

GEOTECHNICAL INVESTIGATIONS

Highway Construction
Km 1768.1 to 1775.7 Alaska #1
Yukon, 2003-2004
Volume 1 of 3



Transportation Engineering Branch
Geotechnical Services

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HIGHWAY CONSTRUCTION

GEOTECHNICAL INVESTIGATION

Km 1768.1 to 1775.7
YUKON 2003-2004

ALASKA HIGHWAY #1

Highway Construction
Km 1768.1 to 1775.7
Alaska Highway #1
Yukon 2003-2004
Volume 1 of 3

This Data Package prepared for project viewing:

December, 2002

Transportation Engineering Branch
Geotechnical Services
461 Range Road
Whitehorse, Yukon

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Volume 1 of 3

INTRODUCTION

Investigation notes, classification methods and legends.

CENTRELINE TESTING ALASKA HIGHWAY

Subsurface Exploration and Testing Report Sheets are provided.

The reports for the centreline holes are arranged according to project location, starting at Km 1768+503 and increasing to Km 1775+500.

TEST HOLES 01 to 35
TEST HOLES 36 to 50
TEST HOLES 51 to 74
TEST HOLES 75 to 97
TEST HOLES 98 to 117

shown with prefix 596-
shown with prefix 597-
shown with prefix 598-
shown with prefix 599-
shown with prefix 600-

NOTE:

Centreline Test Hole locations indicated on the Subsurface Exploration and Testing Report Sheets are approximate. Actual Test Hole locations, located by GPS survey or field survey, are as shown on project plans.

CONTENTS (continued)

Volume 2 of 3

CENTRELINE TESTING ALASKA HIGHWAY

Laboratory Testing Result Sheets are provided.

The reports for the centrelineholes are arranged according to test hole number, starting at 596-01 and increasing to 600-117.

TEST HOLES 01 to 35	shown with prefix 596-
TEST HOLES 36 to 50	shown with prefix 597-
TEST HOLES 51 to 74	shown with prefix 598-
TEST HOLES 75 to 97	shown with prefix 599-
TEST HOLES 98 to 117	shown with prefix 600-

NOTE:

Centreline Test Hole locations indicated on the Subsurface Exploration and Testing Report Sheets are approximate. Actual Test Hole locations, located by GPS survey or field survey, are as shown on project plans.

CONTENTS (continued)

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GRANULAR SOURCE Km 1766.0 LHS ALASKA HIGHWAY

A Production History and location plans are provided.

History of Aggregate Production

2001	20 mm Granular "A" Base Course
2001	20 mm Granular "A" Base Course
2001	20 mm B.S.T. Aggregate

GRANULAR SOURCE Km 1776.0 RHS & LHS ALASKA HIGHWAY

A Production History, location plans, photographs, and subsurface exploration and testing report sheets are provided.

History of Aggregate Production

1992	20 mm Granular "A" Base Course
1992	20 mm B.S.T. Aggregate
2002	20 mm Granular "A" Base Course
2002	20 mm Granular "A" Base Course
2002	20 mm B.S.T. Aggregate

Auger Testing

2001	TEST HOLES 117	shown with prefix 600-
2001	TEST HOLES 1966 to 1978	shown with prefix 626-

Backhoe Testing

1988	TEST PITS 9	shown with prefix 33-
2001	TEST PITS 8 to 15	shown with prefix 610-
2002	TEST PITS 2579 to 2599	shown with prefix 641-
2002	TEST PITS 2601	shown with prefix 642-

HIGHWAY CONSTRUCTION

GEOTECHNICAL INVESTIGATION

Km 1768.1 to 1775.7
YUKON 2003-2004

ALASKA HIGHWAY #1

INTRODUCTION

INTRODUCTION

GEOTECHNICAL INVESTIGATION DATA

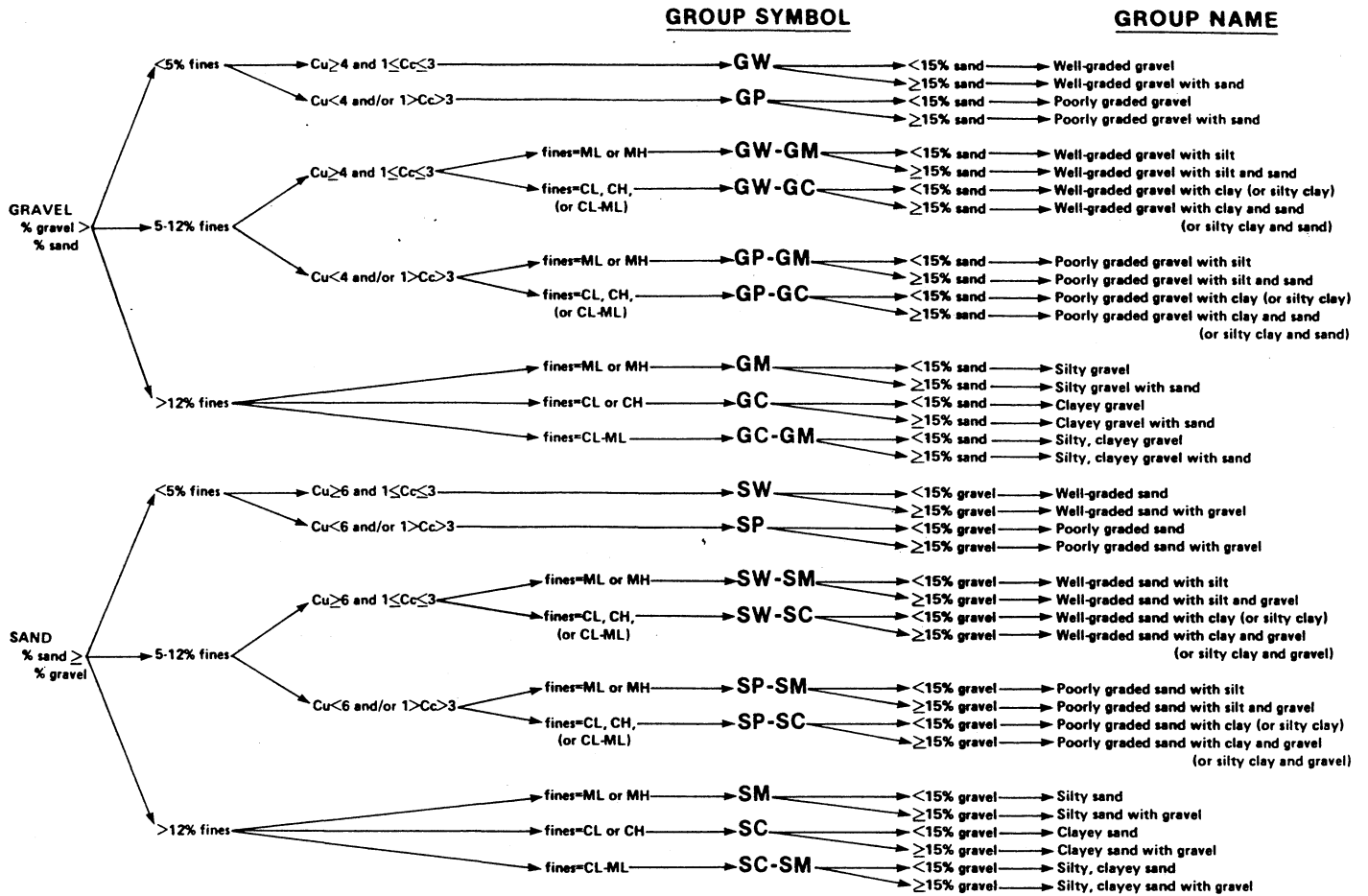
This geotechnical investigation data is provided to assist in the interpretation of soil conditions encountered within this project area. The data presented was prepared solely for Departmental designing and estimating purposes.

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

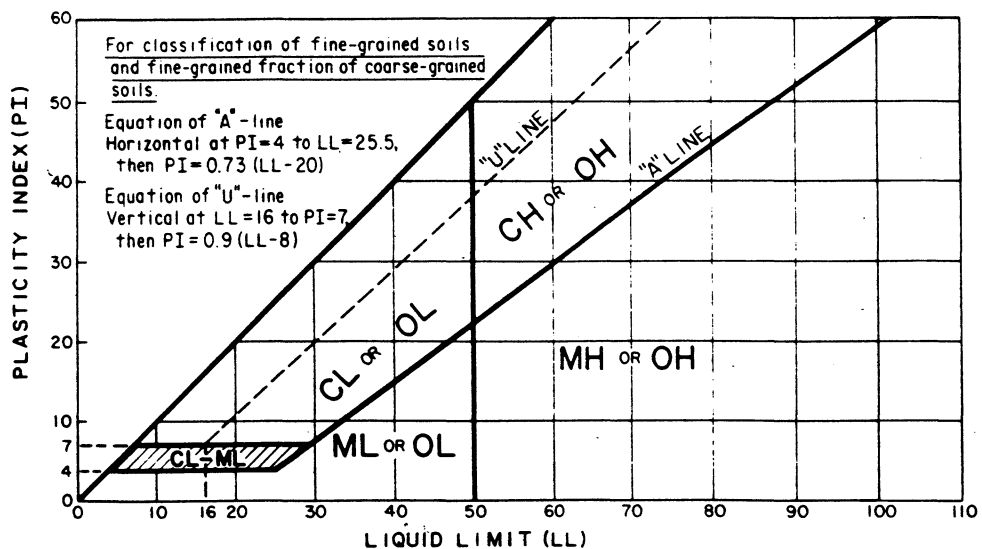
The sample identification and laboratory testing data is provided to give detailed physical properties of selected retrieved samples within the subsurface profile. ***These tests may be conducted on disturbed samples and may exhibit properties different from the native materials. The sample classification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

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

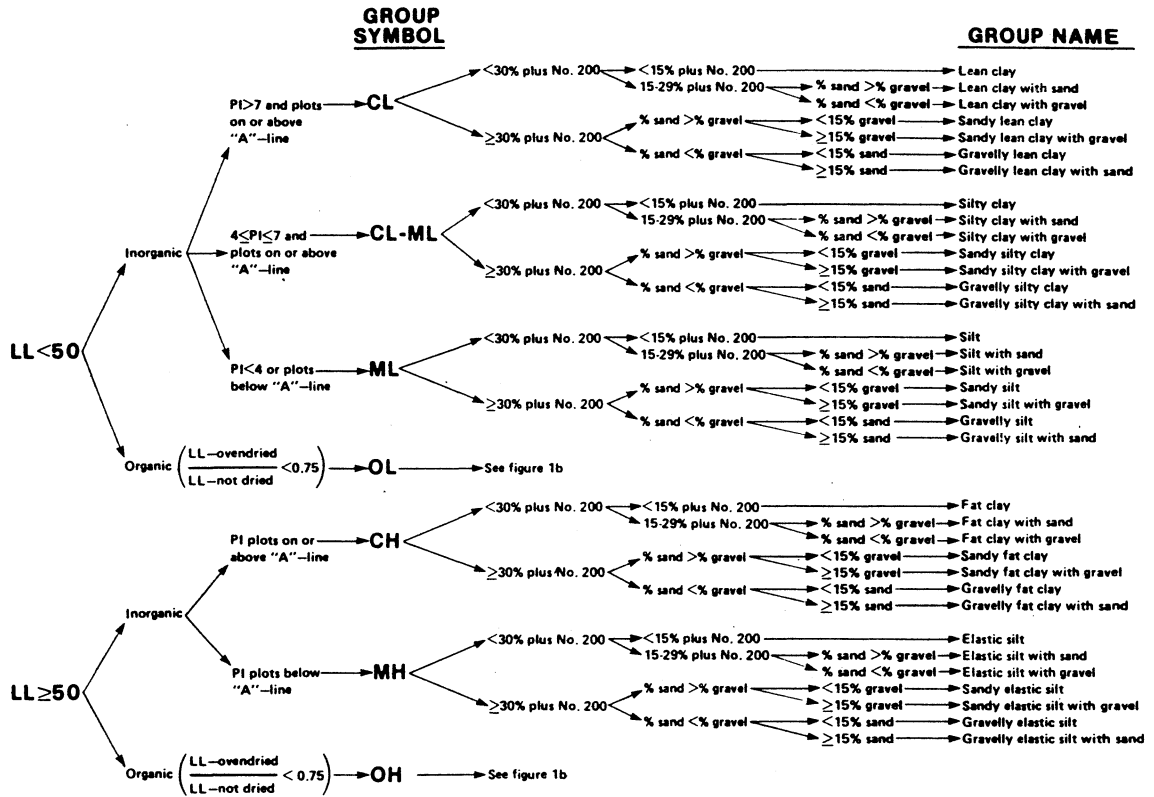
It is recommended that a site inspection, combined with consideration of the regional geology and climatic conditions be conducted. An evaluation of the investigation methods and development work done since the time of investigation should be done prior to interpreting the subsurface conditions at the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



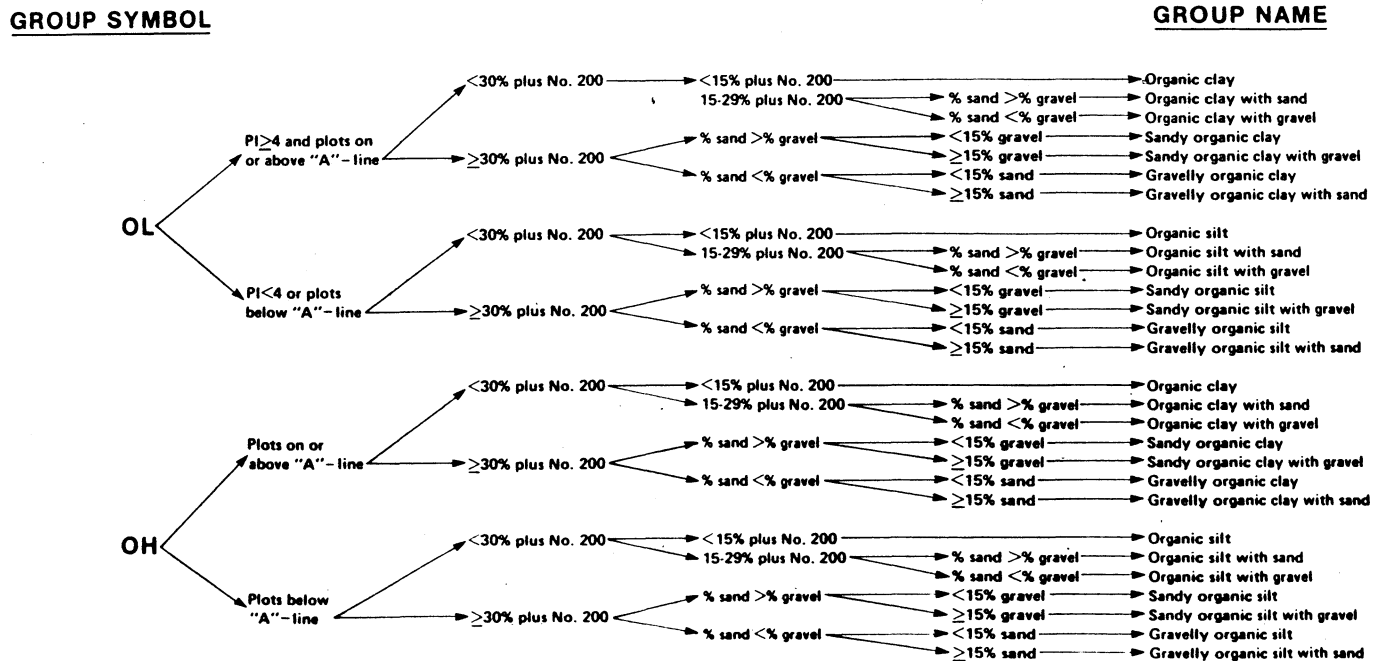
Flow chart for classifying coarse-grained soil.



Plasticity chart.



Flow chart for classifying fine-grained soil.



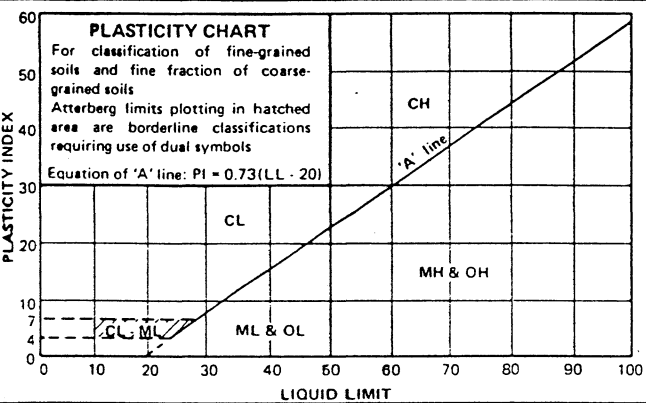
Flow chart for classifying organic soil.

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

- Based on the material passing the 3-in (75-mm) sieve.
- If field sample contained cobbles and/or boulders, add "with cobbles and/or boulders" to group name.
- Gravels with 5 to 12% fines require dual symbols
GW-GM well graded gravel with silt
GW-GC well graded gravel with clay
GP-GM poorly graded gravel with silt
GP-GC poorly graded gravel with clay
- Sands with 5 to 12% fines require dual symbols
SW-SM well graded sand with silt
SW-SC well graded sand with clay
SP-SM poorly graded sand with silt
SP-SC poorly graded sand with clay
- $C_u = D_{60}/D_{10}$ $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$
- If soil contains > 15% sand, add "with sand" to group name.
- If fines classify as CL-ML, use dual symbol GC-GM, SC-SM.
- If fines are organic, add "with organic fines" to group name.
- If soil contains > 15% gravel, add "with gravel" to group name.
- If Atterberg limits plot in hatched area, soil is a CL-ML, silty clay.
- If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel" whichever is predominant.
- If soil contains > 30% plus No. 200, predominantly sand, add "sandy" to group name.
- If soil contains > 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 GM, GC, SM, SC Borderline classification requiring use of dual symbols		
		GRAVELS WITH FINES	GP	Poorly-graded gravels and gravel-sand mixtures, little or no fines			
		SANDS	GM	Silty gravels, gravel-sand-silt mixtures			
		SANDS WITH FINES	GC	Clayey gravels, gravel-sand clay mixtures			
	SANDS More than 50% of coarse fraction passes No. 4 sieve	CLEAN SANDS	SW	Well-graded sands and gravelly sands, little or no fines	$C_u = D_{60}/D_{10}$ Greater than 4 $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between 1 and 3 Not meeting both criteria for GW Atterberg limits plot below 'A' line or plasticity index less than 4 Atterberg limits plot above 'A' line and plasticity index greater than 7		
			SP	Poorly-graded sands and gravelly sands, little or no fines			
		SANDS WITH FINES	SM	Silty sands, sand-silt mixtures		$C_u = D_{60}/D_{10}$ Greater than 6 $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between 1 and 3 Not meeting both criteria for SW Atterberg limits plot below 'A' line or plasticity index less than 4 Atterberg limits plot above 'A' line and plasticity index greater than 7	
			SC	Clayey sands, sand-clay mixtures			
			ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands			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					
	CH	Inorganic clay of high plasticity, fat clays					
	OH	Organic clays of medium to high plasticity					
SILTS AND CLAYS Liquid limit 50% or less	ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands					
	CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays					
HIGHLY ORGANIC SOILS		PT	Peat, muck and other highly organic soils	*Based on the material passing the 3 in. (75 mm) sieve †ASTM Designation D 2487, for identification procedure see D 2488			

GROUND ICE DESCRIPTION

ICE NOT VISIBLE				VISIBLE ICE LESS THAN 50% BY VOLUME			
GROUP SYMBOLS	SYMBOLS	SUBGROUP DESCRIPTION	IMAGE	GROUP SYMBOLS	SYMBOLS	SUBGROUP DESCRIPTION	IMAGE
N	Nf	Poorly-bonded or friable		V	Vx	Individual ice crystals or inclusions	
	Nbn	No excess ice, well-bonded			Vc	Ice coatings on particles	
	Nbe	Excess ice, well-bonded			Vr	Random or irregularly oriented ice formations	
					Vs	Stratified or distinctly oriented ice formations	
				VISIBLE ICE GREATER THAN 50% BY VOLUME			
ICE	ICE + Soil Type	Ice with soil inclusions					
	ICE	Ice without soil inclusions (greater than 25 mm (1 in.) thick)					

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

LEGEND
 Soil Ice

		BOUNDARY LINES ON DRILL LOGS			TEST HOLE NO: 3		
ENGINEERING-CAPITAL					Project No:		
					ELEVATION: 0.00 (m)		
SAMPLE TYPE		<input type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID ────────────┬─────────── 20 40 60 80	USC	◆ 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

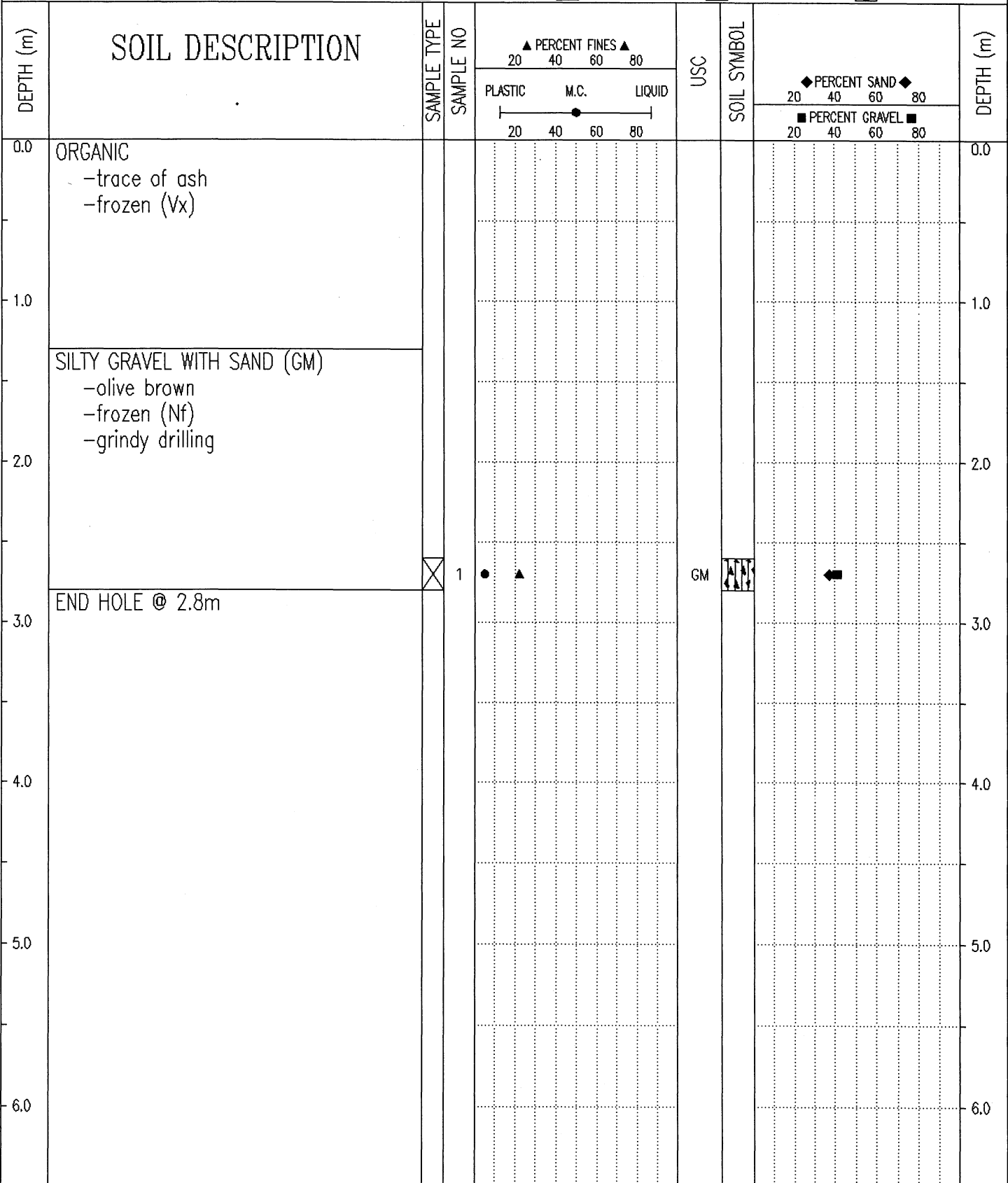
Km 1768.1 to 1775.7
YUKON 2003-2004

ALASKA HIGHWAY #1

CENTRELINE TESTING
1768+503 to 1775+500
ALASKA HIGHWAY

Centerline

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 596-01
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: 1768+503 14M 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: K.J.	COMPLETION DEPTH: 2.8 m
	REVIEWED BY:	COMPLETE: 01/04/25
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 596-02								
ENGINEERING CAPITAL		KM 1729-1787 A/H		Project No: 092-202101-0361								
D-4 CAT B-40 MOBILE DRILL		LOCATION: KM 1768+655 11M 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								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC -frozen (Vx)											0.0
	ICE											
1.0	ORGANIC -trace of silt -frozen (Vx)											1.0
2.0	SILTY SAND WITH GRAVEL (SM) -olive -frozen (Vx) -maximum 50mm material augered up -hard grindy drilling											2.0
3.0	END HOLE @ 2.8m	<input checked="" type="checkbox"/>	2	●	▲		SM	◆	◆			3.0
4.0												4.0
5.0												5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: K.J. REVIEWED BY: Fig. No:				COMPLETION DEPTH: 2.8 m COMPLETE: 01/04/25 Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 596-03							
ENGINEERING CAPITAL		KM 1729-1787 A/H		Project No: 092-202101-0361							
D-4 CAT B-40 MOBILE DRILL		LOCATION: KM 1768+757 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							
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	
0.0	SILTY SAND WITH GRAVEL (SM) -trace organic -brown -humid -maximum 35mm material augered up -grindy drilling	<input checked="" type="checkbox"/>	3	● ▲			SM	◆ ■		0.0	
2.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -brown -damp -maximum 50mm material augered up	<input checked="" type="checkbox"/>	4	● ▲			GP-GM	◆ ■		2.0	
3.0	END HOLE @ 2.8m									3.0	
4.0										4.0	
5.0										5.0	
6.0										6.0	
Government of Yukon Transportation Engineering				LOGGED BY: K.J. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 2.8 m COMPLETE: 01/04/25		Page 1 of 1			

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 596-04
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1768+830 25M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	
0.0	ORGANIC -some ash -frozen (Vx)											0.0	
2.0	SILTY SAND WITH GRAVEL (SM) -olive -frozen (Vx) -grindy drilling											2.0	
3.0	END HOLE @ 2.8m	<input checked="" type="checkbox"/>	5	●	▲		SM	◆◆◆◆	■	◆		3.0	
4.0												4.0	
5.0												5.0	
6.0												6.0	

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REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 2.8 m
COMPLETE: 01/04/25

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 596-05
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1768+996 25M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■		
				20 40 60 80				20 40 60 80	20 40 60 80		
0.0	ORGANIC -frozen (soil & ice)									0.0	
1.0										1.0	
2.0	SILTY SAND (SM) -trace gravel -olive grey -frozen (Nb) -some grindy drilling									2.0	
2.7		<input checked="" type="checkbox"/>	6	●	▲		SM	◆	■	2.7	
3.0	END HOLE @ 2.7m -refusal -rock dust on bit									3.0	
4.0										4.0	
5.0										5.0	
6.0										6.0	

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Fig. No:

COMPLETION DEPTH: 2.7 m
COMPLETE: 01/04/25

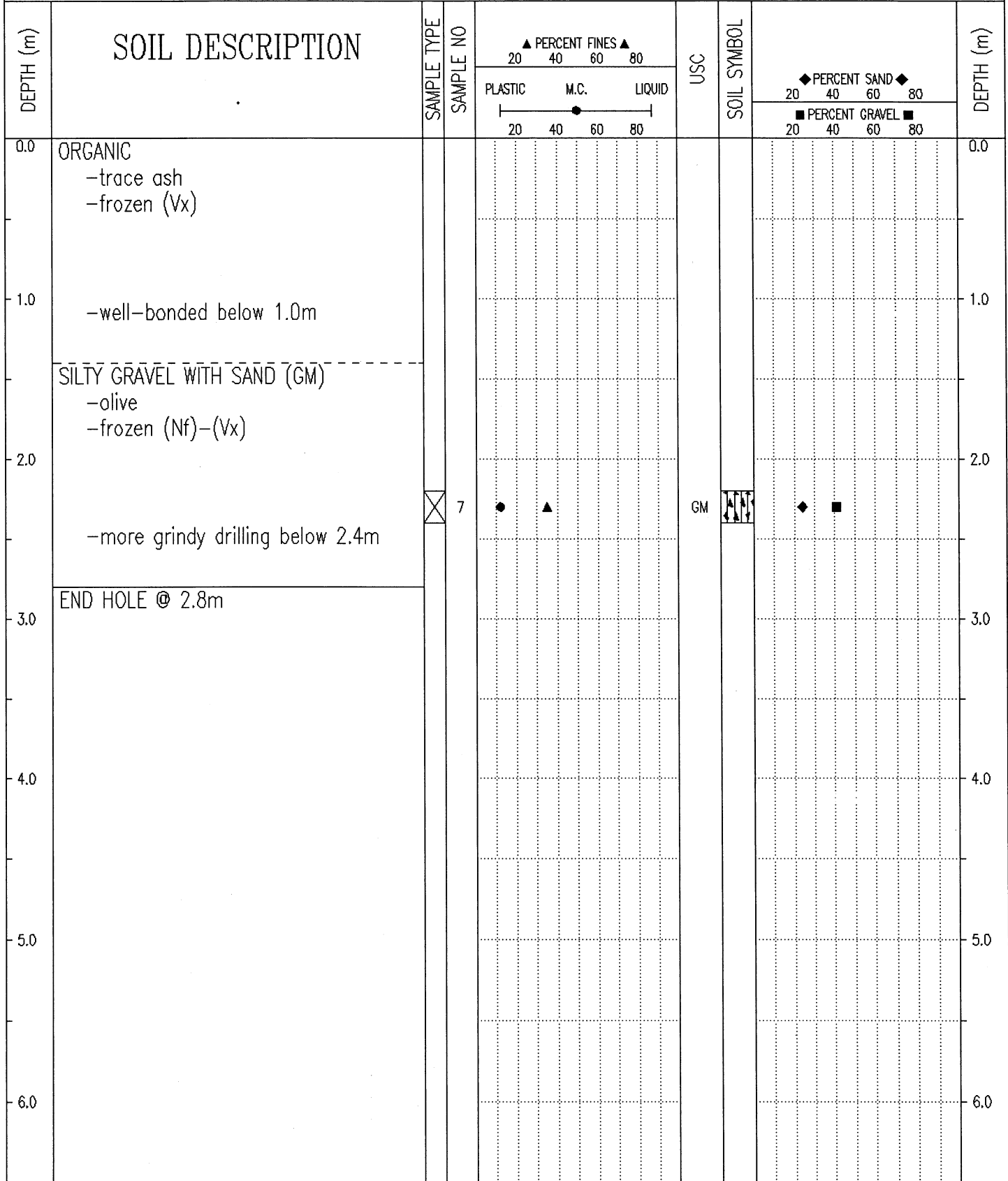
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 596-10
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1769+098 39M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <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 -frozen											0.0	
0.5	ASH												
1.0	ORGANIC -frozen (soil & ice)											1.0	
2.0	SILT -olive -frozen (Vs) -trace grindy drilling											2.0	
3.0	SILTY SAND (SM) -with gravel -frozen (Nb) -olive -hard grindy drilling	<input checked="" type="checkbox"/>	14	●	▲		SM	◆◆◆◆	■	◆		3.0	
2.8	END HOLE @ 2.8m Note: Backtrack from Th#9 to check interceptor ditch line												
4.0												4.0	
5.0												5.0	
6.0												6.0	

