0

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Transportation Engineering

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

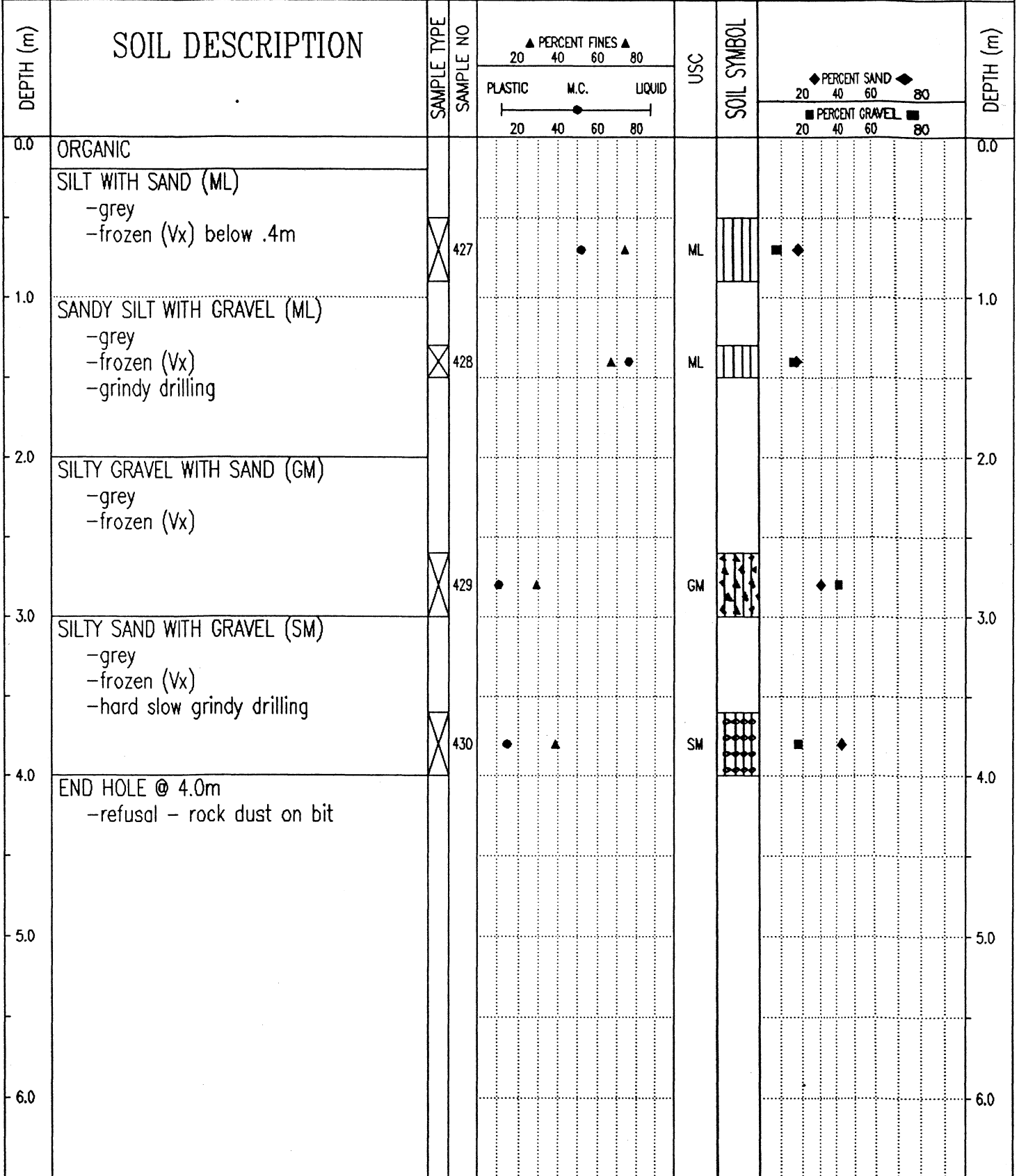
COMPLETION DEPTH: 3.9 m
COMPLETE: 99/07/05

SUB-SURFACE EXPLORATION & TESTING REPORT ALASKA HWY RE-CONSTRUCTION TEST HOLE NO: 519-563

SHAKWAK SEG 13 KM 1796-1822 A/H Project No: 092-2021 01-0329

MOBILE B-40L LOCATION: 1804+225 35M LHS ELEVATION: 0.00 (m)

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



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Transportation Engineering

LOGGED BY: S.H.

REVIEWED BY:

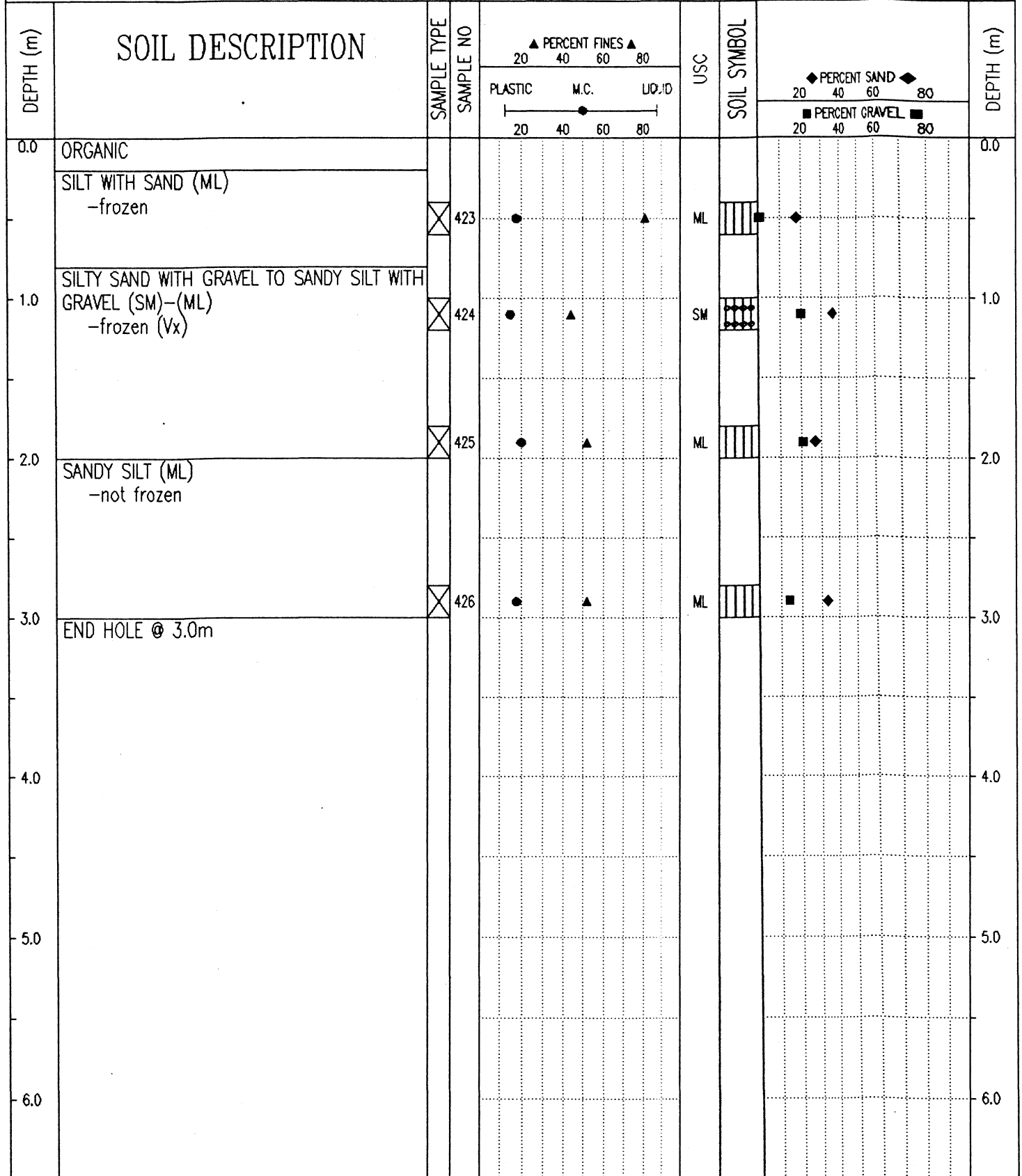
Fig. No:

COMPLETION DEPTH: 4.0 m

COMPLETE: 99/07/05

Page 1 of 1


SUBSURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 514-512
SHAKWAK PROJECT SEG 13B	KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L	LOCATION: 1804+275 CENTRELINE	ELEVATION: 0.00 (m)
SAMPLE TYPE <input 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: G.C.
REVIEWED BY:
Fig. No:

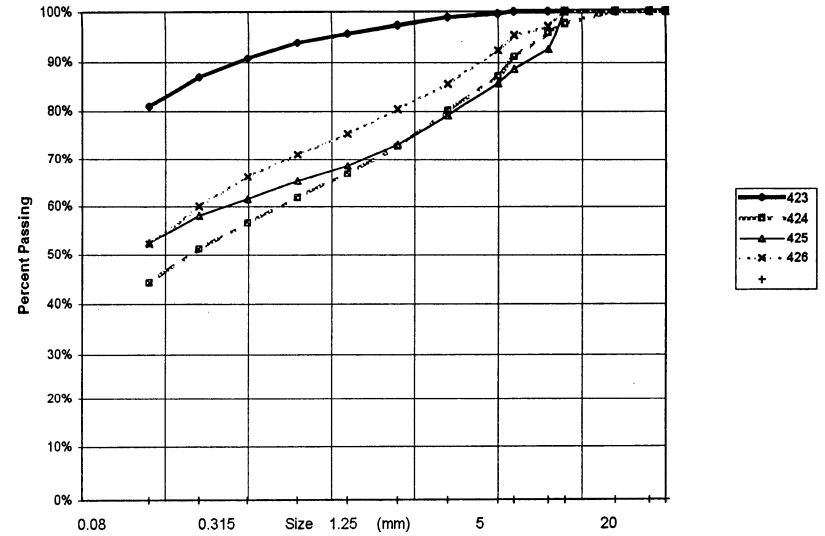
COMPLETION DEPTH: 3.0 m
COMPLETE: 99/05/07

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 13		TEST HOLE NO: 527-729						
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329						
MOBILE B40-L		LOCATION: 1804+325 30M LT		ELEVATION: 0.00 (m)						
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE										
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲		USC	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.			LIQUID	20	
0.0	ORGANIC									0.0
	ASH									
	ORGANIC -frozen (Vx)									
1.0	ICE									1.0
	ICE & ORGANIC									
2.0	SILTY SAND WITH GRAVEL (SM) -frozen -grindy drilling									2.0
3.0	END HOLE @ 3.0m	<input checked="" type="checkbox"/>	691	●	▲	SM		■	◆	3.0
4.0										4.0
5.0										5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 3.0 m COMPLETE: 99/08/18				

PROJECT NUMBER: 092-202101-0329 HOLE No.: 514-512
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: NODWELL B-40L
 HOLE LOCATION: 1804+275 CENTRELINE
 G.C.
 DATE COMP 99-05-07
 LOGGED BY:

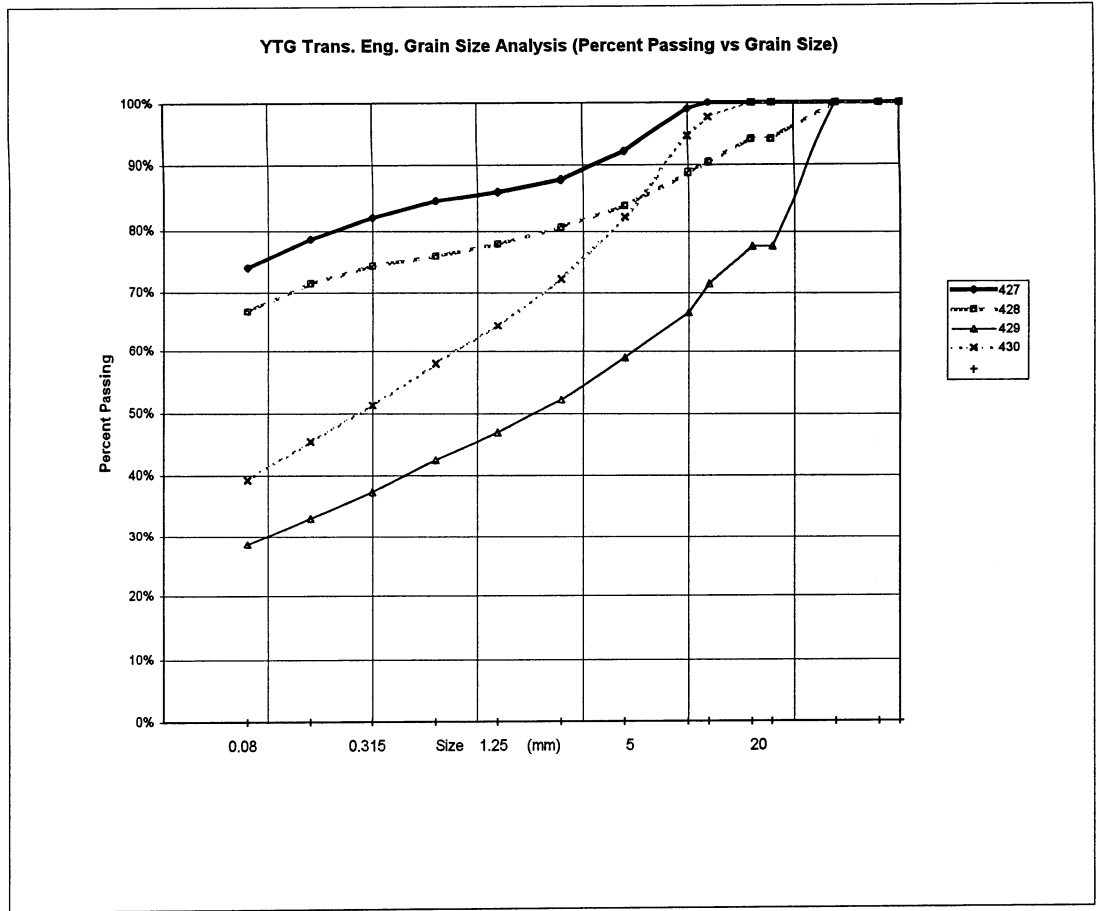
FIELD NO:	423	FIELD No:	424	FIELD No:	425	FIELD No:	426
LAB NO:	432	LAB No:	433	LAB No:	434	LAB No:	435
DEPTH:	0.4-0.6	DEPTH:	1.0-1.2	DEPTH:	1.8-2.0	DEPTH:	2.8-3.0
TYPE:	BULK	TYPE:	AUGER	TYPE:	AUGER	TYPE:	AUGER
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	98%	25.0	100%	25.0	100%
20.0	100%	20.0	96%	20.0	93%	20.0	97%
12.5	100%	12.5	91%	12.5	89%	12.5	96%
10.0	100%	10.0	87%	10.0	86%	10.0	92%
5.0	99%	5.0	80%	5.0	79%	5.0	86%
2.5	97%	2.5	73%	2.5	73%	2.5	80%
1.25	96%	1.25	67%	1.25	69%	1.25	76%
0.630	94%	0.630	62%	0.630	65%	0.630	71%
0.315	91%	0.315	57%	0.315	61%	0.315	66%
0.160	87%	0.160	51%	0.160	58%	0.160	60%
0.080	81%	0.080	44%	0.080	52%	0.080	52%
M.C.(%):	18%	M.C.(%):	15%	M.C.(%):	20%	M.C.(%):	18%
LIMITS		LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	1	% GRAVEL:	20	% GRAVEL:	21	% GRAVEL:	14
% SAND:	18	% SAND:	36	% SAND:	27	% SAND:	33
% FINES:	81	% FINES:	44	% FINES:	52	% FINES:	52
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILT WITH SAND (ML)		SILTY SAND WITH GRAVEL (SM)		SANDY SILT WITH GRAVEL (ML)		SANDY SILT (ML)	

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER:	091-202101-0329-199	HOLE No.:	519-563
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 13		
PROJECT LOCATION:	KM 1799-1822 A/H		
DRILL UNIT:	B-40-L Nodwell		
HOLE LOCATION:	1804+225 35M LT	DATE COMP	99-07-05
LOGGED BY:	S.H.		

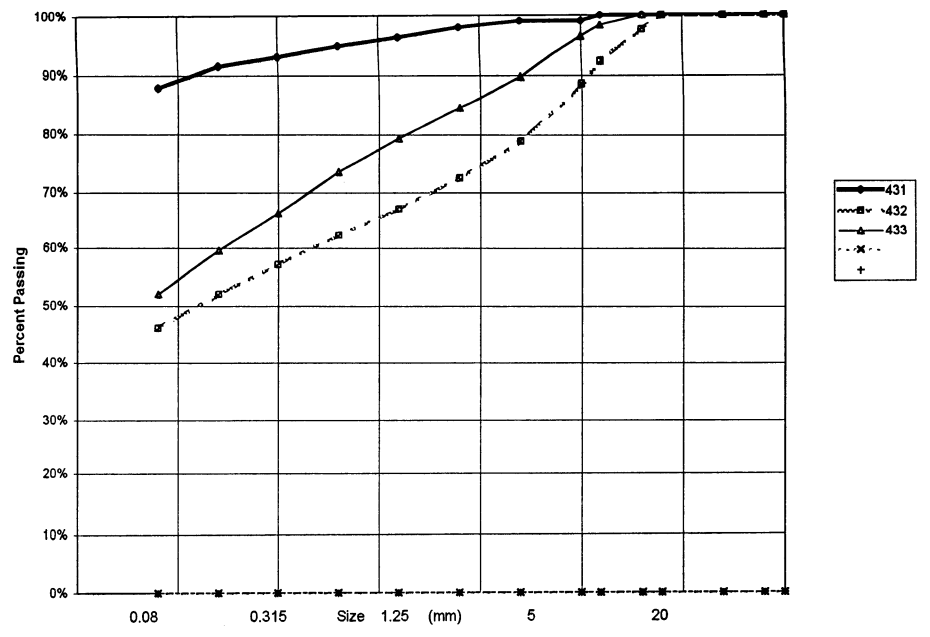
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LAB NO: 526		LAB No. 527		LAB No: 528		LAB No: 529	
DEPTH: 0.5-0.9		DEPTH 1.3-1.5		DEPTH: 2.6-3.0		DEPTH: 3.6-4.0	
TYPE: AUGER		TYPE AUGER		TYPE: AUGER		TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	94%	25.0	78%	25.0	100%
20.0	100%	20.0	94%	20.0	78%	20.0	100%
12.5	100%	12.5	90%	12.5	71%	12.5	97%
10.0	99%	10.0	89%	10.0	67%	10.0	94%
5.0	92%	5.0	84%	5.0	59%	5.0	82%
2.5	88%	2.5	81%	2.5	52%	2.5	72%
1.25	86%	1.25	78%	1.25	47%	1.25	64%
0.630	85%	0.630	76%	0.630	42%	0.630	58%
0.315	82%	0.315	74%	0.315	37%	0.315	51%
0.160	79%	0.160	71%	0.160	33%	0.160	45%
0.080	74%	0.080	67%	0.080	29%	0.080	39%
M.C.(%): 52%		M.C.(%): 76%		M.C.(%): 11%		M.C.(%): 15%	
LIMITS		LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	8	% GRAVEL:	16	% GRAVEL:	41	% GRAVEL:	18
% SAND:	18	% SAND:	17	% SAND:	30	% SAND:	43
% FINES:	74	% FINES:	67	% FINES:	29	% FINES:	39
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILT WITH SAND (ML)		SANDY SILT WITH GRAVEL (ML)		SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)	



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-564
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1804+150 30M LT
 LOGGED BY: S.H. DATE COMP 99-07-05

FIELD NO: 431		FIELD No. 432		FIELD No: 433	
LAB NO: 530		LAB No. 531		LAB No: 532	
DEPTH: 1.3-1.5		DEPTH 2.4-2.6		DEPTH: 4.0-4.2	
TYPE: AUGER		TYPE AUGER		TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%
20.0	100%	20.0	97%	20.0	100%
12.5	100%	12.5	92%	12.5	98%
10.0	99%	10.0	89%	10.0	96%
5.0	99%	5.0	79%	5.0	90%
2.5	98%	2.5	72%	2.5	85%
1.25	96%	1.25	67%	1.25	79%
0.630	95%	0.630	62%	0.630	74%
0.315	93%	0.315	57%	0.315	66%
0.160	91%	0.160	52%	0.160	60%
0.080	88%	0.080	46%	0.080	52%
M.C.(%):	105%	M.C.(%):	17%	M.C.(%):	19%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	1	% GRAVEL:	21	% GRAVEL:	10
% SAND:	11	% SAND:	33	% SAND:	38
% FINES:	88	% FINES:	46	% FINES:	52
CLASSIFICATION:	SILT (ML)	CLASSIFICATION:	SILTY SAND WITH GRAVEL (SM)	CLASSIFICATION:	SANDY SILT (ML)

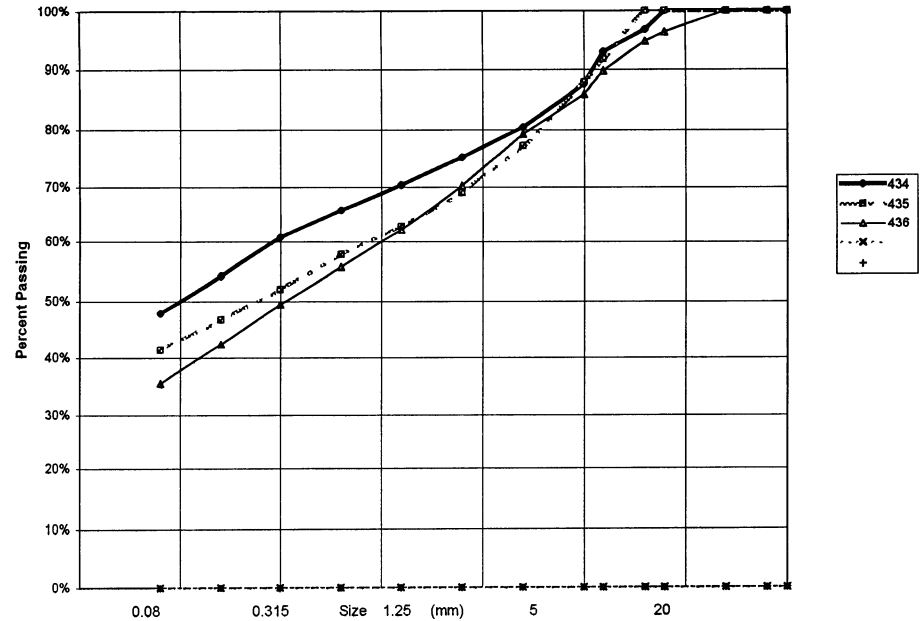
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-565
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1804+050 30M LT
 LOGGED BY: S.H. DATE COMP 99-07-05

FIELD NO:	LAB NO:	DEPTH:	TYPE:	FIELD No:	LAB No:	DEPTH:	TYPE:	FIELD No:	LAB No:	DEPTH:	TYPE:
434	533	0.6-0.8	AUGER	435	534	1.3-1.5	AUGER	436	535	2.6-3.0	AUGER
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%	100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%	80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%	50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%	25.0	96%	25.0	96%	25.0	96%
20.0	97%	20.0	100%	20.0	95%	20.0	95%	20.0	95%	20.0	95%
12.5	93%	12.5	92%	12.5	90%	12.5	90%	12.5	90%	12.5	90%
10.0	88%	10.0	88%	10.0	86%	10.0	86%	10.0	86%	10.0	86%
5.0	80%	5.0	77%	5.0	79%	5.0	79%	5.0	79%	5.0	79%
2.5	75%	2.5	69%	2.5	70%	2.5	70%	2.5	70%	2.5	70%
1.25	70%	1.25	63%	1.25	62%	1.25	62%	1.25	62%	1.25	62%
0.630	66%	0.630	58%	0.630	56%	0.630	56%	0.630	56%	0.630	56%
0.315	61%	0.315	52%	0.315	49%	0.315	49%	0.315	49%	0.315	49%
0.160	54%	0.160	47%	0.160	42%	0.160	42%	0.160	42%	0.160	42%
0.080	48%	0.080	41%	0.080	36%	0.080	36%	0.080	36%	0.080	36%
M.C.(%)	15%	M.C.(%)	17%	M.C.(%)	11%	M.C.(%)	11%	M.C.(%)	11%	M.C.(%)	11%
LIMITS		LIMITS		LIMITS		LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	20	% GRAVEL:	23	% GRAVEL:	21	% GRAVEL:	21	% GRAVEL:	21	% GRAVEL:	21
% SAND:	33	% SAND:	36	% SAND:	44	% SAND:	44	% SAND:	44	% SAND:	44
% FINES:	48	% FINES:	41	% FINES:	36	% FINES:	36	% FINES:	36	% FINES:	36
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)	

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)

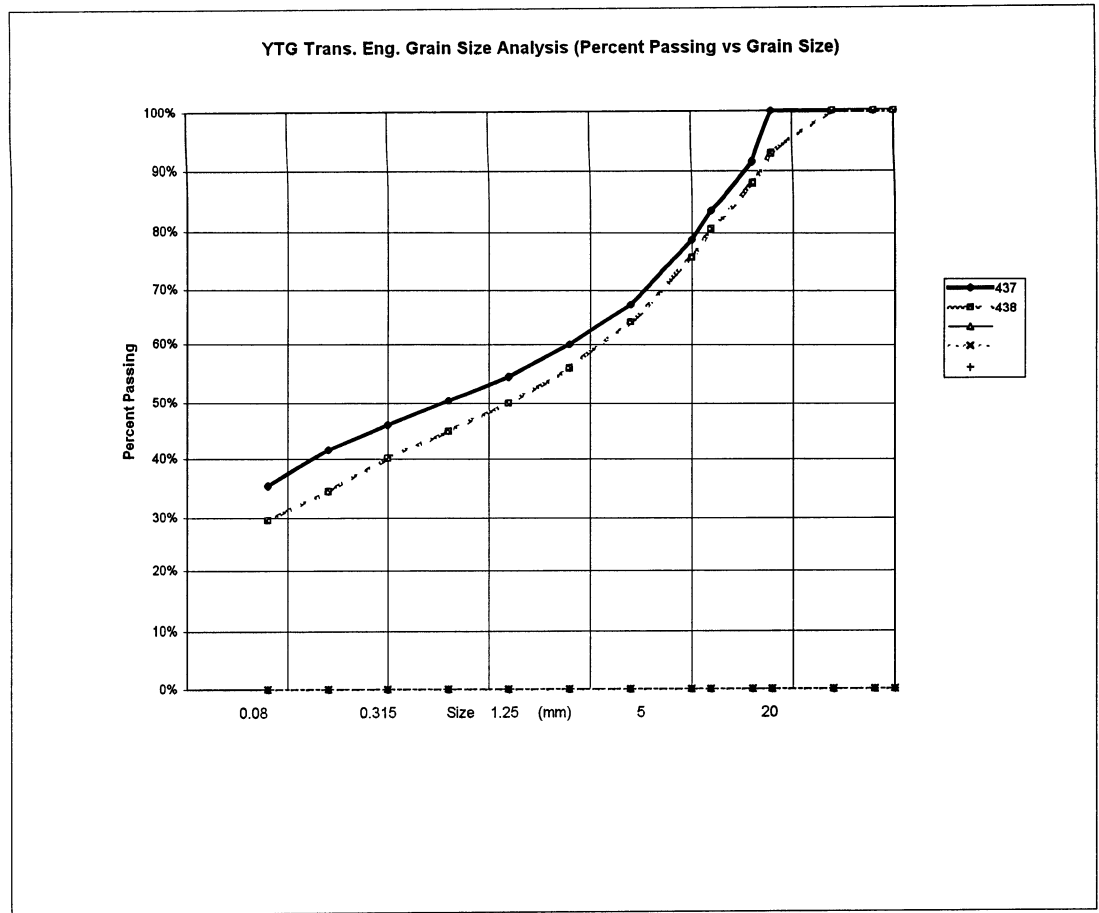


PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-566
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 AH
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1803+975 30M LT
 LOGGED BY: S.H. DATE COMP 99-07-05

FIELD NO:	437	FIELD No.	438
LAB NO:	536	LAB No.	537
DEPTH:	1.3-1.5	DEPTH	2.8-3.0
TYPE:	AUGER	TYPE	AUGER

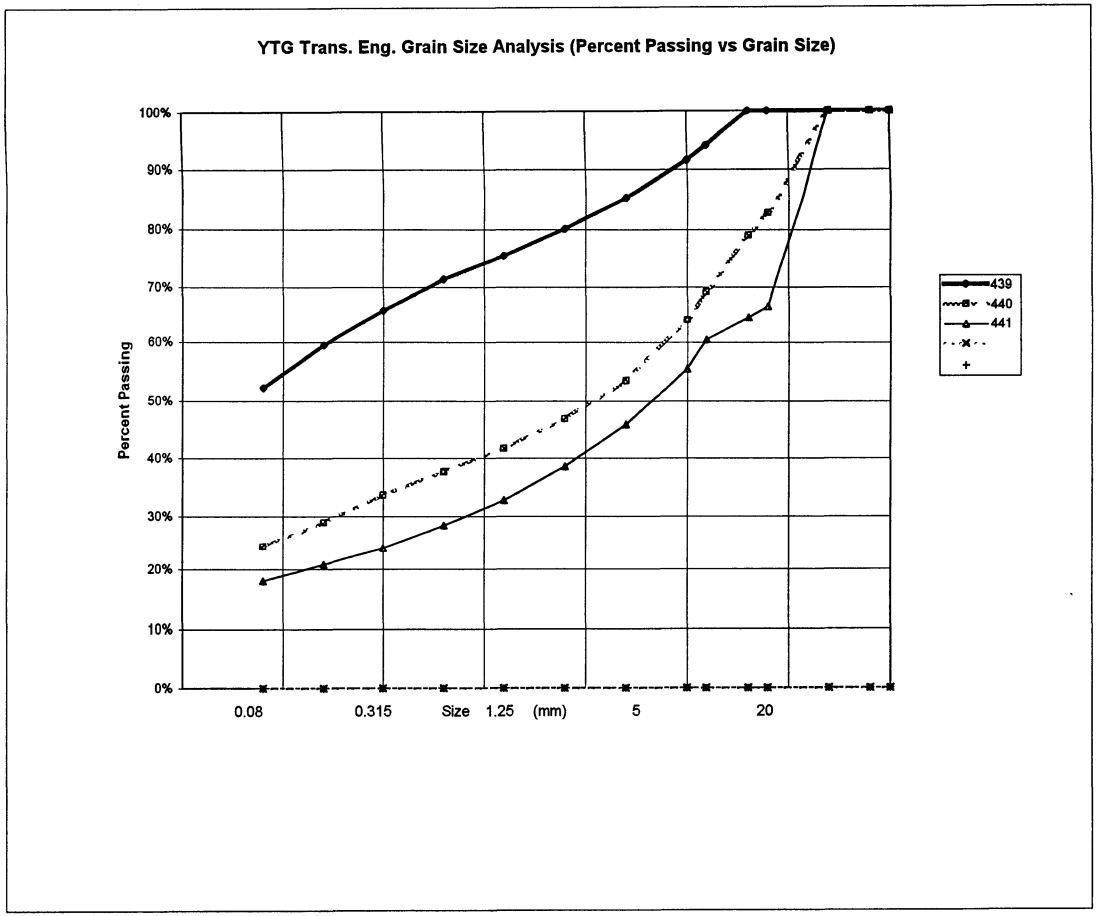
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	93%
20.0	91%	20.0	88%
12.5	84%	12.5	81%
10.0	79%	10.0	76%
5.0	67%	5.0	64%
2.5	60%	2.5	56%
1.25	55%	1.25	50%
0.630	50%	0.630	45%
0.315	46%	0.315	40%
0.160	42%	0.160	35%
0.080	36%	0.080	30%

M.C.(%):	17%	M.C.(%):	12%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	33	% GRAVEL:	36
% SAND:	32	% SAND:	35
% FINES:	36	% FINES:	30
CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)	



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-567
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1803+875 30M LT
 LOGGED BY: S.H. DATE COMP 99-07-05

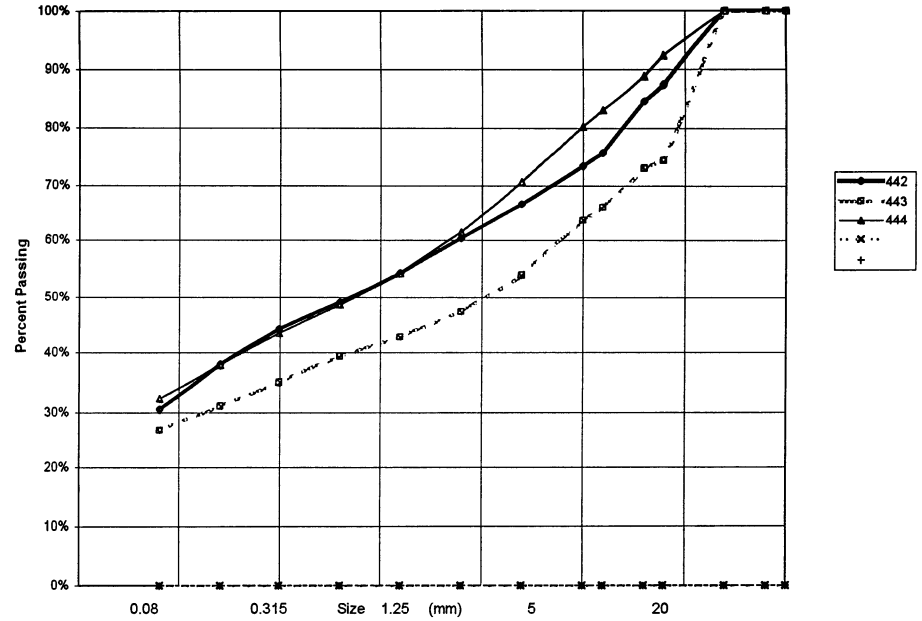
FIELD NO:	439	FIELD No:	440	FIELD No:	441
LAB NO:	538	LAB No:	539	LAB No:	540
DEPTH:	1.5-1.8	DEPTH:	2.8-3.0	DEPTH:	4.1-4.3
TYPE:	AUGER	TYPE:	AUGER	TYPE:	AUGER
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	83%	25.0	67%
20.0	100%	20.0	79%	20.0	64%
12.5	94%	12.5	69%	12.5	61%
10.0	91%	10.0	64%	10.0	56%
5.0	85%	5.0	54%	5.0	46%
2.5	80%	2.5	47%	2.5	39%
1.25	75%	1.25	42%	1.25	33%
0.630	71%	0.630	38%	0.630	28%
0.315	66%	0.315	34%	0.315	24%
0.160	59%	0.160	29%	0.160	21%
0.080	52%	0.080	24%	0.080	18%
M.C.(%):	34%	M.C.(%):	11%	M.C.(%):	11%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	15	% GRAVEL:	46	% GRAVEL:	54
% SAND:	33	% SAND:	29	% SAND:	28
% FINES:	52	% FINES:	24	% FINES:	18
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SANDY SILT (ML)		SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)	



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-568
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1803+775 30M LT
 LOGGED BY: S.H. DATE COMP 99-07-05

FIELD NO:	442	FIELD No:	443	FIELD No:	444
LAB NO:	541	LAB No:	542	LAB No:	543
DEPTH:	1.3-1.5	DEPTH:	2.8-3.0	DEPTH:	3.8-4.0
TYPE:	AUGER	TYPE:	AUGER	TYPE:	AUGER
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	88%	25.0	74%	25.0	92%
20.0	85%	20.0	73%	20.0	89%
12.5	76%	12.5	66%	12.5	83%
10.0	73%	10.0	64%	10.0	80%
5.0	67%	5.0	54%	5.0	71%
2.5	60%	2.5	47%	2.5	62%
1.25	54%	1.25	43%	1.25	54%
0.630	49%	0.630	39%	0.630	49%
0.315	44%	0.315	35%	0.315	43%
0.160	38%	0.160	31%	0.160	38%
0.080	31%	0.080	27%	0.080	32%
M.C.(%):	19%	M.C.(%):	11%	M.C.(%):	12%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	33	% GRAVEL:	46	% GRAVEL:	29
% SAND:	36	% SAND:	27	% SAND:	38
% FINES:	31	% FINES:	27	% FINES:	32
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)	

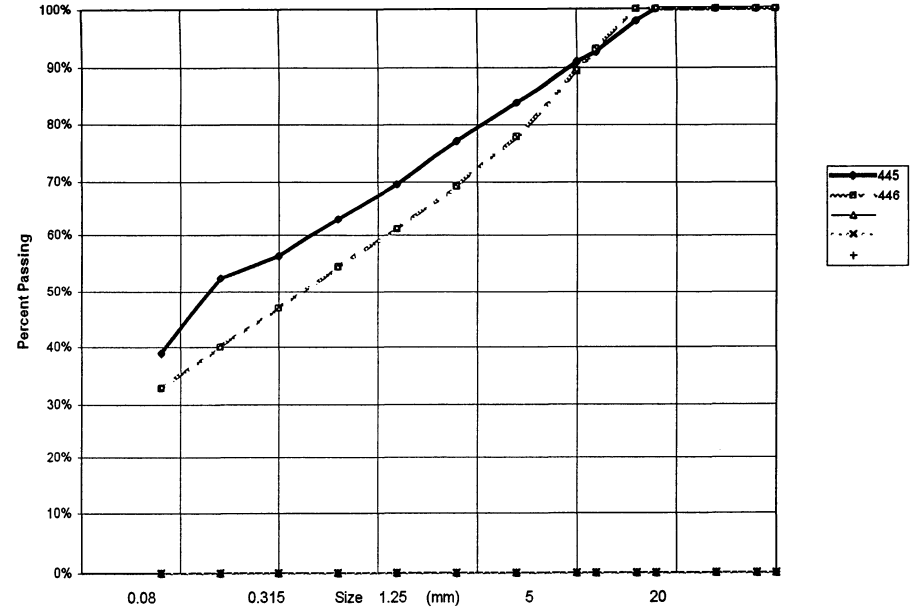
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER:	091-202101-0329-199	HOLE No.:	519-569
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 13		
PROJECT LOCATION:	KM 1799-1822 A/H		
DRILL UNIT:	B-40-L Nodwell		
HOLE LOCATION:	1803+675 30M LT		
LOGGED BY:	S.H.	DATE COMP	99-07-05

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	98%	20.0	100%
12.5	93%	12.5	93%
10.0	91%	10.0	89%
5.0	84%	5.0	78%
2.5	77%	2.5	69%
1.25	70%	1.25	61%
0.630	63%	0.630	55%
0.315	56%	0.315	47%
0.160	53%	0.160	40%
0.080	39%	0.080	33%
M.C.(%):	20%	M.C.(%):	16%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	16	% GRAVEL:	22
% SAND:	45	% SAND:	45
% FINES:	39	% FINES:	33
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)	

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-570
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1803+728 2m RT
 LOGGED BY: S.H. DATE COMP 99-07-05

FIELD NO:	447	FIELD No.	448
LAB NO:	546	LAB No.	547
DEPTH:	1.3-1.5	DEPTH	2.8-3.0
TYPE:	AUGER	TYPE	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	93%
20.0	100%	20.0	90%
12.5	100%	12.5	81%
10.0	99%	10.0	78%
5.0	97%	5.0	67%
2.5	95%	2.5	57%
1.25	92%	1.25	50%
0.630	90%	0.630	44%
0.315	87%	0.315	38%
0.160	83%	0.160	33%
0.080	78%	0.080	28%

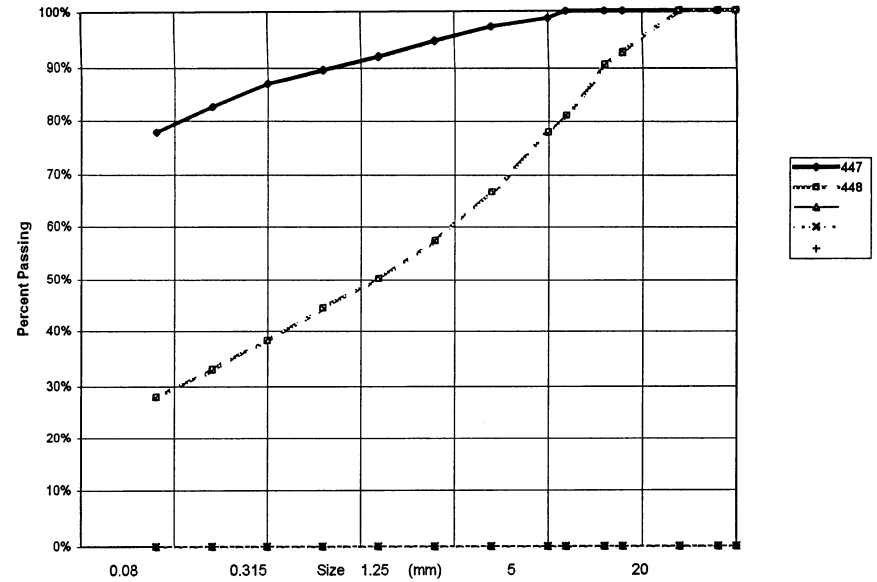
M.C.(%): 43% M.C.(%): 11%

LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0

% GRAVEL:	3	% GRAVEL:	33
% SAND:	19	% SAND:	39
% FINES:	78	% FINES:	28

CLASSIFICATION: SILT WITH SAND (ML) CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-571
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1803+825 2m RT
 LOGGED BY: S.H. DATE COMP 99-07-05

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	98%
12.5	94%	12.5	94%
10.0	92%	10.0	90%
5.0	89%	5.0	79%
2.5	86%	2.5	70%
1.25	83%	1.25	62%
0.630	80%	0.630	56%
0.315	78%	0.315	50%
0.160	73%	0.160	43%
0.080	67%	0.080	37%

FIELD NO: 449	FIELD No. 450
LAB NO: 548	LAB No. 549
DEPTH: 1.3-1.5	DEPTH 3.9-4.1
TYPE: AUGER	TYPE AUGER

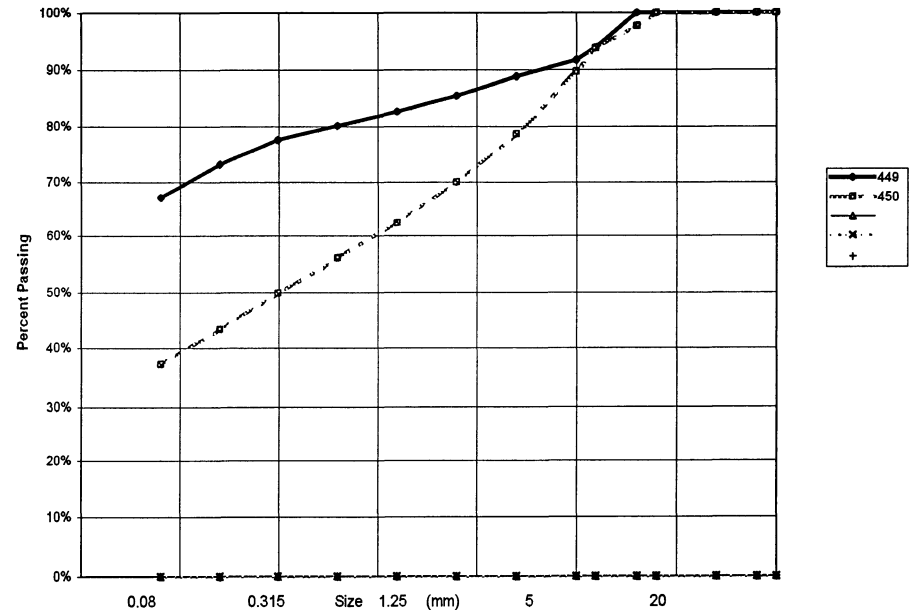
M.C.(%): 85%	M.C.(%): 14%
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LIMITS	LIMITS
LIQUID: 0.0	LIQUID: 0.0
PLASTIC: 0.0	PLASTIC: 0.0
P.I.: 0.0	P.I.: 0.0

% GRAVEL: 11	% GRAVEL: 21
% SAND: 22	% SAND: 42
% FINES: 67	% FINES: 37

CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)
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YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



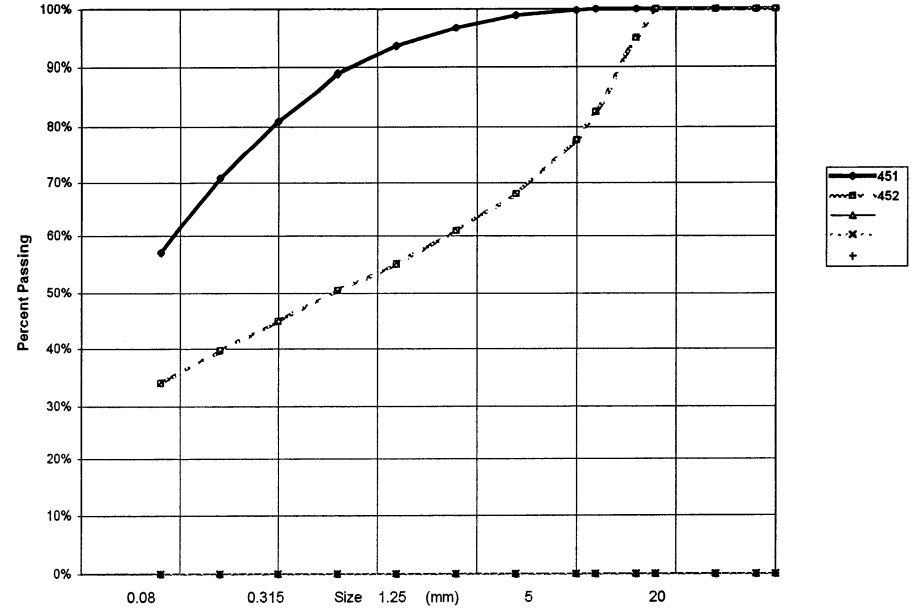
PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-572
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1803+925 2m RT
 LOGGED BY: S.H. DATE COMP 99-07-05

FIELD NO:	451	FIELD No.	452
LAB NO:	550	LAB No.	551
DEPTH:	1.3-1.6	DEPTH	2.8-3.0
TYPE:	AUGER	TYPE	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	95%
12.5	100%	12.5	83%
10.0	100%	10.0	78%
5.0	99%	5.0	68%
2.5	97%	2.5	61%
1.25	93%	1.25	55%
0.630	89%	0.630	50%
0.315	81%	0.315	45%
0.160	71%	0.160	40%
0.080	57%	0.080	34%

M.C.(%)	35%	M.C.(%)	13%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	1	% GRAVEL:	32
% SAND:	42	% SAND:	34
% FINES:	57	% FINES:	34
CLASSIFICATION:	SANDY SILT (ML)	CLASSIFICATION:	SILTY SAND WITH GRAVEL (SM)

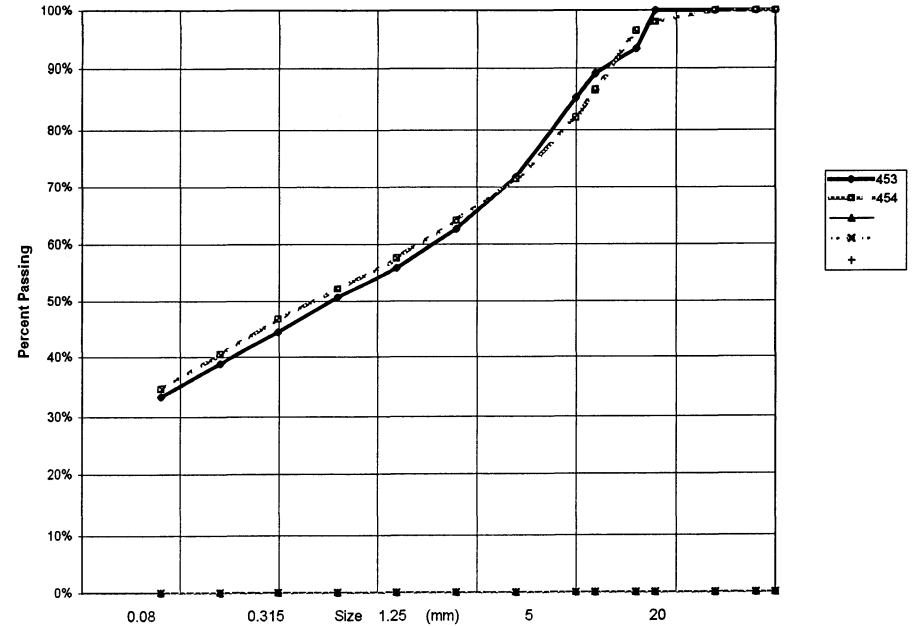
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-573
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1804+025 2M RT
 LOGGED BY: S.H. DATE COMP 99-07-05

=====		=====	
FIELD NO: 453	FIELD No. 454		
LAB NO: 552	LAB No. 553		
DEPTH: 1.3-1.5	DEPTH 2.8-3.0		
TYPE: AUGER	TYPE AUGER		
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	98%
20.0	93%	20.0	96%
12.5	89%	12.5	87%
10.0	85%	10.0	82%
5.0	72%	5.0	71%
2.5	63%	2.5	64%
1.25	56%	1.25	58%
0.630	51%	0.630	52%
0.315	45%	0.315	47%
0.160	39%	0.160	41%
0.080	33%	0.080	35%
M.C.(%): 27%	M.C.(%): 13%		
LIMITS	LIMITS		
LIQUID: 0.0	LIQUID: 0.0		
PLASTIC: 0.0	PLASTIC: 0.0		
P.I.: 0.0	P.I.: 0.0		
% GRAVEL: 28	% GRAVEL: 29		
% SAND: 39	% SAND: 37		
% FINES: 33	% FINES: 35		
CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)		

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-574
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1804+125 2M RT
 LOGGED BY: S.H. DATE COMP 99-07-05

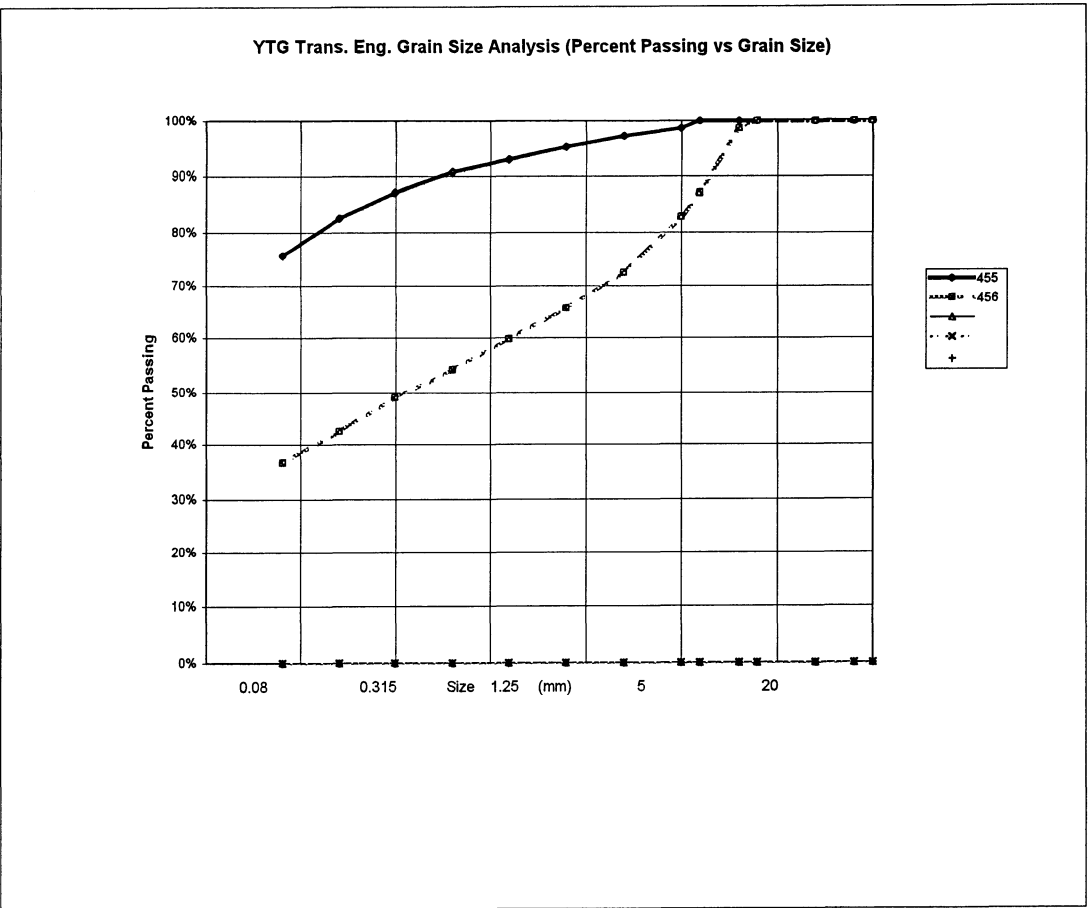
FIELD NO: 455	FIELD No. 456
LAB NO: 554	LAB No. 555
DEPTH: 0.8-1.0	DEPTH 2.6-2.8
TYPE: AUGER	TYPE AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	99%
12.5	100%	12.5	87%
10.0	99%	10.0	83%
5.0	97%	5.0	72%
2.5	95%	2.5	66%
1.25	93%	1.25	60%
0.630	91%	0.630	54%
0.315	87%	0.315	49%
0.160	83%	0.160	43%
0.080	76%	0.080	37%

M.C.(%): 73%	M.C.(%): 17%
LIMITS	LIMITS
LIQUID: 0.0	LIQUID: 0.0
PLASTIC: 0.0	PLASTIC: 0.0
P.I.: 0.0	P.I.: 0.0

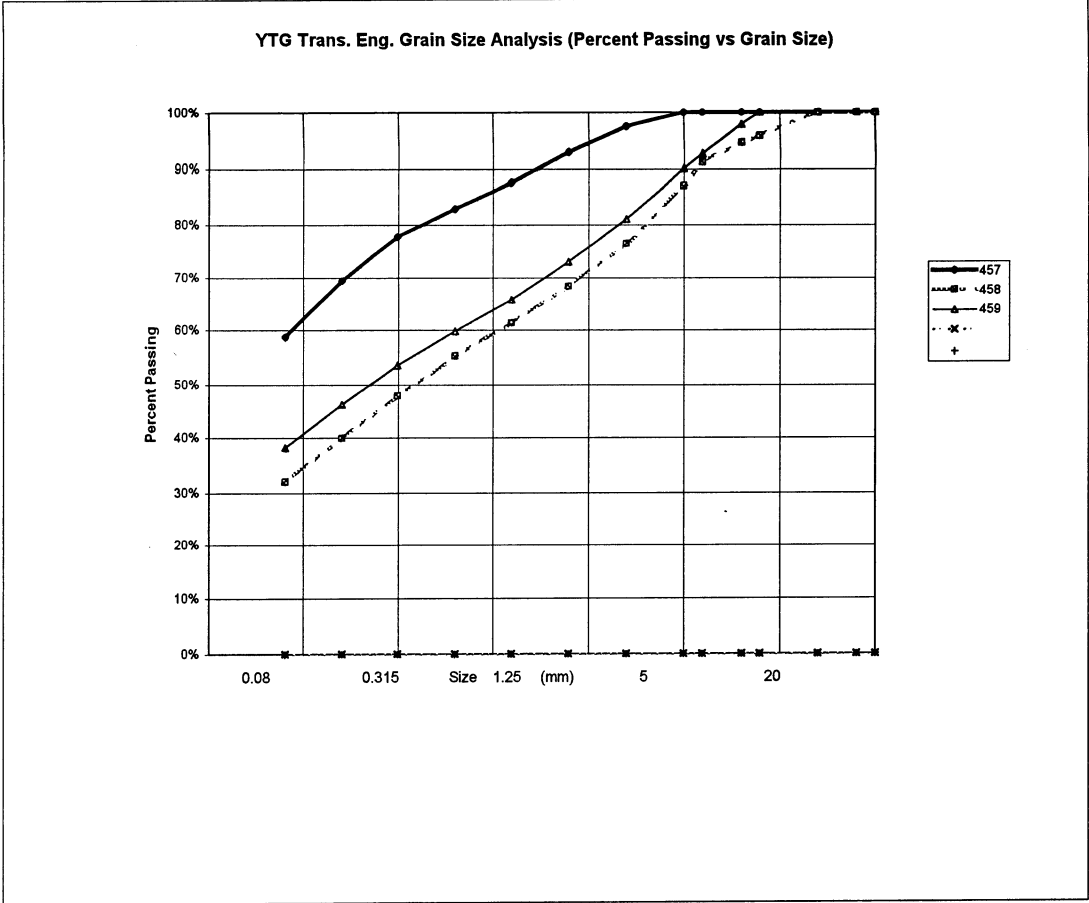
% GRAVEL: 3	% GRAVEL: 28
% SAND: 22	% SAND: 36
% FINES: 76	% FINES: 37

CLASSIFICATION: SILT WITH SAND (ML)	CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)
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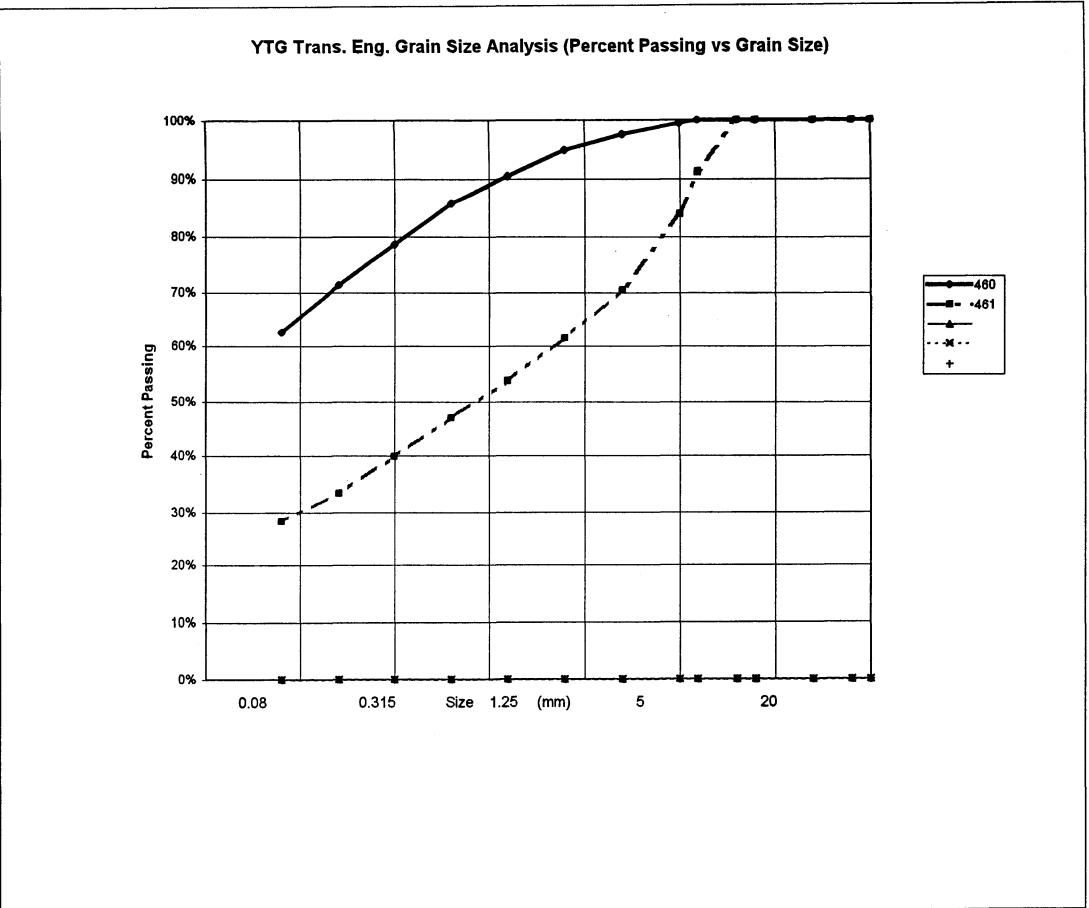
PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-575
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1804+225 2M RT
 LOGGED BY: S.H. DATE COMP 99-07-05

FIELD NO:	LAB NO:	DEPTH:	TYPE:	FIELD No.	LAB No.	DEPTH:	TYPE:	FIELD No.	LAB No.	DEPTH:	TYPE:
457	556	1.3-1.5	AUGER	458	557	2.8-3.0	AUGER	459	558	3.7-3.9	AUGER
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%	100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%	80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%	50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	96%	25.0	96%	25.0	100%	25.0	100%	25.0	100%
20.0	100%	20.0	95%	20.0	95%	20.0	98%	20.0	98%	20.0	98%
12.5	100%	12.5	91%	12.5	91%	12.5	93%	12.5	93%	12.5	93%
10.0	100%	10.0	87%	10.0	87%	10.0	90%	10.0	90%	10.0	90%
5.0	97%	5.0	77%	5.0	77%	5.0	81%	5.0	81%	5.0	81%
2.5	93%	2.5	68%	2.5	68%	2.5	73%	2.5	73%	2.5	73%
1.25	88%	1.25	61%	1.25	61%	1.25	66%	1.25	66%	1.25	66%
0.630	83%	0.630	55%	0.630	55%	0.630	60%	0.630	60%	0.630	60%
0.315	78%	0.315	48%	0.315	48%	0.315	54%	0.315	54%	0.315	54%
0.160	69%	0.160	40%	0.160	40%	0.160	46%	0.160	46%	0.160	46%
0.080	59%	0.080	32%	0.080	32%	0.080	38%	0.080	38%	0.080	38%
M.C.(%):	85%	M.C.(%):	13%	M.C.(%):	15%	M.C.(%):		M.C.(%):		M.C.(%):	
LIMITS		LIMITS		LIMITS		LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	3	% GRAVEL:	23	% GRAVEL:	19	% GRAVEL:		% GRAVEL:		% GRAVEL:	
% SAND:	39	% SAND:	44	% SAND:	43	% SAND:		% SAND:		% SAND:	
% FINES:	59	% FINES:	32	% FINES:	38	% FINES:		% FINES:		% FINES:	
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SANDY SILT (ML)		SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)	



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-576
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1803+625 2M RT
 LOGGED BY: S.H. DATE COMP 7/6/99

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	100%	12.5	91%
10.0	99%	10.0	84%
5.0	97%	5.0	70%
2.5	95%	2.5	61%
1.25	90%	1.25	54%
0.630	86%	0.630	47%
0.315	79%	0.315	40%
0.160	71%	0.160	33%
0.080	63%	0.080	28%
M.C.(%): 31%		M.C.(%): 15%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	3	% GRAVEL:	30
% SAND:	35	% SAND:	42
% FINES:	63	% FINES:	28
CLASSIFICATION: SANDY SILT (ML)		CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	

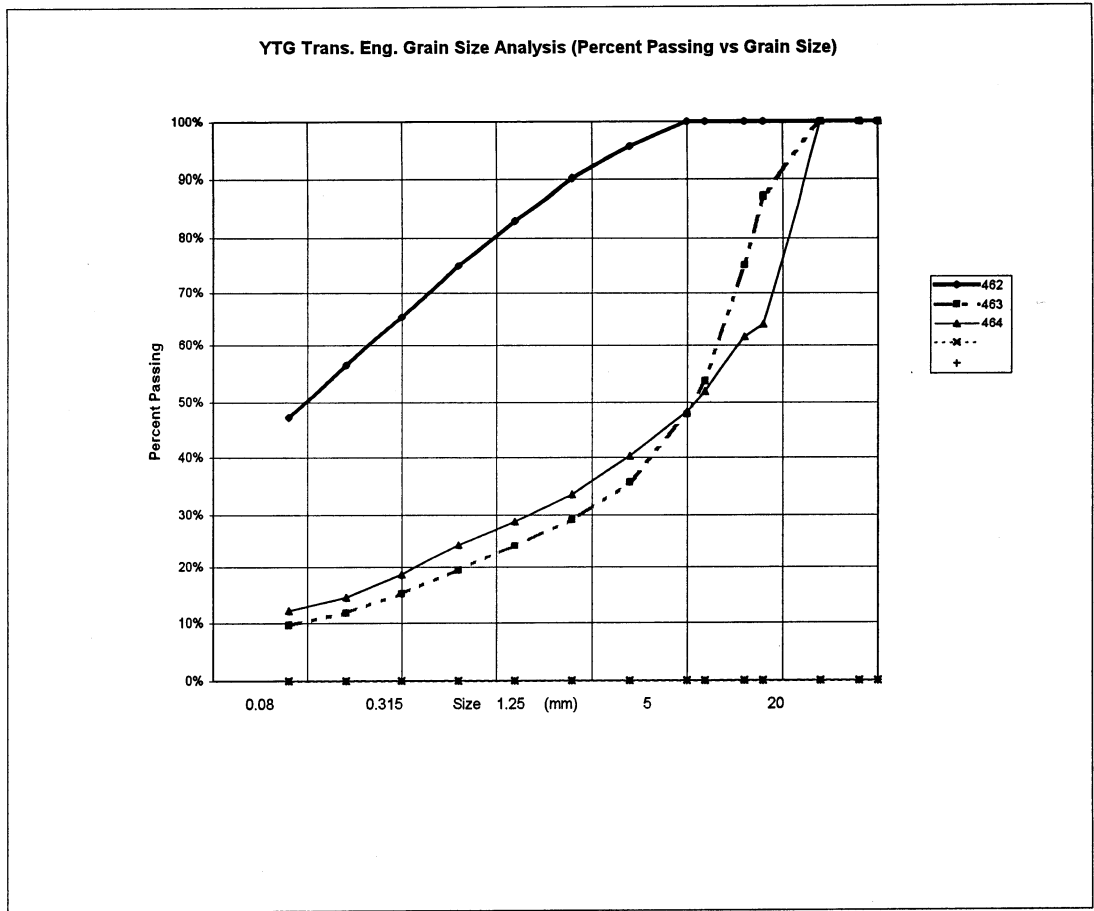


PROJECT NUMBER:	091-202101-0329-199	HOLE No.:	519-577
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 13		
PROJECT LOCATION:	KM 1799-1822 A/H		
DRILL UNIT:	B-40-L Nodwell		
HOLE LOCATION:	1803+525 2M RT	DATE COMP	7/6/99
LOGGED BY:	S.H.		

FIELD NO:	462	FIELD No.	463	FIELD No.:	464
LAB NO:	561	LAB No.	562	LAB No.:	563
DEPTH:	1.2-1.4	DEPTH	1.8-2.0	DEPTH:	1.8-2.0
TYPE:	AUGER	TYPE	AUGER	TYPE:	AUGER

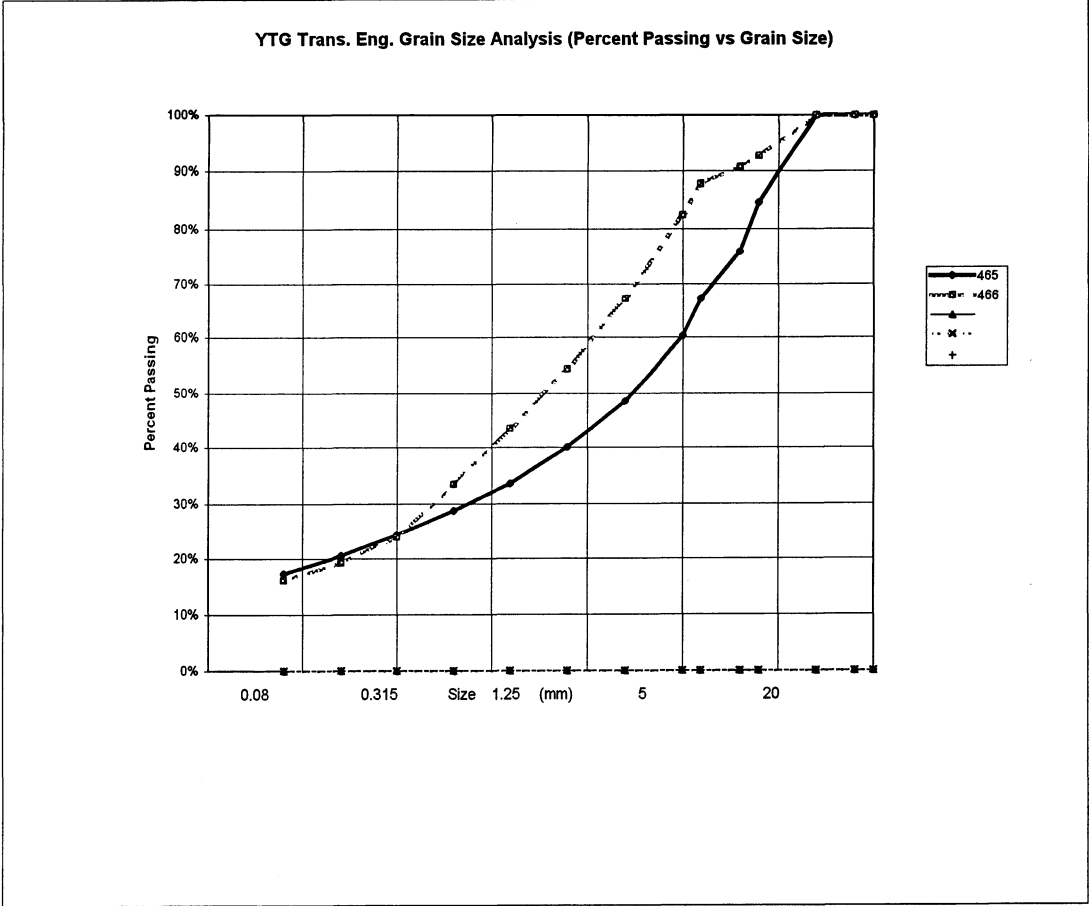
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	87%	25.0	64%
20.0	100%	20.0	75%	20.0	62%
12.5	100%	12.5	54%	12.5	52%
10.0	100%	10.0	48%	10.0	48%
5.0	95%	5.0	36%	5.0	40%
2.5	90%	2.5	29%	2.5	34%
1.25	83%	1.25	24%	1.25	29%
0.630	75%	0.630	19%	0.630	24%
0.315	65%	0.315	15%	0.315	19%
0.160	56%	0.160	12%	0.160	14%
0.080	47%	0.080	10%	0.080	12%

M.C.(%):	22%	M.C.(%):	7%	M.C.(%):	14%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	5	% GRAVEL:	64	% GRAVEL:	60
% SAND:	48	% SAND:	26	% SAND:	28
% FINES:	47	% FINES:	10	% FINES:	12
CLASSIFICATION:	SILTY SAND (SM)	CLASSIFICATION:	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)	CLASSIFICATION:	SILTY GRAVEL WITH SAND (GM)



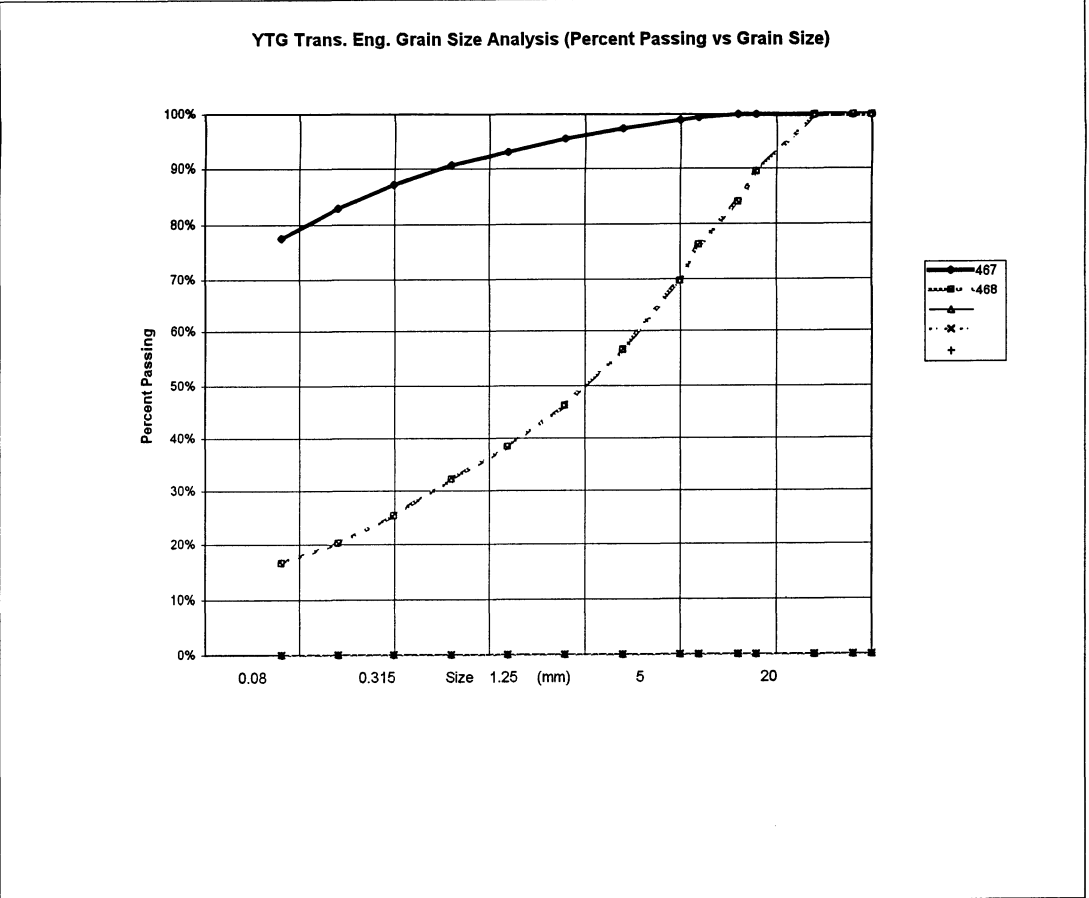
PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-578
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1803+415 CENTRELINE
 LOGGED BY: S.H. DATE COMP 99-07-06

=====		=====	
FIELD NO: 465	FIELD No. 466		
LAB NO: 564	LAB No. 565		
DEPTH: 1.8-2.0	DEPTH 3.6-3.8		
TYPE: AUGER	TYPE AUGER		
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	85%	25.0	93%
20.0	76%	20.0	91%
12.5	67%	12.5	88%
10.0	60%	10.0	82%
5.0	48%	5.0	67%
2.5	40%	2.5	54%
1.25	34%	1.25	44%
0.630	29%	0.630	33%
0.315	24%	0.315	24%
0.160	20%	0.160	19%
0.080	17%	0.080	16%
M.C.(%): 8%	M.C.(%): 11%		
LIMITS	LIMITS		
LIQUID: 0.0	LIQUID: 0.0		
PLASTIC: 0.0	PLASTIC: 0.0		
P.I.: 0.0	P.I.: 0.0		
% GRAVEL: 52	% GRAVEL: 33		
% SAND: 31	% SAND: 51		
% FINES: 17	% FINES: 16		
CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)	CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)		



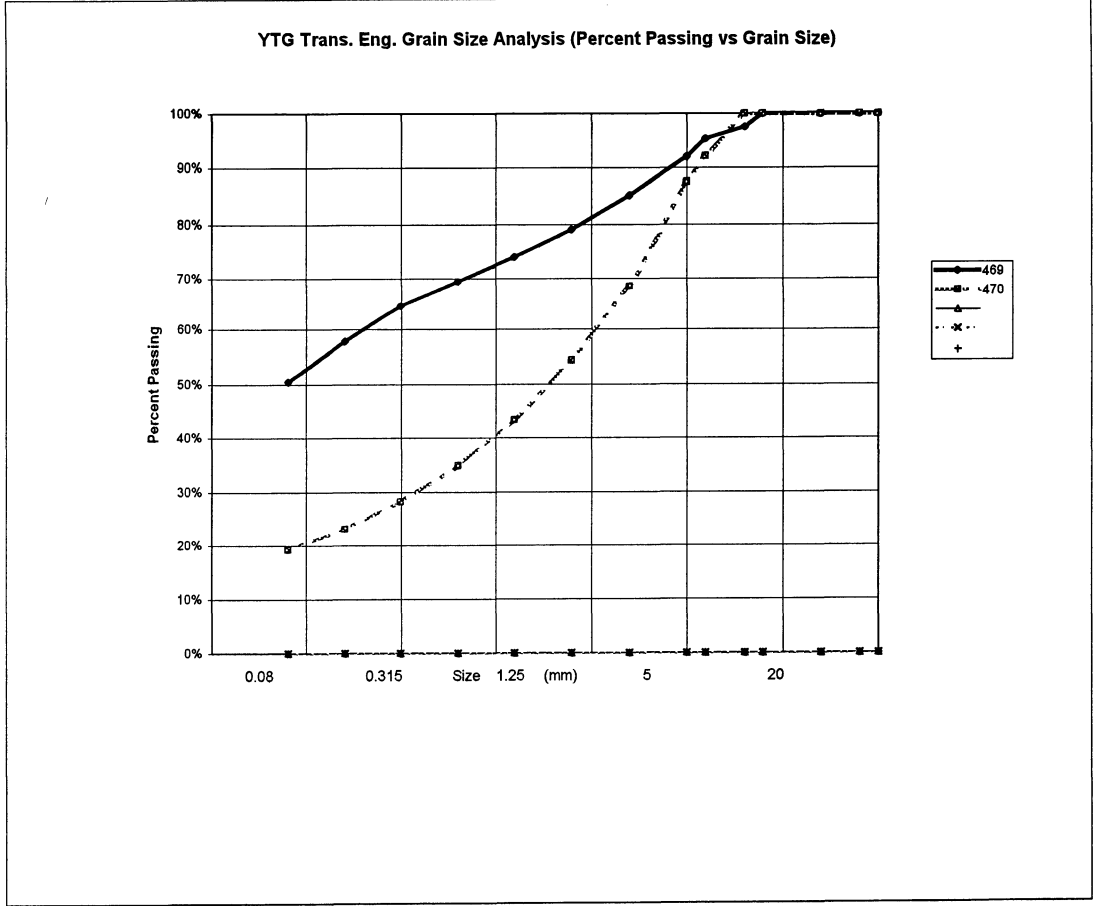
PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-579
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1803+325 2M RT
 LOGGED BY: S.H. DATE COMP 99-07-06

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	89%
20.0	100%	20.0	84%
12.5	99%	12.5	76%
10.0	99%	10.0	70%
5.0	97%	5.0	57%
2.5	95%	2.5	46%
1.25	93%	1.25	38%
0.630	91%	0.630	32%
0.315	87%	0.315	25%
0.160	83%	0.160	20%
0.080	77%	0.080	16%
M.C.(%): 42%		M.C.(%): 8%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	3	% GRAVEL:	43
% SAND:	20	% SAND:	40
% FINES:	77	% FINES:	16
CLASSIFICATION: SILT WITH SAND (ML)		CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)	



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-580
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1803+225 2M RT
 LOGGED BY: S.H. DATE COMP 99-07-06

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	97%	20.0	100%
12.5	95%	12.5	92%
10.0	92%	10.0	88%
5.0	85%	5.0	68%
2.5	79%	2.5	54%
1.25	74%	1.25	43%
0.630	69%	0.630	35%
0.315	65%	0.315	28%
0.160	58%	0.160	23%
0.080	50%	0.080	19%
M.C.(%): 21%		M.C.(%): 10%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	15	% GRAVEL:	32
% SAND:	35	% SAND:	49
% FINES:	50	% FINES:	19
CLASSIFICATION:		CLASSIFICATION:	
SANDY SILT (ML)		SILTY SAND WITH GRAVEL (SM)	



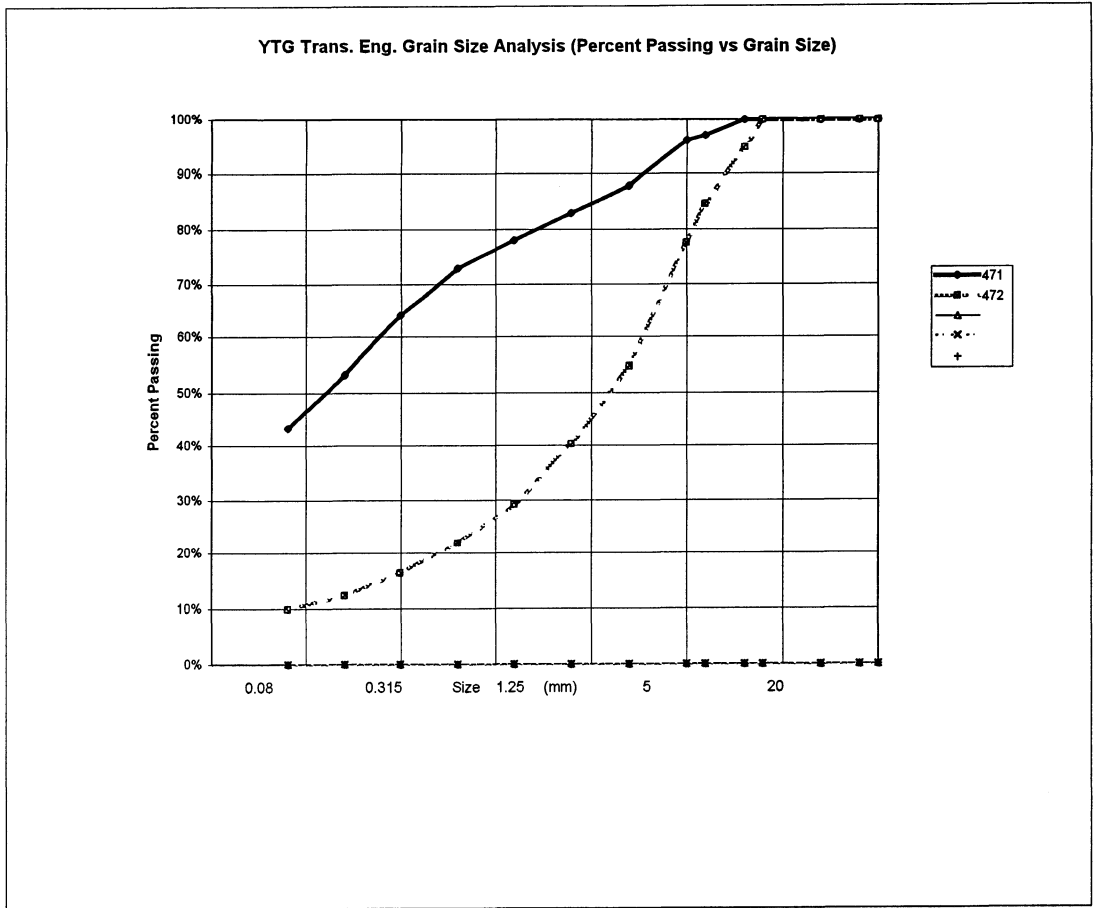
PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-581
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1803+125 2M RT
 LOGGED BY: S.H. DATE COMP 99-07-06

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	95%
12.5	97%	12.5	85%
10.0	96%	10.0	78%
5.0	88%	5.0	55%
2.5	83%	2.5	40%
1.25	78%	1.25	29%
0.630	73%	0.630	22%
0.315	64%	0.315	16%
0.160	53%	0.160	12%
0.080	43%	0.080	10%