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REVIEWED BY:	COMPLETE: 01/04/26
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 596-06
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1769+153 21M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

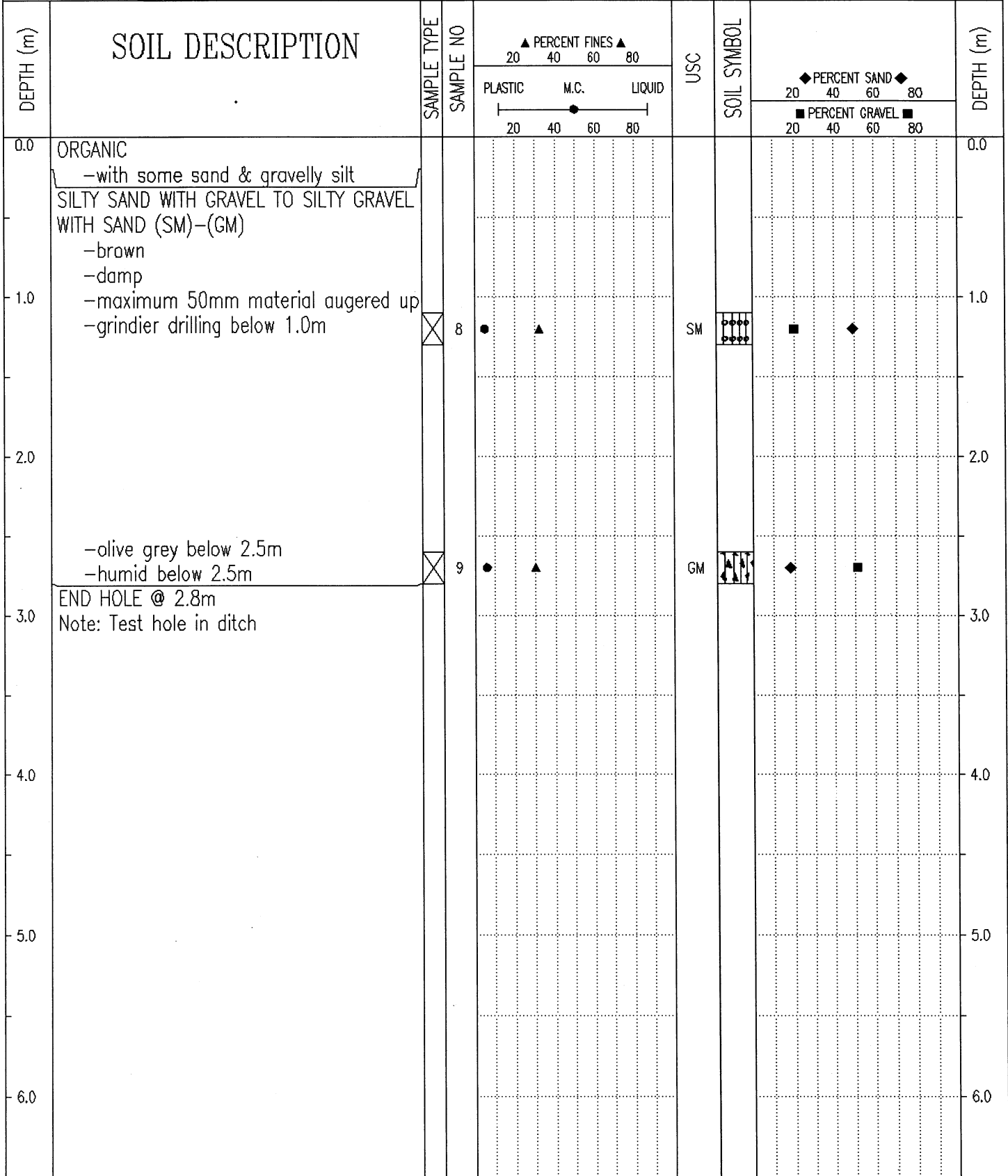


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Fig. No:

COMPLETION DEPTH: 2.8 m
COMPLETE: 01/04/25

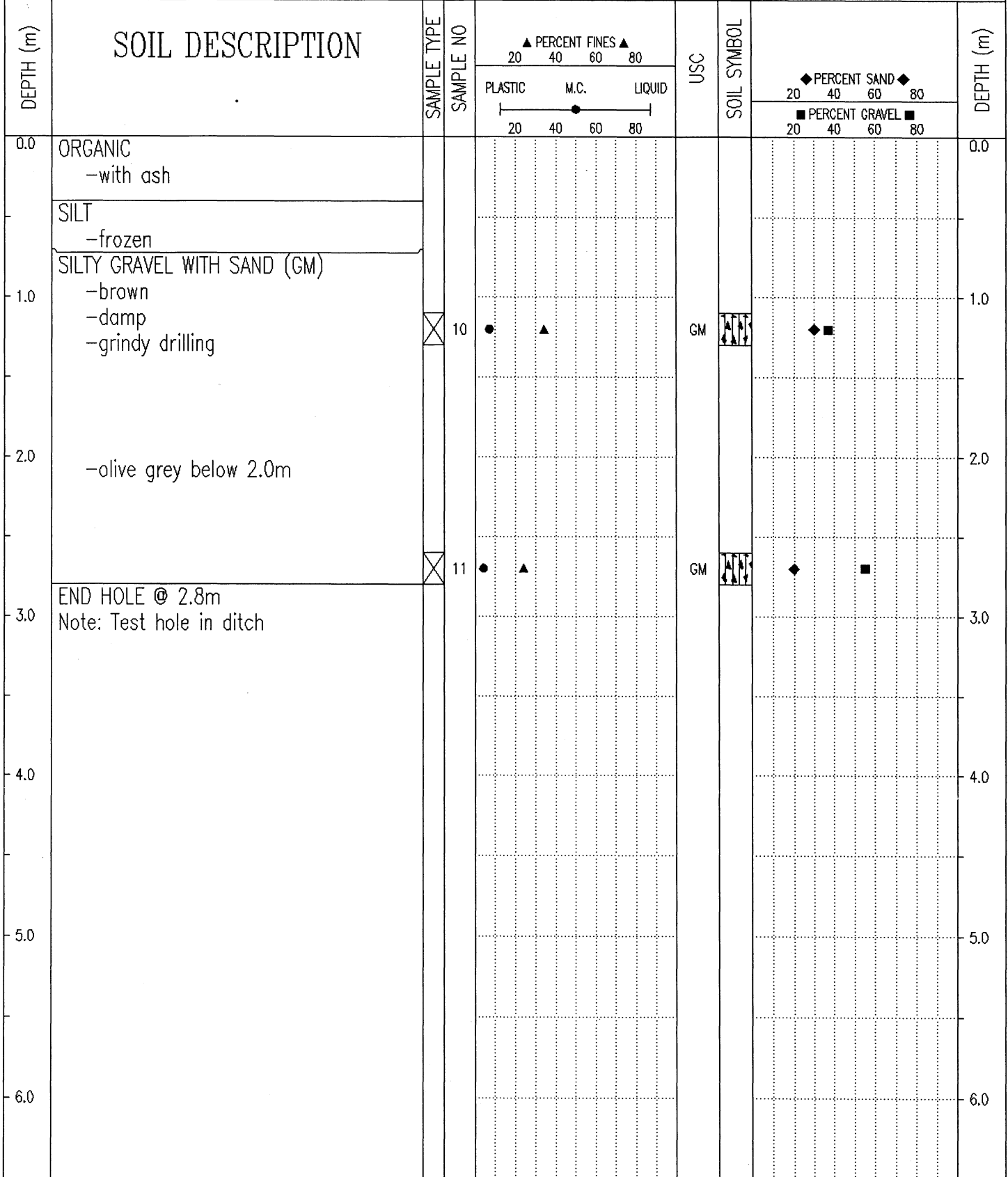
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 596-07
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1769+276 10M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



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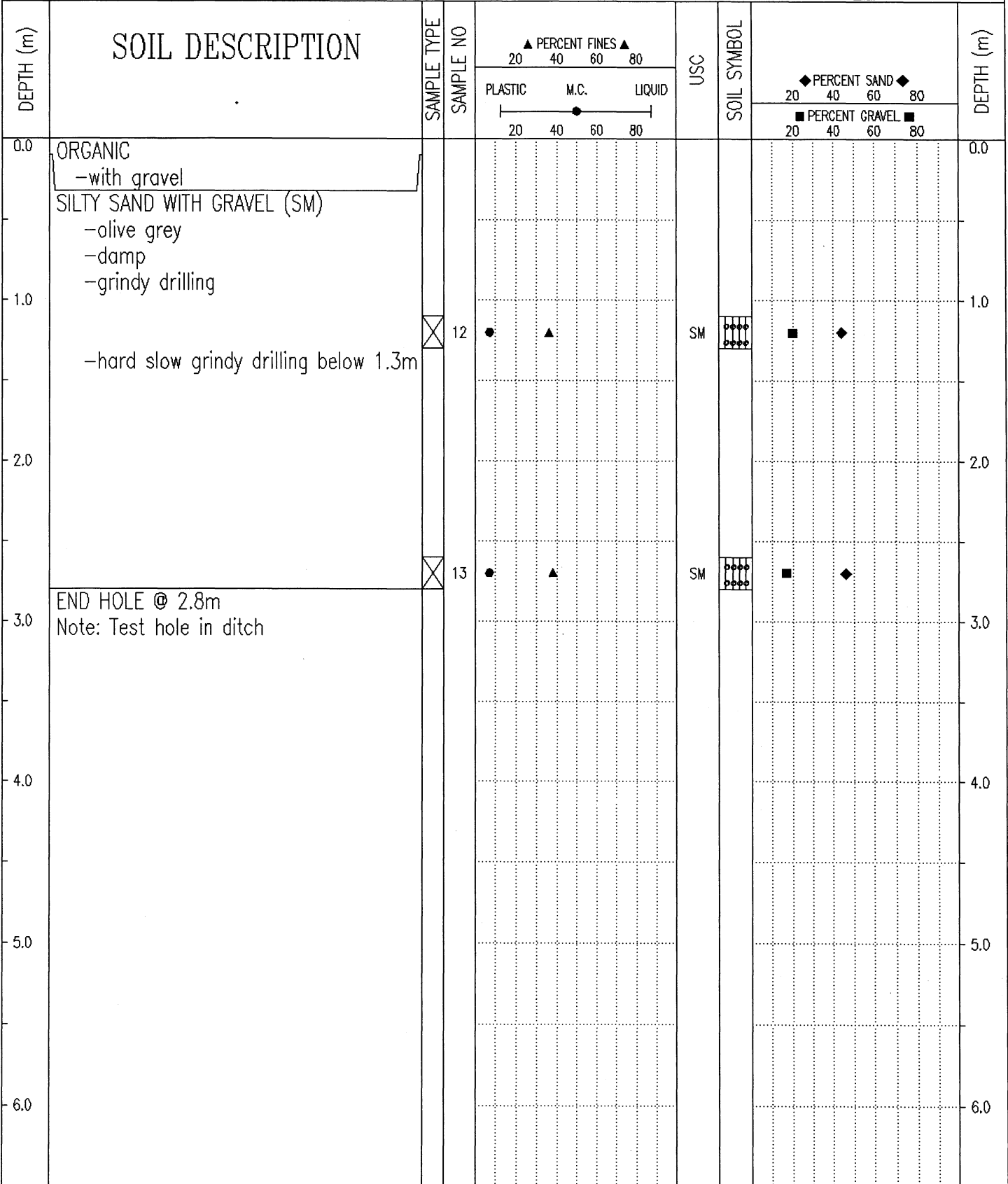
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 596-08
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1769+407 13M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.
	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE



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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 596-09
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1769+547 9M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

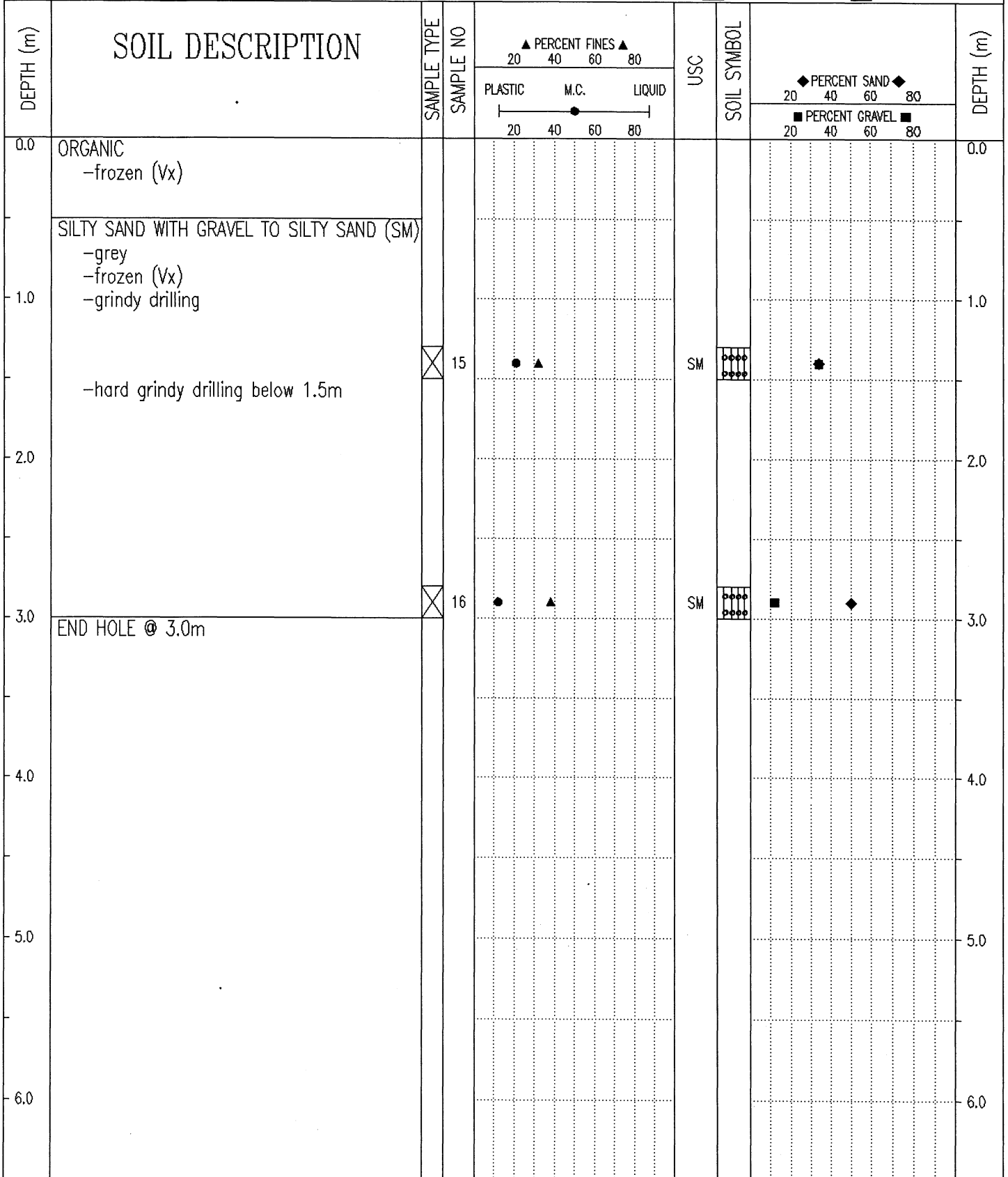


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Fig. No:

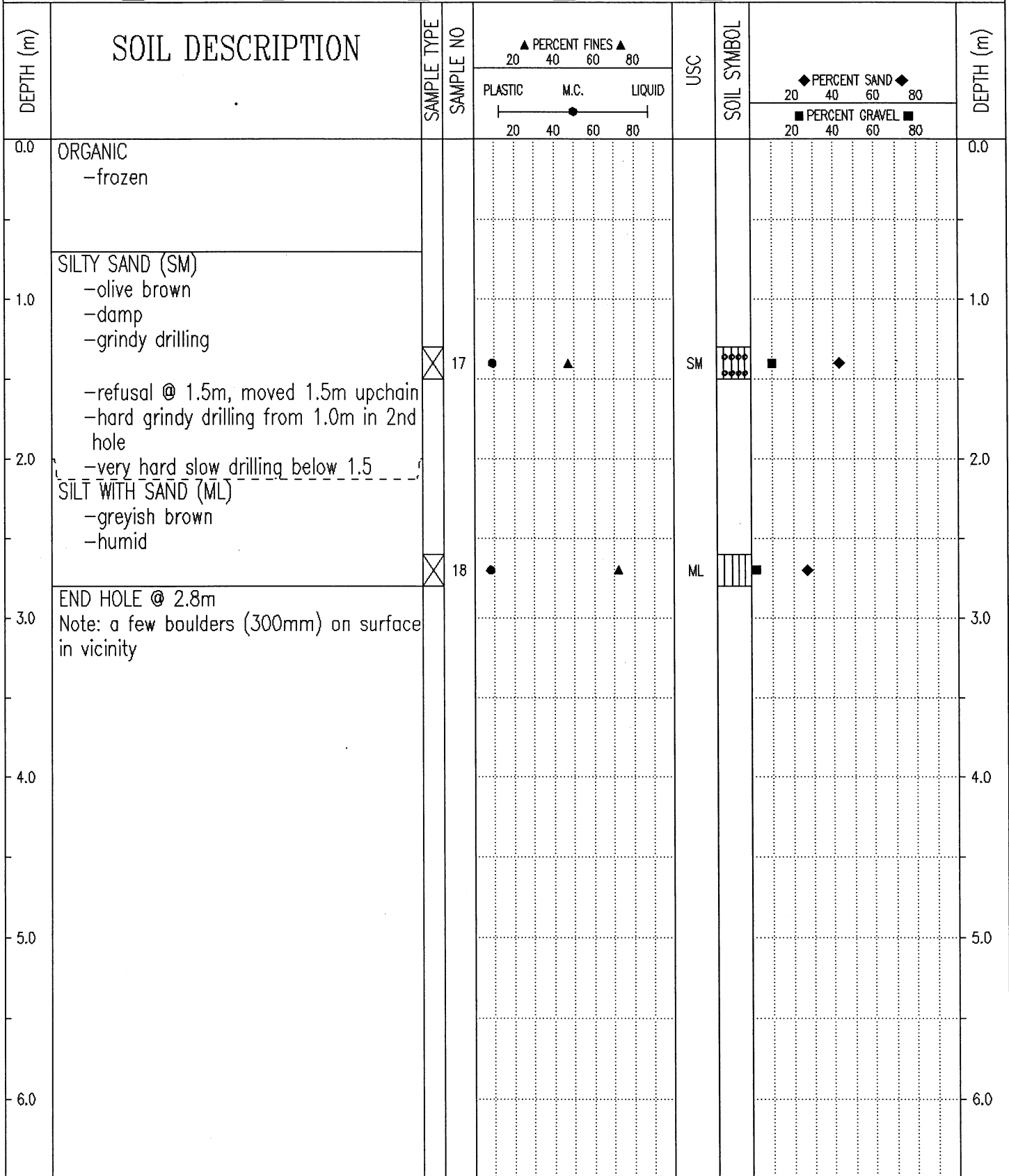
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COMPLETE: 01/04/25

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 596-11
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1769+643 36M 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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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 596-12
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1769+785 12M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	



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SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 596-13							
ENGINEERING CAPITAL		KM 1729-1787 A/H		Project No: 092-202101-0361							
D-4 CAT B-40 MOBILE DRILL		LOCATION: KM 1769+897 22M 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.			20	40		
0.0	ORGANIC -frozen (soil & Ice)										0.0
1.0	ORGANIC & SILT (ML) -frozen (Vx) -tighter drilling -new 7' fish tail bit -sample # 19 - 103% moisture		19			ML					1.0
2.0	SILTY SAND WITH GRAVEL (SM) -olive grey -frozen (Vx) -grindy drilling -hard slow grindy drilling @ 2.0m		20			SM					2.0
3.0	END HOLE @ 2.1m -refusal										3.0
4.0											4.0
5.0											5.0
6.0											6.0

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COMPLETION DEPTH: 2.1 m

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SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 596-14						
ENGINEERING CAPITAL		KM 1729-1787 A/H		Project No: 092-202101-0361						
D-4 CAT B-40 MOBILE DRILL		LOCATION: KM 1770+024 10M LT		ELEVATION: 0.00 (m)						
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE										
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 -surface cobbles -grindy									0.0
1.0	SILTY SAND WITH GRAVEL TO SILTY SAND (SM) -olive grey -frozen (Nb)	<input checked="" type="checkbox"/>	21	●	▲		SM	◆	◆	1.0
	-very hard slow grindy drilling @ 1.3m									
2.0	-damp @ 1.6m	<input checked="" type="checkbox"/>	22	●	▲		SM	■	◆	2.0
	END HOLE @ 1.8m -refusal - rock dust on bit									
3.0										3.0
4.0										4.0
5.0										5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: K.J. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 1.8 m COMPLETE: 01/04/26		Page 1 of 1		

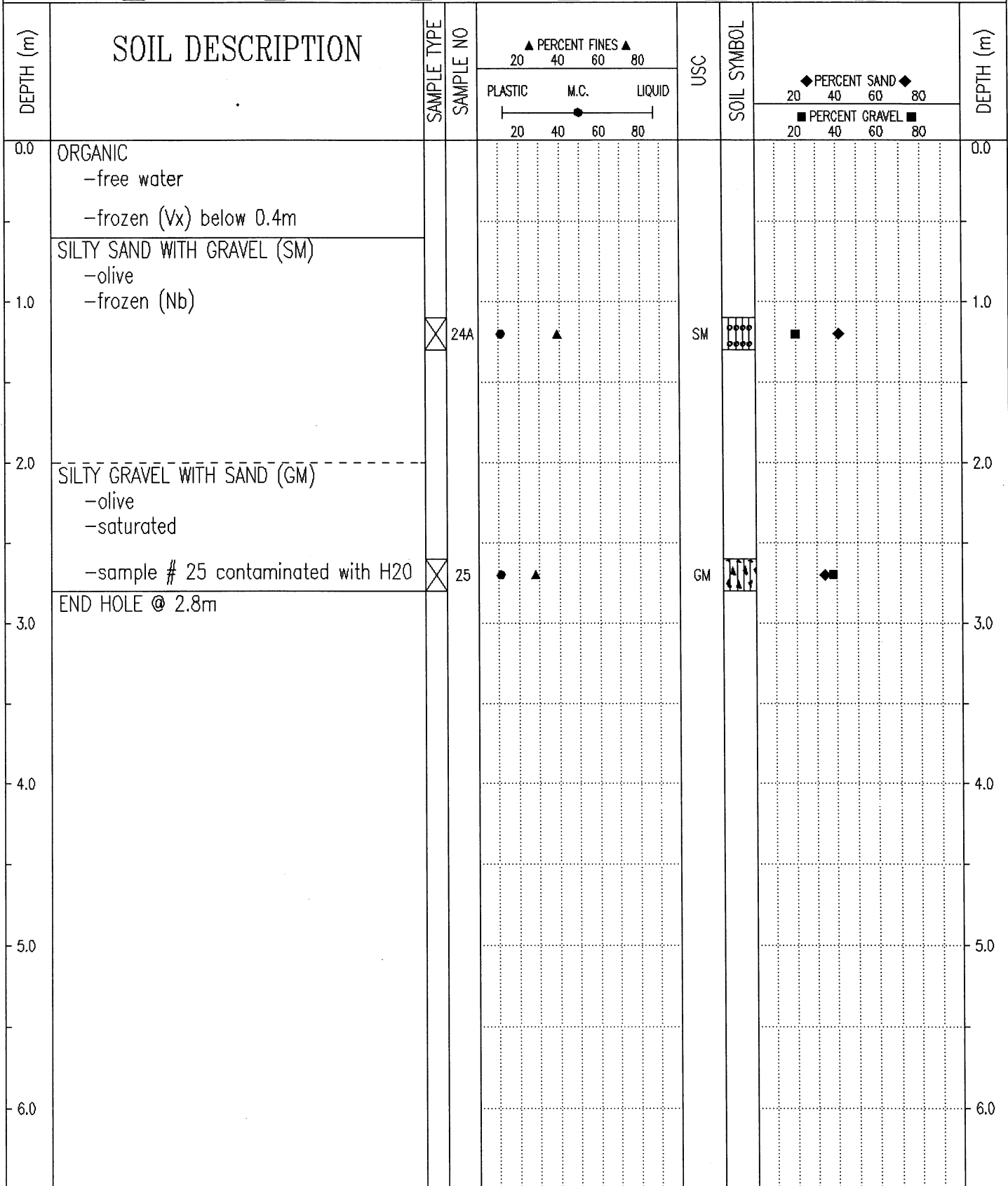
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ENGINEERING CAPITAL		KM 1729-1787 A/H		Project No: 092-202101-0361						
D-4 CAT B-40 MOBILE DRILL		LOCATION: KM 1770+162 38M LT		ELEVATION: 0.00 (m)						
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input 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 -with ash to 0.6m -frozen (Vx)									0.0
1.0	-soil & ice below 1.0m									1.0
2.0	SILTY SAND WITH GRAVEL (SM) -olive -frozen (Nb) -some grindy drilling -hard grindy drilling below 2.2m									2.0
3.0	END HOLE @ 2.8m	<input checked="" type="checkbox"/>	23	●	▲	SM	▣▣▣▣	■	◆	3.0
4.0										4.0
5.0										5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: K.J. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 2.8 m COMPLETE: 01/04/26		Page 1 of 1		

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 596-16
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1770+246 28M 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


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 -frozen (Vx)										0.0	
1.0	ORGANIC -with silt & gravel -frozen (Nf) -grindy										1.0	
2.0	SILTY SAND WITH GRAVEL (SM) -olive -wet										2.0	
3.0	END HOLE @ 2.8m	<input checked="" type="checkbox"/>	24	●	▲		SM	◆	■		3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 596-17
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: 1770+371 17M 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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SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 596-18				
ENGINEERING CAPITAL		KM 1729-1787 A/H		Project No: 092-202101-0361				
D-4 CAT B-40 MOBILE DRILL		LOCATION: KM 1770+506 19M 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	
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC -frozen (soil & ice) -trace gravel below 0.5m							0.0
1.0								1.0
2.0	SILTY SAND (SM) -olive grey -frozen (Nb) -grindy drilling -hard grindy drilling below 2.8m							2.0
3.0	END HOLE @ 2.8m	<input checked="" type="checkbox"/>	26	● ▲	SM		◆	3.0
4.0								4.0
5.0								5.0
6.0								6.0
Government of Yukon Transportation Engineering		LOGGED BY: K.J. REVIEWED BY:		COMPLETION DEPTH: 2.8 m COMPLETE: 01/04/26				
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 596-19
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1770+622 38M 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 -frozen (Vx)										0.0	
1.0											1.0	
2.0	SILTY SAND (SM) -olive grey -frozen Nb) -grindy drilling -hard, slow, grindy drilling below 1.8m										2.0	
3.0	END HOLE @ 2.8m	<input checked="" type="checkbox"/>	27	●	▲		SM	◆	■		3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

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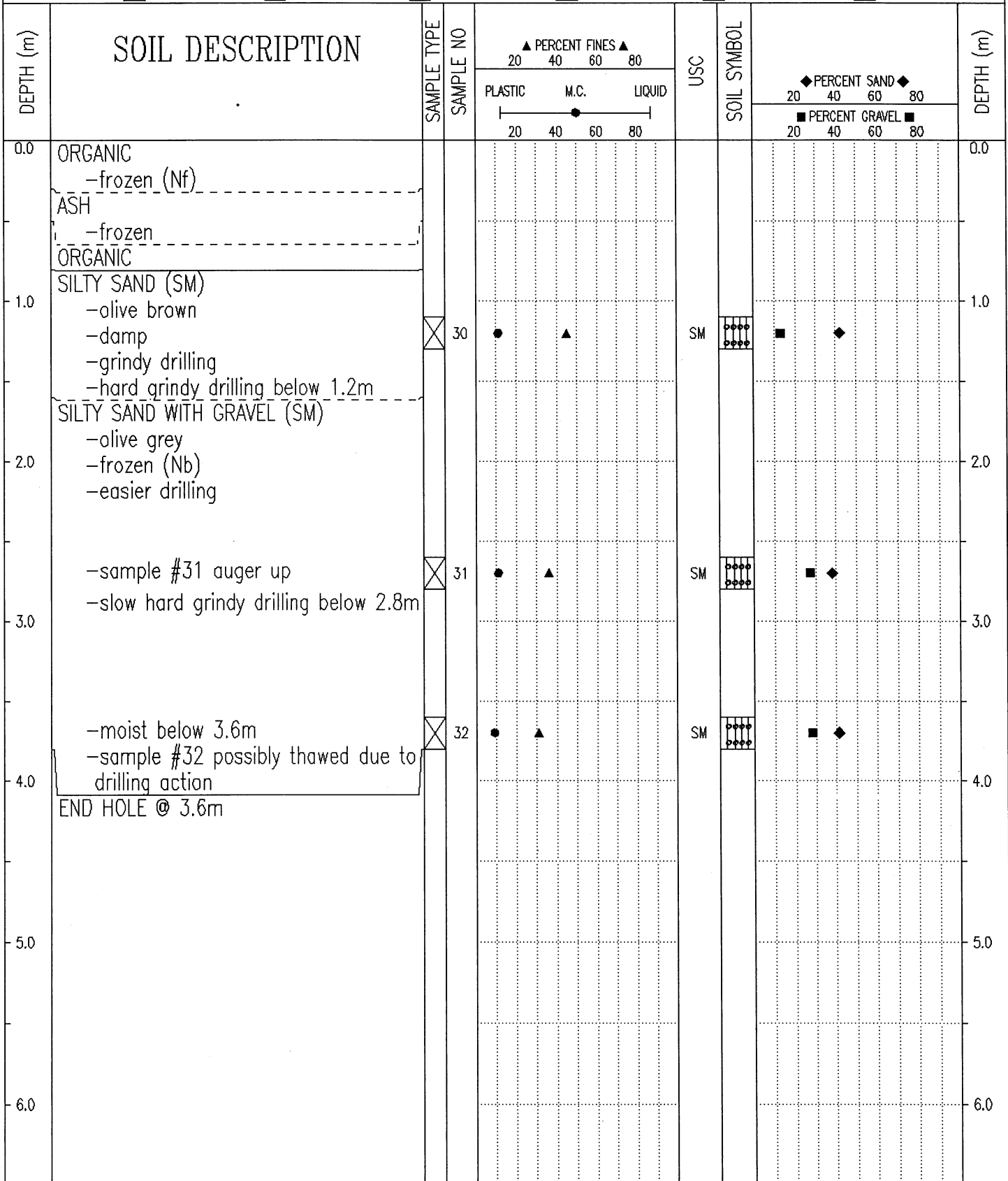
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ENGINEERING CAPITAL		KM 1729-1787 A/H		Project No: 092-202101-0361											
D-4 CAT B-40 MOBILE DRILL		LOCATION: KM 1770+743 29M LT		ELEVATION: 0.00 (m)											
SAMPLE TYPE		<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE													
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			PERCENT GRAVEL ■			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	20	40	
0.0	ROAD BED -sandy gravel with some silt													0.0	
1.0	ORGANIC -trace gravel below 1.2m													1.0	
2.0	SILTY GRAVEL WITH SAND (GM) -olive brown -damp -hard grindy drilling -maximum 50mm material auger up -refusal @ 2.1m - moved 2m	<input checked="" type="checkbox"/>	28	●	▲		GM	▲▲▲	◆	■				2.0	
3.0	-maximum 75mm material augered up END HOLE @ 3.0m Note: Testhole on shoulder existing hwy.	<input checked="" type="checkbox"/>	29	●	▲		GM	▲▲▲	◆	■				3.0	
4.0														4.0	
5.0														5.0	
6.0														6.0	