FIELD NO: 471	FIELD No. 472
LAB NO: 570	LAB No. 571
DEPTH: 1.3-1.5	DEPTH 2.8-3.0
TYPE: AUGER	TYPE AUGER

M.C.(%): 21%	M.C.(%): 7%
LIMITS	LIMITS
LIQUID: 0.0	LIQUID: 0.0
PLASTIC: 0.0	PLASTIC: 0.0
P.I.: 0.0	P.I.: 0.0
% GRAVEL: 12	% GRAVEL: 45
% SAND: 44	% SAND: 45
% FINES: 43	% FINES: 10

CLASSIFICATION: SILTY SAND (SM)	CLASSIFICATION: POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)
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PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-582
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1803+025 2M RT
 LOGGED BY: S.H. DATE COMP 99-07-06

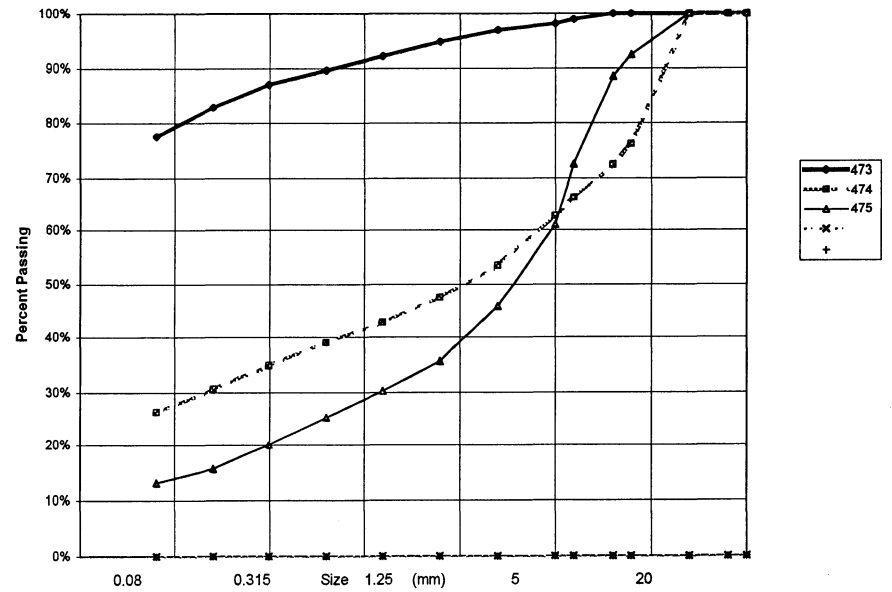
FIELD NO:	LAB NO:	DEPTH:	TYPE:	FIELD No.	LAB No.	DEPTH:	TYPE:	FIELD No.	LAB No.	DEPTH:	TYPE:
473	572	1.3-1.5	AUGER	474	573	2.4-2.6	AUGER	475	574	3.6-3.8	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	76%	25.0	92%
20.0	100%	20.0	72%	20.0	89%
12.5	99%	12.5	66%	12.5	72%
10.0	98%	10.0	63%	10.0	61%
5.0	97%	5.0	53%	5.0	46%
2.5	95%	2.5	47%	2.5	35%
1.25	92%	1.25	43%	1.25	30%
0.630	90%	0.630	39%	0.630	25%
0.315	87%	0.315	35%	0.315	20%
0.160	83%	0.160	31%	0.160	16%
0.080	78%	0.080	26%	0.080	13%

M.C. (%):	49%	M.C. (%):	13%	M.C. (%):	9%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	3	% GRAVEL:	47	% GRAVEL:	54
% SAND:	19	% SAND:	27	% SAND:	33
% FINES:	78	% FINES:	26	% FINES:	13

CLASSIFICATION:	SILT WITH SAND (ML)	CLASSIFICATION:	SILTY GRAVEL WITH SAND (GM)	CLASSIFICATION:	SILTY GRAVEL WITH SAND (GM)
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YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)

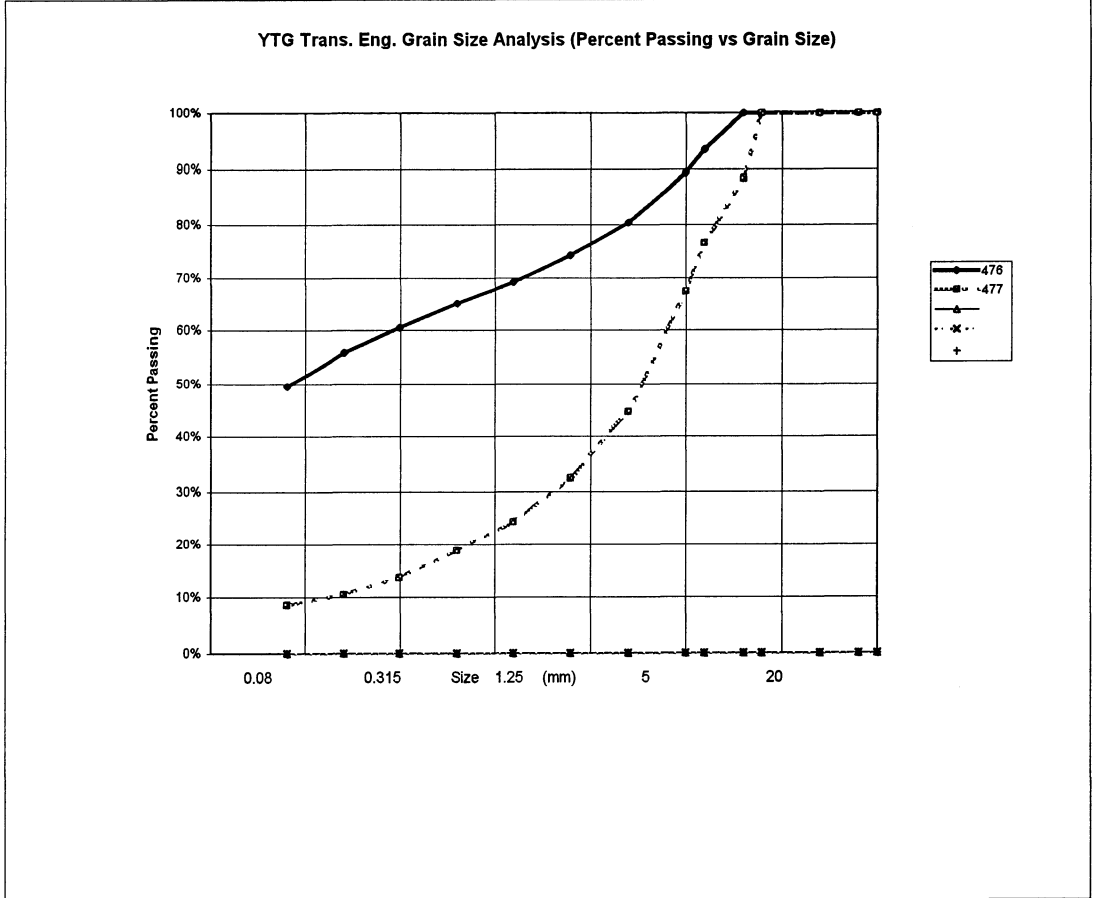


PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-583
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1802+925 2M RT
 LOGGED BY: S.H. DATE COMP 99-07-06

FIELD NO:	476	FIELD No.	477
LAB NO:	575	LAB No.	576
DEPTH:	1.8-2.0	DEPTH	2.8-3.0
TYPE:	AUGER	TYPE	AUGER

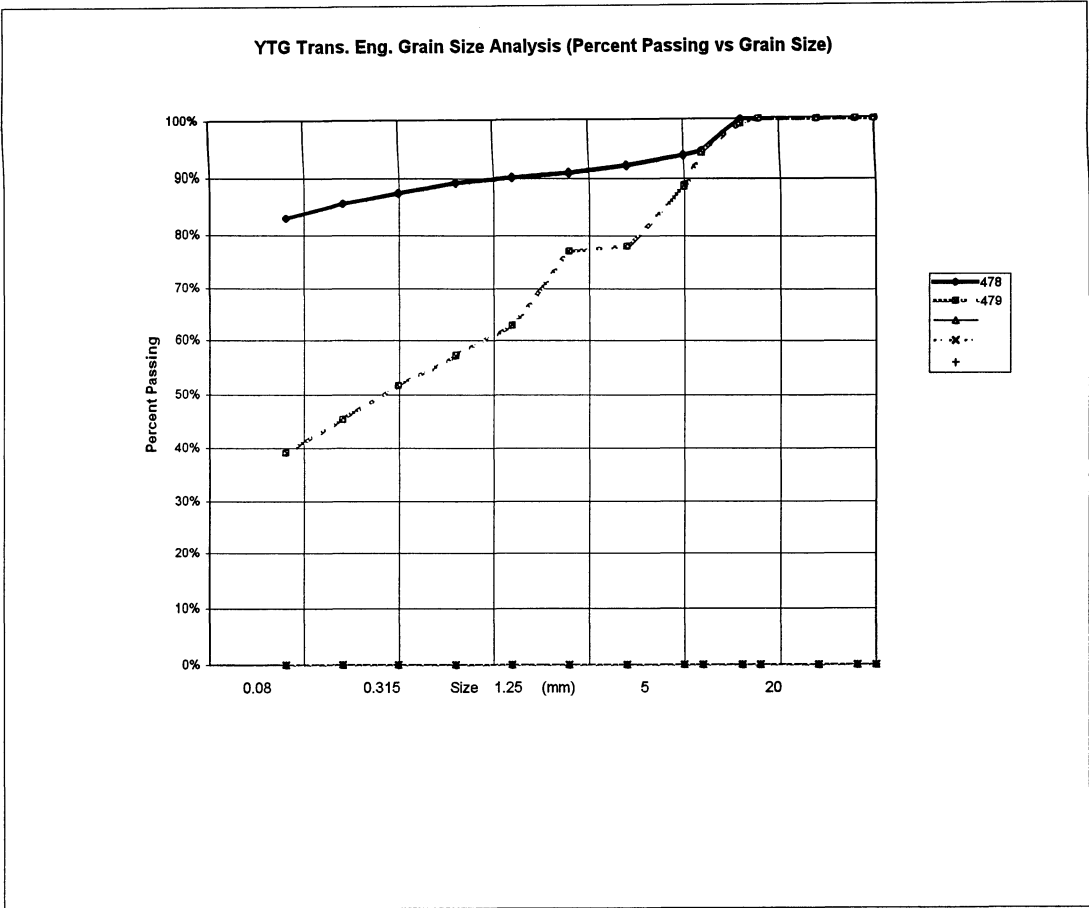
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	89%
12.5	93%	12.5	77%
10.0	89%	10.0	67%
5.0	80%	5.0	45%
2.5	74%	2.5	32%
1.25	69%	1.25	24%
0.630	65%	0.630	19%
0.315	60%	0.315	14%
0.160	56%	0.160	10%
0.080	49%	0.080	9%

M.C.(%):	21%	M.C.(%):	6%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	20	% GRAVEL:	55
% SAND:	31	% SAND:	36
% FINES:	49	% FINES:	9
CLASSIFICATION:	SILTY SAND WITH GRAVEL (SM)	CLASSIFICATION:	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-584
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1802+825 2M RT
 LOGGED BY: S.H. DATE COMP 99-07-06

FIELD NO: 478		FIELD No. 479	
LAB NO: 577		LAB No. 578	
DEPTH: 1.6-1.8		DEPTH 2.8-3.0	
TYPE: AUGER		TYPE AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	99%
12.5	94%	12.5	94%
10.0	93%	10.0	89%
5.0	92%	5.0	78%
2.5	91%	2.5	77%
1.25	90%	1.25	63%
0.630	89%	0.630	57%
0.315	88%	0.315	52%
0.160	86%	0.160	45%
0.080	83%	0.080	39%
M.C.(%):	111%	M.C.(%):	14%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	8	% GRAVEL:	22
% SAND:	9	% SAND:	39
% FINES:	83	% FINES:	39
CLASSIFICATION:	SILT WITH SAND (ML)	CLASSIFICATION:	SILTY SAND WITH GRAVEL (SM)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-585
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1802+725 2M RT
 LOGGED BY: S.H. DATE COMP 99-07-06

FIELD NO: 480
 LAB NO: 579
 DEPTH: 1.8-2.0
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	100%
20.0	100%
12.5	100%
10.0	100%
5.0	99%
2.5	98%
1.25	97%
0.630	96%
0.315	94%
0.160	91%
0.080	85%

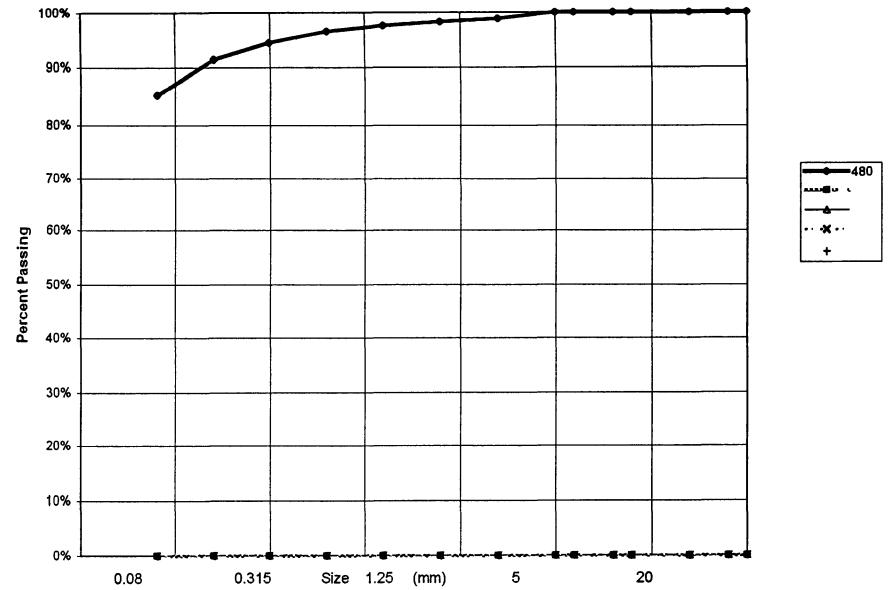
M.C.(%): 43%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 1
 % SAND: 13
 % FINES: 85

CLASSIFICATION:
 SILT (ML)

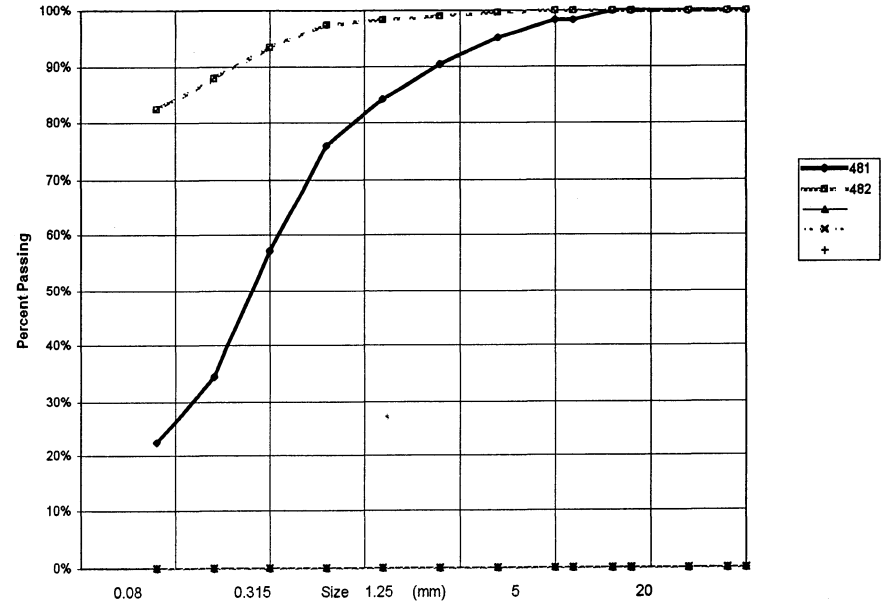
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-586
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1802+618 2M RT
 LOGGED BY: S.H. DATE COMP 99-07-06

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	98%	12.5	100%
10.0	98%	10.0	100%
5.0	95%	5.0	100%
2.5	90%	2.5	99%
1.25	84%	1.25	98%
0.630	76%	0.630	97%
0.315	57%	0.315	93%
0.160	34%	0.160	88%
0.080	22%	0.080	82%
M.C.(%):	22%	M.C.(%):	35%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	5	% GRAVEL:	0
% SAND:	73	% SAND:	17
% FINES:	22	% FINES:	82
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND (SM)		SILT WITH SAND (ML)	

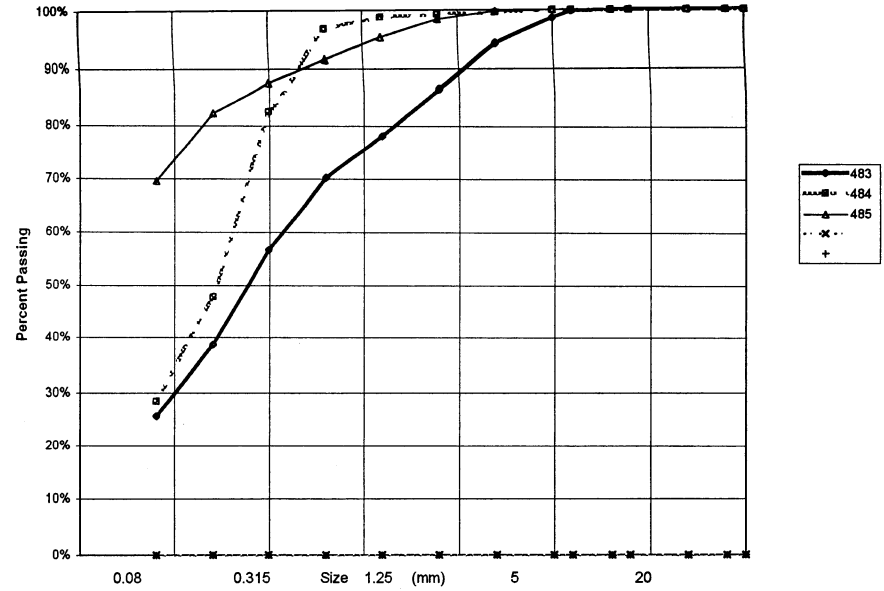
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-587
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1802+519 3M RT
 LOGGED BY: S.H. DATE COMP 99-07-06

FIELD NO:	483	FIELD No:	484	FIELD No:	485
LAB NO:	582	LAB No:	583	LAB No:	584
DEPTH:	1.3-1.5	DEPTH:	1.8-2.0	DEPTH:	2.8-3.0
TYPE:	AUGER	TYPE:	AUGER	TYPE:	AUGER
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%
20.0	100%	20.0	100%	20.0	100%
12.5	100%	12.5	100%	12.5	100%
10.0	98%	10.0	100%	10.0	100%
5.0	94%	5.0	100%	5.0	100%
2.5	87%	2.5	99%	2.5	98%
1.25	78%	1.25	99%	1.25	95%
0.630	70%	0.630	97%	0.630	91%
0.315	57%	0.315	83%	0.315	88%
0.160	39%	0.160	48%	0.160	82%
0.080	26%	0.080	29%	0.080	69%
M.C.(%):	18%	M.C.(%):	22%	M.C.(%):	33%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	6	% GRAVEL:	0	% GRAVEL:	0
% SAND:	68	% SAND:	71	% SAND:	30
% FINES:	26	% FINES:	29	% FINES:	69
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND (SM)		SILTY SAND (SM)		SANDY SILT (ML)	

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 082-202101-0329 HOLE No.: 527-729
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1804+325 30M LT
 LOGGED BY: G.C. DATE COMP 99-08-15

FIELD NO: 691
 LAB NO: 791
 DEPTH: 2.75-3.0
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	94%
20.0	92%
12.5	84%
10.0	82%
5.0	73%
2.5	66%
1.25	60%
0.630	55%
0.315	47%
0.160	40%
0.080	34%

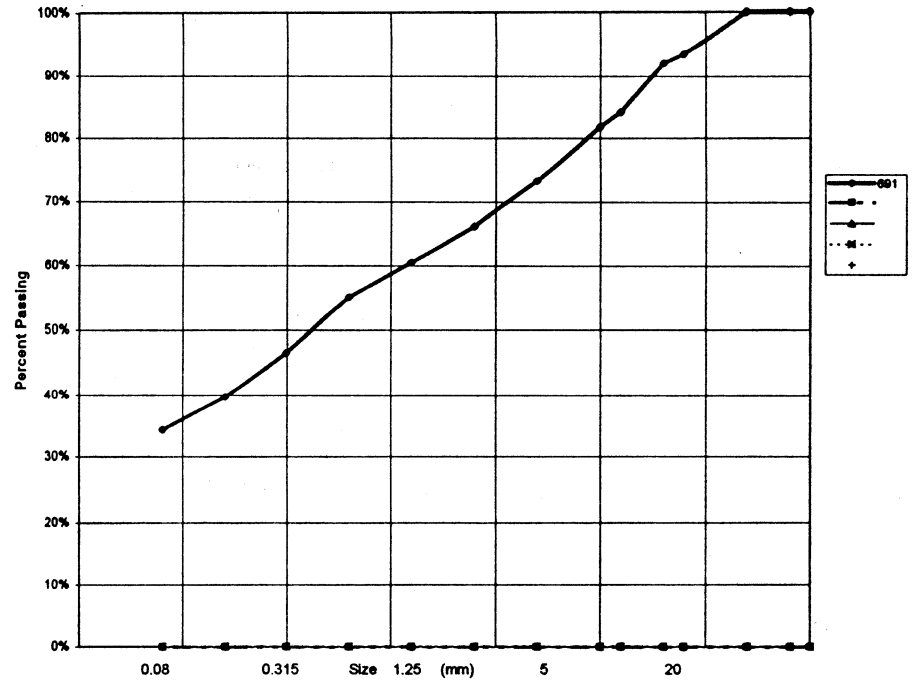
M.C.(%): 16%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 27
 % SAND: 39
 % FINES: 34

CLASSIFICATION:
 SILTY SAND WITH GRAVEL (SM)

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)

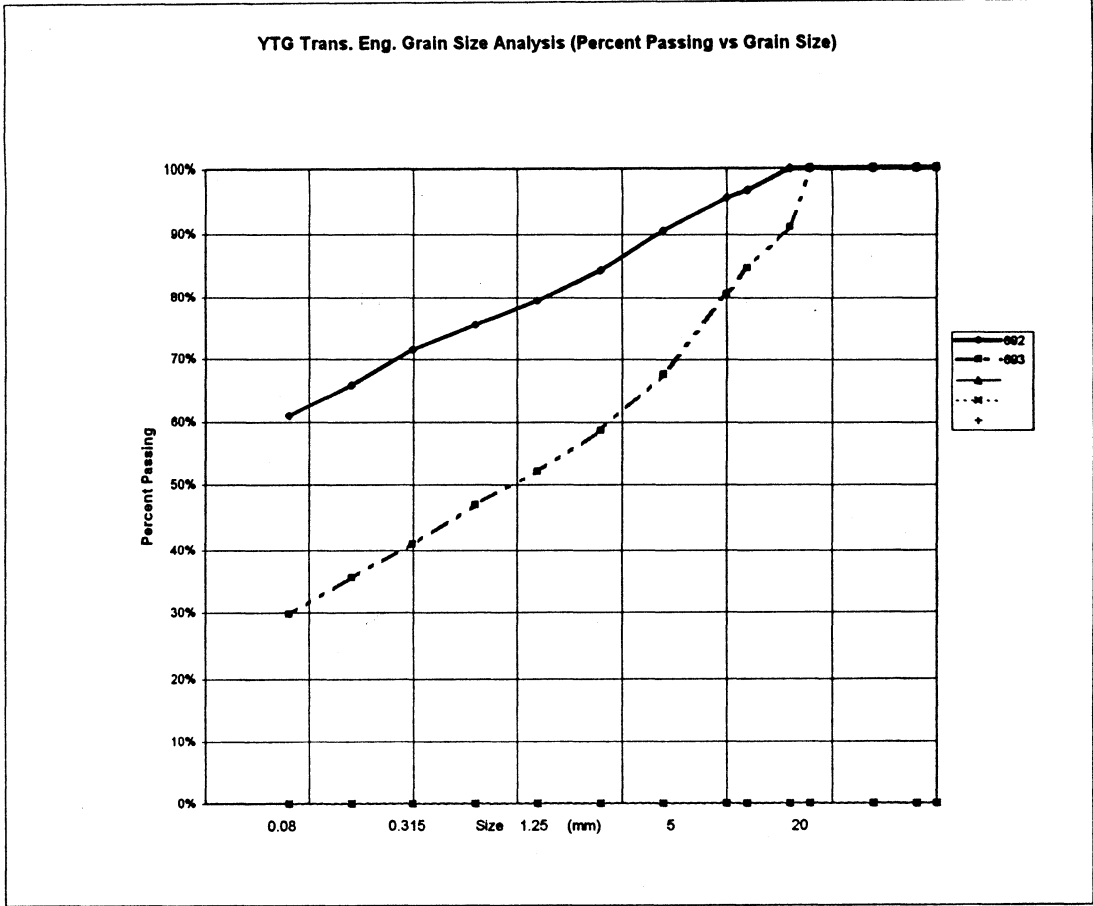


PROJECT NUMBER:	092-202101-0329	HOLE No.:	527-730
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1522 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1804+125 20M LT		
LOGGED BY:	G.C.	DATE COMP	99-08-18

FIELD NO:	692	FIELD No.	693
LAB NO:	792	LAB No.	793
DEPTH:	1.4-1.8	DEPTH	2.6-3.0
TYPE:	AUGER	TYPE	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	91%
12.5	97%	12.5	85%
10.0	96%	10.0	81%
5.0	91%	5.0	68%
2.5	84%	2.5	59%
1.25	80%	1.25	52%
0.630	76%	0.630	47%
0.315	71%	0.315	41%
0.160	66%	0.160	36%
0.080	61%	0.080	30%

M.C.(%):	21%	M.C.(%):	10%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	9	% GRAVEL:	32
% SAND:	30	% SAND:	38
% FINES:	61	% FINES:	30
CLASSIFICATION:	SANDY SILT (ML)	CLASSIFICATION:	SILTY SAND WITH GRAVEL (SM)



PROJECT NUMBER:	092-202101-0329	HOLE No.:	527-731
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1789-1722 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1804+125 20M RT		
LOGGED BY:	G.C.	DATE COMP	99-08-18

FIELD NO:	684	FIELD No:	695
LAB NO:	794	LAB No:	795
DEPTH:	1.6-2.0	DEPTH:	2.0-3.0
TYPE:	AUGER	TYPE:	AUGER

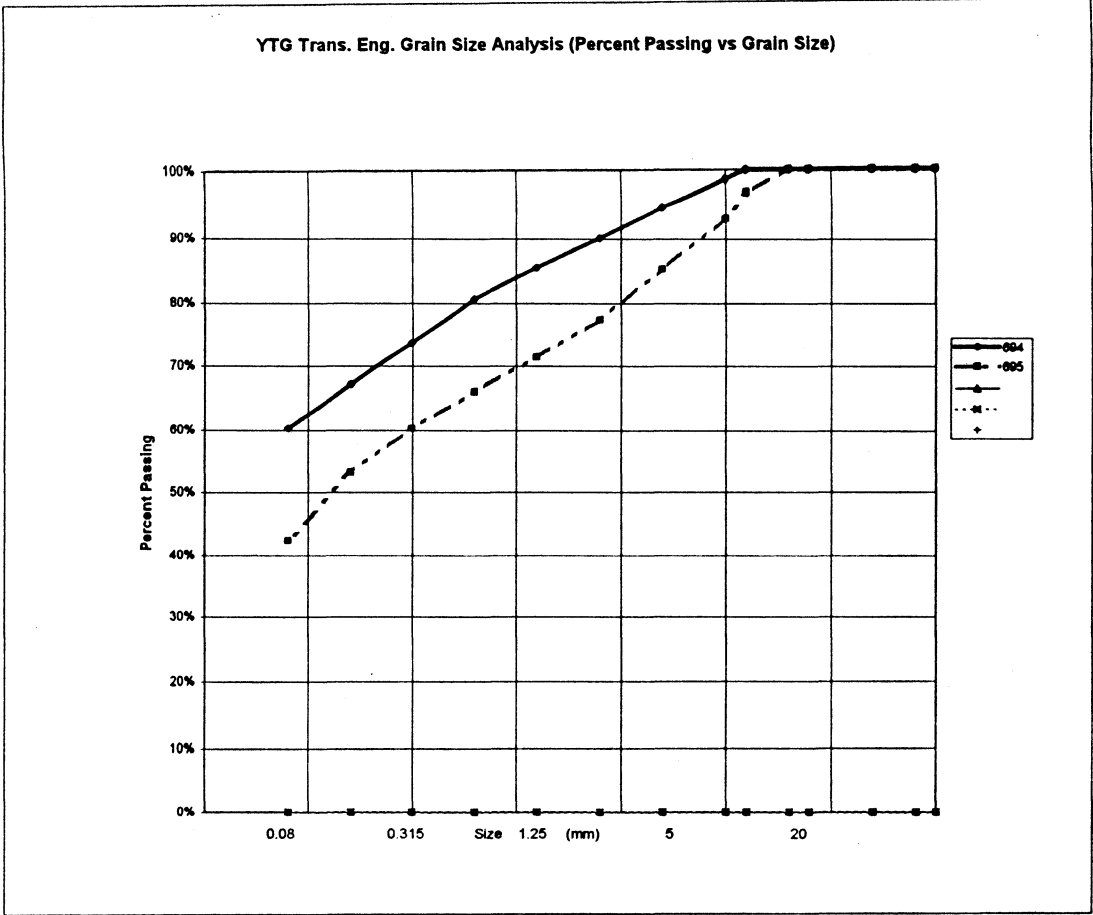
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	100%	12.5	97%
10.0	99%	10.0	93%
5.0	85%	5.0	85%
2.5	90%	2.5	77%
1.25	86%	1.25	71%
0.630	81%	0.630	66%
0.315	74%	0.315	60%
0.180	67%	0.180	53%
0.080	60%	0.080	43%

M.C.(%):	42%	M.C.(%):	15%
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LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0

% GRAVEL:	5	% GRAVEL:	15
% SAND:	35	% SAND:	43
% FINES:	60	% FINES:	43

CLASSIFICATION:	CLASSIFICATION:
SANDY SILT (ML)	SILTY SAND (SM)

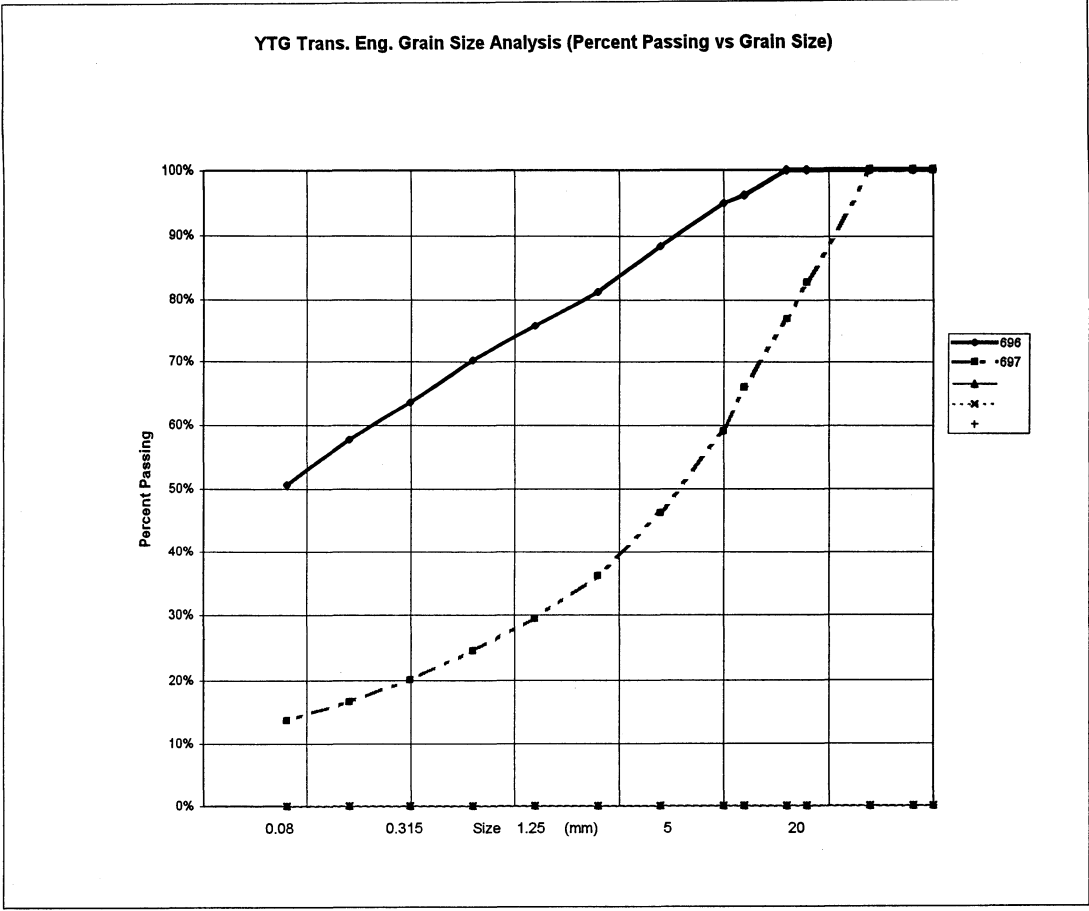


PROJECT NUMBER:	092-202101-0329	HOLE No.:	527-763
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1722 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1805+575 30M LT		
LOGGED BY:	G.C.	DATE COMP	99-08-18

FIELD NO:	696	FIELD No.	697
LAB NO:	796	LAB No.	797
DEPTH:	1.6-2.0	DEPTH	2.6-3.0
TYPE:	AUGER	TYPE	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	83%
20.0	100%	20.0	77%
12.5	96%	12.5	66%
10.0	95%	10.0	59%
5.0	88%	5.0	46%
2.5	81%	2.5	36%
1.25	76%	1.25	29%
0.630	70%	0.630	25%
0.315	64%	0.315	20%
0.160	58%	0.160	17%
0.080	51%	0.080	14%

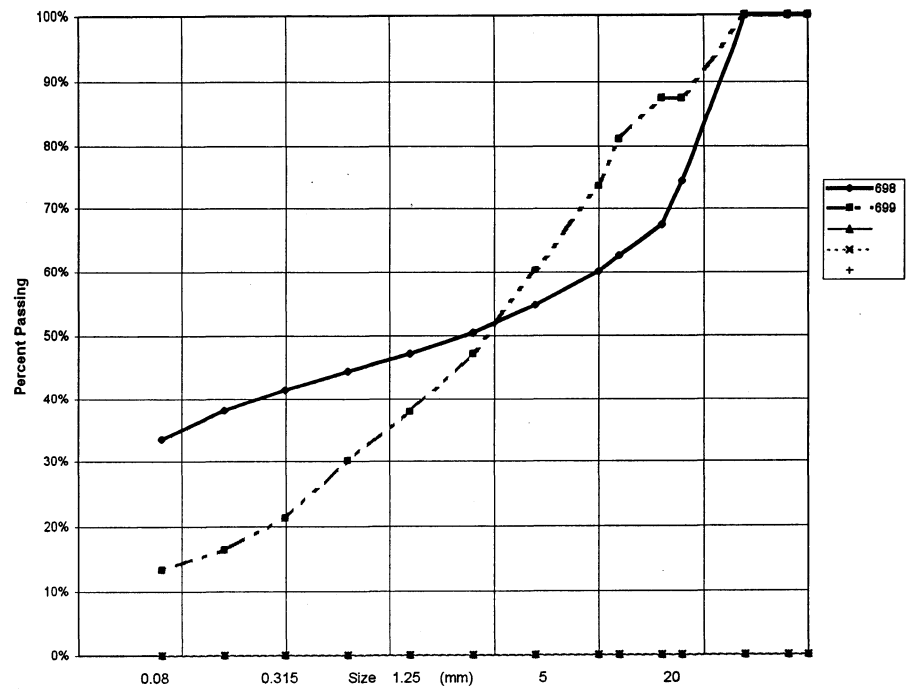
M.C.(%):	42%	M.C.(%):	7%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	12	% GRAVEL:	54
% SAND:	38	% SAND:	33
% FINES:	51	% FINES:	14
CLASSIFICATION:	SANDY SILT (ML)	CLASSIFICATION:	SILTY GRAVEL WITH SAND (GM)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-764
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1803475 30M LT
 LOGGED BY: G.C. DATE COMP 99-08-18

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	74%	25.0	88%
20.0	67%	20.0	88%
12.5	63%	12.5	81%
10.0	60%	10.0	74%
5.0	55%	5.0	60%
2.5	50%	2.5	47%
1.25	47%	1.25	38%
0.630	45%	0.630	30%
0.315	41%	0.315	21%
0.160	38%	0.160	16%
0.080	34%	0.080	13%
M.C.(%):	19%	M.C.(%):	8%
LIMITS			
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	45	% GRAVEL:	40
% SAND:	21	% SAND:	47
% FINES:	34	% FINES:	13
CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)	

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)

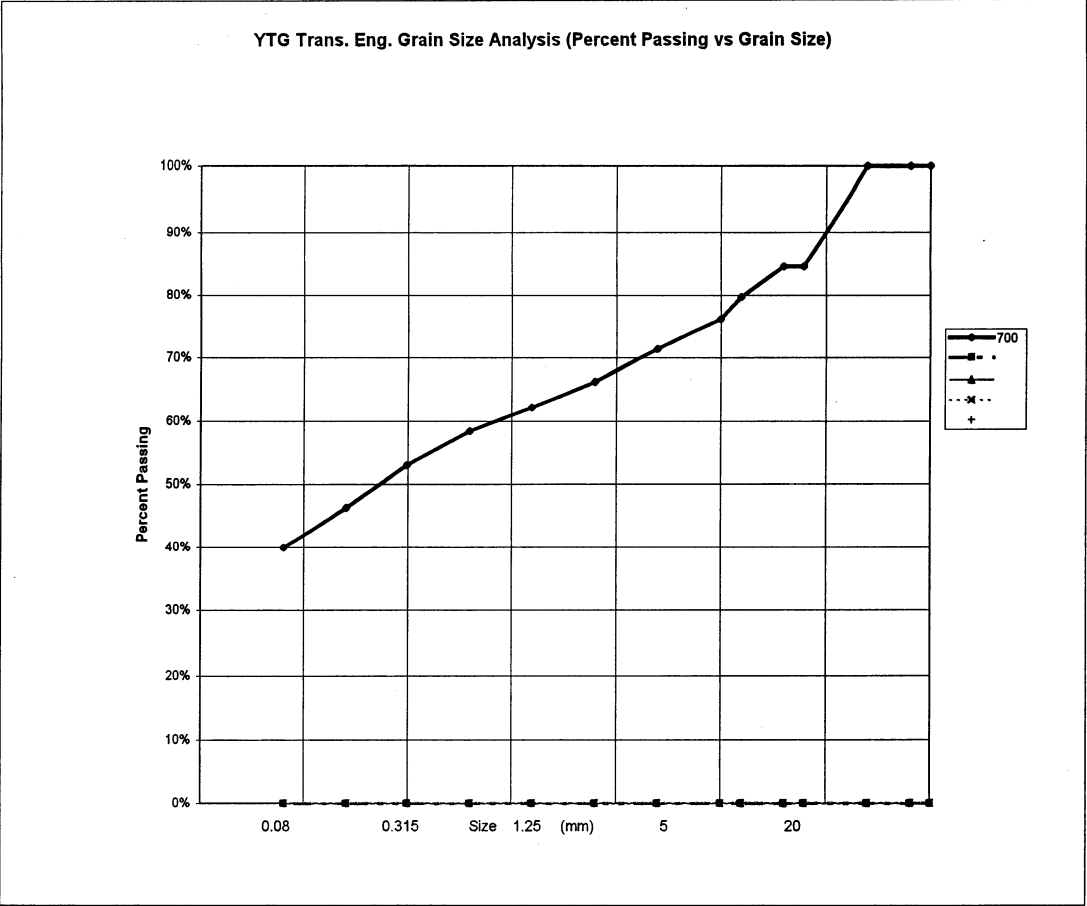


PROJECT NUMBER:	092-202101-0329	HOLE No.:	527-765
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1322 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1803+370 30M LT		
LOGGED BY:	G.C.	DATE COMP	99-08-18

FIELD NO:	700		
LAB NO:	800		
DEPTH:	1.4-1.6		
TYPE:	AUGER		

SIEVE SIZE	PERCENT PASSING		
100.0	100%		
80.0	100%		
50.0	100%		
25.0	84%		
20.0	84%		
12.5	80%		
10.0	76%		
5.0	71%		
2.5	66%		
1.25	62%		
0.630	58%		
0.315	53%		
0.160	46%		
0.080	40%		

M.C.(%):	19%		
LIMITS			
LIQUID:	0.0		
PLASTIC:	0.0		
P.I.:	0.0		
% GRAVEL:	29		
% SAND:	31		
% FINES:	40		
CLASSIFICATION:			
SILTY SAND WITH GRAVEL (SM)			



PROJECT NUMBER:	092-202101-0329	HOLE No.:	527-766
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1#22 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1803+270 30M LT		
LOGGED BY:	G.C.	DATE COMP	99-08-18

FIELD NO:	701	FIELD No.	702
LAB NO:	801	LAB No.	802
DEPTH:	1.8-2.0	DEPTH	2.6-2.9
TYPE:	AUGER	TYPE	AUGER

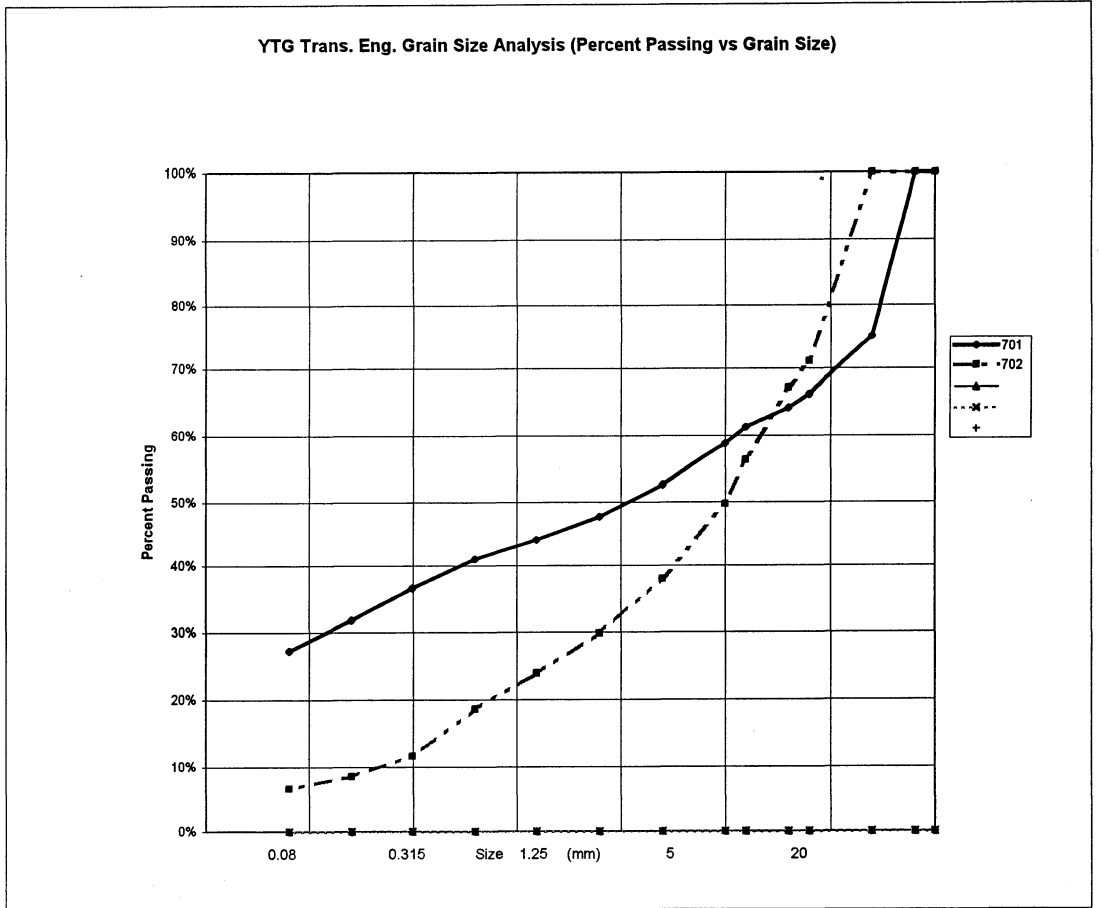
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	75%	50.0	100%
25.0	66%	25.0	71%
20.0	64%	20.0	67%
12.5	61%	12.5	56%
10.0	59%	10.0	50%
5.0	52%	5.0	38%
2.5	48%	2.5	30%
1.25	44%	1.25	24%
0.630	41%	0.630	19%
0.315	37%	0.315	12%
0.160	32%	0.160	9%
0.080	27%	0.080	7%

M.C.(%):	8%	M.C.(%):	5%
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LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0

% GRAVEL:	48	% GRAVEL:	62
% SAND:	25	% SAND:	31
% FINES:	27	% FINES:	7

CLASSIFICATION:	SILTY GRAVEL WITH SAND (GM)	CLASSIFICATION:	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)
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PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-767
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-122 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1803+175 30M LT
 LOGGED BY: G.C. DATE COMP 99-08-18

FIELD NO: 703
 LAB NO: 803
 DEPTH: 1.8-2.0
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	87%
20.0	80%
12.5	73%
10.0	71%
5.0	62%
2.5	54%
1.25	49%
0.630	44%
0.315	39%
0.160	35%
0.080	30%

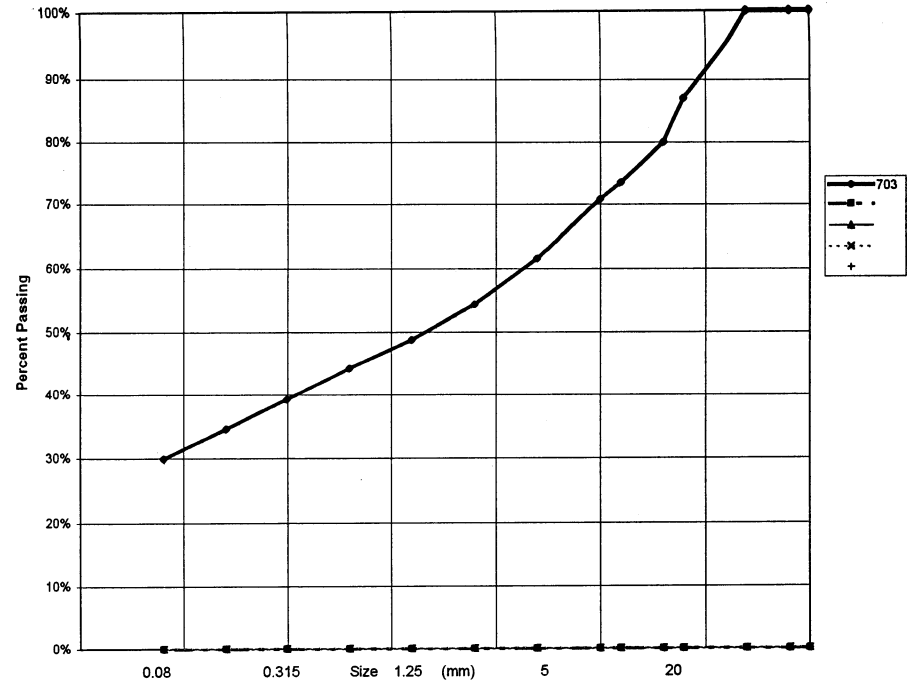
M.C.(%): 10%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

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

CLASSIFICATION:
 SILTY GRAVEL WITH SAND (GM)

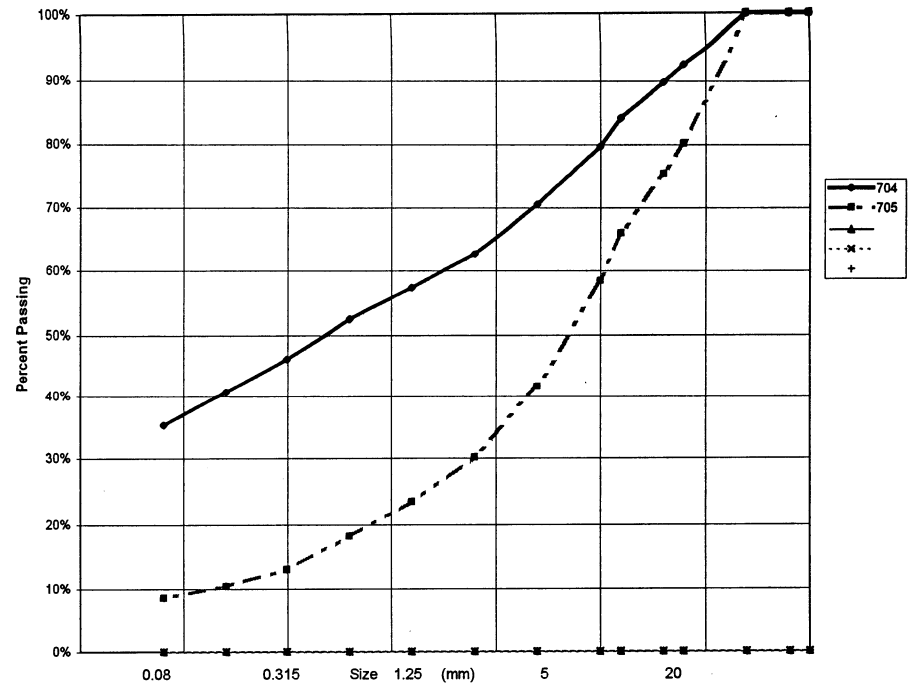
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-768
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1803+075 30M LT
 LOGGED BY: G.C. DATE COMP 99-08-18

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	93%	25.0	80%
20.0	90%	20.0	75%
12.5	84%	12.5	66%
10.0	80%	10.0	58%
5.0	70%	5.0	42%
2.5	63%	2.5	30%
1.25	57%	1.25	23%
0.630	52%	0.630	18%
0.315	46%	0.315	13%
0.160	41%	0.160	10%
0.080	35%	0.080	9%
M.C.(%):	12%	M.C.(%):	7%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	30	% GRAVEL:	58
% SAND:	35	% SAND:	33
% FINES:	35	% FINES:	9
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER:	092-202101-0329	HOLE No.:	527-769
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1722 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1802+975 30M LT		
LOGGED BY:	G.C.	DATE COMP	99-08-18

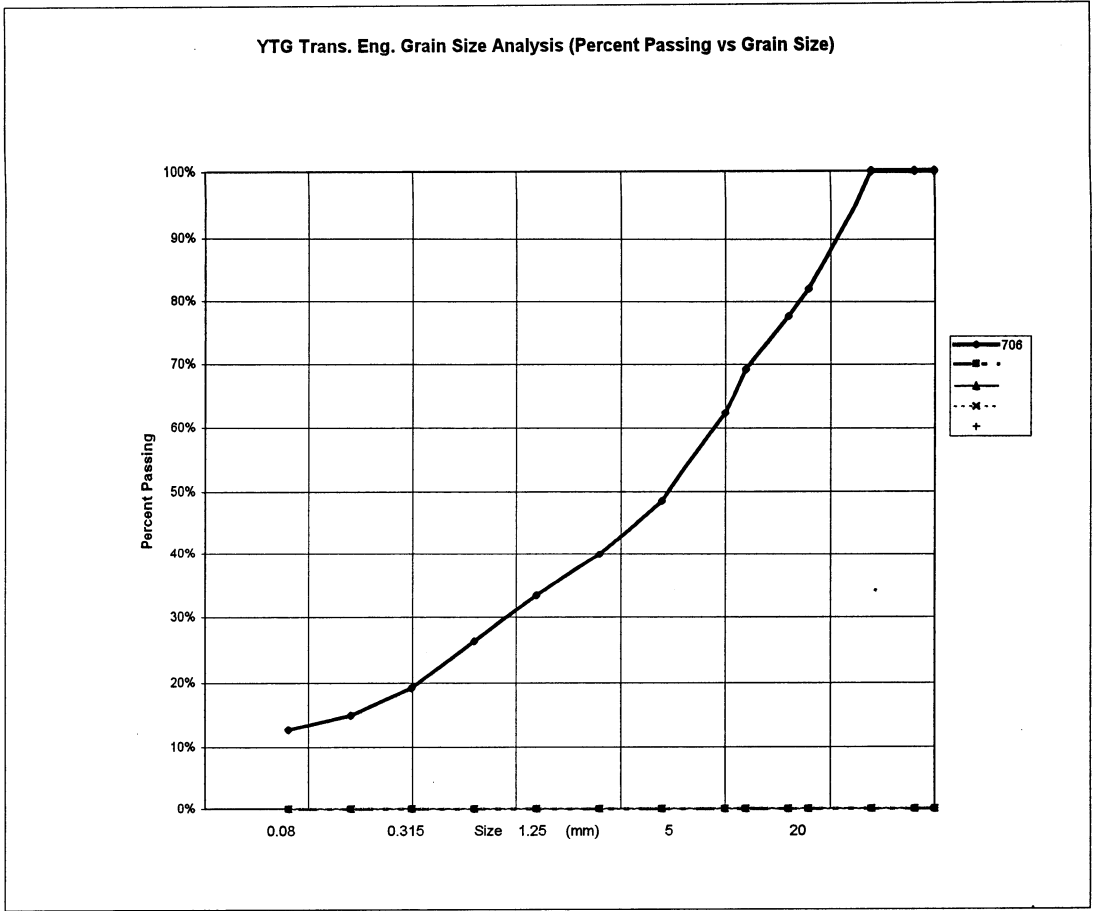
FIELD NO:	706		
LAB NO:	806		
DEPTH:	2.4-3.0		
TYPE:	AUGER		

SIEVE SIZE	PERCENT PASSING		
100.0	100%		
80.0	100%		
50.0	100%		
25.0	82%		
20.0	78%		
12.5	69%		
10.0	62%		
5.0	49%		
2.5	40%		
1.25	33%		
0.630	26%		
0.315	19%		
0.160	15%		
0.080	13%		

M.C.(%):	13%		
LIMITS			
LIQUID:	0.0		
PLASTIC:	0.0		
P.I.:	0.0		

% GRAVEL:	51		
% SAND:	36		
% FINES:	13		

CLASSIFICATION:	SILTY GRAVEL WITH SAND (GM)		



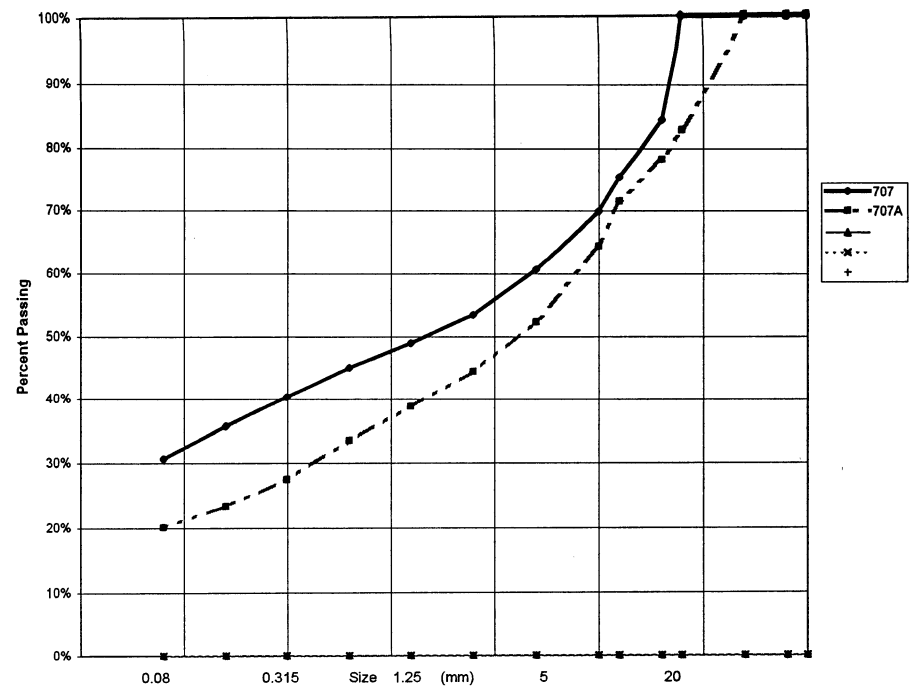
PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-770
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1802+875 30M LT
 LOGGED BY: G.C. DATE COMP 99-08-18

FIELD NO:	707	FIELD No.	707A
LAB NO:	807	LAB No.	808
DEPTH:	1.8-2.0	DEPTH	2.8-3.0
TYPE:	AUGER	TYPE	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	83%
20.0	84%	20.0	78%
12.5	75%	12.5	71%
10.0	70%	10.0	64%
5.0	61%	5.0	52%
2.5	53%	2.5	45%
1.25	49%	1.25	39%
0.630	45%	0.630	33%
0.315	40%	0.315	28%
0.160	36%	0.160	23%
0.080	31%	0.080	20%

M.C.(%):	14%	M.C.(%):	10%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	39	% GRAVEL:	48
% SAND:	30	% SAND:	32
% FINES:	31	% FINES:	20
CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)	

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-771
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1802+775 30M LT
 LOGGED BY: G.C. DATE COMP 99-08-18

FIELD NO:	708	FIELD No.	709
LAB NO:	809	LAB No.	810
DEPTH:	1.8-2.0	DEPTH	2.8-3.0
TYPE:	AUGER	TYPE	AUGER

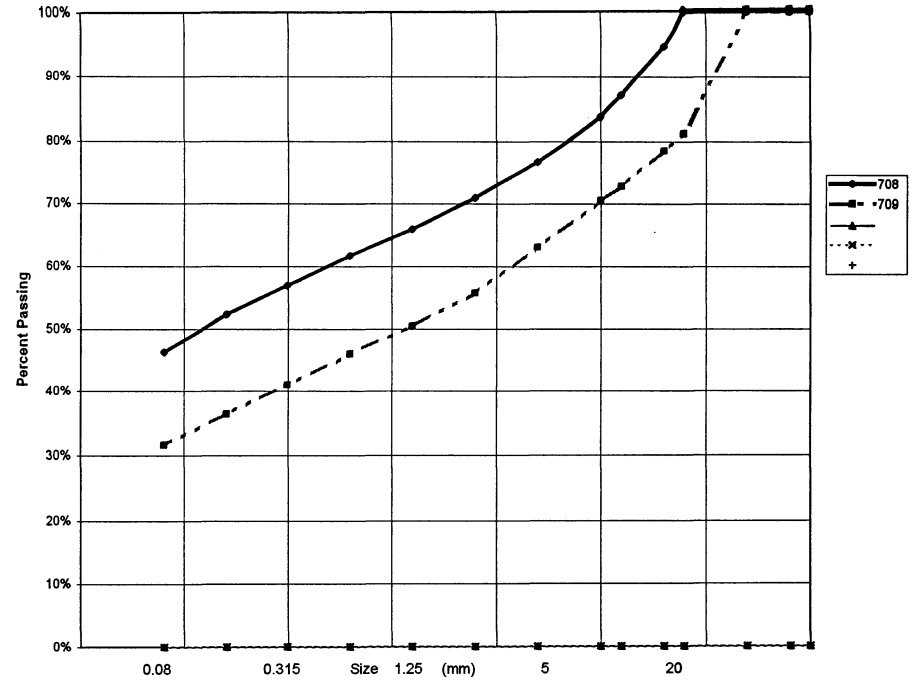
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	81%
20.0	95%	20.0	79%
12.5	87%	12.5	73%
10.0	84%	10.0	70%
5.0	77%	5.0	63%
2.5	71%	2.5	56%
1.25	68%	1.25	50%
0.630	62%	0.630	46%
0.315	57%	0.315	41%
0.160	52%	0.160	36%
0.080	46%	0.080	32%

M.C.(%):	14%	M.C.(%):	12%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0

% GRAVEL:	23	% GRAVEL:	37
% SAND:	30	% SAND:	31
% FINES:	46	% FINES:	32

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

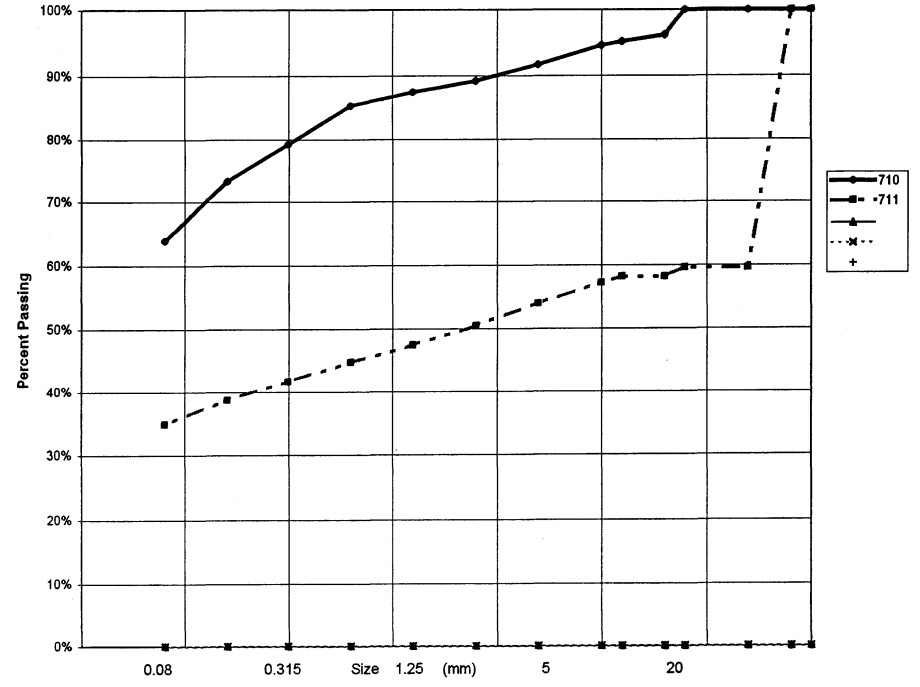
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-772
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1122 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1802+675 30M LT
 LOGGED BY: G.C. DATE COMP 99-08-18

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	60%
25.0	100%	25.0	60%
20.0	96%	20.0	58%
12.5	95%	12.5	58%
10.0	95%	10.0	57%
5.0	92%	5.0	54%
2.5	89%	2.5	50%
1.25	88%	1.25	47%
0.630	85%	0.630	45%
0.315	79%	0.315	42%
0.160	73%	0.160	39%
0.080	64%	0.080	35%
M.C.(%): 27%		M.C.(%): 15%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	8	% GRAVEL:	46
% SAND:	28	% SAND:	19
% FINES:	64	% FINES:	35
CLASSIFICATION:	SANDY SILT (ML)	CLASSIFICATION:	SILTY GRAVEL WITH SAND (GM)

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER:	092-202101-0329	HOLE No.:	527-773
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1722 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1802+600 20M LT		
LOGGED BY:	G.C.	DATE COMP	99-08-18

FIELD NO:	712	FIELD No.	713
LAB NO:	813	LAB No.	814
DEPTH:	1.4-1.6	DEPTH	2.8-3.0
TYPE:	AUGER	TYPE	AUGER

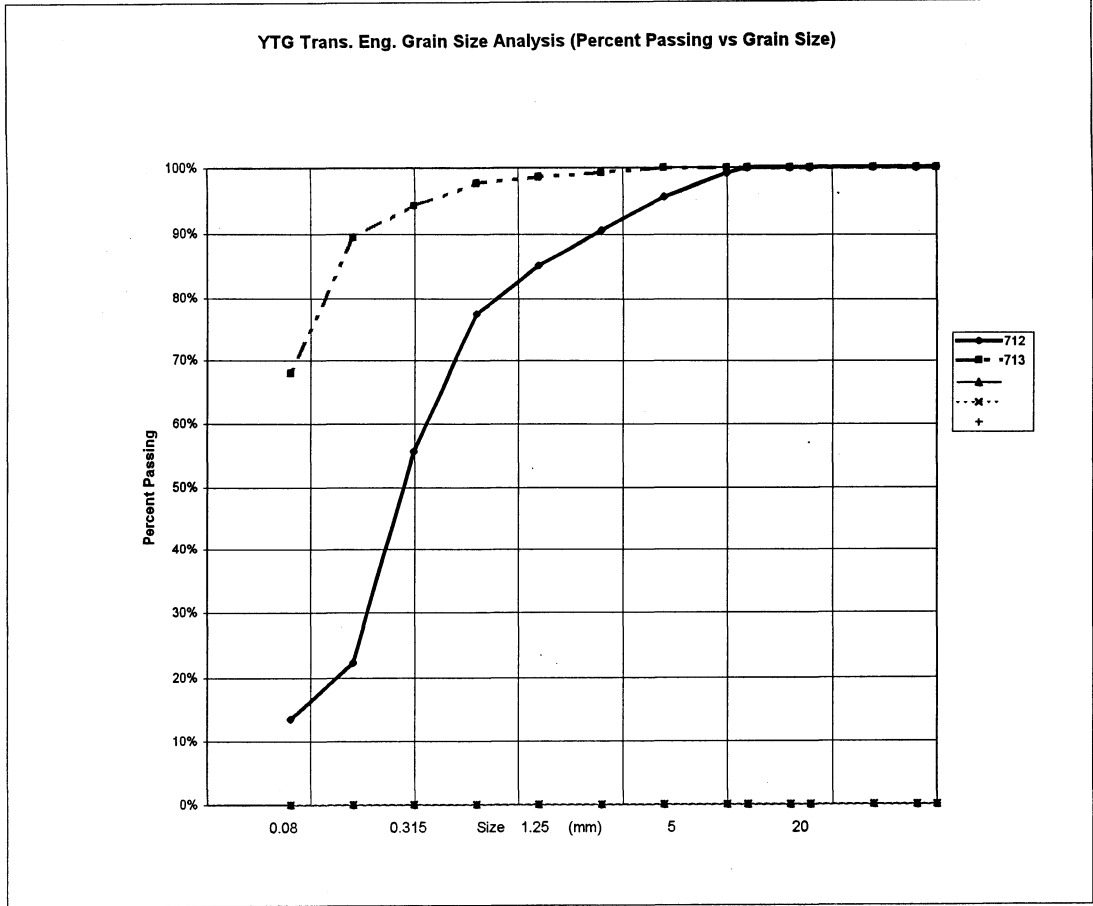
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	100%	12.5	100%
10.0	99%	10.0	100%
5.0	96%	5.0	100%
2.5	91%	2.5	99%
1.25	85%	1.25	99%
0.630	78%	0.630	98%
0.315	56%	0.315	94%
0.160	22%	0.160	90%
0.080	14%	0.080	68%

M.C.(%):	22%	M.C.(%):	20%
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LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0

% GRAVEL:	4	% GRAVEL:	0
% SAND:	82	% SAND:	32
% FINES:	14	% FINES:	68

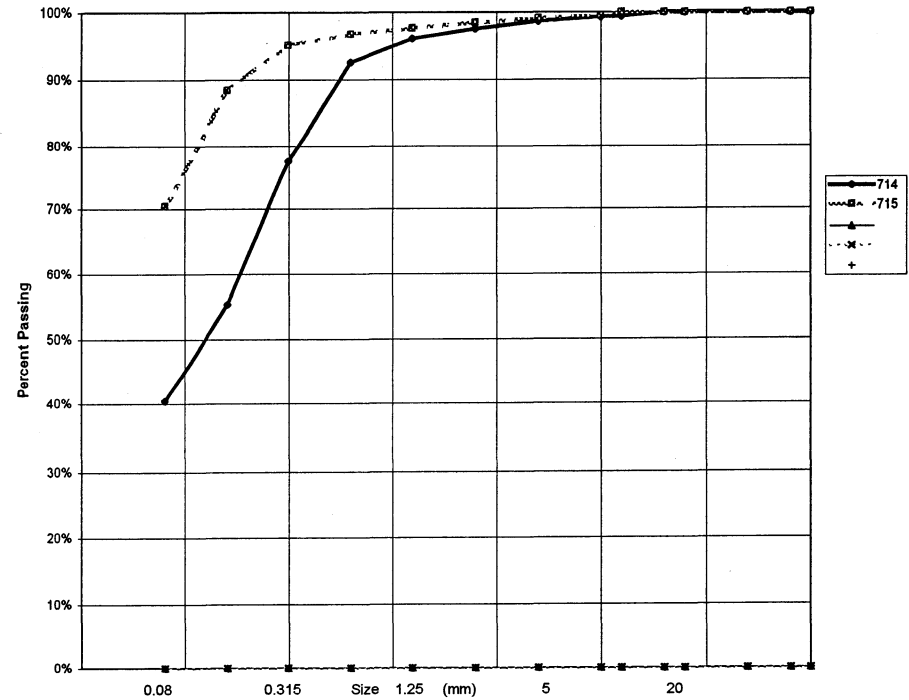
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND (SM)		SANDY SILT (ML)	



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-774
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1802+600 20M RT
 LOGGED BY: G.C. DATE COMP 99-08-18

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	99%	12.5	100%
10.0	99%	10.0	100%
5.0	99%	5.0	99%
2.5	98%	2.5	99%
1.25	96%	1.25	98%
0.630	93%	0.630	97%
0.315	78%	0.315	95%
0.160	55%	0.160	88%
0.080	40%	0.080	70%
M.C.(%):	40%	M.C.(%):	27%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	1	% GRAVEL:	1
% SAND:	58	% SAND:	29
% FINES:	40	% FINES:	70
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND (SM)		SILT WITH SAND (ML)	

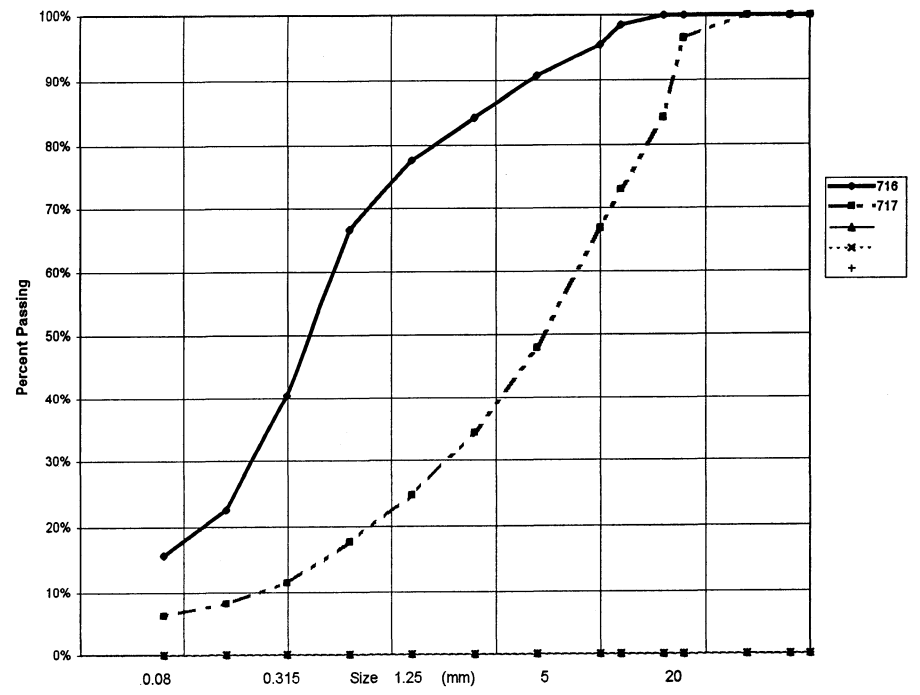
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-775
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1322 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1802+500 30M LT
 LOGGED BY: G.C. DATE COMP 99-08-18

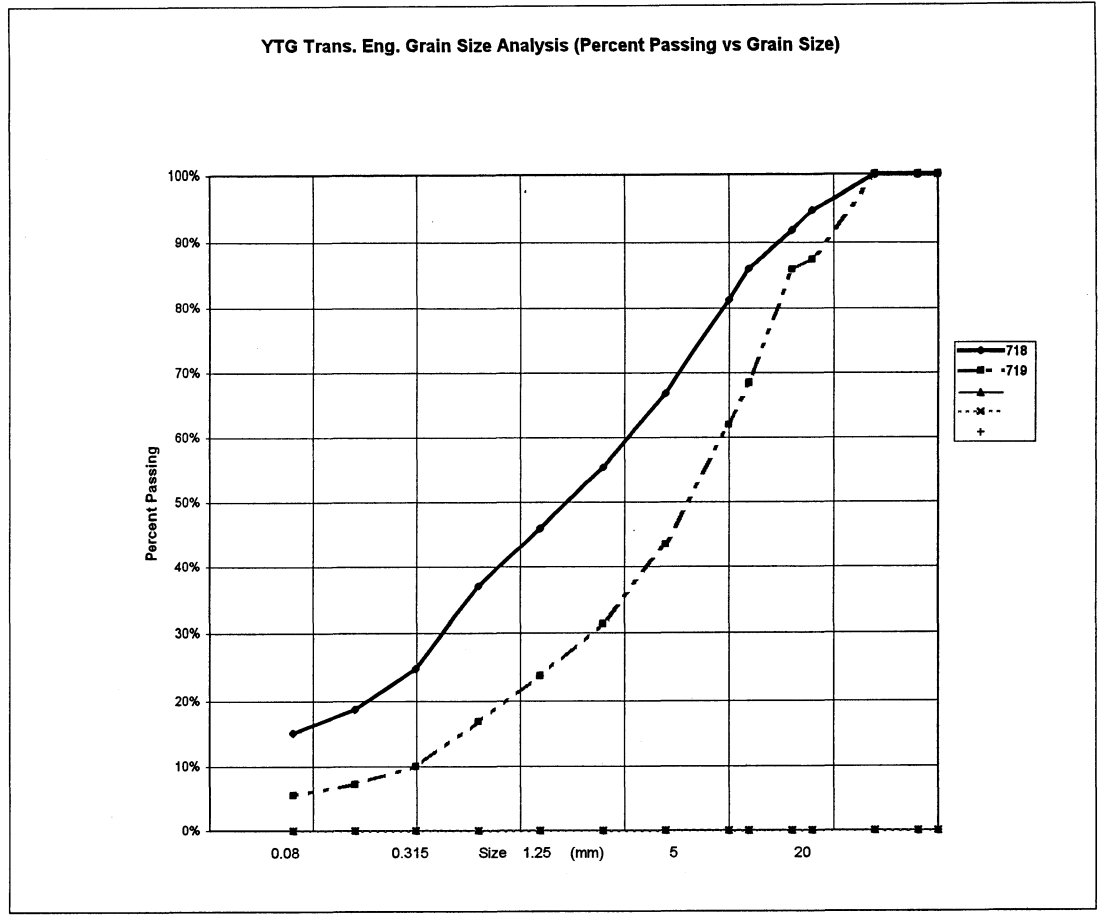
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	97%
20.0	100%	20.0	84%
12.5	99%	12.5	73%
10.0	96%	10.0	67%
5.0	91%	5.0	48%
2.5	84%	2.5	34%
1.25	78%	1.25	25%
0.630	67%	0.630	18%
0.315	40%	0.315	12%
0.160	22%	0.160	8%
0.080	16%	0.080	6%
M.C.(%):	16%	M.C.(%):	7%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	9	% GRAVEL:	52
% SAND:	75	% SAND:	42
% FINES:	16	% FINES:	6
CLASSIFICATION:	SILTY SAND (SM)	CLASSIFICATION:	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-776
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1522 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1802+400 30M LT
 LOGGED BY: G.C. DATE COMP 99-08-18

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	95%	25.0	87%
20.0	92%	20.0	86%
12.5	86%	12.5	68%
10.0	81%	10.0	62%
5.0	67%	5.0	44%
2.5	55%	2.5	31%
1.25	46%	1.25	24%
0.630	37%	0.630	17%
0.315	25%	0.315	10%
0.160	19%	0.160	7%
0.080	15%	0.080	6%
M.C.(%): 11%		M.C.(%): 6%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	33	% GRAVEL:	56
% SAND:	52	% SAND:	38
% FINES:	15	% FINES:	6
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	



PROJECT NUMBER:	092-202101-0329	HOLE No.:	527-777
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1522 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1802+300 30M LT		
LOGGED BY:	G.C.	DATE COMP	99-08-18

FIELD NO:	720	FIELD No.	721
LAB NO:	821	LAB No.	822
DEPTH:	1.4-1.6	DEPTH	2.8-3.0
TYPE:	AUGER	TYPE	AUGER

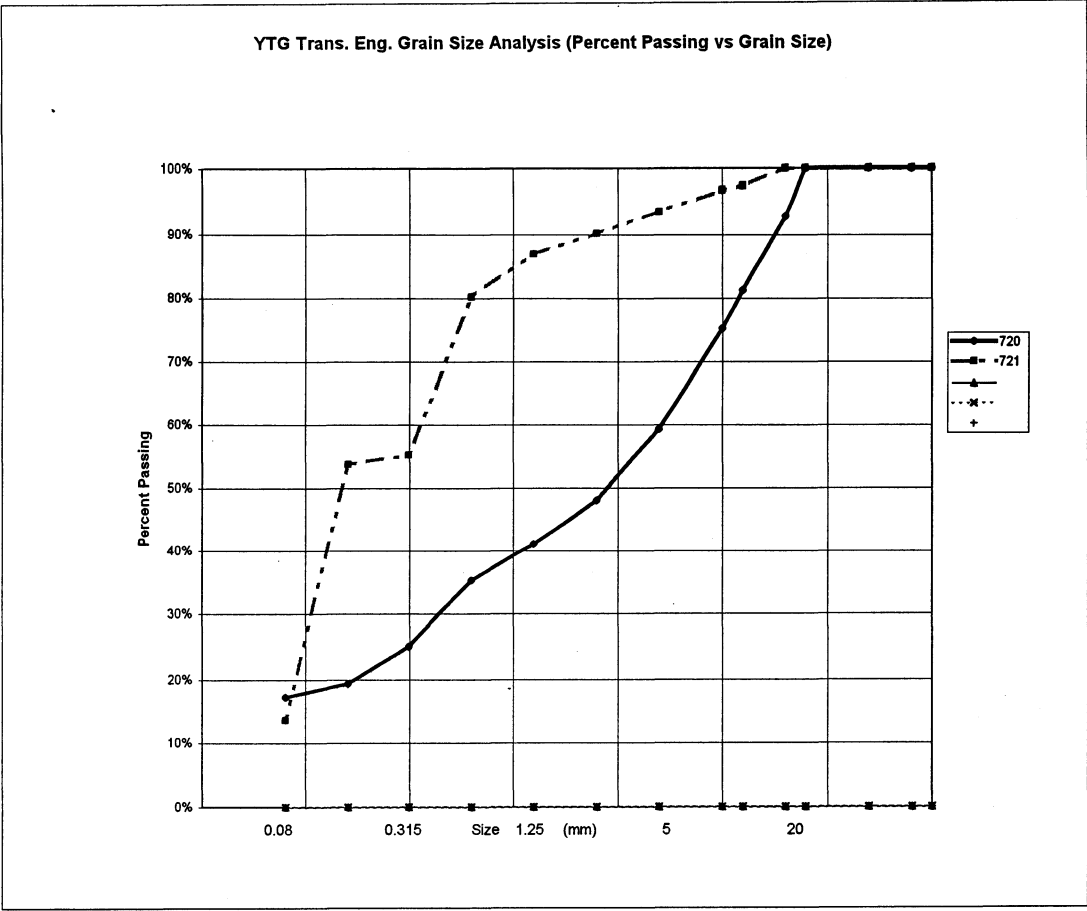
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	93%	20.0	100%
12.5	81%	12.5	97%
10.0	75%	10.0	97%
5.0	59%	5.0	94%
2.5	48%	2.5	90%
1.25	41%	1.25	87%
0.630	35%	0.630	80%
0.315	25%	0.315	55%
0.160	19%	0.160	54%
0.080	17%	0.080	14%

M.C.(%):	18%	M.C.(%):	17%
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LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0

% GRAVEL:	41	% GRAVEL:	6
% SAND:	42	% SAND:	80
% FINES:	17	% FINES:	14

CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY SAND (SM)	

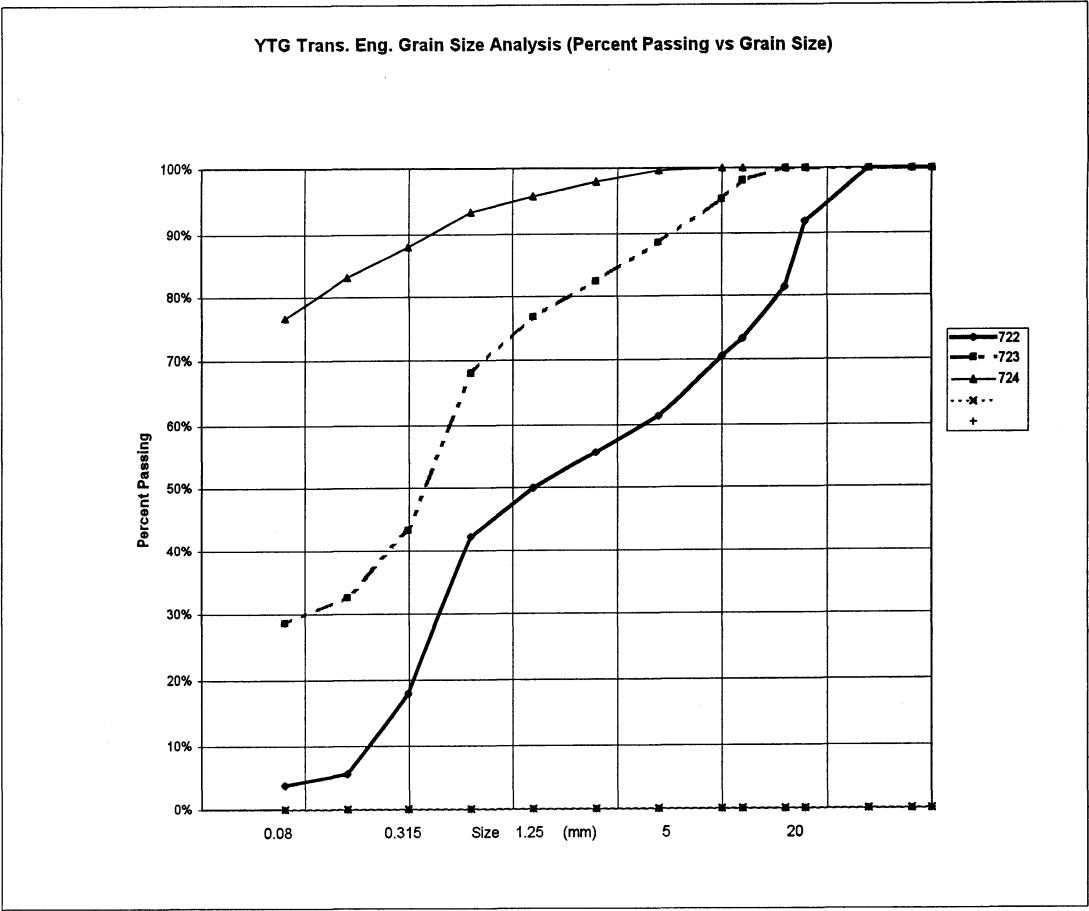


PROJECT NUMBER:	092-202101-0329	HOLE No.:	527-778
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1322 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1802+180 30M LT		
LOGGED BY:	G.C.	DATE COMP	99-08-19