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COMPLETION DEPTH: 3.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 596-21
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1770+876 29M 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

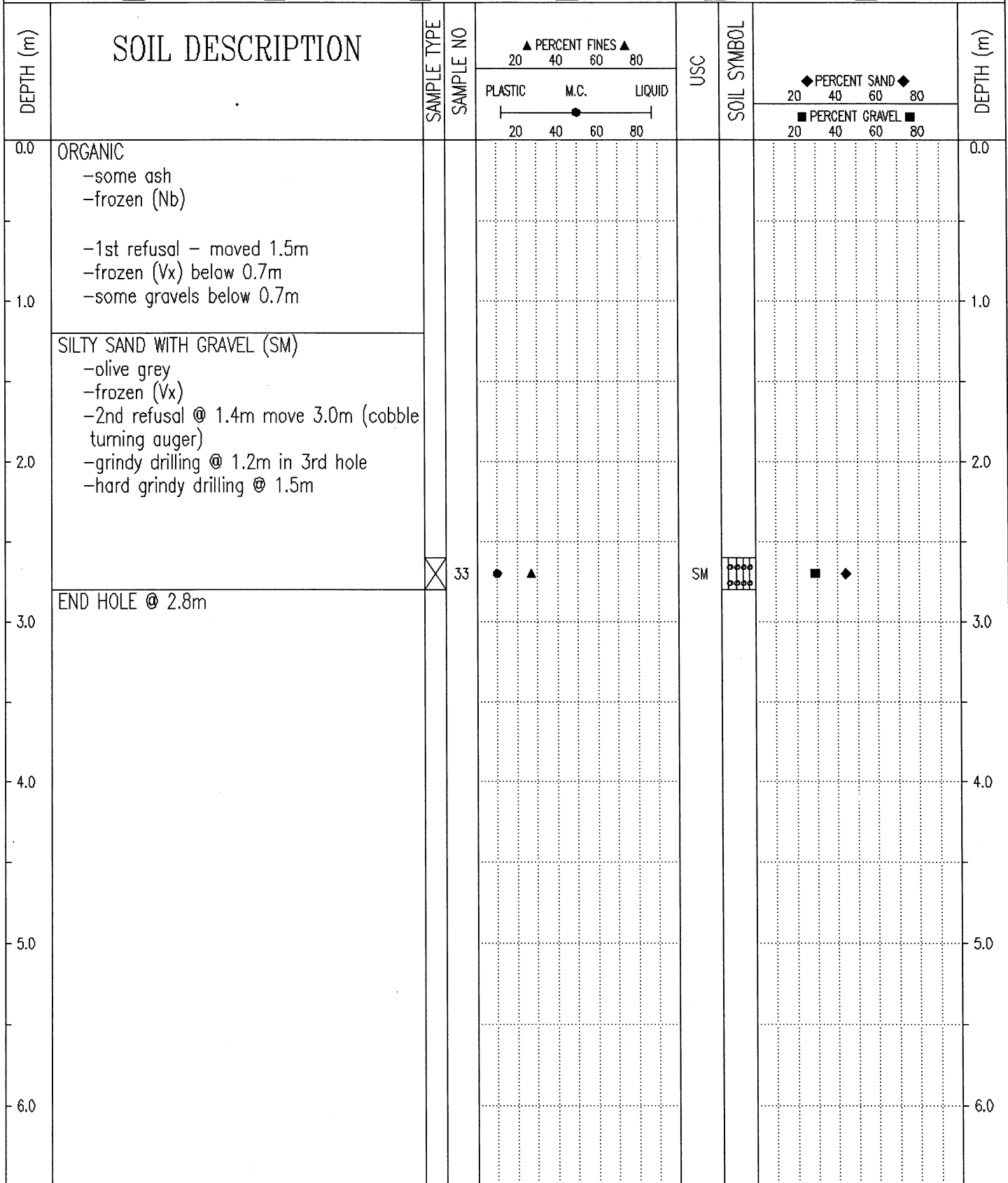


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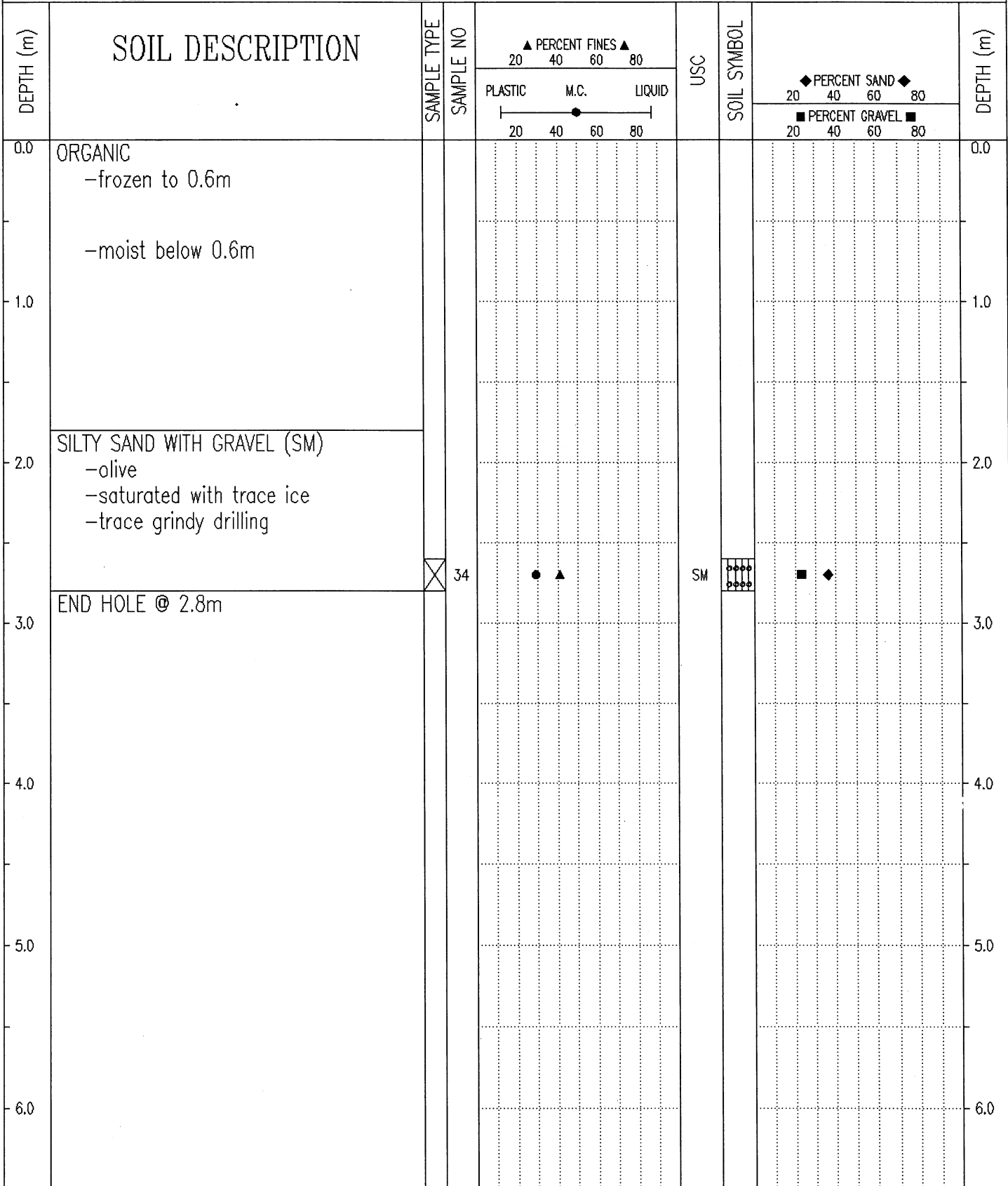
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ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1771+005 14M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	



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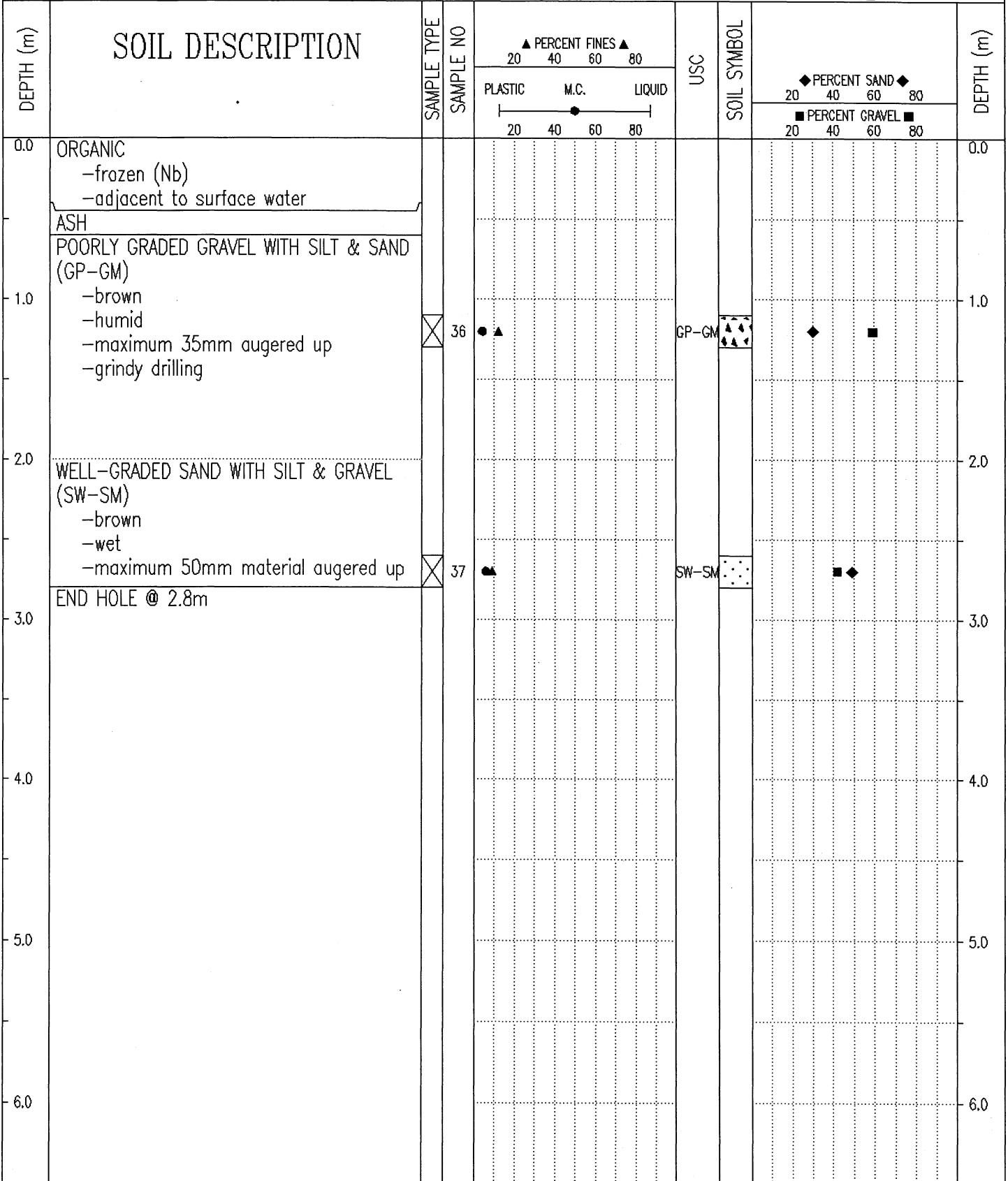
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ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1771+043 1M RT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.
	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE



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SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 596-24								
ENGINEERING CAPITAL		KM 1729-1787 A/H		Project No: 92-202101-0361								
D-4 CAT B-40 MOBILE DRILL		LOCATION: KM 1771+049 39M 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 -frozen (Vx) -soil & ice											0.0
1.0												1.0
2.0	-grindy @ 1.1m -more ice below 1.5m -smooth drilling below 1.5m											2.0
3.0	SILTY SAND WITH GRAVEL (SM) -olive grey -frozen (Vx) -grindy hard drilling	<input checked="" type="checkbox"/>	35	●	▲		SM	▣	◆			3.0
4.0												4.0
5.0	END HOLE @ 2.8m											5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: K.J. REVIEWED BY:		COMPLETION DEPTH: 2.8 m COMPLETE: 01/04/27						
				Fig. No:				Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 596-25
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 92-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1771+152 5M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

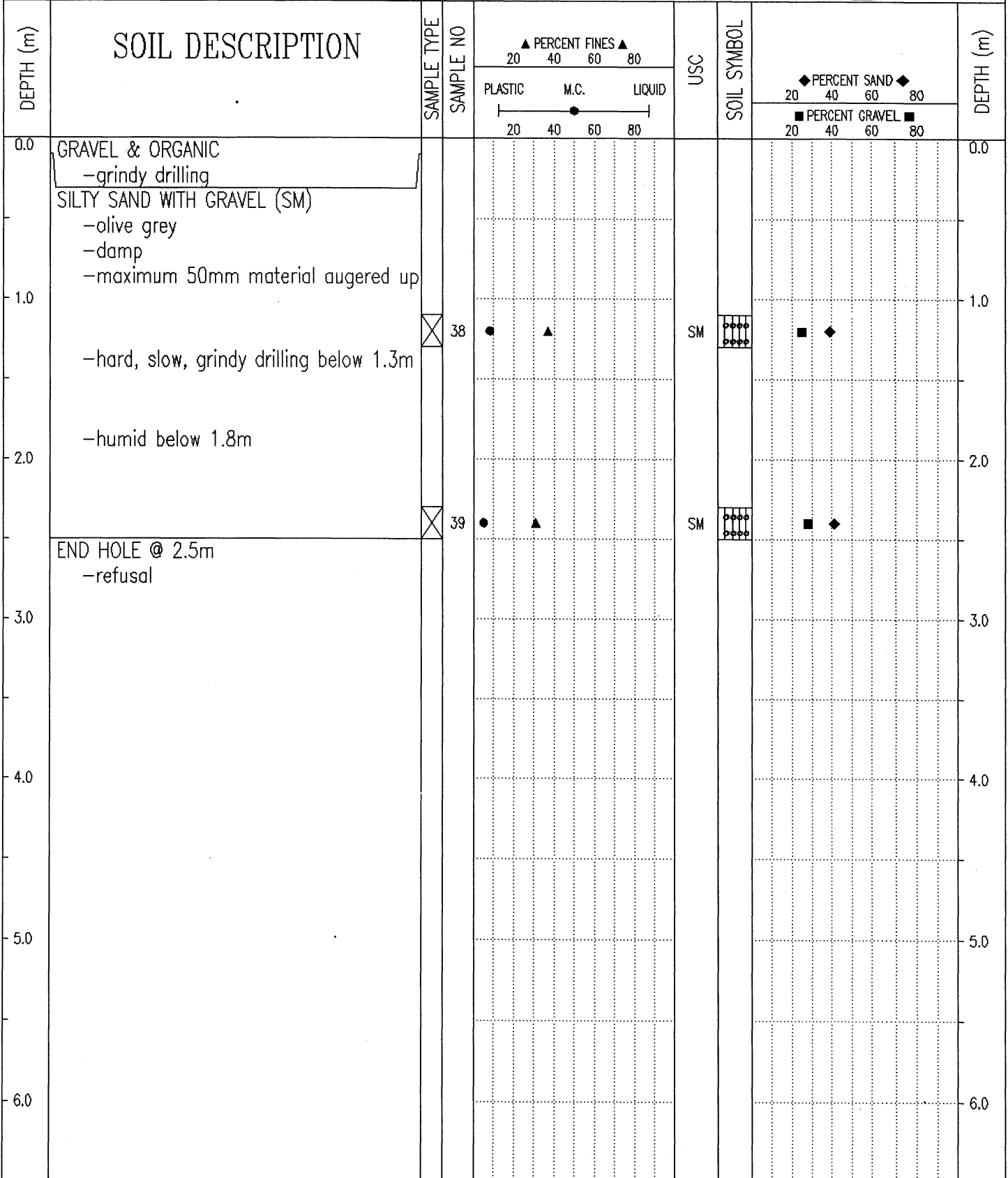


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COMPLETION DEPTH: 2.8 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 596-26
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 92-2021Q1-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1771+268 8M 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

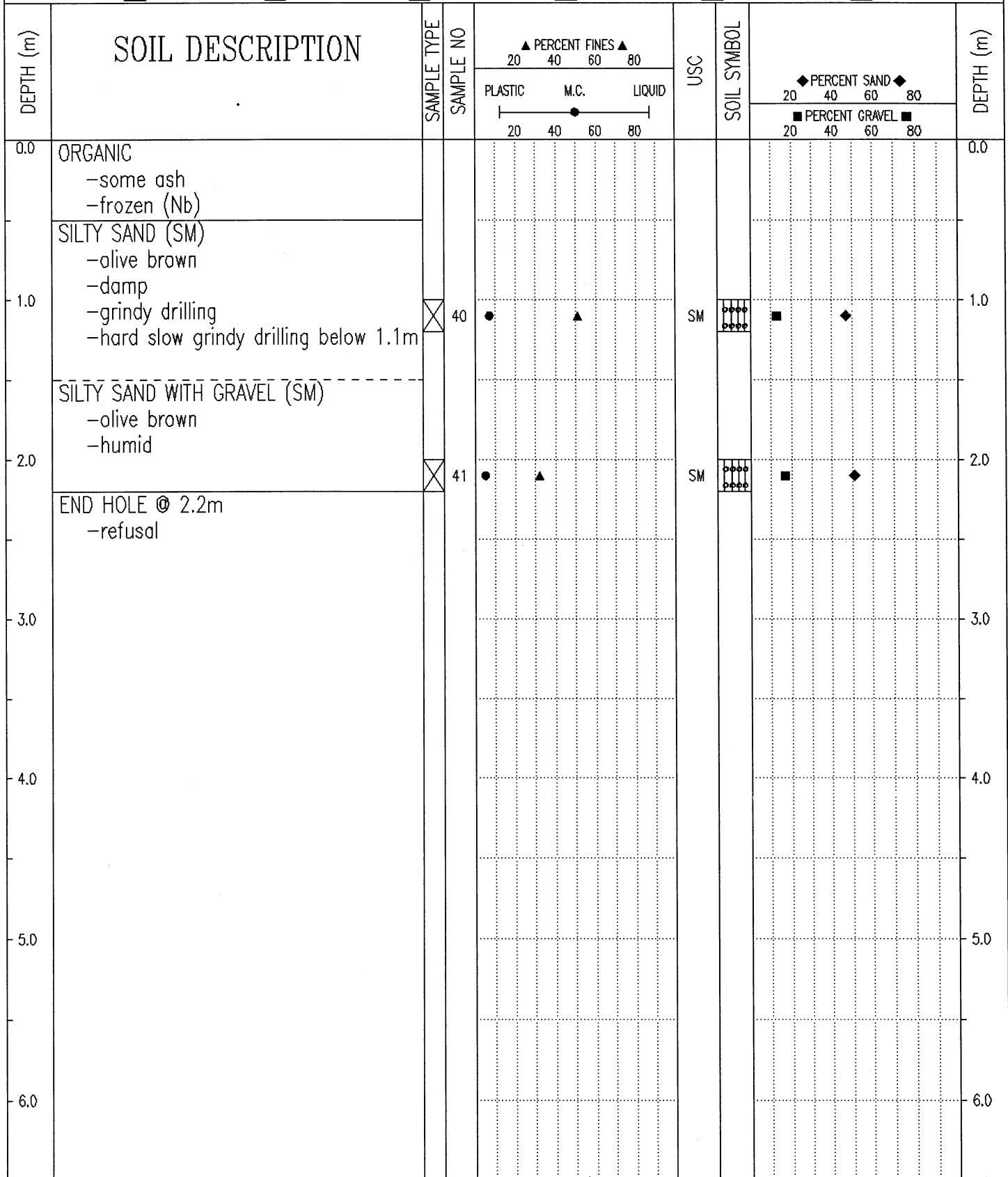


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COMPLETION DEPTH: 2.5 m
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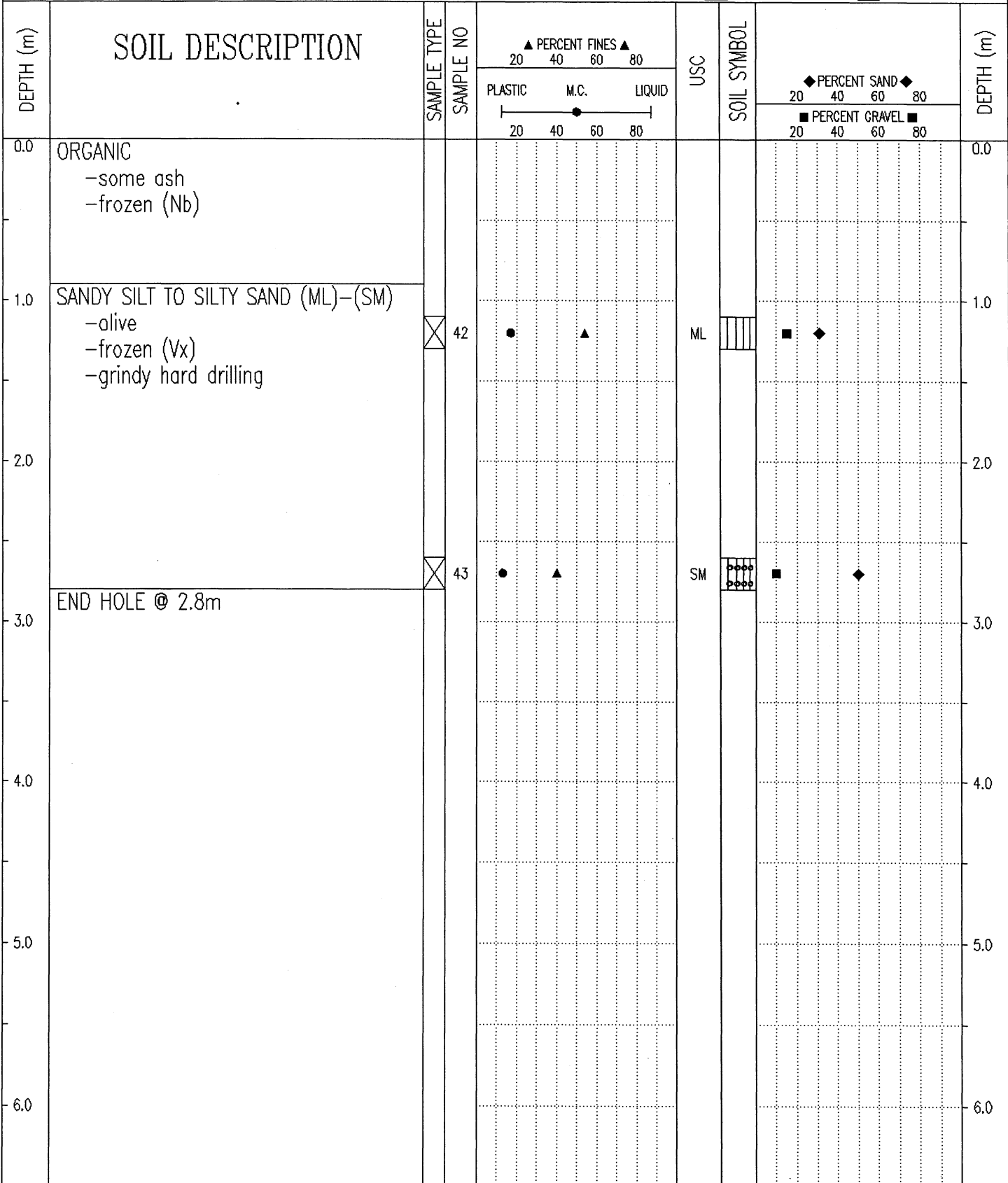
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ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 92-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1771+397 16M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.
	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE



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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 596-28
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 92-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1771+530 18M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	



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Fig. No:

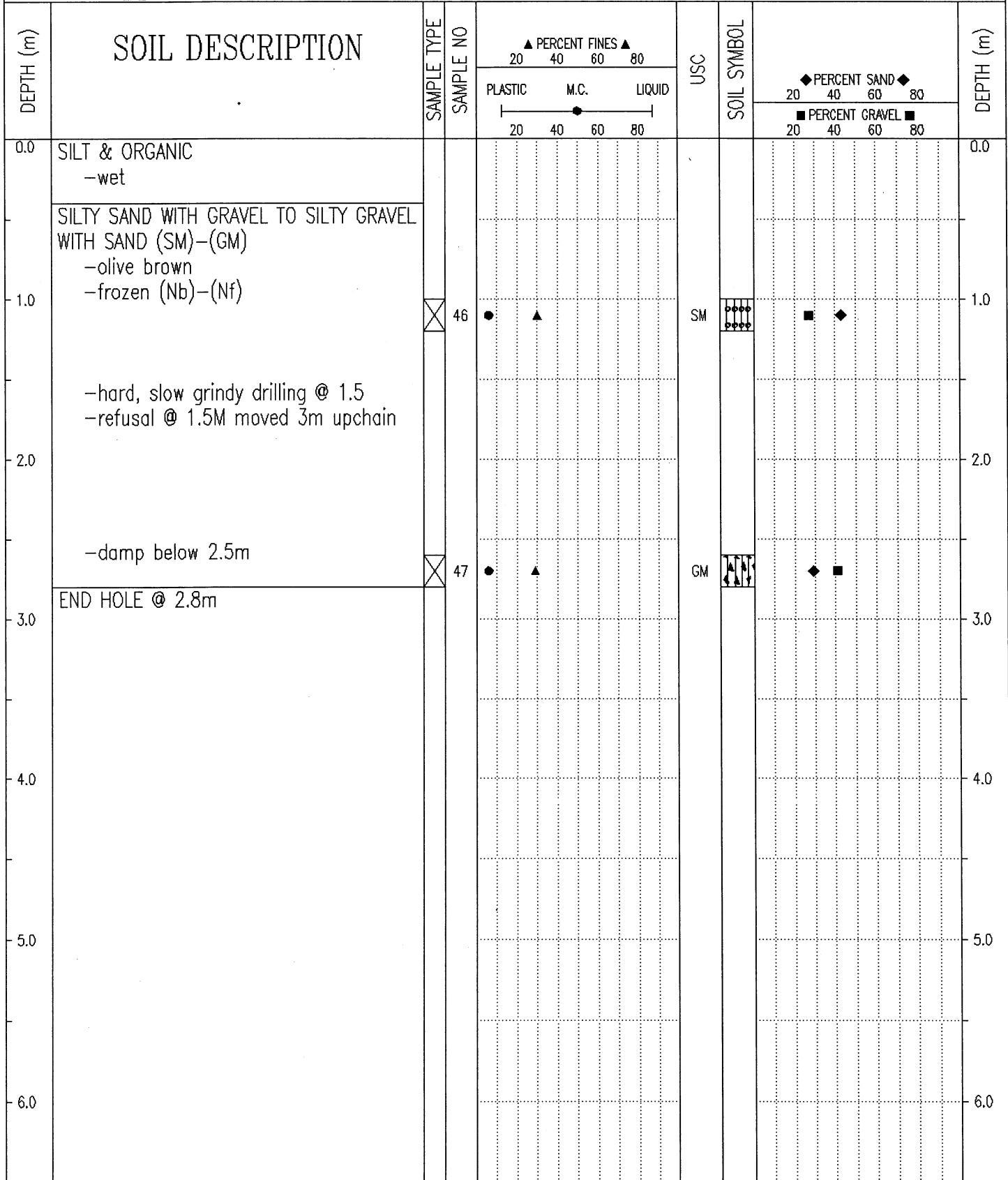
COMPLETION DEPTH: 2.8 m
COMPLETE: 01/04/27

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 596-29
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 92-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1771+671 17M 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

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	SILT & ORGANIC -wet										0.0	
1.0	SILTY SAND WITH GRAVEL (SM) -olive brown -damp to moist -maximum 25mm augered up -grindy drilling -hard grindy drilling @ 1.5m	<input checked="" type="checkbox"/>	44	●	▲		SM	◆◆◆◆	◆	■	1.0	
3.0	-hard, slow grindy drilling below 2.4m -damp below 2.4m -maximum 50mm augered up @ 2.4m -lost sample #45 END HOLE @ 2.8m	<input checked="" type="checkbox"/>	45	●							3.0	

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	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 596-30
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 92-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1771+804 25M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



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COMPLETION DEPTH: 2.8 m
COMPLETE: 01/04/27

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 596-31
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 92-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1771+920 34M 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

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 -frozen										0.0	
1.0	SILTY SAND WITH GRAVEL (SM) -olive -frozen (Vx) -grindy drilling -hard, slow grindy drilling below 1.5m	<input checked="" type="checkbox"/>	48	20	40	60	SM	20	40	60	80	1.0
2.0		<input checked="" type="checkbox"/>	49	20	40	60	SM	20	40	60	80	2.0
3.0	END HOLE @ 2.5m -refusal											3.0
4.0												4.0
5.0												5.0
6.0												6.0

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COMPLETION DEPTH: 2.5 m
COMPLETE: 01/04/27