FIELD NO:	722	FIELD No.	723	FIELD No.:	724
LAB NO:	823	LAB No.	824	LAB No:	825
DEPTH:	1.4-1.6	DEPTH	2.0-2.2	DEPTH:	2.8-3.0
TYPE:	AUGER	TYPE	AUGER	TYPE:	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	92%	25.0	100%	25.0	100%
20.0	81%	20.0	100%	20.0	100%
12.5	73%	12.5	98%	12.5	100%
10.0	70%	10.0	95%	10.0	100%
5.0	61%	5.0	89%	5.0	100%
2.5	55%	2.5	82%	2.5	98%
1.25	50%	1.25	77%	1.25	96%
0.630	42%	0.630	68%	0.630	93%
0.315	18%	0.315	43%	0.315	88%
0.160	6%	0.160	33%	0.160	83%
0.080	4%	0.080	29%	0.080	77%

M.C.(%):	10%	M.C.(%):	25%	M.C.(%):	20%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	39	% GRAVEL:	11	% GRAVEL:	0
% SAND:	58	% SAND:	60	% SAND:	23
% FINES:	4	% FINES:	29	% FINES:	77
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
WELL-GRADED SAND WITH GRAVEL (SW)		SILTY SAND (SM)		SILT WITH SAND (ML)	



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-779
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1802+075 30M LT
 LOGGED BY: G.C. DATE COMP 99-08-19

FIELD NO: 724A	FIELD No. 725
LAB NO: 826	LAB No. 827
DEPTH: 1.8-2.0	DEPTH 2.8-3.0
TYPE: AUGER	TYPE AUGER

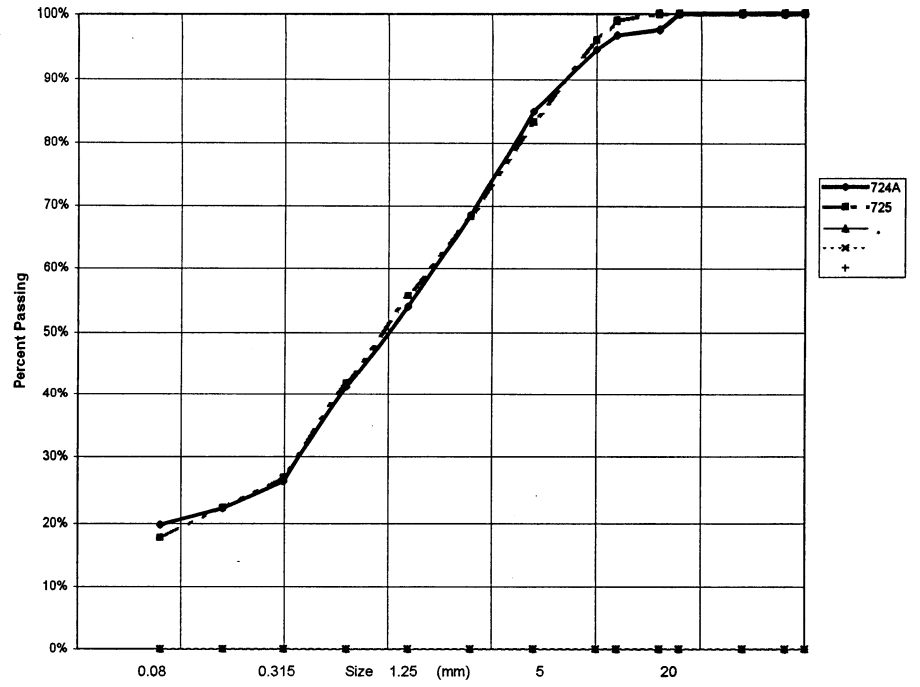
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	98%	20.0	100%
12.5	97%	12.5	99%
10.0	95%	10.0	96%
5.0	85%	5.0	83%
2.5	69%	2.5	68%
1.25	54%	1.25	56%
0.630	41%	0.630	42%
0.315	26%	0.315	27%
0.160	22%	0.160	22%
0.080	20%	0.080	18%

M.C.(%): 16%	M.C.(%): 18%
LIMITS	LIMITS
LIQUID: 0.0	LIQUID: 0.0
PLASTIC: 0.0	PLASTIC: 0.0
P.I.: 0.0	P.I.: 0.0

% GRAVEL: 15	% GRAVEL: 17
% SAND: 65	% SAND: 65
% FINES: 20	% FINES: 18

CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)
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YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-780
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1801+975 40M LT
 LOGGED BY: G.C. DATE COMP 99-08-19

FIELD NO: 726
 LAB NO: 828
 DEPTH: 2.0-2.2
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	82%
20.0	77%
12.5	63%
10.0	53%
5.0	36%
2.5	29%
1.25	26%
0.630	24%
0.315	23%
0.160	21%
0.080	20%

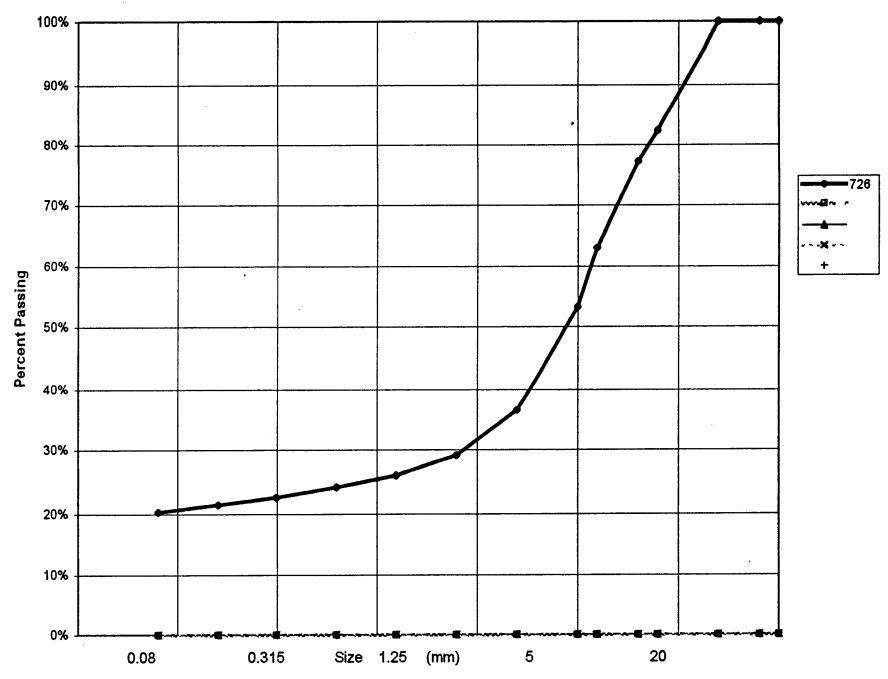
M.C.(%): 18%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

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

CLASSIFICATION:
 SILTY GRAVEL WITH SAND (GM)

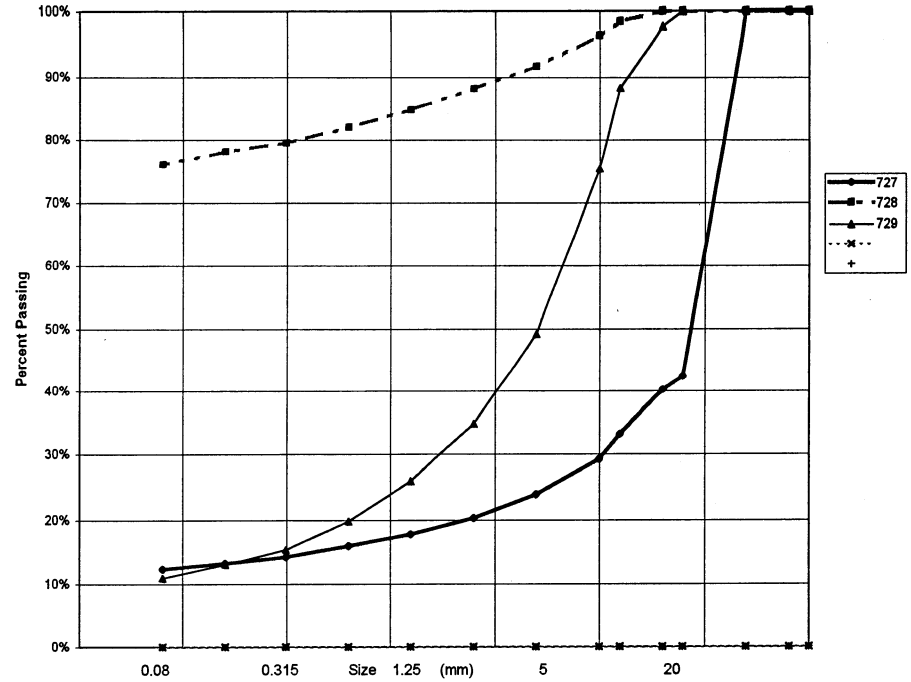
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-781
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1X22 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1801+910 20M LT
 LOGGED BY: G.C. DATE COMP 99-08-19

FIELD NO:	727	FIELD No:	728	FIELD No:	729
LAB NO:	829	LAB No:	830	LAB No:	831
DEPTH:	1.0-1.2	DEPTH:	1.8-2.0	DEPTH:	2.8-3.0
TYPE:	AUGER	TYPE:	AUGER	TYPE:	AUGER
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	42%	25.0	100%	25.0	100%
20.0	40%	20.0	100%	20.0	98%
12.5	33%	12.5	99%	12.5	88%
10.0	29%	10.0	97%	10.0	75%
5.0	24%	5.0	92%	5.0	49%
2.5	20%	2.5	88%	2.5	35%
1.25	18%	1.25	85%	1.25	26%
0.630	16%	0.630	82%	0.630	20%
0.315	14%	0.315	80%	0.315	15%
0.160	13%	0.160	78%	0.160	13%
0.080	12%	0.080	76%	0.080	11%
M.C.(%):	21%	M.C.(%):	43%	M.C.(%):	8%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	76	% GRAVEL:	8	% GRAVEL:	51
% SAND:	12	% SAND:	16	% SAND:	38
% FINES:	12	% FINES:	76	% FINES:	11
CLASSIFICATION:	SILTY GRAVEL (GM)	CLASSIFICATION:	SILT WITH SAND (ML)	CLASSIFICATION:	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-782
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1801+815 20M LT
 LOGGED BY: G.C. DATE COMP 99-08-19

FIELD NO: 730	FIELD No. 731		
LAB NO: 832	LAB No. 833		
DEPTH: 2.2-2.4	DEPTH 3.5-4.0		
TYPE: AUGER	TYPE AUGER		

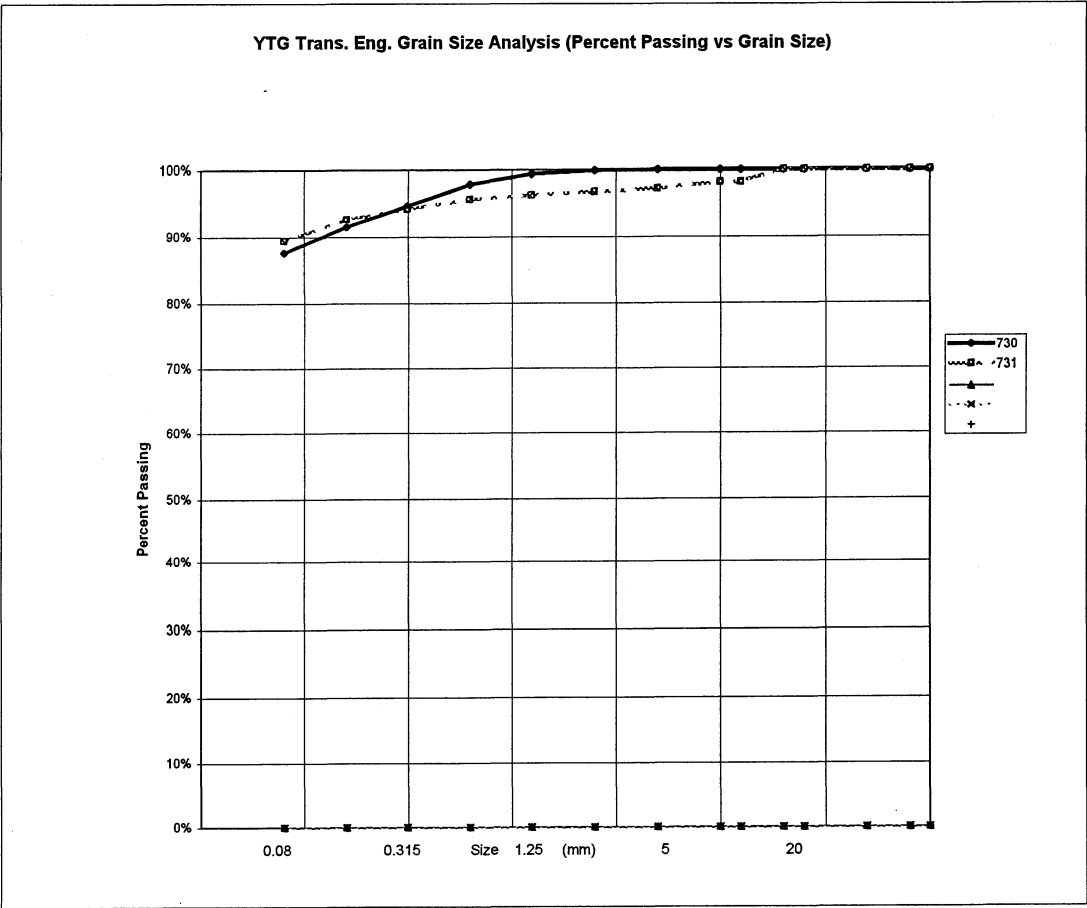
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	100%	12.5	98%
10.0	100%	10.0	98%
5.0	100%	5.0	97%
2.5	100%	2.5	97%
1.25	99%	1.25	96%
0.630	98%	0.630	96%
0.315	95%	0.315	94%
0.160	92%	0.160	93%
0.080	88%	0.080	89%

M.C.(%): 16%	M.C.(%): 41%
--------------	--------------

LIMITS	LIMITS
LIQUID: 0.0	LIQUID: 0.0
PLASTIC: 0.0	PLASTIC: 0.0
P.I.: 0.0	P.I.: 0.0

% GRAVEL: 0	% GRAVEL: 3
% SAND: 12	% SAND: 8
% FINES: 88	% FINES: 89

CLASSIFICATION: SILT (ML)	CLASSIFICATION: SILT (ML)
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PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-783
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1 22 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1801+750 30M LT
 LOGGED BY: G.C. DATE COMP 99-08-19

FIELD NO: 732
 LAB NO: 834
 DEPTH: 1.3-1.5
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	100%
20.0	97%
12.5	86%
10.0	80%
5.0	57%
2.5	42%
1.25	33%
0.630	26%
0.315	18%
0.160	14%
0.080	12%

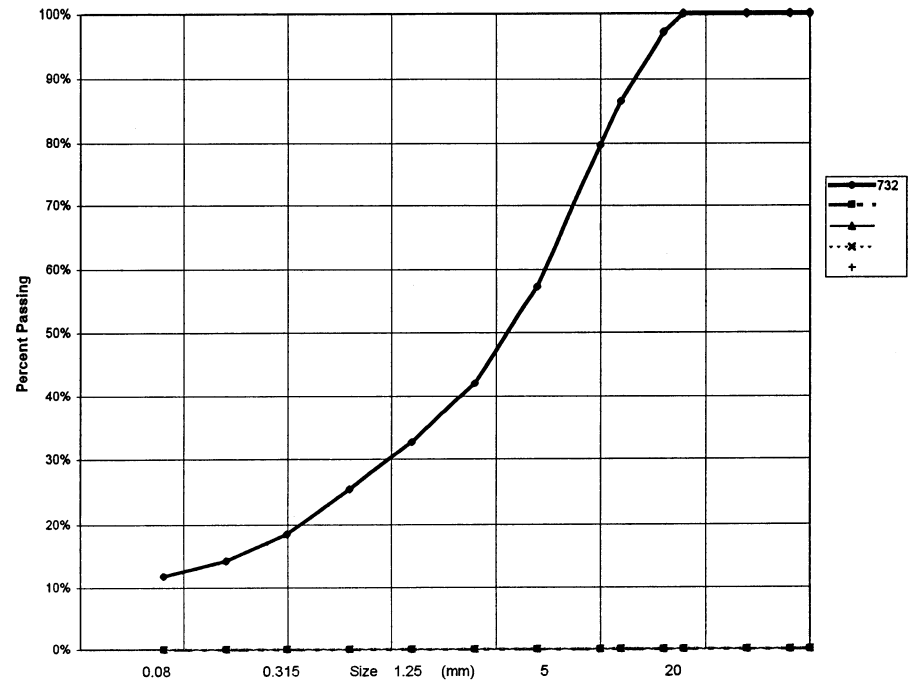
M.C.(%): 9%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 43
 % SAND: 45
 % FINES: 12

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

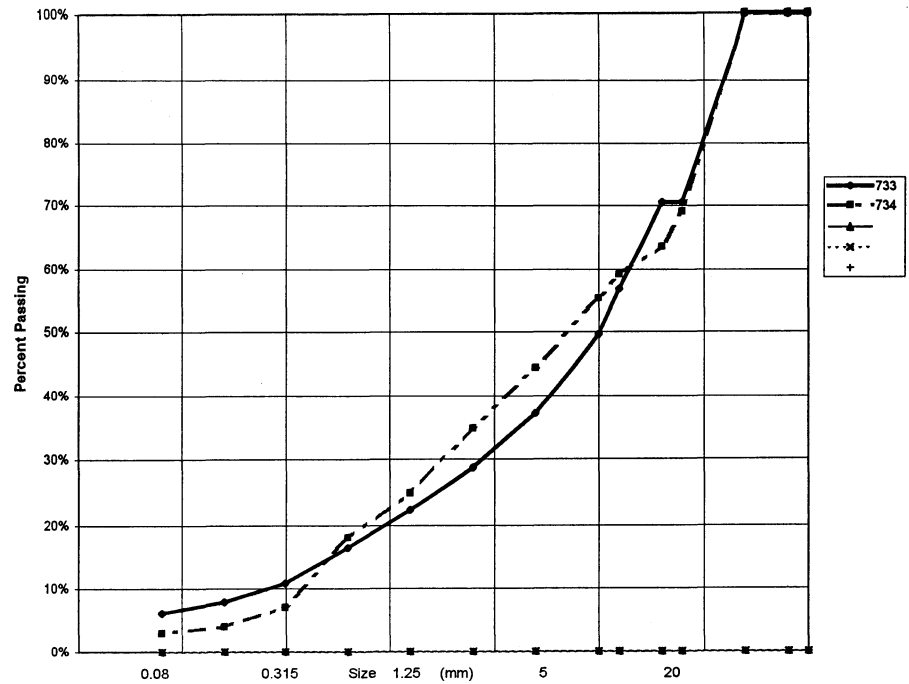
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-784
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1522 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1801+650 14M LT
 LOGGED BY: G.C. DATE COMP 99-08-19

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	70%	25.0	69%
20.0	70%	20.0	64%
12.5	57%	12.5	59%
10.0	50%	10.0	55%
5.0	37%	5.0	45%
2.5	29%	2.5	35%
1.25	22%	1.25	25%
0.630	16%	0.630	18%
0.315	11%	0.315	7%
0.160	8%	0.160	4%
0.080	6%	0.080	3%
M.C.(%):	3%	M.C.(%):	8%
LIMITS			
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	63	% GRAVEL:	55
% SAND:	31	% SAND:	41
% FINES:	6	% FINES:	3
CLASSIFICATION:		CLASSIFICATION:	
POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		POORLY GRADED GRAVEL WITH SAND (GP)	

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-785
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1522 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1801+575 13M LT
 LOGGED BY: G.C. DATE COMP 99-08-19

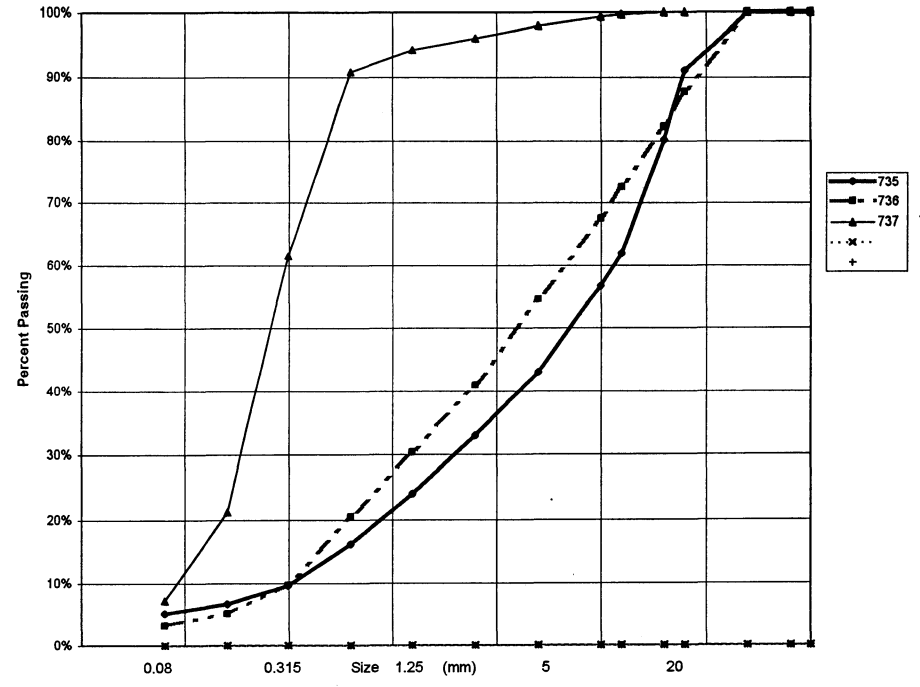
FIELD NO:	735	FIELD No. 736	FIELD No: 737
LAB NO:	837	LAB No. 838	LAB No: 839
DEPTH:	1.0-1.2	DEPTH 2.8-3.0	DEPTH: 4.0-4.5
TYPE:	AUGER	TYPE AUGER	TYPE: AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	91%	25.0	88%	25.0	100%
20.0	80%	20.0	82%	20.0	100%
12.5	62%	12.5	73%	12.5	100%
10.0	57%	10.0	68%	10.0	99%
5.0	43%	5.0	55%	5.0	98%
2.5	33%	2.5	41%	2.5	96%
1.25	24%	1.25	30%	1.25	94%
0.630	16%	0.630	21%	0.630	91%
0.315	10%	0.315	10%	0.315	62%
0.160	7%	0.160	5%	0.160	21%
0.080	5%	0.080	3%	0.080	7%

M.C.(%):	3%	M.C.(%):	6%	M.C.(%):	19%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	57	% GRAVEL:	45	% GRAVEL:	2
% SAND:	38	% SAND:	51	% SAND:	91
% FINES:	5	% FINES:	3	% FINES:	7

CLASSIFICATION:	CLASSIFICATION:	CLASSIFICATION:
POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED SAND WITH GRAVEL (SW)	POORLY GRADED SAND WITH SILT (SP-SM)

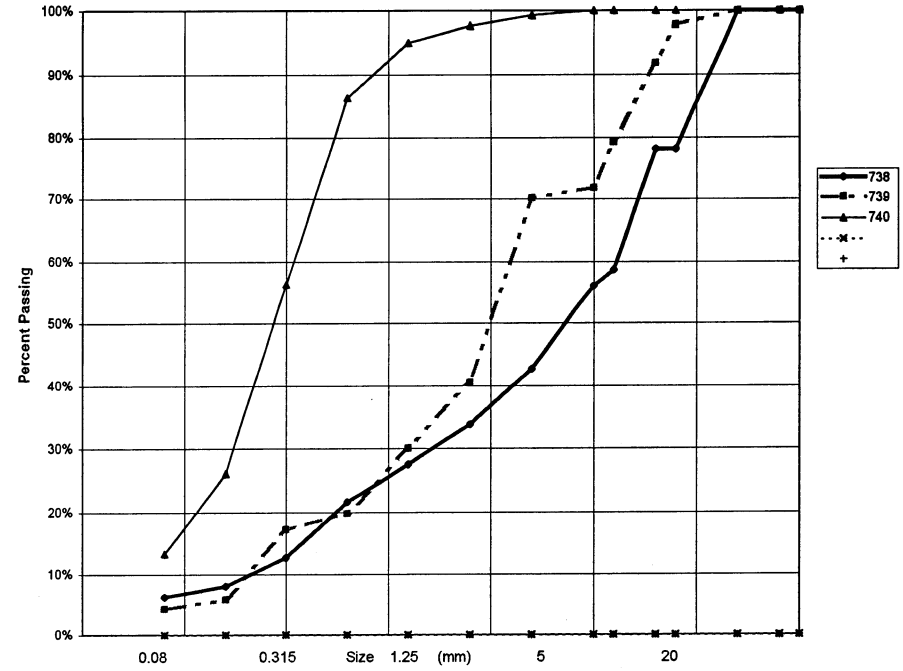
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-786
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1801+475 12M LT
 LOGGED BY: G.C. DATE COMP 99-08-19

FIELD NO:	738	FIELD No.	739	FIELD No:	740
LAB NO:	840	LAB No.	841	LAB No:	842
DEPTH:	1.2-1.4	DEPTH	2.6-3.0	DEPTH:	4.5-4.7
TYPE:	AUGER	TYPE	AUGER	TYPE:	AUGER
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	78%	25.0	98%	25.0	100%
20.0	78%	20.0	92%	20.0	100%
12.5	59%	12.5	79%	12.5	100%
10.0	56%	10.0	72%	10.0	100%
5.0	43%	5.0	70%	5.0	99%
2.5	34%	2.5	41%	2.5	98%
1.25	28%	1.25	30%	1.25	95%
0.630	22%	0.630	20%	0.630	86%
0.315	13%	0.315	17%	0.315	56%
0.160	8%	0.160	6%	0.160	26%
0.080	6%	0.080	4%	0.080	13%
M.C.(%):	7%	M.C.(%):	8%	M.C.(%):	16%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	57	% GRAVEL:	30	% GRAVEL:	1
% SAND:	37	% SAND:	66	% SAND:	86
% FINES:	6	% FINES:	4	% FINES:	13
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		WELL-GRADED SAND WITH GRAVEL (SW)		SILTY SAND (SM)	

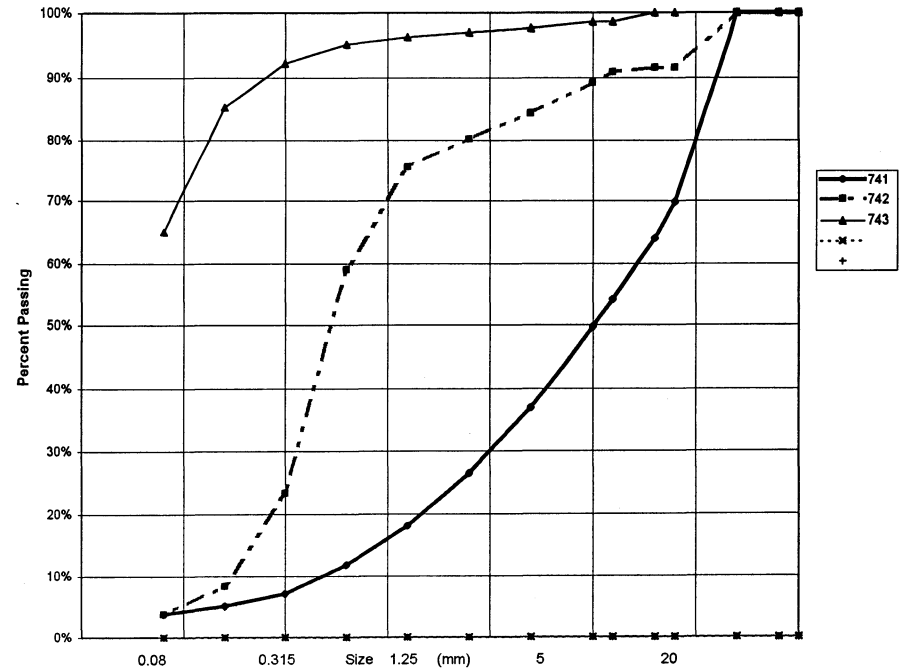
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-787
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1/22 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1801+375 CENTRELINE
 G.C. DATE COMP 99-08-19
 LOGGED BY:

FIELD NO: 741		FIELD No. 742		FIELD No: 743	
LAB NO: 843		LAB No. 844		LAB No: 845	
DEPTH: 1.0-1.5		DEPTH 2.6-3.0		DEPTH: 4.3-4.5	
TYPE: AUGER		TYPE AUGER		TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	70%	25.0	92%	25.0	100%
20.0	64%	20.0	92%	20.0	100%
12.5	54%	12.5	91%	12.5	99%
10.0	50%	10.0	89%	10.0	99%
5.0	37%	5.0	84%	5.0	98%
2.5	27%	2.5	80%	2.5	97%
1.25	18%	1.25	76%	1.25	96%
0.630	12%	0.630	59%	0.630	95%
0.315	7%	0.315	23%	0.315	92%
0.160	5%	0.160	8%	0.160	85%
0.080	4%	0.080	4%	0.080	65%
M.C.(%): 2%		M.C.(%): 16%		M.C.(%): 16%	
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	63	% GRAVEL:	16	% GRAVEL:	2
% SAND:	33	% SAND:	80	% SAND:	33
% FINES:	4	% FINES:	4	% FINES:	65
CLASSIFICATION: POORLY GRADED GRAVEL WITH SAND (GP)		CLASSIFICATION: POORLY GRADED SAND WITH GRAVEL (SP)		CLASSIFICATION: SANDY SILT (ML)	

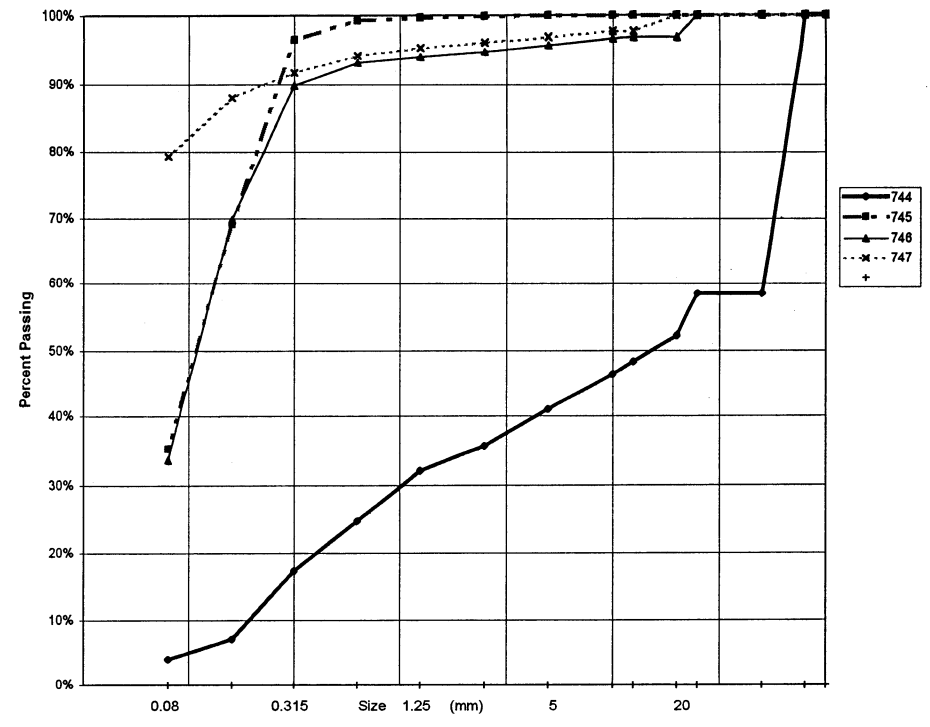
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-788
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1X22 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1804+575 20M LT
 LOGGED BY: G.C. DATE COMP 99-08-17

FIELD NO:	744	FIELD No:	745	FIELD No:	746	FIELD No:	747
LAB NO:	846	LAB No:	847	LAB No:	848	LAB No:	849
DEPTH:	1.2-1.4	DEPTH:	1.8-2.0	DEPTH:	2.8-3.0	DEPTH:	4.4-4.7
TYPE:	AUGER	TYPE:	AUGER	TYPE:	AUGER	TYPE:	AUGER
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%	100	100%
80.0	100%	80.0	100%	80.0	100%	80.0	100%
50.0	58%	50.0	100%	50.0	100%	50.0	100%
25.0	58%	25.0	100%	25.0	100%	25.0	100%
20.0	52%	20.0	100%	20.0	97%	20.0	100%
12.5	48%	12.5	100%	12.5	97%	12.5	98%
10.0	46%	10.0	100%	10.0	97%	10.0	98%
5.0	41%	5.0	100%	5.0	96%	5.0	97%
2.5	36%	2.5	100%	2.5	95%	2.5	96%
1.25	32%	1.25	100%	1.25	94%	1.25	96%
0.630	25%	0.630	99%	0.630	93%	0.630	94%
0.315	17%	0.315	97%	0.315	90%	0.315	92%
0.160	7%	0.160	69%	0.160	70%	0.160	88%
0.080	4%	0.080	35%	0.080	34%	0.080	79%
M.C.(%):	3%	M.C.(%):	18%	M.C.(%):	19%	M.C.(%):	21%
LIMITS		LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	59	% GRAVEL:	0	% GRAVEL:	4	% GRAVEL:	3
% SAND:	37	% SAND:	65	% SAND:	62	% SAND:	18
% FINES:	4	% FINES:	35	% FINES:	34	% FINES:	79
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
POORLY GRADED GRAVEL WITH SAND (GP)		SILTY SAND (SM)		SILTY SAND (SM)		SILT WITH SAND (ML)	

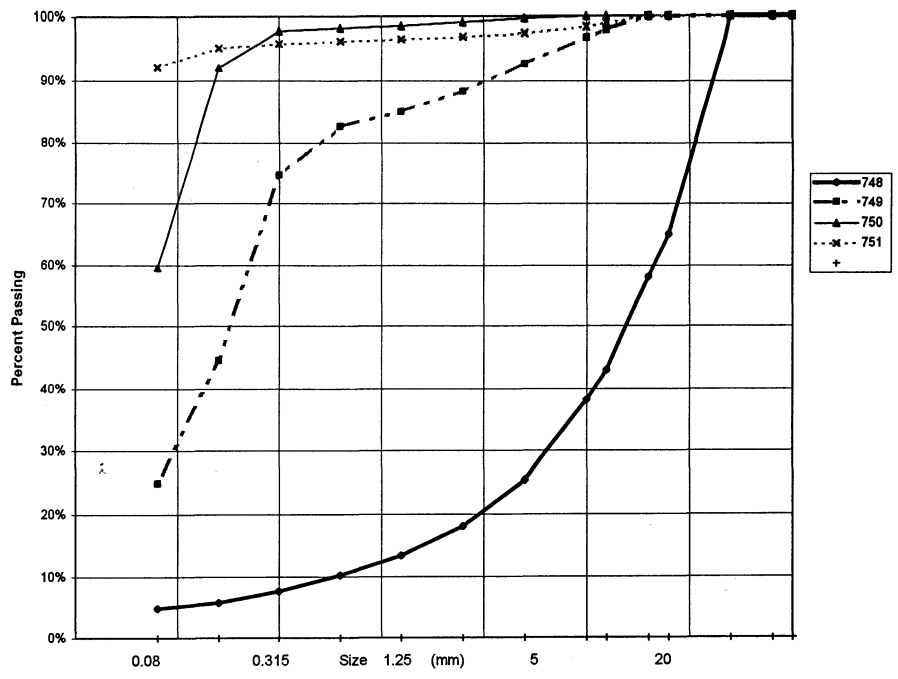
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-789
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1X22 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1801+175 7M LT
 LOGGED BY: G.C. DATE COMP 99-08-19

FIELD NO: 748		FIELD No. 749		FIELD No: 750		FIELD No: 751	
LAB NO: 850	LAB No. 851	LAB No: 852	LAB No: 853	LAB No: 852	LAB No: 853	LAB No: 852	LAB No: 853
DEPTH: 1.3-1.5	DEPTH 1.8-2.0	DEPTH: 2.8-3.0	DEPTH: 4.4-4.7	DEPTH: 2.8-3.0	DEPTH: 4.4-4.7	DEPTH: 2.8-3.0	DEPTH: 4.4-4.7
TYPE: AUGER	TYPE AUGER	TYPE: AUGER	TYPE: AUGER	TYPE: AUGER	TYPE: AUGER	TYPE: AUGER	TYPE: AUGER
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%	100	100%
80.0	100%	80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%	50.0	100%
25.0	65%	25.0	100%	25.0	100%	25.0	100%
20.0	58%	20.0	100%	20.0	100%	20.0	100%
12.5	43%	12.5	98%	12.5	100%	12.5	99%
10.0	38%	10.0	97%	10.0	100%	10.0	99%
5.0	25%	5.0	93%	5.0	100%	5.0	98%
2.5	18%	2.5	88%	2.5	99%	2.5	97%
1.25	13%	1.25	85%	1.25	99%	1.25	97%
0.630	10%	0.630	83%	0.630	98%	0.630	96%
0.315	8%	0.315	75%	0.315	98%	0.315	96%
0.160	6%	0.160	45%	0.160	92%	0.160	95%
0.080	5%	0.080	25%	0.080	60%	0.080	92%
M.C.(%): 6%	M.C.(%): 16%	M.C.(%): 18%	M.C.(%): 22%	M.C.(%): 18%	M.C.(%): 22%	M.C.(%): 18%	M.C.(%): 22%
LIMITS	LIMITS	LIMITS	LIMITS	LIMITS	LIMITS	LIMITS	LIMITS
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	P.I.: 0.0
% GRAVEL: 75	% GRAVEL: 7	% GRAVEL: 0	% GRAVEL: 2	% GRAVEL: 0	% GRAVEL: 2	% GRAVEL: 0	% GRAVEL: 2
% SAND: 21	% SAND: 68	% SAND: 40	% SAND: 5	% SAND: 40	% SAND: 5	% SAND: 40	% SAND: 5
% FINES: 5	% FINES: 25	% FINES: 60	% FINES: 92	% FINES: 60	% FINES: 92	% FINES: 60	% FINES: 92
CLASSIFICATION: WELL-GRADED GRAVEL WITH SAND (GW)	CLASSIFICATION: SILTY SAND (SM)	CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILT (ML)	CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILT (ML)	CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILT (ML)

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)

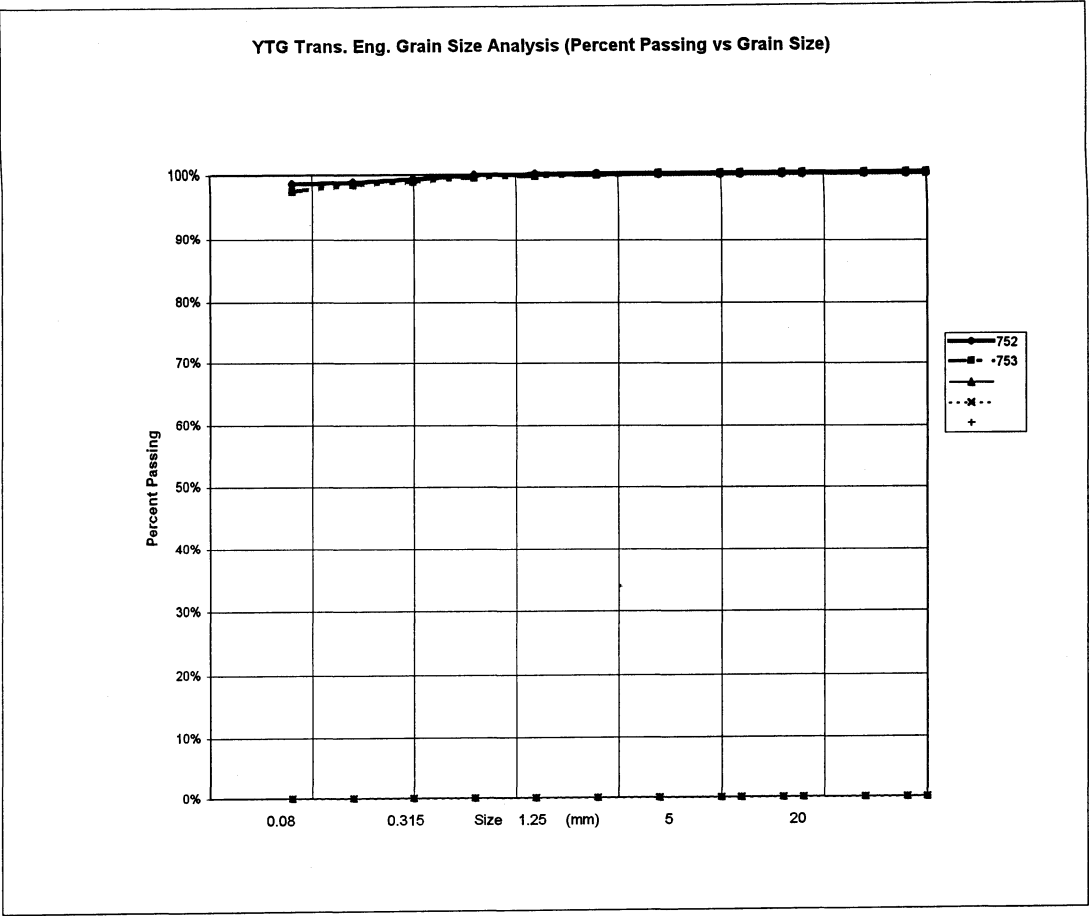


PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-790
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1X22 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1801+075 CENTRELINE
 LOGGED BY: G.C. DATE COMP 99-08-19

FIELD NO:	752	FIELD No.	753
LAB NO:	854	LAB No.	855
DEPTH:	1.2-1.4	DEPTH	2.8-3.0
TYPE:	AUGER	TYPE	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	100%	12.5	100%
10.0	100%	10.0	100%
5.0	100%	5.0	100%
2.5	100%	2.5	100%
1.25	100%	1.25	100%
0.630	100%	0.630	100%
0.315	99%	0.315	99%
0.160	99%	0.160	99%
0.080	99%	0.080	98%

M.C.(%):	29%	M.C.(%):	21%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	0	% GRAVEL:	0
% SAND:	1	% SAND:	2
% FINES:	99	% FINES:	98
CLASSIFICATION:		CLASSIFICATION:	
SILT (ML)		SILT (ML)	



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-791
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1789-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1800+975 10M LT
 LOGGED BY: G.C. DATE COMP 99-08-19

FIELD NO: 754
 LAB NO: 856
 DEPTH: 1.8-2.0
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	100%
20.0	96%
12.5	93%
10.0	93%
5.0	85%
2.5	79%
1.25	74%
0.630	63%
0.315	39%
0.160	27%
0.080	20%

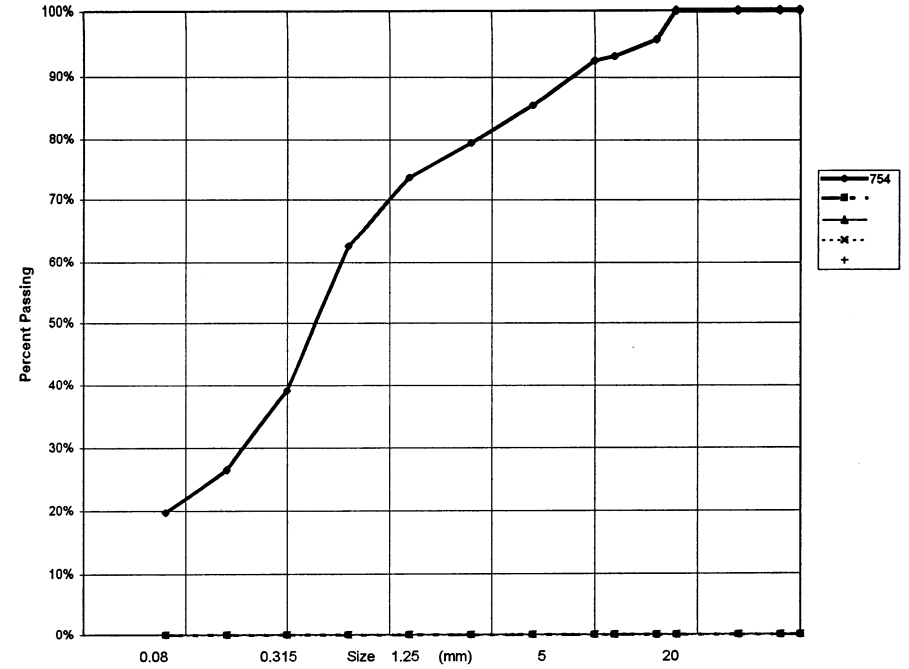
M.C.(%): 18%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 15
 % SAND: 66
 % FINES: 20

CLASSIFICATION:
 SILTY SAND (SM)

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 528-792
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1800+905 20M LT
 LOGGED BY: G.C. DATE COMP 99/08/20

FIELD NO: 755
 LAB NO: 857
 DEPTH: 1.8-2.0
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	90%
20.0	72%
12.5	61%
10.0	58%
5.0	45%
2.5	36%
1.25	27%
0.630	18%
0.315	10%
0.160	7%
0.080	6%

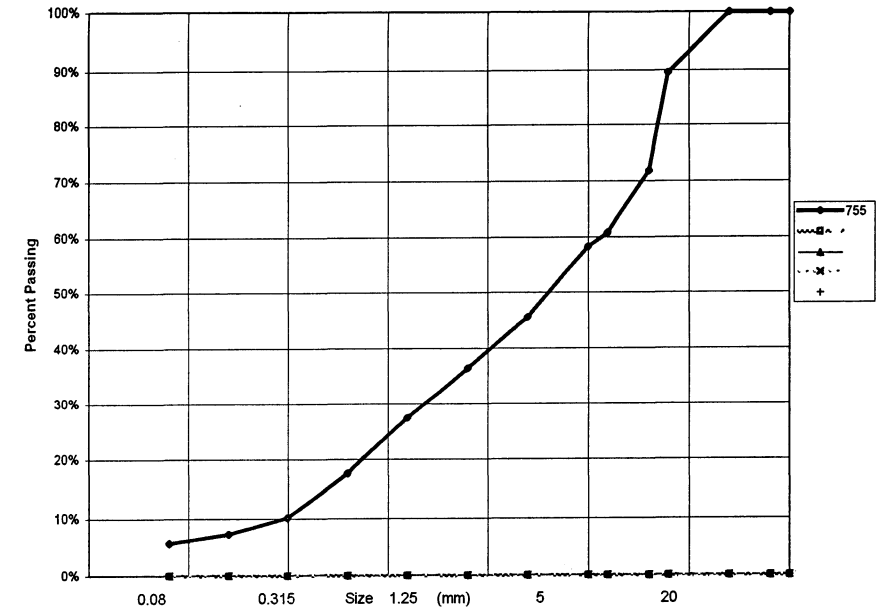
M.C.(%): 10%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 55
 % SAND: 40
 % FINES: 6

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

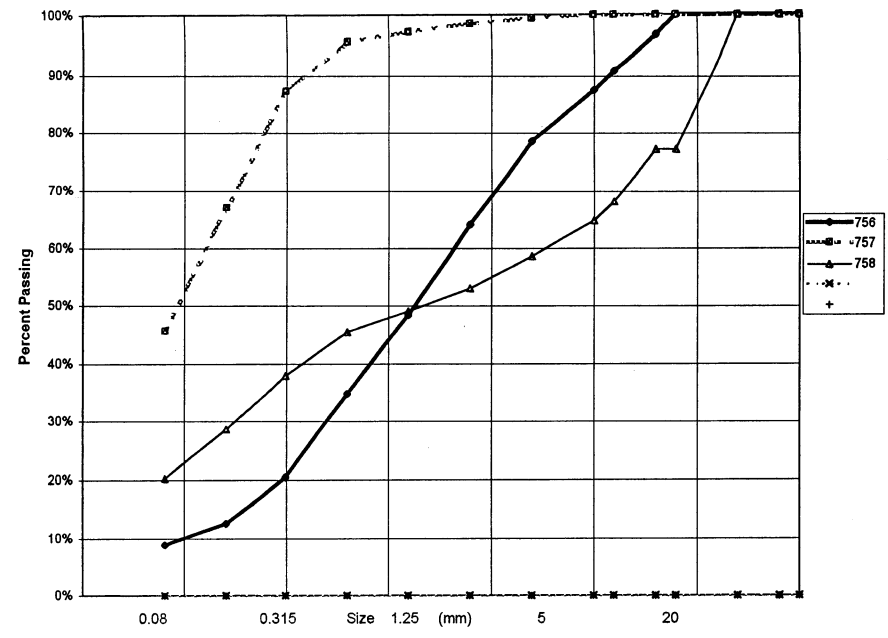
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 528-793
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1800+905 15M RT
 LOGGED BY: G.C. DATE COMP 99-08-20

FIELD NO:	LAB NO:	DEPTH:	TYPE:	FIELD No.	LAB No.	DEPTH:	TYPE:	FIELD No.	LAB No.	DEPTH:	TYPE:
756	858	.8-1.0	AUGER	757	859	1.8-2.0	AUGER	758	860	2.8-3.0	AUGER
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%	100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%	80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%	50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%	25.0	77%	25.0	77%	25.0	77%
20.0	97%	20.0	100%	20.0	100%	20.0	77%	20.0	77%	20.0	77%
12.5	91%	12.5	100%	12.5	100%	12.5	68%	12.5	68%	12.5	68%
10.0	88%	10.0	100%	10.0	100%	10.0	65%	10.0	65%	10.0	65%
5.0	79%	5.0	99%	5.0	99%	5.0	59%	5.0	59%	5.0	59%
2.5	64%	2.5	99%	2.5	99%	2.5	53%	2.5	53%	2.5	53%
1.25	48%	1.25	97%	1.25	97%	1.25	49%	1.25	49%	1.25	49%
0.630	35%	0.630	96%	0.630	96%	0.630	45%	0.630	45%	0.630	45%
0.315	20%	0.315	87%	0.315	87%	0.315	38%	0.315	38%	0.315	38%
0.160	13%	0.160	67%	0.160	67%	0.160	29%	0.160	29%	0.160	29%
0.080	9%	0.080	46%	0.080	46%	0.080	20%	0.080	20%	0.080	20%
M.C.(%):	11%	M.C.(%):	33%	M.C.(%):	16%	M.C.(%):	16%	M.C.(%):	16%	M.C.(%):	16%
LIMITS		LIMITS		LIMITS		LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	21	% GRAVEL:	1	% GRAVEL:	41	% GRAVEL:	41	% GRAVEL:	41	% GRAVEL:	41
% SAND:	70	% SAND:	54	% SAND:	38	% SAND:	38	% SAND:	38	% SAND:	38
% FINES:	9	% FINES:	46	% FINES:	20	% FINES:	20	% FINES:	20	% FINES:	20
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
POORLY GRADED SAND WITH SILT & GRAVEL (SP-SM)		SILTY SAND (SM)		SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)	

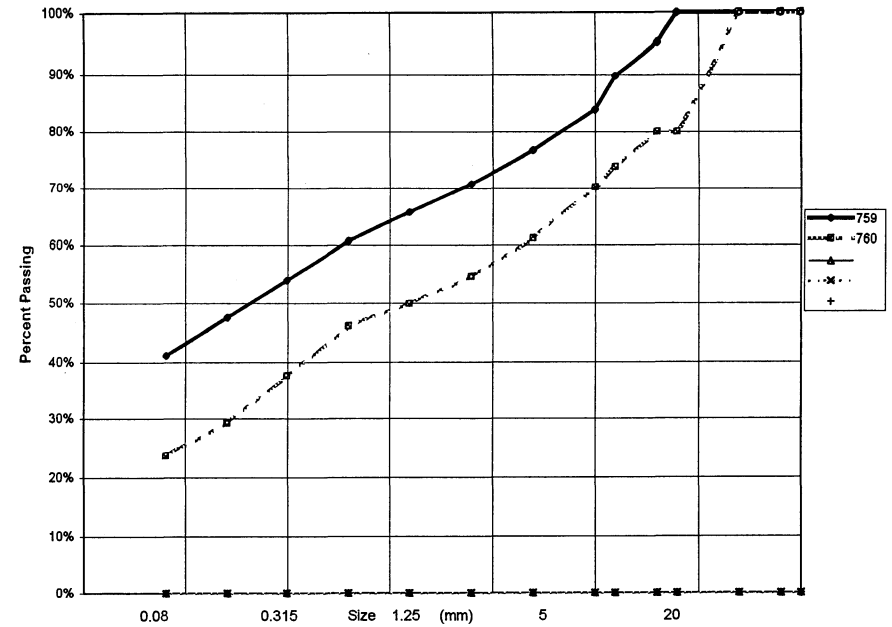
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 528-794
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1800+800 10M RT
 LOGGED BY: G.C. DATE COMP 99-08-20

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	80%
20.0	95%	20.0	80%
12.5	90%	12.5	74%
10.0	84%	10.0	70%
5.0	77%	5.0	61%
2.5	71%	2.5	55%
1.25	65%	1.25	50%
0.630	61%	0.630	46%
0.315	54%	0.315	38%
0.160	47%	0.160	29%
0.080	41%	0.080	24%
M.C.(%):	10%	M.C.(%):	7%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	23	% GRAVEL:	39
% SAND:	36	% SAND:	37
% FINES:	41	% FINES:	24
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)	

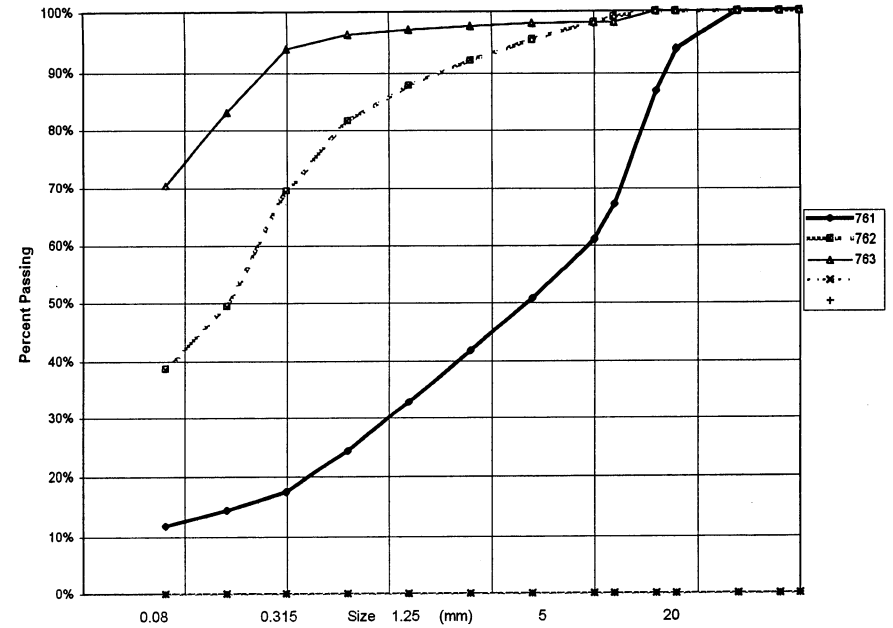
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 528-795
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1800+700 15M RT
 LOGGED BY: G.C. DATE COMP 99-08-20

FIELD NO: 761		FIELD No. 762		FIELD No: 763	
LAB NO:	863	LAB No:	864	LAB No:	865
DEPTH:	0.8-1.0	DEPTH:	1.8-2.0	DEPTH:	2.8-3.0
TYPE:	AUGER	TYPE:	AUGER	TYPE:	AUGER
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	94%	25.0	100%	25.0	100%
20.0	87%	20.0	100%	20.0	100%
12.5	67%	12.5	99%	12.5	98%
10.0	61%	10.0	98%	10.0	98%
5.0	51%	5.0	96%	5.0	98%
2.5	42%	2.5	92%	2.5	98%
1.25	33%	1.25	88%	1.25	97%
0.630	24%	0.630	82%	0.630	96%
0.315	18%	0.315	69%	0.315	94%
0.160	14%	0.160	49%	0.160	83%
0.080	12%	0.080	39%	0.080	70%
M.C.(%):	4%	M.C.(%):	12%	M.C.(%):	16%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	49	% GRAVEL:	4	% GRAVEL:	2
% SAND:	39	% SAND:	57	% SAND:	28
% FINES:	12	% FINES:	39	% FINES:	70
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		SILTY SAND (SM)		SILT WITH SAND (ML)	

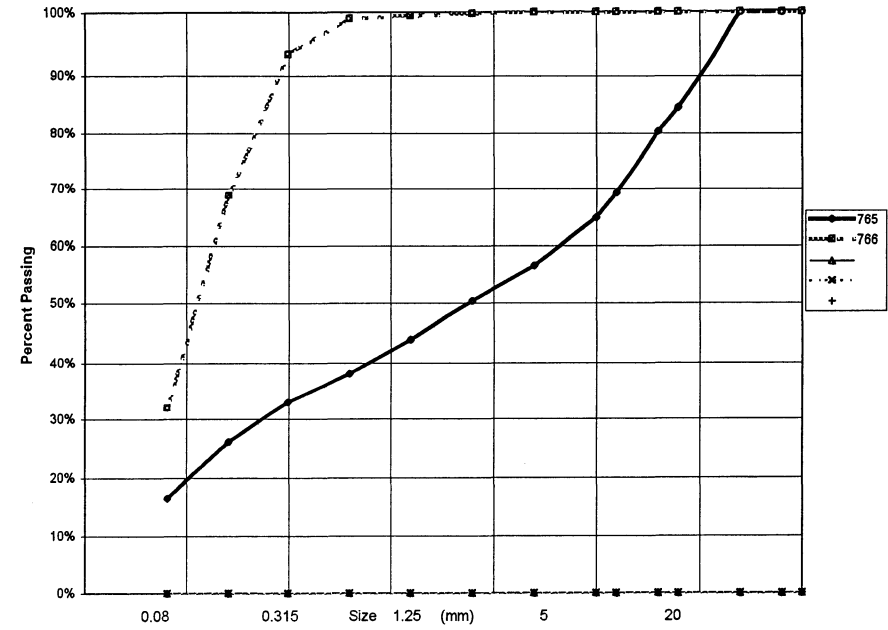
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 528-796
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1800+615 12M RT
 LOGGED BY: G.C. DATE COMP 99-08-20

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	85%	25.0	100%
20.0	80%	20.0	100%
12.5	69%	12.5	100%
10.0	65%	10.0	100%
5.0	57%	5.0	100%
2.5	50%	2.5	100%
1.25	44%	1.25	99%
0.630	38%	0.630	99%
0.315	33%	0.315	94%
0.160	26%	0.160	69%
0.080	16%	0.080	32%
M.C.(%): 10%		M.C.(%): 33%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	43	% GRAVEL:	0
% SAND:	40	% SAND:	68
% FINES:	16	% FINES:	32
CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY SAND (SM)	

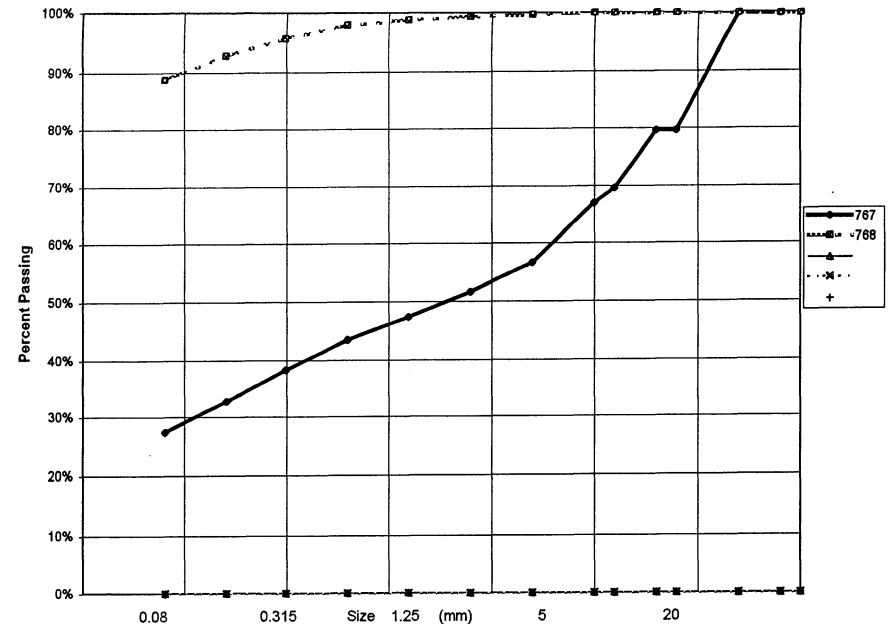
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 528-797
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1800+525 3M RT
 LOGGED BY: G.C. DATE COMP 99-08-20

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	80%	25.0	100%
20.0	80%	20.0	100%
12.5	70%	12.5	100%
10.0	67%	10.0	100%
5.0	56%	5.0	100%
2.5	52%	2.5	99%
1.25	47%	1.25	99%
0.630	43%	0.630	98%
0.315	38%	0.315	96%
0.160	33%	0.160	93%
0.080	27%	0.080	89%
M.C.(%): 10%		M.C.(%): 15%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	44	% GRAVEL:	0
% SAND:	29	% SAND:	11
% FINES:	27	% FINES:	89
CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILT (ML)	

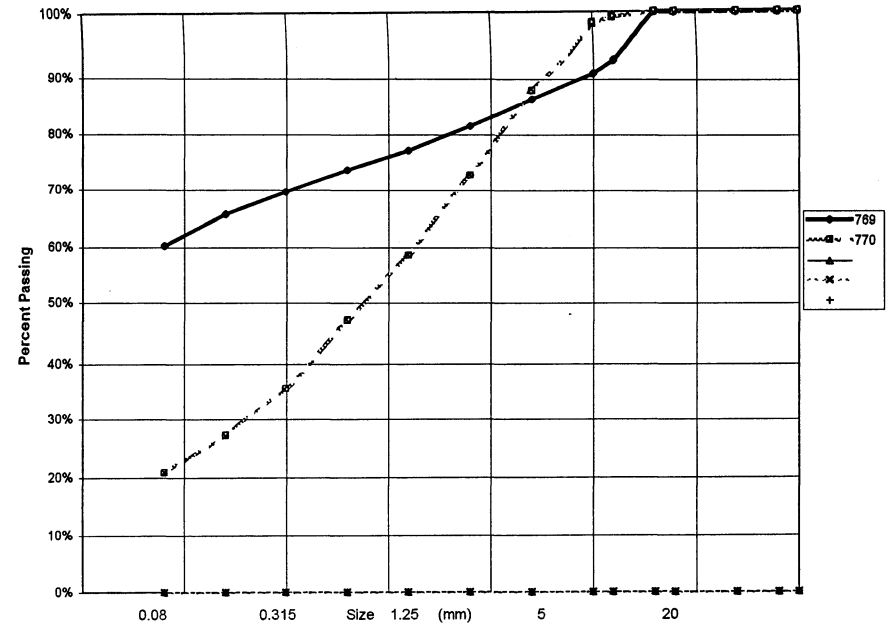
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 528-798
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1800+425 3M RT
 LOGGED BY: G.C. DATE COMP 99-08-20

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	93%	12.5	99%
10.0	91%	10.0	98%
5.0	86%	5.0	88%
2.5	82%	2.5	73%
1.25	77%	1.25	59%
0.630	74%	0.630	47%
0.315	70%	0.315	36%
0.160	66%	0.160	27%
0.080	60%	0.080	21%
M.C.(%):	31%	M.C.(%):	8%
LIMITS			
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	14	% GRAVEL:	12
% SAND:	26	% SAND:	67
% FINES:	60	% FINES:	21
CLASSIFICATION:		CLASSIFICATION:	
SANDY SILT (ML)		SILTY SAND (SM)	

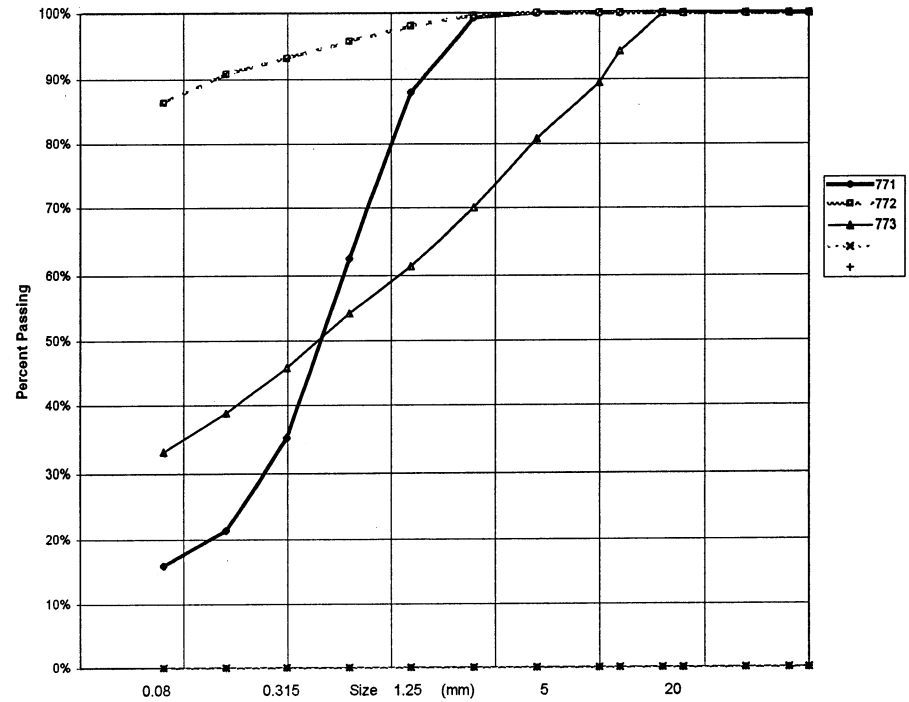
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 529-799
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1800+375 33M RT
 LOGGED BY: D.T. DATE COMP 99-08-23

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%
20.0	100%	20.0	100%	20.0	100%
12.5	100%	12.5	100%	12.5	94%
10.0	100%	10.0	100%	10.0	89%
5.0	100%	5.0	100%	5.0	81%
2.5	99%	2.5	100%	2.5	70%
1.25	88%	1.25	98%	1.25	61%
0.630	62%	0.630	96%	0.630	54%
0.315	35%	0.315	93%	0.315	46%
0.160	21%	0.160	91%	0.160	39%
0.080	16%	0.080	86%	0.080	33%
M.C.(%):	14%	M.C.(%):	26%	M.C.(%):	12%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	0	% GRAVEL:	0	% GRAVEL:	19
% SAND:	84	% SAND:	14	% SAND:	48
% FINES:	16	% FINES:	86	% FINES:	33
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND (SM)		SILT (ML)		SILTY SAND WITH GRAVEL (SM)	

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 529-800
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1800+300 3M RT
 LOGGED BY: D.T. DATE COMP 99-08-23

FIELD NO:	774	FIELD No:	775	FIELD No:	776
LAB NO:	876	LAB No:	877	LAB No:	878
DEPTH:	0.8-1.2	DEPTH:	2.8-3.0	DEPTH:	4.5-4.7
TYPE:	AUGER	TYPE:	AUGER	TYPE:	AUGER

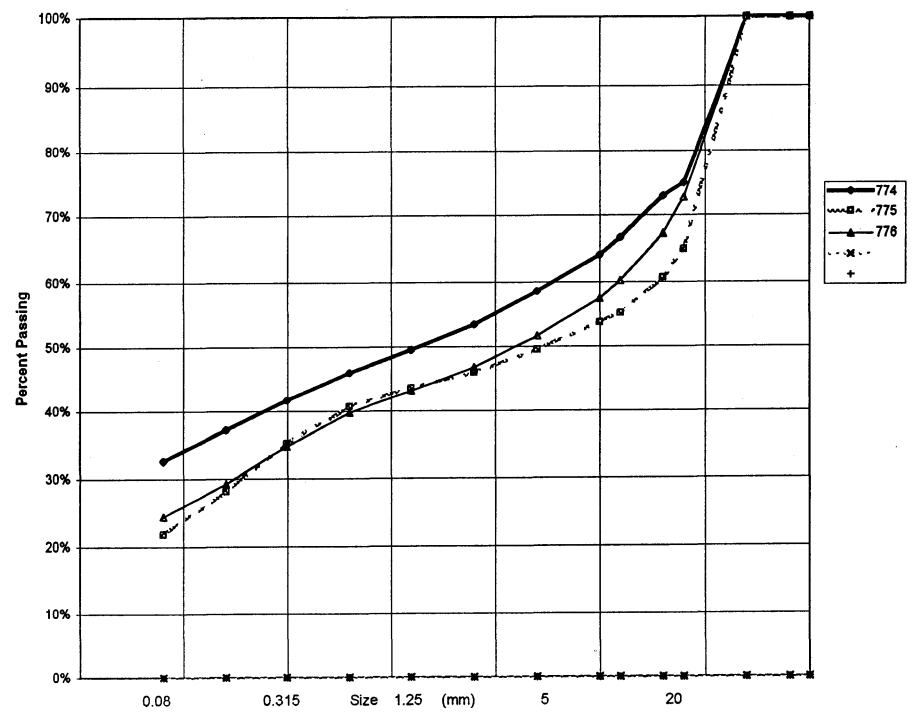
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	75%	25.0	65%	25.0	73%
20.0	73%	20.0	61%	20.0	67%
12.5	67%	12.5	55%	12.5	60%
10.0	64%	10.0	54%	10.0	57%
5.0	59%	5.0	50%	5.0	52%
2.5	53%	2.5	46%	2.5	47%
1.25	50%	1.25	44%	1.25	43%
0.630	46%	0.630	41%	0.630	40%
0.315	42%	0.315	35%	0.315	35%
0.160	37%	0.160	28%	0.160	29%
0.080	32%	0.080	22%	0.080	24%

M.C.(%):	6%	M.C.(%):	5%	M.C.(%):	5%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0

% GRAVEL:	41	% GRAVEL:	50	% GRAVEL:	48
% SAND:	26	% SAND:	28	% SAND:	27
% FINES:	32	% FINES:	22	% FINES:	24

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

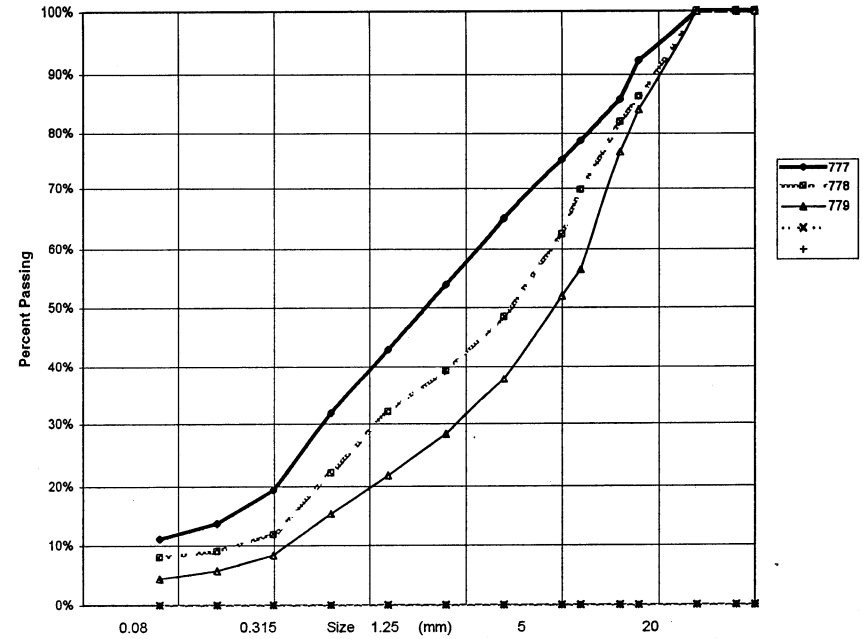
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



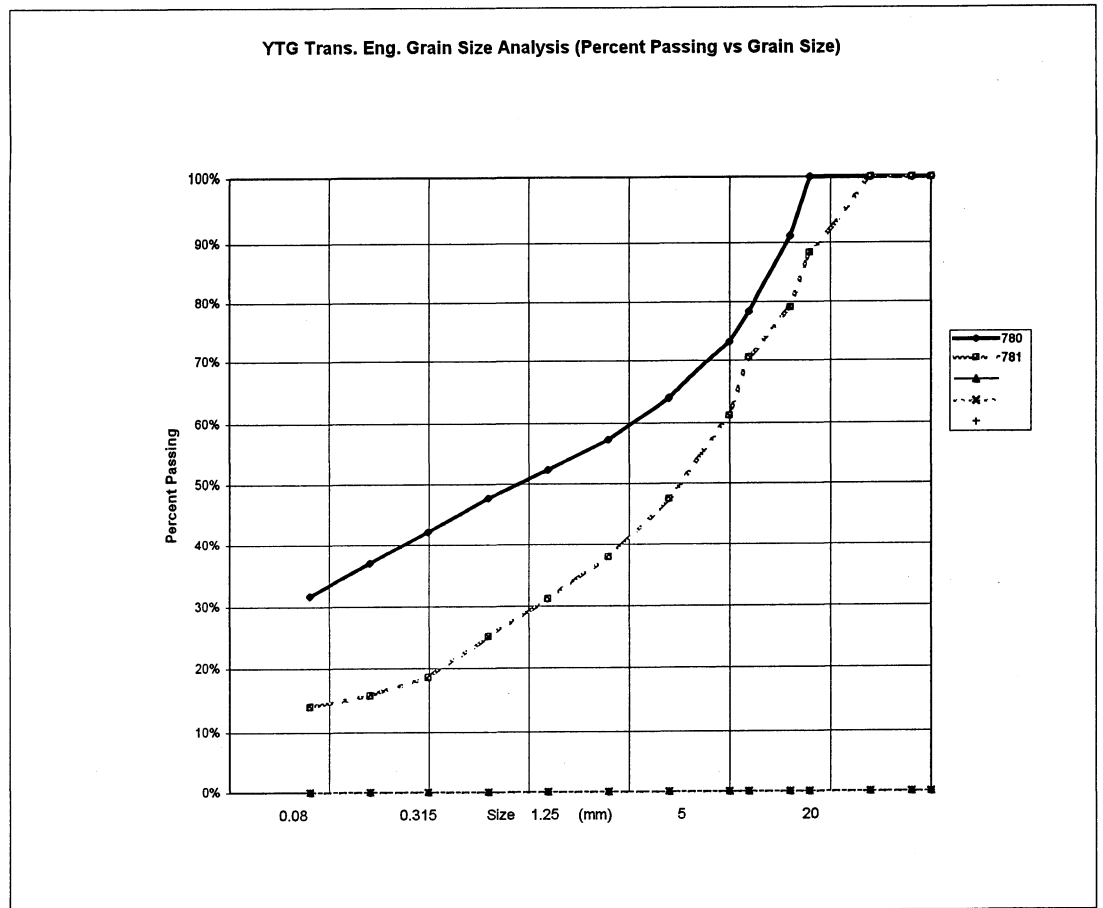
PROJECT NUMBER: 092-202101-0329 HOLE No.: 529-801
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1800+225 2M LT
 LOGGED BY: D.T. DATE COMP 99-08-23

FIELD NO: 777		FIELD No. 778		FIELD No: 779	
LAB NO: 879		LAB No. 880		LAB No: 881	
DEPTH: 0.8-1.0		DEPTH 1.8-2.0		DEPTH: 3.8-4.0	
TYPE: AUGER		TYPE AUGER		TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	92%	25.0	86%	25.0	84%
20.0	86%	20.0	82%	20.0	77%
12.5	79%	12.5	70%	12.5	56%
10.0	75%	10.0	63%	10.0	52%
5.0	65%	5.0	48%	5.0	38%
2.5	54%	2.5	39%	2.5	28%
1.25	43%	1.25	32%	1.25	22%
0.630	32%	0.630	22%	0.630	15%
0.315	19%	0.315	12%	0.315	8%
0.160	14%	0.160	9%	0.160	6%
0.080	11%	0.080	8%	0.080	4%
M.C.(%):	7%	M.C.(%):	3%	M.C.(%):	2%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	35	% GRAVEL:	52	% GRAVEL:	62
% SAND:	54	% SAND:	40	% SAND:	33
% FINES:	11	% FINES:	8	% FINES:	4
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)		POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		POORLY GRADED GRAVEL WITH SAND (GP)	

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)

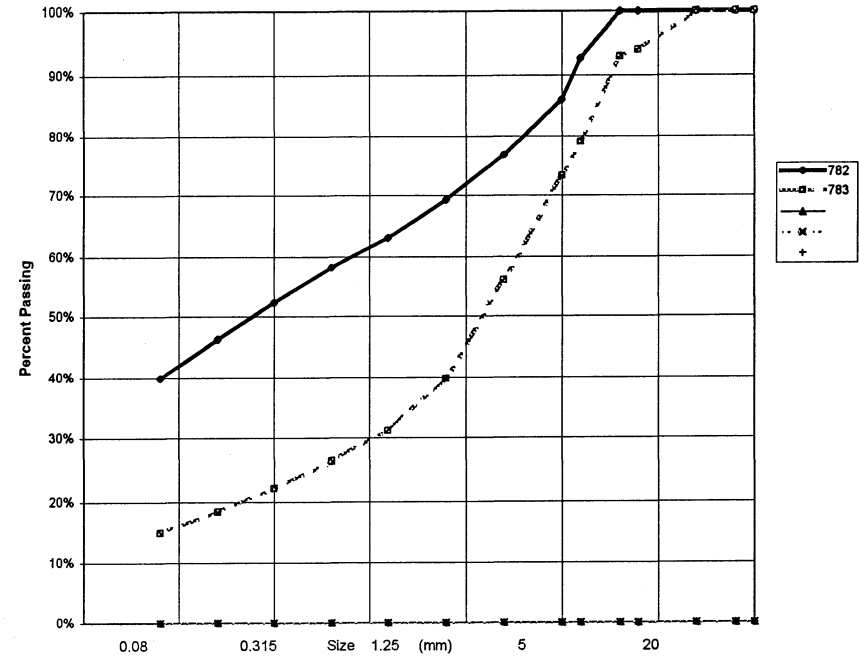


PROJECT NUMBER:	092-202101-0329	HOLE No.:	529-802
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1322 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1800+150 29M RT	DATE COMP	99-08-23
LOGGED BY:	D.T.		
=====			
FIELD NO:	780	FIELD No.	781
LAB NO:	882	LAB No.	883
DEPTH:	3.8-4.0	DEPTH	4.5-4.7
TYPE:	AUGER	TYPE	AUGER
=====			
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	88%
20.0	91%	20.0	79%
12.5	78%	12.5	70%
10.0	73%	10.0	61%
5.0	64%	5.0	47%
2.5	57%	2.5	38%
1.25	52%	1.25	31%
0.630	48%	0.630	25%
0.315	42%	0.315	19%
0.160	37%	0.160	16%
0.080	32%	0.080	14%
=====			
M.C.(%):	10%	M.C.(%):	7%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
=====			
% GRAVEL:	36	% GRAVEL:	53
% SAND:	32	% SAND:	33
% FINES:	32	% FINES:	14
=====			
CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)	



PROJECT NUMBER:	092-202101-0329	HOLE No.:	529-803
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1322 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1800+050 2M LT	DATE COMP	99-08-23
LOGGED BY:	D.T.		
=====			
FIELD NO:	782	FIELD No.	783
LAB NO:	884	LAB No.	885
DEPTH:	1.8-2.0	DEPTH	3.7-3.9
TYPE:	AUGER	TYPE	AUGER
=====			
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	94%
20.0	100%	20.0	93%
12.5	93%	12.5	79%
10.0	86%	10.0	73%
5.0	77%	5.0	56%
2.5	69%	2.5	40%
1.25	63%	1.25	31%
0.630	58%	0.630	26%
0.315	52%	0.315	22%
0.160	46%	0.160	18%
0.080	40%	0.080	15%
=====			
M.C.(%):	17%	M.C.(%):	8%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	23	% GRAVEL:	44
% SAND:	37	% SAND:	41
% FINES:	40	% FINES:	15
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)	

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 529-804
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1799+950 2M LT
 LOGGED BY: D.T. DATE COMP 99-08-23

FIELD NO: 784	FIELD No. 785
LAB NO: 886	LAB No. 887
DEPTH: 1.2-1.4	DEPTH 2.8-3.0
TYPE: AUGER	TYPE AUGER

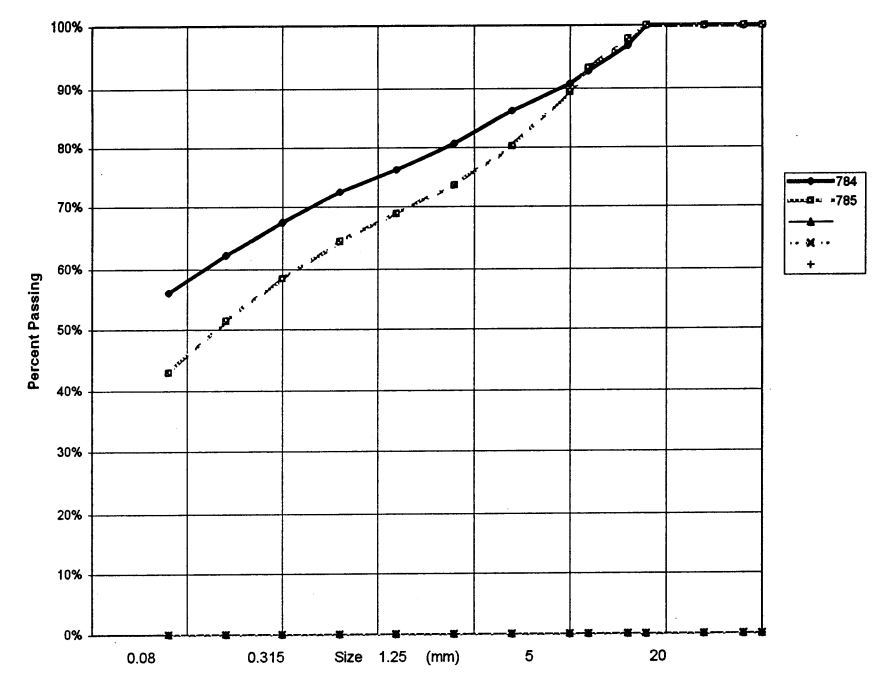
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	97%	20.0	98%
12.5	93%	12.5	93%
10.0	91%	10.0	89%
5.0	86%	5.0	80%
2.5	81%	2.5	74%
1.25	76%	1.25	69%
0.630	72%	0.630	65%
0.315	67%	0.315	58%
0.160	62%	0.160	51%
0.080	56%	0.080	43%