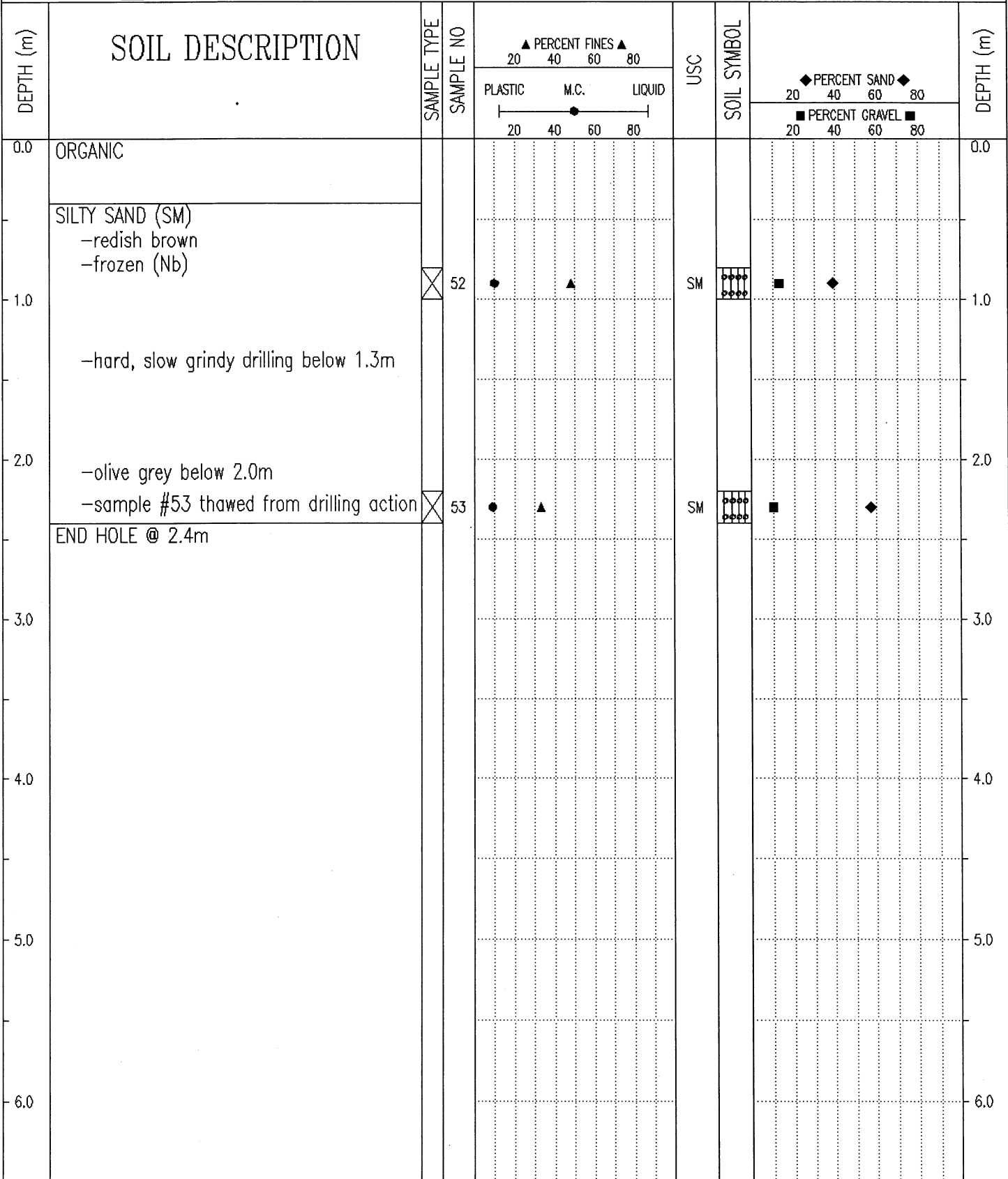
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ENGINEERING CAPITAL		KM 1729-1787 A/H		Project No: 92-202101-0361											
D-4 CAT B-40 MOBILE DRILL		LOCATION: KM 1771+965 26M LT		ELEVATION: 0.00 (m)											
SAMPLE TYPE		<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE													
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			PERCENT GRAVEL ■			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	20	40	
0.0	ORGANIC -frozen (Nb)													0.0	
1.0	SILTY SAND (SM) -olive brown -frozen (Vx) -trace grindy drilling	<input checked="" type="checkbox"/>	50	●	▲		SM	◆◆◆◆	■	◆				1.0	
2.0	SILTY GRAVEL WITH SAND (GM) -olive -frozen (Vx) -grindy drilling													2.0	
3.0	END HOLE @ 2.8m	<input checked="" type="checkbox"/>	51	●	▲		GM	◆◆◆◆	■	◆				3.0	
4.0														4.0	
5.0														5.0	
6.0														6.0	

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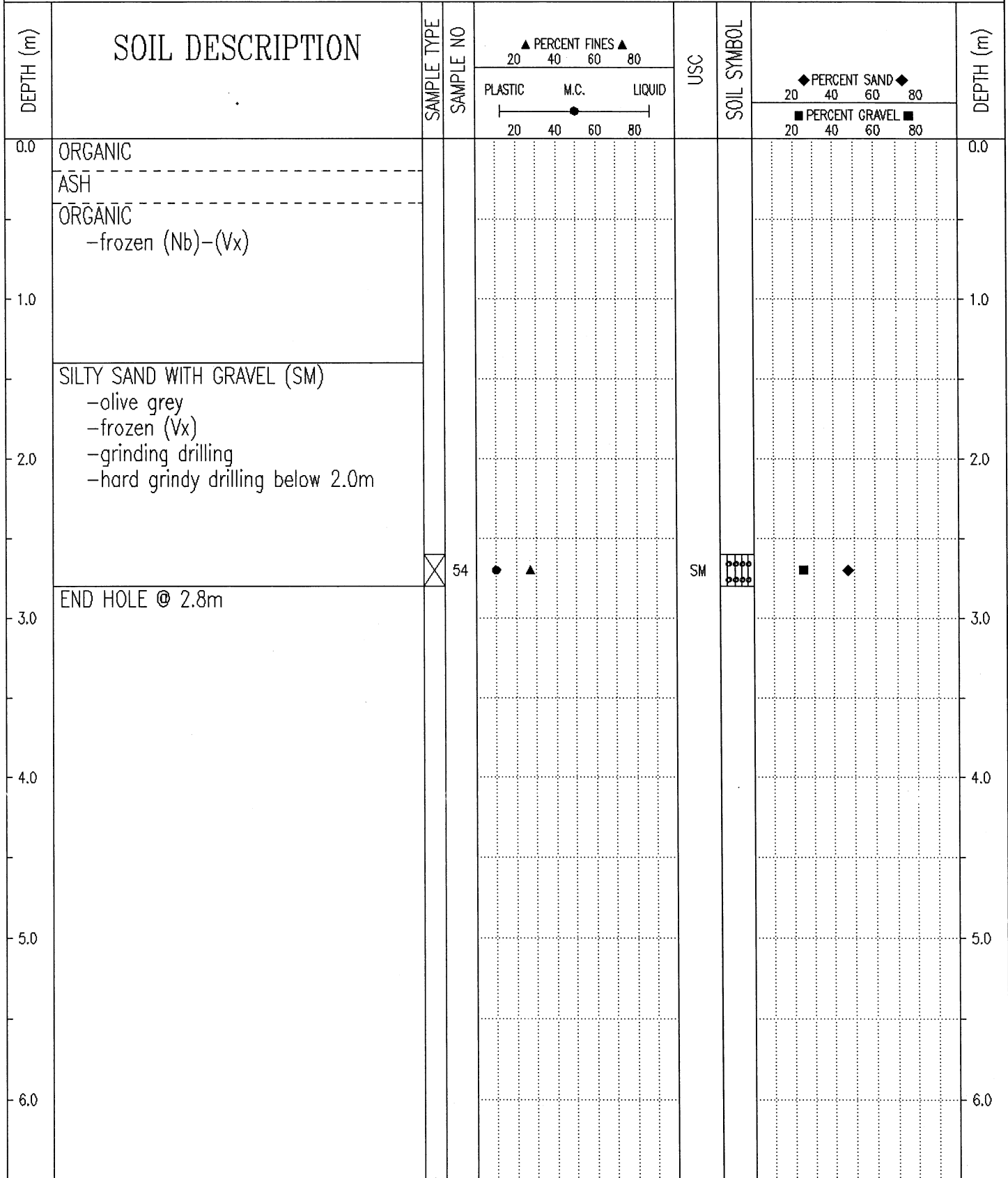
COMPLETION DEPTH: 2.8 m
COMPLETE: 01/04/27

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 596-33
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 92-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1772+054 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



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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 596-34
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 92-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1772+193 17M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
	<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
		<input type="checkbox"/> CORE



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Fig. No:

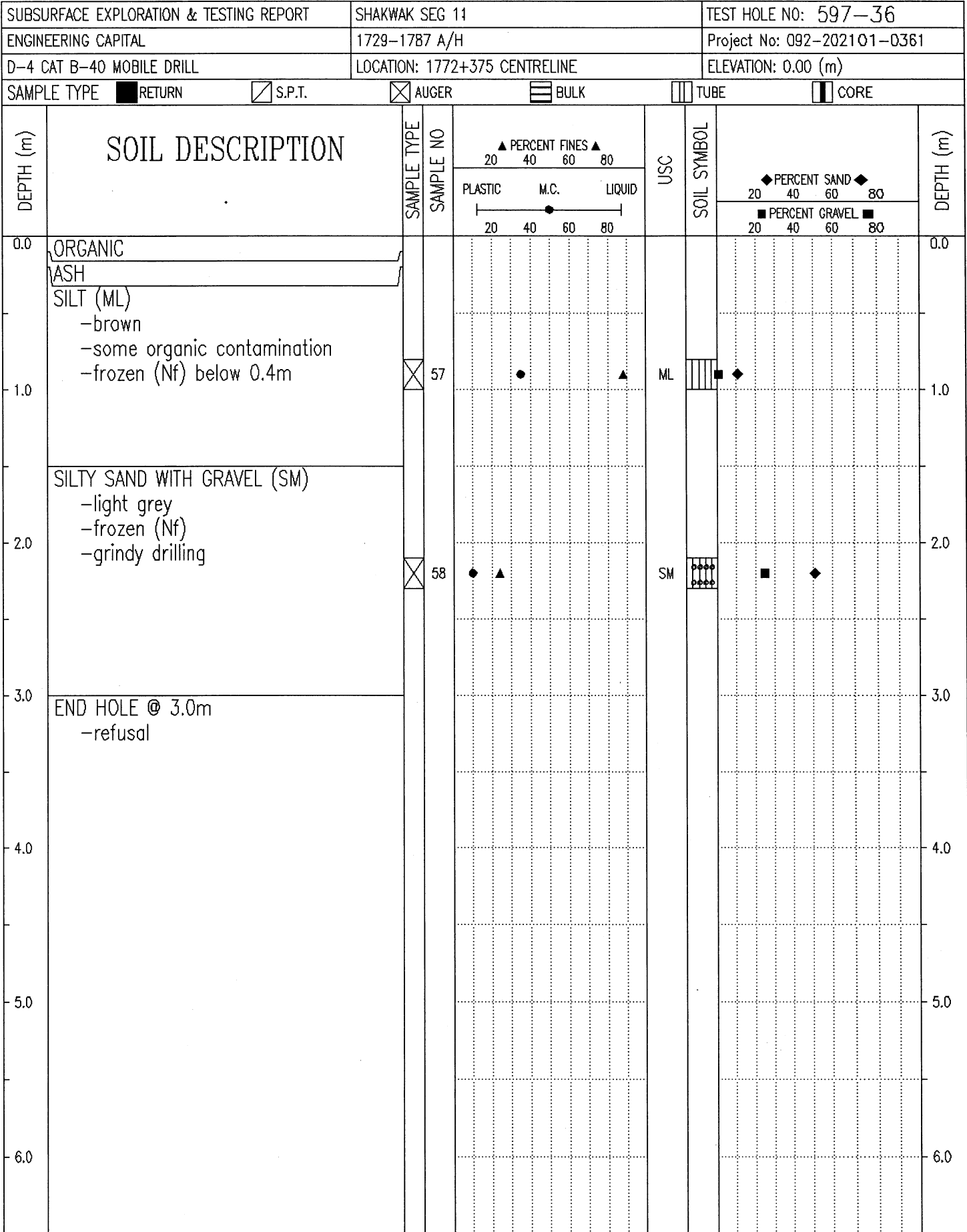
COMPLETION DEPTH: 2.8 m
COMPLETE: 01/04/27

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 596-35								
ENGINEERING CAPITAL		KM 1729-1787 A/H		Project No: 92-202101-0361								
D-4 CAT B-40 MOBILE DRILL		LOCATION: KM 1772+269 35M 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										
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 -frozen										0.0	
1.0	SILTY SAND WITH GRAVEL (SM) -brown -frozen (Vx) -grindy drilling -hard, slow grindy drilling below 1.5m	<input checked="" type="checkbox"/>	55	●	▲		SM	○○○○	■	◆	1.0	
2.0											2.0	
3.0	-olive grey below 2.5m -sample #56 saturated as it thawed from drilling action END HOLE @ 2.8m	<input checked="" type="checkbox"/>	56	●	▲		SM	○○○○	■	◆	3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	
Government of Yukon Transportation Engineering				LOGGED BY: K.J. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 2.8 m COMPLETE: 01/04/27		Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 599-81						
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361						
B40L MOBILE DRILL		LOCATION: 1772+370 57M 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 SANDY SILT WITH ORGANIC -brown -saturated									0.0
1.0	SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND (SM)-(GM) -brown -moist -grindy drilling									1.0
2.0	-wet below 2.0m	<input checked="" type="checkbox"/>	134	●	▲		SM	■	◆	2.0
3.0	END HOLE @ 2.9m	<input checked="" type="checkbox"/>	135	●	▲		GM	■	◆	3.0
4.0										4.0
5.0										5.0
6.0										6.0

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Fig. No:

COMPLETION DEPTH: 3.0 m
COMPLETE: 01/06/06

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 597-37						
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361						
D-4 CAT B-40 MOBILE DRILL		LOCATION: 1772+475 CENTRELINE		ELEVATION: 0.00 (m)						
SAMPLE TYPE		<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE			
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲		USC	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.			LIQUID	20	
0.0	ORGANIC ASH SILT (ML) -brown -frozen (Nf) below .04m									0.0
1.0		<input checked="" type="checkbox"/>	59			ML		■	◆	1.0
2.0	SILTY SAND (SM) -light grey -some gravel -frozen (Nf) -grindy drilling	<input checked="" type="checkbox"/>	60			SM		■	◆	2.0
3.0										3.0
4.0	END HOLE @ 4.0m -refusal	<input checked="" type="checkbox"/>	61			SM		■	◆	4.0
5.0										5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B. REVIEWED BY:		COMPLETION DEPTH: 4.0 m COMPLETE: 01/06/06				
				Fig. No:		Page 1 of 1				

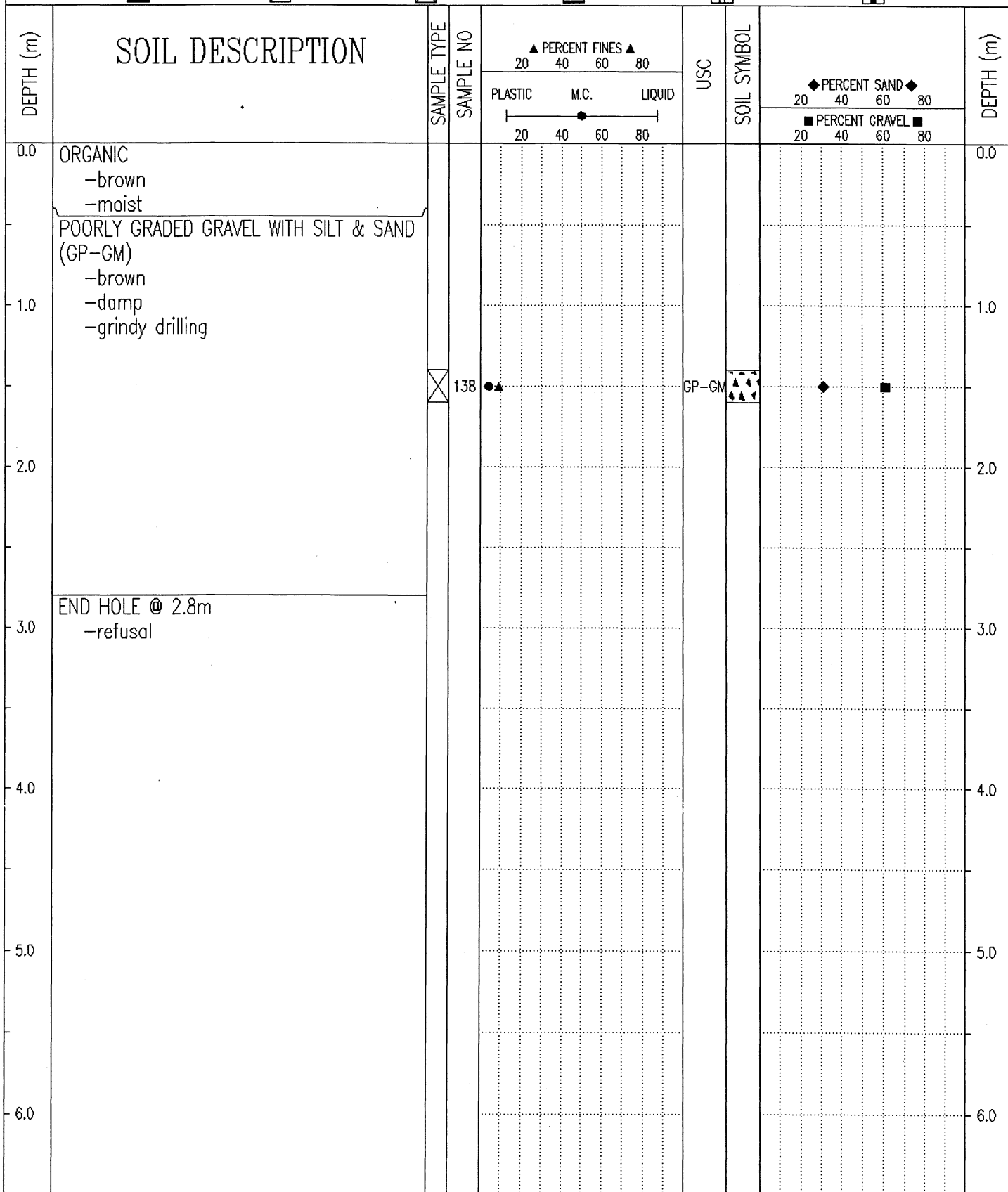
SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 597-38								
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361								
D-4 CAT B-40 MOBILE DRILL		LOCATION: 1772+475 20M LT		ELEVATION: 0.00 (m)								
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE												
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC ASH SILTY SAND WITH GRAVEL (SM) -brown -frozen (Nf) -grindy drilling	<input checked="" type="checkbox"/>	62	20	40	60	SM	20	40	60	80	0.0
1.0												1.0
2.0	-grey below 1.8m -coarser drilling below 1.8m											2.0
3.0		<input checked="" type="checkbox"/>	63	20	40	60	SM	20	40	60	80	3.0
4.0	END HOLE @ 3.3m -refusal											4.0
5.0												5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B. REVIEWED BY: Fig. No:				COMPLETION DEPTH: 3.3 m COMPLETE: 01/06/07 Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 597-39						
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361						
D-4 CAT B-40 MOBILE DRILL		LOCATION: 1772+475 30M RT		ELEVATION: 0.00 (m)						
SAMPLE TYPE		<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80		USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80		DEPTH (m)
0.0	ORGANIC ASH									0.0
0.0 - 1.0	SILT WITH SAND (ML) -brown -frozen (Vx) below 0.4m									1.0
1.0 - 2.0	-some organic contamination	⊗	64			ML	▨	◆		
2.0 - 2.5	GRAVEL -grindy drilling									
2.5 - 3.0	WELL-GRADED SAND WITH SILT (SW-SM) -brown -frozen (Nf) -smoother drilling	⊗	65			SW-SM	▨	■	◆	
3.0 - 4.5	SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (GM)-(SM) -grey -frozen (Nf) -grindy drilling	⊗	66			GM	▨	◆	■	
4.5 - 5.0	END HOLE @ 4.5m	⊗	67			SM	▨	■	◆	
5.0 - 6.0										
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				REVIEWED BY:		COMPLETE: 01/06/07				
				Fig. No:		Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 599-82											
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361											
B40L MOBILE DRILL		LOCATION: 1772+490 62M 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															
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND			PERCENT GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	20	40	
0.0	ORGANIC -brown -frozen (Nf) 0.3 to 1.0m													0.0	
1.0	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -brown -saturated -grindy drilling	<input checked="" type="checkbox"/>	136	■			SW-SM		■	◆				1.0	
2.0	SILTY GRAVEL WITH SAND (GM) -brown -saturated	<input checked="" type="checkbox"/>	137	●	▲		GM	▲▲▲	◆	■				2.0	
3.0	END HOLE @ 2.9m													3.0	
4.0														4.0	
5.0														5.0	
6.0														6.0	
Government of Yukon Transportation Engineering				LOGGED BY: B.B. REVIEWED BY: Fig. No:				COMPLETION DEPTH: 2.9 m COMPLETE: 01/06/18				Page 1 of 1			

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 597-40								
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361								
D-4 CAT B-40 MOBILE DRILL		LOCATION: 1772+600 CENTERLINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE		<input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE										
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC ASH SILT & ORGANICS -brown & black -frozen (Nf) below 0.4m											0.0
1.0	SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (GM)-(SM) -frozen (Nf) -grindy drilling		68	●	▲		GM	◄	◄	◆	■	1.0
2.0												2.0
3.0	END HOLE @ 3.0m -refusal		69	▲			SM	◄◄◄	◄◄◄	◆	■	3.0
4.0												4.0
5.0												5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 3.0 m COMPLETE: 01/06/07		Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11	TEST HOLE NO: 599-83
ENGINEERING CAPITAL		1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL		LOCATION: 1772+647 38M 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: 01/06/18
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SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 597-41								
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361								
D-4 CAT B-40 MOBILE DRILL		LOCATION: 1772+700 CENTERLINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE		<input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE										
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	<p>ORGANIC</p> <p>POORLY GRADED GRAVEL WITH SILT & SAND TO WELL-GRADED SAND WITH SILT & GRAVEL (GP-GM)-(SW-SM)</p> <p>-brown</p> <p>-damp</p> <p>-grindy drilling below 0.6m</p>										0.0	
1.0												1.0
2.0												2.0
3.0			70	▲			GP-GM	▲▲▲▲	◆	■		3.0
4.0												4.0
5.0			71	▲			SW-SM	●●●●	◆	■		5.0
6.0												6.0
	<p>-h20 level @ 3.4m</p> <p>-grey below 3.4m</p> <p>-saturated below 3.4m</p>											
	END HOLE @ 4.5m		72	▲			SW-SM	●●●●	◆	■		

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Fig. No:

COMPLETION DEPTH: 4.5 m

COMPLETE: 01/06/07

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 599-84
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: 1772+740 31M 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	40	60	80	20	
0.0	ORGANIC -brown -moist													0.0	
1.0	SANDY GRAVELLY MATERIAL OBSERVED -grindy drilling -no sample recovered													1.0	
2.0	END HOLE @ 1.6m -refusal													2.0	
3.0														3.0	
4.0														4.0	
5.0														5.0	
6.0														6.0	

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	REVIEWED BY:	COMPLETE: 01/06/18
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 597-43								
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361								
D-4 CAT B-40 MOBILE DRILL		LOCATION: 1772+822 22M 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												
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	SOIL SYMBOL	◆ PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC -frozen (Vx)											0.0
1.0												1.0
2.0												2.0
3.0	SANDY SILT (ML) -trace gravel -frozen (Vx) -grindy drilling	<input checked="" type="checkbox"/>	74	●	▲		ML		■	◆		3.0
4.0	END HOLE @ 3.3m -refusal											4.0
5.0												5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 3.3 m COMPLETE: 01/06/07		Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 597-42						
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361						
D-4 CAT B-40 MOBILE DRILL		LOCATION: 1772+830 CENTERLINE		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 -brown -frozen (Vx)									0.0
1.0										1.0
2.0										2.0
3.0	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -grey -frozen (Nf) -grindy drilling	<input checked="" type="checkbox"/>	73	●		SW-SM	■	◆		3.0
4.0	END HOLE @ 3.5m -refusal									4.0
5.0										5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B. REVIEWED BY:		COMPLETION DEPTH: 3.5 m COMPLETE: 01/06/07		Fig. No:		Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 599-84A
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: 1772+875 42M 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

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 -brown -frozen (Vx) below 0.3m											0.0
1.0												1.0
2.0												2.0
3.0	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -brown -frozen (Nf) -grindy drilling END HOLE @ 2.9m	<input checked="" type="checkbox"/>	139	▲			SW-SM	■	◆			3.0
4.0												4.0
5.0												5.0
6.0												6.0

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REVIEWED BY:	COMPLETE: 01/06/18
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SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 597-44								
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-D361								
D-4 CAT B-40 MOBILE DRILL		LOCATION: 1772+913 6M 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 -brown -frozen (Vx)											0.0
1.0												1.0
2.0	WELL-GRADED SAND WITH SILT & GRAVEL TO SILTY SAND WITH GRAVEL (SW-SM)-(SM) -grey -frozen (Nb) -grindy drilling	<input checked="" type="checkbox"/>	75	■			SW-SM	◆	■			2.0
3.0												3.0
4.0		<input checked="" type="checkbox"/>	76	▲			SM	◆	■			4.0
5.0	END HOLE @ 4.5m											5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B.		COMPLETION DEPTH: 4.5 m						
				REVIEWED BY:		COMPLETE: 01/06/08						
				Fig. No:				Page 1 of 1				

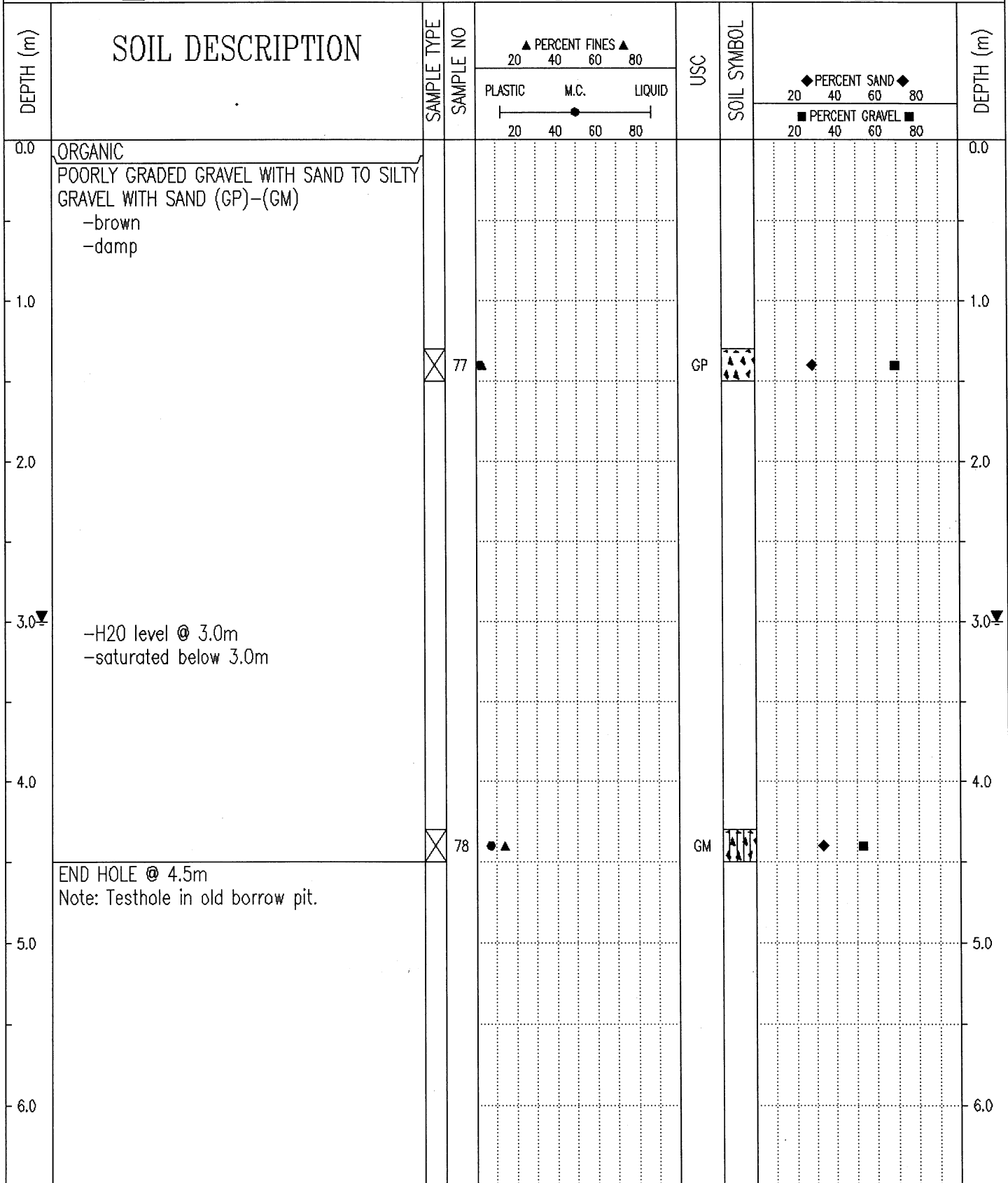
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 599-85
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: 1772+939 46M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" 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 -brown -frozen (Vx) below 0.3m -grindy drilling @ 1.6m -surface water flowing into hole -no samples recovered END HOLE @ 1.8m -refusal										0.0	
1.0											1.0	
2.0											2.0	
3.0											3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

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REVIEWED BY:	COMPLETE: 01/06/18
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 597-45
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: 1773+015 1M RT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.
	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE



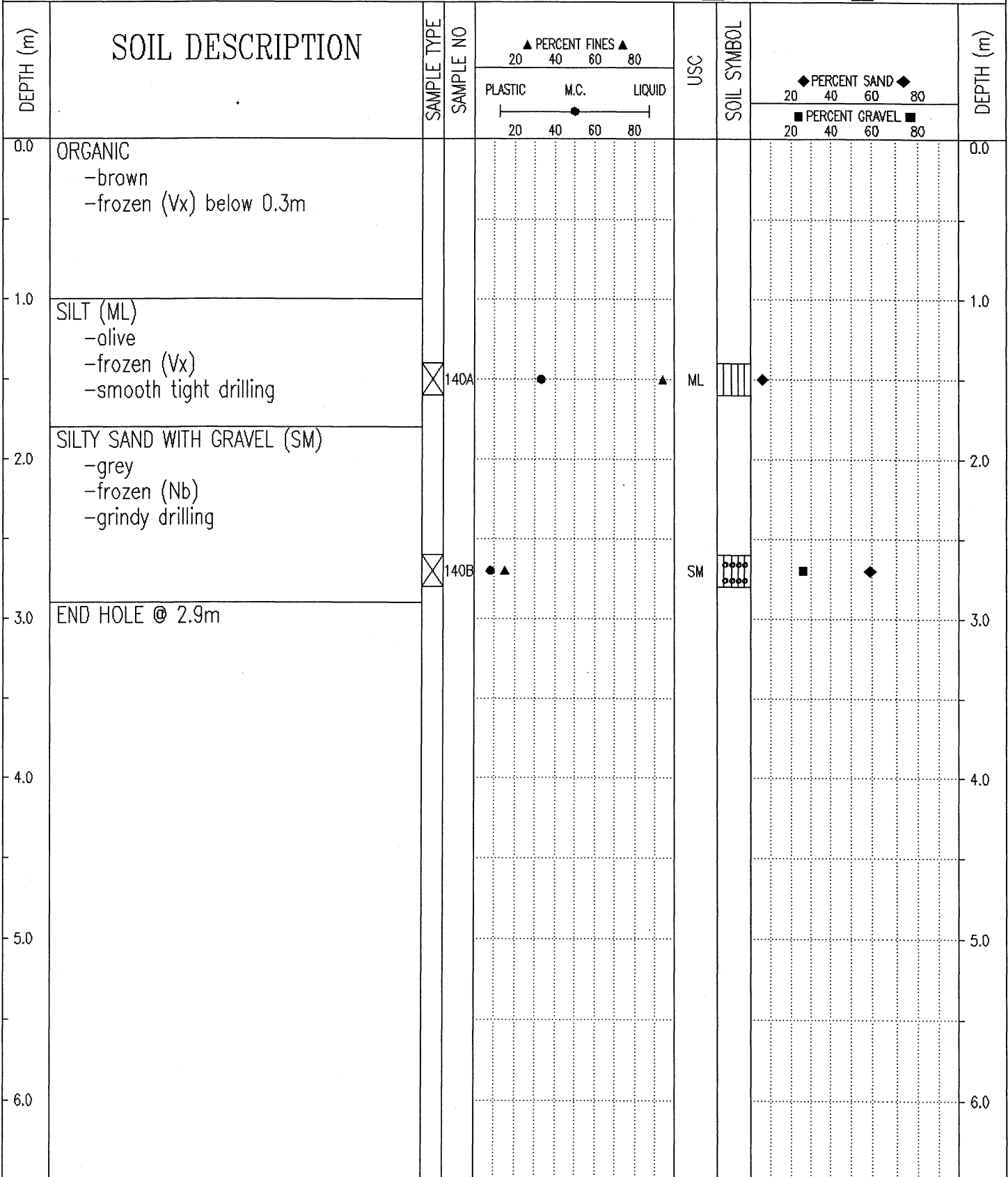
Government of Yukon Transportation Engineering	LOGGED BY: B.B.	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 01/06/08
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 597-46
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: 1773+058 2M RT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	SOIL SYMBOL	◆ PERCENT SAND ◆			DEPTH (m)	
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■				
				20	40	60	80		20	40	60	80	
0.0	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -brown -frozen (Nb) below 0.4m												0.0
1.0	-grindy drilling below 1.0m												1.0
2.0	-first refusal @ 1.5M -very slow rough difficult drilling below 1.6m	<input checked="" type="checkbox"/>	79	●				SW-SM	◆◆				2.0
2.0	END HOLE @ 2.0m -refusal												2.0
3.0													3.0
4.0													4.0
5.0													5.0
6.0													6.0