M.C.(%): 26%	M.C.(%): 21%
LIMITS	LIMITS
LIQUID: 0.0	LIQUID: 0.0
PLASTIC: 0.0	PLASTIC: 0.0
P.I.: 0.0	P.I.: 0.0

% GRAVEL: 14	% GRAVEL: 20
% SAND: 30	% SAND: 37
% FINES: 56	% FINES: 43

CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)
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YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 529-805
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1322 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1799.850 2M LT
 LOGGED BY: D.T. DATE COMP 99-08-23

FIELD NO: 786
 LAB NO: 888
 DEPTH: 1.6-1.8
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	100%
20.0	100%
12.5	97%
10.0	96%
5.0	90%
2.5	85%
1.25	82%
0.630	79%
0.315	75%
0.160	70%
0.080	64%

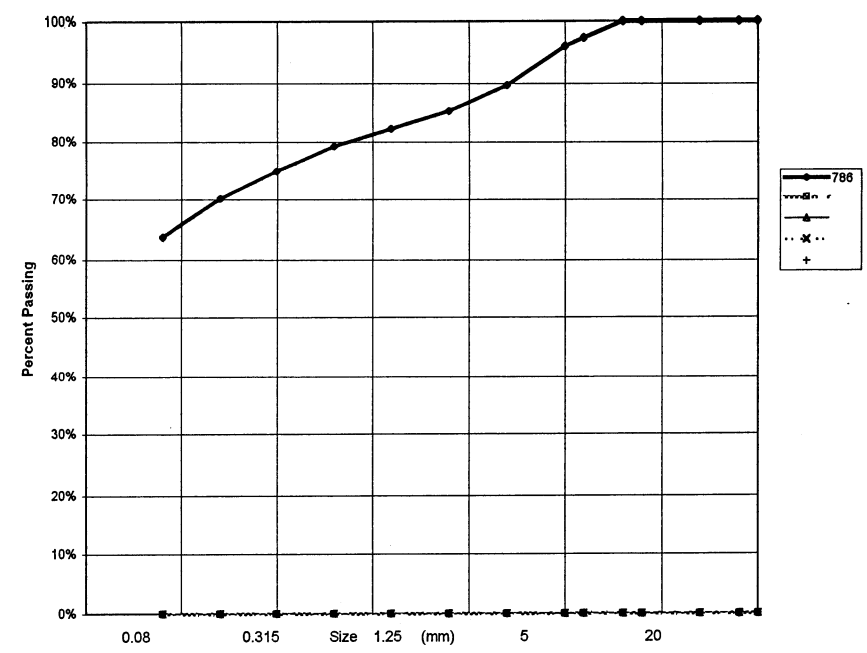
M.C.(%): 34%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 10
 % SAND: 26
 % FINES: 64

CLASSIFICATION:
 SANDY SILT (ML)

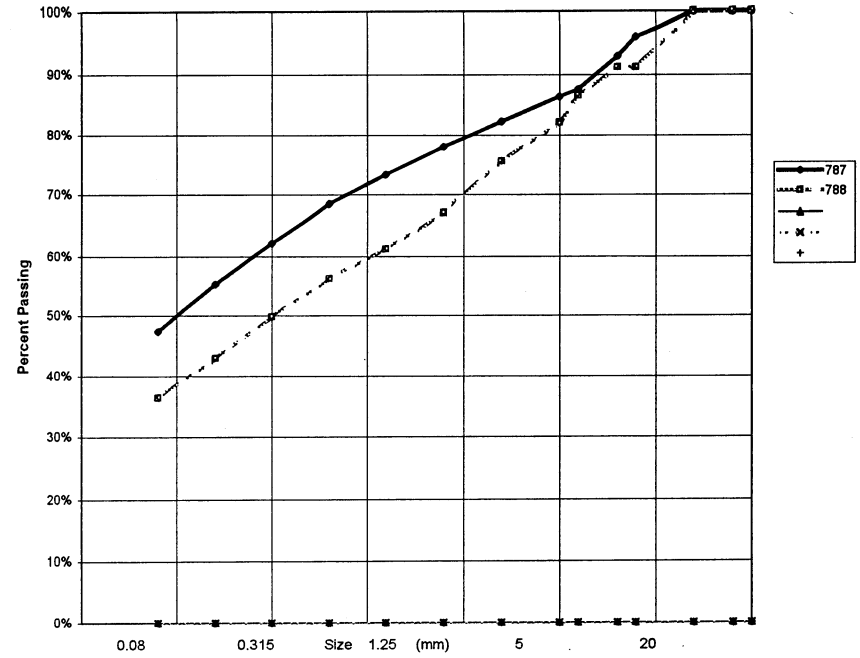
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 529-806
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1799+800 20M RT
 LOGGED BY: D.T. DATE COMP 99-08-23

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	96%	25.0	91%
20.0	93%	20.0	91%
12.5	88%	12.5	86%
10.0	86%	10.0	82%
5.0	82%	5.0	76%
2.5	78%	2.5	67%
1.25	73%	1.25	61%
0.630	69%	0.630	56%
0.315	62%	0.315	50%
0.160	55%	0.160	43%
0.080	47%	0.080	36%
M.C.(%):	18%	M.C.(%):	19%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	18	% GRAVEL:	24
% SAND:	35	% SAND:	39
% FINES:	47	% FINES:	36
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)	

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 529-807
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1799+800 20M LT
 LOGGED BY: D.T. DATE COMP 99-08-23

FIELD NO: 789	FIELD No. 790
LAB NO: 891	LAB No. 892
DEPTH: 2.2-2.4	DEPTH 3.0-3.2
TYPE: AUGER	TYPE AUGER

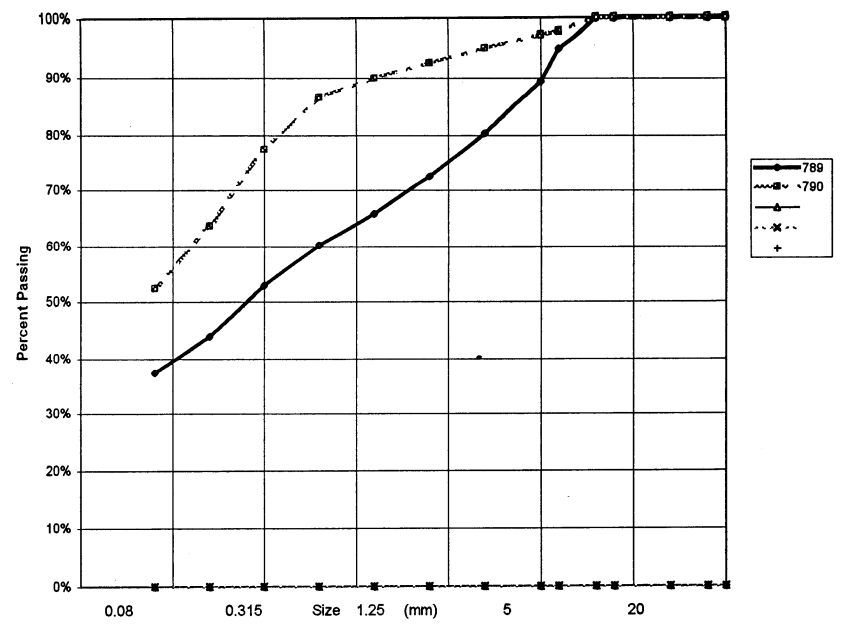
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	95%	12.5	98%
10.0	89%	10.0	97%
5.0	80%	5.0	95%
2.5	72%	2.5	93%
1.25	66%	1.25	90%
0.630	60%	0.630	87%
0.315	53%	0.315	77%
0.160	44%	0.160	64%
0.080	37%	0.080	52%

M.C.(%): 19%	M.C.(%): 25%
LIMITS	LIMITS
LIQUID: 0.0	LIQUID: 0.0
PLASTIC: 0.0	PLASTIC: 0.0
P.I.: 0.0	P.I.: 0.0

% GRAVEL: 20	% GRAVEL: 5
% SAND: 43	% SAND: 43
% FINES: 37	% FINES: 52

CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	CLASSIFICATION: SANDY SILT (ML)
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YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 529-808
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1522 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1799+700 2M LT
 LOGGED BY: D.T. DATE COMP 99-08-23

FIELD NO: 791	FIELD No. 792
LAB NO: 893	LAB No. 894
DEPTH: 0.8-1.0	DEPTH 2.8-3.0
TYPE: AUGER	TYPE AUGER

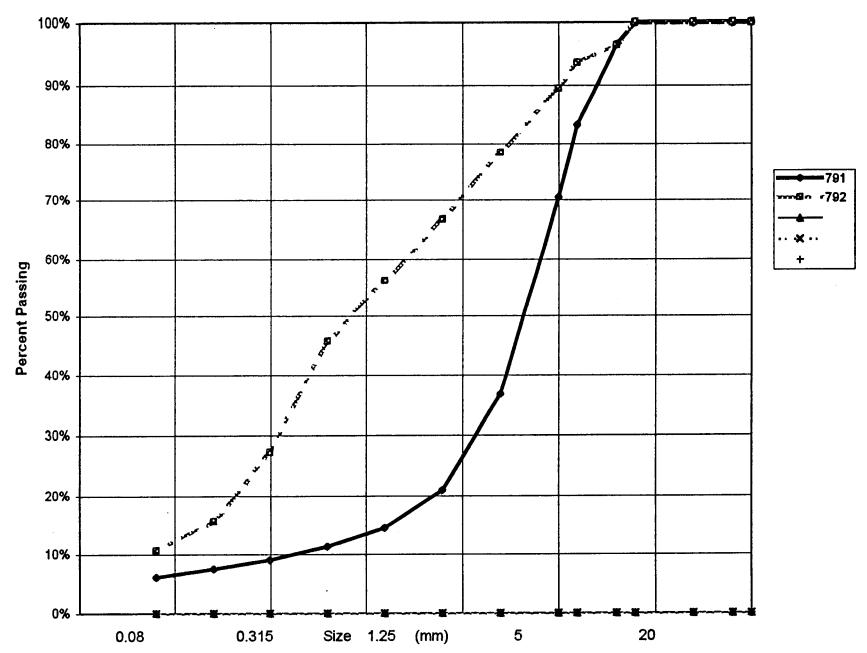
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	97%	20.0	97%
12.5	83%	12.5	94%
10.0	70%	10.0	89%
5.0	37%	5.0	78%
2.5	21%	2.5	67%
1.25	14%	1.25	56%
0.630	11%	0.630	46%
0.315	9%	0.315	27%
0.160	7%	0.160	16%
0.080	6%	0.080	11%

M.C.(%): 15%	M.C.(%): 14%
LIMITS	LIMITS
LIQUID: 0.0	LIQUID: 0.0
PLASTIC: 0.0	PLASTIC: 0.0
P.I.: 0.0	P.I.: 0.0

% GRAVEL: 63	% GRAVEL: 22
% SAND: 31	% SAND: 68
% FINES: 6	% FINES: 11

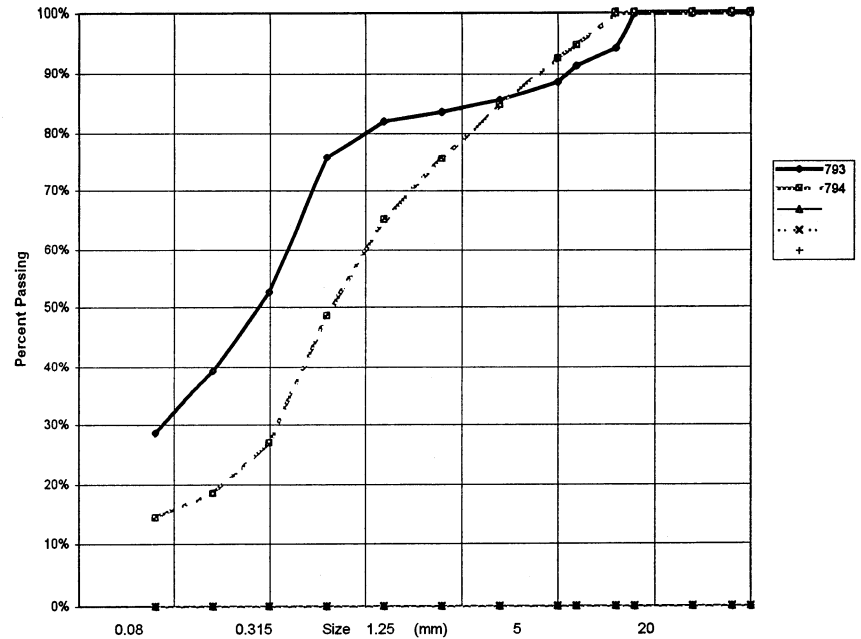
CLASSIFICATION: POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	CLASSIFICATION: POORLY GRADED SAND WITH SILT & GRAVEL (SP-SM)
--	--

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER:	092-202101-0329	HOLE No.:	529-809
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1322 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1799+600 CENTRELINE	DATE COMP	99-08-23
LOGGED BY:	D.T.		
=====			
FIELD NO:	793	FIELD No.	794
LAB NO:	895	LAB No.	896
DEPTH:	1.8-2.0	DEPTH	4.3-4.5
TYPE:	AUGER	TYPE	AUGER
=====			
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	94%	20.0	100%
12.5	91%	12.5	95%
10.0	89%	10.0	93%
5.0	86%	5.0	85%
2.5	84%	2.5	76%
1.25	82%	1.25	65%
0.630	76%	0.630	49%
0.315	52%	0.315	27%
0.160	39%	0.160	18%
0.080	29%	0.080	14%
=====			
M.C.(%):	34%	M.C.(%):	40%
LIMITS			
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
=====			
% GRAVEL:	14	% GRAVEL:	15
% SAND:	57	% SAND:	70
% FINES:	29	% FINES:	14
=====			
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND (SM)		SILTY SAND WITH GRAVEL (SM)	

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 529-810
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1X22 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1799+500 CENTRELINE
 LOGGED BY: D.T. DATE COMP 99-08-24

FIELD NO:	795	FIELD No:	796	FIELD No:	797
LAB NO:	897	LAB No:	898	LAB No:	899
DEPTH:	2.2-2.4	DEPTH:	3.3-3.5	DEPTH:	4.5-4.7
TYPE:	AUGER	TYPE:	AUGER	TYPE:	AUGER

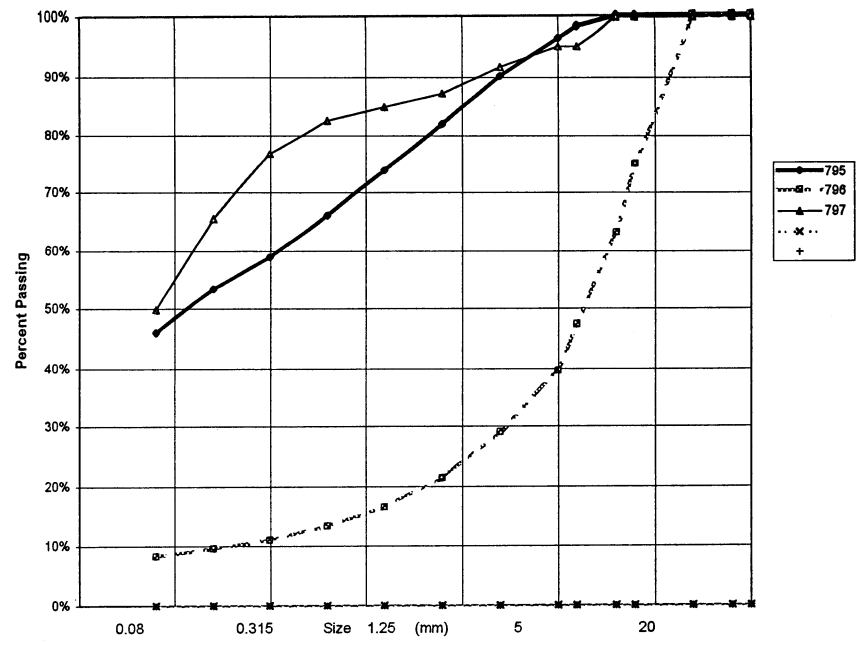
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	75%	25.0	100%
20.0	100%	20.0	63%	20.0	100%
12.5	99%	12.5	47%	12.5	95%
10.0	97%	10.0	40%	10.0	95%
5.0	90%	5.0	29%	5.0	92%
2.5	82%	2.5	21%	2.5	87%
1.25	74%	1.25	16%	1.25	85%
0.630	66%	0.630	13%	0.630	82%
0.315	59%	0.315	11%	0.315	77%
0.160	53%	0.160	10%	0.160	66%
0.080	46%	0.080	8%	0.080	50%

M.C.(%):	55%	M.C.(%):	23%	M.C.(%):	76%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0

% GRAVEL:	10	% GRAVEL:	71	% GRAVEL:	8
% SAND:	44	% SAND:	21	% SAND:	42
% FINES:	46	% FINES:	8	% FINES:	50

CLASSIFICATION:	SILTY SAND (SM)	CLASSIFICATION:	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	CLASSIFICATION:	SILTY SAND (SM)
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YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER:	092-202101-0329	HOLE No.:	529-811
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 Km 1799-1822 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1799+400 4M LT		
LOGGED BY:	D.T.	DATE COMP	99-08-24

FIELD NO:	798	FIELD No.	799
LAB NO:	900	LAB No.	901
DEPTH:	1.7-1.9	DEPTH	4.3-4.6
TYPE:	AUGER	TYPE	AUGER

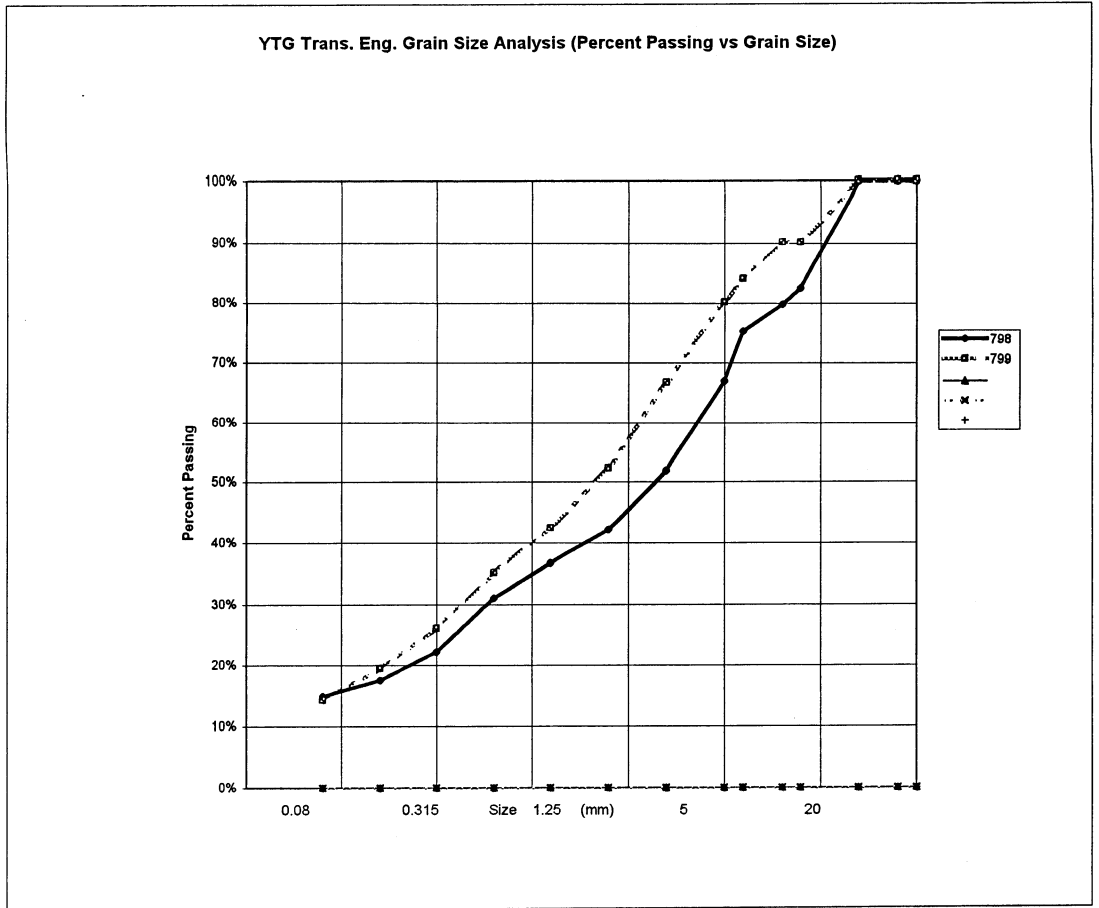
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	82%	25.0	90%
20.0	80%	20.0	90%
12.5	75%	12.5	84%
10.0	67%	10.0	80%
5.0	52%	5.0	67%
2.5	42%	2.5	52%
1.25	37%	1.25	43%
0.630	31%	0.630	35%
0.315	22%	0.315	26%
0.160	17%	0.160	19%
0.080	15%	0.080	14%

M.C.(%):	10%	M.C.(%):	17%
----------	-----	----------	-----

LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0

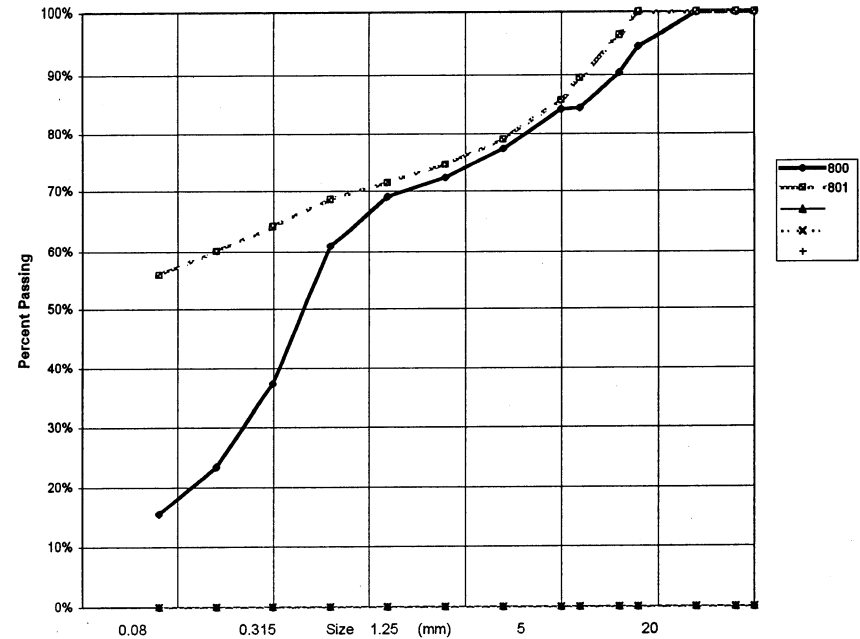
% GRAVEL:	48	% GRAVEL:	33
% SAND:	37	% SAND:	53
% FINES:	15	% FINES:	14

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



PROJECT NUMBER:	092-202101-0329	HOLE No.:	529-812
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1322 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1799+275 12M RT		
LOGGED BY:	D.T.	DATE COMP	99-08-24
=====			
FIELD NO:	800	FIELD No.	801
LAB NO:	902	LAB No.	903
DEPTH:	1.8-2.0	DEPTH	4.4-4.7
TYPE:	AUGER	TYPE	AUGER
=====			
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	95%	25.0	100%
20.0	90%	20.0	96%
12.5	84%	12.5	89%
10.0	84%	10.0	86%
5.0	77%	5.0	79%
2.5	72%	2.5	75%
1.25	69%	1.25	71%
0.630	61%	0.630	69%
0.315	37%	0.315	64%
0.160	23%	0.160	60%
0.080	15%	0.080	56%
=====			
M.C.(%):	14%	M.C.(%):	38%
LIMITS			
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
=====			
% GRAVEL:	23	% GRAVEL:	21
% SAND:	62	% SAND:	23
% FINES:	15	% FINES:	56
=====			
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SANDY SILT WITH GRAVEL (ML)	

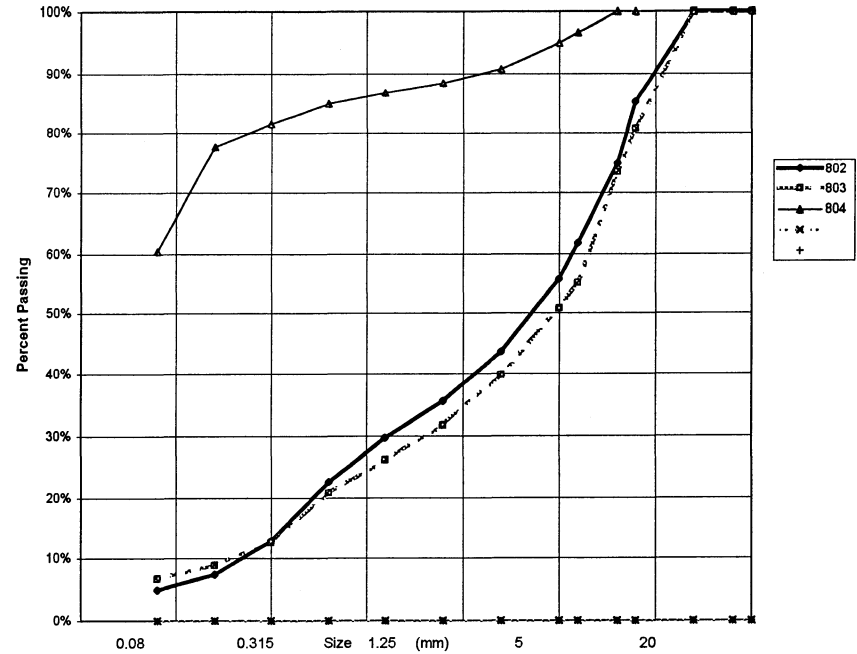
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 529-813
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 Km 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1799+257 11M RT
 LOGGED BY: D.T. DATE COMP 99-08-24

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	85%	25.0	81%	25.0	100%
20.0	75%	20.0	73%	20.0	100%
12.5	62%	12.5	55%	12.5	97%
10.0	56%	10.0	51%	10.0	95%
5.0	44%	5.0	40%	5.0	91%
2.5	35%	2.5	32%	2.5	88%
1.25	30%	1.25	26%	1.25	87%
0.630	23%	0.630	21%	0.630	85%
0.315	13%	0.315	13%	0.315	81%
0.160	7%	0.160	9%	0.160	78%
0.080	5%	0.080	7%	0.080	60%
M.C.(%):	12%	M.C.(%):	13%	M.C.(%):	30%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	56	% GRAVEL:	60	% GRAVEL:	9
% SAND:	39	% SAND:	33	% SAND:	30
% FINES:	5	% FINES:	7	% FINES:	60
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
POORLY GRADED GRAVEL WITH SAND (GP)		POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		SANDY SILT (ML)	

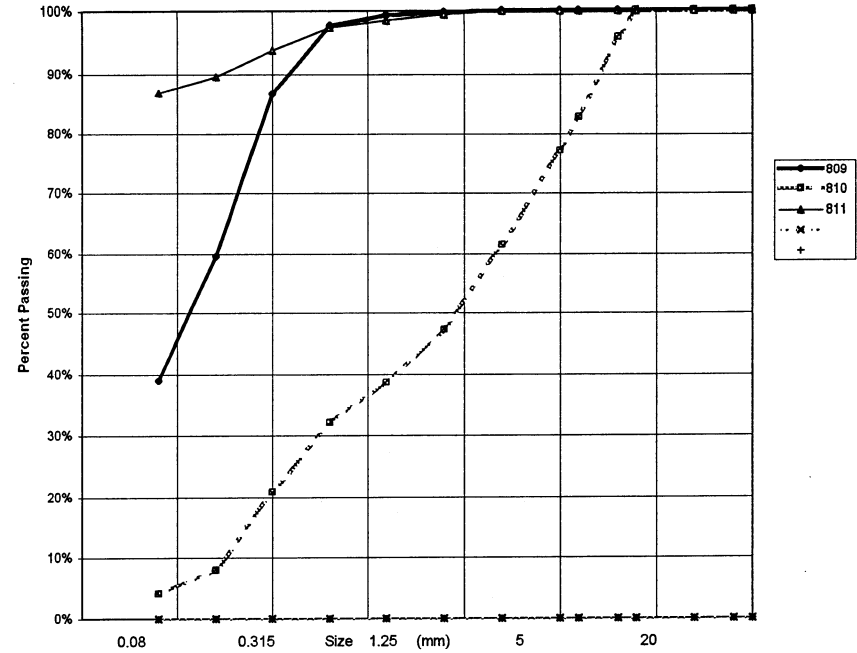
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 529+816
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 Km 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1798+936 12M RT
 LOGGED BY: D.T. DATE COMP 99-08-24

FIELD NO:	809	FIELD No:	810	FIELD No:	811
LAB NO:	911	LAB No:	912	LAB No:	913
DEPTH:	1.3-1.5	DEPTH:	2.8-3.0	DEPTH:	4.4-4.6
TYPE:	AUGER	TYPE:	AUGER	TYPE:	AUGER
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%
20.0	100%	20.0	96%	20.0	100%
12.5	100%	12.5	83%	12.5	100%
10.0	100%	10.0	77%	10.0	100%
5.0	100%	5.0	62%	5.0	100%
2.5	100%	2.5	47%	2.5	99%
1.25	99%	1.25	39%	1.25	99%
0.630	98%	0.630	32%	0.630	98%
0.315	87%	0.315	21%	0.315	94%
0.160	60%	0.160	8%	0.160	90%
0.080	39%	0.080	4%	0.080	87%
M.C.(%):	58%	M.C.(%):	14%	M.C.(%):	90%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	0	% GRAVEL:	38	% GRAVEL:	0
% SAND:	61	% SAND:	57	% SAND:	13
% FINES:	39	% FINES:	4	% FINES:	87
CLASSIFICATION:	SILTY SAND (SM)	CLASSIFICATION:	WELL-GRADED SAND WITH GRAVEL (SW)	CLASSIFICATION:	SILT (ML)

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER:	092-202101-0329	HOLE No.:	529-817
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1822 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1798+936 20M RT		
LOGGED BY:	D.T.	DATE COMP	99-08-24

FIELD NO:	812	FIELD No.	813	FIELD No:	814
LAB NO:	914	LAB No.	915	LAB No:	916
DEPTH:	2.8-3.0	DEPTH	4.3-4.5	DEPTH:	5.8-6.0
TYPE:	AUGER	TYPE	AUGER	TYPE:	AUGER

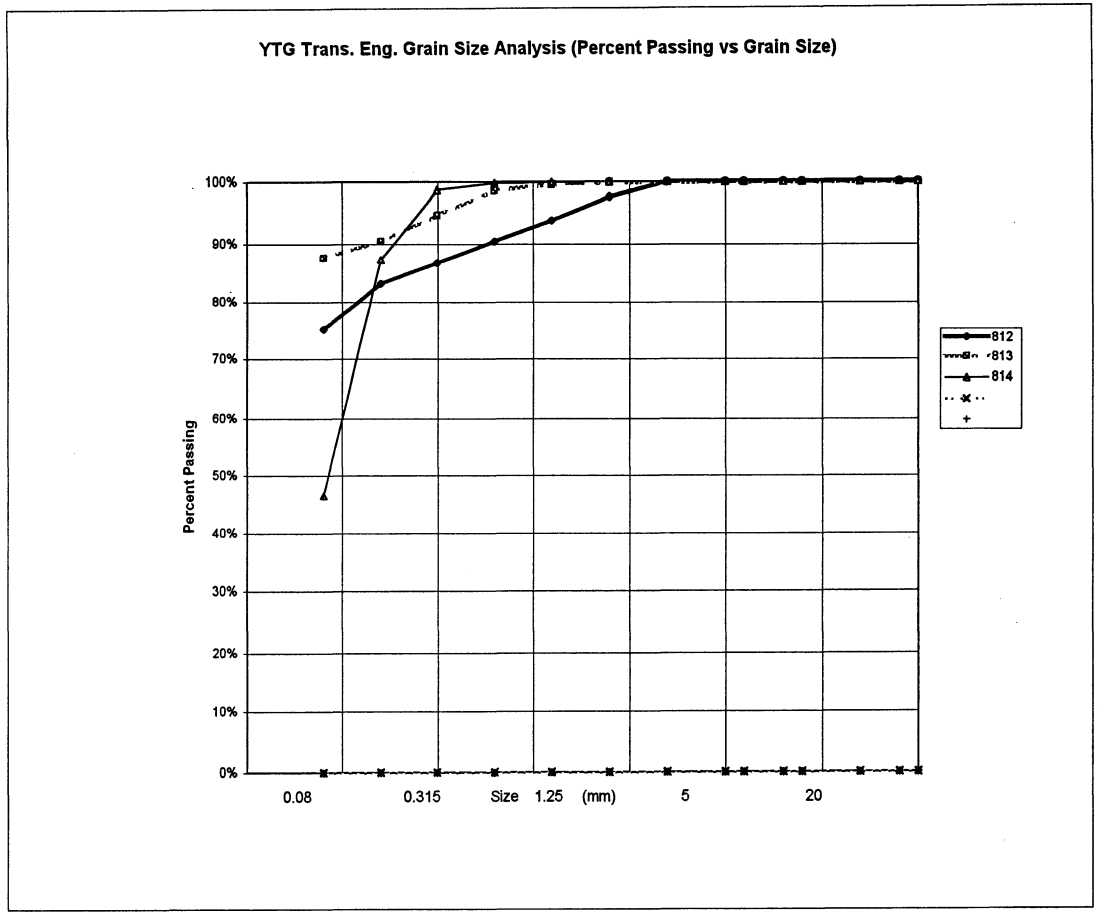
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%
20.0	100%	20.0	100%	20.0	100%
12.5	100%	12.5	100%	12.5	100%
10.0	100%	10.0	100%	10.0	100%
5.0	100%	5.0	100%	5.0	100%
2.5	98%	2.5	100%	2.5	100%
1.25	94%	1.25	100%	1.25	100%
0.630	90%	0.630	99%	0.630	100%
0.315	87%	0.315	95%	0.315	99%
0.160	83%	0.160	90%	0.160	87%
0.080	75%	0.080	88%	0.080	47%

M.C.(%):	83%	M.C.(%):	79%	M.C.(%):	26%
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LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0

% GRAVEL:	0	% GRAVEL:	0	% GRAVEL:	0
% SAND:	25	% SAND:	12	% SAND:	53
% FINES:	75	% FINES:	88	% FINES:	47

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 529-818
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1322 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1798+800 2M RT
 LOGGED BY: D.T. DATE COMP 99-08-25

FIELD NO:	815	FIELD No. 816	FIELD No: 817
LAB NO:	917	LAB No. 918	LAB No: 919
DEPTH:	0.8-1.0	DEPTH 2.8-3.0	DEPTH: 4.5-4.7
TYPE:	AUGER	TYPE AUGER	TYPE: AUGER

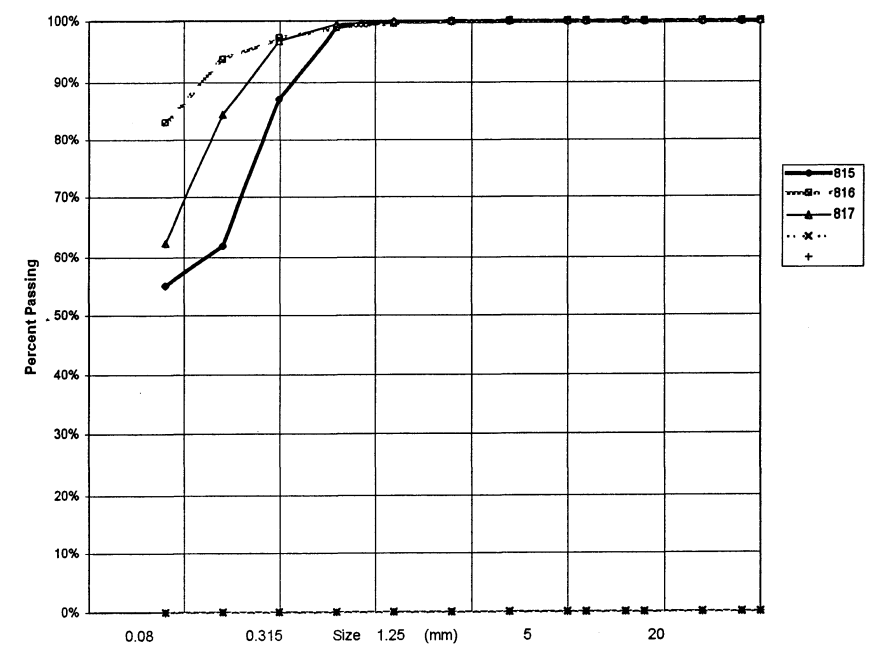
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%
20.0	100%	20.0	100%	20.0	100%
12.5	100%	12.5	100%	12.5	100%
10.0	100%	10.0	100%	10.0	100%
5.0	100%	5.0	100%	5.0	100%
2.5	100%	2.5	100%	2.5	100%
1.25	100%	1.25	100%	1.25	100%
0.630	99%	0.630	99%	0.630	99%
0.315	87%	0.315	97%	0.315	97%
0.160	62%	0.160	94%	0.160	84%
0.080	55%	0.080	83%	0.080	62%

M.C.(%):	79%	M.C.(%):	61%	M.C.(%):	59%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0

% GRAVEL:	0	% GRAVEL:	0	% GRAVEL:	0
% SAND:	45	% SAND:	17	% SAND:	38
% FINES:	55	% FINES:	83	% FINES:	62

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

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)

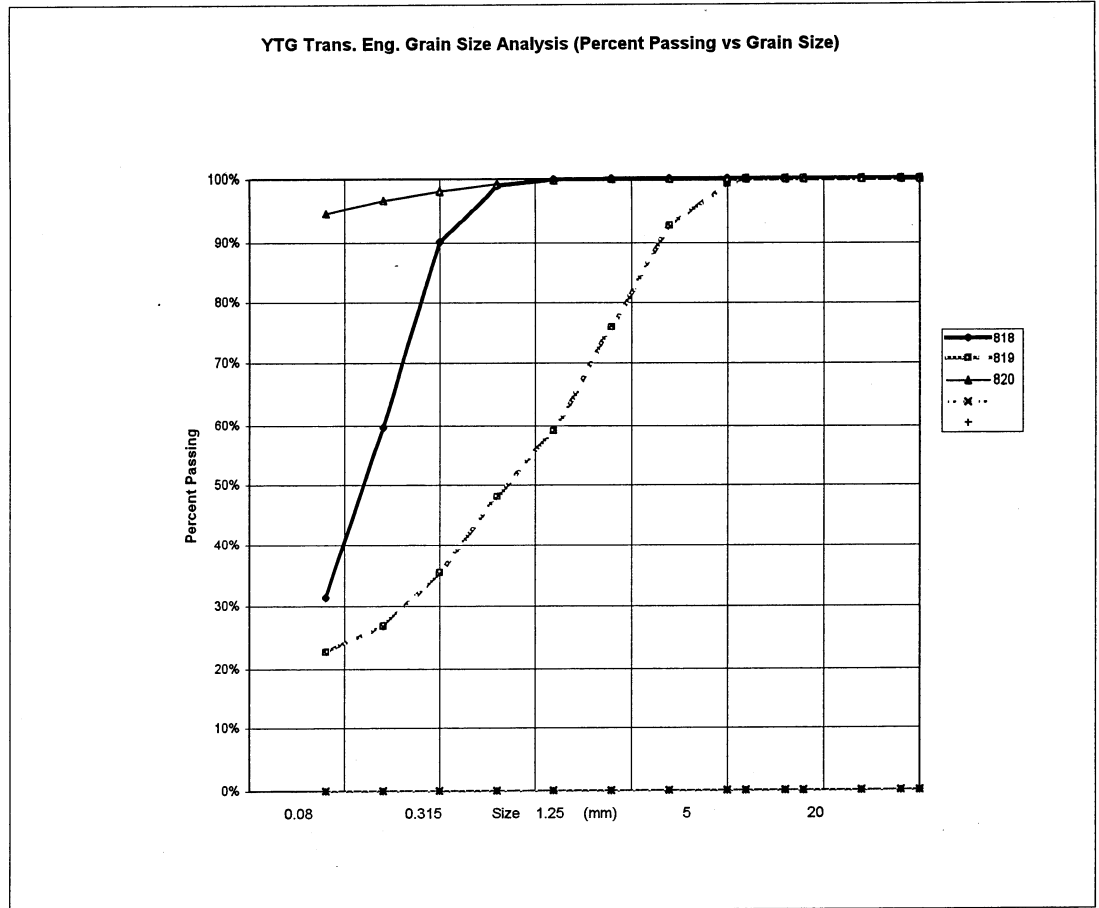


PROJECT NUMBER: 092-202101-0329 HOLE No.: 529-819
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 Km 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1798+650 20M RT
 LOGGED BY: D.T. DATE COMP 99-08-25

FIELD NO:	818	FIELD No:	819	FIELD No:	820
LAB NO:	920	LAB No:	921	LAB No:	922
DEPTH:	0.8-1.0	DEPTH	2.0-2.2	DEPTH:	2.9-3.1
TYPE:	AUGER	TYPE	AUGER	TYPE:	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%
20.0	100%	20.0	100%	20.0	100%
12.5	100%	12.5	100%	12.5	100%
10.0	100%	10.0	99%	10.0	100%
5.0	100%	5.0	93%	5.0	100%
2.5	100%	2.5	76%	2.5	100%
1.25	100%	1.25	59%	1.25	100%
0.630	99%	0.630	48%	0.630	99%
0.315	90%	0.315	35%	0.315	98%
0.160	60%	0.160	27%	0.160	97%
0.080	31%	0.080	23%	0.080	95%