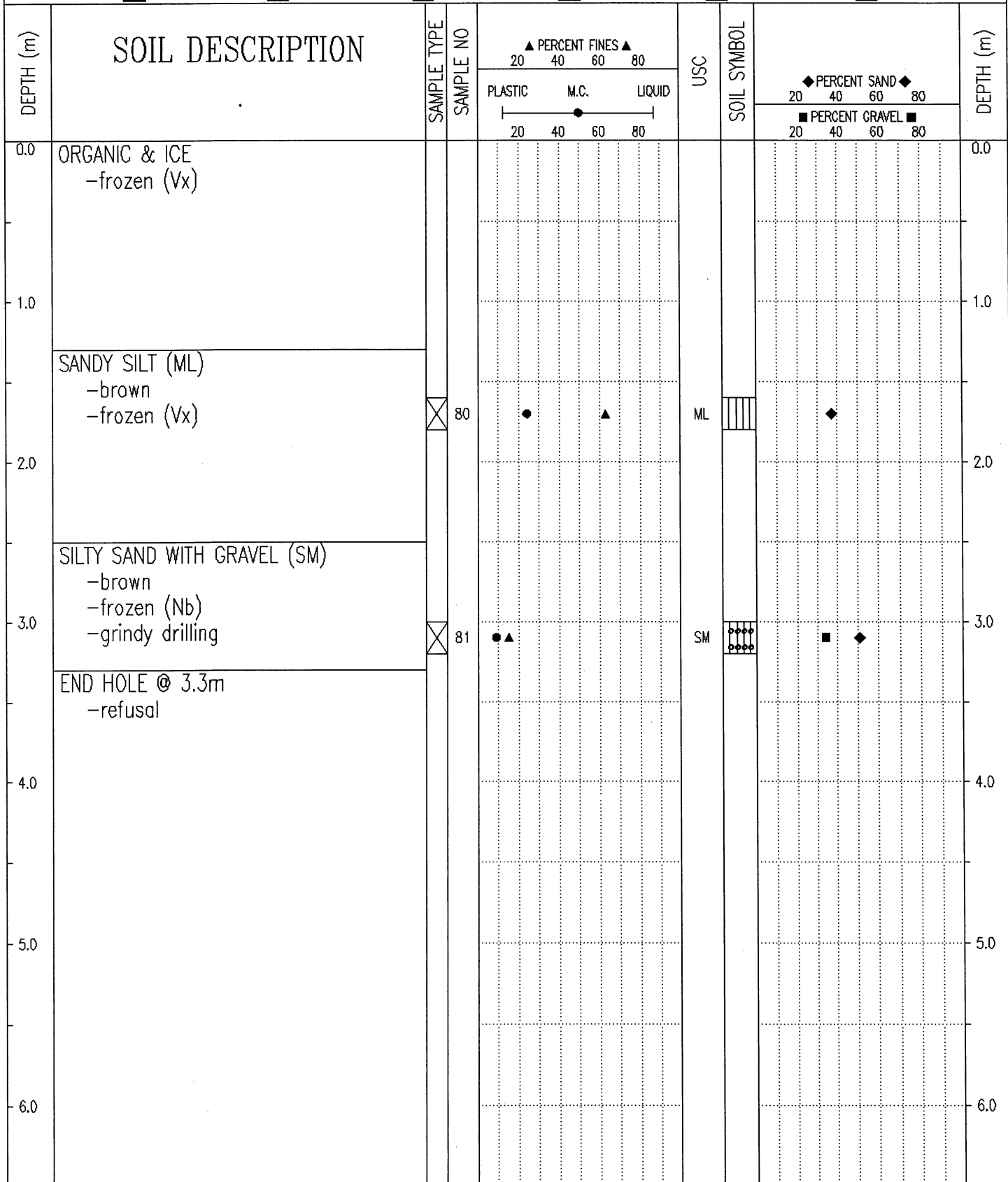
Government of Yukon Transportation Engineering	LOGGED BY: B.B.	COMPLETION DEPTH: 2.0 m
	REVIEWED BY:	COMPLETE: 01/06/08
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 599-86
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: KM 1773+100 35M 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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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 597-47
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1773+144 1M RT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



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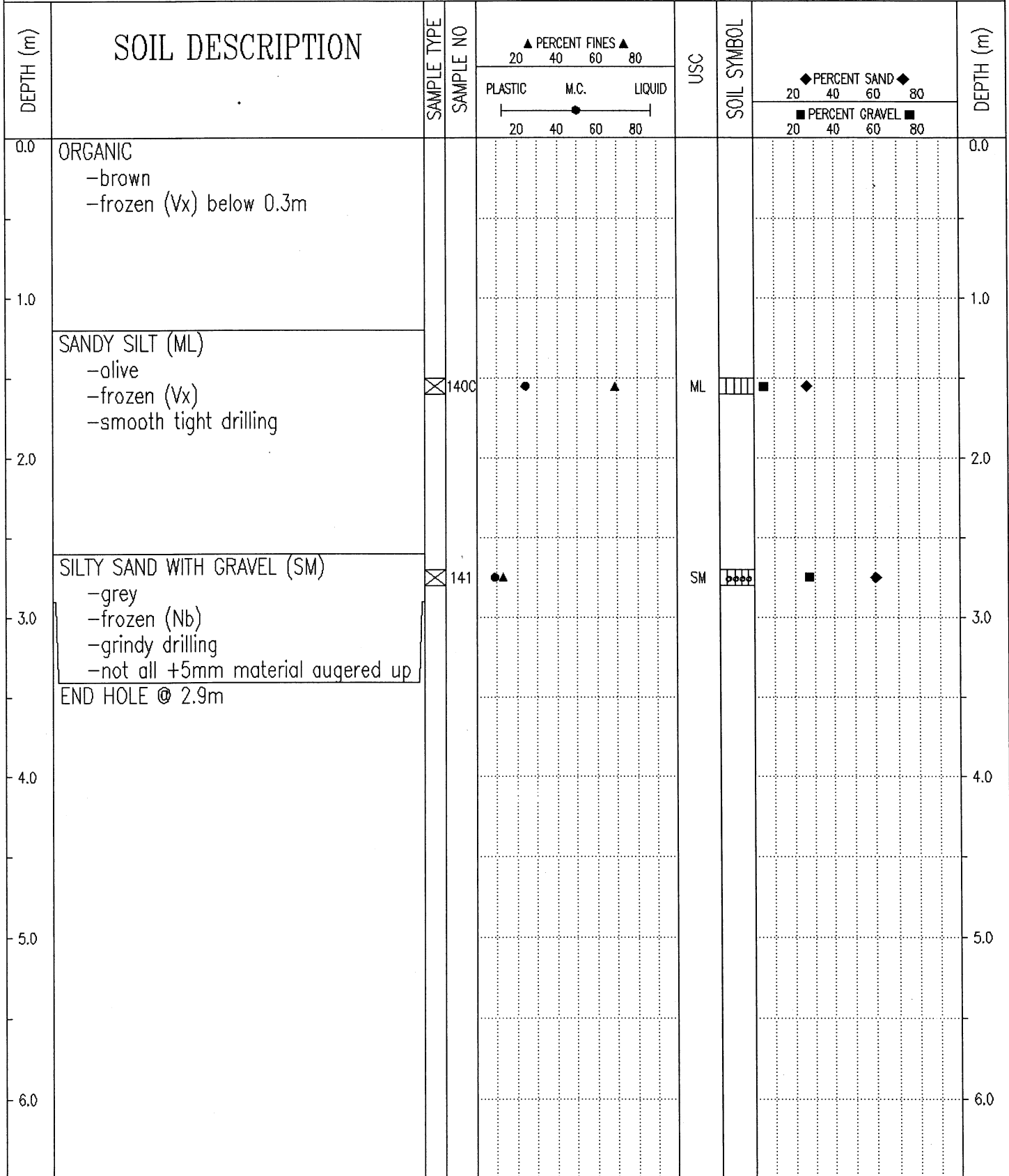
Fig. No:

COMPLETION DEPTH: 3.3 m

COMPLETE: 01/06/08

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 599-87
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: 1773+180 35M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.
	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE



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REVIEWED BY:	COMPLETE: 01/06/19
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 599-80
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: 1773+185 35M RT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	SOIL SYMBOL	◆ PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC -brown -frozen (Vx) below 0.3m											0.0
1.0												1.0
2.0	SILT -trace of sand -brown -frozen (Vx) -smooth tight drilling											2.0
3.0	SILTY SANDY GRAVEL -brown -frozen (Nf) -grindy drilling											3.0
3.0	SILTY SAND -frozen (Nf) -smooth drilling	<input checked="" type="checkbox"/>	133	▲			SW-SM	◆	◆			3.0
4.0	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -brown -frozen (Nf) -grindy drilling											4.0
5.0	END HOLE @ 2.9m											5.0
6.0												6.0

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Fig. No:

COMPLETION DEPTH: 2.9 m
COMPLETE: 01/06/18

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 597-50
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1773+263 23M RT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			PERCENT GRAVEL ■			DEPTH (m)
				20	40	60			80	20	40	60	80	20	
0.0	ORGANIC													0.0	
	ASH														
	ORGANIC -frozen (Vx)														
1.0														1.0	
	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -brown -frozen (Nb) -grindy drilling		86				GP-GM	▲▲▲▲	◆	■				2.0	
2.0	END HOLE @ 2.0m -refusal													2.0	
3.0														3.0	
4.0														4.0	
5.0														5.0	
6.0														6.0	

Government of Yukon Transportation Engineering	LOGGED BY: B.B.	COMPLETION DEPTH: 2.0 m
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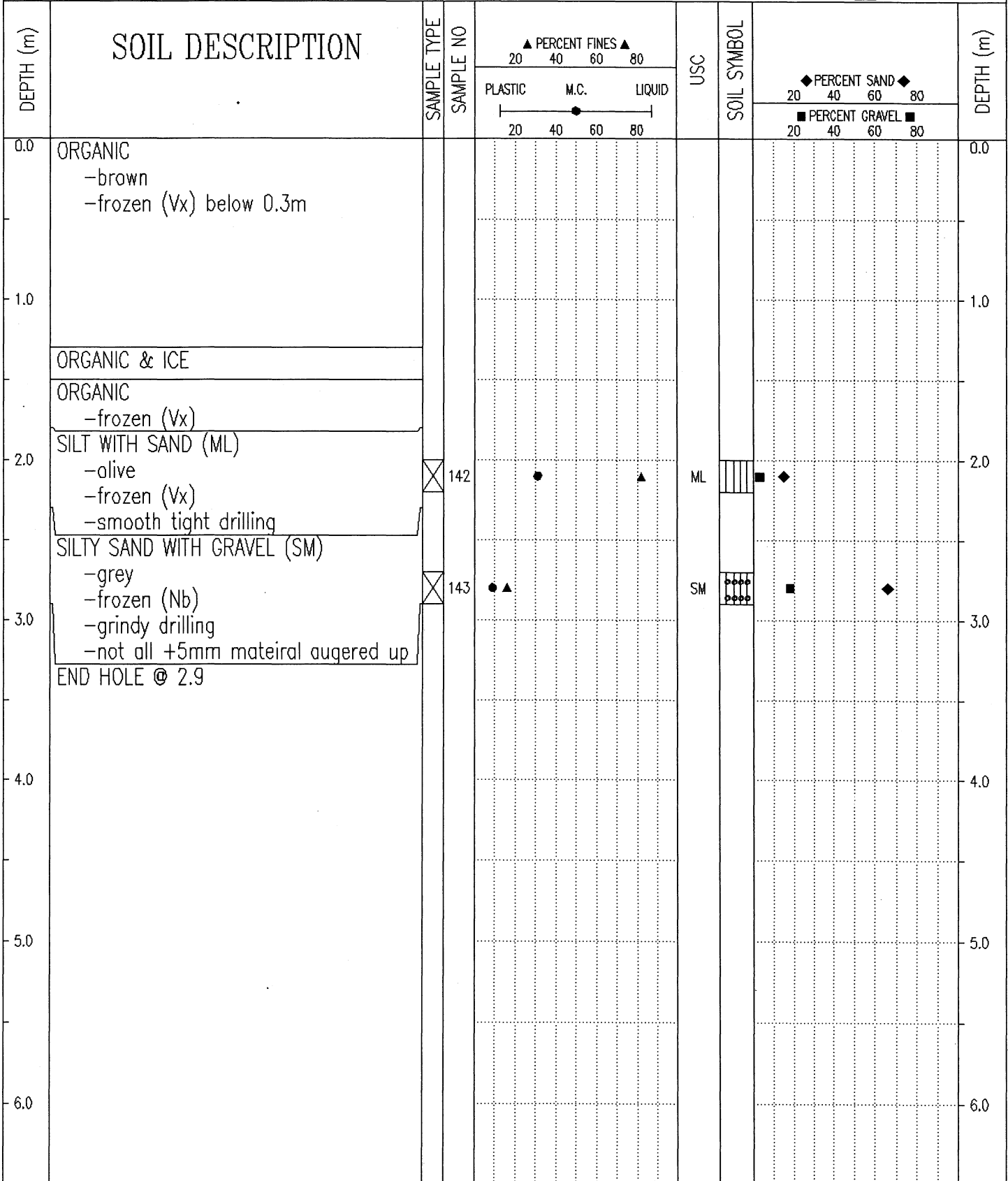
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ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
D-4 CAT B-40 MOBILE DRILL	LOCATION: KM 1773+264 1M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.
	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	SOIL SYMBOL	◆ PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC -frozen (Vx)											0.0
1.0	SILTY GRAVEL WITH SAND TO WELL-GRADED SAND WITH SILT & GRAVEL (GM)-(SW-SM) -brown -frozen (Nb) -grindy drilling											1.0
2.0		<input checked="" type="checkbox"/>	82	■			GM	▲▲▲	■			2.0
3.0												3.0
4.0		<input checked="" type="checkbox"/>	83	●			SW-SM	●●●	■	◆		4.0
5.0	END HOLE @ 4.3m -refusal											5.0
6.0												6.0

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	REVIEWED BY:	COMPLETE: 01/06/08
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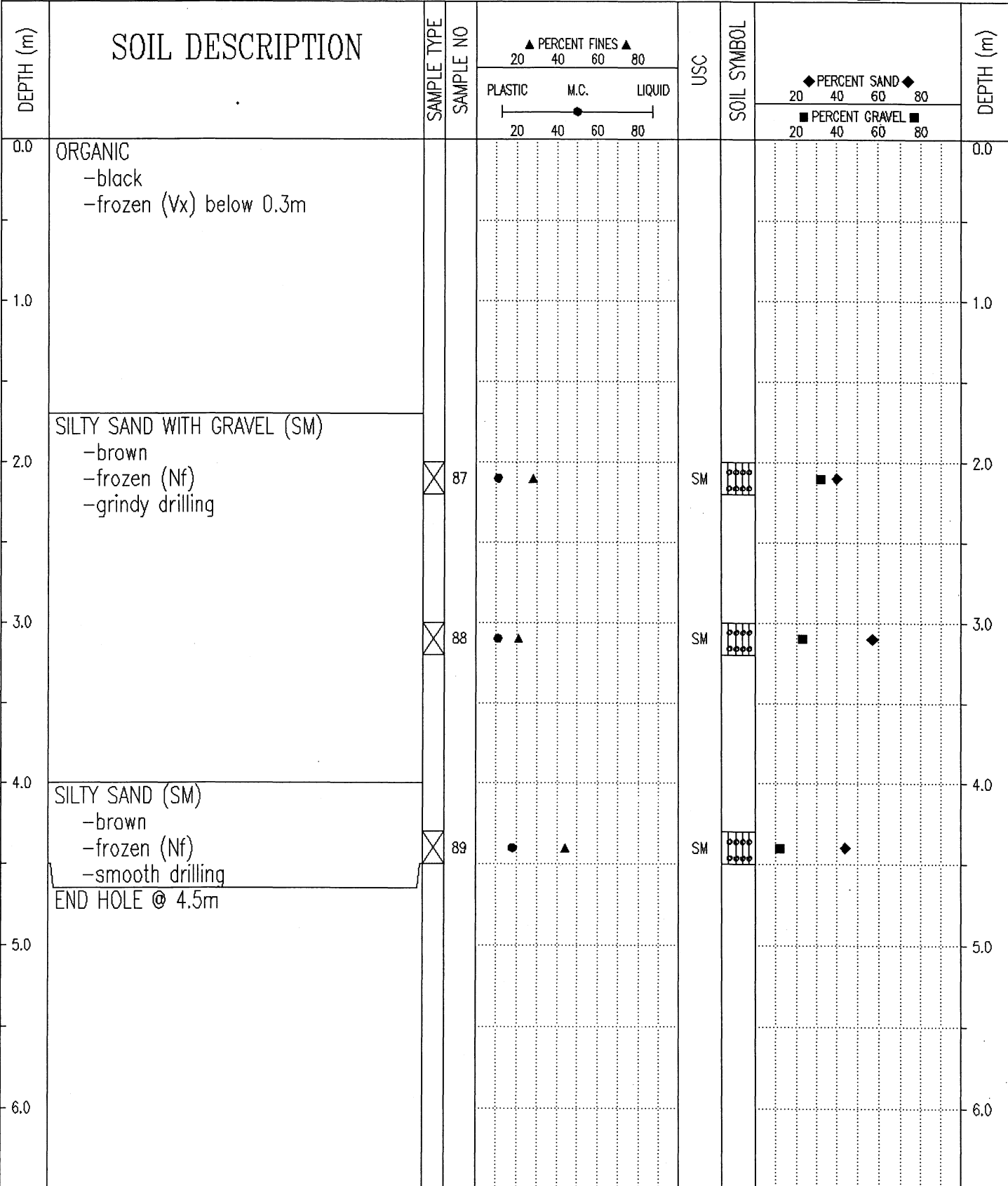
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ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361						
D-4 CAT B-40 MOBILE DRILL		LOCATION: KM 1773+270 19M LT		ELEVATION: 0.00 (m)						
SAMPLE TYPE		<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE			
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲		USC	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.			LIQUID	20	
0.0	ORGANIC -frozen (Vx)									0.0
1.0	WELL-GRADED SAND WITH SILT & GRAVEL TO POORLY GRADED GRAVEL WITH SILT & SAND(SW-SM)-(GP-GM) -frozen (Nb) -grindy drilling									1.0
2.0		<input checked="" type="checkbox"/>	84	▲		SW-SM	◆	■		2.0
3.0										3.0
4.0	END HOLE @ 3.5m -refusal	<input checked="" type="checkbox"/>	85	▲		GP-GM	◆	■		4.0
5.0										5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 3.5 m COMPLETE: 01/06/08				

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 599-88
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: KM 1773+307 37M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	



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	Fig. No:	Page 1 of 1

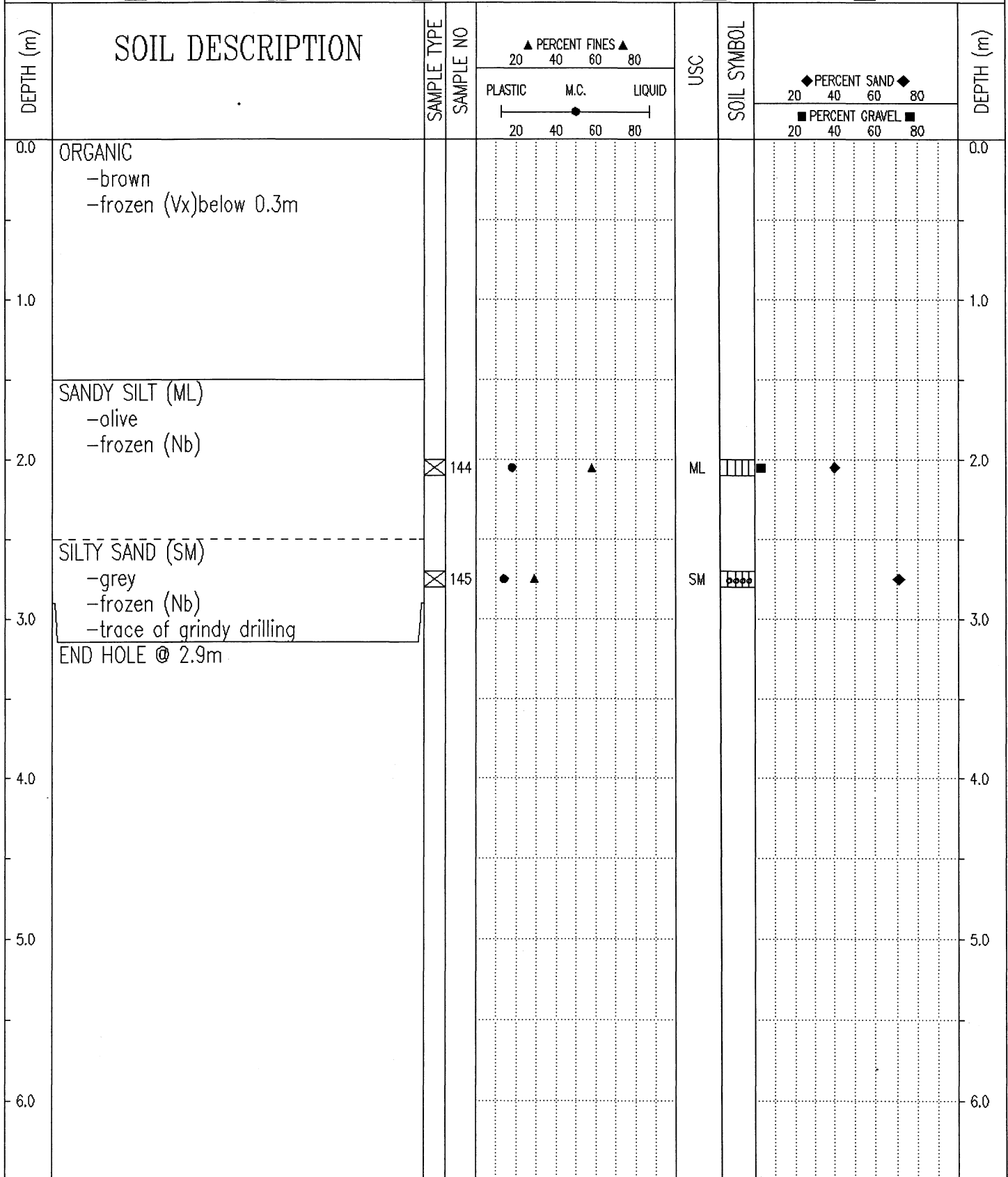
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 598-51
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: KM 1773+331 4M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.
	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE



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LOGGED BY: D.T.	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 01/06/11
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 599-89
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: KM 1773+406 36M 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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SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 599-79								
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361								
B40L MOBILE DRILL		LOCATION: 1773+419 27M RT		ELEVATION: 0.00 (m)								
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE												
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	SOIL SYMBOL	◆ PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC -brown -frozen (Vx) below 0.3m											0.0
2.0	SILT (ML) -brown -frozen (Nb) -smooth tight drilling	<input checked="" type="checkbox"/>	131		●	▲	ML		◆			2.0
3.0	SILTY SAND WITH GRAVEL (SM) -brown -frozen (Nf) -grindy drilling	<input checked="" type="checkbox"/>	132	●▲			SM		■	◆		3.0
3.0	END HOLE @ 2.9m											3.0
4.0												4.0
5.0												5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 2.9 m COMPLETE: 01/06/18		Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 598-52								
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361								
B40L MOBILE DRILL		LOCATION: 1773+453 1M 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					
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC -frozen (Vx) below 0.3m											0.0
2.0	SILT (ML) -brown -trace sand -frozen (Nb) -smooth tight drilling	<input checked="" type="checkbox"/>	90	●		▲	ML	▨	◆			
3.0	SANDY SILTY GRAVEL -grindy drilling											
3.0	SILT WITH SAND (ML) -brown -frozen (Nb) -smooth drilling	<input checked="" type="checkbox"/>	91	●		▲	ML	▨	◆	■		
4.0	SILTY SAND WITH GRAVEL (SM) -brown -frozen -grindy drilling -some gravel lost on sample retrieval	<input checked="" type="checkbox"/>	92	●	▲		SM	▨	◆	■		
5.0	END HOLE @ 4.5m											

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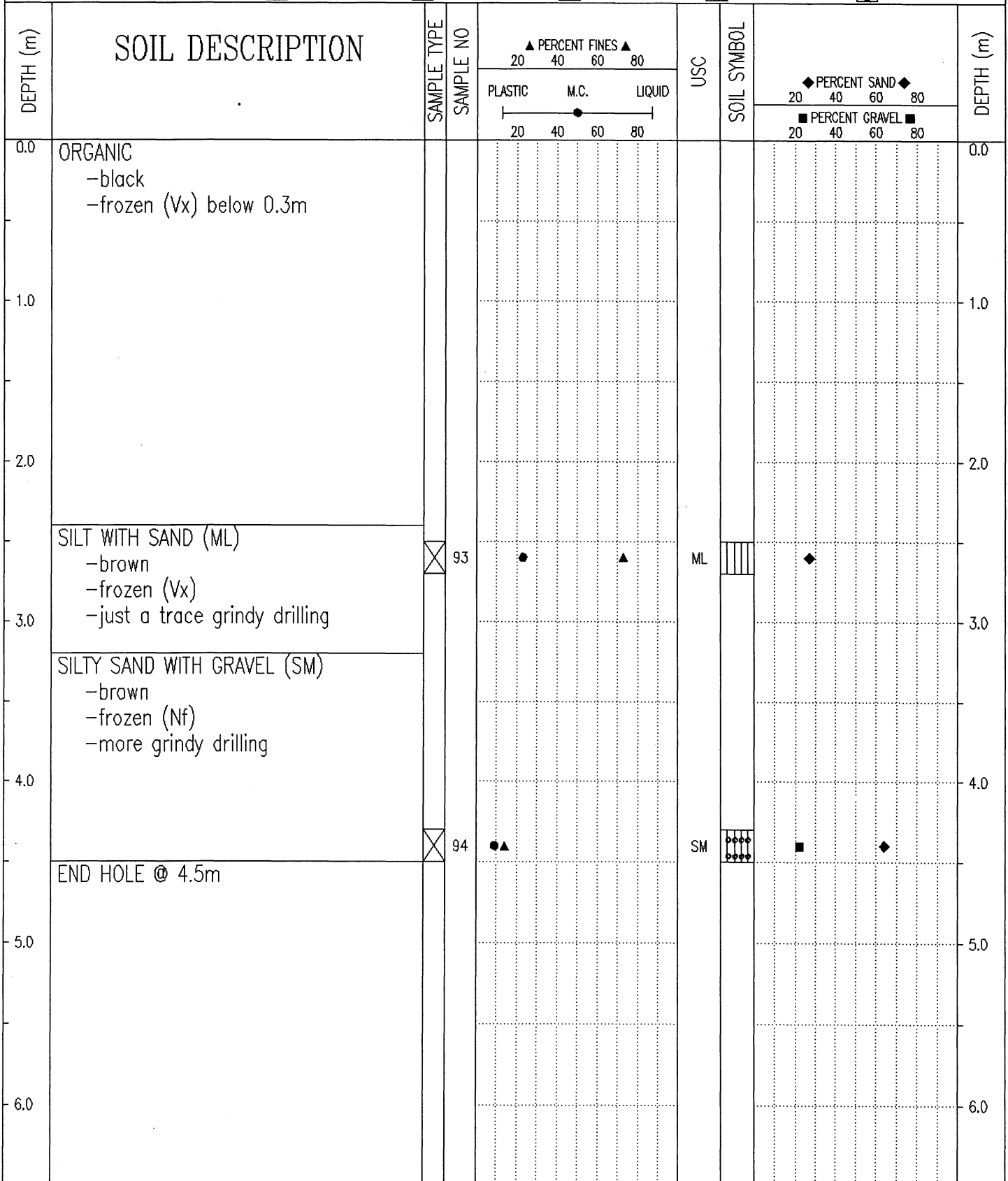
LOGGED BY: B.B.
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.5 m
COMPLETE: 01/06/11

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 599-90								
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361								
B40L MOBILE DRILL		LOCATION: 1773+500 36M 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 -brown -frozen (Vx)											0.0
2.0	SILT (ML) -olive -frozen (Nb) -smooth drilling	<input checked="" type="checkbox"/>	145				ML					2.0
3.0	END HOLE @ 2.9m											3.0
4.0												4.0
5.0												5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B.				COMPLETION DEPTH: 2.9 m				
				REVIEWED BY:				COMPLETE: 01/06/19				
				Fig. No:				Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 599-78						
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361						
B40L MOBILE DRILL		LOCATION: 1773+545 34M RT		ELEVATION: 0.00 (m)						
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE										
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲		USC	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.			LIQUID	PERCENT GRAVEL ■	
0.0	ORGANIC -brown -frozen (Vx) below 0.3m									0.0
1.0										1.0
2.0	SANDY SILT (ML) -brown -frozen (Vx) -smooth tight drilling	<input checked="" type="checkbox"/>	130	●	▲	ML	▨	◆		2.0
3.0	END HOLE @ 2.9m									3.0
4.0										4.0
5.0										5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 2.9 m COMPLETE: 01/06/18		Page 1 of 1		

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 598-53
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: 1773+550 3M RT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	



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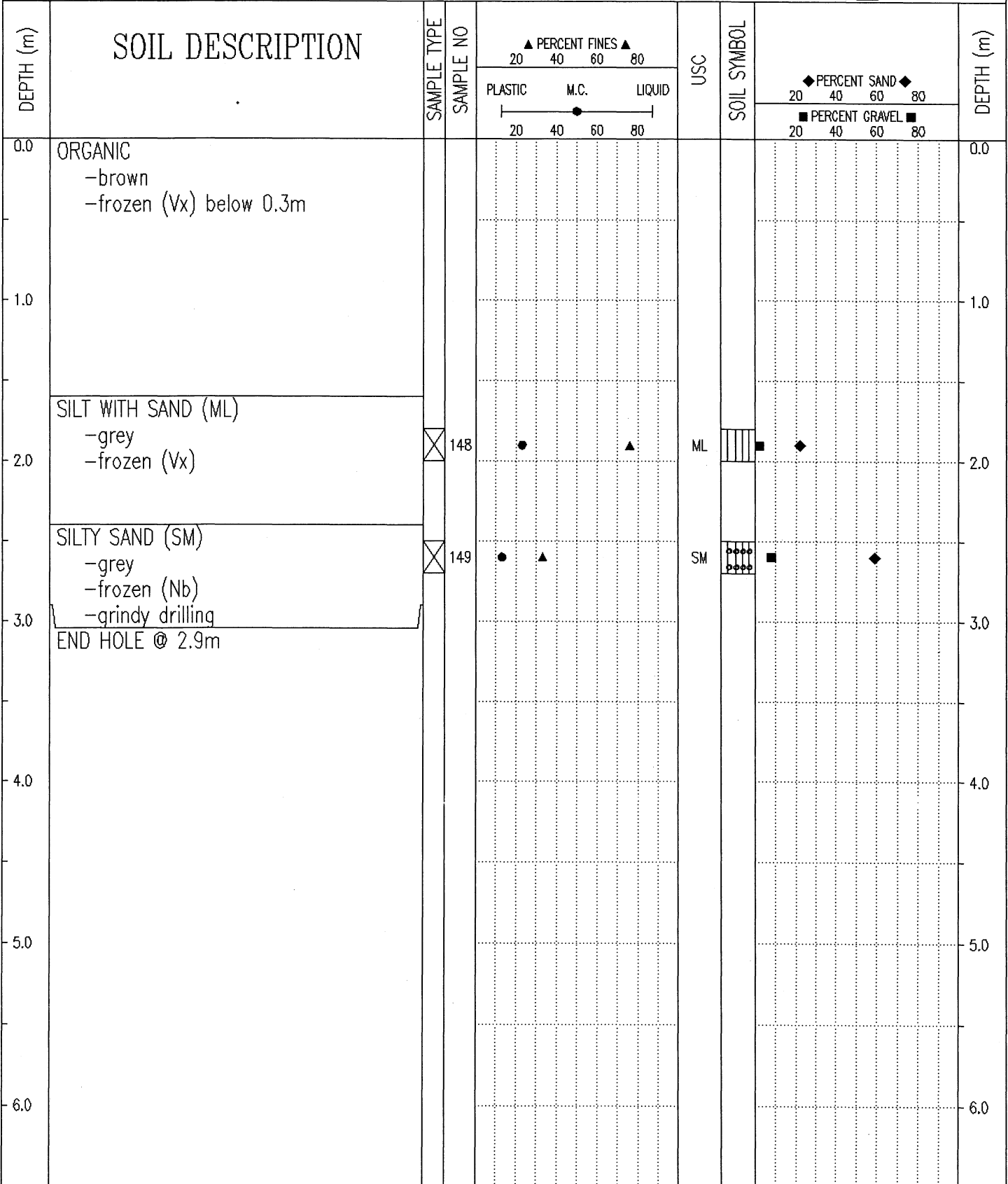
LOGGED BY: B.B.	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 01/06/11
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 599-91						
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361						
B40L MOBILE DRILL		LOCATION: 1773+599 36M 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			
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 -brown -frozen (Vx) below 0.3m									0.0
1.0										1.0
2.0	NO DESCRIPTION -smooth tight drilling below 1.6m -surface water flowing into hole -no sample recovered - washed off									2.0
3.0	SILTY SAND WITH GRAVEL (SM) -grey -frozen (Nf) -sample #147 contaminated by surface water flowing into hole END HOLE @ 2.9m	<input checked="" type="checkbox"/>	147	▲			SM	◆	■	3.0
4.0										4.0
5.0										5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B. REVIEWED BY:		COMPLETION DEPTH: 2.9 m COMPLETE: 01/06/19				
				Fig. No:		Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 599-77							
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361							
B40L MOBILE DRILL		LOCATION: 1773+646 36M RT		ELEVATION: 0.00 (m)							
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN		<input checked="" type="checkbox"/> S.P.T.		<input checked="" type="checkbox"/> AUGER							
				<input type="checkbox"/> BULK							
				<input type="checkbox"/> TUBE							
				<input type="checkbox"/> CORE							
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆	PERCENT GRAVEL ■	DEPTH (m)
				PLASTIC	M.C.	LIQUID					
0.0	ORGANIC -brown -frozen (Vx) below 0.3m										0.0
1.0											1.0
2.0	SILT (ML) -brown -frozen (Vx) -smooth tight drilling	<input checked="" type="checkbox"/>	129				ML				2.0
3.0	END HOLE @ 2.9m										3.0
4.0											4.0
5.0											5.0
6.0											6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B.		COMPLETION DEPTH: 2.9 m					
				REVIEWED BY:		COMPLETE: 01/06/18					
				Fig. No:				Page 1 of 1			

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 598-54								
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361								
B40L MOBILE DRILL		LOCATION: 1773+654 1 M LT		ELEVATION: 0.00 (m)								
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE												
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40		
0.0	ORGANIC -brown -frozen (Vx) below 0.3m										0.0	
1.0	SILT WITH SAND (ML) -brown -frozen (Vx) -smooth tight drilling	<input checked="" type="checkbox"/>	95	45	55	75	ML		45			1.0
2.0	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -brown -frozen (Nf) -grindy drilling	<input checked="" type="checkbox"/>	96	10	15	25	SW-SM		85	10		2.0
3.0												3.0
4.0												4.0
5.0	END HOLE @ 4.5m	<input checked="" type="checkbox"/>	97	10	15	25	SW-SM		85	10		5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B. REVIEWED BY:		COMPLETION DEPTH: 4.5 m COMPLETE: 01/06/11						
				Fig. No:				Page 1 of 1				


SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 599-92
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: 1773+704 36M 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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COMPLETION DEPTH: 2.9 m
COMPLETE: 01/06/19

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 599-76						
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361						
B40L MOBILE DRILL		LOCATION: 1773+751 36M RT		ELEVATION: 0.00 (m)						
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE										
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲		USC	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.			LIQUID	20	
0.0	ORGANIC -dark brown -frozen (Vx) below 0.3m									0.0
1.0										1.0
2.0	SILTY SAND WITH GRAVEL (SM) -brown -frozen (Nb) -grindy drilling									2.0
3.0	END HOLE @ 2.9m	<input checked="" type="checkbox"/>	128	◆	▲	SM		■	◆	3.0
4.0										4.0
5.0										5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 2.9 m COMPLETE: 01/06/18		Page 1 of 1		

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 598-55						
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361						
B40L MOBILE DRILL		LOCATION: KM 1773+753 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								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲		USC	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.			LIQUID	20	
0.0	ORGANIC -frozen below 0.3m									0.0
	ASH									
	ORGANIC									
1.0	SILT WITH SAND (ML) -frozen (Vx) -smooth tight drilling	<input checked="" type="checkbox"/>	98			ML				1.0
2.0	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -brown -frozen (Nf) -grindy drilling	<input checked="" type="checkbox"/>	99			SW-SM				2.0
3.0										3.0
4.0										4.0
5.0	END HOLE @ 4.5m	<input checked="" type="checkbox"/>	100			SW-SM				5.0
6.0										6.0

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Fig. No:

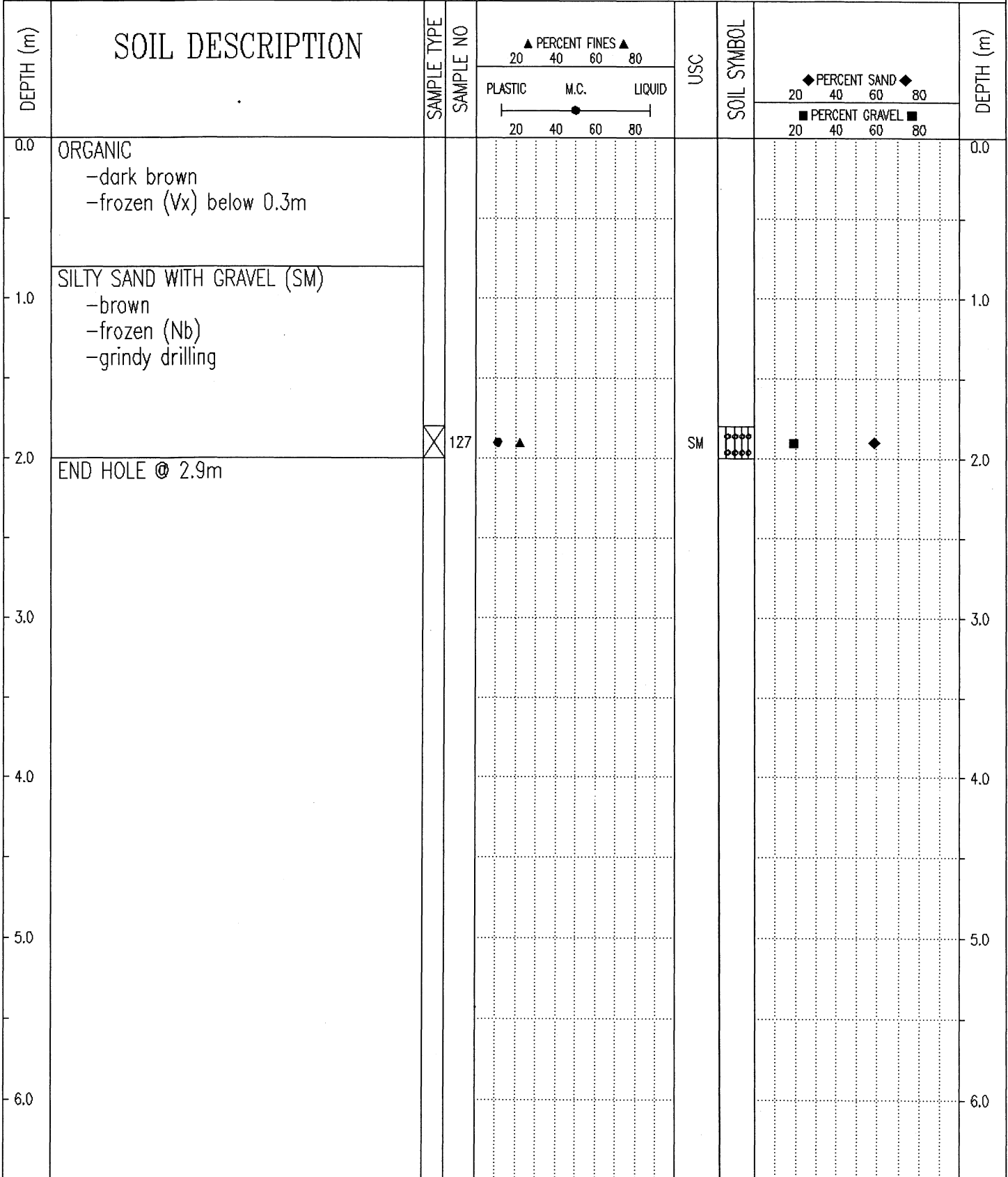
COMPLETION DEPTH: 4.5 m

COMPLETE: 01/06/11

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SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 599-93						
ENGINEERING CAPITAL		1729-17B7 A/H		Project No: 092-202101-0361						
B40L MOBILE DRILL		LOCATION: KM 1773+800 37M 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										
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 -brown -frozen (Vx) below 0.3m									0.0
1.0										1.0
2.0	SILTY SAND WITH GRAVEL (SM) -grey -frozen (Nb) -grindy drilling	<input checked="" type="checkbox"/>	150	●	▲		SM	■	◆	2.0
3.0	END HOLE @ 2.9m									3.0
4.0										4.0
5.0										5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B. REVIEWED BY:		COMPLETION DEPTH: 2.9 m COMPLETE: 01/06/19				
				Fig. No:						Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 599-75
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: 1773+846 36M RT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



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	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 598-56											
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361											
B40L MOBILE DRILL		LOCATION: 1773+901 2M RT		ELEVATION: 0.00 (m)											
SAMPLE TYPE		RETURN		S.P.T.											
		AUGER		BULK											
		TUBE		CORE											
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND			PERCENT GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	20	40	
0.0	ORGANIC -frozen (Vx) below 0.3m													0.0	
1.0	SILT -trace sand -frozen (Vx)													1.0	
1.0	ICE & SILT													1.0	
2.0	SANDY SILT (ML) -brown -frozen (Vx) -some grindy drilling	X	101				ML							2.0	
3.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -brown -frozen (Nb) -rough grindy drilling	X	102				GP-GM							3.0	
4.0	SILTY SAND WITH GRAVEL (SM) -brown -frozen (Nb)													4.0	
5.0	END HOLE @ 4.5m	X	103				SM							5.0	
6.0														6.0	

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Fig. No:

COMPLETION DEPTH: 4.5 m
COMPLETE: 01/06/11

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 599-94				
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361				
B40L MOBILE DRILL		LOCATION: KM 1773+901 37M 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	
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲		USC	SOIL SYMBOL	DEPTH (m)
				PLASTIC	M.C.			
0.0	ORGANIC -brown -frozen (Vx) below 0.3m							0.0
1.0								1.0
2.0	SILTY SAND WITH GRAVEL (SM) -grey -frozen (Nb) -grindy drilling -sample #151 contaminated by surface water flowing into hole							2.0
3.0	END HOLE @ 2.9m	<input checked="" type="checkbox"/>	151	▲		SM	◆	3.0
4.0								4.0
5.0								5.0
6.0								6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B.		COMPLETION DEPTH: 2.9 m		
				REVIEWED BY:		COMPLETE: 01/06/19		
				Fig. No:		Page 1 of 1		

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 598-74
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: 1773+952 37M RT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.
	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	SOIL SYMBOL	◆ PERCENT SAND ◆		■ PERCENT GRAVEL ■	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40		
0.0	ORGANIC -brown -frozen (Vx) below 0.3m										0.0	
1.0											1.0	
2.0	SILTY SAND WITH GRAVEL (SM) -grey -frozen (Nf) -grindy drilling										2.0	
3.0	END HOLE @ 2.9m	<input checked="" type="checkbox"/>	126	●	▲		SM	●●●●	■	◆	3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

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REVIEWED BY:	COMPLETE: 01/06/15
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SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 599-95						
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361						
B40L MOBILE DRILL		LOCATION: 1774+002 34M 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			
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 ICE SILT (ML) -brown -frozen (Vx)									0.0
1.0										1.0
2.0	SILTY SAND WITH GRAVEL (SM) -grey -frozen (Nb) -grindy drilling	<input checked="" type="checkbox"/>	152				ML			2.0
3.0	END HOLE @ 2.7m -refusal	<input checked="" type="checkbox"/>	153				SM			3.0
4.0										4.0
5.0										5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 2.7 m COMPLETE: 01/06/19		Page 1 of 1		

SUBSURFACE EXPLORATION & TESTING REPORT SHAKWAK SEG 11 TEST HOLE NO: 598-73

ENGINEERING CAPITAL 1729-1787 A/H Project No: 092-202101-0361

B40L MOBILE DRILL LOCATION: 1774+041 35M RT ELEVATION: 0.00 (m)

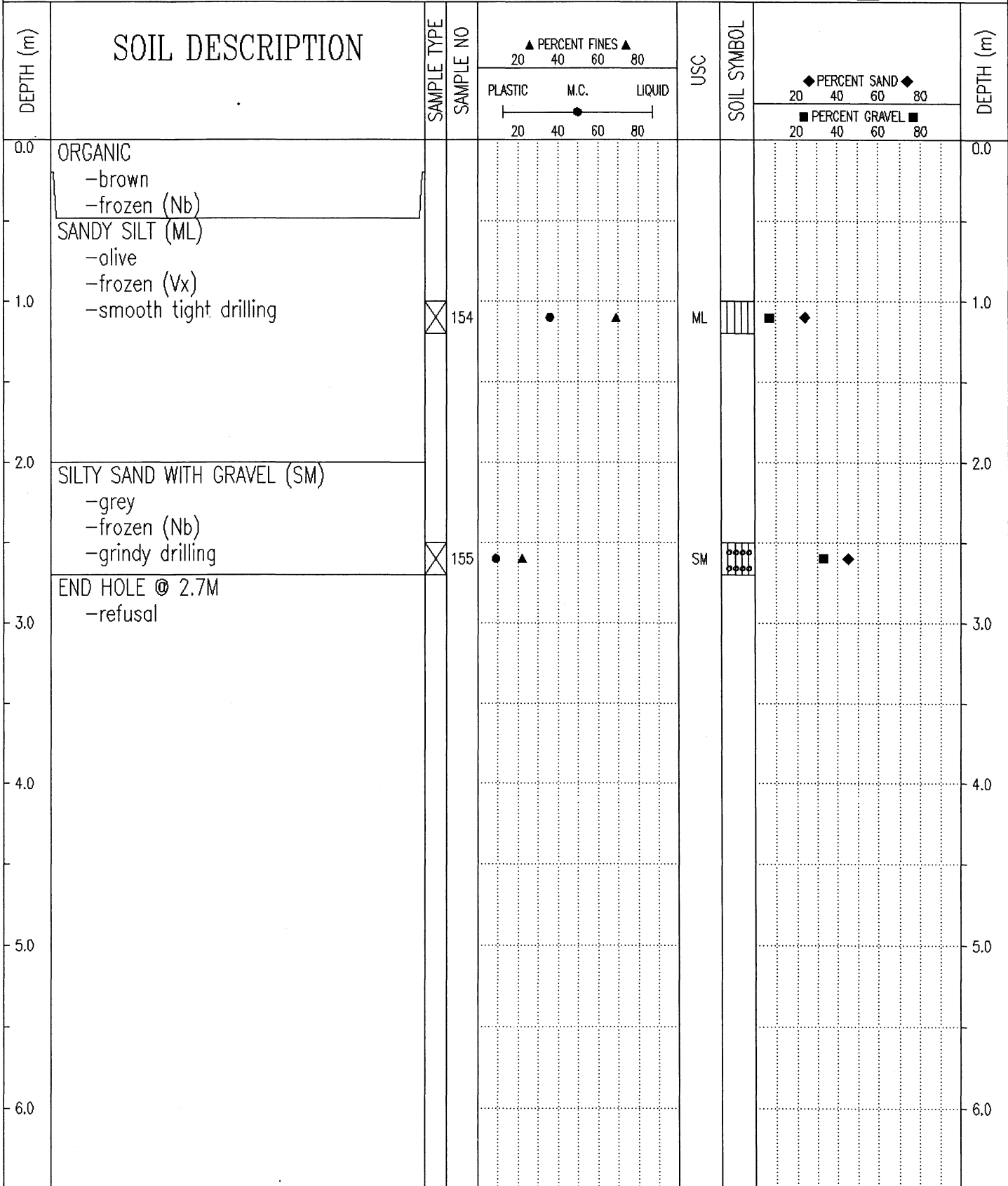
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE

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 -brown -frozen (Vx) below 0.3m											0.0
1.0												1.0
2.0	SILTY SAND WITH GRAVEL (SM) -grey -frozen (Nf) -grindy drilling											2.0
3.0	END HOLE @ 2.9m	<input checked="" type="checkbox"/>	125	●	▲		SM	◻◻◻◻◻◻◻◻◻◻	■	◆		3.0
4.0												4.0
5.0												5.0
6.0												6.0

Government of Yukon Transportation Engineering	LOGGED BY: B.B.	COMPLETION DEPTH: 2.9 m
	REVIEWED BY:	COMPLETE: 01/06/15
	Fig. No:	Page 1 of 1

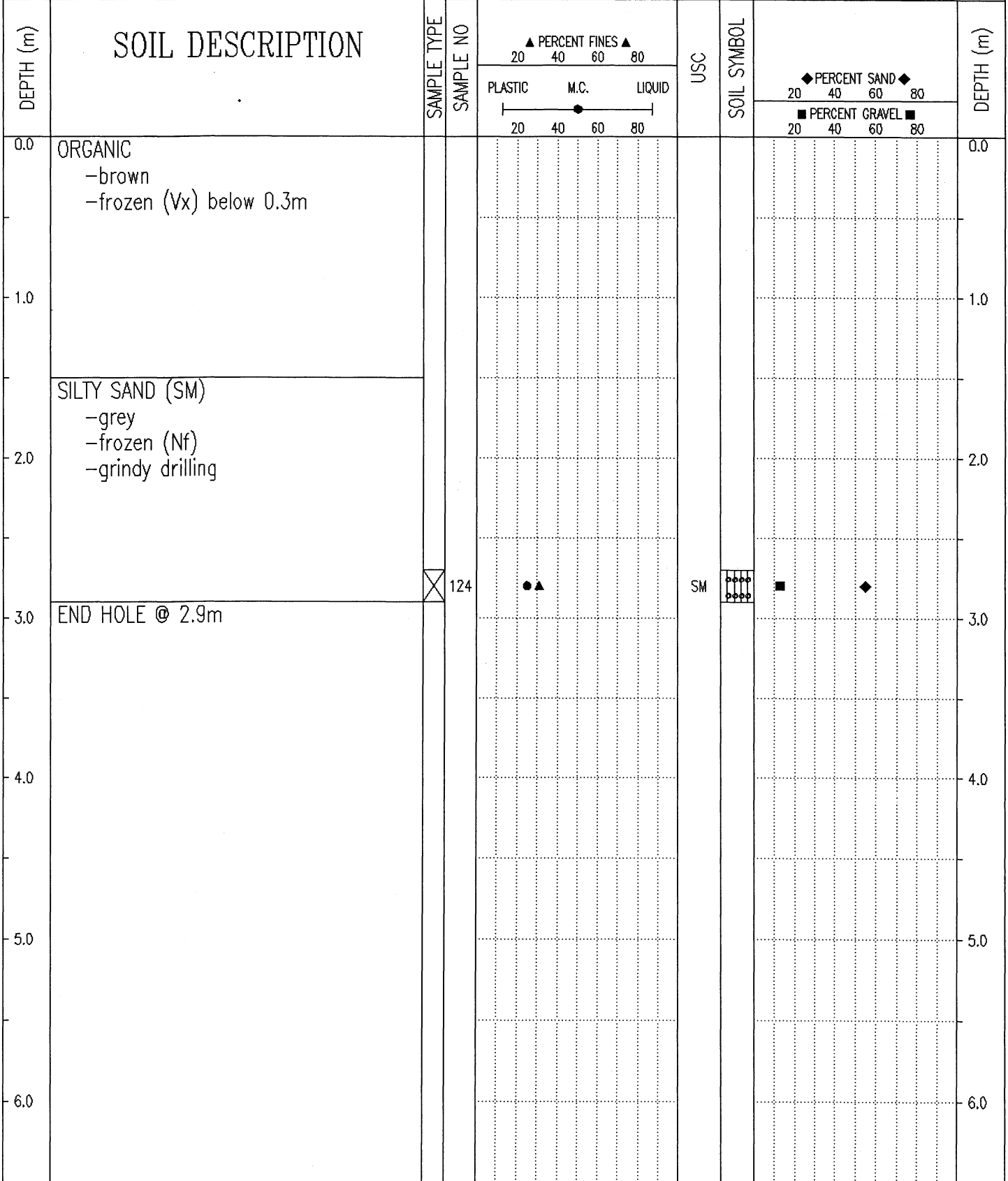
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ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361								
B40L MOBILE DRILL		LOCATION: 1774+050 CENTERLINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE <input type="checkbox"/> RETURN		<input checked="" type="checkbox"/> S.P.T.		<input checked="" 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 -frozen (Vx) below 0.3m											0.0
1.0	GRAVELLY SILT WITH SAND (ML) -brown -frozen (Vx) -grindy drilling	<input checked="" type="checkbox"/>	104				ML					1.0
2.0	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -brown -frozen (Nb) -more difcilt grindy drilling	<input checked="" type="checkbox"/>	105				SW-SM					2.0
3.0		<input checked="" type="checkbox"/>	106				SW-SM					3.0
4.0		<input checked="" type="checkbox"/>										4.0
5.0	END HOLE @ 4.5m											5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B.		COMPLETION DEPTH: 4.5 m						
				REVIEWED BY:		COMPLETE: 01/06/11						
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 599-96
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: 1774+103 35M 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		



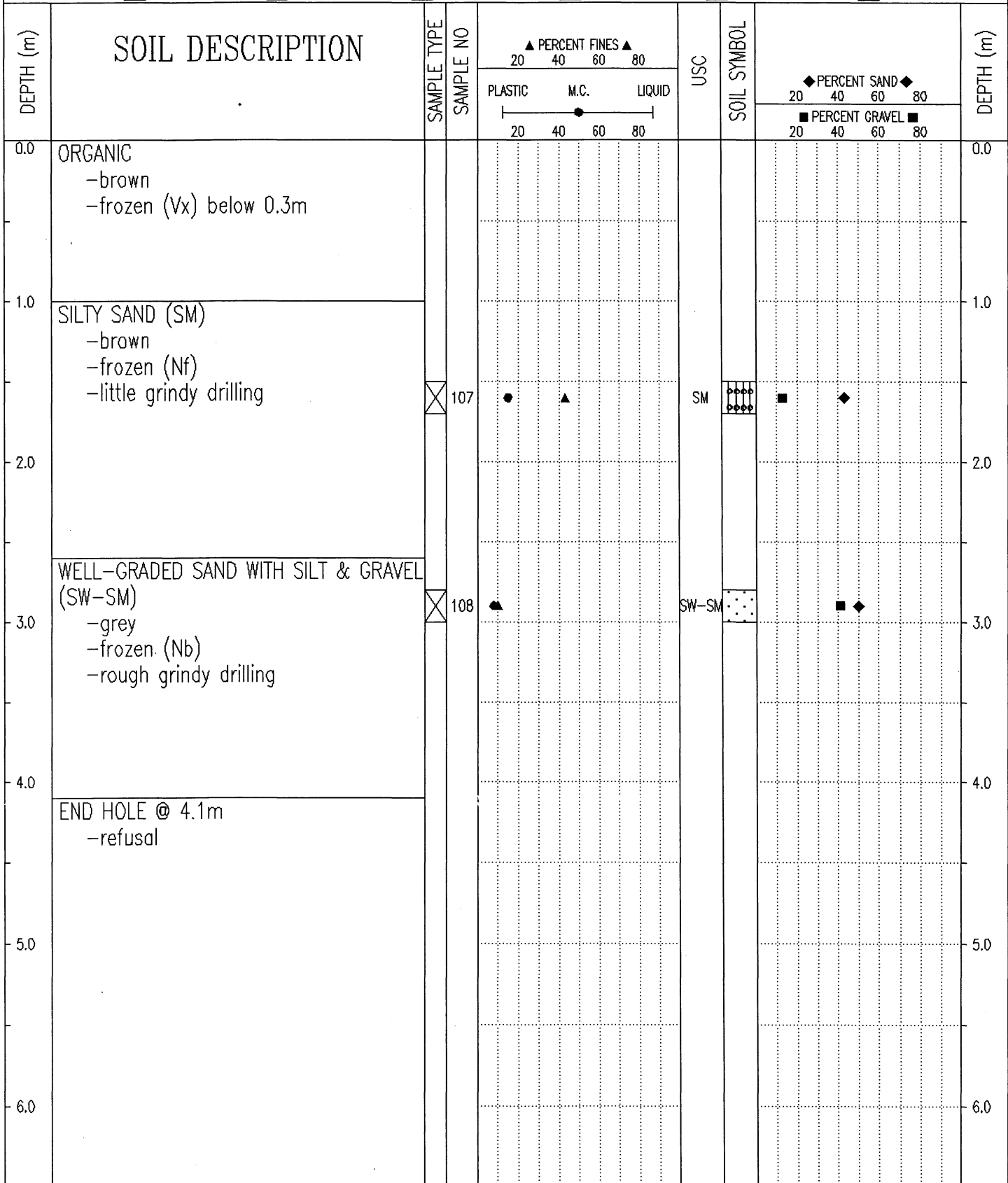
Government of Yukon Transportation Engineering	LOGGED BY: B.B.	COMPLETION DEPTH: 2.7 m
	REVIEWED BY:	COMPLETE: 01/06/19
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 598-72
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: 1774+147 37M RT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.
	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE



Government of Yukon Transportation Engineering	LOGGED BY: B.B.	COMPLETION DEPTH: 2.9 m
	REVIEWED BY:	COMPLETE: 01/06/15
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 598-58
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: 1774+155 CENTERLINE	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	

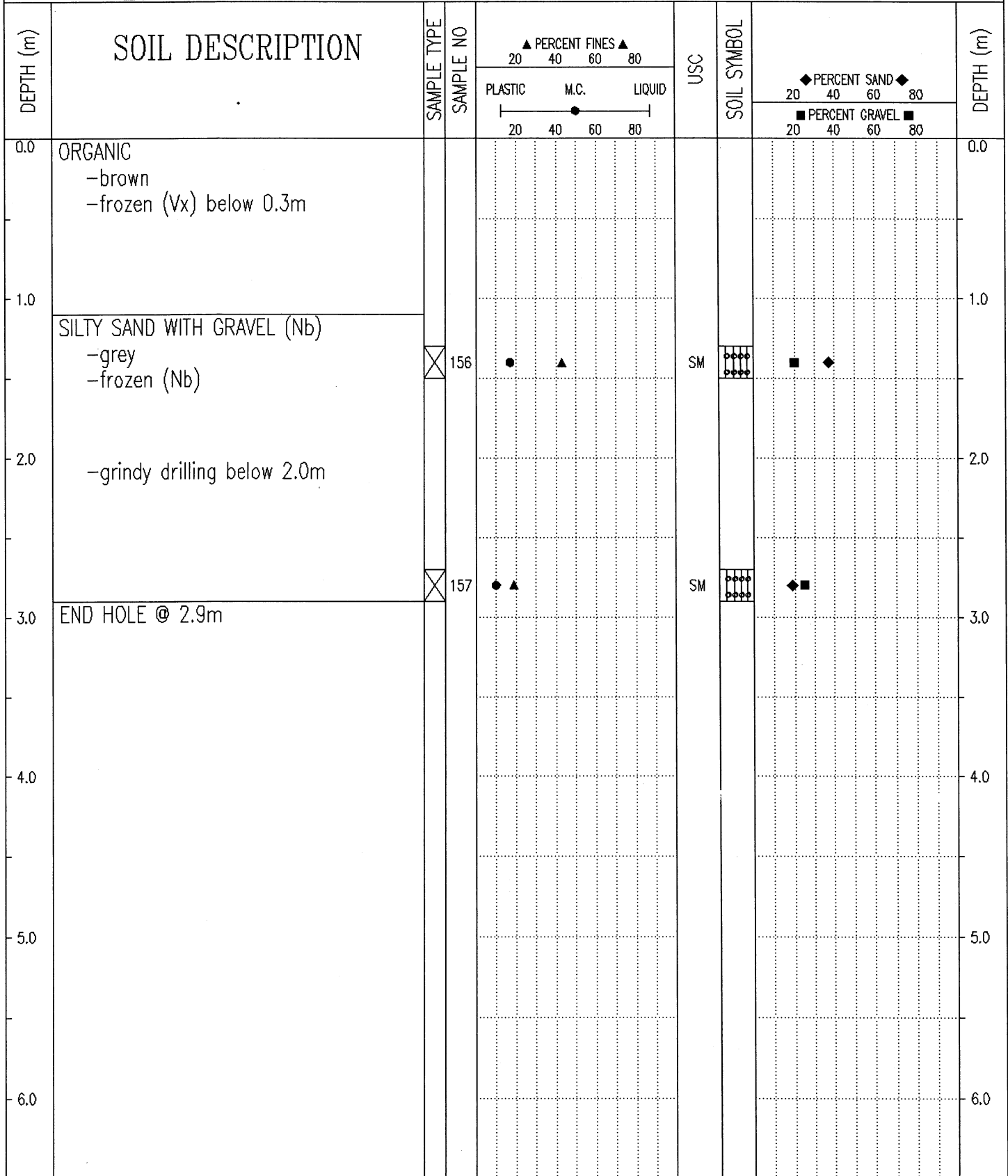


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REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.1 m
COMPLETE: 01/06/11