M.C.(%):	23%	M.C.(%):	26%	M.C.(%):	56%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	0	% GRAVEL:	7	% GRAVEL:	0
% SAND:	69	% SAND:	70	% SAND:	5
% FINES:	31	% FINES:	23	% FINES:	95
CLASSIFICATION:	SILTY SAND (SM)	CLASSIFICATION:	SILTY SAND (SM)	CLASSIFICATION:	SILT (ML)



PROJECT NUMBER:	092-202101-0329	HOLE No.:	529-820
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1822 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1798+660 20M LT		
LOGGED BY:	D.T.	DATE COMP	99-08-25

FIELD NO:	821		
LAB NO:	923		
DEPTH:	1.3-1.5		
TYPE:	AUGER		

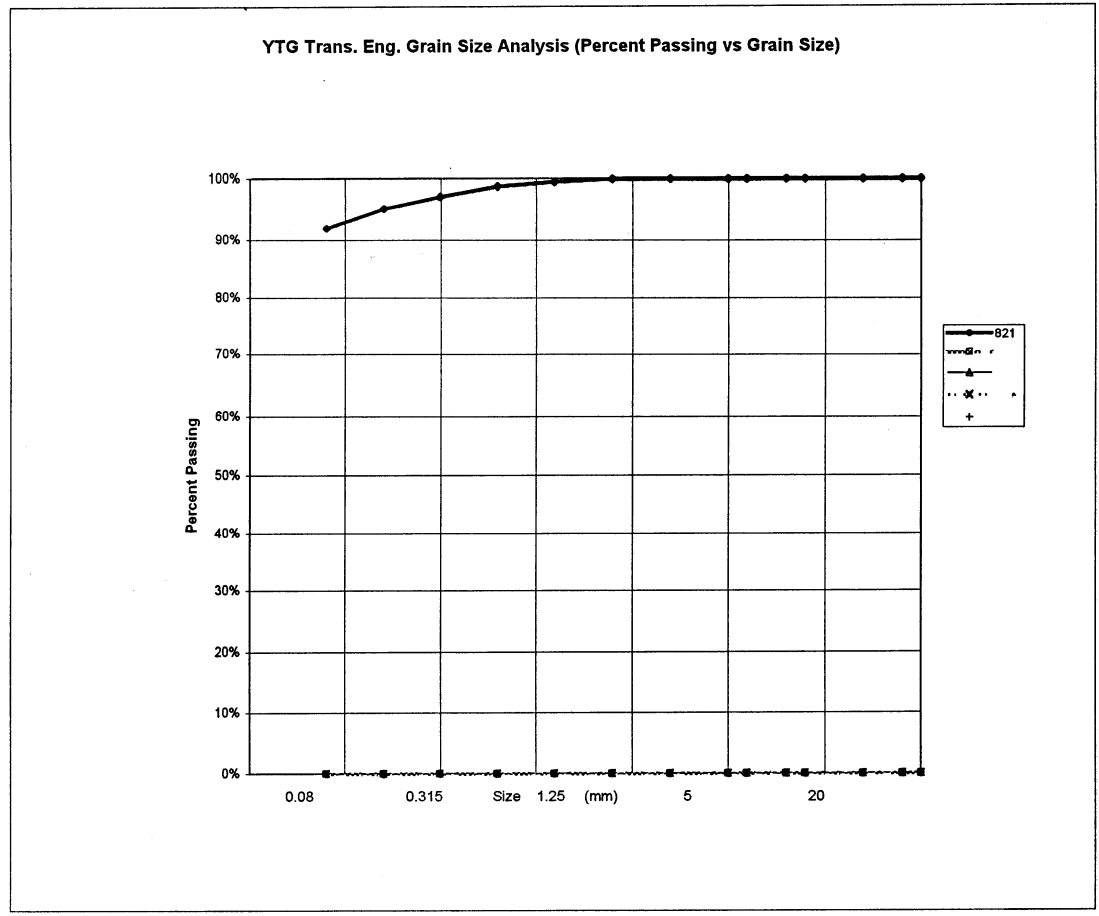
SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	100%
20.0	100%
12.5	100%
10.0	100%
5.0	100%
2.5	100%
1.25	99%
0.630	99%
0.315	97%
0.160	95%
0.080	92%

M.C.(%):	99%
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LIMITS	
LIQUID:	0.0
PLASTIC:	0.0
P.I.:	0.0

% GRAVEL:	0
% SAND:	8
% FINES:	92

CLASSIFICATION:	SILT (ML)
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PROJECT NUMBER: 092-202101-0329 HOLE No.: 529-821
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 Km 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1798+600 2M LT
 LOGGED BY: D.T. DATE COMP 99-08-25

FIELD NO: 822	FIELD No. 823
LAB NO: 924	LAB No. 925
DEPTH: 0.8-1.0	DEPTH 1.8-2.0
TYPE: AUGER	TYPE AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	100%	12.5	100%
10.0	100%	10.0	100%
5.0	100%	5.0	100%
2.5	100%	2.5	100%
1.25	100%	1.25	99%
0.630	100%	0.630	97%
0.315	99%	0.315	93%
0.160	98%	0.160	89%
0.080	86%	0.080	81%

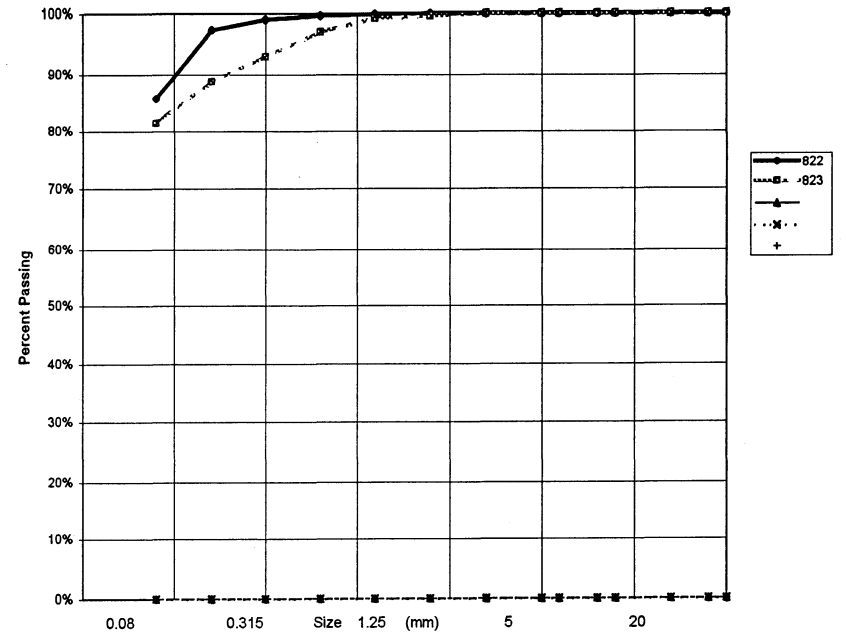
M.C.(%): 16% M.C.(%): 57%

LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0

% GRAVEL:	0	% GRAVEL:	0
% SAND:	14	% SAND:	19
% FINES:	86	% FINES:	81

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

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER:	092-202101-0329	HOLE No.:	529-822
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1822 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1798+475 2M LT		
LOGGED BY:	D.T.	DATE COMP	99-08-25

FIELD NO:	824	FIELD No:	825
LAB NO:	926	LAB No:	927
DEPTH:	1.6-1.8	DEPTH	2.2-2.4
TYPE:	AUGER	TYPE	AUGER

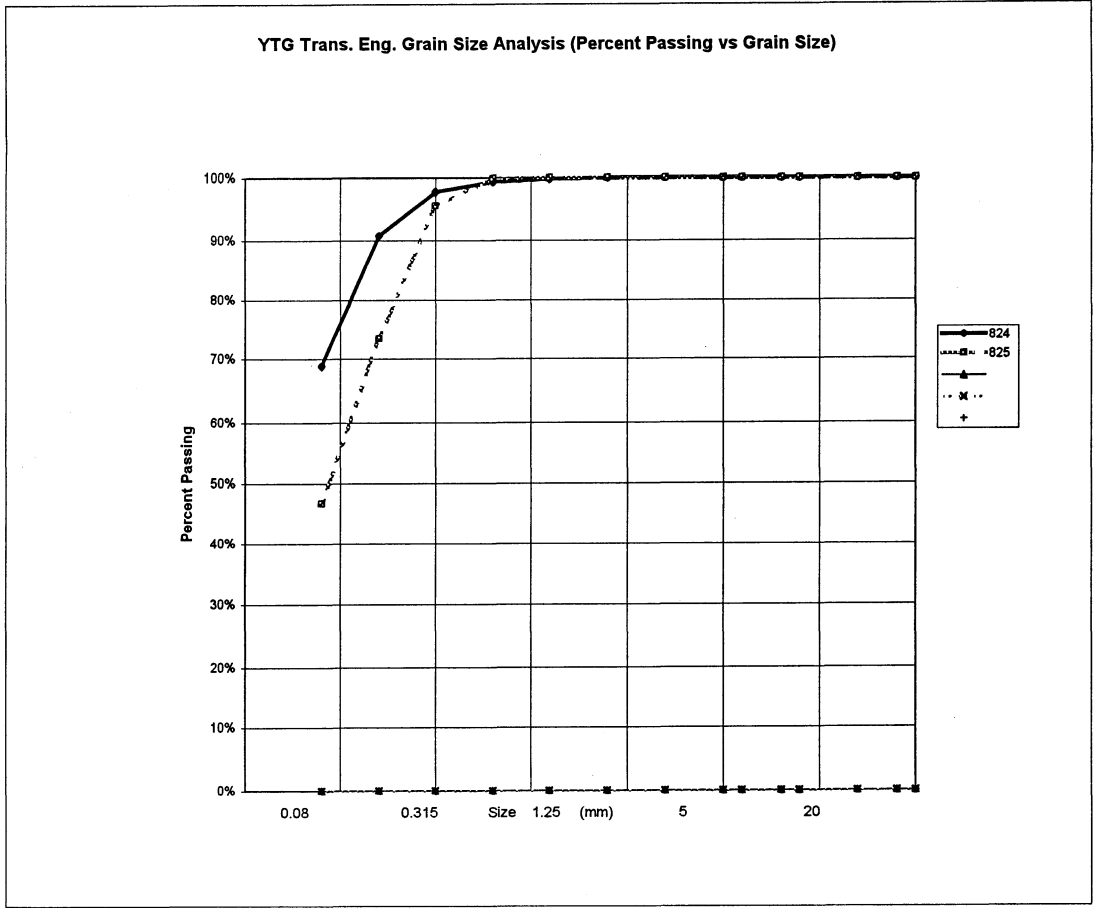
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	100%	12.5	100%
10.0	100%	10.0	100%
5.0	100%	5.0	100%
2.5	100%	2.5	100%
1.25	100%	1.25	100%
0.630	99%	0.630	100%
0.315	98%	0.315	96%
0.160	91%	0.160	73%
0.080	69%	0.080	47%

M.C.(%):	60%	M.C.(%):	36%
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LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0

% GRAVEL:	0	% GRAVEL:	0
% SAND:	31	% SAND:	53
% FINES:	69	% FINES:	47

CLASSIFICATION:	CLASSIFICATION:
SANDY SILT (ML)	SILTY SAND (SM)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 529-823
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1798+375 2M LT
 LOGGED BY: D.T. DATE COMP 99-08-25

FIELD NO:	LAB NO:	DEPTH:	TYPE:	FIELD No:	LAB No:	DEPTH:	TYPE:	FIELD No:	LAB No:	DEPTH:	TYPE:
826	928	1.3-1.5	AUGER	827	929	2.8-3.0	AUGER	828	930	4.5-4.7	AUGER

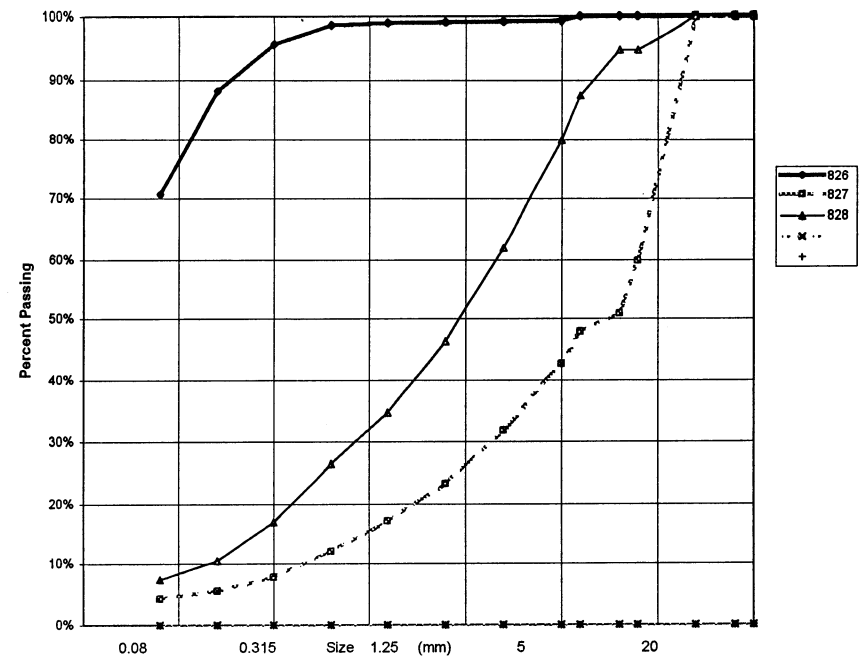
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	60%	25.0	95%
20.0	100%	20.0	51%	20.0	95%
12.5	100%	12.5	48%	12.5	87%
10.0	99%	10.0	43%	10.0	80%
5.0	99%	5.0	32%	5.0	62%
2.5	99%	2.5	23%	2.5	46%
1.25	99%	1.25	17%	1.25	35%
0.630	99%	0.630	12%	0.630	27%
0.315	96%	0.315	8%	0.315	17%
0.160	88%	0.160	6%	0.160	10%
0.080	71%	0.080	4%	0.080	7%

M.C.(%)	LIMITS	LIMITS	LIMITS
27%	LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0
	PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0
	P.I.: 0.0	P.I.: 0.0	P.I.: 0.0

% GRAVEL:	% SAND:	% FINES:	% GRAVEL:	% SAND:	% FINES:	% GRAVEL:	% SAND:	% FINES:
1	29	71	68	27	4	38	55	7

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

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 529-824
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1322 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1798+276 CENTRELINE
 LOGGED BY: D.T. DATE COMP 99-08-25

FIELD NO: 829
 LAB NO: 931
 DEPTH: 1.0-1.2
 TYPE: AUGER

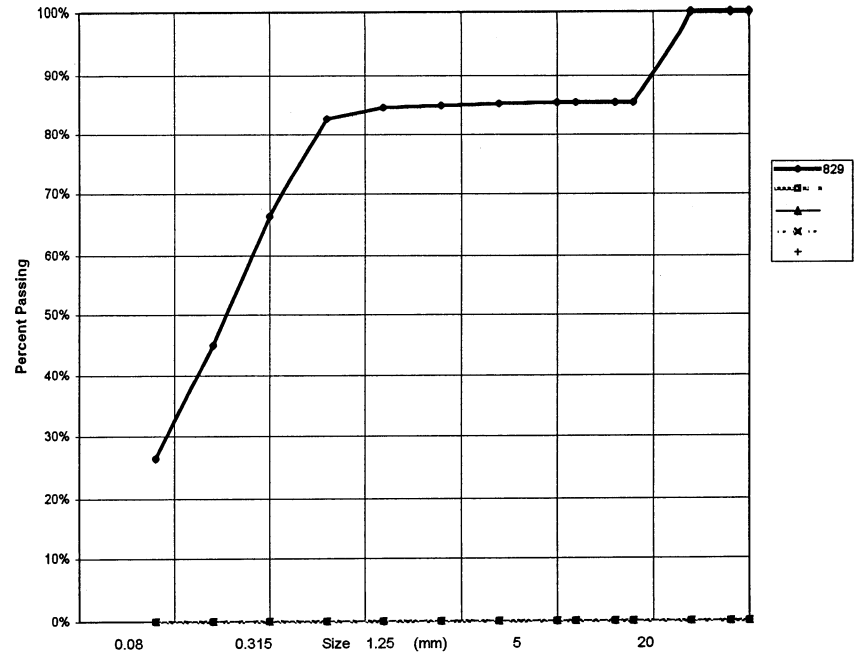
SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	85%
20.0	85%
12.5	85%
10.0	85%
5.0	85%
2.5	85%
1.25	85%
0.630	83%
0.315	66%
0.160	45%
0.080	26%

M.C.(%): 17%
 LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

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

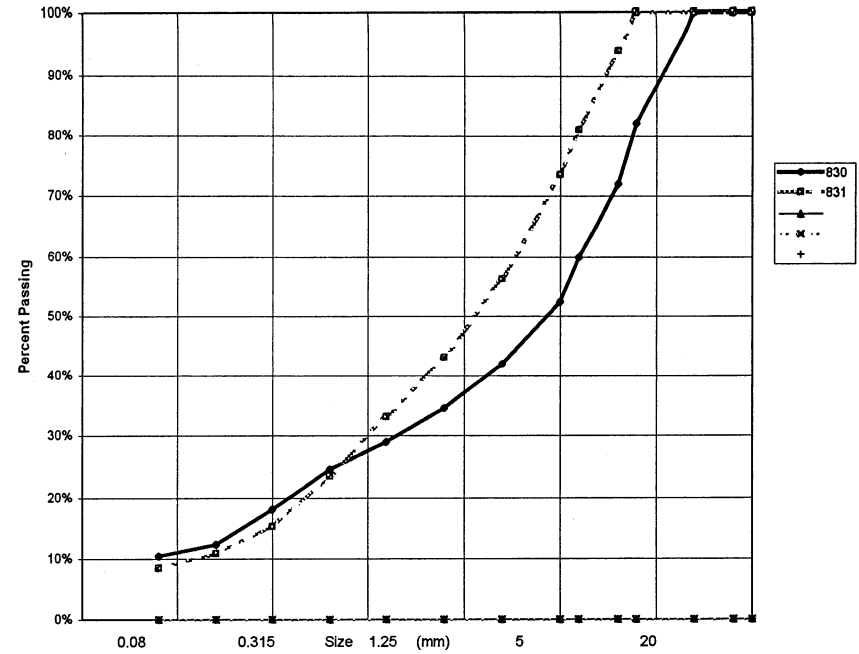
CLASSIFICATION:
 SILTY SAND (SM)

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER:	092-202101-0329	HOLE No.:	529-825
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1322 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1798+285 20M RT	DATE COMP	99-08-25
LOGGED BY:	D.T.		
=====			
FIELD NO:	830	FIELD No.	831
LAB NO:	932	LAB No.	933
DEPTH:	1.5-1.7	DEPTH	4.5-4.7
TYPE:	AUGER	TYPE	AUGER
=====			
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	82%	25.0	100%
20.0	72%	20.0	94%
12.5	60%	12.5	81%
10.0	52%	10.0	73%
5.0	42%	5.0	56%
2.5	34%	2.5	43%
1.25	29%	1.25	33%
0.630	25%	0.630	24%
0.315	18%	0.315	15%
0.160	12%	0.160	11%
0.080	10%	0.080	9%
=====			
M.C.(%):	15%	M.C.(%):	14%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
=====			
% GRAVEL:	58	% GRAVEL:	44
% SAND:	32	% SAND:	48
% FINES:	10	% FINES:	9
=====			
CLASSIFICATION:		CLASSIFICATION:	
POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	

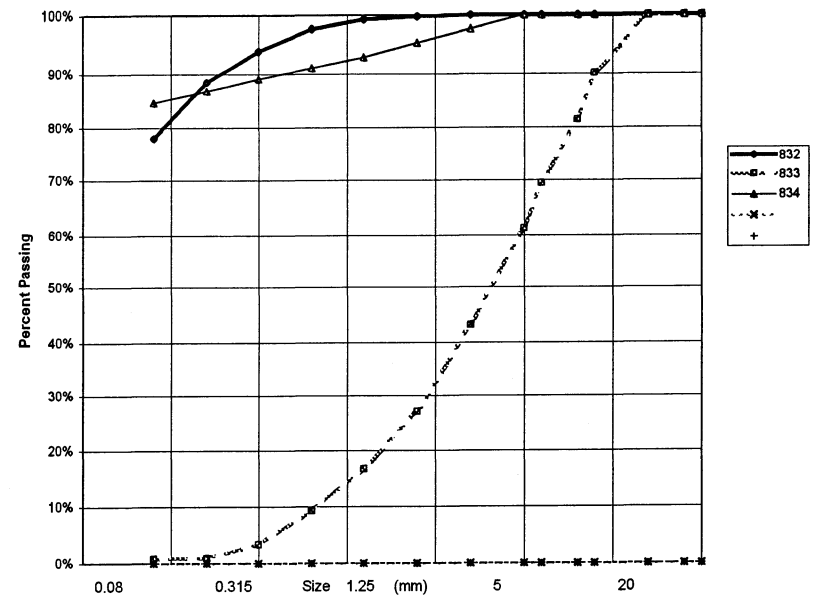
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 529-827
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 Km 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1798+050 2M RT
 LOGGED BY: D.T. DATE COMP 99-08-25

FIELD NO:	LAB NO:	DEPTH:	TYPE:	FIELD No. 833	LAB No. 935	DEPTH:	TYPE:	FIELD No. 834	LAB No. 936	DEPTH:	TYPE:
832	934	1.0-1.2	AUGER	833	935	2.8-3.0	AUGER	834	936	4.2-4.4	AUGER
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%	100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%	80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%	50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	90%	25.0	100%	25.0	100%	25.0	100%	25.0	100%
20.0	100%	20.0	81%	20.0	100%	20.0	100%	20.0	100%	20.0	100%
12.5	100%	12.5	69%	12.5	100%	12.5	100%	12.5	100%	12.5	100%
10.0	100%	10.0	61%	10.0	100%	10.0	100%	10.0	100%	10.0	100%
5.0	100%	5.0	43%	5.0	98%	5.0	98%	5.0	98%	5.0	98%
2.5	100%	2.5	27%	2.5	95%	2.5	95%	2.5	95%	2.5	95%
1.25	99%	1.25	17%	1.25	93%	1.25	93%	1.25	93%	1.25	93%
0.630	98%	0.630	9%	0.630	91%	0.630	91%	0.630	91%	0.630	91%
0.315	94%	0.315	3%	0.315	89%	0.315	89%	0.315	89%	0.315	89%
0.160	89%	0.160	1%	0.160	87%	0.160	87%	0.160	87%	0.160	87%
0.080	78%	0.080	1%	0.080	85%	0.080	85%	0.080	85%	0.080	85%
M.C.(%):	30%	M.C.(%):	9%	M.C.(%):	40%	M.C.(%):		M.C.(%):		M.C.(%):	
LIMITS		LIMITS		LIMITS		LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	0	% GRAVEL:	57	% GRAVEL:	2	% GRAVEL:		% GRAVEL:		% GRAVEL:	
% SAND:	22	% SAND:	42	% SAND:	13	% SAND:		% SAND:		% SAND:	
% FINES:	78	% FINES:	1	% FINES:	85	% FINES:		% FINES:		% FINES:	
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILT WITH SAND (ML)		POORLY GRADED GRAVEL WITH SAND (GP)		SILT WITH SAND (ML)		SILT WITH SAND (ML)		SILT WITH SAND (ML)		SILT WITH SAND (ML)	

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



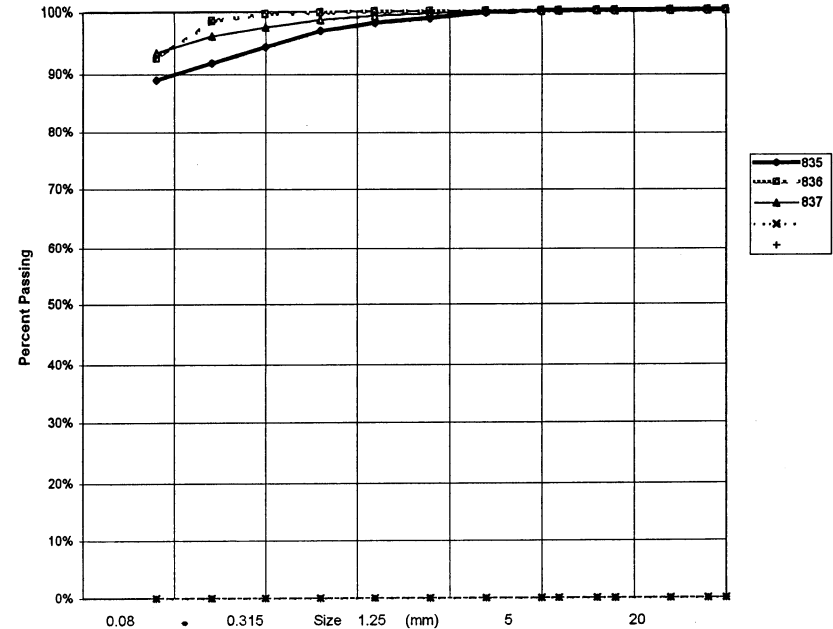
PROJECT NUMBER:	092-202101-0329	HOLE No.:	529-828
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 Km 1799-1822 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1797+950 2M RT		
LOGGED BY:	D.T.	DATE COMP	99-08-25

FIELD NO:	LAB NO:	DEPTH:	TYPE:	FIELD No.	LAB No.	DEPTH	TYPE	FIELD No:	LAB No:	DEPTH:	TYPE:
835	937	0.9-1.1	AUGER	836	938	3.0-3.2	AUGER	837	939	4.5-4.7	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%
20.0	100%	20.0	100%	20.0	100%
12.5	100%	12.5	100%	12.5	100%
10.0	100%	10.0	100%	10.0	100%
5.0	100%	5.0	100%	5.0	100%
2.5	99%	2.5	100%	2.5	100%
1.25	98%	1.25	100%	1.25	99%
0.630	97%	0.630	100%	0.630	99%
0.315	94%	0.315	100%	0.315	98%
0.160	92%	0.160	99%	0.160	96%
0.080	89%	0.080	93%	0.080	94%

M.C.(%):	30%	M.C.(%):	29%	M.C.(%):	40%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	0	% GRAVEL:	0	% GRAVEL:	0
% SAND:	11	% SAND:	7	% SAND:	6
% FINES:	89	% FINES:	93	% FINES:	94
CLASSIFICATION:	SILT (ML)	CLASSIFICATION:	SILT (ML)	CLASSIFICATION:	SILT (ML)

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



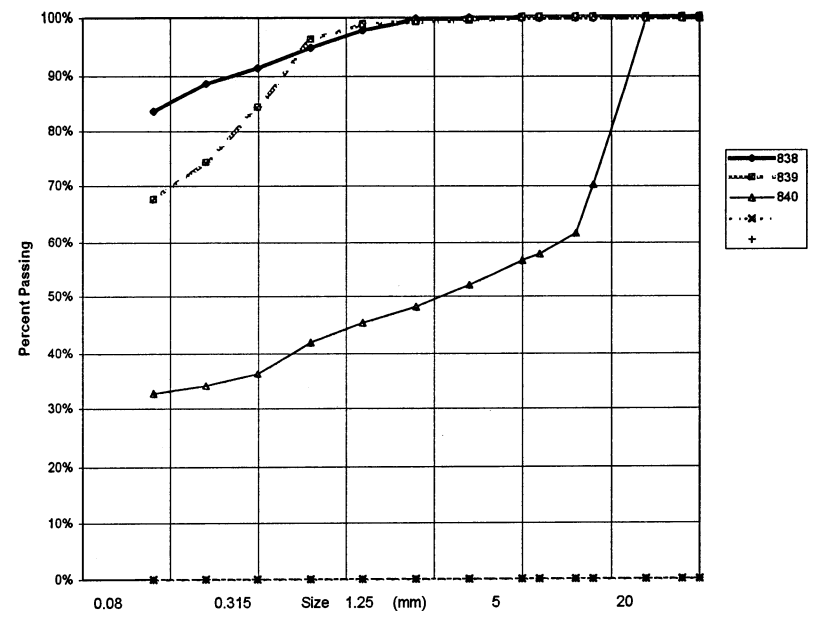
PROJECT NUMBER: 092-202101-0329 HOLE No.: 529-829
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1797+850 2M RT
 LOGGED BY: D.T. DATE COMP 99-08-25

FIELD NO:	838	FIELD No:	839	FIELD No:	840
LAB NO:	940	LAB No:	941	LAB No:	942
DEPTH:	1.0-1.2	DEPTH	2.8-3.1	DEPTH:	4.5-4.7
TYPE:	AUGER	TYPE	AUGER	TYPE:	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	70%
20.0	100%	20.0	100%	20.0	62%
12.5	100%	12.5	100%	12.5	58%
10.0	100%	10.0	100%	10.0	57%
5.0	100%	5.0	100%	5.0	52%
2.5	100%	2.5	99%	2.5	48%
1.25	98%	1.25	99%	1.25	45%
0.630	95%	0.630	96%	0.630	42%
0.315	91%	0.315	84%	0.315	36%
0.160	89%	0.160	74%	0.160	34%
0.080	84%	0.080	68%	0.080	33%

M.C.(%):	25%	M.C.(%):	31%	M.C.(%):	9%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	0	% GRAVEL:	0	% GRAVEL:	48
% SAND:	16	% SAND:	32	% SAND:	20
% FINES:	84	% FINES:	68	% FINES:	33
CLASSIFICATION:	SILT WITH SAND (ML)	CLASSIFICATION:	SANDY SILT (ML)	CLASSIFICATION:	SILTY GRAVEL WITH SAND (GM)

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER:	092-202101-0329	HOLE No.:	529-830
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1822 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1797+650 10M RT		
LOGGED BY:	D.T.	DATE COMP	99-08-25

FIELD NO:	841	FIELD No:	842	FIELD No:	843
LAB NO:	943	LAB No:	944	LAB No:	945
DEPTH:	1.4-1.6	DEPTH	2.9-3.1	DEPTH:	4.5-4.7
TYPE:	AUGER	TYPE	AUGER	TYPE:	AUGER

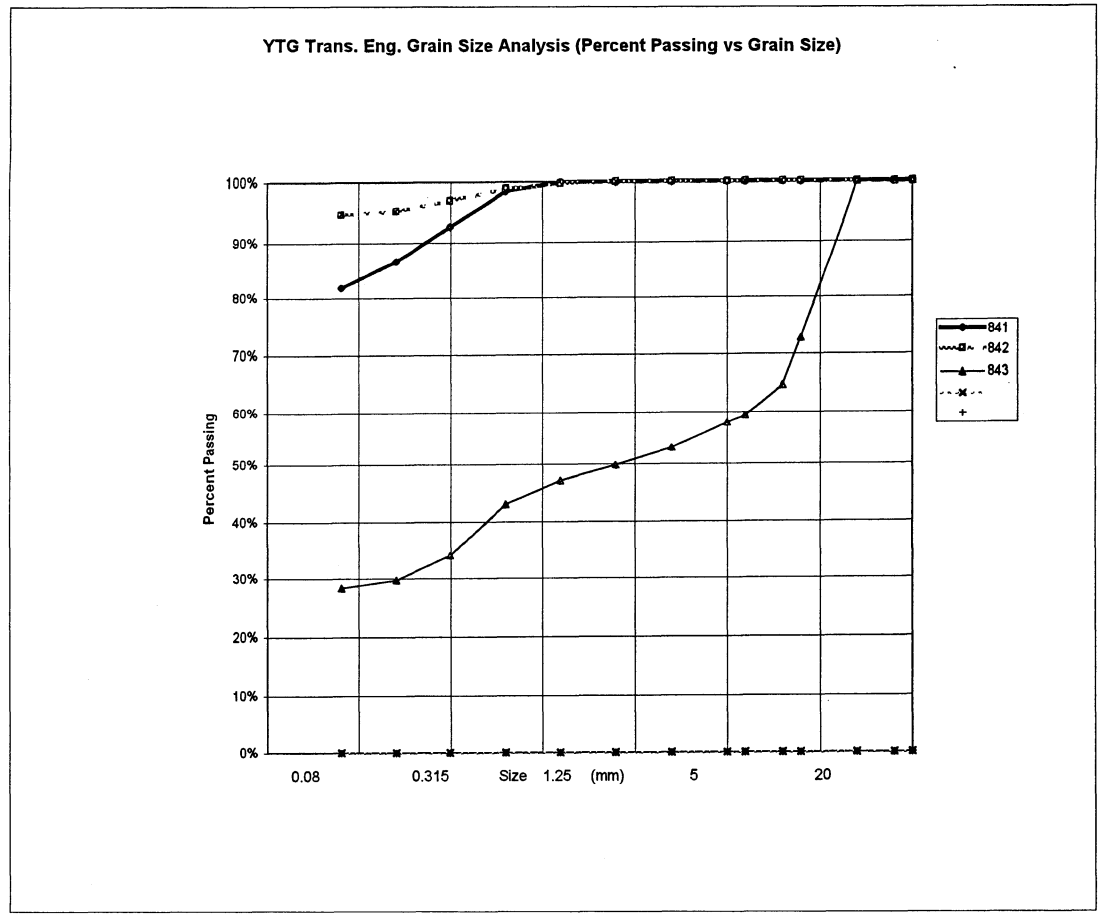
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	73%
20.0	100%	20.0	100%	20.0	65%
12.5	100%	12.5	100%	12.5	59%
10.0	100%	10.0	100%	10.0	58%
5.0	100%	5.0	100%	5.0	53%
2.5	100%	2.5	100%	2.5	50%
1.25	100%	1.25	100%	1.25	47%
0.630	99%	0.630	99%	0.630	43%
0.315	93%	0.315	97%	0.315	34%
0.160	87%	0.160	95%	0.160	30%
0.080	82%	0.080	95%	0.080	28%

M.C.(%):	35%	M.C.(%):	34%	M.C.(%):	11%
----------	-----	----------	-----	----------	-----

LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0

% GRAVEL:	0	% GRAVEL:	0	% GRAVEL:	47
% SAND:	18	% SAND:	5	% SAND:	25
% FINES:	82	% FINES:	95	% FINES:	28

CLASSIFICATION:	SILT WITH SAND (ML)	CLASSIFICATION:	SILT (ML)	CLASSIFICATION:	SILTY GRAVEL WITH SAND (GM)
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PROJECT NUMBER: 092-202101-0329 HOLE No.: 529-831
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 Km 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1797+650 10M RT
 LOGGED BY: D.T. DATE COMP 99-08-25

FIELD NO: 844 FIELD No. 845
 LAB NO: 946 LAB No. 947
 DEPTH: 1.0-1.2 DEPTH 2.1-2.3
 TYPE: AUGER TYPE AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	86%
20.0	100%	20.0	72%
12.5	100%	12.5	58%
10.0	99%	10.0	54%
5.0	97%	5.0	44%
2.5	96%	2.5	37%
1.25	95%	1.25	31%
0.630	93%	0.630	23%
0.315	74%	0.315	10%
0.160	39%	0.160	5%
0.080	34%	0.080	3%

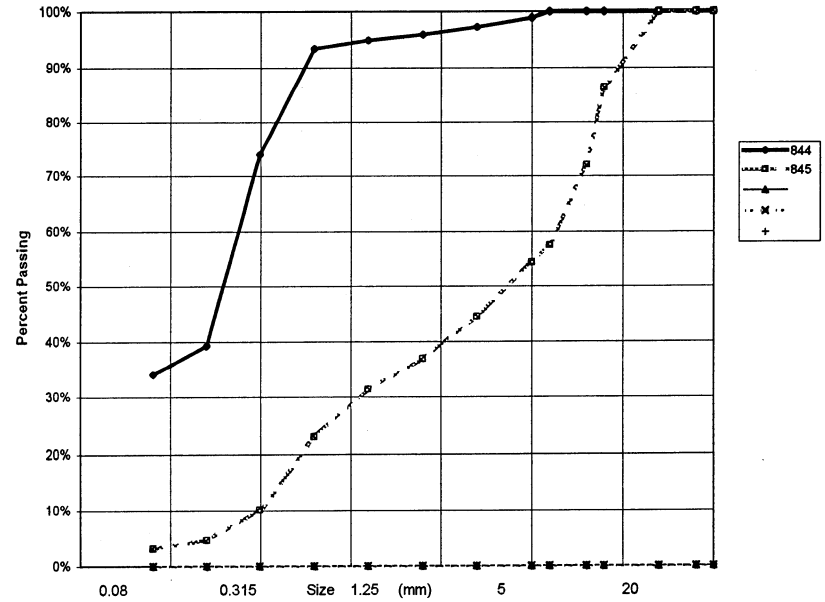
M.C.(%): 13% M.C.(%): 3%

LIMITS
 LIQUID: 0.0 LIQUID: 0.0
 PLASTIC: 0.0 PLASTIC: 0.0
 P.I.: 0.0 P.I.: 0.0

% GRAVEL: 3 % GRAVEL: 56
 % SAND: 63 % SAND: 41
 % FINES: 34 % FINES: 3

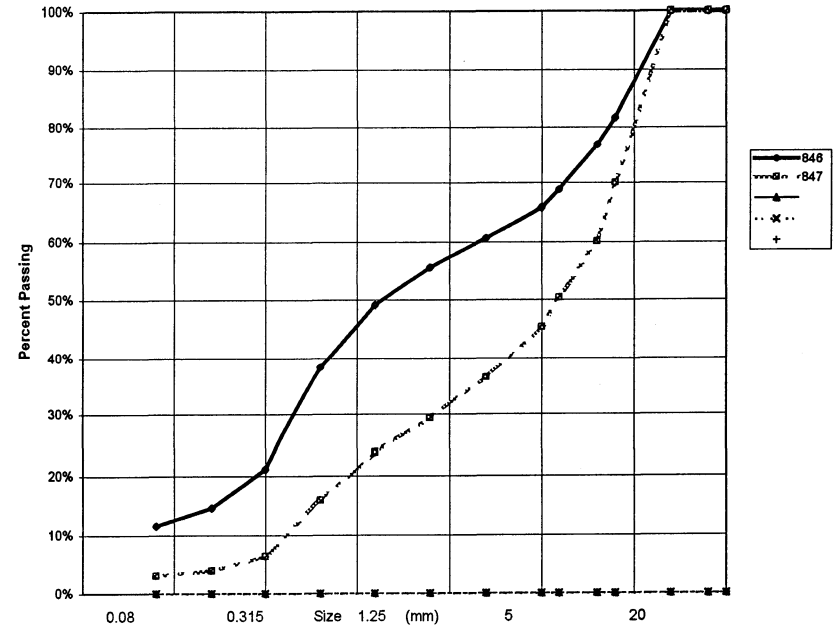
CLASSIFICATION: SILTY SAND (SM)
 CLASSIFICATION: POORLY GRADED GRAVEL WITH SAND (GP)

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER:	092-202101-0329	HOLE No.:	529-832
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1322 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1797+625 20M RT	DATE COMP	99-08-26
LOGGED BY:	D.T.		
=====			
FIELD NO:	846	FIELD No:	847
LAB NO:	948	LAB No:	949
DEPTH:	0.9-1.1	DEPTH:	2.8-3.0
TYPE:	AUGER	TYPE:	AUGER
=====			
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	82%	25.0	70%
20.0	77%	20.0	60%
12.5	69%	12.5	50%
10.0	66%	10.0	45%
5.0	61%	5.0	36%
2.5	56%	2.5	29%
1.25	49%	1.25	24%
0.630	38%	0.630	16%
0.315	21%	0.315	6%
0.160	15%	0.160	4%
0.080	11%	0.080	3%
=====			
M.C.(%):	9%	M.C.(%):	3%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
=====			
% GRAVEL:	39	% GRAVEL:	64
% SAND:	49	% SAND:	33
% FINES:	11	% FINES:	3
=====			
CLASSIFICATION:		CLASSIFICATION:	
WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)		POORLY GRADED GRAVEL WITH SAND (GP)	

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329		HOLE No.: 529-833	
CLIENT: ENGINEERING-CAPITAL			
PROJECT NAME: SHAKWAK PROJECT			
PROJECT LOCATION: SEG 13 KM 1799-1822 A/H			
DRILL UNIT: NODWELL B40-L			
HOLE LOCATION: 1797+625 20M LT			
LOGGED BY: D.T.		DATE COMP 99-08-26	
FIELD NO: 848	FIELD No. 849		
LAB NO: 950	LAB No. 951		
DEPTH: 1.4-1.6	DEPTH 2.8-3.0		
TYPE: AUGER	TYPE AUGER		
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	83%
20.0	100%	20.0	70%
12.5	100%	12.5	61%
10.0	100%	10.0	57%
5.0	100%	5.0	50%
2.5	99%	2.5	46%
1.25	99%	1.25	43%
0.630	99%	0.630	39%
0.315	59%	0.315	29%
0.160	11%	0.160	15%
0.080	7%	0.080	12%
M.C.(%): 7%	M.C.(%): 5%		
LIMITS	LIMITS		
LIQUID: 0.0	LIQUID: 0.0		
PLASTIC: 0.0	PLASTIC: 0.0		
P.I.: 0.0	P.I.: 0.0		
% GRAVEL: 0	% GRAVEL: 50		
% SAND: 93	% SAND: 38		
% FINES: 7	% FINES: 12		
CLASSIFICATION: POORLY GRADED SAND WITH SILT (SP-SM)	CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)		

YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)