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 599-97
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: 1774+213 35M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	



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Fig. No:

COMPLETION DEPTH: 2.9 m
COMPLETE: 01/06/19

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 598-71
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: 1774+245 36M RT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC -brown -frozen (Vx) below 0.3m											0.0
2.0	SANDY SILT (ML) -grey -frozen (Nf) -grindy drilling											2.0
2.7	END HOLE @ 2.7m -refusal	<input checked="" type="checkbox"/>	123	●	▲		ML	▨	◆	■		2.7
3.0												3.0
4.0												4.0
5.0												5.0
6.0												6.0

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COMPLETION DEPTH: 2.7 m

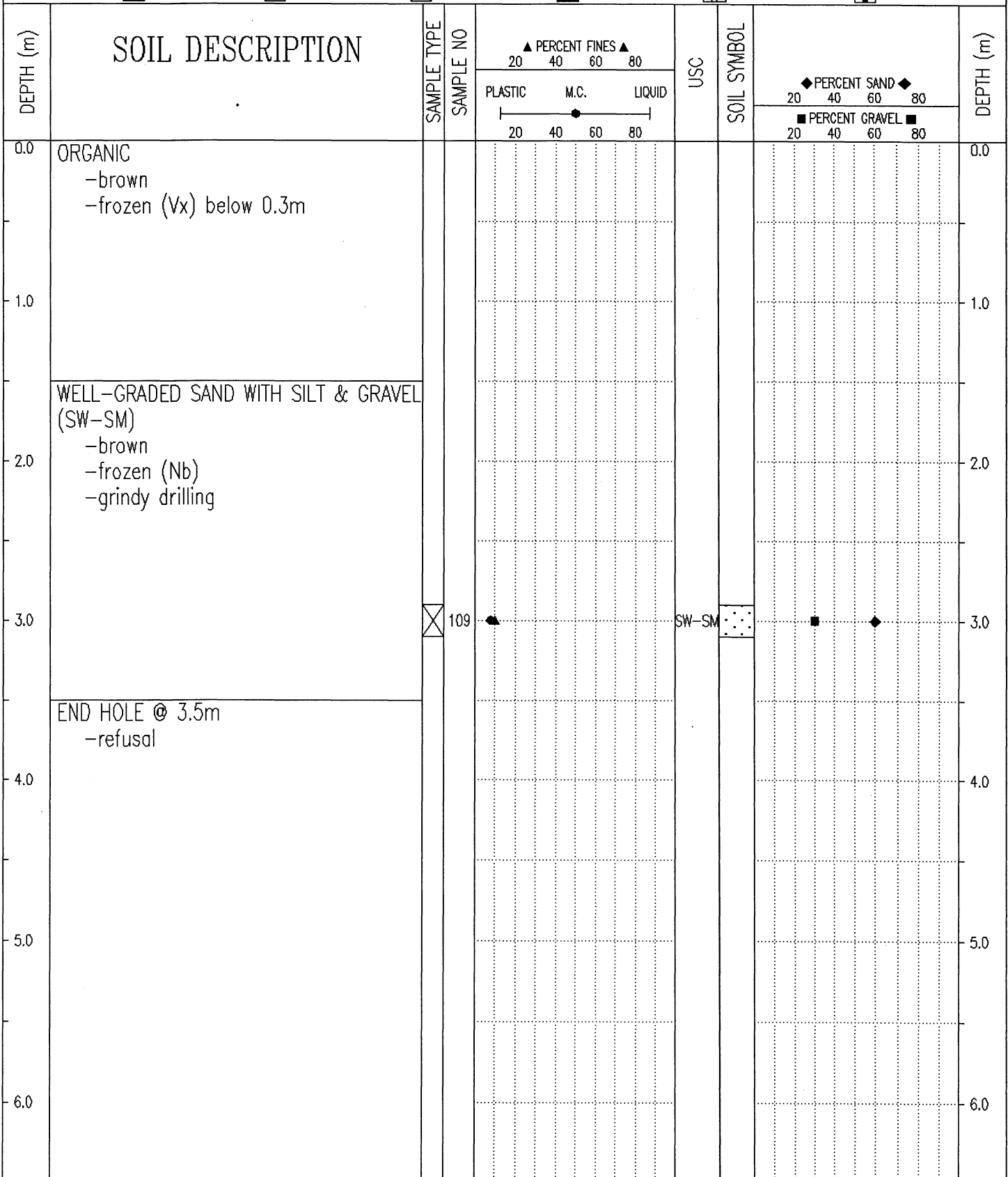
REVIEWED BY:

COMPLETE: 01/06/15

Fig. No:

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 598-59
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: 1774+294 CENTERLINE	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.
	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE



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REVIEWED BY:	COMPLETE: 01/06/11
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 598-60								
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361								
B40L MOBILE DRILL		LOCATION: 1774+295 17M LT		ELEVATION: 0.00 (m)								
SAMPLE TYPE <input type="checkbox"/> RETURN		<input checked="" type="checkbox"/> S.P.T.		<input checked="" type="checkbox"/> AUGER								
		<input type="checkbox"/> BULK		<input type="checkbox"/> TUBE								
				<input type="checkbox"/> CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	SOIL SYMBOL	◆ PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC -brown -frozen (Vx) below 0.3m											0.0
2.0	SILTY SAND WITH GRAVEL (SM) -brown -frozen (Nb) -sample #110 had some organic contamination from above -grindy drilling	<input checked="" type="checkbox"/>	110				SM					2.0
3.5	END HOLE @ 3.5m -refusal											3.5

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Fig. No:

COMPLETION DEPTH: 3.5 m

COMPLETE: 01/06/12

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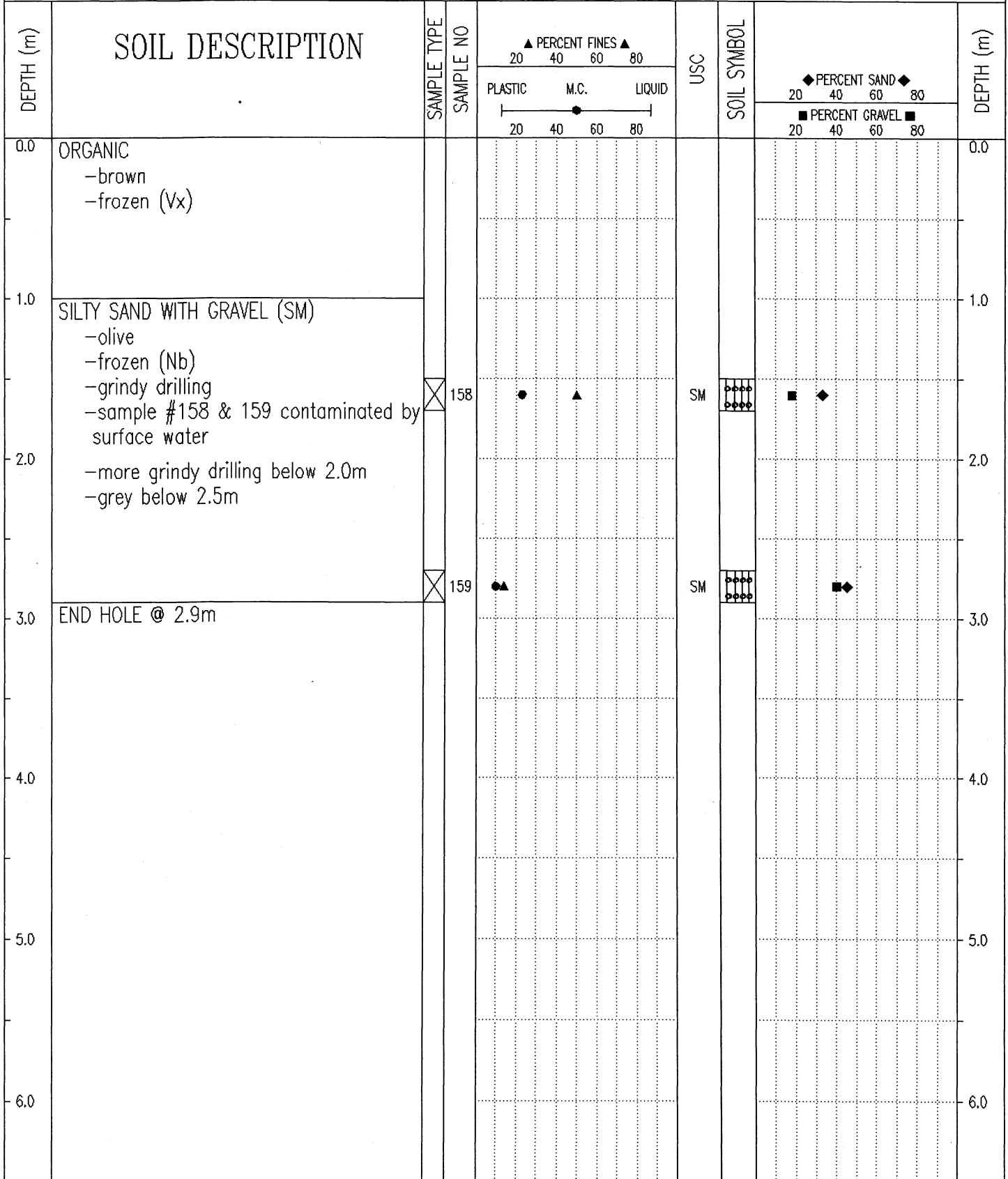
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ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361						
B40L MOBILE DRILL		LOCATION: 1774+295 25M RT		ELEVATION: 0.00 (m)						
SAMPLE TYPE		<input type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE			
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲		USC	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.			LIQUID	20	
0.0	ORGANIC -brown -frozen (Vx) below 0.3m									0.0
2.0	SILTY SAND WITH GRAVEL (SM) -brown -frozen (Nb) -sample # 111 has some organic contamination from above -grindy drilling	<input checked="" type="checkbox"/>	111	●▲		SM	◆◆	■		2.0
3.0	END HOLE @ 3.0m -refusal									3.0
4.0										4.0
5.0										5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 3.0 m COMPLETE: 01/06/12		Page 1 of 1		

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 598-70
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: 1774+341 37M RT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	
0.0	ORGANIC -brown -frozen (Vx) below 0.3m									0.0	
2.0	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -grey -frozen (Vx) -grindy drilling									2.0	
3.0	END HOLE @ 2.8m -refusal	<input checked="" type="checkbox"/>	122	▲			SW-SM	◆	■	3.0	
4.0										4.0	
5.0										5.0	
6.0										6.0	

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	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 600-98
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
B40 L MOBILE DRILL 6" AUGER	1774+350 35m 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: B.B.	COMPLETION DEPTH: 2.9 m
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	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 598-62						
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361						
B40L MOBILE DRILL		LOCATION: 1774+398 CENTERLINE		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 -dark brown ICE & FROZEN ORGANIC									0.0
1.0										1.0
2.0	SILT (ML) -brown -frozen (Nf) -grindy drilling									2.0
3.0	SILTY SAND WITH GRAVEL (SM) -grey -frozen	<input checked="" type="checkbox"/>	112	●		▲	ML	◆		3.0
4.0										4.0
5.0	END HOLE @ 4.5m	<input checked="" type="checkbox"/>	113A	▲	●		SM	■	◆	5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B.		COMPLETION DEPTH: 4.5 m				
				REVIEWED BY:		COMPLETE: 01/06/12				
				Fig. No:		Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 598-69						
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361						
B40L MOBILE DRILL		LOCATION: 1774+445 37M 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	ORGANIC -brown -frozen (Vx) below 0.3m									0.0
1.0	SANDY SILT (ML) -olive -some organic -frozen (Vx)									1.0
2.0										2.0
2.9		<input checked="" type="checkbox"/>	121	●	▲	ML	■	◆		2.9
3.0	END HOLE @ 2.9m									3.0
4.0										4.0
5.0										5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B.		COMPLETION DEPTH: 2.9 m				
				REVIEWED BY:		COMPLETE: 01/06/15				
				Fig. No:		Page 1 of 1				

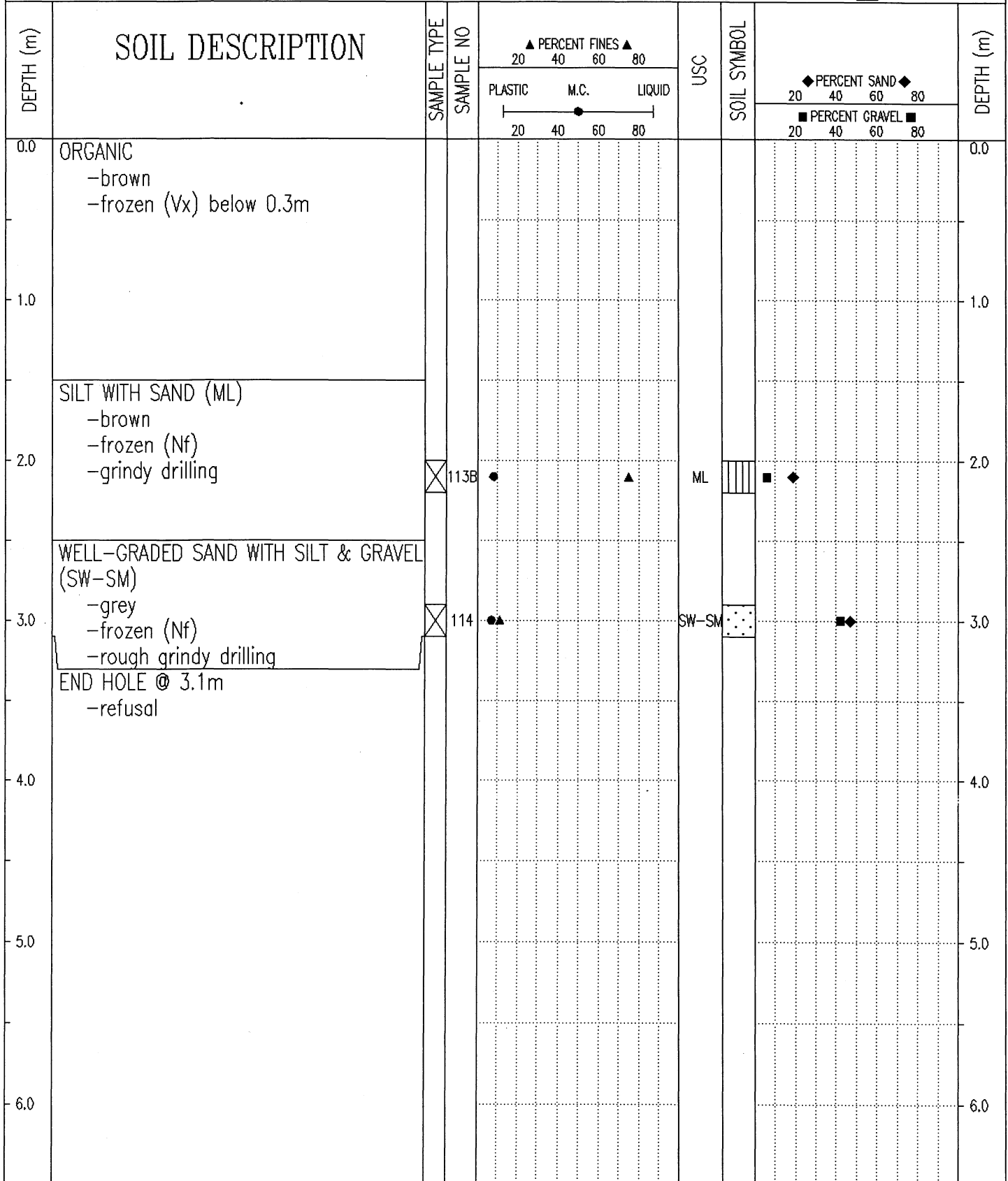
SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 600-99					
ENGINEERING CAPITAL		KM 1729-1787 A/H		Project No: 092-202101-0361					
B40 L MOBILE DRILL 6" AUGER		LOCATION: 1774+450 35m LT		ELEVATION: 0.00 (m)					
SAMPLE TYPE		RETURN		S.P.T.					
		AUGER		BULK					
		TUBE		CORE					
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES	USC	SOIL SYMBOL	PERCENT SAND	PERCENT GRAVEL	DEPTH (m)
				▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80			◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80		
0.0	ORGANIC -brown -frozen (Vx)								0.0
1.0	SILTY SAND (SM) -trace of organic -grey -frozen (Nb)	⊗	160	● ▲	SM	⊗	◆		1.0
2.0	SILTY SAND WITH GRAVEL (SM) -grey -frozen (Nb)	⊗	161	● ▲	SM	⊗	◆ ■		2.0
3.0	SANDY SILT (ML) -grey -frozen (Nb) END HOLE @ 2.9m	⊗	162	● ▲	ML	⊗	◆		3.0
4.0									4.0
5.0									5.0
6.0									6.0

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Fig. No:

COMPLETION DEPTH: 2.9 m
COMPLETE: 01/06/20

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 598-63
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: 1774+505 1M LT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	



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	REVIEWED BY:	COMPLETE: 01/06/12
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 598-68
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: 1774+549 38M RT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	

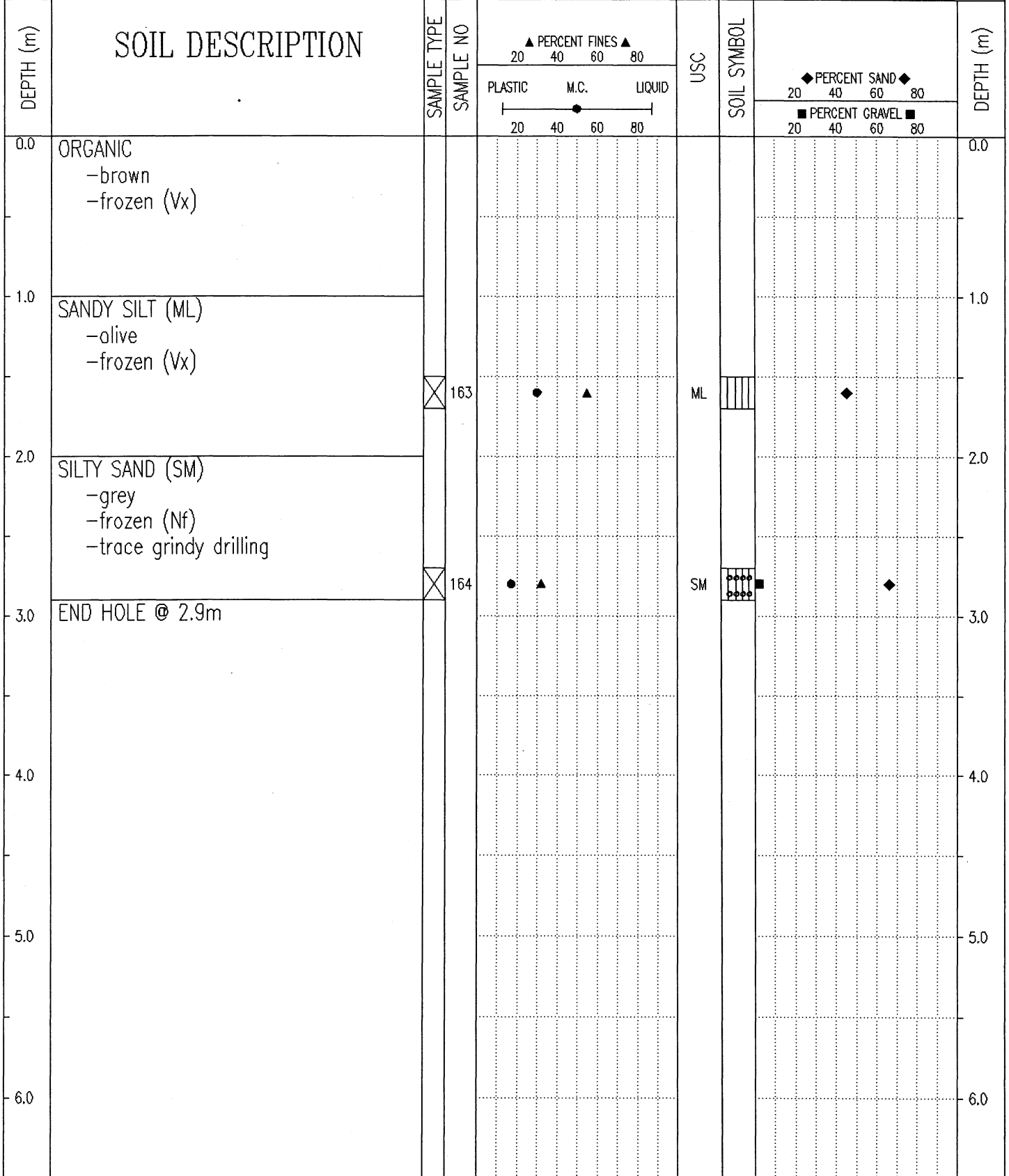
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC -brown -frozen (Vx) below 0.3m										0.0	
1.0	SILT & ICE -smooth tighter drilling										1.0	
2.0	SANDY SILTY GRAVEL -grey -frozen (Nf) -grindy drilling										2.0	
3.0	SANDY SILT (ML) -grey -frozen (Vx) -smooth drilling	<input checked="" type="checkbox"/>	120	●	▲		ML	▨	◆		3.0	
3.0	END HOLE @ 2.9m										3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

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	REVIEWED BY:	COMPLETE: 01/06/15
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 598-64						
ENGINEERING CAPITAL		1729-1787 A/H		Project No: 092-202101-0361						
B40L MOBILE DRILL		LOCATION: 1774+594 1M 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			
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 -brown -frozen (Vx) below 0.3m									0.0
1.0	SANDY SILT (ML) -brown -frozen (Vx)									1.0
2.0	SILT WITH SAND (ML) -brown -frozen (Nf)	<input checked="" type="checkbox"/>	115	●	▲	ML	▨	◆		2.0
3.0	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -brown -frozen (Nb) -rough grindy drilling	<input checked="" type="checkbox"/>	116	●	▲	ML	▨	◆		3.0
4.0	END HOLE @ 4.2m -refusal	<input checked="" type="checkbox"/>	117	●	▲	SW-SM	▨	◆	■	4.0
5.0										5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B. REVIEWED BY:		COMPLETION DEPTH: 4.2 m COMPLETE: 01/06/12		Fig. No: Page 1 of 1		

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 600-100
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
B40 L MOBILE DRILL 6" AUGER	LOCATION: 1774+600 35m LT	ELEVATION: 0.00 (m)

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

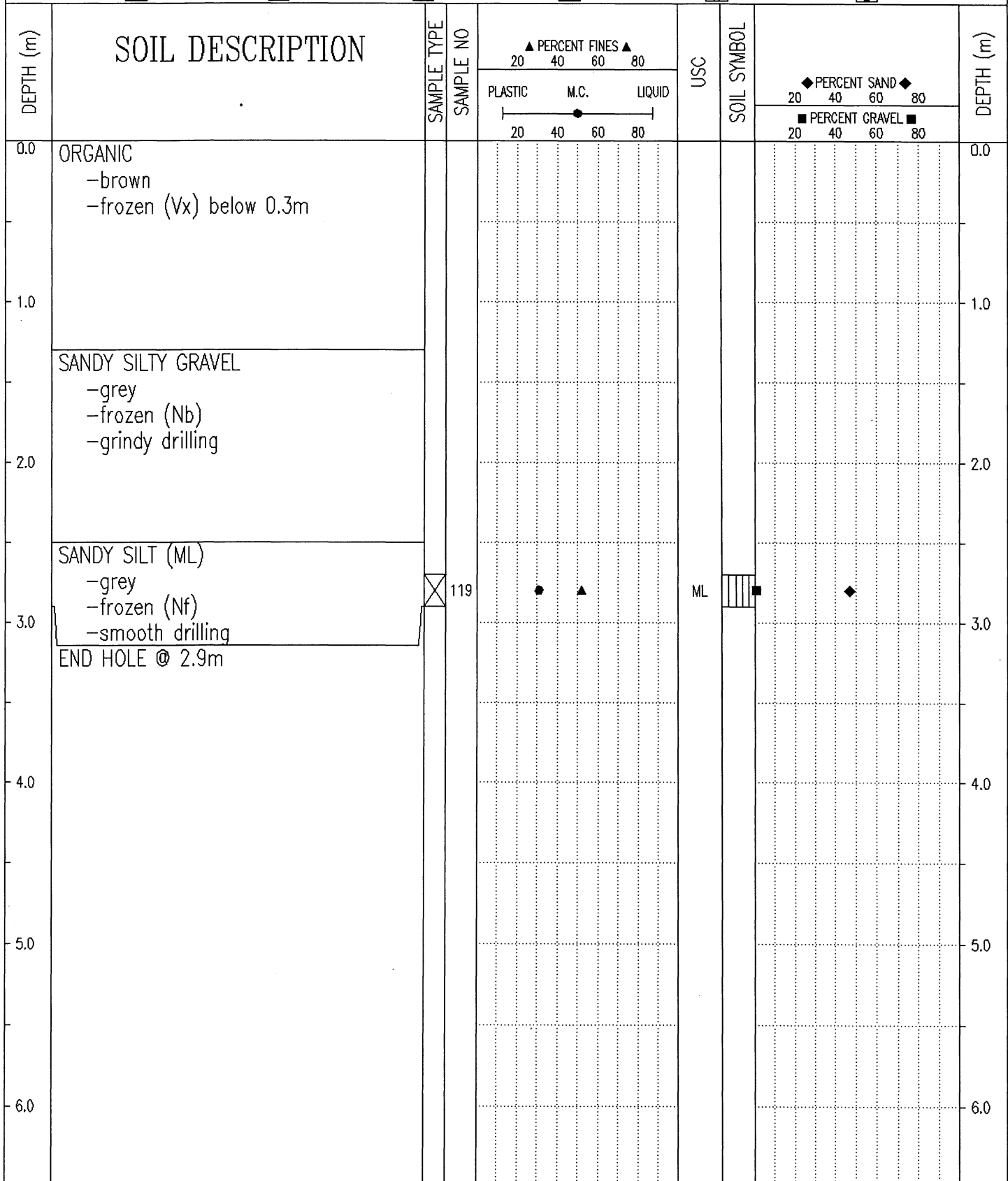


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Fig. No:

COMPLETION DEPTH: 2.9 m
COMPLETE: 01/06/20

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 598-67
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: 1774+643 37M RT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	



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	REVIEWED BY:	COMPLETE: 01/06/15
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 600-101								
ENGINEERING CAPITAL		KM 1729-1787 A/H		Project No: 092-202101-0361								
B40 L MOBILE DRILL 6" AUGER		LOCATION: 1774+700 35m 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 -brown -frozen (Vx) ORGANIC & ICE -brown											0.0
1.0												1.0
2.0	WELL-GRADED GRAVEL WITH SAND (GW) -grey -frozen (Nf) -grindy drilling	<input checked="" type="checkbox"/>	165	▲			GW	◆	■			2.0
3.0	END HOLE @ 2.5m -refusal											3.0
4.0												4.0
5.0												5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B.		COMPLETION DEPTH: 2.5 m						
				REVIEWED BY:		COMPLETE: 01/06/20						
				Fig. No:		Page 1 of 1						

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 598-65
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: 1774+701 2M RT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND			PERCENT GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	20	40	
0.0	ORGANIC -brown -frozen (Vx) below 0.3m													0.0	
1.0														1.0	
2.0	-grindy drilling below 1.5m													2.0	
2.0	END HOLE @ 2.0m -refusal Note: Moved 1m upchain / 2nd refusal @ 1.6 -no samples recovered													2.0	
3.0														3.0	
4.0														4.0	
5.0														5.0	
6.0														6.0	

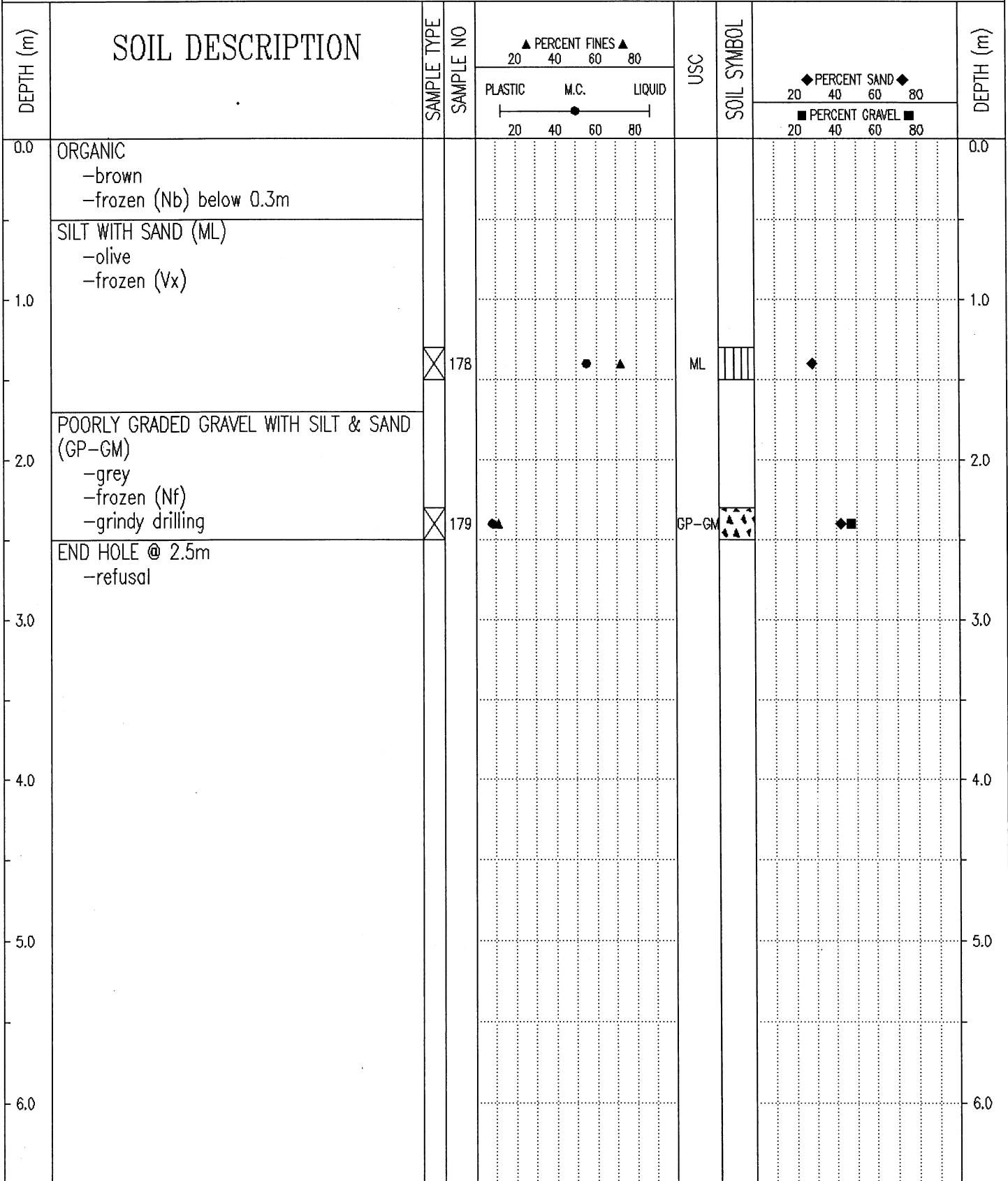
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	REVIEWED BY:	COMPLETE: 01/06/12
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 598-66
ENGINEERING CAPITAL	1729-1787 A/H	Project No: 092-202101-0361
B40L MOBILE DRILL	LOCATION: 1774+750 38M RT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC -brown -frozen (Vx) below 0.3m											0.0
1.0	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -frozen											1.0
2.0	END HOLE @ 2.2m -refusal	<input checked="" type="checkbox"/>	118	▲	●	◆	SW-SM	◆	■	◆		2.0
3.0												3.0
4.0												4.0
5.0												5.0
6.0												6.0

Government of Yukon Transportation Engineering	LOGGED BY: B.B.	COMPLETION DEPTH: 2.2 m
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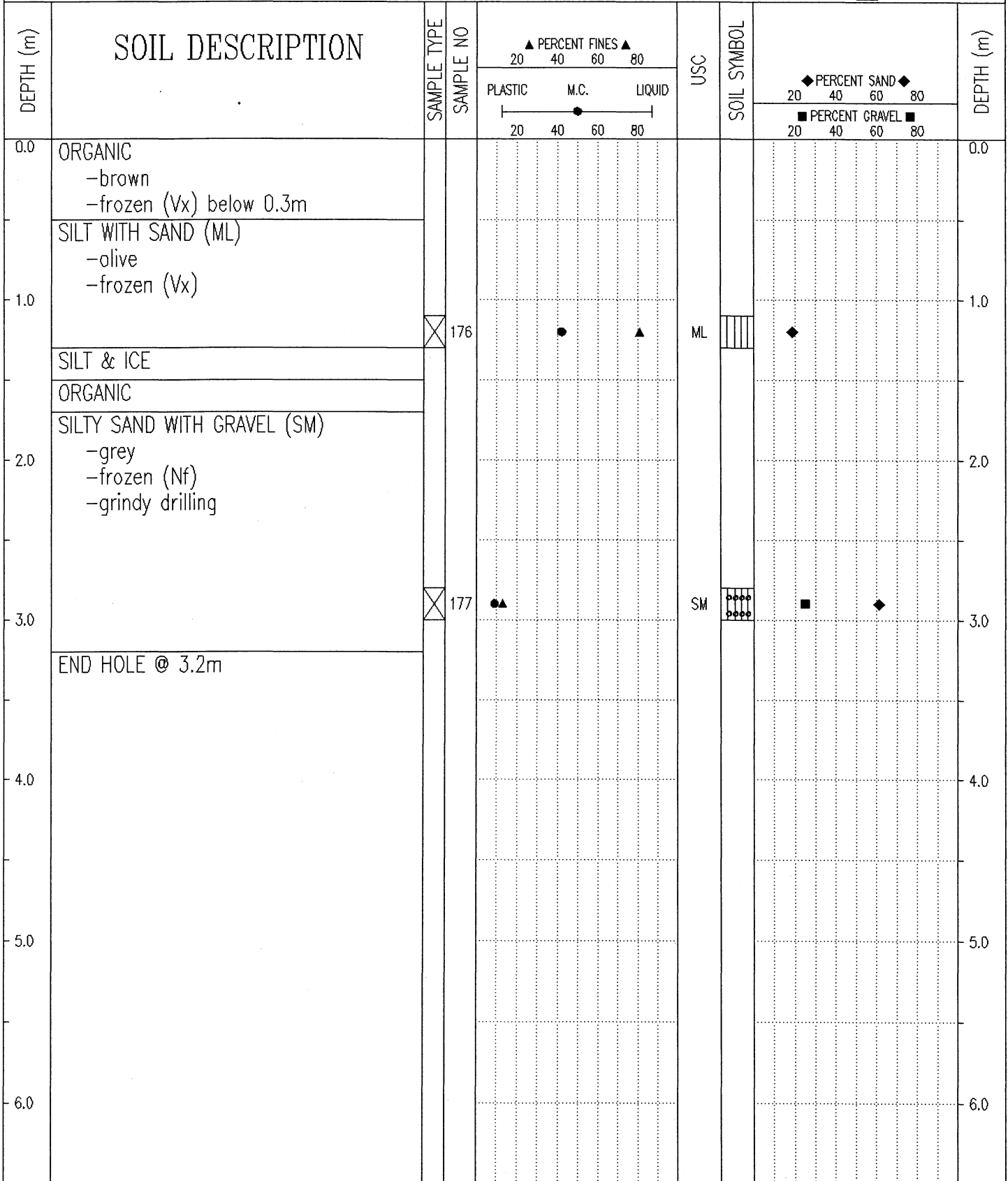
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 600-109
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
B40 L MOBILE DRILL 6" AUGER	LOCATION: 1774+772 3m Rt	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.
	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE



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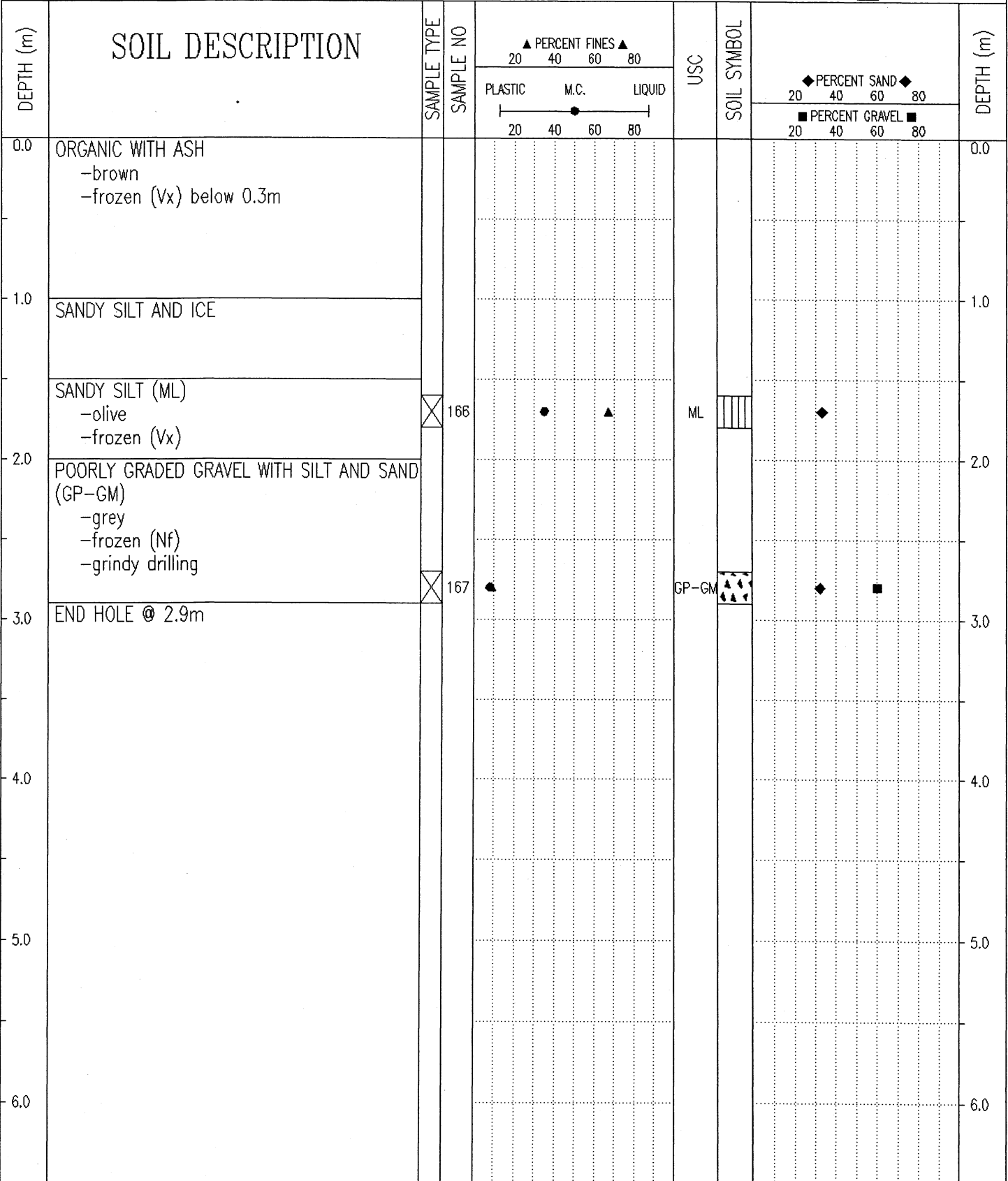
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 600-108
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
B40 L MOBILE DRILL 6" AUGER	LOCATION: 1774+775 20m LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



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SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 600-110													
ENGINEERING CAPITAL		KM 1729-1787 A/H		Project No: 092-202101-0361													
B40 L MOBILE DRILL 6" AUGER		LOCATION: 1774+775 25m RT		ELEVATION: 0.00 (m)													
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN		<input checked="" type="checkbox"/> S.P.T.		<input checked="" type="checkbox"/> AUGER													
		<input type="checkbox"/> BULK		<input type="checkbox"/> TUBE													
				<input type="checkbox"/> CORE													
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			PERCENT GRAVEL ■			DEPTH (m)		
				PLASTIC	M.C.	LIQUID			20	40	60	80	20	40		60	80
0.0	ORGANIC -brown -frozen (Nb) below 0.3m																0.0
1.0	SILT (ML) -olive -frozen (Vx)																1.0
2.0	SILTY GRAVEL WITH SAND (GM) -grey -frozen (Nf) -contaminated by surface water -grindy drilling																2.0
3.0	END HOLE @ 2.5m -refusal Note: Surface water near hole.																3.0
4.0																	4.0
5.0																	5.0
6.0																	6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B.				COMPLETION DEPTH: 2.5 m									
				REVIEWED BY:				COMPLETE: 01/06/21									
				Fig. No:				Page 1 of 1									

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 600-102
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
B40 L MOBILE DRILL 6" AUGER	LOCATION: 1774+800 35m LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
	<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
		<input type="checkbox"/> CORE

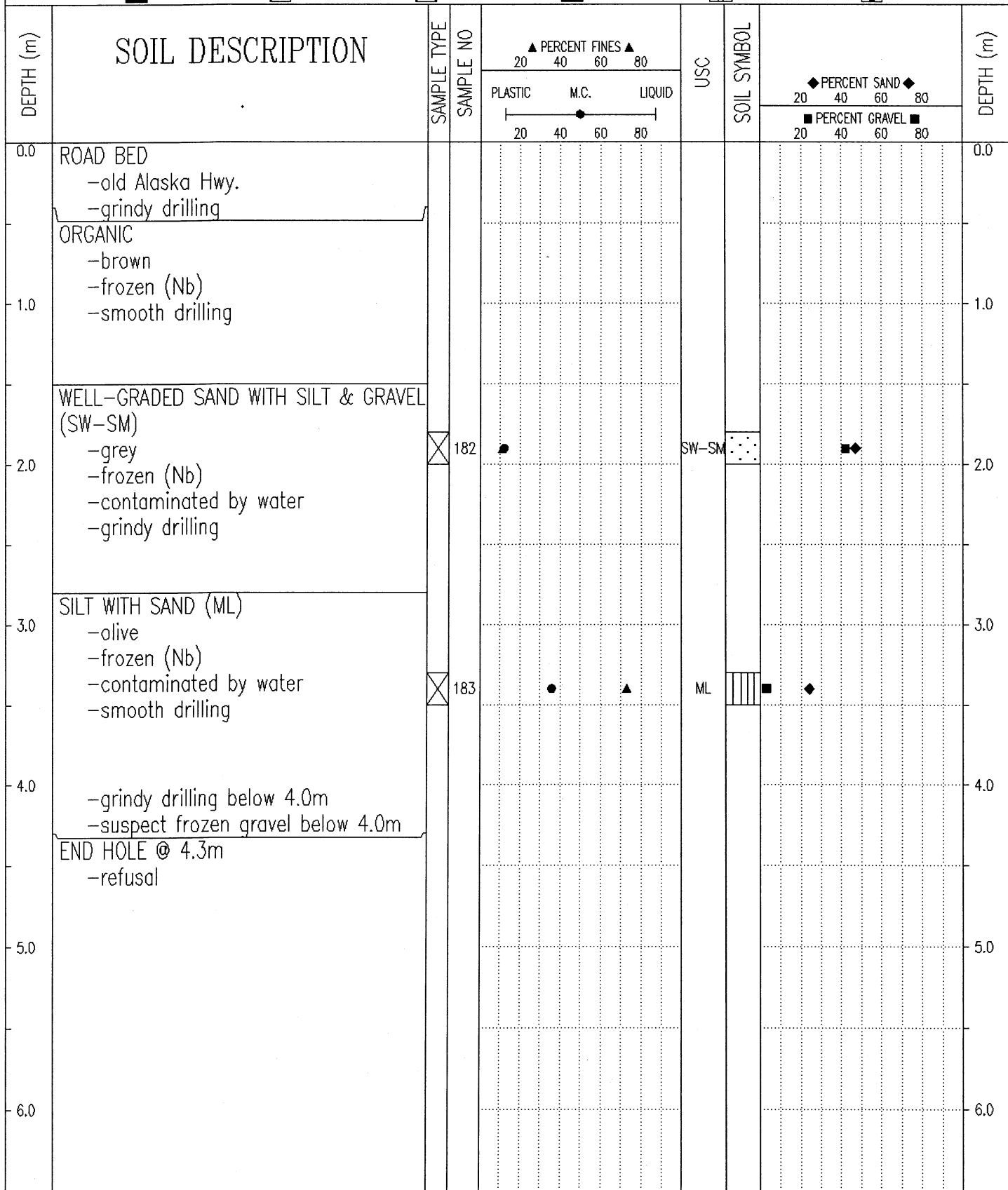


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Fig. No:

COMPLETION DEPTH: 2.9 m
COMPLETE: 01/06/20

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 600-111
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-D361
B40 L MOBILE DRILL 6" AUGER	LOCATION: 1774+900 C.L.	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		



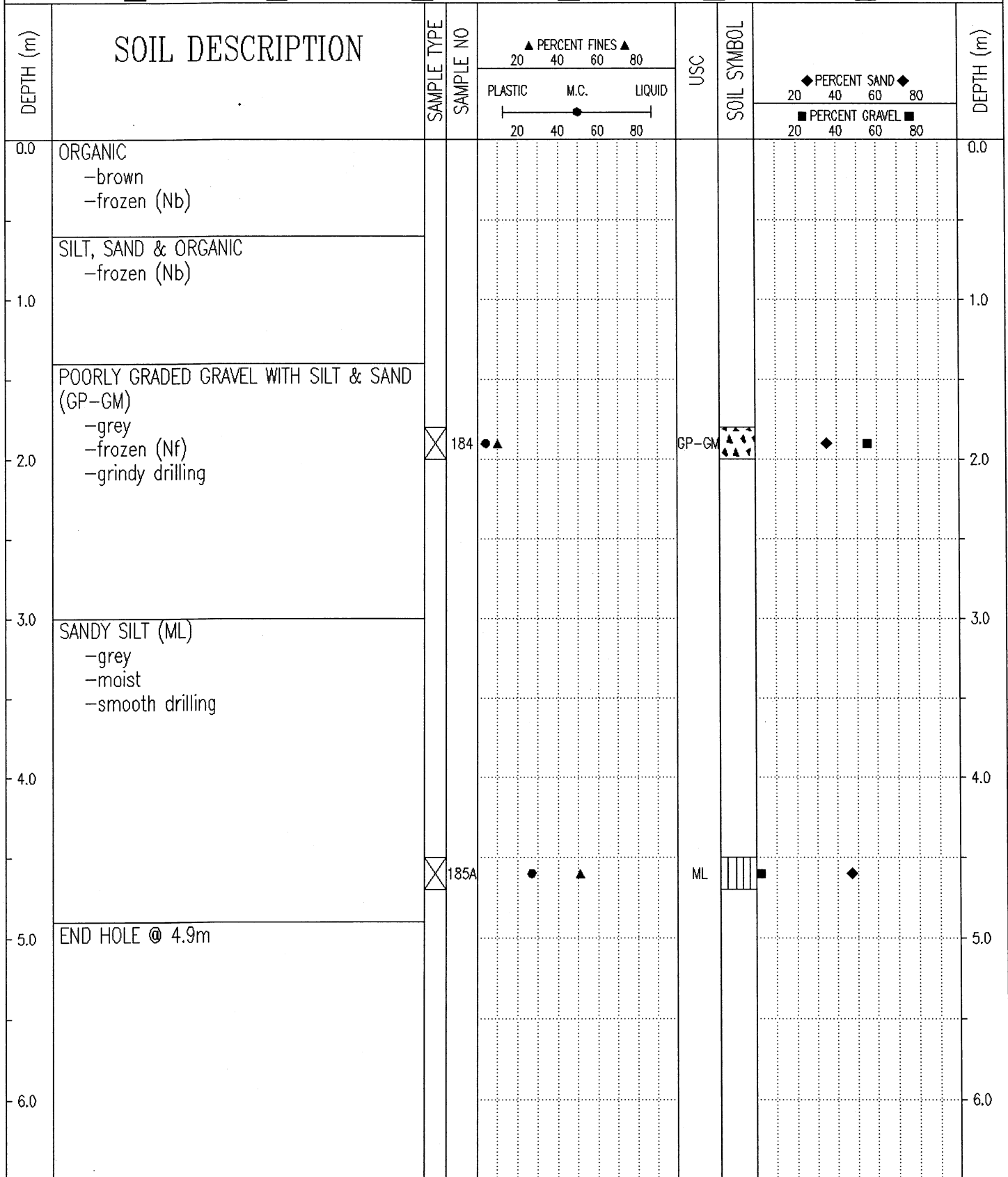
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Fig. No:

COMPLETION DEPTH: 4.3 m
COMPLETE: 01/06/21

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 600-103							
ENGINEERING CAPITAL		KM 1729-1787 A/H		Project No: 092-202101-0361							
B40 L MOBILE DRILL 6" AUGER		LOCATION: 1774+900 35m 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							
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 -brown -frozen (Vx)										0.0
1.0											1.0
2.0	SILTY SAND TO SANDY SILT (SM)-(ML) -olive -frozen (Vx) -grindy drilling -frozen (Nf) below 2.0m	<input checked="" type="checkbox"/>	168	●	▲		SM	○○○○	■	◆	2.0
3.0	END HOLE @ 2.9m	<input checked="" type="checkbox"/>	169	●	▲		ML			◆	3.0
4.0											4.0
5.0											5.0
6.0											6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B.		COMPLETION DEPTH: 2.9 m					
				REVIEWED BY:		COMPLETE: 01/06/20					
				Fig. No:		Page 1 of 1					

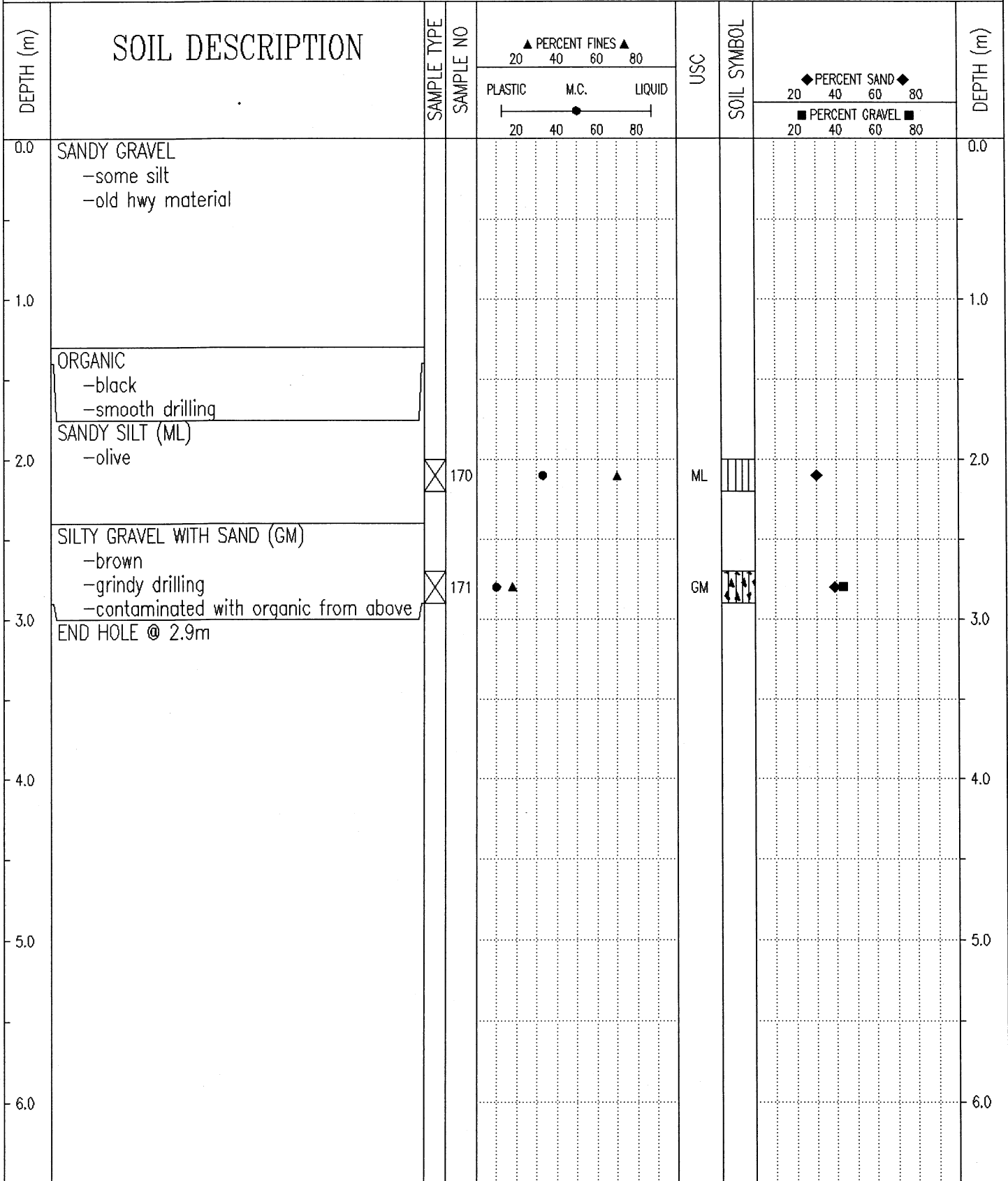
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 600-112
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
B40 L MOBILE DRILL 6" AUGER	LOCATION: 1775+000 10m LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
	<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
		<input type="checkbox"/> CORE



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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 600-104
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
B40 L MOBILE DRILL 6" AUGER	LOCATION: 1775+000 35m 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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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 600-113
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
B40 L MOBILE DRILL 6" AUGER	LOCATION: 1775+100 15m LT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	
0.0	SANDY GRAVEL -existing road fill material											0.0	
	ORGANIC -brown -frozen (Nb)												
1.0	ASH SILTY SAND -brown -frozen (Nf)											1.0	
2.0	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM) -grey -moist -grindy drilling											2.0	
3.0		<input checked="" type="checkbox"/>	185B	▲			GW-GM	◆		■		3.0	
4.0	END HOLE @ 3.6m -refusal											4.0	
5.0												5.0	
6.0												6.0	

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COMPLETION DEPTH: 3.6 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 600-105
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
B40 L MOBILE DRILL 6" AUGER	LOCATION: 1775+100 35m 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

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 -brown										0.0	
	SILTY SAND -brown -moist											
	ASH											
1.0	ORGANIC -brown -frozen (Nb)										1.0	
	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -grey -frozen (Nf) -first refusal @ 1.3m	<input checked="" type="checkbox"/>	172				GP-GM	▲▲▲▲		◆	2.0	
2.0	END HOLE @ 2.4m -refusal											
3.0											3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 600-114
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
B40 L MOBILE DRILL 6" AUGER	LOCATION: 1775+200 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		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				20	40	60			80	20	40	60	
0.0	ORGANIC -brown -frozen (Nb)											0.0	
1.0	SILTY SAND -brown -frozen (Nf)											1.0	
2.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -grey -moist -grindy drilling											2.0	
4.0		<input checked="" type="checkbox"/>	186	●	▲		GP-GM	◆	■			4.0	
5.0	END HOLE @ 4.5m											5.0	
6.0												6.0	

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 600-106
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
B40 L MOBILE DRILL 6" AUGER	LOCATION: 1775+200 35m LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	SOIL SYMBOL	◆ PERCENT SAND ◆		■ PERCENT GRAVEL ■	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40		
0.0	ORGANIC -brown											0.0
	SILTY SAND WITH ORGANIC -smooth drilling											
1.0	ASH -frozen											1.0
	ORGANIC -brown -frozen (Nf)											
2.0	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -grey -frozen (Nf) -grindy drilling -contaminated with organic from above	<input checked="" type="checkbox"/>	173	●▲			SW-SM	◆		■		2.0
	END HOLE @ 2.0m -refusal											
3.0												3.0
4.0												4.0
5.0												5.0
6.0												6.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 600-115
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0381
B40 L MOBILE DRILL 6" AUGER	LOCATION: 1775+300 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		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				20	40	60			80	20	40	60	
0.0	ORGANIC -brown -frozen (Nb)											0.0	
1.0	SANDY SILT -light brown -frozen (Nf)											1.0	
2.0	SILTY GRAVEL WITH SAND (GM) -grey -frozen (Nf)											2.0	
4.0	END HOLE @ 4.0m -refusal	<input checked="" type="checkbox"/>	187	●	▲		GM	▲	◆	■		4.0	
5.0												5.0	
6.0												6.0	

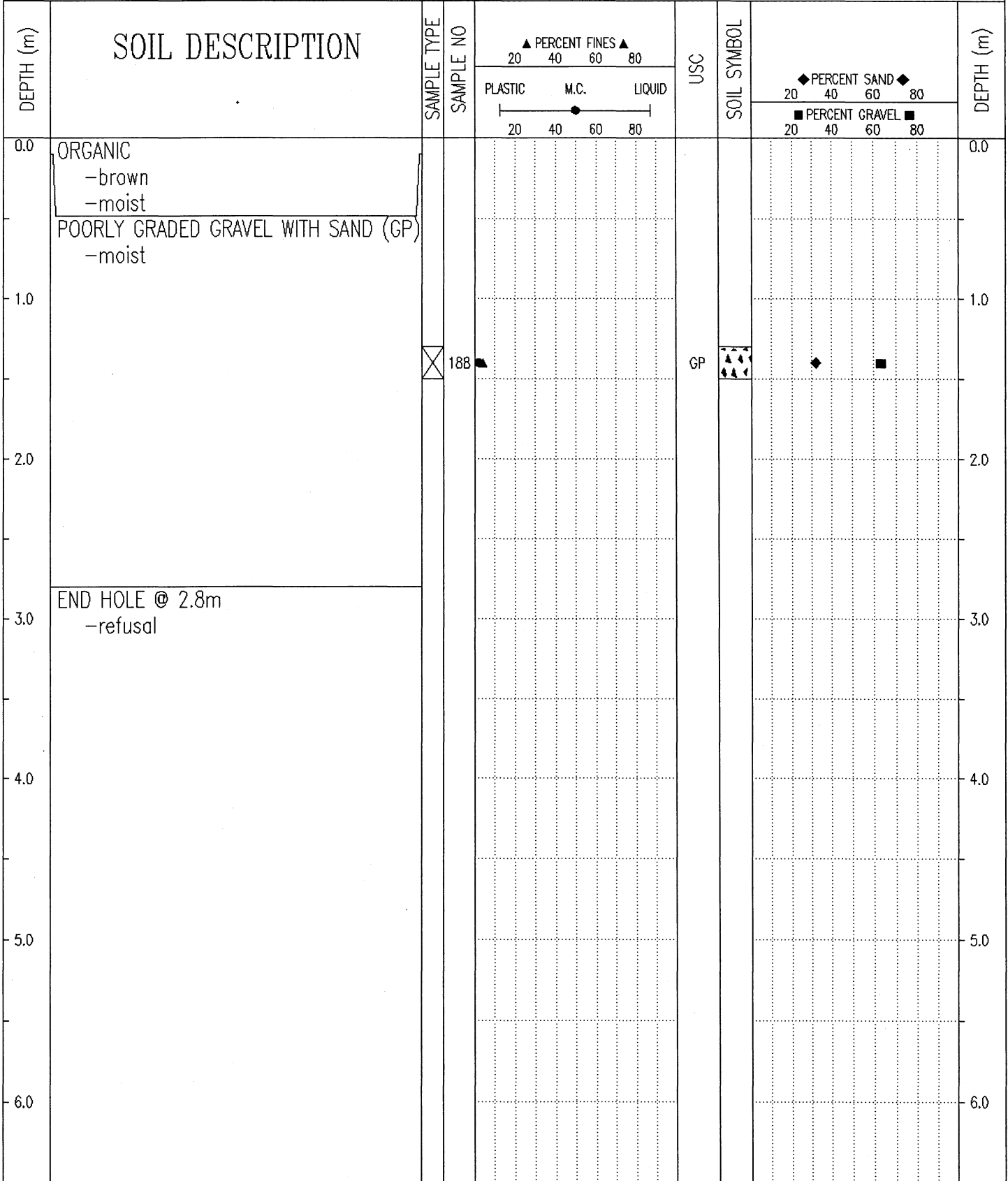
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COMPLETION DEPTH: 4.0 m
COMPLETE: 01/06/21

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11		TEST HOLE NO: 600-107						
ENGINEERING CAPITAL		KM 1729-1787 A/H		Project No: 092-202101-0361						
B40 L MOBILE DRILL 6" AUGER		LOCATION: 1775+350 35m 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 -black -frozen (Nb)									0.0
1.0	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -grey -frozen (Nf) -grindy drilling	<input checked="" type="checkbox"/>	174	●			SW-SM	■	◆	1.0
2.0	SANDY SILT (ML) -olive -frozen (Nb) -smooth drilling									2.0
3.0	END HOLE @ 2.9m	<input checked="" type="checkbox"/>	175	●	▲		ML		◆	3.0
4.0										4.0
5.0										5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: B.B.		COMPLETION DEPTH: 2.9 m				
				REVIEWED BY:		COMPLETE: 01/06/20				
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 600-116
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
B40 L MOBILE DRILL 6" AUGER	LOCATION: 1775+400 10m LT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
	<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
		<input type="checkbox"/> CORE



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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 600-117
ENGINEERING CAPITAL	KM 1729-1787 A/H	Project No: 092-202101-0361
B40 L MOBILE DRILL 6" AUGER	LOCATION: 1775+500 10m LT	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.
	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE

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 -brown -moist										0.0	
1.0	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM) -grey -moist										1.0	
2.0											2.0	
3.0											3.0	
4.0	END HOLE @ 4.0m -refusal	<input checked="" type="checkbox"/>	189				GW-GM	▲ ▲ ▲ ▲ ▲ ▲	◆	■	4.0	
5.0											5.0	
6.0											6.0	

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Fig. No:

COMPLETION DEPTH: 4.0 m
COMPLETE: 01/06/21